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1 Introduction

“When you inspect this map it will be difficult for you to visualize how this has been accomplished, how my numerous purchases have been brought together into one solid area. I myself can hardly realize it. A map showing the different acquisitions both small and large over the years would remind you of your grandmother’s patchwork quilt, which finally in some mysterious way came out of the confusion into one large piece.”¹



Figure 1-1 Percival P. Baxter

In the end, even Park donor Percival Proctor Baxter was amazed at what he had done. Employing a rare combination of individualism, innovation and persistence fueled by a dedication to public service and deep love of Maine and her people, Percival Baxter forged a unique and enduring Park. Referring often to “my park”, he articulated a personal vision of wilderness management that reflected his love of Maine’s people and culture.

In addition to the gift of the land itself, Percival Baxter applied his experience and foresight in the provision of two additional things: the formation of a three member **Authority** to govern the Park and the provision of a substantial **Trust Fund** to allow the Park to be financially independent. Together with the **Land**, these three components give the Park the attributes of a well-made three-legged stool – great beauty, long lasting durability and the strength to withstand great weight and pressure.

With the land, Percival Baxter provided opportunities for hunting, fishing, exemplary forestry and a large area of Maine’s mountains, forests, lakes, ponds and streams where nature, and nature alone, provides the management. After a half century of management and visitation by thousands of people, the Park remains undeniably wild. Over the next 50 to 100 years, the forests of the wilderness of the Park will ever more strongly reflect Baxter’s vision ...*“In the years to come when the Forests of our State have been cut off and disappeared, when civilization has encroached upon the land we now refer to as ‘Wild Land’, this Park will give the people of succeeding generations a living example of what the State of Maine was ‘in the good old days’ before the song of the woodsman’s axe and the whine of the power saw was heard in the land.”²*

Although known as a preservationist, Baxter was a well-traveled man of expansive thought and accordingly, his concern about the resources of his home State of Maine was not limited to wilderness alone. The inclusion of the Scientific Forest Management Area as a part of the Park reflects Baxter’s enduring concern for Maine’s forest resources and his belief that “*What*

¹ Percival Baxter, from a March 17, 1955 letter to Maine Governor Edmund Muskie

² Percival Baxter, from a January 11, 1955 letter to Maine Governor Edmund Muskie

is done in our forests today will help or harm the generations who follow us."³ The SFMA is now established as "*a place where a continuing timber crop can be cultivated, harvested and sold*"⁴ providing important income contributing to the care and maintenance of the Park.

Like many of my colleagues at the Park, I've been called a "Baxter Cultist". I stand guilty as charged. And I'm not alone – members of the Park staff and Authority, Advisory members and thousands of Park visitors also qualify for the label. We each have our own image of Percival Baxter, shaped and colored by our own wants, desires and convictions, but our varied views are unified by the powerful physical presence of the Park itself and the memories of family, friends, peace and the connection with nature we have made there.

The image of the Park is complex and people's desires to protect or use the Park can lead to controversy and conflict. Baxter foresaw this during his years creating the Park and in 1939, he created the Baxter State Park Authority to act as guardians of the trust after he was gone. Acting as a triumvirate of Trustees, for over 60 years the Baxter State Park Authority has served to interpret and implement Percival Baxter's wishes regarding the management of the Park.

Although Percival Baxter had a large family, many respected friends and colleagues, many more acquaintances and thousands of admirers, he left the sovereign control of the Park solely in the hands of the Baxter State Park Authority. To guide the Authority, he left written Communications accompanying the deeds for the land he gifted to the people of Maine. Over the past 40 years, Authorities have hired, and occasionally dismissed, hundreds of important staff members and used Baxter's language to interpret his intent and decide appropriate management in the Park. Their record of decisions on various issues, some involving lengthy processes and with controversial outcomes, has served the Park well and provides a strong basis for future decisions in the Park.

The Authority has only two things to officially guide them in their efforts: the formal Deeds of Trust and Communications, and the policy, practice and protocol handed down by preceding Authorities. When an issue is particularly grey, the Authority often turns to the perspectives of Park staff, advisory committees, Baxter family members and other interested parties to help them arrive at a deliberative decision.

Finally, Percival Baxter was always clear that, in essence, the Park is a promise: he offered us the land and the means to keep it in perpetuity, in exchange for our promise to always manage it in the manner he intended. As Maine people, that is a promise we must always keep.

"In conveying these lands to the State of Maine a definite Trust is created and I have the utmost confidence that the word of this Sovereign State as given by the Chief Executive and by the

³ *Baxter Communications (1955) to Governor Muskie; Senate and House of Representatives, 97th Legislature*

⁴ *Baxter Communications (1955) to Governor Muskie; Senate and House of Representatives, 97th Legislature*

representatives of the people never will be broken and that this State never will violate the Trust provisions in the Deeds it accepts from me.”⁵

This plan is an attempt to describe the great Park that Percival Baxter left us. In the course of this description, we will attempt to define and describe the challenges that we most need to address in the coming years. Although we know with full certainty that we can predict and plan for some things, there is much we cannot foresee, for in the Park, *Nature is in charge*. One thing seems sure; if we combine the foresight and generosity of Percival Baxter with our deepest dedication, care, and commitment, the Park will endure for us, our children, grandchildren and beyond.

Just like Percy wanted.



1-2 The Katahdin massif from South Turner Mountain

⁵ Percival Baxter in a Formal Letter of Communication to the Maine Legislature and Governor Barrows, 1937

2 Executive Summary

Baxter State Park is a 201,018 acre public trust established by former Maine Governor Percival Baxter through a series of land gifts to the State of Maine between 1931 and 1962. After Baxter's death in 1969, the governing body he established to administer the Park, the Baxter State Park Authority, added an additional 8,483 acres to the Park through fee purchase and the acceptance of gifted land to bring the Park to its current size of 209,501 deeded acres.

The Baxter State Park Authority approved a Park Management Plan in 1978. The 1978 plan was revised and updated numerous times over the past 34 years, but no substantial changes were made to the basic plan structure and approach. In 2009, the Park began to consider the construction of a substantially revised management plan that described the Park as it exists today and considered the current issues facing the Park. In 2010, public scoping sessions were held in three locations in Maine to gather concerns regarding Park management.

This plan intends to provide a transparent overview of the management structure and important policies directing the protection and operation of the Park. The plan is a somewhat complex and involved document because the Park is a combination of complex ideas. Mostly, this plan is a discussion about the challenge maintaining the Park's financial independence, while protecting the Park's wilderness essence and simultaneously providing opportunities for thousands of people to hike, fish, camp, and canoe in the Park's wilderness each year in, as Percival Baxter wished, *"the right, unspoiled way."*⁶

Most of the difficult issues we face in the management of the Park are about striking the correct balance between the protection of resources and the provision of recreational opportunities. This balance is not always easy to find and at times comes down to the judgment of the Baxter State Park Authority, as Baxter intended. Baxter was clear however, that when a distinct conflict between resource protection and recreational use arose, resource protection should take priority: *"This area is to be maintained primarily as a Wilderness and recreational purposes are to be regarded as of secondary importance and shall not encroach upon the main objective of this area which is to be "Forever Wild."*⁷

In our efforts to manage the Park, we must also recognize that our nature as human beings is to improve our condition. If nothing else, we humans are irrepressible agents of change. This distinctly human trait can, and often does, conflict with the Park's general mandate to leave things alone and let nature, and only nature, do the changing. More vexingly, our habits of

⁶ Percival Baxter in a January 5, 1945 letter to Governor Hildreth and the Maine Legislature, in part: *"Everything in connection with the Park must be left simple and natural and must remain as nearly as possible as it was when only the Indians and the animals roamed at will through these areas. I want it made available to persons of moderate means who with their boys and girls, with their packs of bedding and food, can tramp through the woods, cook a steak and make flapjacks by the lakes and brooks. Every section of this area is beautiful each in its own way. I do not want it locked up and made inaccessible; I want it used to the fullest extent but in the right unspoiled way."*

⁷ Percival Baxter in a January 11, 1955 letter to Governor Edmund Muskie and the Maine Legislature

change often don't appear as single large endeavors, but as small, well-intentioned and seemingly good ideas. As humans, we tend to apply steady, incremental, often unnoticeable change, but over enough time we have the power, and the tendency, to effect significant change on an environment. Many of the issues and concerns expressed in this plan are an attempt to define management processes that control incremental development inside the Park.

Finally, although the Park itself should remain changed only by nature, the methods we use to protect and administer the Park must change with new technologies and knowledge. New technologies, research, and ideas, have all been and will continue to be applied to the operations of the Park in our Reservation System, Maintenance, Communications, Public Safety and other areas.

This draft management plan was released by the Baxter Park Authority for additional public review and comment in May of 2011. The plan was finalized and approved by the Baxter State Park Authority on May 17, 2012. In addition to providing a **Statement of Purpose** and **Mission Statement** for the Park, the Plan provides **background descriptions of the Park landscape and organization**. Plan policy and discussion is organized around six **core functions** of the Park drawn from the Trust Deeds defining the Park. These core functions are:

- Protecting Park Resources
- Providing Recreational Opportunities
- Conducting Exemplary Forest Management
- Maintaining Park Property
- Providing for Staff and Public Safety
- Managing Fiscal Resources

The discussion of the core functions generated **action statements** – specific efforts that should be pursued by the Park over the next decade. The action statements are included in the Plan appendix and provided also as a separate document for specific review. Additional specification of the action statements including priority status, lead staff and estimated cost will be developed during the final draft stage of planning. In many instances, the completion of an action statement will require funding that may be outside the current budget limitations of the Park.

The plan text is supported by a robust appendix and several maps and is designed primarily as a digital document with extensive internal linking within the document.

The plan can be downloaded as a PDF document from the Management Plan page of the Park website: baxterstateparkauthority.com. This plan is intended to be a dynamic plan reflecting the continuing efforts of the Park management and the Baxter State Park Authority to improve and refine the management of Baxter State Park. As action items and other issues specified

within the plan are addressed, the plan text and documentation will be amended to reflect the change. A Record of Plan Amendments can be found in the appendix

The Baxter State Park Authority wishes to thank Park users and other commenters who helped with the development of this plan. In particular, the Authority wishes to thank the members of the Baxter State Park Advisory Committee for their work in the review and formation of this plan.

On behalf of the Baxter State Park Authority, the Administrative Staff and the Park's Advisory Committees, we thank you for your interest in this plan and future of Baxter State Park.



2-1 Nesowadnehunk Stream in Baxter State Park

3 BAXTER STATE PARK - Overview



3.1 Statement of Purpose

Seldom has a more generous gift been presented to a people than has been given by Percival Proctor Baxter to the people of the State of Maine. It is incumbent upon them, the recipients, to preserve the trust impressed upon them, to ensure for themselves and for future generations the fullest use of Baxter State Park consistent with the desires of the donor.

Governor Baxter's expressed desires were that this park "shall forever be retained and used for state forest, public park and public recreational purposes ... shall forever be kept and remain in the natural wild state ... shall forever be kept and remain as a sanctuary for beasts and birds."

Lest those that follow, uncertain of Governor Baxter's wishes, seek to define his desires in ways inharmonious with their original intent, this section is enacted.

It shall be the object of the Baxter State Park Authority to preserve the grandeur and beauty of Maine's highest peak, Mount Katahdin, as well as the 45 other mountains, the numerous lakes, ponds and streams; to subordinate its own wishes to the intent of Governor Baxter; to recognize his wish that, in this era of change, one thing of natural beauty remain constant.

This intent must be interpreted so as not to separate this park from the people to whom it was given; but rather seek to have it enjoyed and "used to the fullest extent but in the right unspoiled manner."

As a public forest it shall remain in its natural wild state and when "the Forests of our State have been cut off and disappeared, when civilization has encroached upon the land we now refer to as 'Wild Land,' this park will give the people of succeeding generations a living example of what the State of Maine was 'in the good old days' before the song of the woodsman's axe and the whine of the power saw was heard in the land."

As a public park and a place of recreation, it is apparent that it is intended for "those persons who enjoy the wilderness" and that the repeated use of the word "recreation" refers to the use of this park compatible with its natural state as a wilderness area and an expanse "for those who love nature and who are willing to walk and make an effort to get close to nature ... with pleasant foot-trails built and attractive camp-sites laid out in the valleys, by the brooks, and on the shores of the water."

3.2 Mission Statement

Baxter State Park is the result of the dream of former Maine Governor Percival P. Baxter that Katahdin and its landscape should belong to the people of Maine. In the 31 years between 1931 and 1962, Baxter donated 201,018 acres of land in 28 separate parcels ([parcel map - sec. 10.8](#)) to successive Maine legislatures. Between 1962 and 2009, four additional parcels were added to the Park through purchase or gift bringing the current Park deeded acreage to 209,643 acres.

The Baxter State Park Authority was established by statute ([sec. 10.10](#)) in 1939 and holds “*full power in the control and management of Baxter State Park*” in accordance with the wishes of Park donor, former Maine Governor Percival P. Baxter. The Authority consists of three Maine State officials: the Maine Attorney General, the Director of the Maine Forest Service, and the Commissioner of Inland Fisheries and Wildlife.

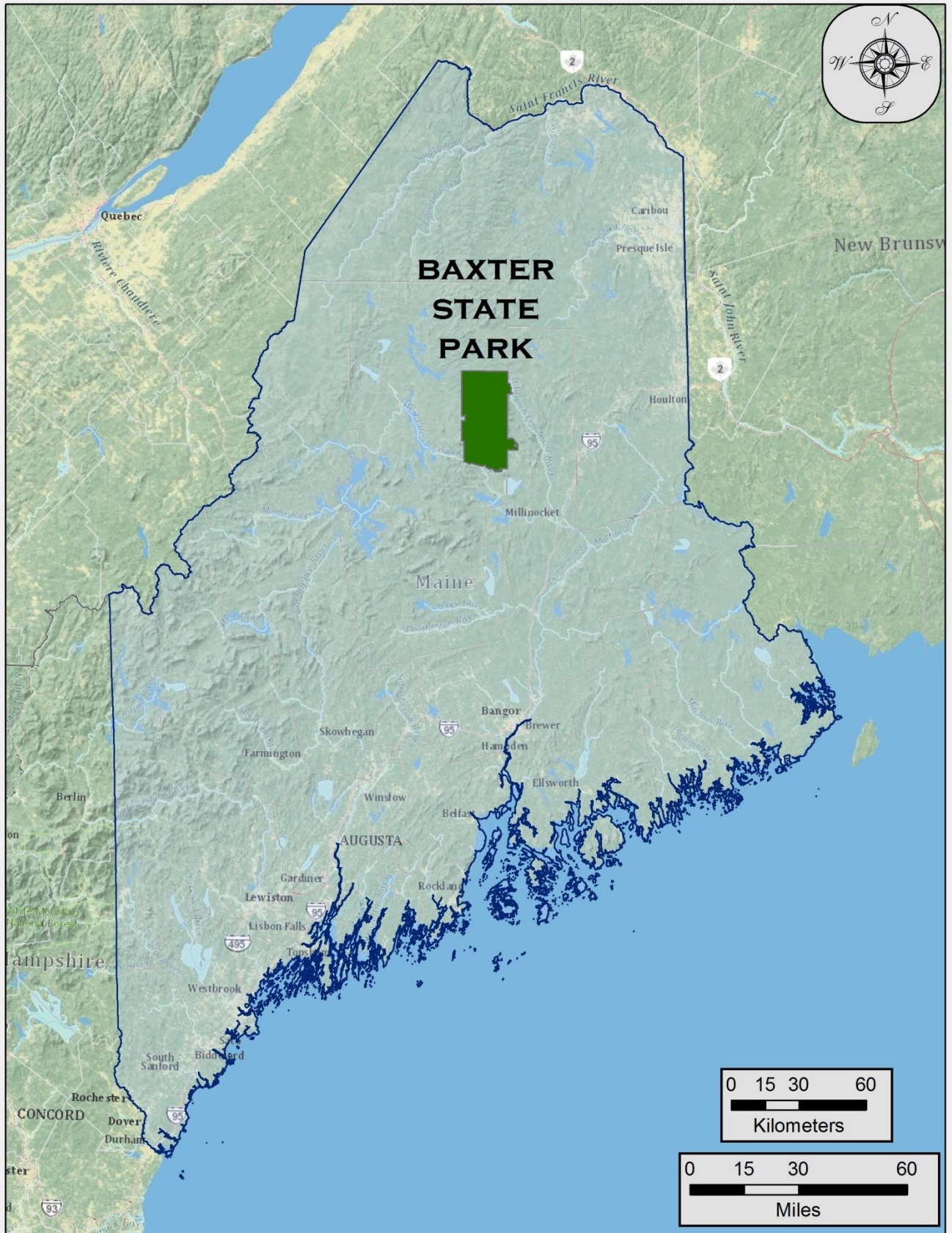
Park donor Percival Baxter expressed his wishes regarding the management and operation of the Park in numerous communications attached to the deeds gifted to the State of Maine that comprise the Park⁸. Baxter wished that the Park “...*shall forever be retained and used for state forest, public park and recreational purposes...shall forever be kept and remain in the natural wild state...shall forever be kept and remain as a sanctuary for beasts and birds*”, and in its Scientific Forest Management Area, shall “*become a show place for those interested in forestry, a place where a continuing timber crop can be cultivated, harvested and sold...an example and an inspiration to others.*”

The principal intentions of Park donor Percival Baxter regarding the management of the Park as expressed in the Deeds of Gift and Formal Communications provide the fundamental mission of Baxter State Park. The mission of Baxter State Park can be expressed in six primary objectives:

- To protect the natural resources of the Park for their intrinsic value and for the enjoyment of present and future generations.
- To provide various appropriate recreational opportunities to Park visitors.
- To conduct exemplary sustainable forest management operations within the 29,537 acre Scientific Forest Management Area of the Park.
- To maintain the facilities, infrastructure and data systems of the Park.
- To provide for the safety of Park staff and visitors.
- To manage and protect the fiscal integrity and independence of the Park for current and future generations.

Together, these expectations provide the mission and the primary core functions of the Park and form the basis of most of the discussion in this Plan.

⁸ An excellent reference for Baxter Trust Deeds and Communications is [Percival P. Baxter's vision for Baxter State Park: an annotated compilation of original sources](#); compiled by Howard Whitcomb and distributed by the *Friends of Baxter State Park*.



3.3 General Park Description

3.3.1 Administrative Description

Baxter State Park ([Park Facilities map – sec. 10.1](#)) is located on eleven unorganized townships in north-central Maine. The southern edge of the Park is about 18 miles from Millinocket and the eastern edge is about 24 miles from Patten.

The Park is a large public trust. Beginning in 1931 and ending in 1962, Percival Baxter, acting as a private citizen, purchased 28 parcels of land totaling 201,018 acres, and gifted them in Trust to various Maine legislatures. Baxter attached Communications to the gifts specifying how the parcels were to be managed. The management of the Park is an extension of the Trust Communications and the Authority acts as the final arbiter in the interpretation and application of the Trust Communications.

According to the acreage recorded on the deeds that form the Park, the Park is currently 209,501 acres in size. The Park's Global Information System (GIS) software – utilizing recently gathered global positioning system (GPS) data for Park property lines and corner monuments indicates the Park is closer to 215,000 acres. The boundary of the Park forms a rough rectangle measuring 12 x 24 miles. The Park is home to Maine's highest mountain, Katahdin. There are 18 additional named peaks over 3,000' in the Park.

The Park holds numerous complete small watersheds and all of the Nesowadnehunk, Katahdin and Webster Stream watersheds and parts of larger watersheds including Wassataquoik Stream, Trout Brook and Abol Stream. Approximately 68% of the Park lies in the East Branch Penobscot watershed with the remainder in the watershed of the West Branch of the Penobscot River.

Baxter provided for different land uses ([uPark Use Zone map -sec. 10.9](#)) within the Park. About 75% of the Park is managed as wilderness or wildlands with the protection of natural resources as the primary objective in management. About 13% of the Park designated as the Scientific Forest Management Area (SFMA) ([location map -sec. 10.3](#)) and is managed for exemplary and sustainable forest management. About 25% of the Park is open to hunting and trapping with the exception of moose hunting, which is prohibited in the Park.

Since 1962, the Authority has increased the Park's size with two significant and strategic purchases, one large land gift, and one smaller, but important land gift ([acquisitions map- sec 10.7](#)). In 1993, the Authority purchased 1,046 acres from the James River Corp. around Upper and Lower Togue Ponds on the southern Park border. In 1997, the Park purchased 2,669 acres between the Park's southern border and the West Branch of the Penobscot River. In 2006, 4,119 acres around and including Katahdin Lake were gifted to the Park through a

complicated deal brokered by the Dept. of Conservation and the Trust for Public Lands. Early in 2012, the Huber Corp. gifted 143 acres of land on the southeast shore of Katahdin Lake to the Park. The four land additions bring the Park to its current size of 209,644 acres. With the gift of the Huber Corp. parcel in 2012, the Park developed an Assimilation Plan to assess the parcel and implement any necessary changes to the recreation infrastructure and management to provide consistency with the Park as a whole. This Assimilation Plan can be viewed in the [Reports](#) section of the Park website.

The purchases and gifts of additional land resulted in a number of “in-holdings” - parcels located within the general boundaries of the Park owned by private parties:

- Three parcels of approximately 0.5 acres each on the eastern shore of Upper Togue Pond containing seasonal family owned dwellings. These parcels were leased from the former owners and were purchased from Baxter State Park at fair market assessed value after the Park acquired the land from Georgia Pacific in 1993.
- A parcel of approximately 36 acres on the southwest shore of Lower Togue Pond owned by the Girl Scouts of America.
- Clark Island, a 6 acre island in Lower Togue Pond, has been owned by a private family since 1964.
- A parcel of approximately 2.45 acres in size on the northern shore of Lower Togue Pond owned by the Millinocket School District.
- A family-owned parcel of approximately 50 acres on the eastern shore of Katahdin Lake just north of Katahdin Brook.

The Park also includes both eased and leased lands:

- The purchase of the West Branch Lands in 1997 included an easement on the Appalachian Trail Corridor. The easement language and land use restrictions are generally directed toward protecting the corridor from encroachment from development or logging activities and in no way conflict with the Park’s Trust-directed management in this area. The AT easement involves only land within the purchased parcel and does not extend into land originally gifted by Percival Baxter.
- As a part of the 1997 West Branch Lands purchase, the Park accepts and provides a continuing lease for two small lots along the West Branch of the Penobscot River.
- As a part of the 2006 Katahdin Lake gift, the Authority agreed to provide a continuing opportunity for a minimum of 25 years, for the operation of [Katahdin Lake Wilderness Camps](#) on a 30 acre lease on the south shore of Katahdin Lake.
- The Boy Scouts of America - Maine High Adventure have deeded rights to use and access the area known as “Matagamon Landing” near the Park’s Matagamon Gatehouse on Matagamon Lake.

3.3.2 Landscape Description

“The crest that bears the highest peaks is bent like a deep crescent, opening north, and enclosing the Great Basin. At the centre of the crescent are the two chief peaks, which differ in altitude less than twenty feet, and are not more than a third of a mile apart. Directly beneath the East Peak, shoots off to the southeast the longest of all the spurs, which, narrow above, widens greatly towards its foot. Beyond the peaks, the eastern horn of the crescent includes a thin, serrated crest, and forms, at its tip, first, the little tower-like peak known as the Chimney, and then, across a narrow, square-cut notch, the peak of Pamola, named from the Indians’ demon of the mountain. It is known only as First Peak, so styled because it was the first summit reached by tourists who followed the original eastern route to the mountain.”⁹

Baxter State Park is composed of 28 separate parcels- ([sec 10.8](#)) gifted to the Maine legislature by Percival Baxter between 1931 and 1962. In addition, the Park added two additional parcels purchased in 1993 and 1997 by the Baxter State Park Authority. In 2006 and 2012, two additional parcels were gifted to the Baxter Park Authority ([map – sec. 10.7](#)). Together, the deeded acreage of these 31 parcels is 209,644 acres. Current geographic positioning system data indicates the actual Park size to be 215,714 acres.

The Park is roughly divided north to south into two Level III [ecoregions](#), the Northeastern Highlands and the Acadian Plains and Hills. Within these two broad classifications, the Park includes 4 Level IV ecoregions. In the Northeastern Highlands, the Park contains the Moosehead-Churchill Lakes, the Quebec/New England Boundary Mountains, and the Upper Montane/Alpine Zone (primarily centered on Katahdin) subregions. In the Acadian Plains, the Park includes the Aroostook Hills subregion.

A thorough description of the natural communities that can be found in the Park is contained in the book Natural Landscapes of Maine by Gawler and Cutko.¹⁰ Intact examples of the natural communities found in the Park include spruce fir, northern hardwood and spruce-northern hardwood forest communities, a number of wooded wetland communities, and several communities represented in Maine primarily by the Park including Spruce-Fir Krummholz, Bilberry-Mountain Heath Alpine Snowbank, and Diapensia Alpine Ridge. Other important resource features and communities in the Park include old growth forests and forested (spruce) bogs, acidic fens, dwarf shrub bogs, northern White Cedar swamps, fishless tarns and ponds.

Visitors can experience the largest expanses of unfragmented low elevation matrix forest communities in Maine, including examples of old growth, enriched hardwood forest, hardwood floodplain forest, red pine forest, old growth slope spruce and old growth talus slope spruce forest, pine-hemlock/spruce forest, spruce slope forest, acidic shoreline shrub thicket, and circumneutral talus community. The Park has numerous [research papers and reports on file-](#)

⁹ C. E Hamlin, Harvard College Bulletin of the Museum of Comparative Zoology; No. V., Observations upon the Physical Geography and Geology of Mount Ktaadn and the Adjacent District, June 1881

¹⁰ Susan Gawler, Andrew Cutko; Natural Landscapes of Maine, Maine Natural Areas Program, 2010

([sec.10.31](#)) of old growth forest stands in the Park rated as outstanding examples of old forest structure with rare ecological assemblages. The 1996 Maine State Planning Office report notes that current Park management protects these communities from development in perpetuity.

Aside from the wide interior basin of the Wassataquoik and the rolling terrain of the Wadleigh, Brayley and Hinkley Brooks draining the northwestern corner, the Park's landscape is dominated by the 18 peaks above 3,000 feet that form the waning end of the Appalachian Mountains. With Katahdin dominating the landscape of both the Park and the region, the Park includes both the 7 highest peaks and 14 of the highest 50 peaks in Maine. While numerous mountain peaks in the Park are accessible by hiking trail, many peaks are untrailed and can be reached only by an arduous bushwhack. The consideration of mountain peaks and areas in the Park without trails arose as a part of a comprehensive discussion regarding Park trails and is discussed in detail in Section 4, [Protecting Park Resources](#).

Prominent in the Park's landscape is the 4,300 ac. treeless area known as the Tableland. This alpine zone lying generally west and north of Baxter Peak provides habitat for several species unique to Tableland and for many others rare to Maine and the region. Including the area between North Traveler and The Traveler, the Park contains 4,500 acres above treeline.



3-1 The Tableland

3.3.2.1 Water

The Park boundary forms a rough rectangle 12 miles east to west and 24 miles north to south. As such, the Park boundary forms a very human construct placed upon a very natural landscape. Other than the portion of the southern boundary formed by the West Branch of the Penobscot River, the Park boundary ignores existing waterways, ridgelines or other natural landscape boundaries. The Park landscape drains primarily (68%) to the East Branch of the Penobscot River through the major watersheds of Wassataquoik Stream and Trout Brook. The smaller portions of the Sandy Stream and Nesowadnehunk watersheds lying inside the Park provide the only Park drainage to the West Branch of the Penobscot.

Like most of northern Maine, ponds, lakes, bogs, flowages, swamps and numerous streams dot and thread the landscape. The Park has many ponds, streams and waterfalls, including 73 named ponds. The largest lake in the Park is First Lake Matagamon (3,865 acres) and its connected cousin, Second Lake Matagamon (1,004 acres) although a portion of First Lake Matagamon extends beyond the Park boundary. Other larger waters include 649 acre Katahdin Lake and 171 acre Wassataquoik Lake. A number of these aquatic resources harbor native fish populations including brook trout and the much rarer Arctic char. Some locations are reached only by hiking (no motorized access). The deepest water body in the Park is Billfish Pond with a depth of approximately 90 feet. The Park landscape also contains a minimum of four fishless ponds – a Maine rarity. Waters in the Park have been tested for chemical composition and recent research has focused on the waters and water-based vertebrates and invertebrates of the Wassataquoik watershed in order to form a baseline of species and abundance for future monitoring.¹¹ Fisheries in the Park are discussed in more detail in [section 4.4.2.](#) below.

3.3.2.2 Forests

The forests of the Park are primarily composed of mixed hardwood/softwood and softwood types with red, white and black spruce, balsam fir, northern white cedar, eastern hemlock, eastern white pine and tamarack representing softwood species and red maple, sugar maple, beech, yellow and white birch, white and brown ash and quaking and big-tooth aspen representing typical hardwood species¹². While active forest management occurs only in the Scientific Forest Management Area (~14% of the Park's area), the forest landscape of the Park exhibits a long history of both human and natural disturbance. Logging, insect epidemics, wind, snow and ice damage and fire have all played significant roles in shaping the Park's forest landscape.

Percival Baxter purchased each of the Park's 28 separate parcels from various lumbering and forest products interests and often the purchases included the rights for the seller to conduct a harvest of wood products from the tract within a negotiated period after the purchase. Consequently, to the trained eye much of the Park's forests still reveal the signs of harvest, although the last "cutting rights" harvest were completed by the mid 1960's and the signs are becoming harder to spot. Although the stumps are rotting away and the skid trails are re-grown, the Park's forest as a whole is generally relatively mature, with only patches and pockets of undisturbed mature or old forest, mostly on steeper slopes difficult to access with logging equipment or in those areas missed by various forest fires over the past 100 years. Over the next 50 years, the Park's forests should begin to exhibit the signs of late successional character, with the average ages of many dominant stems in mixed wood and spruce-dominated stands surpassing 100 years.

The Park has no information on the current forest typing of the Park's landscape. Little or no monitoring activities are in place for existing late-successional and old growth forests in the

¹¹ Roy Bouchard, Biological Survey of the Wassataquoik Watershed; Maine Department of Environmental Protection, 2009-2010.

¹² F.H. Eyre, Editor, *Forest Cover Types of the United States*; Society of American Foresters, 1980

Park. Late successional and old growth forests in the Scientific Forest Management Area at Frost Pond and Boody Brook have active monitoring points and Boody Brook has been the study of recent research¹³ but known late successional sites in the wilderness area of the Park such as spruce slope forests on North Turner, spruce forests on South Turner, northern hardwood/spruce forests near Nesowadnehunk Field and other and other sites in the Park have not been recently researched or quantifiably measured.

The Park has an extensive and complex fire history. It is probable that some of the fires in the Park between 1880 and 1950 were at least partly linked to fuel placement resulting from logging activities. Extended drought periods combined with logging and land clearing activities in the late 1800's and early 1900's contributed to regional fire complexes in Maine. Until Maine formed active fire detection and suppression organizations through the Maine Forest Service, fires ignited by lightning in the Park burned to the extent the fuel and weather allowed and died out naturally. The most significant known fire is the great fire of 1903. Beginning in June on the south side of Webster Stream, over a few days this fire extended southward over several townships in the Park, eventually engulfing a significant portion of the Wassataquoik Valley and reaching as far south as South Turner Mountain. In the 1930's and '40s, fires also burned significant areas in the southern end of the Park in T2R9. In June of 1977, a large area of windthrown timber north of Abol Stream and the West Branch of the Penobscot was ignited by lightning and, combined with logging debris on privately owned land adjacent to the Park burned over 2,500 acres on the Park. The Maine Forest Service, Park staff and many members of the public worked to control this blaze in what became a very public and newsworthy event.

Between 1915-25 and again between 1975-85, the Park's forests felt the effects of the Spruce budworm (*Choristoneura fumiferana*). The spruce budworm is a small moth that, in the larval stage, feeds on emerging new growth and existing needles (leaves) of several commercially important softwood species native to Maine including balsam fir, white spruce and red spruce. Normally existing in Maine's forests at very low levels, spruce budworm erupts to epidemic levels in a cyclic fashion approximately every 60-80 years. It is estimated that stands with greater than 50% balsam fir stocking suffered over 70% mortality as a result of budworm feeding in the '75-85 epidemic. The effects in the Park were often dramatic and the loss of mature spruce-fir forests at Chimney Pond and north of Nesowadnehunk Field substantially changed the look and feel of these areas in a short time. Increased danger of forest fire as a result of the amount of dead and downed softwood timber was a concern to Park managers into the 1990's. Much remains to be discovered about this insect and its explosive cycles of population growth – it remains unknown why the '75-'85 epidemic collapsed. Forest entomologists expect another epidemic to build in Maine sometime in the next 20 years. In recent years, the existence of non-native invasive insects in the region, has emerged as a more principal and strident concern than the spruce budworm or other natural cyclical insects. The potential for significant and permanent change to the structure and composition of the

¹³ Stacy Jo Birch; *Stand Dynamics and Spatio-Temporal Patterns of Natural Disturbance in an Acadian Old-Growth Reserve*; Master of Science in Forest Resources submission; University of Maine, August 2010

Park's forest is a cause for great concern and active management to protect the Park to the extent possible. Insects and disease in the Park are discussed in more detail in section 5.4.1.1 below.

Wind is another significant disturbance agent in the Park's forest landscape. Windthrow in the Park is primarily an endemic process, requiring the regular patrol of Park roads to clear occasional windthrown trees. As Park forests mature over the next 50 years, wind events are likely to have a more pronounced effect on Park forests. The propensity of wind events to effect large areas of forest quickly is important in the Park's emergency management planning, as visitors at campgrounds in the Park can awake after a windstorm to find that access out of the Park is blocked by several miles of windthrown trees across the Park's Tote Road. The potential effect of wind on Park forests is discussed in more detail in [section 4.4.1.1](#).

For the most part, natural disturbance factors such as wind, insects and fire are considered part of the natural ecological processes in the Park that have shaping and impacted the Park's forest landscape for hundreds of years before the Park was created. Fire poses a more thorough and complex planning process as the Park must consider the potential for fires originating inside the Park to spread and affect other private and public ownerships outside the Park. Accordingly, the Park works closely with the Maine Forest Service in the preparation and maintenance of a Baxter State Park Fire Plan. The effects of Wildland fire and the Park Fire Plan are discussed in greater detail in [section 4.4.2.2](#).

3.3.2.3 Soils

Until recently, the Park had sound soil mapping for only the area within the Scientific Forest Management Area. As a result of 2010/11 survey work by soils scientists with the USDA Natural Resource and Conservation Service, the Park will soon have comprehensive soil mapping and information. This information will be integrated with the Park's data management system and can be used as a tool for trail relocation and maintenance efforts.

3.3.2.4 Geology

The geology of the Park is complex and interesting. Baxter State Park contains textbook examples of glacial geology features including moraines, eskers, kettleholes, glacial cirques, a glacial arête and glacial erratics. The Trout Brook Valley Formation on the Park's north end is an internationally significant fossil location for some of earth's earliest land plants. The Park has been carefully studied by dedicated surficial and bedrock geologists. The results of these study efforts have been consolidated in an excellent work by Douglas Rankin and Dabney Caldwell. The following excerpt provides an excellent overview of the Park's fascinating geology:

Geologic History

"Except for some older rocks along the very northern fringe of the Park and some possibly younger dikes, all of the bedrock in Baxter State Park is of Devonian age. We know from the

older rocks outside the Park in the area of Ripogenus Lake to the west, and to the east in the Shin Pond area, that the region had a long and complex pre-Devonian history. Evidence for that history within the Park has been covered or obscured by Devonian rocks. The oldest rocks in Cambrian Period this part of Maine was not part of North America, but was part of another continent and separated from North America by a wide ocean. During the Ordovician Period that ocean gradually closed. During the closure, volcanic island arcs, analogous to the present Lesser Antilles of the Caribbean, formed above subduction zones down which oceanic crust was returned to the interior of the Earth. The remnants of one such arc are the basalts that form the southern buttress of Ripogenus Dam and those at Pond Pitch on the East Branch Penobscot River. Closure of that ocean basin resulted in the collision of the island arcs with other arcs or continents and finally continent-continent collision producing widespread, significant rock deformation and the uplift of mountains, particularly in western New England. Major forces that produced uplift and accompanying rock deformation are called tectonic forces.

GEOMORPHOLOGY

The study of the origin of landscapes and many of the loose deposits that occur at the Earth's surface is called geomorphology, literally meaning "study of the shape of the Earth." Landscape is the result of several geologic and climatic processes acting together. Different processes of erosion and deposition, and different climates will produce different landscapes. The most important processes that have shaped the Katahdin region are rock alteration through exposure to water and the atmosphere (weathering); downslope movement, largely through gravity-driven running water (stream erosion); and glacial erosion and deposition. The present mountains are erosional remnants of a regionally uplifted area.

Rock type plays a major role in the amount and style of erosion. Some types of rock are very strong and resist being worn away, forming high steep-sided hills and mountains. Other rocks are relatively weak, and are eroded to form low hills and valleys. The more resistant rocks in the Park, such as the Katahdin Granite and Traveler Rhyolite, form mountains. Generally the weaker, more easily eroded sedimentary rocks form lowlands. The granophyric phase of the granite seems to be more resistant and forms higher mountains than the uniform granite of the lowlands. Weathering of the granite in some areas produces a granular disintegration into an accumulation of angular fragments called grus, which is easily eroded (Hanson and Caldwell, 1989).

Time is important. The longer the time spent in wearing rocks away, the more rock will be eroded, regardless of how strong the rocks are. Most rocks in the Park formed between 420 and 390 million years ago. We have no direct evidence of what happened in the area of the Park between 390 million years ago and the most recent glaciations, but mountains that were formed during the Acadian orogeny were gradually worn down and possibly the whole area experienced one or more periods of regional uplift or continuous uplift along with erosion. Any landforms that may have been created during the eruptions of the Traveler Rhyolite, folding of the Early Devonian strata, or the intrusion of the Katahdin Granite have long since been eroded.

Estimates of present erosion rates in the Appalachians range from about 20 feet to 100 feet per million years (Judson and Ritter, 1964; Matmon and others, 2003; Hancock and Kirwan, 2007). At this rate of erosion, the ground surface would have been lowered between 7,800 feet and 39,000 feet over 390 million years. The latter figure is unrealistically high. Of course, we have no way of knowing whether the erosion rate remained the same over that time. Almost certainly it did not, but surely a lot of rock was removed.

By 10 million years ago, toward the end of the Tertiary Period, the general features of the landscape in the Baxter Park region were already fashioned. If we take a conservative estimate of an erosion rate of 33 feet per million years, the ground surface has been lowered about 330 feet in the last 10 million years.”¹⁴

3.3.2.5 Access Roadways

Vehicle access to trailheads and frontcountry recreation facilities in the Park is provided by approximately 58 miles of narrow roadway ([Park Facilities map- sec 10.1](#)). Except for ¼ of a mile at the southern boundary of the Park, all roadway in the Park is gravel surfaced. Percival Baxter considered the issue of roads in the Park carefully over the course of his work to create the Park. Initially, Baxter viewed roads as contrary to the purpose and nature of the Park and in formal communications included with Deeds of Trust in parcels gifted to the State before 1945, Baxter included clear language placing limitations on current roads in the Park and prohibitions against any future road construction:

“said premises shall forever be used for public park and recreational purposes, shall forever be left in the natural wild state, shall forever be kept as a sanctuary for wild beasts and birds, that no roads or ways for motor vehicles shall hereafter ever be constructed therein or thereon, and that the grantor, during his lifetime, retains the right to determine, and to place whatever markers or inscriptions shall be maintained or erected on or within the area hereby conveyed”¹⁵

He reiterated and further specified these restrictions again in the formal communications of 1945 and 1947. Then in 1949, the Park donor changed his position regarding roads in the Park, amending his prior restrictions on all Park lands to reflect his concern that future Trustees have some flexibility regarding the issue of roads:

“I HEREBY AUTHORIZE AND EMPOWER the said State of Maine as said Trustee to construct and maintain within the areas described in said Deeds dated January 2, 1945 and January 8, 1947 and also within the other areas of land theretofore donated to the State of Maine IN TRUST by said Baxter and known as BAXTER STATE PARK, such roads and ways as said State as such Trustee shall deem to be in the public interest and for the proper use and enjoyment of those citizens of said State who may visit the area known as BAXTER STATE PARK, subject however to the conditions, limitations and restrictions that said roads and ways

¹⁴ Douglas W. Rankin, Dabney W. Caldwell, Robert G. Marvinney, A Guide to the Geology of Baxter State Park and Katahdin; Maine Geological Survey, Dept of Conservation, 2010, p 30-35

¹⁵ Private & Special Laws of 1931, Chap. 23

be constructed and maintained in a manner not to interfere with the natural wild state now existing in said areas.”¹⁶

In an accompanying letter to Governor Payne, Baxter explained the reasoning behind his change in position regarding roads:

“In my former Deeds of January 2, 1945, and January 8, 1947 as recorded in Chapter I Laws of 1945 and Chapter I Laws of 1947, certain restrictions as to the construction and maintenance of roads within the Park were imposed in the gift. Although I want this area always to be left in “its natural wild state” as provided in all my Deeds to the State, I also want this area to be reasonably accessible to those persons who enjoy the wilderness and who wish to go there for rest and recreation. That of course is my principal reason for creating this Park.

On mature deliberation I now have come to the conclusion that my restrictions as to roads are somewhat too severe. Without the proper access roads the number of persons who would enjoy the Park would be limited. In view of this I deem it best to allow the existing roads to remain open and to permit the State in the years to come to construct such additional roads as may be necessary to accommodate those persons who wish to enjoy the great, unspoiled area that now is the property of our State.

*I now present to you an Amended Act of Acceptance together with a Deed, which makes the necessary changes in the former Deeds of Trust that contain the road restrictions herein referred to. In order, however, that there may be some reasonable check in the future on the construction and maintenance of roads in the Park it is provided in these Amendments that no roads or ways shall be constructed or maintained that will interfere with or detract from “the natural wild state” of this region. In this, however, I must rely upon the good faith of the State of Maine and am confident that the State will live up to the terms of this Trust and will not break faith with me.”*¹⁷

Regarding the nature of roads in the Park, Baxter addressed the issue of the two existing roads in the Park at the time (the Millinocket-Sourdnahunk Tote Road and the Roaring Brook Road) in his 1945 Communications:

“Furthermore I provide that these two roads be maintained in their present condition, with ample turn-outs for passing cars and with only a graveled surface. I want no hard surfaced roads in this Park my object being to have it remain as nearly as possible in its natural wild state unimproved by man.”

For more than 40 years, Park management has employed this vision in the maintenance of roads in the Park. Throughout the Park, many roads that existed as hold-overs from past logging operations or roads constructed as landowners completed logging under cutting right agreements before 1972, have been reclaimed by forest and discernable only to the experienced observer. Since 1965, the Baxter State Park Authority has made a limited number of changes to the Park road system. For a summary of recreation access roads in the Park,

¹⁶ Private & Special Laws of 1949, Chap. 2

¹⁷ Formal Communications (in part) from Percival Baxter to Governor Frederick Payne, January 3, 1949.

see [Section 5.2.1. - Summary of Park Access Roads](#). For more detailed history on these changes, see [Section 7.2 – Road Maintenance](#)

In 1987, the Park included four staffed access points. In addition to the primary gatehouses at Togue Pond and Matagamon, the Park staffed two control points on the western boundary of the Park at Nesowadnehunk Field and Telos Gate at the northwestern reach of the Park Tote Road. Both these sites had minimal use and required travel over extensive miles of privately owned forest management road to access the Park. Maintenance of these roads by the private owners was intermittent and uncommitted and public use was very low. After moving the Nesowadnehunk Gatehouse from Nesowadnehunk Field to just east of the dam at the south end of Nesowadnehunk Lake as a trial, the Authority decided in 1989 to close all west side entrances.

Unlike the Forever Wild section of the Park, road construction has been a more integral part of the administration of the Scientific Forest Management Area ([SFMA map – sec. 10.4](#)) as Park staff has worked to meet the Trust intentions for this unique area. Road construction activities on the area began in 1972 and by 2005 the majority of forest management roads had been constructed. The area currently holds 49.2 miles of Class 1 all season road and 35.8 miles of Class 2 road useable only in with significant snow and in frozen conditions. Approximately 4 miles of forest management road remains to be constructed in the SFMA in the future.

In 2006, a short (1/4 mile) section of road was constructed linking the SFMA forest management road system with the section of the Park Tote Road passing through the SFMA near Trout Brook Crossing. This road provides access for SFMA and Ranger patrol and staff-guided tours to the SFMA to view forest management.

A more detailed discussion of the Park’s approach to roads can be found in [section 7.2](#) below.

3.4 Core Functions

The Park has identified six core functions which characterize the management and operation of the Park as expressed in the Park’s Mission Statement above. These core functions are summarized below and described in much greater detail later in this plan.

3.4.1 Protecting Park Resources

In 1955, Baxter included the following wording in his formal trust communications:

...“This area is to be maintained primarily as a Wilderness and recreational purposes are to be regarded as of secondary importance and shall not encroach upon the main objective of this area which is to be “Forever Wild.”¹⁸

¹⁸ *Private and Special Laws of Maine, 1955; Chapter 2, page 2*

The Park includes approximately 4,500 acres (2.1% of the Park) considered above treeline – currently providing habitat for some of Maine’s rarest species including the Katahdin arctic butterfly and the American pipit. Outside the treeless zones, the Park landscape is covered by most forest types typical of north-central Maine and the Acadian Forest. Fires and logging are historic influences on the Park’s forests and only a small fraction of the Park’s forest qualify as “old growth” or “late successional¹⁹”, but significant acres in the Park are likely to qualify for these designations in the next 50 years. The Park has healthy populations of many of Maine’s “charismatic mega-fauna” including deer, moose, black bear, pine marten, coyote and fisher. Although the Park continues to maintain a stocking program with IF&W on a portion of the Park ponds, the Park also contains pristine populations of eastern brook trout and several fishless ponds.

The Park’s Rules and Regulations are divided into 7 categories. More rules address resource protection than any other category. Current Park policies limiting daily hiking access to Katahdin area trails, campfire use in some areas of the Park, and restrictions in research and personal collecting are examples of the Authority’s efforts to protect the Parks resources.

The fundamental challenge at the core of most of the controversial issues and decisions addressed by the Authority over the past 40 years involves reconciling the often conflicting core functions of **Resource Protection** and **Provision of Recreation Opportunities**.

3.4.2 Providing Recreation Opportunities

Baxter State Park ([Park Facilities map – sec. 10.1](#)) is a popular outdoor recreation destination in the northeast. Over 60,000 people passed through the Park gates in 2010. Current Park use numbers ([BSP use statistics – sec. 10.12](#)) are down about 30% from the mid-1990’s, but have been rising for the past five years. The Park operates 8 car-accessible campgrounds, two backcountry hike-in campgrounds and about 35 remote backcountry campsites. Camping facilities in the Park are primitive and fall into four categories: lean-tos, tent sites, rustic cabins and bunkhouses. The Park often hosts more than 1,000 people/night during peak operational periods in July, August and early September. Park visitors use the Park in a variety of ways including to camp, canoe, kayak, fish, photograph, hunt and especially, to hike Park trails. The Park maintains over 215 miles of hiking trail in some of the most remote and rugged terrain in Maine including several Katahdin access trails over a century old. Hiking trail maintenance is accomplished through summer intern trail crews, contract crews and volunteer individuals and groups.

¹⁹ Forests younger than “Old Growth” but >100years old (beyond the typical rotation length of commercially managed forests of 50–100 years) are often referred to as late successional(LS) forest ([Frelich, 2002](#)). From: An index to identify late-successional forest in temperate and boreal zones
Andrew A. Whitman *, John M. Hagan Manomet Center for Conservation Sciences, 14 Maine St., Brunswick, ME 04011, USA

The Park provides a wide range of fishing opportunities, although the use of live fish as bait is prohibited in the Park. The Park maintains an active and productive relationship with IF&W regional fisheries staff in managing the Park's fisheries resources.

The Park is also a popular destination for winter backcountry camping, skiing, ice-climbing and winter mountaineering. The bunkhouse at Chimney Pond is often fully booked during the months of February and March.

3.4.3 Conducting Exemplary Forest Management

"I want this township to become a show place for those interested in forestry, a place where a continuing timber crop can be cultivated, harvested and sold; where reforestation and scientific cutting will be employed; an example and an inspiration to others. What is done in our forests today will help or harm the generations who follow us." ²⁰

The 29,587 acre Scientific Forest Management Area (SFMA location map – sec 11.3) was established as a part of the Park by Baxter in 1954/55. The SFMA has a long and detailed history, but has been actively managed since the early 1980's ([SFMA management map- sec 10.4](#)). The SFMA has been certified by the Forest Stewardship Council since 2001 – a third party confirmation of exemplary forest management. Management access to the area is now nearly complete with over 60 miles of forest management road and about 450 active management units. The SFMA recently completed the 2nd measurement of 115 continuous forest inventory plots. Annual harvest rates are around 7-8,000 cord-equivalents per season with active harvesting underway about 35-40 weeks per year. Harvesting is accomplished by contract with a local logging contractor. The Park provides on-site housing for harvesting crews.



Figure 3-2. SFMA Harvesting

²⁰ Baxter Communications (1955) to Governor Muskie; Senate and House of Representatives, 97th Legislature

3.4.4 Maintaining Park Property

The Park is a large area ([Park map – sec. 10.1](#)) with 8 frontcountry (roadside and accessible by vehicle) campgrounds, 2 backcountry campgrounds (accessible only by foot on hiking trails) and several service areas to assist with storage and supply. Most people are surprised to learn that there are well over 300 structures in the Park. The Park maintains nearly 100 toilets, 80 lean-tos and more than 15 picnic shelters, along with around 30 structures for staff housing ranging from small crew camps to the dormitory style facilities at Abol Field. The Park also maintains a permitted waste disposal field for the spreading of waste pumped as needed from Park toilets. In addition to Park-based facilities, the Park maintains several large buildings in the Town of Millinocket at the Headquarters Campus including the Headquarters building, a warehouse facility and a garage-shop building and a storage pole-barn.

The Park maintains about 58 miles of public use road in the Park as well as over 70 miles of forest management road in the SFMA. The Park public use road also includes four significant bridges and over 300 culverts, including a number of culverts larger than 6' in diameter ([culvert map- sec 10.6](#)).

3.4.5 Protecting the Public and Staff

In general, the Park works to ensure that the visitor's sense of freedom and the spirit of wilderness shall be interfered with as little as possible, consistent with the Park's need to provide for resource protection, reasonable public safety and emergency assistance. Emphasis will be placed on information, education and interpretive activities that make the visitor aware of the hazards of using an undeveloped area and their responsibility for their own safety, consistent with the degree of difficulty of the activity they are pursuing.

Baxter Park utilizes six commissioned Baxter Park Rangers (5 BSP Rangers and 1 Deputy Chief Ranger) to conduct public safety and law enforcement activities in the Park. Most violations of Park rules are civil violations and a typical fine is \$200.

The Park Rangers, Chief Ranger and the Director have a strong and cooperative relationship with local IF&W Wardens and Maine Forest Service Rangers. The Park handles between 25 and 40 search and rescue incidents per year. Most of these incidents are minor assists or walk-downs. A smaller number require longer and larger search or evacuation team organization and/or air assist evacuations. Cooperators in air assist evacuations are the 126th Army National Guard Medivac Unit out of Bangor, and the Maine Forest Service out of Old Town.

Park staff is trained in varying levels of first aid, depending upon individual job standards.



Figure 3-3. 126th Air Army National Guard Helicopter

3.4.6 Managing Fiscal Resources

Baxter State Park is classified as a quasi-state agency, due to the independence of the Authority and Park financing. The Park is independently funded and has not received an appropriation from the General Fund since 1972. The FY11 work program budget for the Park is \$3,572,000.

Park revenues come from four principal sources²¹:

- Park Trust Fund Revenues (67%)
- Fees for Camping (19%)
- Forest Products Revenue from the SFMA (7%)
- Non-Resident Entrance Fees (3%)
- Miscellaneous Revenues (3%)

Park Trust Fund Revenues (67%)

Percival Baxter established two trust funds totaling about 11 million dollars, which became available after his death in 1969. Baxter left the principal fund, the Baxter Trust, to his family bank, the Boston Safe and Deposit Company. Boston Safe was eventually acquired by Mellon Bank, which has since been acquired by the Bank of New York. Baxter specified that revenue generated by this fund be delivered to the Authority for use in the care and maintenance of Baxter State Park. Since 1970, unused revenue has been deposited in a second fund, the Investment Management Fund. A third fund is managed by the State Treasurer in combination with several other State of Maine funds.

The effective long-term management and financial stewardship ([Stewardship Index – sec. 10.58](#)) of the Park Trusts is both vitally important and very complex. The management is facilitated by an Investment Policy Statement and an Investment Committee consisting of knowledgeable experts.

Fees for Camping (19%)

²¹ Percentages based on FY2011 revenue estimates.

The Park assesses reasonable fees for camping in the Park. Recently, the Park changed its fee structure from a per-person rate to a per-site rate. This change greatly simplified the fee structure and will allow the Park to move to on-line reservations. The Park uses a fee review protocol ([section 10.41](#)) to assess fees rates every two years. The protocol reviews fees against objective indices such as the change in average per capital wages in Maine, Consumer Price Index and comparative facilities in the region.

Forest Products Revenue from the SFMA (7%)

The SFMA operates through an enterprise account, and typically harvests and sells approximately 8,000 cord-equivalents of product per year, grossing approximately \$1,000,000 in wood products sales. After payments to contractor(s) for harvesting and trucking services, the net profits from wood sales are deposited in the Park's operating fund in May of each year.

Non-Resident Entrance Fees (3%)

The Park current charges \$14 for non-resident vehicles to enter the Park. This fee is adjusted along with others based on the outcome of the Fee Review Protocol.

Miscellaneous Revenues (3%)

The Park derives additional revenue from small to significant donations from the [Baxter Park Wilderness Trust](#), a private trust formed in 2007 and currently providing approximately \$85,000/year to the Park in the form of unrestricted donations. The Park also receives financial support from the [Friends of Baxter Park](#) – a private non-profit advocacy group. The Park also manages a donation account for other donations provided by Park visitors. A summary of donations are reported annually to the Authority and the Governor's office.

3.5 Administrative Structure and Function



Figure 3-4. Baxter Park Staff - 2010

3.5.1 Staff

The primary decision-making body for the Park is the **Baxter State Park Authority**. Established by statute in 1939 ([sec 10.10](#)), the Authority has “*full power in the control and management of Baxter State Park*” in accordance with the wishes of Park donor, former Maine Governor Percival P. Baxter. The Authority consists of three Maine State officials: the Commissioner of Inland Fisheries and Wildlife, the Director of the Maine Forest Service, and the Maine Attorney General.

As an organization ([organization chart- sec. 10.11](#)), the Park includes 22 year-round employees and 38 seasonal employees (2010) working in the summer months, totaling 40.1 FTE's (Full Time Equivalents). The Park's Administrative Team includes the Park Director, Chief Ranger, Park Naturalist, Business Manager and Resource Manager.

The **Chief Ranger** is responsible for the operations arm of the Park including a Deputy Chief Ranger (Law Enforcement) and 5 Supervisory Baxter State Park Rangers, Maintenance/Transportation Supervisor, Carpenter and Maintenance Ranger, and most seasonal campground and gatehouse staff. The Chief Ranger provides a lead role on search and rescue operations.

The **Park Naturalist** supervises the Interpretive Specialist and is responsible for most Park outreach, resource monitoring, administration of media projects in the Park, the operation of the Park visitor center, maintenance of Park photo and historical documents archives, and the operation of summer seasonal resource protection staff including Alpine Steward and Interpreter. Working with the Research Committee, the Park Naturalist also leads the review of proposals for research within the Park and administers approved research efforts.

The **Business Manager** administers the implementation of the approved budget in the Park, participates in trust fund management meetings, and controls the warehouse, accounting and reservation departments on the Park Headquarters campus. The Business Manager also administers the Personnel office and Human Resource function in the Park.

The **Resource Manager** administers all aspects of forest management and forest planning on the SFMA, supervising a field forester and a seasonal technician. The Resource Manager also develops and executes contracts to complete harvesting, road construction, road maintenance and other forest management operations on the SFMA. The Resource Manager also coordinates the delivery of forest products used by the Park in various maintenance efforts (bog bridging, firewood etc.). The Resource Manager also provides a lead role in data management for both the SFMA and the Park.

3.5.2 Advisory Committees

The Authority has formed four distinct standing advisory committees to assist the Director and the Authority in the development of Park policy and operational initiatives. Appointments or other changes to the committees are made by the Authority at the May BSPA meeting. None of the Advisory committees has any statutory basis and all serve at the pleasure of the Authority.

Baxter State Park Advisory – the BSP Advisory was formed by the Authority in the 70's and is the oldest of the Advisory Committees. The committee has a cap of 15 members who serve two year terms with a maximum of three consecutive terms allowed. Term-off members may be re-appointed by the Authority after a break in service of one year. This committee works closely with the Director to review and comment on policy and operational initiatives in the planning stage before presentation to the Authority. The committee is composed of Park users from all over Maine with a wide range of outdoor expertise and familiarity with Park resources and facilities. This committee will typically meet monthly from Nov-Apr and will also include one or two optional summer trips in the Park.

Scientific Forest Management Advisory – this committee was formed in the early 1980's to assist with the development of forest management in the SFMA. The committee has a cap of 15 members who serve three year terms without limit. This committee works closely with the Resource Manager to address forest management and planning efforts on the SFMA. Some members of the SFMA Advisory have been on the committee for many years and help provide

continuity in the consideration of SFMA management. This committee will typically meet 2-4 times per year including a fall field tour in the SFMA.

BSP Research Committee – this committee was formed in the 1990’s to help the Park staff provide an objective and knowledgeable review process regarding the permitting of various proposals for research inside the Park. The committee is currently composed of 12 members, although no formal cap exists on committee size and committee members have no formal terms of service. Committee members provide expertise in a wide range of resource disciplines including entomology, wildlife biology, geology and botany. This work of this committee is led by the Park Naturalist and works to review research proposals in conformance with an existing written proposal process. This committee will typically meet 2-4 times per year depending upon submitted proposals.

BSP Investment Committee – this committee currently consists of 6-10 members, including the current BSP Advisory Chair who is an ad-hoc member of this committee. This committee has no cap on membership numbers, and no term lengths limits. The committee members generally include individuals with financial, and investment expertise who work with the Park Director and Fund Managers to develop and implement investment strategies for the effective management of the Park’s trust fund portfolios. The work of the committee is guided by a Baxter State Park Investment Policy Statement. The committee provides regular updates to the Authority at regular and special Authority meetings. This committee has been very active in recent years in the broadening of the asset classes and investment instruments under consideration for inclusion in the Park’s portfolio.

3.5.3 Park Volunteers

The Park administers an active volunteer program and volunteers contribute significant hours to trail and building maintenance efforts within the Park. The program is administered through the Chief Ranger’s office.

3.6 Park Documentation and Guidance

The Administration of the Park is supported by a variety of documents, guides, reports and communication devices. In addition to the Deeds of Trust and Communications, the Park maintains a Standard Operating Procedures Manual (SOP) available to Park staff, a Law Enforcement and Duty Officer Manual for Baxter Park Law Enforcement and Administrative staff, and an Annual Operations Summary report compiled each year by the Administrative staff.



3-5 Saddle Trail on the Tableland

4 Protecting Park Resources – Core Function 1

4.1 Introduction

“This area is to be maintained primarily as a Wilderness and recreational purposes are to be regarded as of secondary importance and shall not encroach upon the main objective of this area which is to be “Forever Wild.”²²

With these words, Percival Baxter defined the challenge to management of the Park. He tasked us to recognize and protect the primary importance of the wilderness, while providing free and unfettered opportunities for recreation within that wilderness, recognizing that people are a part of his wilderness idea, but “*in the right, unspoiled way*”. ²³The effort to provide recreational activities in the Park’s wilderness while maintaining an “*unspoiled*” resource is at the core of most of the management policies that govern the use of the Park today.

Within the wilderness zone of the Park, almost all of the Park’s policies attempt to address either natural disturbance or human disturbance. In general, the Park interprets no need and takes no steps to interfere with natural disturbance events including storms producing blowdowns, rainstorms, heavy snows, cyclical and episodic insect outbreaks and in some instances, lightning ignited fires. These natural disturbance events are largely stochastic and can all be classified as part of “nature’s endless cycle” - a part of the constant stream of natural processes that shape and define all wild lands on earth. Park management does attempt to identify and address public safety issues that are associated with natural events including warning systems, evacuation plans and other pre-planning measures to protect visitors during, and sometimes long after, periods of significant natural events through an Evacuation Plan.

Most of the resource protection policies applied within the Park seek to address the effect of human use or human disturbance. Park management uses various tools to protect the Park resources from the impacts of human use and also to preserve for all visitors an appropriate social experience. In general, Park management utilizes three approaches to protecting the Park from human impacts: the spoken word, the written word and physical actions. Park staff employs constant communication with Park visitors at Park Headquarters, gatehouses, campgrounds, and on the trails within the Park to explain the reasoning behind and appropriate techniques for appropriate low-impact use of the Park. Park management also employs an impressive array of brochures, hand-outs, reports, publications, books, newspapers, website pages and other print media to provide visitors with information on how to best enjoy wilderness experience within the Park while protecting the Park’s natural resources. Lastly, Park management employs actions such as the establishment of rules and regulations, use policies, the application of law enforcement in the Park, and the physical

²² Private and Special Laws of Maine, 1955, Chapter 2, p 1

²³ Percival P. Baxter. Formal Communication to Maine Governor Horace Hildreth, January 2, 1945

closure or limitation on the use of trails, roads or other recreation facilities. This spectrum of management has successfully protected the Park for many decades. Most of the content of this section will address the various tools applied toward resource protection in the Park and will identify areas of concern for future management.

Because the protection of the Park's wilderness is such an important part of the Park's mission, and the Percival Baxter's concept of the Park's wilderness is so unique, this section begins with a discussion of the Park's wilderness. Overwhelmingly, verbal and written communication is the Park's most common tool for resource protection. Referred to in the trade as Information and Education or I&E, [section 4.3](#) continues with a discussion of interpretation in Baxter State Park. The section is completed with the consideration of Resource Protection Policies and Concerns in [section 4.4](#).

4.2 Wilderness and the Natural Wild State

The term “wilderness” is frequently applied to Baxter State Park, including numerous places in this management plan. This can be misleading, as the concept of “wilderness” embodied in Baxter State Park as conceived by Percival Baxter should not be confused with the concept of Wilderness described and applied on Federal and other lands.

Roderick Nash, in his landmark work Wilderness and the American Mind proposes an approach to resolving the difficulty in defining the concept of wilderness:

“A possible solution to the problem is the conception of a spectrum of conditions or environments ranging from the purely wild on the one end to the purely civilized on the other – from the primeval to the paved. This idea of a scale between two poles is useful because it implies the notion of shading or blending. Wilderness and civilization become antipodal influences which combine in varying proportions to determine the character of an area.”²⁴

This is perhaps a productive way to view the wilderness of the Park. The existence of maintained roads for vehicles, cabins both in the frontcountry and backcountry with modern appliances, two-way radios, the use of chainsaws and brushsaws to maintain Park trails, all suggest that the spectrum of wilderness in the Park, while not at all close to the paved end of Nash's spectrum, includes areas that are not entirely primeval either. Viewing the Park as a spectrum of conditions within a wilderness provides cohesiveness to the concept of including frontcountry drive-in campgrounds within the wilderness zone. While these areas contain many non-wilderness features such as cars and buildings, the pre-eminent philosophy of management in these areas remains oriented to the maintenance of an “unspoiled” wilderness character.

The concept of wilderness in America rapidly evolved during the 30 year period in which Baxter created the Park, reaching an important milestone with the passage of the Wilderness Act in 1964.

²⁴ Roderick Nash, *Wilderness and the American Mind*, Yale University Press, Fourth Edition, 2001; p.6

Many current definitions of wilderness exist. [Wikipedia](#) defines wilderness as “ a natural environment on Earth that has not been significantly modified by human activity. A common requirement in international wilderness definition is that wilderness be *legally protected* and *biologically intact*. One of the most carefully crafted and most commonly cited is the core language from section 2C of the 1964 United States Wilderness Act:

“A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.”²⁵

Aldo Leopold described wilderness as:

“..a continuous stretch of country preserved in its natural state, open to lawful hunting and fishing, devoid of roads, artificial trails, cottages or other works of man”²⁶

The [Wild Foundation](#) states:

“The essence of a wilderness area is that it is a place where humans can maintain a relationship with wild nature. Whether that relationship is characterized by recreational use or traditional, indigenous use does not matter, so long as the relationship is predicated on a fundamental respect for – and appreciation of – wild nature”

Robert Marshall used the following definition:

“...a region which contains no permanent inhabitants, possesses no possibility of conveyance by any mechanical means and is sufficiently spacious that a person in crossing it must have the experience of sleeping out.”²⁷

Although the concept, meaning and the evolution of our understanding of wilderness have been written about extensively by many, Dawson and Hendee assert that a handful of identifiable ideas characterize the value of wilderness:

“Although wilderness may mean something different to each person, four central themes have consistently emerged: experiential, the direct value of the wilderness experience; the value of wilderness as a scientific resource and environmental baseline; the symbolic and spiritual values of wilderness to the nation and the world; and the value of wilderness as a commodity or place that generates direct and indirect economic benefits”²⁸

Baxter exchanged supportive correspondence with the principal author and determined advocate of the Wilderness Act, Howard Zanhiser, and it is very probable that Baxter’s thinking evolved significantly during this time. Baxter consistently applied the term “natural wild state” using it at least 24 times in the Deed of Gifts and an additional 5 times in his Formal Communications. In contrast, he used the word “wilderness” sparingly (approx. 3 times) in the text of the Deeds of Gift and did not use it at all before 1949.

²⁵ <http://www.fws.gov/laws/lawsdigest/wildrns.html>

²⁶ Aldo Leopold, 1921. The wilderness and its place in forest recreational policy. *Journal of Forestry*. 19(7); 719

²⁷ Robert Marshall, 1930. The problem of the wilderness. *Scientific Monthly*. 30:141-148

²⁸ Chad P. Dawson, John C Hendee; Wilderness Management – Stewardship and Protection of Resources and Values; International Wilderness Leadership Foundation; 2009; p.6

Baxter also was ahead of his time in recognizing the role of humans in concept of the wilderness landscape. While his general theme promotes a hands-off approach, he also includes the opportunity for carefully considered management of the wilderness to maintain ecological integrity.

As with most Americans during in the 20th century, Baxter realized that the definition of wilderness was somewhat individual and that different people held differing visions. In order to clarify his vision of the Park, Baxter included two significant texts, one the Formal Communications to Governor Horace Hildreth in 1945 and another in the Deeds of Gift submitted to the Ninety-seventh Legislature in 1955. These texts provide the best, and arguably the only guide suitable for defining the unique wilderness of the Park.

In the Formal Communications of 1945 the text is as follows:

"In all the deeds from me to the State the phrases "natural wild state" and "as a sanctuary for wild beast and birds" have been used. By these I do not intend that the Park forever shall be a region unvisited and neglected by man. I seek to provide against commercial exploitation, against hunting, trapping and killing, against lumbering, hotels, advertising, hot-dog stands, motor vehicles, horse-drawn vehicles and other vehicles, air-craft, and the trappings of unpleasant civilization. Nor is the Park to be kept exclusively for professional mountain climbers; it is for everybody.

I want pleasant foot-trails built and attractive camp-sites laid out in the valleys, by the brooks and on the shores of the waters. Sites where simple forest lean-tos and small log cabins are available for those who love nature and are willing to walk and make an effort to get close to nature. A suitable shelter also should be erected on the summit of Katahdin to give protection to those who climb the mountain and who may be caught in a storm or compelled to remain overnight.

With the protection of wild life the deer, the moose and the birds no longer will fear man and gradually they will come out of their forest retreats and show themselves. I want hunting with cameras to take the place of hunting with guns. Aircraft frighten wild life and disturb the peace and solitude of the wilderness. Would that the day may come when all of Maine will become [sic] a sanctuary for the beasts and birds of the forest and field and when cruelty to the humbler orders of life no longer stalks the land.

Everything in connection with the Park must be left simple and natural and must remain as nearly as possible as it was when only the Indians and the animals roamed at will through these areas. I want it made available to persons of moderate means who with their boys and girls, with their packs of bedding and food, can tramp through the woods, cook a steak and make flapjacks by the lakes and brooks. Every section of this area is beautiful each in its own way. I do not want it locked up and made inaccessible; I want it used to the fullest extent but in the right unspoiled way."²⁹

²⁹ Percival P. Baxter. Formal Communication to Maine Governor Horace Hildreth, January 2, 1945

In the Deeds of Gift the text is as follows:

“In consultation with our Forest and Game officials and with the Attorney General’s Department it seems desirable to provide for an understanding as to what is required under the Trust Deeds. Under the Act now submitted to you the powers of State management are broadened and made more flexible in order that the Trusts will not be violated in the years to come. As all my Trusts have been made for perpetuity great care has to be taken to make them understandable and enforceable.

“NATURAL WILD STATE” and “SANCTUARY FOR WILD BEASTS AND BIRDS”

WHEREAS it is in the public interest to have a correct interpretation of the phrase “natural wild state” and the phrase “sanctuary for wild beasts and birds” in the above mentioned Deed of January 12, 1954, as well as wherever they appear in all the former Deeds and conveyances made to the State by Percival Proctor Baxter relating to Baxter State Park:

NATURAL WILD STATE

The State of Maine is authorized to clear, protect and restore areas of forest growth damaged by ACTS OF NATURE such as blowdowns, fire, floods, slides, infestation of insects and disease or other damage caused by ACTS OF NATURE in order that the forest growth of the Park may be protected, encouraged and restored.

The State is authorized to build trails and access roads to camp sites, to use timber from this area for fire control and firewood and to construct shelters and lean-tos for mountain climbers and other lovers of nature in its wild state.

This area is to be maintained primarily as a Wilderness and recreational purposes are to be regarded as of secondary importance and shall not encroach upon the main objective of this area which is to be “Forever Wild.”

The existing leases of the land and buildings at Kidney Pond, Daisey Pond and on the shores of Matagamon Lakes may be continued by and in the discretion of the Baxter State Park Authority.

SANCTUARY FOR WILD BEAST AND BIRDS

The State is authorized to maintain the proper balance of nature among the different species of wild life; to control predators that may become a menace to other species; to control disease and epidemics of the wild life of the Park. Such control shall be exercised by the Baxter State Park Authority. The destruction of any specie (sic) of wild life shall be carried on exclusively by the Personnel of said Authority and the Forest and Fish and Game Departments.

All work carried on by the State in connection with the above shall be in accordance with the best forestry and wild life practices and shall be undertaken having in mind that the sole purpose of the donor in creating this Park is to protect the forests and wild life therein as a great wilderness area unspoiled by Man. Nothing shall be done for the purpose of obtaining income

*but should there be incidental income it is to be used solely for the care, operation and protection of this Wilderness area.*³⁰

In Baxter's interpretation a central directive emerges:

"This area is to be maintained primarily as a Wilderness and recreational purposes are to be regarded as of secondary importance and shall not encroach upon the main objective of this area which is to be "Forever Wild.""

Around this central directive Baxter articulated several additional guidelines:

- The Park and all things in it should remain simple and natural.
- Wildlife in the Park should be protected from harassment or interference by humans.
- The Park should guard against commercial exploitation and the "trappings of unpleasant civilization".
- Trails and campsites including lean-tos and simple cabins are acceptable.
- Opportunities for recreation in the Park should be available to all who are "willing to walk and make an effort to get close to nature.

In addition to these themes, Baxter provided the clear authority to the Baxter State Park Authority to utilize roads and trails in conjunction with the appropriate provision of recreation opportunities in the manner described above, and he provided the flexibility for the Authority take action if necessary to address serious natural disturbance events qualified by the understanding that any actions taken should be *"to protect the forests and wild life therein as a great wilderness area unspoiled by Man."*

Taken as a whole, Baxter's vision is clear: a large area managed primarily as wilderness where natural process proceed without interruption or interference from humans and where recreational opportunities are secondarily provided in an available, yet simple and natural fashion. In his understanding of the relationship between humans and the natural landscape, Baxter was ahead of his time. We recognize both the importance and the challenge that lies ahead in allowing unfettered natural processes.

One reason for restraint in general and the hands-off approach in particular is that in many situations there is insufficient knowledge to manage ecosystems. Any environmental science textbook is replete with examples of attempts to "fix" an ecological problem that went awry because of unforeseen consequences. Global climate change exacerbates this lack of knowledge. In discussing whether there is sufficient knowledge to manage ecosystems, Turner (1996:124) concludes, "We are not that wise, nor can we be. The issue is not the legitimacy of science in general, nor the legitimacy of a particular scientific discipline, but the appropriate limits to be placed on any scientific discipline in light of limited knowledge. To ignore these limits is to refuse humility." The increasing rarity of wildness in our increasingly manipulated

³⁰ Private and Special Laws of Maine, 1955, Chapter 2, p 1

world argues for greater humility and restraint for watching change occur – even if this change is not in accord with what managers and scientists think should be happening.”³¹

These directives have guided the Baxter Park Authority’s management of the Park for over 50 years and will provide a constant foundation for the management issues described below. The evolution in wilderness thinking that Percival Baxter experienced during his lifetime creating the Park, continued after his death as new understandings emerged regarding the management of intact ecosystems and their components, including wildlife, forests and water. The Authority has considered these understandings in the management of the Park and accordingly has adopted a more restrained role than suggested by Baxter regarding the control of predators and insect and disease protection. Although Baxter suggested the construction of a “simple shelter on the summit of Katahdin”, after considering modern recreation management information, the Authority has concluded that the drawbacks of such a shelter would likely outweigh the possible benefits. In general, the Authority has refrained from interfering in natural processes in the Park. This approach has allowed the Park to grow wilder over the past decades.

“The hands-off approach preserves wildness by restraining direct interventions generally recognized as having adverse effects on ecosystems, such as suppressing lightning-ignited fires, introducing nonindigenous fish and ungulates for sport (or any other reason), killing or removing native predators, or damming and diverting water bodies and flows.”³²

Other, less formal guidelines for management have emerged in Baxter’s informal communication. Guidelines regarding the prohibition of the use of prison labor inside the Park, and a reluctance to directly advertise the Park to potential users are examples of less formal guidelines that have been respected by the Park Authority and applied to situations in Park management.³³

The directives provided in the Deeds of Gift, Formal and informal communications provide a complex, but clear and warmly personal vision of a wild, natural, and undeniably Maine, Wilderness. They are the threads with which the tapestry of the Park’s management policies has been woven. Since Percival Baxter’s death in 1969, we have added some miles of hiking trail, and Katahdin and the popular campgrounds of the Park have provided hundreds of thousands of visitors with the opportunity to experience the Maine wilderness, but the Park, as a whole, remains largely as it was 40 years ago. In many areas where old logging roads and paths have re-grown, the Park is wilder now than it was 50 years ago.

This section of the Park Management Plan will address resource protection issues specific to the directive provided by Percival Baxter and the actions the Park has taken or needs to take

³¹ Cole and Young, Editors; *Beyond Naturalness, Rethinking Park and Wilderness Stewardship in an Era of Rapid Change*, Island Press, 2010, p.93.

³² Cole and Young, Editors; *Beyond Naturalness, Rethinking Park and Wilderness Stewardship in an Era of Rapid Change*, Island Press, 2010, p.91

³³ See in Appendix: Advertising in the Park: November 22, 1955 letter from Percival Baxter to Maine State Parks Director Harold Dyer. Use of Prison Labor in the Park: September 21, 1956 hand-written note from Percival Baxter to Forest Commissioner and BSP Authority member Albert Nutting.

to continue to manage this complex landscape in the manner intended by the Trustor. Striking the appropriate balance of human and natural concerns in this management is almost always the most challenging, critical, and interesting, aspect of wilderness management.

“If wildness can stop being (just) out there and start being (also) in here, if it can start being as humane as it is natural, then perhaps we can get on with the unending task of struggling to live rightly in the world – not just in the garden, not just in the wilderness, but in the home that encompasses them both.”³⁴



4-4-1 Teardrop Pond on the Marston Trail

³⁴ William Cronin, *The Trouble with Wilderness; or, Getting Back to the Wrong Nature*. William Cronin, ed., *Uncommon Ground: Rethinking the Human Place in Nature*, New York: WW Norton & Co. 1995, p69-90

4.3 Interpretation in Baxter State Park

4.3.1 Introduction

Interpretation in Baxter State Park is an essential function of the Information/Education division. This division seeks to foster a relationship of understanding between the Park and the Park's widely diverse audiences in order to engender appreciation and protection for this special place. The challenge of interpretation is to find appropriate and effective ways to achieve this understanding, within the context of Park philosophy. This section will examine existing program efforts then discuss ideas for the future.

4.3.1.1 Percival P. Baxter's Vision for Baxter State Park

Percival Baxter's views about how the Park should be operated and maintained evolved over time to encompass normally divergent aspects of wilderness and multiple use management. There are multiple historical references and texts that provide the reader with a better understanding of this lifetime of selfless effort than possible in this brief plan. A standard text outlining the creation of the Park and early history of operation, Legacy of a Lifetime, by John Hakola, and several other references are available at libraries throughout the state and can be purchased at Park Headquarters. A bibliography of books primarily devoted to Percival P. Baxter and Baxter State Park can be viewed in [Sec. 10.57](#).

The Park has adopted Rules and Regulations ([Park Rules- sec. 10.33](#)), many of which are based on the donor's writings, providing consistent regulation for lands within Park boundaries. Hunting and trapping is permitted on approximately 25% of Park lands, however, specific prohibitions on hunting with dogs, baiting animals or hunting moose apply. Fishing regulations, instituted by the Maine Inland Fisheries and Wildlife Department in cooperation with Baxter State Park, apply on waters throughout the Park.³⁵

Motorcycles and pets are prohibited and there are vehicle size restrictions within the Park. Additional regulations govern leadership of youth groups, prohibit collecting, disturbance or harassment of animals, etc).

4.3.1.2 Purpose of the Park

Baxter State Park's Statement of Purpose ([sec. 3.1](#)) and Mission Statement ([sec. 3.2](#)) provide the foundation for the development of interpretation in the Park. In the words of the park donor, the Baxter State Park Authority and employees under the direction of the Authority, will ensure that the Park "*shall forever be retained and used for state forest, public park and public*

³⁵ Public Laws 1971; Chapter 477; An Act Revising the Laws Relating to Baxter State Park; Sec. 906: "The powers and duties of the Baxter State Park Authority shall not be so construed as to ...interfere or conflict in any way with the powers and duties of the Maine State Park and Recreation Commission, Department of Inland Fisheries and Game or Forestry Department and their duly appointed wardens or rangers, and the enforcement of the inland fisheries and game and forestry laws in respect to Baxter State Park or to the State generally."...

recreational purposes. . .shall forever be kept and remain in the natural wild state. . .shall forever be kept and remain as a sanctuary for beasts and birds.” Baxter stated that the Park was intended for “those who love nature and who are willing to walk and make an effort to get close to nature. . .with pleasant foot-trails built and attractive camp-sites laid out in the valleys, by the brooks, and on the shores of the water.” He emphasized his wish for his guidelines for the Park to be honored faithfully after his death, saying, “While I am living I fear no encroachments on the park, but as time passes and new men appear upon the scene, there may be a tendency to overlook these restrictions and thus break the spirit of these gifts.”

4.3.2 Interpretive Themes in Baxter State Park

Interpretive themes serve as the foundation for Park interpretive programs and media. The themes do not include everything to be interpreted but rather the ideas that are critical to a visitor’s understanding of the Park’s significance. All interpretive efforts should relate to at least one or more of these themes. Each theme should be addressed in the overall interpretive program.

Unique Niche of the Park

Baxter State Park occupies a unique niche in the outdoor recreation spectrum. Percival Baxter left the Park with a designated governing body and the necessary financial/legal autonomy to ensure the Park experience would remain as he envisioned for Park visitors of future generations.

Regulations in the Park are distinct from those of other Maine state parks because Baxter State Park was created with the private funds of Percival Baxter. While Baxter was on holiday in Europe in 1937, a move was initiated by state officials and members of the legislature to convert the Park to a National Park. Upon his return, Baxter worked tirelessly for over a year to crush this initiative and he continued his singular pursuit of a Park for the people of Maine, held by the state of Maine not the federal government. Baxter was well aware of the national park system, including activism during the 1950’s and 1960’s to create a federal Wilderness system, but he chose not to support or pursue designation for his Park under the National Wilderness Act, finally enacted in 1964. Throughout his lifetime and the creation of the Park, instead he pursued a highly personal vision of wilderness that permitted rustic cabins, allowed rangers to supplement foot patrols with patrolling in vehicles and provided a Park Tote Road to access campgrounds and trails. Today, the Park remains an anachronism, where scientific research is tightly restricted, yet visitors can fish ponds and streams (in keeping with Maine Department of Inland Fisheries and Wildlife regulations). A Park where, at the donor’s behest, 29,000 acres are devoted to sustainable forest management, including annual wood harvest, yet clearing trees on a dangerous curve on the Park Tote Road is frowned upon. Pets are not allowed within Baxter State Park, even on leash, but hunting and trapping take place on almost a quarter of the Park land. Suffice it to say that an important interpretive theme in Baxter State Park is to help visitors understand, and support with their informed actions, this idiosyncratic, “little ‘w’” wilderness and the reasons each policy was introduced.

The Unique Park Setting

The Park preserves a setting in which to experience unaltered processes and intact natural communities as well as the rare opportunity to learn self - sufficiency and restraint through solitude and physical challenge. The donor sought to create in the Park an environment in which the gamut between the peace and power of untrammelled nature are the predominant forces experienced by the visitor, without emphasis on human artifice or historical actions.

The donor's intentions are reflected in Park management through education efforts including a component of backcountry skills, incorporating LNT principles with safety information, and a focus on the inspirational nature of outdoor experiences. Logging history and the historical status of Park buildings or artifacts will be discussed as testament to the far more enduring influence of nature in the region, not as a driving force in interpreting the landscape but as a contributory factor.

The Park works to ensure that the visitor's sense of freedom and the spirit of wilderness is interfered with as little as possible, consistent with the Park's need to priority on resource protection, and need to provide reasonable public safety and emergency assistance. Emphasis will be placed on information, education and interpretive activities that make the visitor aware of the hazards of using an undeveloped area and their responsibility for respecting the environment while providing for their own safety, consistent with the degree of difficulty of the activity they are pursuing.

Preservation of Resources a Priority

The preservation of natural resources is a priority over recreational use in Baxter State Park and this priority is upheld throughout Park operations, in decisions governing staff actions as well as managing the public use of the Park.

Management decisions are based on this tiered mission, from how many cars are permitted to park at a Katahdin trailhead, to when park visitors are able to rent a cabin near a loon nesting site, to staff use of technology. This primary tenet is based on the following quote from Percival Baxter: *"This area is to be maintained primarily as a Wilderness and recreational purposes are to be regarded as of secondary importance and shall not encroach upon the main objectives of this area which is to be 'Forever Wild'."* Park employees are called upon to demonstrate their personal understanding of this theme in very practical ways as they carry out their day-to-day activities. Additionally, they can help visitors examine their place as humans within nature and to find constructive, low-impact ways to experience the Park. Lessons and materials based on this theme may have a take-home component, encouraging visitors to examine their "footprint" at home and elsewhere.

The People's Park

Former Governor Percival P Baxter created the Park to allow visitors to enjoy it. *"I do not want it to be locked up and made inaccessible; I want it used to the fullest extent but in the right unspoiled way"*. This means the Park should strive to be user friendly whenever possible, facilitating proper relations between visitors and the natural setting of the Park.

While strict guidelines were given on the subject of park operations, the donor also made it clear that he wished for the Park to be shared fairly and thoroughly with “*those who love nature and are willing to walk and make an effort to get close to nature*”. He called Park visitors “beneficiaries” and his cordiality to campers on his many Park visits was second only to his love of the wildlife. By carefully following his lead to define the recreational niche of the Park and targeting information to attract users appropriate to our niche, Park information/education efforts can increase the likelihood Park visitors will have the knowledge and opportunity to fully experience the Park’s benefits. Interpretation on this theme will strive to share trip planning options and Park information in as many modes and locations as possible (including websites, podcasts, etc.), so that visitors can work with the Park to have the trip of a lifetime or a lifetime of trips!

Interpretation of Forest Management

The Scientific Forest Management Area ([SFMA map- sec. 10.4](#)) was included as a part of the Park by Percival Baxter to contribute to Park operations while providing a model of forestry, recreation and conservation on the same acreage.

This theme requires the recognition of Baxter’s intentions regarding this portion of Park lands so that the public will understand the fully sanctioned and operational nature of sustainable forest management on these acres, within the context of the Park philosophy. Interpretive efforts related to the SFMA should be integrated in both approach and style with the main portion of the Park while highlighting the unique aspects of this area. Interpretive efforts related to this theme should strive to utilize the full range of on-site, outreach and remote interpretive tools used to communicate all other Park themes. Approaches used to communicate on this theme should also be extended to both the Harpswell and Mt. Chase forest demonstration lots.

4.3.3 Audience Profiles

Interpretive Audiences:

Park Employees

Campground Rangers, Reservation Clerks, Gate Attendants and other field staff serve as the front line interpreters for the Park. Training and in-house education are essential to ensure a consistent message is being delivered across all levels of the Park organization. Park employees require accessible, current information on all aspects of the Park’s natural and cultural resource in order to successfully perform their public contact and resource protection duties. Coupled with providing ongoing educational support to allow them to confidently and consistently answer the wide range of questions they encounter each day, this aspect of park interpretation is critical to the Park’s success as an organization.

Similar to other workplaces today, prevailing modern day workplace and social trends indicate that the Park cannot expect to experience the stable workforce of the earlier eras in Park

history. Some elements of a formal orientation and training effort have been developed over the last decade to address the loss of long term seasonal and year round employees and assist in maintaining quality and consistency of service in the face of employee turnover and the changing generational expectations of employees. Information is disseminated to this group in annual spring and fall meetings, training programs, SOP materials, as well as training provided in New Employee Park Tours, indoor BSP 101 sessions for new employees, memos and newsletter columns throughout the season. The Information/Education division also responds to all employees or volunteers who have resource questions, on an as-needed basis. When appropriate, contract workers and volunteers involved in visitor contact should be included at the appropriate level in Park orientations and informed of policy updates as applicable because these individuals often represent the Park or Park policy to visitors who encounter them. The average annual turnover rate over the past 10 years for seasonal employees in Baxter State Park is 5-10%, yet seasonal employees are pivotal components in the representation of the Park to Park visitors.

4.3.3.1.1 Action

Develop a comprehensive interpretive training program provided to new and continuing seasonal employees to improve the visitor experience in the Park.

Campers

The reservation process has always been opportunistic conduit for education, with mail being exchanged and phone calls being made to and from the Park. The transition to the Rolling Reservation system, instituted in 2005, required substantial educational effort in the initial implementation which paid off with rapid adoption of the system and enthusiastic visitors. One component, the option to phone in and reserve sites using a credit card, has grown rapidly in popularity from ~20% in 2008 to 39% of the camping reservations made at Park Headquarters in 2010³⁶. The Park's efforts towards information/education must continue to make information available to both staff and these campers, in a focused, appropriate format suitable for spontaneous decision makers, likely utilizing the Park website.

Summer campers are divided into two broad categories: Frontcountry campers, choosing from 8 campgrounds (two with cabins only), and Backcountry campers, choosing from 2 (hike-in only) campgrounds and 34 individual backcountry sites. Education for this audience will not only supply them with necessary information to enjoy and use the Park correctly but can also serve to inform them of the wide range of opportunities and possibly provide an opportunity to address some allocation issues. The average length of stay for a Park visitor (2010 data - frontcountry and backcountry combined) is 2.4 camper-nights. Each group uses the Park differently and has a need for different information, in addition to a common need for basic knowledge about the Park. Education focused on giving visitors an idea of how to transition from frontcountry to backcountry camping could increase utilization of these sites and this is an area in which growth would be healthy, based on the Park's mission and use statistics. For instance, 2009 statistics show that backcountry sites were vacant an average of 77% of the time, with even the sought-after sites such as Davis Pond incurring a vacancy rate of 31%.

³⁶ BSP Reservation Supervisor Joni Lowell, Nov 2010 pers. communication.

Some backcountry sites, such as the sites around the Fowler Ponds and Webster area experience an 86-98% vacancy rate. These sites might be more fully utilized if information on them was more widely available. Likewise, frontcountry campers who have always frequented a roadside family favorite might begin making memories in a new roadside location if outreach to this group more fully explains the attractions of each location.

Summer Day Visitors

2010 Park gate statistics ([sec 10.19](#)) show a total of 42,913 people visiting the Park as day use visitors, 67% of the total number of 2010 visitors. 58% of these day visitors in 2010 were Maine residents, 42% were from out of state. About 50% of all Park visitors are repeat visitors (1988 survey results).

Some in the day use category stay in nearby towns and visit several consecutive days in a row. Others combine Park visits with (out-of-Park) rafting, or activities with their pets, etc. Efforts with this audience are best focused on the 50% visitation comprised of first time visitors to the Park, needing an orientation to opportunities achievable in a day visit and policies which may not be typical of other parks they frequent.

Winter Campers and Day Users

The winter camping season in the Park is December 1 to March 30. Obviously visitation in this season is highly variable and dependent on snow and travel conditions. This season has a reservation process distinct from the summer season, with additional policies in place. Access is on foot or by snowmobile after the snow reaches several inches depth on the Park Tote Road. These Park users have a specific need for alpine information, as the most preferred destination in the winter is consistently Chimney Pond. A pamphlet and separate packet of winter use recommendations and policies³⁷ is available by mail and on the Park website and is updated regularly, with input from staff and others with winter alpine expertise.

Winter day use is broken down into those visiting on foot and a larger number visiting on snowmobile. Day use in the winter is harder to quantify due to voluntary registration at Park gates being inconvenient for snowmobilers with heavy mitts. The Park monitors trail counters placed to acquire data regarding actual snowmobile use. In 2009-2010, over 1500 snowmobiles were counted as recreational visitors ([sec.10.21](#)). Continued effort to communicate the wilderness nature and remote setting of the Park is necessary to address the needs of camping and day use winter visitors.

Hunters and Fishermen

While fishermen are a subset of campers and day visitors listed above, hunters/trappers are most often a subset of day use only and their activities are restricted to certain areas in the Park, unlike anglers, who are quite widespread throughout the Park, in the summer season. Anglers, motorized and non-motorized boaters and airplane pilots should be made aware of the need to check themselves and their equipment for unwanted exotic invasive species.

³⁷ The complete winter use packet can be viewed on the Park website at:
<http://www.baxterstateparkauthority.com/pdf/BaxterStateParkWinterUse.pdf>

Information on the zones and seasons in which these activities are permitted must be made widely available to this audience. Efforts with this group should include education on invasive aquatics.

Forestry Professionals/Students

The SFMA is intended to provide a showplace for modern forestry techniques and practices. It regularly draws industry professionals and forestry students from throughout the NE, including the Canadian Maritime provinces and Quebec. The Lynx Road, installed in 2005 between the eastern-most portion of the Wadleigh Mountain Road in the SFMA and the Park Tote Road just south of Trout Brook Crossing, as well as a self-guided forestry trail in the same area, has improved the Park's ability to offer the SFMA as a more routine interpretive experience for park visitors.

4.3.3.1.2 Action

Information/education should develop interpretive strategies specific to the SFMA area under the guidance and with the support of the SFMA Resource Manager.

Commercial Users and Large Groups

Park receives approximately 2% of total use from commercial or institutional users, including youth camps, church and school groups, photo tours, and nature watching groups. This group often relies on information from previous year's trips or word of mouth from similar groups. With commercial tours in particular, information on the park's resource protection mission is important to impart, as the clients are receiving their information on the Park from individuals with widely varying amounts of knowledge concerning the Park and a profit motive independent of the Park's mission. This subject is also discussed below under Commercial and Visitor Use, [sec. 5.4.2.10](#) below. Developing and implementing the most efficient modes of outreach to outing clubs, youth camps and school groups should be a priority.

4.3.3.1.3 Action

Develop a list of commercial/institutional Park users.

4.3.3.1.4 Action

Participate in local and regional efforts that provide a forum for BSP representatives to educate commercial users on the Park's mission and appropriate ways they can enjoy the Park within those parameters.

Distance Hikers

For the purposes of the Park, distance hikers are defined as individuals "hiking, at a minimum, 100 miles immediately prior to and contiguous with the Park".

In 2010, 1,460 people were registered as distance hikers (sec. 11.54). On average about 1.5%-2% of our total visitation is visiting the Park as part of a long distance hike. Users in this group sometimes have difficulty adjusting to the management framework of the Park after being in less regulated areas just south or north of Park lands. The difference in expectations between this small group of distance hikers and the much larger group of Park campers has at times resulted in misunderstandings or disappointment due to lack of information. Extensive

efforts are invested in managing the experience of this visitor group, including shared funding/ supervision of a e Ridge Runner on the AT corridor as it enters BSP, a long distance hiker brochure, information posted on the [Park website](#), a one-page BSP Long Distance Hiker welcome ([sec. 10.40](#)) and explanation of pertinent policies mailed to AT locations south of Maine, camping procedures and information on "The Birches," a special overnight site for distance hikers and an Information kiosk for distance hikers, located in the AT corridor as it enters the Park. The Park should continue to utilize all current modes employed but allow full consideration for a, assimilating hiker information duties with West Branch parcel patrols, including Foss and Knowlton, Blueberry Ledges and the Abol Pond loop trail.

4.3.3.1.5 Action

Consider the establishment of a BSP- employed patrol position to orient this group and facilitate their experience in the Park.

Fly-in Visitors

Commercial operators land on Matagamon, Nesowadnehunk and Webster Lakes and Katahdin Lake Wilderness Camps utilizes float plane service for supply purposes under a Park permit on Katahdin Lake. In 2010, there were 15 registered flights landing on Webster Lake. Clients of commercial outfitters typically receive information about the Park directly from guides; continued monitoring and contact with this group on an outreach basis can ensure consistent information is made available operators and their clients, encouraging their help in stewardship of Park resources.

Scientists/Researchers

The number of research proposals that come before the Director each year varies in number and in amount of support required from Park staff. This audience requires specialized orientation efforts and assistance from staff to minimize the impacts their activities may have on Park resources. BSP Research Policy guidelines control the type of research that can take place in the Park ([full policy- sec. 10.26](#)). Researchers have two needs:

- 1) information on previous research to guide their inquiry process in preparation for proposing a research project in the Park.
- 2) orientation materials that remind the scientist of park regulations they must comply with, unless they hold a permit with specific waivers.

Outreach Audience

This includes local area schools from Houlton to Bangor as well as schools in every corner of the state. Likewise, universities, youth and adult civic/church groups, state policy makers and special events throughout the year. Presentation topics fall into several categories: pre-trip orientation, Park history, general hiking/backcountry trip safety, special topics related to Park resources or management efforts, job opportunities/ preparation for careers in Park operations, and current issues. The Park may request cost reimbursement for programs south of Bangor that require lodging or vehicle travel to the hosting institution.

Media Representatives

Baxter State Park, and Katahdin especially, have reached iconic status. Film companies, state and national periodicals, newspapers and book authors regularly contact the Park regarding their projects. TV and radio stations and newspapers contact us for immediate breaking news during rescues, emergencies and other times of public interest. A Media Policy has been developed to deal with this occasional but very influential audience ([full policy- sec. 10.36](#)).

4.3.3.1.6 Action

Develop and maintain regular contacts within the governmental and non-governmental tourism sector, including film and press promotion bureaus.

4.3.4 Tilden's Basic Principles of Interpretation

While interpretation in Baxter must take into account the many factors that distinguish the Park from other interpretive settings, the six general principles of interpretation as outlined by Freeman Tilden in his classic 1957 text, *Interpreting Our Heritage* have served generations of interpreters in developing their programs:

- Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile.
- Information, as such, is not Interpretation. Interpretation is revelation based upon information. But they are entirely different things. However, all interpretation includes information.
- Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical or architectural. Any art is in some degree teachable.
- The chief aim of Interpretation is not instruction, but provocation.
- Interpretation should aim to present a whole rather than a part, and must address itself to the whole man rather than any phase.
- Interpretation addressed to children (up to the age of twelve) should not be a dilution of the presentation to adults, but should follow a fundamental different approach. To be at its best it will require a separate program.³⁸

4.3.5 Beyond Tilden: Guidelines for Interpretation in Baxter State Park

The Park has developed its own distinctive culture and tradition in the years since Percival Baxter donated the first parcel in 1931. Like all other endeavors in the Park, interpretation will strive to recognize and reinforce the unique characteristics that make the Park the special place it is. This means:

Interpretive efforts will be informed at all times by the donor's wish that the Park be "maintained primarily as a Wilderness and recreational purposes are to be regarded as

³⁸ Freeman, Tilden, *Interpreting Our Heritage*, 3rd edition, University of North Carolina Press, 1977.

of secondary importance and shall not encroach upon the main objectives of this area which is to be 'Forever Wild'.

We offer the setting for visitors to explore their place in nature and our programs and interactions with the public aim to foster deep connections that have a lasting effect and contribution to the long-term protection of the Park, according to the priorities outlined in the statement above.

Interpretive efforts in the Park may or may not resemble interpretive programs or products found in other park settings. It is not our primary goal to annually increase the numbers of programs or “grow” the numbers of participants taking part but to increase the numbers of people who experience and embrace the Park’s philosophy firsthand.

Interpretation should reflect the Park’s landscape

Interpretive activities, products and settings will be designed to represent the role of much of the Park lands in providing a sanctuary where wildlife can live and natural processes occur without undue interference from humans.

Although hunting and trapping are allowed in certain sections of the Park, and fishing, berry/mushroom/fiddlehead picking for personal consumption are permitted throughout the Park, consumptive activities are not generally the subject of BSP programs. This interpretive theme has implications for how the Park presents a field lesson, how program participants are taught to gather information, and how teaching props, campground office and bulletin board displays are presented throughout the Park. Examples include altering scavenger hunts and other games so that they become competitive observational and descriptive games vs. competitive acquisition games and favoring earthcaching over pursuits such as geocaching and letterboxing in the Park.

Baxter State Park regulations require that visitors leave all natural and cultural objects where they are found in nature. A number of additional state and federal laws overlap the BSP regulations, adding to the need to demonstrate and follow this regulation. For instance collection/ possession of bird feathers, nests or eggs generally requires a federal permit, unless they are from one of Maine’s regulated game species. This law originated because of the women’s hat trade in the late 1800’s. Adding to the problems of commercial plunder, during the “golden age” of amateur naturalists in the 1890’s and early 1900’s, it was a status symbol for private citizens to have a curio cabinet filled with bird eggs, nest and feathers, mounted insect specimens, rocks, and even antlers and skulls collected during the course of walking through the woods. The 1918 Migratory Bird Act was enacted to address the impact of both commercial and private feather harvesting in a precedent setting international law that likely rescued some species on the brink of extinction, even as others were too late to save. Reflecting the intent of these laws, the Park strives to teach visitors to err on the side of caution and to set the example by “walking the talk” as much as possible. During the Park’s on-site programs, children grasp the concept of leaving antlers for the next person to discover

and to eventually serve as a rich calcium and mineral source for voles and deer mice. In general, it is best if the activities and image presented by the Park are consistent with what is expected from visitors in the Park. If visitors are asked not to take home natural or cultural objects they find in the Park, Park staff also should take care we do not collect and display these items in our offices.

Appropriate use of technology

Percival Baxter desired the Park to provide sanctuary from “the trappings of civilization”. Accordingly, Park staff will attempt to strike the appropriate balance between the use of technology in the Park and the respect for the wilderness nature of the Park. Personal communications and media devices, global positioning system (GPS) units, and other devices have become standard items in the pockets or backpacks of a majority of both Park staff and visitors. The capability of constantly evolving technology to improve communication and data collection and management have resulted in the distribution of cell phones, GPS units and field data collectors to appropriate staff. The Park is careful to extend technology into the Park with care and only in a low-profile and appropriate way. Interpretation extends the same message to Park visitors. The Park asks visitors to carefully consider their use of technology while visiting the Park and keep devices from interfering with their experience or the experience of other visitors. Programs on location in the Park will seek to set an example and follow these guidelines closely.

New technology that facilitates improved trip planning for the visitor, or providing access to new audiences, will be used to full advantage both inside and outside physical Park boundaries. At the same time, the Park will continue protect the visitors inside the Park from exposure to technology that prevents them from engaging in a traditional manner with their natural surroundings, as intended and expressed by Percival Baxter.

Maintain a take-home component

Interpretive programs and products will encourage a “take home” component whenever possible, so that visitors understand that the lessons learned in Baxter State Park have applications in their home towns and backyards.

Most interpretive activities are done in the Park setting when families are vacationing and removed from the day-to-day structure of school and standardized tests. They deeply appreciate sensory, experiential lessons which are often designed to help them draw parallels between Baxter resources and their lakes, ponds, streams and forests at home. Even topics such as weather and Park governance lend themselves well to “take home” lessons that spread the positive impact of Baxter’s ideals far outside Park boundaries. Some visitors develop a taste for citizen science and learn about efforts taking place in their own communities. Hopefully, they are inspired by Percival Baxter’s lifelong labor of love and begin to think about what contributions they might make to the world at large.

4.3.6 Interpretive Tools Used In Baxter State Park

The Park has a substantial library of outreach materials including brochures on a wide variety of Park use, resource and logistic subjects, a trail guide (in the process of significant review and revision), and a well regarded Park newspaper. The Park also maintains a robust and active website which includes real-time views of Park-wide reservation status and provides Park visitors the ability to acquire Day Use Parking Passes and to make camping reservations online. In addition to Park-produced documents, there are a wide number of books available on the history and use of the Park. Most of these works are available for purchase through the Park either at Park HQ or via the Park's website.

Visitor Contact Positions

Visitors routinely ignore signs and brochures in lieu of hearing the same information directly from a uniformed employee. For that reason, visitor contact is one of the most highly valued tools in an interpreter's toolbox.

Visitor contacts originating from the Interpretation/Education office include informal/scheduled, informal/ non-scheduled, and formal/scheduled contacts and programs. Examples of informal/nonscheduled visitor contacts include those that occur when a staff person is hiking from one duty station to another or working on a project at HQ when the phone rings.

Informal/scheduled contacts include Moose Patrols and Alpine Steward patrols. Formal/scheduled visitor contacts include Saturday Children's programs and Evening programs, as well as outreach programs at libraries, schools, colleges, for civic groups and nursing homes. Contacts are conducted according to general interpretive principles, using the "Authority of the Resource"³⁹.

The reference used for successfully engaging in visitor contact of both the informal and formal type is *The Interpreter's Handbook*, by Regnier, Gross, and Zimmerman, part of the Interpreter's Handbook series, University of WI, Stevens Point, WI, 1992. Other resources materials are stored in the Naturalist office at Park HQ. Suggested "cold contact" techniques for alpine Stewards and Moose Pond Patrols are described in the BSP Alpine Steward Manual. The Park SOP also contains guidance for anyone representing the Park through visitor contact. Key points include reminders on how to wear the uniform, keeping personal opinions separate from work, and listening carefully to disgruntled visitors to glean information that might help solve their problem or might alert the Park to an emerging issue.

While efficiency is always a goal, in Baxter State Park, the success of visitor contacts is not measured solely by numbers contacted. There will be a number of times in any summer when a Moose Pond Patrol, Alpine Steward Patrol or Saturday Children's program involve a very low number of contacts. These incidents are not viewed as wasted time but as time for very high quality contacts for those visitors who are encountered.

³⁹ Dr. George N. Wallace, Colorado State University; *Legacy*. Vol. 1 (2), pp. 4-8.

General Printed Handout Materials

A park with the acreage and diversity of primitive recreational opportunities such as Baxter necessarily relies on a large number of printed informational pieces to meet the needs of the various types of visitors. The vast majority of these materials must originate from the Information/Education office ([publication list- sec. 10.37](#)). Park handouts are usually designed as stand-alone pieces that can speak in place of Park personnel if taken home with a school child or picked up at a conference or brochure rack. Printed material provided ahead of time can help visitors prepare properly for their trip. In general, effort invested in making as much information as possible available prior to the visitor entering a primitive recreational area is less intrusive and adds maximum quality to the actual experience.

Two key pieces every visitor receives two key pieces upon entering through a Park gate: Wildnotes, a compendium of Park information and facts, and the [Park Rules and Regulations brochure \(sec. 10.33\)](#).

The Gregg Reference Manual by William A Sabin serves as a technical reference for grammatical questions and technical writing guidelines. *Making the Right Connection* and *Creating Environmental Publications*, from the Interpreter's Handbook Series, published by the University of Wisconsin, Stevens Point, WI, 1992, serves as a resource for style and interpretive approaches to writing.

All printed materials produced in-house are made available to visitors at no cost. Each information piece created for public handout purposes is viewed with an eye toward simplicity and low cost. Copy jobs use paper with recycled content and combine information pieces so that both sides of the paper are used, when possible. While many pieces are produced at Park Headquarters, some pieces represent greater challenges in layout or production and are contracted out. The decision for creating/ producing in-house, or contracting for any given project rests with the Park Naturalist under the direction of the Park Director, as does the actual determination of what information pieces will be Park-produced.

The amount of information and the way the Park chooses to engage visitors as they seek information has been a fertile topic of discussion in recent years. Especially in the "information age", it is tempting to try to force as much information as possible onto the available paper or website. However, it undermines the concept of experiencing wilderness or self-sufficiency if every mile of trail and every stream crossing in Baxter State Park is described in minute detail ahead of time for the visitor. The Park's aim as an agency is to try to achieve a balance between sharing enough information in handouts or on the Park website to help the visitors plan a successful itinerary while leaving room for discoveries of their own. This philosophy includes conveying to visitors that it is desirable to acquire and use detailed maps and guidebooks and equipment appropriate to their endeavors in order to make the most of their time at Baxter. In recent years, there have been several requests to be able to download detailed maps from the Park website. Technology in this area is rapidly changing and at the time of this printing, the Park is exploring the possibility of responding to these requests in the near future. In the meantime, visitors are encouraged to purchase and use commercially produced maps of the Park. Restraint and care in the amount and way information is

distributed is one way the Park can support citizens and vendors in the local region that are well-grounded in their natural setting and deserving of a chance to work within the information and service niches Park management provides.

Site/ and /or Audience Specific Handout Materials

The Park Naturalist is assigned with determining which sites/topics require unique information pieces. Examples include the Alpine Ecology brochure, the Distance Hiker brochure, the Jr. Naturalist booklet, the Trout Brook Mountain brochure and the Blueberry Knoll geology handout.

Consideration for costs, efficiency and use of recycled paper are discussed above. Especially in projects of this sort, artwork is used to illustrate information and/or to attract the reader's eye to certain pieces of critical information. When available, we use original art from artists familiar with the Park or the species living in the Park. All artwork whether donated to the Park or taken as clip art off the Internet, will be properly credited to its creator within the standards and guidelines in the Gregg Reference mentioned above.

Public Health/Safety/Trip Planning Notices

A significant portion of the interpretive work in Baxter is devoted to this category, working closely with the Park Director, Chief Ranger and other divisions as necessary to craft and distribute the correct message. Examples are: winter bulletin board postings, "*So You Think You Want to Hike Katahdin?*", water treatment reminders, Heat Index tables, etc.. Often pieces prepared in this category are used several ways, including as mail stuffers, bulletin board postings and website postings. Part of the value people derive from visiting a wilderness or primitive recreation area is an opportunity to exercise their decision making skills and practice self-sufficiency in the Park setting. Our efforts focus on achieving a balance between providing information and allowing visitors to make choices within their tolerance for risk. If personal safety and individual abilities are in question, we try will to pose the questions that lead visitors to their own answers; when resource protection is at stake, wording will be less ambiguous.

Bulletin Boards/Displays/Campground Offices

The Information/Education division is charged with ensuring BSP Core Postings are posted park-wide and ensuring all displays, bulletin board postings and notices, including those on special topics, reflect the Park's mission and interpretive philosophy and standards. Bulletin boards and displays are present in varying designs and forms throughout the Park and Park duty stations. There are a large number of core postings that have been determined to be essential for each standardized display at campground bulletin boards.

Visitors enjoy talking to campground rangers in their offices and often this is the setting in which a child asks their first question of a ranger. The campground ranger office is an important communication tool, even when no words are spoken, simply because of the concentrated amount of visitor contact that occurs in each ranger office. Historically, office and porch displays have varied widely throughout the Park, partly due to different sizes and styles of ranger offices/ porches and partly due to the interests of rangers assigned to these duty stations. Display and posting space is limited; some locations have room for material beyond

the standardized BSP Core Postings required at each campground. Each office has certain necessities for dealing with reservations, campground and trail statistics, radio communications and first aid needs. Beyond these items, any displays in public spaces at duty stations are expected to be consistent with park philosophy and regulations and are subject to review/alteration to ensure Park philosophy is portrayed consistently throughout the Park.

Mail Enclosures

Park reservations and certain safety and/or conservation pointers are delivered to visitors on paper via mail or email, using pre-visit mailings or follow-up mailings as much as possible. When trail conditions, road conditions or other extenuating circumstances require us to communicate with incoming campers in advance of their arrival, the interpretive staff works with Reservations and/or Operational staff to create brief notes suitable for enclosure with reservation confirmations.

Targeted Mailings

Targeted mailings are undertaken to a very limited degree, usually when communicating with a specific group to resolve significant issues of visitor inconvenience or threats to the Park resource. In recent years, targeted mailings have gone out to the distance hiker hostel network, commercial Park users, and youth group leaders.

3-D Models

Three-D landscape models are useful teaching tools for everything from hiking safety to geology to ecological zonation. Whenever possible, the effort has been made to have landscape models placed low enough for children to enjoy and keep them uncovered so they can be explored by tactile as well as visual means.

Summer Children's Programming

Seasonal intern positions in the Info/Ed division were instituted in 1989 and work directly for the Interpretive Specialist. These interns are charged with developing and implementing a full slate of Saturday children's programs. The lesson plans and materials originate under the guidance of the Park Naturalist and Interpretive Specialist, using *The Interpreter's Guidebook*, other trade publications and standard environmental education references. Children's programs are offered from late June through to late August. The focus of Park children's programs is teaching children how to use their natural curiosity and exuberance to learn about and take care of the natural world. Every opportunity is taken to demonstrate ways parents can help their children explore the outdoors. This involves teaching about journaling, using binoculars and field guides and how to observe wildlife without disturbing them. Often, the parents are learning at the same time their children learn. Program content is purposely linked whenever possible to hometown environments, so that the lessons learned are applied in other places. Occasionally, programs may occur on days other than Saturday but extensive experimenting over the seasons has shown the greatest participation occurs on Saturdays. While a general effort is made to ensure that all the Park visitors and people staying in town and using the Park on a day-use basis see or hear announcements about the programs, the

Park's focus is to enrich and facilitate an enjoyable experience for those already using the Park. An extension of the in-Park programs for children is a recent collaborative effort between the Millinocket library and the Park. The Park offers several programs each summer/fall at the library.

Summer Evening Programming

The summer evening programs are a distant adjunct to the real "program" in the Park: Nature, in all her varied glory! The Park is not meant to be a destination for passive entertainment but rather a location for people to learn self-reliance, therefore, it is important to offer formal programming with a very light hand. Wednesday nights are the traditional night set aside for our offerings as experience has indicated that the highest attendance usually occurs on Wednesdays. Programs are typically held at either Daicey Pond or Kidney Pond campground due to facilities providing shelter for audiences during inclement weather. The Park has experimented with offering programs at other campgrounds to a limited degree. The majority of programs are informal offerings directly from Park staff, including The Park Director, the Park Naturalist and Interpretive Specialist, the Chief Ranger, and year round rangers. For many years now the Park has enjoyed the opportunity to host *Lost on Mountain in Maine* author Donn Fendler one evening each summer. Park employees also dramatize a children's nature classic with a play or puppet show each summer, in a very carefree and loosely organized production, usually involving audience participation. Volunteers with a special expertise in the night sky or park history or other topics may also be invited to fill in empty Wednesdays but the emphasis is not on "growing" the number of evenings each summer with programs but to keep the offerings consistent with the Park philosophy in number and content.

Seasonal interns and the Interpretive Specialist create notices for all the summer programming in the Park, which are then approved by the Interpretive Specialist for text and content prior to release. Donated artwork is preferable to computer clipart but in any case, artists and photographers must receive credit when their work is used and the postings must be consistent with Park philosophy.

All park duty stations receive copies of the postings for display on their bulletin boards and the Info/Ed office mails out copies to a limited number of local newspapers as well as anyone who calls and requests a copy. The Park does not promote or advertise to increase visitation to the Park but seek to inform to those already visiting, planning their visit, or living nearby the Park.⁴⁰

Campground Visits on Request

Groups camping in the Park can request an orientation program upon their arrival. In a more proactive mode, interns contact groups with reservations in the Group Camping areas and offer to visit them at their campsite. Info/Ed staff and interns will provide general orientations, covering the basics of Park history, governance, regulations and policies with a healthy

⁴⁰ In a November 22, 1956 letter to State Parks Director Harold Dyer, Baxter wrote: *"We should not advertise the Park as a tourist resort because it is well enough known now and we want to keep it for mountain climbers and people who are willing to put up with somewhat primitive conditions."*

amount of time allotted for questions specific to the group itinerary and concerns. Specialized programs on natural history topics are also offered, within employee expertise.

Occasionally, programs may involve walking with a variety of campers a short way down one of the Park's trails but formally "guided" group hikes for organized camps or other entities are not part of the Park's program schedule.

Nature Trails

There are three nature trails in the Park with pamphlets, as noted in descriptions of Roaring Brook, Daicey Pond and South Branch Pond Campgrounds. A simple self-guiding brochure or pamphlet has been written for each of these trails. An additional trail, the Forestry in Action trail, is located near the Park Tote Road, south of Trout Brook Crossing and a pamphlet will be available for that trail as well. Thus far, the Park has not used in situ props, signs or numbered posts for stops but depended solely on the pamphlets as a means of interpreting these trails.

Individual Campground Histories

In his Deeds of Gift and Formal Communications, Percival Baxter focused his intentions for the Park primarily on the preservation of the forever wild state and human history and culture were not emphasized, or really even mentioned. Accordingly, interpretation in the Park does not focus on the human history of the Park. However, the growing body of human culture overlaying the Park as generations of Park visitors come to know and love it, is something of great interest to some Park visitors. Daicey Pond and Kidney Pond have a distinctive history in the tradition of sporting camps and scrapbooks describing that era are kept in the Ranger's stations for campers to peruse at their leisure. Other campground offices occasionally have an historic photograph or two illustrating past uses of the land.

Visual Archives

A growing area of responsibility concerns the accumulation of visual images of Park locations, facilities and people associated with the Park over time. Park visual images are divided between historic flat photos, 35mm slide images and more recent digital images. The Park has chosen Past Perfect software as an archiving system and is beginning the process of filing photos in a searchable database so Park staff can use key words, dates or names to look up useful photos. Early digital images but have proven to have inadequate resolution for any other use while recent larger digital files are now taxing server storage and archival processing limits. Currently, it is typical for photo collections of Park users of the 1930's-1960's to be donated to the Park. Many landscape photos hold some value for research on erosion, changes in vegetation and plant communities, changes in trails and facilities, etc. The Park's current policy is to conservatively accept those photos that might be of use and assign a name to the collection so appropriate credit can be given when they are used. Due to the ease of digital photography, digital images are accumulating at a far faster rate than 35 mm images accumulated in the years 1988-2000. Aggressive purging of photo files has become a necessity.

Due to the sheer backlog of archivable photos needing to be archived, the digitizing of 35 mm slide and flat files is being contracted out to professional scanning services. Scanned photos are saved on DVDs in both a high resolution format and a much lower resolution format. The Past Perfect software is designed for working with the smaller images while the larger images are saved for requests from publications or researchers.



4-4-2 Lester Hall at the former Basin Pond Camp

Hard photo and slide files are stored in the Naturalist office closet and a cabinet in a separate program storage room. A supply of white cotton gloves are provided in the cabinet with archive disks and photos and anyone handling these photos must wear the gloves. A separate copy of the disks will be saved in a location away from Park Headquarters to prevent loss due to fires etc. For more about photo files and staff photos, see the BSP Media Policy ([sec. 10.36](#)).

Automated Slideshow

Since the early 1980's, the Park Headquarters building has had an automated slideshow to introduce visitors to Park. The script, narrators, technology and images have changed over the years but the usefulness in orienting visitors to the salient facts about the park and the varied scenery remain relevant. Currently regular and closed caption versions of the show are installed on a dedicated hard drive, operating in the AV room and available for viewing by request throughout the day and seasons. Legal copyright permission has been obtained for all music used in the production and photographers are noted in the credits at the program's end. The show is twelve minutes long. Originally, the length of the show was limited by availability of looped cassette tapes but in recent years, despite the option new technology offers to run a longer production, the apparent limit of viewer attention span and patience prior to their arrival in the Park and the start of their trip suggests that twelve minutes is an appropriate length.

The script of the Park automated slide show, “**Forever Wild**”, is designed to orient visitors to the Park and the range of available recreational opportunities but most importantly, to impart the intent of Percival Baxter in creating the Park. Care has been taken to include some photos with people in the landscape, to underscore the reality that visitors will see others when they visit the Park, especially at Baxter Peak or in popular places such as Daicey Pond. Percival Baxter quotes are featured throughout the show, to ground the visitor in the origins and founding philosophy of the Park donor.

Videos

The Information/Education office has produced one video, “*Happy Trails*”, a short presentation on hiking essentials and trip planning tips for a day hike in Baxter State Park. The video was filmed and edited on a volunteer basis by filmmaker Huey Coleman, producer of a feature length documentary on Katahdin. He worked with Information/Education division staff to make a video that would incorporate many of the Park regulations and Leave No Trace principles into a presentation that would also help our division accomplish our goal of informing people about the wide range of opportunities available in the Park. The video focuses on a hike of South Turner and encourages viewers to carefully assess their group and save Katahdin for another day if they do not have the fitness or experience levels necessary on a particular day. The video features ideas for rainy day options for families with children. “Happy Trails” is available for viewing on request in Park Headquarters auditorium. A few feature length commercially made videos about the Park are also available for viewing on request and sold at suggested retail price through the reservation office. To reach a wider audience and to encourage the “Plan Ahead and Prepare” principle of Leave No Trace, The “Happy Trails” video is made available as a loaner to outing clubs, schools, youth groups and camps wishing to view it prior to their trip to the Park. In some cases, groups known to use the Park regularly and frequently have been given their own copy.

Traveler Information Radio Station

The primary objective of the Traveler Information Station (TIS) is to employ an additional means of letting visitors know about three key regulations that have proven problematic for visitors over the years: the prohibitions on pets, motorcycles and oversize vehicles. Signs on the interstate and roads approaching the Park on listing the prohibitions as well as the official Park regulation brochure and other information efforts were not totally effective. The TIS has been in use since 1995. The technology has definitely proven effective in reaching some of the people who were missing the message but there are still the inevitable pets, motorcycles or oversize vehicles arriving at the gates. An added bonus is the opportunity to explain gate hours, seasonal policies and encourage trip preparation as well as remind listeners to visit Park Headquarters or Togue Pond Visitor Center to get more information and purchase maps and guides. The tower and equipment are meant to be used for only short distance transmitting (1 miles or less). BSP Radio licenses are maintained through the BSP Business

Manager's office. TIS recordings are changed on a seasonal basis, with the recording taking place in the Naturalist's office. Individual tracks are limited to messages 255 seconds long and there are four recording tracks on the equipment. Messages are limited to the essentials incoming visitors need to know, with the Park Director reviewing any substantive script changes for consistency with Park policy.

A more powerful tower, placed near the I-95 corridor with messages relevant to visitors going to either the N or S gate was considered at the time of purchase but the cost of land/equipment was considered prohibitive and the current, less costly system with a range limited to less than one mile was purchased.

The TIS format lends itself well to occasional changes or Park-wide notices but is too cumbersome to employ for posting daily weather/class day information, due to the time-consuming process of recording a lengthy to broadcast. It has been very effective in tandem with D.O.T. approved/installed signage, in communicating the Park's prohibitions of motorcycles, pets, and oversized vehicles to visitors prior to their arrival at southern gate of the Park.

Hiker Information Line

Many Parks offer dedicated phone lines to assist visitors planning their visit. The purpose of BSP's Hiker Information Line is give people an idea of what to expect for weather, trail conditions, access to Katahdin trailheads with enough lead time to change their plans. The line is not used for detailed trail information or other purposes. This information on the Hiker Information Line is generally mirrored on the "Trails and Parking Update" box on the Park's website.

Website

The establishment and maintenance of the [Park website](#) is overseen by the Park Director and the BSP Business Manager, who regularly check with all divisions for updates and corrections. The Information/Education division recognizes the significant impact the Park's website has had in changing the way the Park communicates with the public. Over the long term, this has reduced the Park's dependence on printed pieces and has already greatly reduced postage costs and the amount of time staff spend on the phone answering several of the FAQ about Baxter State Park. A 2008 Economic Impact Study ([full study- sec. 10.57](#)) questioned how many respondents had computers and how many of those had checked the website. 93.9% of the respondents verified they had a computer and 65.8% said they did check the website prior to their visit. The same survey included many comments on website design, which Park administrative staff utilized in the 2009 redesign of the website. The Information/Education division will play an ongoing role in determining what types of information go on the website and in assisting with the updating of information on the website. Certain sections directly relate to the Park's information efforts and an effort is being made to coordinate and maximize the positive public relations impact this communication tool can have for the Park.

Writer/Author/Media Assistance

Several times a month, freelance writers and authors or writers assigned by publishing conglomerates are referred to Park Headquarters for information or fact checking services. The Park also works with related specialty projects such as trail guides and trail maps, providing information and pertinent digital files as appropriate while appropriately asserting the Park's philosophy during contacts. The [BSP Media Policy \(sec. 10.36\)](#) contains further details regarding this category of information/education.

The Park seeks to maintain an appropriate balance between responsiveness and efficient department time – avoiding the replication of work already out there or doing the work others have been hired to do. Inquiries often come from students or freelance authors writing articles they plan to pitch to a magazine, along with contacts from writers employed by a specific magazine. Callers are directed to appropriate resources for further research, then encouraged to contact Park staff if they still have questions or for fact checking. In the case of media contacts, the Park requests that questions first be submitted in writing, to encourage thoughtful use of staff time and to provide an opportunity to conduct necessary research.

Public Phone/ Email Information Services

An essential and ongoing function of the Info/Ed division involves responding to incoming calls and emails, often students or the general public requesting specialized natural history, cultural history or trail information. Maine schools have a portion of the curriculum devoted to “Maine Studies” resulting in a number of opportunities to correspond with students about Percival Baxter’s civic and environmental accomplishments on behalf of Maine citizens. The Park also receives regular inquiries regarding rare plants, and endangered and threatened animals in the Park.

Staff Newsletter/ Division Annual Reports

Every administrative staff member annually submits a section to the Director outlining the activities of the Information/Education division, for inclusion in the BSP Annual Report. On a monthly basis, informal updates and informational pieces are submitted for inclusion in the staff newsletter. Time and space allotted for the newsletter pieces are often limited but the effort often pays off by encouraging dialogue and a better understanding of the educational and conservation challenges Park staff face together. Newsletter pieces are one more tool the Park uses to give frontline staff the information they need to respond accurately and effectively to a wide range of visitor questions and concerns.

Professional Conference Poster Sessions

On an occasional basis, Park employees represent the agency at a professional gathering. These may focus on recreational opportunities and trip planning, career opportunities, forestry operations in the SFMA, trail crew or volunteer recruitment or operational updates on issues

such as the Appalachian Trail. The Info/Ed office, by virtue of managing photo files for the Park, has created a number of photo displays for use with a portable tabletop display unit and works with other divisions to help them prepare for their events as requested.

Outreach Programming

Outreach Programs are one of the principal assigned duties of the Information/Education division. Occurring most often between October and April each year, outreach programs are offered free of charge, although at times, costs for overnight lodging may be requested. Audiences run the gamut, from nursing home residents to university students to scout groups and civic leaders.

Outreach programs convey the philosophy and spirit of the Park to audiences or individuals who are not recreating in the Park at the moment, including some audiences that may never be able to visit the Park. Throughout his life, Percival Baxter expressed his extreme affection for Maine people with his words and his gifts, over a lifetime of philanthropy. With the help of modern technology, we can “bring the Park to the people”, especially those unable to hike or make the trip to see the Park. In representing this agency throughout the state, outreach programs are designed consistent with Park interpretive themes and guidelines to reflect the donor’s respect for and generosity to Maine people.

The positive results of the outreach programs are many; we speak in terms of “The Authority of the Resource”⁴¹ to explain the Park’s origins, regulations and policies, which differ in content and philosophy from many other parks. Those who visit the Park after an orientation program are much better informed. Because they have a prior acquaintance at least one Park employee, they are more comfortable asking questions as the need arises, resulting in a more personal and comprehensive connection with the Park. Those hampered by disabilities or families that might never be able to visit the Park are nevertheless reminded of the great gift left by Baxter and have a greater understanding when conservation issues are in the headlines.

A couple of issues related to outreach programming have emerged in recent years. One relates to a certain type of request we will be turning down in the future, the other relates to outreach programs offered by staff other than the Information/Education division.

While every attempt will be made to respond to requests for outreach programs, I/E staff will avoid out of town breakfast meetings and lunch seminars because the 15 minute time slot does not allow sufficient time to provide consistent background material considered essential in the I/E outreach effort. The cost benefit is not favorable for the Park in this situation. These requests will not necessarily be viewed the same in other workgroups or divisions at the Park. For instance the Park Director or Business Manager could provide Rotarians with a quick update on pending legislation or a new initiative of interest to local business community without compromising essential elements of their role. The benefit for these contacts justifies the travel

⁴¹Dr. George N. Wallace, Colorado State University; *Legacy*. Vol. 1 (2), pp. 4-8.

time and staff time entailed, based on their function and possible alliances and support to be gained.

Aside from the primary outreach effort of the Information/Education division, the responsibility for additional or specialized outreach programming is most typically assigned to Administrative staff and division heads. Access to Park-owned equipment and images for offering outreach programs is limited to those designated by the Director. The use of paid time for other staff positions to provide programs is subject to supervisory approval and the wearing of a Park uniform when presenting to groups outside of work time/season is not a permitted practice. The automated slide show at Park Headquarters will be made available as a loaner DVD for staff sign-out. This scripted show provides all the standard background on Percival Baxter, Park origins, history and mission normally covered in any I/E outreach presentation, thus ensuring a consistent message. The DVD is not reproducible for outside distribution as many of the photos in the program are donated for in-house staff use only.

4.3.7 Recommendations for Future Services

This section is a discussion and listing of potential improvements, additions, modifications, and other changes to the existing platform of information and educational materials, programs and protocols provided by the Park. Each proposal will require specific consideration of its merit.

4.3.7.1.1 Action

Develop Short Term Interpretive Plans, for each duty station in the Park as a bridge to the development of permanent site-specific Interpretive Plans.

4.3.7.2 Park Wide Initiatives

Bulletin Boards and Other Postings

New information kiosks should be built according to established BSP plans. This means standardized space is available at each site with one of these sheltered two-sided bulletin boards. A list of core postings ([sec. 10.38](#)) can be found in the appendix to this Plan. Once standard information pieces are used Park-wide, when an update is needed, we can print out the appropriate number, laminate and distribute with the confidence that all the campground bulletin boards and kiosks are being updated at once. This translates into an assurance that all Park visitors are equally exposed to the Park's basic core messages, regardless of location or contacts with individual staff members.

Core winter postings ([sec. 10.39](#)) for bulletin boards should also be developed and consistently posted Park-wide. During the winter camping season, consistent information is even more difficult to guarantee because low use equals spotty staff coverage. Some winter visitors, particularly snowmobilers passing through the Park or winter campers at Russell Pond, may

not encounter any rangers during their visit, making the necessity for comprehensive and season-appropriate winter postings even greater.

Outhouse Postings

A standardized LNT posting for all outhouses will be developed and posted parkwide. This will address proper disposal of waste and discuss water quality issues as well.

Groups

Education of groups of more than 12 individuals visiting the Park can go a long way toward reducing the impact they might have on the natural resources of the Park as well as the social experience of other visitors. By working with groups, the benefits to the Park can be multiplied many times over, not only because of the numbers in each group, but because these early experiences during the formative years are parlayed by many into future careers in the outdoors and at the very least, may serve as the background when participants grow up and bring their young families to recreate in the same places they visited at a young age. Past efforts have been earnest but haphazard with only the most motivated groups seeking and receiving programs. Some approaches to consider:

- Prepare pretrip materials to orient large groups visiting the park, including mention of the loaner LNT, Happy Trails and similar videos.
- Work with gate and Headquarters Reservation staff to develop and maintain a contact list of youth camps and large groups camping in the Park or visiting the Park for day use. Each May, use this list to either make individual phone calls to organizations or send a mass email to the large group (camping) list, offering to meet their group when they arrive in Millinocket, at the Visitor Center or at their campsite for a welcome talk and brief orientation/ question/answer period.
- Team the I&E staff with the Park Director and Chief Ranger to re-invigorate and follow through on the large group registration process that was first put in place in 1992. Work with Reservation staff to learn what impact phone registrations of large day use groups will have on the existing reservation office operation. Work to find ways to accomplish the sign-up of these groups and educate them regarding their choices, using “Authority of the Resource”⁴² to initiate them to the concept and process.
- In concert with implementing sign up of large groups for day use on Katahdin, Team the I&E staff with the Park Director and Chief Ranger to design and implement a policy of physically allocating large group use between Katahdin trails on a day-by-day basis to protect the experience of all visitors. Emphasize to groups that their cooperation with this process helps them contribute to responsible stewardship of the Park.
- Contribute to annual analysis and follow-up of this effort with the Park Director and Chief Ranger. Offering improvements of the staff training and public educational components of the initiative as needed.

⁴² Dr. George N. Wallace

Website

Devote attention to the educational aspects of the BSP website, recognizing the key role web inquiries will play in communicating with our current and future audiences. Some approaches to consider:

- Staff training specific to interpretive applications of agency websites
- Using interns to design interactive quizzes and activities for Park website
- Park-wide “Newspaper” (see below) on an annual basis, posted on the Park website
- Development and posting of short educational video clips

3-D models

Visitors gravitate to the Katahdin mountain models on display throughout the Park as well as the landscape model of the South Branch/Traveler region. In the spring of 2008, members of the [Friends of Baxter State Park](#) approached the Park with the offer of a landscape model that more completely represents the Katahdin trails. The current model has a distinct weakness in that it only partially portrays the Hunt (AT) and Abol trails, while fully depicting the glacial cirques and headwalls of Great, South and North Basins. Costs for commercially-produced 3-D landscape models are high and the Park has managed thus far with the talents and good will of volunteers who made the molds for the existing models. An ideal to aim for would be:

- An accurate and complete 3-D representation of the Katahdin massif for Katahdin trailheads
- An accurate 3-D representation of the entire Park acreage, including new additions such as the West Branch Lands and Katahdin Lake and the entire SFMA, with road access and main Park roads and trails clearly represented.

For the purposes of Park interpretive efforts, an accurate and complete Katahdin model is a priority because it will give visitors visual reminders of the level of commitment a Katahdin hike represents. Also important is the finish of the model and the location. The ideal product for the Park will be durably finished to withstand sticky fingers and easy cleanup and touchup of the paint. The model should be located within reach of individuals in wheelchairs or elementary age children. Installation should be where the greatest number of people can see it for the greatest amount of time and the model should be installed sufficiently secure from those who might be inspired to attempt removal.

Publications

The current list of publications originating out of the Information/Education division is not necessarily representative of the complete educational needs of the Park visitor. Many handouts or brochures came about because of the special interest of a particular intern or a recurring issue that necessitated a special educational piece. A thorough review should be conducted of the handouts currently being printed to determine if the handout is currently valid and worthwhile and if the format, content and style addresses Park needs. Furthermore, it is

necessary to standardize for the production of handouts coming from this division. Standards established should address:

- Color of paper for various topic categories (wildlife, nature trails, etc), recycled content, font size and style, artwork standards, sources and format for artist credit,
- Guidelines for job cost/ number of copies, specifications for in-house copy vs. contract copy vs. contract typesetting, layout and printing services.
- A planned rotation of revisions and printing of all printed handouts under the I/E division, for budgeting and supply purposes..
- Providing a couple of centrally located boxes, plus one in the staff mailroom at HQ, situated to collect corrections/suggestions for our handouts as well as corrections/ suggestions regarding commercially available maps/guidebooks. field staff and visitors

Examples of new pieces needed: a standardized LNT posting for backcountry site outhouses, a handout on deer ticks for the gates/campgrounds.

The Information/Education division should take the opportunity to work with Reservation staff to maximize the educational dividends of reservation mailings. Changes in the future management of the Reservations office may include fewer mailings when the Reservation system transitions to online reservations. However, in the near future, possibilities remain for us to “piggyback” our educational initiatives onto reservation mailings.

Wildnotes

In 2010, a pilot publication, *Wildnotes*, was produced. Initial reaction has been very favorably received by Park visitors. *Wildnotes* contains helpful suggestions for improvement from employees. *Wildnotes* is modeled after institutional “newspapers” employed by other Parks and outdoor agencies. This publication is written to include all the pertinent facts for new visitors, including Gatehouse, Headquarters and Visitor Center hours, Park Rules and Regulations, highlighting some of the prohibitions unique to the park, news of trail or road re-routes and upcoming projects visitors should know about this season. Trail cut-off times, explanation of Class Days etc. should also be included. The paper may evolve to feature employee photography and short educational pieces on everything from the night sky to Park wildflowers and birds. It should serve, first and foremost, as a printed, portable Park bulletin board, containing all the core pieces that can also be found in each campground.

Baxter Park Trail Guide

The Park recently purchased rights to Steve Clark’s Guide to Katahdin and Baxter State Park. Significant resources will be invested in updating the information on trails and revising the format. Other than Legacy of a Lifetime and In the Deeds We Trust, the Park has not owned

the rights to books and this is an opportunity for us to build on the work Mr. Clark did in weaving information about the Park mission and proper use in the text and trail descriptions. As mentioned earlier in this document, the Park administrative team is also exploring the idea of producing downloadable maps, available for a small fee on the Park website, while at the same time cultivating relationships with commercial mapmakers to make sure information on trail changes is readily available to them. The I/E division has traditionally worked with commercial mapmakers to provide text and/or fact checking for maps they produce. Fostering these relationships will allow us to disseminate information about the Park's mission and resources to a far wider audience than we might do with only our budget.

Baxter Park Plant Guide

Most of the materials produced by the Information/Education Division are products of desktop publishing, to keep costs down and make the information available to all visitors. However the Park also stands to benefit from commercially-produced publications of the natural history genre. Fortunately, the geology of the Park is covered by an excellent revision of the Geology of Katahdin bulletin, produced by the Maine Geological Survey, featuring many new color photographs and maps. However, no similar titles exist for a comprehensive plant book or a general natural history guide. A guide to The Plants of Baxter State Park, based on the model presented by The Plants of Acadia National Park by Glenn Mittelhauser, Linda Gregory, Jill Weber, Sally Rooney, Donna Kausen and Marilee Lovit (2010), would be a popular addition to our resale titles. This guide bridges the gap between introductory wildflower identification guides and technical floras. If the plant and habitat photos are attractive, this item will appeal for the general public as well as visiting amateur botanists and professionals. If the Park produces such a book, it allows us to incorporate information on Park regulations, policies, LNT principles, etc. that may or may not be included in guides produced by entities other than the Park. Another valuable project the Park could initiate is a photographic Natural History Guide with key bird, mammal, amphibian/reptile, invertebrates, placed in the context of natural communities as defined by the Maine Natural Area Program. Projects of this quality and magnitude would require a large one- time budget, but with recent projects focused on the history of the Park, an illustrated flora and i.d. guide would complement the publications already commissioned by the Park. In many Parks, the profits over wholesale cost of books are dedicated to fund interpretive and natural history publications of the Park's choice. While this has not been the practice in the past at Baxter State Park, a percentage of profits from maps and books could be used to raise funds for these projects.

Programs

Park interpretive efforts could benefit from the development of pretrip materials for visiting elementary, middle and high schools. Along with pretrip packets, a consistent commitment to program evaluation is an essential component of a successful educational effort. A simple standardized form can be developed for outreach programs and a separate one for evening, summer children's and library programs. These evaluations can guide us in program focus, equipment and supply purchasing, interpretive staff training needs and goal setting for seasonal interns as well as long term employees.

Keeping abreast of use trends is an important part of running a relevant and effective Information/Education division. Some suggested approaches:

- Place a high value on maintaining communication with agencies with similar missions, cooperating with each other on conferences, trainings and available resource people to achieve shared dialogue and effectiveness in our work.
- Monitor online forums and blogs to learn about education gaps/visitor trends and opinions
- Provide educational resources and effort to assist the Park Director and Chief Ranger in the maintenance of a working relationship with commercial groups, commercial guides, and the authors of commercial maps/trail guides.

4.3.7.3 Site by Site Ideas

Park Headquarters

In 2008, the Park Director initiated a review of the Headquarters downstairs lobby, conference room and auditorium. The following ideas were submitted from the Information/Education division:

- Utilize the entrance annex at the east entrance to Headquarters for educational postings situated to be read through the glass windows and doors when Headquarters is closed. This entails moving snow tools mounted on a wall rack and posting information on motorcycles/ pets/ oversized vehicles prohibitions, gate, Visitor Center and Headquarters hours, gate and camping fees, etc.
- Entering the Headquarters Lobby via the right (north door), post hanging files on different types of park accommodations, include all the cabins @ both cabin campgrounds, all bunkhouses, a typical campground leanto and tent site and a backcountry leanto/tent site . In the (currently available) oak-framed cork board: Reservations staff would like to post weather and reservation information.
- On the same side of the lobby, where the mail basket currently sits, consider a monitor with a selection of educational video clips endless loop on selected topics, Park scenery or a selection of interactive park information programs and games.
- On the corkboard at the left end of the lobby counter (to the right of the door going upstairs), space is available for a natural history topic on a rotating basis.
- An additional framed and glassed in corkboard to the left of the door can also be devoted to natural history, possibly wildlife or a topic of current interest/concern (invasive plants).
- In the alcove to the left of the Men's restroom and drinking fountain: "Did You Know" corner, a little more adult than Jr. Ranger corner, a rotating single issue space for I/E interns to provide displays on bats, fir waves, climate change, etc.
- The mountain model and Sewall photograph above: this mountain model: is the oldest model on display in the Park and the only one in a display case; both the case and the model are in serious need of touch up paint. Ideally a more comprehensive Katahdin

model will become available for this space in the future. In reality, a model could be larger than the current one and still have ample room to fit in this alcove.

- To the left of the Sewall photo poster sized hanging files display commercially created maps.
- Room may also be available here for alpine wildlife identification display and nearby, a general wildflower display.
- Blank wall near entrance door on right (as you face outside), blank space for volunteer/employee recruitment and rotating recognitions space for staff, etc.
- Inside the auditorium on this floor, the Park Director has authorized using the two large side walls and rear wall for educational displays with the caveat that the room is a multiple use room and displays must be compatible with visitors coming in to view the automated show from time to time.
- The outside of the Headquarters building is another canvas for information

Supplement TIS station

The current TIS equipment installed on the Headquarters lot in Millinocket is designed for very limited transmission distance, within approximately a one mile radius of the HQ lot. The limitations of this broadcast location preclude any use of this communication tool to inform visitors headed to the north end of the Park or those trying to choose between the north and south end of the Park. There is no way for information from the Park to reach northbound travelers who may be wondering which end of the Park has the terrain and opportunities they are seeking. While the majority of visitors seek a Katahdin experience, on a daily basis Togue Pond Gate personnel greet visitors who would have enjoyed the north end of the Park but didn't have enough information out on the interstate to make a different decision. It would be ideal if travelers could have a phone number to call for this sort of information, more detailed than possible on the Hiker Information Line but still a recorded message. One challenge is choosing the appropriate cost effective, accessible technology for the messages (probably not another TIS radio station), the other challenge is obtaining permission to place a DOT grade sign along the Interstate corridor so all Northbound visitors are reached before Medway.

Automated Slide Show Update and Other Video Offerings

The images, script, narration and projecting technology of the automated slide show at Park Headquarters should be reviewed for revisions and updates on a regularly scheduled basis. The show is currently overdue for updated images and new narration, featuring the current Park Director and a suitable narrator for the quotes of Governor Baxter embedded in the script. The projection room becomes quite hot when equipment is run throughout the day in the summer, which may shorten the life of the electrical equipment. The room should be studied for any improvements in ventilation or configuration that may make it better for the technology currently installed there.

There is opportunity for interns or volunteers to work with Information/Education staff to create new topical shows or videos for the viewing public using the Headquarters Auditorium. A menu of shows could be available for visitors to view on rainy days or when they arrive with

extra time before setting up camp in the Park. The same menu could be installed on the computer monitor proposed for the reservation counter and available on the Park website. Ideally, the Information/Education division should generate a list of topics that would be most useful to the Park, supporting our mission while enriching the visitor's understanding and experience of the Park. This list could guide consideration of any proposals the Park receives and provide suggestions for individuals with good intentions who desire to contribute their photographic talents to the Park. Video clips illustrating the 7 LNT Principles, interpreted for Baxter State Park, would be immediately useful, including disposal of human waste below treeline and above treeline, disposal of waste water and food particles, how to wash dishes or bathe when camping, hiking above treeline, hiking in critical Endangered Species habitat string fences), hiking during the shoulder seasons or after periods of high rainfall.

Division Image Archives

Archiving efforts at the Park in the future may include not only visual images but other resources falling under other divisions, including blueprints for all Park buildings, trail signs and corridors, news clips featuring Baxter State Park issues and news, and all manner of agency correspondence and meeting minutes. Specific to the Information/Education division, management of images depicting natural history, cultural history, Park events and staff is a major effort, not currently being accomplished in the manner necessary. The goal is to have images accessible and useful to the Park for any and all manner of uses, including responding to program requests, analyzing change in landscape or facilities over time, responding to requests from publishers and facilitating research through use of historical photos. To date, we have not made progress proportionate to the need or the rate at which images continue to be created or donated. The Past Perfect software was purchased and installed in 2004 but day-to-day work demands did not allow for time devoted to the exacting task of archiving images properly. An off-site contractor has been working for the last year with little progress, primarily due to extenuating family circumstances. The continued proliferation of images and expectation that Park photo files will be useable for a wide range of projects necessitates that the division undertake for the Director an Information/ Education Visual Resources Inventory enumerating:

- Slides currently scanned for archiving vs. slides/photos yet to be scanned for archiving.
- Numbers and subject categories of digital images waiting to be scanned.
- Historical collections yet to be scanned and archived.

Other considerations related to archiving images:

- A proposal to fund a part-time or seasonal archivist to work on site, more closely and consistently with the Park Naturalist to archive photos using Past Perfect as well as scan slides and photos or oversee the sorting of materials to send to professional scanning services.

- .The physical curating of flat photo files and donated photo/slide collections under the division's care must begin occurring simultaneously with the digital archive process to prevent the backlog from growing and the deterioration of original material.
- A protocol must be in place for accepting and managing photos of people, natural features and facilities to keep this portion of the files reasonably useful and efficient over time. Solutions may involve documented disposal, transfer to family members (with chain of custody references retained to share with publishers needing certain files), and/or culling to an essential few representative shots of each subject after a reasonable period of time.
- A backup protocol should be in place to preserve copies of digital archives at some location other than park Headquarters and the Park network server.

The inventory will serve to make the Director aware of visual resources available for administrative use as well as allow him to work with the Naturalist to prioritize the archiving work of the division.

Small Woodland HQ Lot (NAPA Lot)

Similar to the outside of the HQ building, the grounds have not been utilized as fully as they could be, to share both our mission and information useful to visitors about to enter the Park. The small wooded area encircled by the Headquarters parking lot, as well as the additional building lot purchased by the Park near the corner of Tamarack and Balsam Drive, contains representative species of the local forests, wildflower and tree identification and forest interpretation. A small amount of interpretive effort focused on these areas could introduce visitors to wildflowers, trees and shrubs they might encounter in the Park as well as show that the hallmark Baxter commitment to natural resources applies in town as well as within the Park boundaries.

Poster Session Materials

From time to time, the Information/Education division receives requests for a tabletop display to be shared at various conferences and professional gatherings. In conjunction with the division's archiving effort, it would be helpful to create a "library" of display ready images for such a purpose. Currently the Park has two folding tabletop display units, one of which is in disrepair. The division should research available replacements, with an eye toward cost, portability and durability. Images and computer generated information pieces on key subjects should be prepared and available in anticipation of standard events as a time and energy saving effort (i.e., career fairs, environmental education conferences).

Winter Film/ Speaker series

While Park use of the large conference room at 64 Balsam Street has been limited to meetings and hearings, the room has certainly hosted many non-work-related functions for the local

community since it was constructed in 1995. It is a suitable space for the Park to consider holding public gatherings as well. One idea tried in the winter of 2000 and again in 2006, involved a winter speaker's series, enjoyed limited attendance but showed some promise. In keeping with Millinocket's long term transition into a locale with a broader -based economy and more diverse livelihoods than historically has been the case, the Park could easily host a few events each winter to celebrate and illuminate the natural setting of the area and all the possibilities and responsibilities inherent in such an exceptional region. Schedules could be coordinated with events such as the Winterfest and other community events. However, part of the attraction of such an idea is to offer something to local residents who are often too busy or disinclined to partake of the programs offered in the Park in the summer. For this purpose, offering an activity during the quietest times may be the more thoughtful approach. This idea also lends itself well to an extension of the cooperative relationship the division has forged in recent summers with the Millinocket Memorial Library. When there is an overlap between the subject matter of their winter reading group and topics suitable to our Winter Programs Series, we could tailor program choices and work together to encourage attendance.. Our conference room provides a better setting for films or speakers than the library room layout can provide. The offerings could range from speakers to films and videos with a guest discussion leader following. The concept would be to support the Park's philosophy and mission through a broader lens. Programs would ideally not be based in or related directly to Baxter State Park but would have a broader environmental education focus. The conference room would be more useful if it had a ceiling mounted digital projector, speakers and a remote microphone system for some presenters who are soft spoken.

Citizen Science Support

In the summer of 2004 and again in 2009, the division organized and hosted an Invasive Aquatic Plant Workshop in the conference room of Park Headquarters. The Park is surrounded by a landscape featuring many exceptional ponds, lakes and streams. It makes sense for us to regularly organize and host these workshops in our conference room, to encourage local citizens to patrol for and report invasive aquatic plants, both in and out of the Park. This would reinforce our public support of citizens as informed monitors and stewards of Maine's natural resources. There are likely other citizen science initiatives we can support with the use of this room from time to time and Information/Education staff should be alert to opportunities in this vein for the Director's consideration.

Togue Pond VC

Efforts at the Visitor Center should build on the success the facility already enjoys. This could include:

- Changing the current photos of wildlife, and wildflowers to newer photos, although the long term treatments of currently displayed photos have effectively protected them from deterioration for many years and they remain in generally good condition. In fact, we continue to receive requests to purchase the Silliker landscape panorama. Current photos include donated images from Bill Silliker and Jean McLean, professionally

enlarged and bonded to lexan for durability, weather and UV-proofing. Before any change is instituted, the entire cost of the change, including special treatments to the photographs and framing, would have to be carefully considered.

- Division staff and seasonals will look for ways to have more interactive displays or activities available for children coming into the Visitor Center and Togue Pond area.
- The outside walls of the Visitor Center building should be used for interpretive postings to direct and inform visitors arriving outside VC business hours. Many do not realize information is just ahead, at Togue Pond Gate. The VC information could emphasize the opportunities ahead and highlight some prohibitions so that visitors have one last place to learn about those before arriving at the gate.
- All the signage at Togue Pond Beach, and across the road on Lower Togue Pond, should be reviewed for consistency, accuracy and tact.
- The Visitor Center and Togue Pond Beach area should be assessed for a likely information kiosk upon which to post core BSP bulletin board postings found elsewhere in the Park as well as possible natural and cultural history specific to Cranberry Pond or Togue Ponds.

Togue Pond Gate

As mentioned in prior discussion on Togue Pond Gate, this facility has little room for interpretive postings or programs. However, future efforts of the I.E division here should focus on giving the gate employees all the information they need to do their jobs and to include them when looking for ideas to help with certain user trends or issues. Two things might benefit this area:

- As mentioned above, information specific to the wetlands in the Togue Pond area, including the Togue Ponds, Cranberry Pond and the wetlands near the gate
- The Park does not normally clear or interpret for landscape views in a formal way. However, for people, with RV's, motorcycles or pets or for those with time or vehicle limitations, the view from the large pullout just before Togue Pond Gate presents opportunities to interpret aspects of the geology/zonation of Katahdin, as well as a recognition of the Park's unique origin and mission as they stand at the doorstep of the Park. A kiosk to one side could be used to achieve this.

Matagamon Gate

A full assessment of possible opportunities at this facility may increase information on posted on canoe camping and other subjects specific to visitors in this area. Possibilities for an informational kiosk also exist at Matagamon Landing, where increased awareness and action concerning invasive aquatic plants is especially important, in addition the need for all BSP core postings.

A 2' X 3' enlarged map of Matagamon Lake, similar to the one posted in the Chief Ranger's office, with the suggested high and low water (channel) routes on Matagamon Lake

superimposed would provide gate employees with a helpful visual tool to show canoe campers arriving at the gate.

Future Recommendations for Individual Park Duty Stations

This is the first time Interpretation, Information and Education elements of the Park have been addressed in the Park Management Plan. Now that underlying concepts and goals for the work of the Information/Education division are part of the Management Plan, the next phase proposed is a detailed Interpretive Plan for each duty station/campground, based on the introductory treatment and resources at each site, as described in this document. For practical purposes, each of the ten Park campgrounds is the equivalent of an individual state park campground, deserving of a detailed interpretive assessment and plan relevant to the specific features and resources present on site.

4.3.7.3.1 Action

Produce site-specific Interpretive Plans for each duty station in the Park.

Staffing/Support Issues

The proposed initiatives in this document take current staffing levels (yr round, seasonal and contract), and current budget for the Information /Education division into account. Increasing the number of seasonal interns, changing the 6 month seasonal intern to a classified position or adding an additional Interpretive Specialist would obviously have a direct impact on the quality and amount accomplished in Information/Education initiatives for the Park. Ongoing training funds are necessary to function as necessary with two yr round positions coordinating and several other seasonal/contract positions contributing to the work at hand. In addition to training customary for the Interpretive Specialist and Naturalist, topic specific training in Natural History is desirable to supplement the personal knowledge of long term VC employees. There also exists a Park-wide need to better train mid-season hires. These employees usually enter the work force at the busiest time and we must work to find ways to streamline the new employee training while at the same time increasing the amount of knowledge we transfer because experience has shown that new employees filling recently vacated positions often do not have the tools they need to give information crucial to protecting the Park resources and the visitor's safety. Another area requiring concerted attention is the training of Roving Rangers. Because these positions can be stationed almost anywhere in the Park, their training necessarily must have a more comprehensive component. Unless we formally adopt a standard for these situations, mid-season hires and Roving Rangers, and develop the necessary materials to meet the need, results will be inconsistent and haphazard, depending on the staffing levels and time available at the moment. The I/E division will continue to submit ideas for programs/products that may prove helpful and is available to assist in these efforts as needed.

4.4 Resource Protection Policies – Natural Disturbance

4.4.1 Natural Disturbance Concerns

*“Ye will know when Marm Pamola is a turnin’ of ‘em loose
By the hunchin’s and the shivers of the hemlock an’ the spruce
For they tremble an’ they shake an’ the lippin’ lappin’ lake
Goes a-slaverin’ the ledges, an’ the hills begin to quake.*

*The flutter an’ the flarin’s of the crooked lightnin’s scare
The looservee, the coon an’ fox, the deer and gruntin’ bear,
Then out o’ old Katahdin come the devils on the whoop,
For Pamola at the doorway gives the order, “Clear the coop!”*

*And the awful thunder drums, an’ the wind it sings and hums
Then burstin’ to a grummer howl the roaring whirlwind comes.
And down from off the mountain in the shootin’ sheets of flame
The devils of Katahdin come to play their reg’lar game.*

*Then it’s men hold tight, pray for mornin’ light,
Katahdin’s caves are empty an’ the fiends are out to-night.”⁴³*

4.4.1.1 Fire, Wind, Insects, Disease, Weather

The forested landscape of the Park is a complex ecosystem of soil types, landforms and plant communities. Although the process is often too slow for us to easily notice, the plant and forest communities of the Park are in a constant state of change. Occasionally, significant natural events occur either singly or in combination to produce immediate and striking change. In the case of a spruce-budworm epidemic, this change takes place over a ten year period, but in the case of a forest fire or a windstorm event, big changes can happen overnight. Although thousands of acres of windthrown or burned timber can be a heartbreaking loss both economically and emotionally, we are almost always awed and fascinated by the power of nature – one of the qualities of wilderness. Fire, wind, insects and disease are four of the most primary forces affecting constant change on the Park’s ecosystem and forest structures.

Although individually stochastic in nature, these forces almost always function in some type of complex interrelationship – significant areas of windthrown timber may be a result of land aspect, disease agents that weaken trees, or a significant rain event that reduces the ability of the roots to hold firm in soaked soils. Significant fires are often influenced by previous disturbance events such as windthrow or logging, which deposit branches and tree tops on the forest floor where they become combustible fine and course fuels. Disease or insects, normally endemic in the forest, may explode to epidemic populations when forest structures mature to a certain point or drought or extended high rainfall alters conditions in the forest. When enough trees die in a given area from insects or disease, increased fuel loads lead to a higher risk of a wildland fire event.

Wildland Fire

⁴³ “H’ant O’ Katahdin” in part, from Kin O’ Kataadn , by Holman Day, 1904

Fire is an integral part of the forest ecosystem of the Park. The structures of many of the forest stands in the Park express the effects of fires that occurred over the past century. The average frequency and primary causes of fire in the Acadian forest have been, and will continue to be the subject of study and debate. Lorimer⁴⁴ and Wilson⁴⁵ have both contributed to our understanding about fire in the forests of the Park and their work suggests that fire occurrence, intensity and size is often part of a complex interrelationship with other natural disturbance factors such as wind, insects and disease. Together, these researchers suggest that any black and white interpretation of the Acadian forest disturbance regime is simplistic and reality is inherently much messier, with macro and micro-site influences playing significant roles in how disturbance plays out on the landscape. This complexity is ensured with the recognition that small scale gap dynamics will be overlaid atop larger scale less frequent stand replacing events, to create a complex mosaic of stand conditions.

The largest known fire in the Park occurred in June of 1903. Beginning on the south shore of Webster Stream and perhaps started by an escaped campfire, this fire burned southward in a large swath that extended through the central Wassataquoik basin and south to South Turner Mountain. Logging slash remaining from the Davis and Love operations of the 1880's in combination with other unrecorded weather and insect events may have increased the intensity of the fire in the Russell Pond area. Today, the composition of tree species in the stands ranging from the Scientific Forest Management Area through South Branch Pond to Russell Pond reflect the effects of this fire. A striking example of this can be seen on the Pogy Notch trail when the trail crosses through a patch of forest skipped or missed by the fire. This small area contains large sugar maple, red spruce, yellow birch and beech in contrast to the big tooth and quaking aspen, paper birch and balsam fir more prevalent in the land affected by the fire. The largest recent fire in the Park was the 1977 fire that extended from the West Branch of the Penobscot near Abol Bridge up to Foss and Knowlton Pond and east to Stump Pond and the Park Tote Road. This fire of over 2,500 acres was well covered in the media and involved a large organized suppression action led by the Maine Forest Service. The June fire began in a large area of windthrown timber that resulted from a strong wind and rain event in the fall of 1974. The final lines of the fire did not extend far outside the original lines of the windthrown timber.

After past logging and fires, Park forests are now generally relatively mature. In this condition large fires may be relatively unlikely, although the potential for dry periods, extended drought, or significant wind events and the likely return of the spruce budworm, all suggest that this status could change suddenly. While the Park is a large area, it is not particularly large in the context of natural events such as wildland fire.

⁴⁴ Craig G. Lorimer; The Presettlement Forest and Natural Disturbance Cycle of Northeastern Maine, *Ecology*, Vol 58, No 1 winter, 1977.

Craig G. Lorimer and Alan S. White; Scale and Frequency of Natural Disturbance in the Northeastern US; Implications to early forest successional habitats and regional age distributions; *Elsevier*, Forest Management and Ecology, 185 (2003),p. 41-64

⁴⁵ Jeremy Wilson; Nineteenth Century Lumber Surveys for Bangor, Maine: Implications for Pre-European Settlement Forest Characteristics in Northern and Eastern Maine; *Journal of Forestry*, July August 2005, p 218-223.

The Maine Forest Service serves as the legal fire suppression agent for the Park. Working closely with Park staff, in the early 1990's MFS personnel developed a Baxter State Park Fire Plan (see plan as separate website posting here:

http://www.baxterstateparkauthority.com/pdf/reports/2012%20BSP%20Fire%20Plan_v4.pdf)

addressing fire suppression protocols and policies for fires occurring within the Park. The plan has been reviewed and revised in 2011 and addresses protocols for fire detection, training, communication, pre-suppression, suppression and public and personnel safety. A decision criteria is included to evaluate the primary options between Wildland fire management and suppression. Although fire is discussed here as a natural disturbance, it is possible that a Wildland fire could be accidentally or deliberately set by human activity. It is clearly stated in the Fire Plan decision model (section VI. in plan) that human caused fires are not considered natural events and will be suppressed. Most importantly, the plan describes specific answers and decision models for determining the appropriate actions in the resolution of the potentially contradictory goals of protecting the resources of adjacent landowners and reducing or eliminating the impact of fire suppression activities on the natural resources of the Park.

Wind

Wind is a constant force of change within the Park. A primary focus of Park training and one of the primary tools employed by Park staff within the Park is the chainsaw – principally used to address the influence of wind. Although we plan for and consider the effects of large wind events that effect the structure of the forest over hundreds of acres or more, Park staff and volunteers are almost continually engaged in the cutting and clearing of windthrown trees from Park roads and trails. The endemic influence of wind is a larger factor in daily Park operation and maintenance than any other natural disturbance factor. Although windthrown timber may be actively harvested within the Scientific Forest Management Area according to existing salvage policies, within the remainder of the Park wind generated changes in stand structure are viewed as natural processes contributing to the “natural wild state” of the Park and cutting and clearing of windthrown timber is limited to the minimum necessary to restore hiking trails to standard clearing widths, open Park roads to safe passage of vehicles and clear campgrounds to provide adequate public safety and protection of park facilities.

Insects and disease

Similar to wind, insects and disease are an integral part of the ecology and function of the natural communities occupying the Park landscape. Spruce bark beetles (*Dendroctonus rufipennis*), the bronze birch borer (*Agrilus anxius*), the saddle prominent (*Heterocampa guttivitta*), the satin moth (*Leucoma salicis*), are a few of the hundreds of insects that have affected Park trees. Along with a host of bacterial diseases or complexes, insects and disease play an important, continuing and important role in the ecology of the Park. Some species have the capacity to erupt suddenly to epidemic population levels and have significant affects on forest structures over large regions. The [Spruce budworm](#) (*Choristoneura fumiferana*) is an example of such a species. This insect, endemic to forests in the northeastern US and Canada, periodically erupts into to epidemic levels, usually beginning in Quebec Province CA, and sweeps eastward toward the Atlantic. Despite its misleading name, the insect has primarily evolved to feed on the emerging new growth of balsam fir and white spruce, but in the

large populations of epidemics, will feed on and effect red spruce. Examinations of unlogged old growth stands in Maine, including stands within the Park, reveal relatively high percentages of red spruce compared to balsam fir, suggesting that repeated cycles of the spruce budworm may tend to purge softwood stands of balsam fir, leaving the less susceptible and longer-lived red spruce. The cyclical nature of the spruce budworm is fairly well known, but not at all well understood, with an expected cycle of 30-60 years with individual episodes lasting 6-10 years. Maine experienced serious spruce budworm outbreaks between 1913-20 and again between 1973-86. In both events, the reason for the end of the outbreak is not unknown. Both events resulted in the mortality of a significant percentage of balsam fir and red spruce in the region. Following the 1973-86 outbreak, mortality rates of spruce-fir stands with stocking of more than 50% balsam fir were approximately 71%⁴⁶. The sudden decrease in live stocking of softwood stands often was followed by more pronounced windthrow and later by elevated fire occurrence. Experts suspect that the next outbreak of the spruce budworm is likely within the next 10-20 years. Although this event will likely have significant effects on the forests of the wilderness portion of the Park, it is considered a natural event and the Park will make no effort to interfere with the progress of the event other than to protect Park facilities and public safety, and maintain access to roads and trails. In the Scientific Forest Management Area, more active measures may be taken to protect managed forest stands and the standing timber inventory.

Weather

Although wind is a weather factor, its continuous effect on the Park suggests it deserves the unique attention provided above. Other elements of weather; rain, snow, ice, drought, and even extreme cold, can all play a part in affecting Park management. Of primary concern to Park management is the duration and intensity of rain events due to the powerful erosive effects of water on the landscape – particularly in terms of trail erosion, and washouts to roads in the Park. The Park will continue to work to address long term preventative measures in the applied materials and to reduce the effects of high intensity and/or long duration rain events on Park design of both roads and trails. See section on road maintenance in [section 7.2](#) and trail maintenance in [section 7.4](#) below for more discussion on this issue.

Non-Native Invasive Plants and Animals

“As human observers who measure change in days and years, it is difficult for us to grasp that the landscapes we know in our lifetimes are not only ephemeral, but also often radically different from those that preceded them.”⁴⁷

“Invasive”, “exotic”, “non-native” or “alien” are common terms heard today in natural resource management. These terms are usually applied when an “alien” or “non-native” species arrives

⁴⁶ Lloyd C. Irland, John B. Diamond, Judy L. Stone, Jonathan Falk, Ellen Baum; *The Spruce Budworm Outbreak in Maine in the 1970's- Assessment and Directions for the Future*; Bulletin 819, October 1988, Maine Agricultural Experiment Station, University of Maine, Bu

⁴⁷ Tom Wessels, *Reading the Forested Landscape*; The Countryman Press, 1997

in an environment and causes a noticeable and often long-lasting change in the environment, usually through crowding native plants or animals out by aggressive and effective competition for resources, by killing or affecting other flora or fauna in the system, or by disrupting key processes in certain natural communities. Non-native invasive species includes all ranges of life including both land and water-based plants and vertebrate and invertebrate animals and fungi. The following definitions are excerpted from statute adopted by the Maine Department of Agriculture titled “*Criteria for Listing Invasive Terrestrial Plants*”. Although these definitions were developed for plants, they could also be applied to vertebrate and invertebrate animals.

Invasive plant – a non-native species that has spread into native or minimally managed plant communities (habitats) in Maine. They cause economic or environmental harm by developing self-sustaining populations and becoming dominant and/or disruptive to native species. As defined here “species” includes all synonyms, subspecies, varieties, forms and cultivars of that species unless proven otherwise by a process of scientific evaluation.

Non-native plant – a species that is not native or naturally occurring (based on its biology, phylogeny, distribution and current knowledge of the species) within Maine. A species may be native to North America, but non-native to Maine. Synonymous with non-indigenous, exotic or alien.⁴⁸

Naturalized plant– refers to the ability of a plant to reproduce and colonize on its own without human assistance.⁴⁹

As resource managers, the primary concern is not the former habitat of a species, but the invasive nature – the ability a species may have to significantly alter an existing environment and the social and economic effects the alterations may have on humans. The effects of invasive organisms on the forest ecosystems of Maine is not new, but the propensity of humans to travel widely over the landscape has clearly increased the speed and opportunities for organisms to travel around the globe and pioneer new environments. Over the last 350 years, a wide variety of plants and insects “native” to other continents, have migrated to North American and naturalized across the landscape, including portions of Baxter State Park. Examples include plants such as dandelion, yarrow, pearly everlasting and insects such as the Gypsy Moth (*Lymantria dispar*). Beginning in the 1930’s, beech bark disease, a complex association of scale insects and fungal disease, spread through northeastern states and killed and degraded American beech (*Fagus grandifolia*). No known practical control for this disease has been found. In the early 1900’s, the Chestnut Blight (*Cryphonectria parasitica*) spread through the wide range of the American Chestnut in the U.S. and effectively removed this species from forest stands. The Chestnut Blight was followed closely by Dutch Elm Disease, which effectively eliminated mature American Elm trees from forests throughout its range and the streets of hundreds of cities and towns.

⁴⁸ Reference: 7 M.R.S.A. Chapter 405-A Section 2211, December 25, 2011 – filing 2011-469

⁴⁹ Don Cameron, personal communication.

More recently a new wave of aggressively “invasive” non-native plants and animals have arrived in North America, including, but certainly not limited to species such as Eurasian Milfoil (*Myriophyllum spicatum*), Hydrilla (*Esthwaite Waterweed*), the Asian Long-horned Beetle (*Anoplophora glabripennis*), the Emerald Ash Borer (*Agrilus planipennis*), and the Hemlock Woolly Adelgid (*Adelges tsugae*). These species are rapidly establishing themselves and have the potential to change the ecosystems and natural communities people know and love and in some cases depend upon for economic security. In most cases these non-native species do not have any known effective natural control in their new setting. The changes that have been seen in the mid Atlantic and southern New England states, where certain invasive plants and organisms have already become established, have imparted a sense of urgency to managers of areas not yet affected.

Species Watch Lists

1. Once criteria for defining non-native invasive organisms has been developed, the next step for most natural resource managers concerned about non-native invasive plants and animals is to develop a list of plants and animals that currently exist on the landscape or exhibit trends of movement that suggest they are likely to arrive on the landscape in the future. This Park utilizes a list developed by the Park Naturalist, “[*Working List of Invasive and Potentially Invasive Species in Baxter State Park*](#)”.

In addition to the working list for Baxter State Park, several additional publications contain watch lists for invasive non-natives in Maine including:

- Maine Natural Areas Program List of Invasive Plants Species in Maine
- Management Plans for Invasive Plant Species of Acadia National Park: http://www.nps.gov/nero/science/FINAL/ACAD_invasivemanagement/ACAD_invasivemanagement.htm
- Adirondack Park Invasive Plant Program – Best Management Practice: <http://www.adkinvasives.com/>
- The Maine Forest Service includes a comprehensive section on invasive insects on their website: <http://www.maine.gov/doc/mfs/InvasiveThreats.htm>

These lists, management and response plans provide a comprehensive information resource regarding the non-native invasive land and water-based organisms that most likely pose immediate, imminent or possible threats to Baxter State Park. These lists are likely to change as existing non-natives make progress toward Maine and as climate change alters the relationships between organisms in ecosystems across the natural landscape.

Non-native and Invasive Fish

“The introduction and spread of competing fish species has had a substantial impact on the quantity and quality of Maine’s brook trout resource. The chain pickerel was indigenous to only a few southern Maine waters but by 1850 had been introduced to other parts of the state and was well established in many trout waters. More recently, northern pike and muskellunge – which are related to pickerel but grow much larger – have been illegally introduced into several drainages where they continue to expand their range. The smallmouth bass had become

established in many coastal drainages by the early 1900's, but continues to be illegally introduced into new drainages, including the upper Kennebec and Androscoggin River drainages in the 1980's; and the St. John River drainage in the 2000's.

*White perch and yellow perch, both severe competitors with brook trout, became widespread during the late 1800's. These species remain an active threat, as exemplified by the introduction of yellow perch into the Moosehead Lake drainage, the Rangeley Lakes, and the Fish River Chain of Lakes in the 1950's and 1960's.*⁵⁰

Fishing in the Park is governed by the rules of the Maine Department of Inland Fisheries and Wildlife (BSP Rule 3.2). MEIF&W rules have prohibited the use of live fish as bait in all fully-inclusive Park waters since the 1960's. There is no doubt this rule has played a critical role in protecting the species integrity of Park waters and should remain in place into the future. Despite the prohibition of live bait, a small number of non-native species exist in some Park ponds. For example, golden shiner and rainbow smelt have been detected in Kidney Pond surveys).



4-43 Rock Structure at Abol Pond outlet

In 2008, the Park removed the deteriorating wooden dam at the outlet of Abol Pond. The Park replaced the dam with a substantial stone spillway constructed from local boulders. This structure was the result of a cooperative discussion with IF&W and in part, addressed the long-term concern regarding non-native species in the West Branch of the Penobscot River. The existence of non-native species in the Penobscot drainage does suggest the possibility, if not the likelihood,

that non-natives may at some point travel into the Park via Katahdin Brook, Nesowadnehunk Stream,

Katahdin Stream, Trout Brook or Wassataquoik Stream, although some of these streams have significant natural barriers to upstream fish migration.

Monitoring for Invasive Species in BSP

The I&E Division of Baxter State Park organizes staff and volunteers for monitoring efforts for non-native invasive species within the Park. These efforts include annual shoreline surveys of several roadside ponds and lakes in the Park (roadside ponds, particularly with trailered boating access are more likely as establishment points for non-native invasives). When available, the Park works to provide training opportunities for staff and Park volunteers in the identification of non-native invasive land and water-based plant and insect species that

⁵⁰ Forrest R. Bonney, Regional Fishery Biologist; Brook Trout Management Plan; Department of Inland Fisheries and Wildlife, Divisions of Fisheries and Planning, June 2009, P 7.

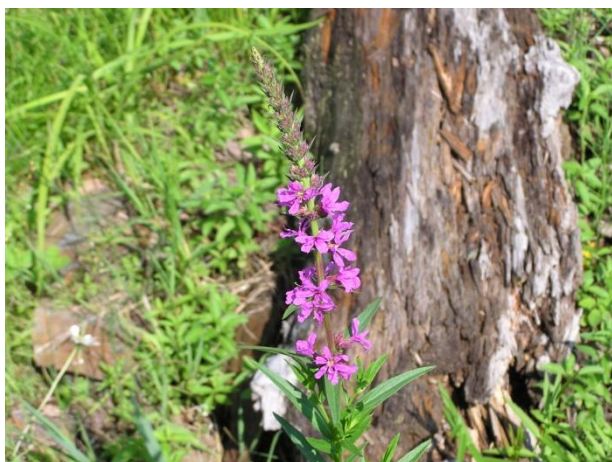
currently exist or could arrive in the Park. The I&E Division also uses opportunities to provide Park visitors with information on non-native invasive species including both the potential threat to the Park ecosystem as well as identification information and response guidelines.

The Park is currently engaged in a multi-year effort to develop a complete flora of the Park. This database will provide a record of existing plants in the Park, including both native and non-native naturalized species. The Park works closely with the Maine Forest Service in survey efforts for potential non-native invasive insects threats such as the Emerald Ash Borer (*Agrilus planipennis*), the Asian Long-horned Beetle (*Anoplophora glabripennis*), Gypsy Moth (*Lymantria dispar dispar*) and the Hemlock Woolly Adelgid (*Adelges tsugae*). In addition, the Park maintains over 100 continuous forest inventory plots in the Scientific Forest Management Area and more the Maine Forest Service measures data on more than 30 Forest Inventory and Analysis (FIA) plots in the Park as a whole. These plots are regularly visited for the collection of specific forest measurement and survey data and provide an excellent unbiased sample set to check for the existence of non-native invasive species on the forest landscape of the Park.

The Park works closely with fisheries biologists from the Maine Department of Inland Fisheries and Wildlife (IF&W) in the management of the fisheries in Park ponds and lakes. Almost all Park ponds holding significant fish populations have been surveyed by IF&W biologists at least once and many have been surveyed several times. In addition to checking the existing species structure in each pond for non-native fish, the biologists also have an eye out for possible invasive aquatic plants and other non-fish fauna.

The Maine Department of Environmental Protection has recently worked on a more in-depth survey of the Wassataquoik watershed within the Park, including sampling of aquatic invertebrate and other non-fish populations and water chemistry.

Lastly, the Park has hosted research directed at the small number of naturally fishless ponds within the Park. This research developed a basic dataset of existing aquatic insect populations in these remote mountain ponds. Internally, the Park is currently working on building a database of mapped vernal pools located in the Park.



Purple Loosestrife in Baxter State Park

“To sum up, chance and change are ubiquitous; habitats are heterogenous, selection drives parents to produce a great excess of young; death (disturbance) is necessary for life; and movements of individuals are pervasive. That’s the way the world is made and works. I think, in fact, that these, not order and integration, are what allow species to ride out the tribulations of this imperfect world.”⁵¹

4.4.2 Human Disturbance Concerns

4.4.2.1 Atmospheric Issues

“Climbers from Chimney Pond reported an estimated 200 people on Baxter Peak today. It was a clear blue day and some claimed they could see the Atlantic Ocean.”⁵²

A full discussion of the issues surrounding atmospheric pollution and climate change would be far too complex and extensive for this plan.

“For the 21st century, the models show a strong trend in Maine toward warmer conditions with more precipitation in all four seasons. A warmer and wetter future will affect the seasons as we know them, with more winter precipitation in the form of rain and a continued shift in the timing of hydrological events, such as spring runoff. Other assessments forecast increased intensity of precipitation, as suggested by several recent severe storm events. A warmer ocean could increase the frequency and intensity of hurricanes, with implications for water and wastewater management, coastal infrastructure, and water quality.”

“Climate change will almost certainly lead to significant changes in Maine’s overall assemblage of plants and animals, including those living in our coastal waters. It is difficult to predict effects on specific species, but we may have fewer spruce, loons, chickadees, lynx, halibut, and moose; and more oaks, bobcat, summer flounder, and deer. The state list of endangered and threatened species will likely grow as a result of climate change.”

“The forest industry can expect continued forest cover in Maine, with shifting geography for individual tree species, as balsam fir and spruce give way to red maples and other hardwoods. Climate change also may affect overall wood availability and will certainly change the timing of forest operations. A longer mud season and shorter periods of hard freeze could restrict the traditional winter harvesting season.”⁵³

The debate on climate change has moved on from a discussion on the validity of the concern to a more substantive debate on what to do and calculations of the likely effects on societies and natural resources in the coming decades. In general, along with warmer average annual temperatures, climate change models suggest more precipitation and an increased likelihood of more severe extremes in weather events in the Northeast. Current research suggests that the effects of climate change will have significant effects on the natural resources and ecosystems and all the core mission functions of the Park. It is not possible at this time to

⁵¹ William H. Drury, John T. Anderson, *Chance and Change, Ecology for Conservationists*, 1998, University of California Press.

⁵² From Park Superintendent Helon Taylor’s Weekly Work Report; entry for Sunday, September 1, 1963.

⁵³ Jacobson, G.L., I.J. Fernandez, P.A. Mayewski, and C.V. Schmitt (editors). 2009. Maine’s Climate Future: An Initial Assessment. Orono, ME: University of Maine.
<http://www.climatechange.umaine.edu/mainesclimatefuture/>

specifically predict the changes that may occur over the landscape of the Park and the plants, animals and organisms that inhabit it, but in a general, in an almost subconscious way, consideration of these possible changes have infiltrated into the Park's consideration of almost every resource protection issue.

Atmospheric pollution has been documented in the Park, although there are indications that the physical location of the Park is far enough north to have reduced the deposition rates of sulphur and nitrogen compared to the Adirondacks and other areas in New England, although the effects of local industry is measureable and the issue of soil and water acidity resulting from atmospheric deposition is still of concern in Maine and the Park. In 1988, samples were taken of many ponds in the Park by Jeffery Kahl and Matthew Scott as a part of the Maine High Elevation Lake Monitoring (HELM) project⁵⁴. The analysis included estimates for “*mean acid neutralizing capacity (ANC)*” in Park ponds. ANC values less than zero are an indication that the pond waters are “acidic. The Maine HELMS study found that Maine had the “*highest number of low acid neutralizing capacity lakes of any state.*” Although many high elevation ponds in the Park produced low measured ANC values (<100), only one, Pamola Pond, was estimated to be acidic with an ANC value of -21. In comparison, the ANC value for Wassataquoik Lake was 111, Kidney Pond was 119 and Abol Pond was 177. In 1994, Davies *et al* completed a study of the water chemistry and other attributes of twelve northern New England lakes, including the fishless and very remote Klondike Pond in the Park. Davis did not find acidification to be evident in Klondike Pond, but the activities of industry around the Park could be inferred:

“However, the air pollution indicator V begins a sustained increase around 1860. Klondike had, by far, the lowest background concentration of V of the four lakes where V was measured, and thus may record the initially slight increases of atmospheric input of V early in the record. Concentrations of Pb and Zn begin sustained increases at ~1900. The closest town, Millinocket, ~35 km southeast of the lake, was constructed along with its large paper mill and a railroad line in 1889-1900. Coal was used to fuel the mill until the 1950s when it was replaced by oil (P. Firlotte, pers. comm.). A major increase in soot in sediment begins shortly after 1900.”⁵⁵

4.4.2.1.1 Action

Remeasure the water chemistry of representative low and high elevation Park ponds with similar or identical protocols as the HELM project as part of a long-term monitoring program.

4.4.2.2 Fire

Fire as a natural disturbance is discussed above in [section 4.4.1.1](#). Human-caused wildland fire, whether accidental or deliberate, is not considered a natural event or process and suppression action will be directed toward such fires. Aside from planning for wildland fire, campfires are an integral part of most of the frontcountry and backcountry camping experience

⁵⁴ Jeffrey S. Kahl, Matthew Scott; Lake and Reservoir Management; 1998 4(1): 33-39

⁵⁵ Ronald B. Davis, Dennis S. Anderson, Stephen A. Norton, Mark C. Whiting, ***Acidity of twelve northern New England lakes in recent centuries***, Dept. of Plant Biology and Pathology/Institute for Quaternary Studies/Dept. of Geological Sciences, University of Maine, May 1994.

in the Park. Exceptions to open fires are imposed in a limited number of areas where the attributes of a very quality wilderness setting, and/or high use rates and/or relatively fragile sites are of sufficient concern either singly or in combination to suggest a restriction on the use of fire. Areas in the Park where open fires are not permitted (backpack-type stoves only) are:

- Chimney Pond – high use rates, fragile sites
- Davis Pond – high quality wilderness setting, fragile site

Campground and backcountry fire rings are inspected by the Maine Forest Service and Park staff to ensure compliance with Maine Forest Service standards. During times of drought or other environmental conditions when the moisture levels of forest fuels becomes relatively low and the ability of an ignited wildland fire to rapidly spread becomes relatively high, Park staff and MFS staff begin a continuing dialogue concerning suitable actions to reduce the overall risk of fire to both visitors and the natural resources of the Park. Actions would include:

- Site specific evaluation of forest fuels moisture levels by MFS personnel and evaluation of fuel levels in fire behavior models;
- Increased distribution of information and education through hand-out written materials;
- specific notice and caution information utilizing website, newspaper, television and radio media;
- requirements for staff to carry fire suppression equipment such as backpack tanks, and shovels and testing of all campground and vehicle based pumps and hose equipment;
- additional staff patrol and spoken dialogue to Park visitors;
- restrictions on open fires in backcountry campsites;
- restrictions of open fire size in frontcountry campsites;
- additional patrol and pre-suppression equipment readiness in the SFM A;
- restriction of access to areas difficult to patrol, such as the SFMA.

4.4.2.3 Roads

The intent of Park donor Percival Baxter regarding roads is discussed in several other places in this plan (see [section 3.3.2.5](#), [section 4.2](#) and [section 7.2](#),). In recognition that Baxter viewed the purpose of roads in the Park as necessary to provide access to trailheads and campgrounds, the Park considers the approximately 60 miles of gravel surfaced Park Tote Road, Roaring Brook Road, Abol Pond Road, Kidney Pond Road, Daicey Pond Road and South Branch Pond Road to be access threads embedded within the wilderness or forever-wild portions of the Park. Accordingly, the land immediately adjacent to the roadway should be managed in the same fashion as land abutting a Park trail. The public access roads in the Park listed above were constructed at differing times and with different standards. However, the desired condition of these roads should be as intended by the donor, “single track graveled surfaced road with frequent turn-outs” and that these roads be maintained “in a way not to interfere with the wild natural state now existing in said areas.”⁵⁶

⁵⁶ This wording was used frequently throughout the Trust documents, but can be specifically referenced in Private and Special Laws 1949, C.2 p.3-4

In order to ensure that the average width of the road does not slowly increase as a result of maintenance activities, in 1999 the Park implemented a regular road width monitoring protocol involving 110 road width measurements taken at specified, remeasurable points on the Park Tote Road between Togue Pond Gate and Matagamon Gate. Regular remeasurements utilizing this protocol will allow the Park to objectively evaluate and monitor road width.

4.4.2.3.1 Action

Continue to implement the road-width monitoring protocol every 5-10 years to ensure that the character and nature of the Park Tote Road remain appropriate to the natural wild state of the Park.

Brush, fallen trees and other debris lying in the road between the outside edge of the ditch lines may be removed to allow safe and clear passages for cars and maintenance vehicles, including the occasional large truck. The occasional leaning, damaged or diseased tree that poses an obvious hazard to fall in the road, or trees falling in the road from normal wind events, may be removed upon the approval of the appropriate supervisory ranger. Situations involving landscape disturbances such as tree mortality from insect or disease outbreaks or severe windstorms should involve a more comprehensive review before any tree cutting or removal may commence.

“The purpose of Baxter State Park is to have a Wilderness area forever to be kept as a Wilderness without the accessories of civilization. This means that the roads should not be boulevards, only they would be reasonably safe. With too many improvements the Wilderness idea will no longer be maintained and I shall be pleased if you will give consideration to the matter. I find that those who visit the Park do not mind the crooked roads or the many turn-outs; in fact these give a little zest to the journey. People feel that they are at last in an unspoiled region. This I hope to maintain”⁵⁷

The narrow and winding nature of Park roads are features that most strongly characterize the driving experience in the Park and often add “a little zest” to the journey. While the Park’s management should always strive to maintain this character, maintenance should consider the provision that the roads “be reasonably safe”. The appropriate balance point between these conflicting ideals will take constant vigilance and effort to maintain. Cutting and removal of tree limbs, brush and the occasional tree outside the ditch lines of the roadway should be included in normal road maintenance activities to maintain a reasonably safe sight distance on Park roads – particularly on the many sharp turns in the Park Tote Road between Nesowadnehunk Field and the junction of the Abol Pond Road.

4.4.2.4 Vegetation Management of Open Areas and Viewsheds

⁵⁷ Percival Baxter in a letter to State Highway Commission Chairman David Stevens, October, 1957.



In recent years, visitors have commented that landscape views and **vistas** from the Park Tote Road or campgrounds such as Katahdin Stream and Chimney Pond have diminished or disappeared as trees and other vegetation has re-grown following natural disturbances such as windstorms, fire and insect related mortality. Often, landscape and mountain vistas from the Park Tote Road were created by the clearing of forest growth for logging camps or the original construction of the Park Tote Road. Large **openings** created over the past century or more at Nesowadnehunk Field and Trout Brook Farm campgrounds reflect the original development of these sites as logging camps and farmed fields to produce feed for oxen and horses used for logging activities. The Park's past management of these sites has included the use of both fire and mowing to maintain the existing openings. As the Park has continued to consider appropriate long-term management within the wilderness or "Forever Wild" zone, the need for more specific long-term guidance regarding open areas and vistas has become apparent.

4.4.2.4.1 Action

Determine the management objectives regarding the maintained openings at Trout Brook Farm and Nesowadnehunk Field Campgrounds and develop a long-term plan to meet the desired objectives.

Resolved: The BSPA approved the following guidance for this action item at their March 20, 2013 public meeting.

Human History and Background of Open Areas and Vistas in the Park

Most of Baxter State Park is currently managed as wilderness, but the Park has a long history of human use and management that precedes the "*forever wild*" designation established by Park donor Percival Baxter. Most of the Park's landscape was subject to logging activities at some time in the past, and some areas were logged several times following the advent of access by European settlers in the mid-1800's. Early logging efforts of the 19th century are very hard to discern today as these efforts were reliant on streams and rivers for transport and



Russell Pond Camps circa 1920



Russell Pond circa 2005

did not have equipment capable of leaving long-term marks on the landscape. These early efforts, including the extensive and significant logging settlements of Old City and New City in

the Wassataquiok watershed near Bell Pond and Russell Pond, Chase Field on the Roaring Brook Road, Sandy Stream Pond and Basin Ponds on the Chimney Pond Trail and numerous sites in the Webster Stream/Hudson Pond area, have become largely unnoticeable to Park hikers due to the re-growth of the Acadian forest. Later efforts extending from 1920 to 1960 often altered the landscape in more intensive ways and included areas later subsumed into the Park's recreational infrastructure as campgrounds including South Branch Pond, Russell Pond, Trout Brook Farm, Nesowadnehunk Field and Foster Field and McCarty Field. While most of these areas have settled from their original cleared condition back into a largely forested state (see *Russell Pond photos above*), the Park has maintained a portion of the original cleared area at Nesowadnehunk Field and Trout Brook Farm.

In addition to logging camps and settlements, early activities in the Park also included private sporting camps. Russell Pond and Daicey Pond Campgrounds were originally established as logging camps and subsequently re-purposed as sporting camps. Other efforts such as Kidney Pond Camps and Katahdin Lake Camps established the camps and buildings specifically for use as sporting camps.

Large openings currently existing at Trout Brook Farm and Nesowadnehunk Field originated from significant logging operations centered on the area prior to purchase by Percival Baxter and inclusion in the Park. At both campgrounds, the openings have been maintained by Park staff for decades by the use of prescribed fire and in more recent years, periodic mowing. The maintenance work necessary to maintain them does represent a cost to the Park in both labor and equipment. Although these openings may present important wildlife habitat and form a substantial part of the iconic identity of these campgrounds to Park staff and visitors alike, they exist on the interface between resource protection and recreation management.

Natural History and Background of Open Areas and Vistas in the Park

In addition to openings resulting from human activities, natural events and processes have, and will continue to alter the Park's landscape in a variety of ways. The three principle natural forces that affect forest cover in the Park are wind, fire and insects/disease. These change agents are discussed in detail in the preceding section (4.4.2.1). While to a great degree, wind, fire and insects and disease are stochastic events that cannot be specifically predicted in terms of time or location, their consistent occurrence over time strongly suggests that they will continue to affect the Park in the future. Although the time, extent and location of these changes to the landscape cannot be accurately predicted, Park management expects to see future openings resulting from wildland fires, wind and insects and/or disease.

The guiding principles of the Park as articulated by Park donor Percival Baxter in the Deeds of Trust and Trust Communications are discussed above in detail in [section 4.2, Wilderness and](#)

[the Natural Wild State](#). In general, the Trust Deeds and formal communications express the consistent direction that the Park:

“...is authorized to build trails and access roads to camp sites, to use timber from this area for fire control and firewood and to construct shelters and lean-tos for mountain climbers and other loves of nature in its wild state.

This area is to be maintained primarily as a Wilderness and recreational purposes are to be regarded as of secondary importance and shall not encroach upon the main objective of this area which is to be “Forever Wild”.”



Looking south from Nesowadnehunk Field

Guidance - Management of Open Areas

Nesowadnehunk and Trout Brook Farm - Previous logging operations in the park included the clearing of significant openings at these two campgrounds in the Park. The original openings at both locations were significantly larger than exist currently and included a number of buildings and structures, all of which have been removed. The openings at both areas are beginning to fill in with trees and other forest growth and require human intervention through

prescribed fire or manual cutting and/or mowing to maintain them as early successional forest habitat. As suggested by the words “Farm” and “Field” in their names, these areas have been open in some degree for their entire history as Park campgrounds and the openings are a component in both staff and visitor’s impressions, memory and understanding of these areas of the Park. The shape and delineation of the existing openings at both campgrounds is somewhat square with abrupt edges and reflects human influence more than a natural event such as a wildfire or wind storm. Management guidance is to retain a defined primary core of the existing openings at both Trout Brook Farm and Nesowadnehunk Field Campgrounds through mowing. The primary core would be shaped to include significant edge habitat and a non-linear shape more similar to a natural opening. The portions of the current opening outside the primary core would be allowed to gradually return to a forested condition. Draft designs for the primary core areas for [Nesowadnehunk Field](#) and [Trout Brook Farm](#) are included in the appendix.

Kidney Pond – no changes in primary campground opening.

Daicey Pond – allow lower meadow to re-vegetate to forest growth over the next several decades.

McCarty Field – allow open space to re-vegetate to forest growth over the next several decades.

Katahdin Lake Wilderness Camps lower meadow – this meadow is partially in use by the camps as part of their commercial sporting camp operation. The Park will not maintain the opening, but will otherwise not prevent the camp operator from maintaining the current opening. Enlargement of the current opening will not be permitted.

Foster Field and Nesowadnehunk Field Group Areas – these areas shall be maintained in their current state as open areas to facilitate the use of large groups.

Other Openings – the Park maintains a number of natural and man-made openings as landing zones (LZ) for emergency helicopter use. The Park will continue to maintain all specified LZ's ([see p. 37 BSP.Fire Plan](#)) within Baxter State Park to necessary dimensions to meet the needs of potential emergency rescue aircraft. (Chimney Pond, Russell Pond, Slaughter Pit, Katahdin Lake upper meadow, SFMA Hemlock Road Camps

Guidance - Management of Roadside Vistas

A drive of the Park Tote Road reveals more than forty current existing vistas of mountains, fields, streams or a combination of these features (*see attached map – Observed Viewpoints on the Park Tote Road*). Almost all of the current vistas occur naturally without staff intervention for creation or maintenance.

In keeping with the Forever Wild trust directives, with two notable exceptions, roadside vegetation shall not be cut or otherwise manipulated to create or maintain vistas or views.



[Doubletop from the Park Tote Road](#)

Open areas from past logging, camps, or other human activities that may still exist along the side of the Park roads will not be maintained to provide mountain or landscape views. Viewpoints will not be cut along the Park road to provide or re-establish views that once existed but have become obscured as a result of forest growth, but views may be created by the clearing of brush to maintain the integrity of roadbeds and drainage structures. Examples include the clearing of vegetation on causeways such as at Maynard's Marsh on the Daicey Pond Access Road, and at all large culverts in the Park, including the North Branch of Trout Brook,

Avalanche Brook and the large culvert in the causeway between Abol Pond and Abol Logan. Past logging activities created some roadside views in the Park that have since grown back to forest. Natural events, such as windstorms, wildland fire and insect outbreaks also created scenic views that have diminished over time as the forest has re-grown. Based on our knowledge of natural disturbance patterns in Maine ([sec. 4.4.1](#)), we should expect these forces to create new viewsheds in the coming years.

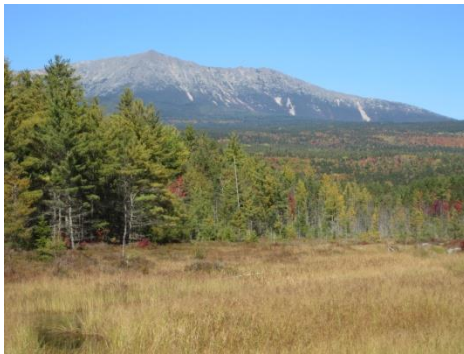
Exceptions:



Moose in Maynard's Marsh

1. Roadside/wetland interfaces: in cases where the existing Park road system interfaces directly with a non-forested wetland, vegetation growing on the shoulder or edge berm of the road may be trimmed. This vegetation management provides the dual benefit of maintaining the road shoulders as well as providing unobstructed views for road travelers of the wetland as well as a wider landscape in some locations. Existing locations along the Park Tote Road where this exception

would apply would include Barren Brook, Maynard's Marsh on the Daicey Pond Road, Fowler Green, Black Brook at the Black Brook culvert crossing. In addition, the wetland 0.5 miles from Togue Pond Gate on the Roaring Brook Road would also apply. Lastly, maintenance of culverts over 5' in diameter requires that vegetation be cut or otherwise discouraged from growth on the roadside edge and fill around large stream culvert placements on the Park Tote Road such as Wadleigh Brook, Black Brook, the North Branch of Trout Brook, Dwelley Brook, Roaring Brook (near Slide Dam), Abol Stream and tributaries (Ladd/Scott Culvert), Abol Pond Logan and culverts on the Roaring Brook Road including Chase Brook, Bear Brook and Avalanche Stream.



Katahdin from the Roaring Brook Road

2. The open area along the Park access road approximately 200' before (south of) Togue Pond Gatehouse is a typical parking spot and the last point-of –pause before entering into the Park at Togue Pond Gate. This opening was the former site of the Togue Pond Gatehouse and Mountain View Camp and as late as the year 2000 a good all-season view of Katahdin

was available at this site. Over the past decade, trees have grown up on the north edge of this opening and obscured the view. In consideration of the value of this view to potential Park visitors who may be deciding on a Katahdin hike, or whether or not to visit the Park, the Park will work to gradually restore this vista by the removal of obstructing trees over a two to three year period. After the vista is restored, photo documentation will be employed as a guide to the continuing maintenance of this vista.

Vista Management - Trails



Teardrop Pond from the Marston Trail

Existing trails in the Park often afford fine vistas of the surrounding landscape, particularly trails that extend or exist above treeline or travel through mountainous terrain. Trail maintenance on existing trails should be restricted to the clearing limits of normal trail maintenance expressed in the Standard Operating Procedures. This guidance anticipates that some vistas formerly provided on some

Park trails may, over time, become obscured by trees.

The guidance similarly anticipates that windthrow and other natural disturbance events will provide unexpected vistas on trails after the initial clearing work is completed. A familiar example of this would be the section of the Saddle Trail a mile or so above Chimney Pond that was intersected by a winter avalanche in the 1980's. This section of the trail still provides excellent views of the surrounding slopes of the Great or South Basin and Hamlin Ridge.

Vista Management – Campgrounds and Campsites

Outside of the guidance provided above regarding the significant openings at Nesowadnehunk and Trout Brook Farm Campgrounds, tree and vegetation management in campgrounds and around campsites shall be limited to what is necessary to provide adequate public, staff and operational safety. It is anticipated that individual backcountry and frontcountry campsites originally constructed with an available view may lose that view in time due to the growth of the forest.

4.4.2.5 Camping

Camping has been a recreation activity in the Park long before the Park was created by Percival Baxter. Campgrounds like Chimney Pond, Katahdin Stream, Daicey Pond and Kidney Pond have been in use in some form as campsites for generations. Despite their long and successful use, or perhaps because of it, a few issues bear consideration by the Park. The use, storage and disposal of food, food scraps and waste or grey water continues to be an effort in communication, education and interpretation. Currently, Chimney Pond provides a well-marked and advertised bear line for the temporary safe storage of food by campers at a location apart from individual campsites and inaccessible to bears and (most) other wildlife. Due to the presence of cars at most frontcountry campgrounds, bear lines or separate food storage containers have never been provided. Visitors are often likely to store food, or deposit food scraps or waste water in available and inappropriate settings, perhaps lacking the knowledge and experience regarding food handling.

4.4.2.5.1 Action

Consider the installation of a bear line at Russell Pond and the provision (rental) of bear canisters in the backcountry as a Park policy.

At several of the Park's busiest campgrounds including Roaring Brook, Abol, Katahdin Stream and South Branch Pond, Park campsites include numerous popular sites located very close to stream and pond edges. Erosion issues have developed in these sites and many have been addressed by local action initiated by the Campground Ranger. Erosion issues, along with other maintenance and economic concerns at Nesowadnehunk Field Campground were addressed with a comprehensive multi-year effort in the reorganization of the campground. In general, a consistent overall policy and criteria are lacking regarding acceptable site conditions and erosion mitigation measures, including available options for site hardening, site relocation or restrictions in availability.

4.4.2.5.2 Action

Develop specific and Park-wide criteria for the evaluation and mitigation of campsite erosion and other site damage concerns at Park campgrounds.

4.4.2.6 Hiking Trails

The Park currently maintains approximately 218 miles of hiking trail. recreational use of the Park and was specifically mentioned by Percival Baxter in his formal communications:

"I want pleasant foot-trails built and attractive camp-sites laid out in the valleys, by the brooks and on the shores of the waters. Sites where simple forest lean-tos and small log cabins are available for those who love nature and are willing to walk and make an effort to get close to nature.

I want it made available to persons of moderate means who with their boys and girls, with their packs of bedding and food, can tramp through the woods, cook a steak and make flapjacks by the lakes and brooks. Every section of this area is beautiful each in its own way. I do not want it locked up and made inaccessible; I want it used to the fullest extent but in the right unspoiled way."⁵⁸

Park hiking trail statistics for 2010 ([sec. 10.15](#)), indicate that over 80,000 visitors registered at a trailhead for a hike on a trail or trails in the Park. Annually, more than 20,000 visitors register a hike on one of the Katahdin-access trails anchored at Roaring Brook, Katahdin Stream or Abol campgrounds. The significant use of Park trails has resulted in the emergence of a number of resource protection issues involving Park trails.

Trail Erosion and Treadway Protection

The general maintenance function of Park trails is discussed in section [7.4 Trail Maintenance](#), below. This section addresses many concerns about trail erosion resulting from either heavy use or inherited trail layout and design or a combination of the two factors and provides a number of recommendations and action items. Along with many others, the section includes two important recommendations regarding Park trails:

⁵⁸ Percival P. Baxter. Formal Communication to Maine Governor Horace Hildreth, January 2, 1945

4.4.2.6.1 Action

To address long-term soil erosion potential, develop a multi-year plan for evaluating, designing, relocating and rehabilitating areas of fall line trail with high erosion hazards before committing to long term efforts at trail hardening on steep slopes.

4.4.2.6.2 Action

Implement a Park-wide trail structure inventory gathering spatial and attribute data using GPS-capable field data computers to specify and quantify the existing backlog in unmet trail maintenance needs and to facilitate future planning efforts.

Resolved – Action 4.4.2.6.2; see Action 7.4.3.1.2, p. 177-178 in section [7.4 Trail Maintenance](#) for text describing the resolution of this action item.

While the Park's efforts to address the erosion concerns on Park trails in a manner that is effective in perpetuity are important, there are other issues of concern.

Trail Density and Resource Protection

The Park was established over a 31 year period by Park donor Percival P. Baxter. Additional lands purchased by the Baxter State Park Authority or gifted to the Park were added to the Park after the initial establishment period. Many of the original purchased parcels, as well as parcels purchased by, or gifted to the Authority, included established hiking trails.

In 2011, the Park is responsible for the maintenance of approximately 218 miles of hiking trail. This current maintenance requirement is estimated to be near or at the maximum amount of trail miles the Park can current afford to maintain in the rugged and remote landscape of Baxter State Park.

Over the Park's long history, the Park has both discontinued existing trails and constructed new trails. The overall trend over time has resulted in a steady and significant increase in miles of hiking trail in the Park over the past 20 years.

In 2010, of the 78 named ponds in the Park, there are less than 10 significant ponds without established trail access. Most of the Park's major peaks – particularly those with significant area above treeline, have established trail access. These areas within the Park often represent the most pristine wilderness and also often provide potential or existing habitat for the Park's rarest species.

Objective consideration indicates that Park staff and user communities have an inherent and recognized bias or predilection in favor of the addition of new hiking trails within the Park. Historically, the addition of hiking trails has occurred on an incremental, project-by-project basis without consideration of any comprehensive impacts over time.

Beginning in 2008, Park staff began to consider this issue with the Baxter State Park Advisory Committee. This discussion resulted in the proposal to establish Trail Free Zones in the Park ([map- sec. 10.2](#)).

4.4.2.6.3 Action

Establish four Trail-Free Zones within the Park totaling 64,463 acres, in which new trail construction will be prohibited for the following reasons:

- ***To protect the Park's most wild and pristine areas from the impacts that direct trail access will bring.***
- ***To protect the Park from assuming trail maintenance responsibilities outside its staffing or financial capability to support.***

Resolved: The proposal for the establishment of four Trail Free Zones in the Park was included in the proposed management plan. The approval of the plan on March 9, 2012 established the Trail-Free Zones within the Park as defined in the map included in [sec. 10.2](#).

Revision: In a scheduled public meeting of the Baxter State Park Authority on October 10, 2014, the Baxter Park Authority voted unanimously to merge the Traveler and Turner Mtn, Trail Free Zones to include the Wassataquoik Stream corridor. Discussion notes on this action can be viewed on the Park website.

Evaluation of Proposed Changes to the Park Trail System

As discussed above, the Park's history includes numerous changes to the trail system, including relocations or closures of existing trails and addition of new trails. Most of these changes were considered on an ad hoc basis. No specific process or protocol governed the review of trail proposals as a part of a comprehensive framework. As the number of miles of trails the Park maintained quietly grew, the Park began to struggle to meet the increasing effort required to adequately maintain the hiking trail system.

In 2008, the Park began a series of discussions toward the objective of developing a more comprehensive consideration of hiking trails in the Park. Along with the establishment of Trail Free Zones discussed above, two additional guides were developed to assist the Park in the consideration of changes to the Park trail system

The Trail Evaluation Matrix ([sec. 10.51](#)) was developed in 2009 and the final evaluation of existing Park trails was completed early in 2011. The Trail Evaluation Matrix provides a series of trail ratings in two major categories, Resource Concerns and Social Concerns, and is intended to serve as an objective guide for evaluating the important aspects of Park trails and to evaluate the impacts of proposed new trails. The Trail Evaluation Matrix is designed as a tool to assist in the objective consideration of a variety of trail attributes. Although the matrix provides a summary rating of the considered attributes, this rating has no limited significance and judgment must be applied based on consideration of each attribute. A companion document, the Trail Evaluation Guide ([sec. 10.52](#)), provides guidance in the assignment of rating values for each criterion in the Trail Evaluation Matrix.

4.4.2.6.4 Action

Employ the Trail Evaluation Matrix in any and all proposals regarding changes to the current trail system, including relocations, closures and new trail construction.

In addition to the Trail Free Zones ([sec. 10.2](#)) and Trail Evaluation Matrix, the issue of the funding and supporting adequate resources to maintain Park Trails was addressed. As a guide to help Park staff assess the effects of changes to the Park's trail system relative to the combination of Park staff and volunteers that provide the necessary maintenance effort, the Park developed the Trail Support Index ([sec. 10.52](#)). This index is discussed in more detail below in [Section 7.4 Trail Maintenance](#).

4.4.2.6.5 Action

Employ the Trail Support Index in any and all proposals regarding changes to the current trail system, including relocations, closures and new trail construction.

The careful and comprehensive evaluation of any proposed changes to the Park's trail system will likely become more important in the coming years. Large scale land transactions over the past 10 years have resulted in substantial changes to the management objectives of landowners abutting the Park boundary. In 1990, aside from 19% of the Park boundary shared with the Bureau of Parks and Lands and the Penobscot Indian Nation, the Park was surrounded by a variety of large industrial landowners, engaged in timber harvesting and other active forms of forest management. In 2011, the Park shared 53% of its border with different conservation owners or conservation eased lands. In general, conservation owners have management objectives similar to the Park's including an orientation toward non-motorized use and backcountry hiking and camping. Industrial ownerships with conservation easements, while continuing active forest management on the landscape, provide many recreational opportunities similar to those provided by the Park and the future management of these lands is more predictable as a result of the conservation easements.

Viable future proposals and opportunities for trail and campsite additions are likely to include these lands and may involve landscape concept trail proposals that extend across ownership lines and seek to develop models for shared maintenance and administration of recreational use and resource protection. Consideration of these proposals will be complex and should include a careful evaluation of the administrative, maintenance and policy tenure of each owner involved in a proposal.

4.4.2.6.6 Action:

Improve effective lines of communication with adjoining landowners. In situations where the Park and the adjoining landowner share similar management and recreational use objectives, the Park should work to develop effective criteria to evaluate proposals to extend recreational uses across property lines.

Large Group Use

See Commercial and Visitor Use, [section 5.4.2.10](#) below.



4.4.2.7 Park Wildlife

“The beaver in the Park have shown a definite increase since the area has been under the control of Park personnel. Of particular value was the effect of the presence of the Fish and Game crew in the area, several of whom were commissioned game wardens. The martin (sic) and fisher have also increased in numbers.”⁵⁹

Comments from visitors describing their time in the Park almost always include a reference to seeing wildlife. For those that visit the Park, opportunities to see moose and deer are common



and the sight of the Park's rarer denizens such as marten, fisher, coyote, and bear is a likely event for those that spend considerable time in the Park. Although wildlife is an integral part of the natural resources of the Park and consequently, of the Park experience, only limited formal wildlife research has been conducted in the Park. This is in large part due to a resistant position the Park has held toward wildlife research due to the conflict typically inherent in the need to trap or otherwise interfere (including

unavoidable mortality) with wildlife in the conduct of research and the Park's mission to provide for free and unfettered natural processes.

In the late 1990's, the Park hosted in part an extensive study of marten (*Martes americana*) conducted by Payer and Harrison in areas within and adjacent to the Park. This study produced viable data on marten populations in the Park, especially relative to more actively managed areas adjacent to the Park.

“Density of resident, nonjuvenile marten was 2x greater in the forest reserve than in the untrapped industrial forest, suggesting that clearcutting reduced the carrying capacity of the harvested landscape. Trapping further reduced marten density in the trapped industrial forest via additive mortality of males, resulting in a 3x greater density in the reserve than in the trapped area.”⁶⁰

The population densities and health status of larger vertebrate species in the Park such as moose, deer, bear, coyote, fisher, bobcat, snowshoe hare are generally estimates only, usually based on the quality of existing habitat and reflective of the fact that trapping and hunting are prohibited in the majority of the Park. This process has been, and likely will continue to be sufficient for the Park and in keeping with Baxter's directive that *“the best forestry wild life practices and shall be undertaken having in mind that the sole purpose of the donor in creating this Park is to protect the forests and wild life therein as a great wilderness area unspoiled by*

⁵⁹ Park Supervisor Harold Dyer, Baxter Park Annual Report, 1941, p.19

⁶⁰ David C. Payer, Daniel J. Harrison; Influences of Timber Harvesting and Trapping on Habitat Selection and Demographic Characteristics of Marten, College of Natural Resources, Forestry and Agriculture University of Maine, Orono, Maine 04469, December 9, 1999

Man.⁶¹ As the forests of the Park continue to mature, and are affected by various natural disturbances, the quality of habitat will vary, improving in quality and quantity for some species and declining for others.

This “laissez-faire” approach to wildlife management in the wildlife sanctuary portions of the Park is not applied to the Scientific Forest Management Area where more active management, including hunting and trapping, is conducted and the planning and management of forest habitat for wildlife is considered on a landscape basis. The mix of forest structures developed by forest management over the landscape is a complex and evolving mix of science and art. Current management on the SFMA provisions for the retention of mature softwood forest structures, in part but not exclusively, to provide wintering habitat for whitetail deer.

Park policy regarding predator control has evolved over the years. In his 1955 Trust Deed interpretation of “Wildlife Sanctuary”, Baxter expressed the understanding of the day in providing the Authority authorization to:

“maintain the proper balance of nature among the different species of wild life; to control predators that may become a menace to other species; to control disease and epidemics of the wild life of the Park. The destruction of any specie (sic) of wild life shall be carried on exclusively by the Personnel of said Authority and the Forest and Fish and Game Departments.”⁶²

As the understanding of functioning ecosystems has evolved with continuing research, the Authority’s actions to “*maintain the proper balance of nature*” have increasingly reflected the understanding that nature most often provides the appropriate balance among species. This includes that consideration that at times natural conditions favor predators and prey populations are reduced and conversely at times prey populations enjoy favorable conditions and predator populations plunge. In 1993, the Park specifically considered the issue of predator control. Text from the Director’s Summary section of the annual report expresses the conclusion:

“...if a predator was threatening the existence of a game species, in this instance deer, then the Baxter Park Authority may, in cooperation with Inland Fisheries & Wildlife, initiate predator control techniques. However if it was not a threat to the species, it would not necessarily be in the best interest for the Park and its resources to initiate such a program and that the resources should be able to interact in a natural environment without interference.”⁶³

Consequently, since the mid- 1990’s the Authority has generally allowed wildlife populations to interact without human intervention in the Park outside of hunting and trapping activities in permitted areas and rodent control in Park housing, while remaining vigilant for situations where the existence of a species is threatened by predation or loss of habitat. In these instances, after consultation with IF&W personnel and others, the Authority may consider and implement appropriate intervention.

⁶¹ Private and Special Laws of Maine, 1955, Chapter 2, p 1

⁶² Private and Special Laws of Maine, 1955, Chapter 2, p 1

⁶³ Irvin C. Caverly Jr., Directors’ Summary, Baxter State Park Annual Report, 1993

The Park has interwoven a continuous message in visitor contact themes regarding contact with wildlife. Park visitors in campgrounds, trails, viewing sites and other places in the Park are strongly encouraged to respect the wildlife in the Park and to help the Park “keep wildlife wild” by avoiding feeding, calling or other forms of direct interaction. The feeding of bear and deer in campgrounds, whether intentional or unintentional, can quickly result in the development of a situation that is hazardous to both Park visitors and wildlife as wildlife become inured to human presence and begin to lose their innate fear of people. In the 1960’s and 70’s it was not uncommon for the Park to trap, remove or destroy one or more bears on an annual basis. With the removal of dumpsters within and adjacent to the Park in the 1980’s and the implementation of a Carry-In, Carry-Out policy within the Park, the incidents of black bear – visitor interactions and the necessity for Park personnel to trap and remove bears plummeted. Since 1990, the Park has had only one incident requiring the trapping and removal of bears. Black bears are now rarely seen in the Park although wildlife personnel estimate that bear populations in the Park are good.

Of greater concern to the Park are species occupying limited and fragile habitat types or species having genotypes known to be rare or unique to the Park. In these cases, simple population estimates may not be sufficient for the Park to evaluate the effectiveness of resource protection policies in place. In the case of several of these rare species, the Park has implemented monitoring programs to improve our estimates of population levels and as importantly, to provide an alert to any downward trends in these populations. A more complete discussion on this issue can be found under [section 5.4.2.9](#), Research and Monitoring.

4.4.2.8 Park Fisheries

Fisheries Management of Park Waters

The Park provides some of the best remaining habitat and consequently the best fisheries for eastern brook trout (*Salvelinus fontinalis*) in the United States. The complex management of this outstanding resource has been a cooperative effort by the Park and the Department of Inland Fisheries and Wildlife. In 2006, the Maine Legislature established “Heritage Fish Waters Legislation” ([statute text- sec. 10.27](#)) ponds recognizing the importance of the nature eastern brook trout strains and specified protections against the stocking of these ponds.

“These waters – referred to as ‘A List’ or Heritage waters – received special Legislative protection in 2006. In addition, some of the infrequently stocked lakes may still contain relatively pure genotypes because early stockings were often unsuccessful. These...lakes and ponds ... referred to as the ‘B List’ waters, are defined as having not been stocked directly or indirectly within the last 25 years.”⁶⁴

The Park currently has 38 ponds designated as “Heritage Waters”, including 25 ‘A List’ ponds and 13 ‘B List’ ponds ([BSP Heritage Pond list- sec 10.28](#)).

⁶⁴ Forrest R. Bonney, Regional Fishery Biologist; Brook Trout Management Plan; Department of Inland Fisheries and Wildlife, Divisions of Fisheries and Planning, June 2009, p 12

The Park also includes 9 ponds that are regularly stocked by Inland Fisheries and Wildlife with hatchery-reared eastern brook trout ([BSP stocked ponds list- sec. 10.29](#)). Stocking and other direct manipulation of wildlife structures is not an action typically conducted in wilderness areas, but fish stocking has been a long standing management technique that was in practice during the time Baxter was purchasing the lands that form the Park. Stocking began in Billfish, Abol, Kidney and Daicey Pond in the late 1930's and continued in Kidney and Daicey until the early 1960's. Billfish Pond is still stocked.⁶⁵ In more modern times, South Branch Pond was stocked from 1960 until 1998 and this work included reclamation efforts and the stocking of arctic char (*Salvelinus alpinus*). This more active posture in the conduct of fisheries management in Park ponds is unusual for a wilderness area, but reflects the unique nature of the Natural Wild State described by Percival Baxter, which included consideration of active human management when considered appropriate based on current knowledge and understanding:

"The State is authorized to maintain the proper balance of nature among the different species of wild life; to control predators that may become a menace to other species; to control disease and epidemics of the wild life of the Park. Such control shall be exercised by the Baxter State Park Authority. The destruction of any specie (sic) of wild life shall be carried on exclusively by the Personnel of said Authority and the Forest and Fish and Game Departments.

*All work carried on by the State in connection with the above shall be in accordance with the best forestry and wild life practices and shall be undertaken having in mind that the sole purpose of the donor in creating this Park is to protect the forests and wild life therein as a great wilderness area unspoiled by Man. Nothing shall be done for the purpose of obtaining income but should there be incidental income it is to be used solely for the care, operation and protection of this Wilderness area."*⁶⁶

In its first management plan, the Park expressed guidelines for the management of fisheries and wildlife that remain valid today:

- Provisions for a high quality recreation experience shall have priority over quantity.
- Opportunities to angle for native fish in a natural setting shall take precedence over programs that might increase the number that may be caught if such programs detract from the "natural setting" experience
- A basic management objective shall be the perpetuation of all native species.
- Activities that threaten the existence of native species in the park shall be prohibited.
- In any program where restocking is planned, thorough consideration will be given to the genetic stocks proposed for release. Genetic stock as similar to native forms as is reasonably possible should be utilized."

Over the past decade, Park management began to discuss opportunities to better protect the native genotypes of eastern brook trout in Park waters, including those fish in stocked ponds. For a short period, IF&W's approach to stocking in the Park included the use of brood fish

⁶⁵ Gordon Kramer, IF&W Regional Fisheries Biologist, pers. comm..

⁶⁶ Private and Special Laws of Maine, 1955, C 2. P.2.

captured in Nesowadnehunk Lake to rear a hatchery strain with a very local genotype. Park management felt the Nesowadnehunk strain provided better protection of local genotypes and served to mitigate the inherent conflict in stocking in a wilderness area, but the use of the Nesowadnehunk strain was short-lived.

“In the 1990’s the Department (IF&W) undertook a program to improve its brook trout hatchery brood stock. We developed new strains from wild fish originating from the Kennebago River and Sourdnehunk (Nesowadnehunk) Lake with the goal of producing progeny that retain wild-fish characteristics, including greater longevity. Because these strains grow and behave differently from the more domesticated strains previously stocked, stocking rates have been evaluated and adjusted as necessary. Results of comparative performance studies of the new strains indicated that the longevity of both strains exceeded that of the older, domesticated strains. However, the Kennebago strain fish performed better in hatchery/rearing station environment and provided better returns to the angler post-stocking. Consequently, the Kennebago strain has been retained for hatchery production, though these fish are frequently crossed with the older hatchery strain to provide faster-growing (though shorter-lived) fish for specific management situations.”⁶⁷

The decision of IF&W to drop the Nesowadnehunk strain of hatchery fish has been a concern to Park management for some time. In 2006, the Park wrote to IF&W Commissioner (and Authority member) Dan Martin, encouraging the re-establishment of the Nesowadnehunk strain for use in stocking Park waters. In a June, 2006 letter from Commissioner Martin, this request was denied on the basis of cost to the Department ([full letter – sec. 10.32](#)). Recently, discussions have made progress toward developing a resolution to this concern.

4.4.2.8.1 Action

Work with IF&W fisheries management to explore and implement cooperative and joint efforts to restore the Nesowadnehunk hatchery strain for use in stocking Park ponds.

While the stocking program in the Park has been active for some time, as a wilderness area, the primary approach of fisheries management in the Park is to manage Park ponds to produce self-sustaining and healthy populations of native strain eastern brook trout. Toward this end, IF&W fisheries biologists have extended considerable and professional efforts at conducting regular fisheries inventories of Park ponds. IF&W biologists have made productive efforts in recent years to broaden the list of ponds inventoried in the Park and as of 2010, almost all Park ponds with fish populations have been inventoried. Fisheries biologists have combined inventory data with fisheries management expertise to produce management plans specific to ponds within the Park ([sample plan- sec.10.30](#)). The preparation of individual management plans for every pond with a significant recreational fishery in the Park is approximately 30% complete (including approximately 20 of the 25 ‘A-List’ Heritage Ponds in the Park) and it is expected that individual management plans for Park ponds will be completed by 2013 with approximately 70 plans⁶⁸. At times, the inventory methods and some fisheries research has come into conflict with Park management directives involving mortality

⁶⁷ Forrest R. Bonney, Regional Fishery Biologist; Brook Trout Management Plan; Department of Inland Fisheries and Wildlife, Divisions of Fisheries and Planning, June 2009, P 6.

⁶⁸ Gordon Kramer, IF&W Regional Fisheries Biologist, pers. comm..

of wildlife and use of motors on ponds. Park management and IF&W staff are working toward completing a more robust Memorandum of Understanding that would define clear objectives to fisheries management in the Park as well as specify acceptable use options, protocols for lodging and equipment, assistance by Park staff and other details.

4.4.2.8.2 Action

Work with IF&W staff to complete and execute a Memorandum of Understanding defining and guiding the direction and relationship between BSP and IF&W regarding fisheries management in the Park.

Non-native and Invasive Fish

“The introduction and spread of competing fish species has had a substantial impact on the quantity and quality of Maine’s brook trout resource. The chain pickerel was indigenous to only a few southern Maine waters but by 1850 had been introduced to other parts of the state and was well established in many trout waters. More recently, northern pike and muskellunge – which are related to pickerel but grow much larger – have been illegally introduced into several drainages where they continue to expand their range. The smallmouth bass had become established in many coastal drainages by the early 1900’s, but continues to be illegally introduced into new drainages, including the upper Kennebec and Androscoggin River drainages in the 1980’s; and the St. John River drainage in the 2000’s.

White perch and yellow perch, both severe competitors with brook trout, became widespread during the late 1800’s. These species remain an active threat, as exemplified by the introduction of yellow perch into the Moosehead Lake drainage, the Rangeley Lakes, and the Fish River Chain of Lakes in the 1950’s and 1960’s.”⁶⁹

Fishing in the Park is governed by the rules of the Maine Department of Inland Fisheries and Wildlife (BSP Rule 3.2). MEIF&W rules have prohibited the use of live fish as bait in all fully-inclusive Park waters since the 1960’s. There is no doubt this rule has played a critical role in protecting the species integrity of Park waters and should remain in place into the future. Despite the prohibition of live bait, a small number of non-native species exist in some Park ponds. For example, golden shiner and rainbow smelt have been detected in Kidney Pond surveys).

4.4.2.8.3 Action

Work with IF&W to develop an inventory on non-native fish in Park waters and an accordant response plan for any Park waters with non-native fish.

⁶⁹ Forrest R. Bonney, Regional Fishery Biologist; Brook Trout Management Plan; Department of Inland Fisheries and Wildlife, Divisions of Fisheries and Planning, June 2009, P 7.



4-4-4 Rock Structure at Abol Pond outlet

In 2008, the Park removed the deteriorating wooden dam at the outlet of Abol Pond. The Park replaced the dam with a substantial stone spillway constructed from local boulders. This structure was the result of a cooperative discussion with IF&W and in part, addressed the long-term concern regarding non-native species in the West Branch of the Penobscot River. The existence of non-native species in the Penobscot drainage does suggest the possibility, if not the likelihood,

that non-natives may at some point travel into the Park via Katahdin Brook, Nesowadnehunk Stream,

Katahdin Stream, Trout Brook or Wassataquoik Stream, although some of these streams have significant natural barriers to upstream fish migration.

4.4.2.8.4 Action

Work with various State agencies to assess the threat of non-native fish migration into the Park, including relative risk of existing non-native species and the relative potential for movement based on the existence or lack of natural barriers on existing waterways leading into the Park.

The Park has been fortunate to have avoided, as far as we know, the illegal introduction of non-native, invasive fish into Park waters. The Park's good fortune should not be cause for complacency. With over 60,000 people entering the Park each year, the risk for illegal introduction is very real. At this time, the Park has no formal plan or decision model to address an illegal introduction.

4.4.2.8.5 Action

Work closely with IF&W fisheries biologists to develop or incorporate an action plan and decision model into the Park's management plan to ensure appropriate and timely action in the case of the discovery of an introduction of an invasive fish species into Park waters.

Stream Habitat Degradation

The Park includes some of the wildest streams in Maine and many include significant and stable populations of eastern brook trout and are favored haunts of anglers in the Park. Major lotic ecosystems in the Park include Nesowadnehunk Stream, Trout Brook, Webster Stream and Wassataquoik Stream. Each of these major 3rd and 4th order streams are fed by many smaller 1st and 2nd order streams. The assumption of many staff and visitors is that these streams are wild, undisturbed, and unaffected by human activities. Recent research and survey work has indicated that this is not the case.

“Detailed stream surveys conducted within recent years suggest that many of Maine’s interior rivers and streams that provide brook trout habitat are degraded as a result of activities associated with log driving, timber harvesting, and associated road construction. Although log driving was terminated many decades ago, surveyed streams that were driven tend to remain overwidened, entrenched (incised) and have fewer pools than would be expected.

Loss of habitat connectivity resulting from improperly placed/sized culverts at road crossings limits fish passage and isolates populations. Data collected as part of the Eastern Brook Trout Joint Venture surveys indicate that approximately 80% of the culverts examined act as barriers to fish passage.”⁷⁰

The Park has a long history of log driving on all the major streams mentioned above and accordingly, many of the Park streams, regardless of their current wild and natural appearance, include habitat degraded to some extent by past uses.

Habitat and fishery survey data on Nesowadnehunk Stream collected by IFW personnel from 2004 to 2010 has providing a much clearer understanding of the relationship of past activities to current stream habitats in the Park. Survey data covering the stream length of Nesowadnehunk Stream from the dam at Nesowadnehunk south almost to Foster Field reveals that the effects of log driving are still apparent in the habitat and structure of the stream. The following is an excerpt from the full report:

“Habitat:

We conducted Level II habitat surveys over the period of several years. At 37 transect sites we recorded basic stream habitat features (bankfull and wetted widths, depths, shading, substrate, and riparian characterization) (Figure 2). Additionally, any significant pools or drops were noted.

⁷⁰ Forrest R. Bonney, Regional Fishery Biologist; Brook Trout Management Plan; Department of Inland Fisheries and Wildlife, Divisions of Fisheries and Planning, June 2009, P 17.

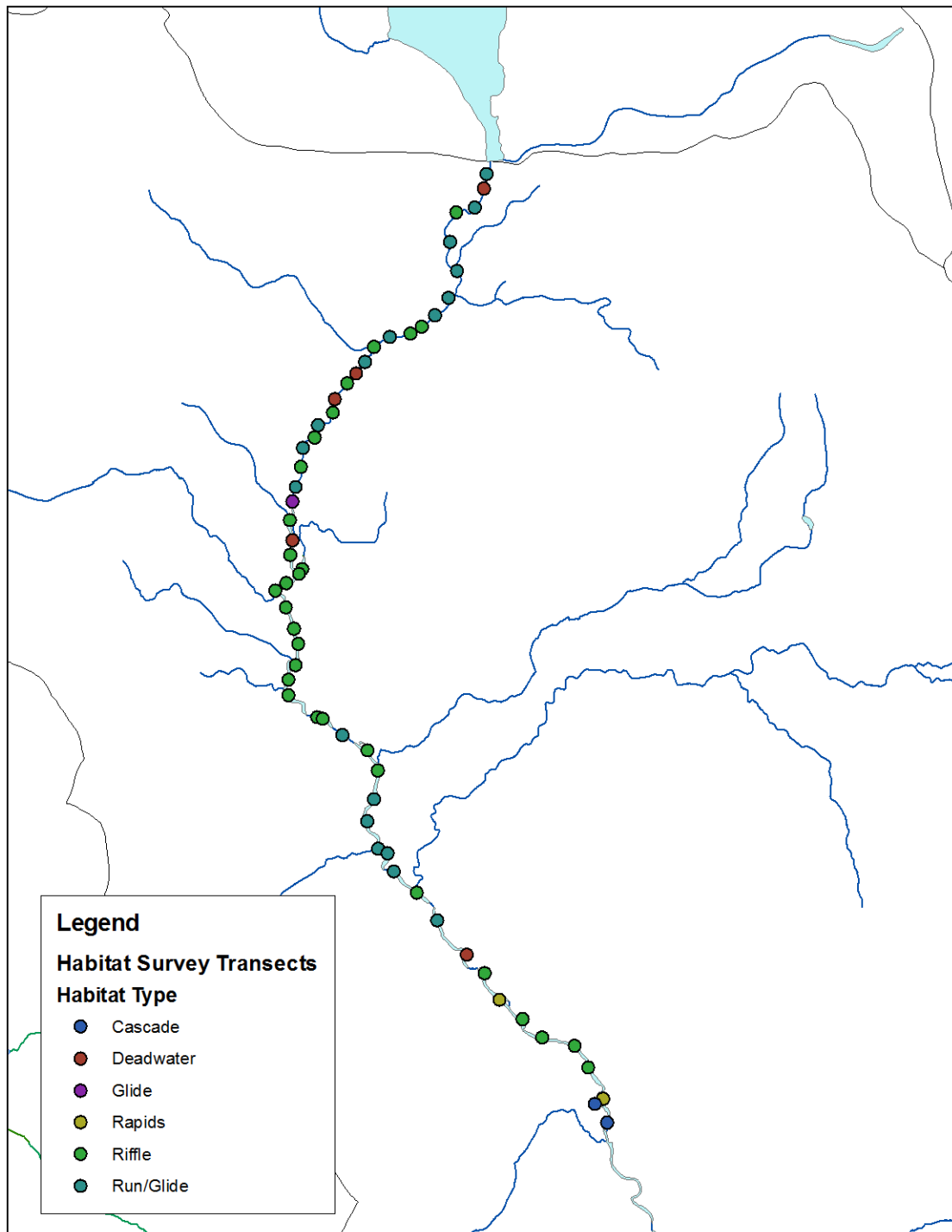


Figure 2- Level II habitat survey transects

Our transect measurements indicated an average bankfull width of 12.1 meters (39.7 ft), and an average wetted width of 11.4 m (37.3 ft). The average depth was measured as 0.34 m (1.12 ft), and the average maximum depth at each transect site was 0.4 m (1.34 ft).

A visual estimation of riparian vegetation type is also recorded at each transect site. Overall the riparian vegetation was estimated to consist of approximately 24% trees, 53% shrubs, 20% forbs and 3% bare. Obviously, these proportions varied from site to site, but seeing as the stream is mostly within Baxter State Park,

timber harvest is unlikely to pose a significant threat in the future. Evidence of historic log drives was still present, including the numerous lengths of pulpwood lying on the bottom of the stream.

Cobble was the primary substrate in 22/37 transects. Mud and gravel tied for next most common, each listed as the primary substrate in 6/37 transects, with boulders and rubble making up the remaining substrates.

Rosgen level II surveys were conducted at 6 sites (Figure 3). Most surveys indicated type C (riffles and pools) channel types, with one section of type F (degraded, entrenched and unstable) located directly below the lake outlet.

Combining the habitat survey data with the Rosgen classification indicates that Nesowadnehunk stream is lacking in pools. A class C stream should, on average, have a pool every 5 to 7 bankfull widths of stream length (Bonney, 2006). ***Nesowadnehunk stream had pools approximately every 14 bankfull widths, or half as many as would be expected. This is likely due to in stream alterations to facilitate log driving, such as removing large boulders and snags that tend to create pools.***

We believe completing the survey of the lower reaches of Nesowadnehunk Stream would be valuable. Its history of log driving is shared with most of the streams in Maine, and it would be useful as a living laboratory to study the natural recovery processes of impacted streams.”⁷¹

4.4.2.8.6 Action

Work with IF&W personnel to complete the study work on Nesowadnehunk Stream and to consider possible actions to speed or enhance the natural restoration process on degraded streams in the Park.

4.4.2.8.7 Action

Consider the replacement of road culverts, particularly larger culverts, with structures that better facilitate fish passage.

For a more detailed discussion of Park culverts and culvert replacement see [section 7.2](#), Park Road Maintenance, below.

Fishless Ponds

The Park landscape includes at least four very rare resources in Maine – fishless ponds. Chimney Pond, Klondike Pond, Davis Pond and Lake Cowles. There may be others not yet documented as fishless (Pamola Pond) and there are some, such as Upper and Lower Basin Ponds, that were possibly once fishless, but have had eastern brook trout introduced at some point in the past.

“Far from barren, biologists say fishless lakes are hubs of biodiversity. Lacking piscine predators, they are home to a greater abundance and variety of invertebrates than lakes with fish, and provide breeding grounds for frogs, salamanders and waterfowl. But as fish are moved around — legally by fisheries agencies, illegally by anglers and bait growers — fishless lakes are becoming increasingly rare.

⁷¹ Partial report data provided to BSP by Merry Gallagher of Dept Inland Fisheries and Wildlife. Emphasis (bold and italics) by author.

*Rugged and sparsely populated, the Maine woods have some of the last fishless lakes in the Northeast. Some, like this one, are kettle lakes without inlets or outlets, excavated in the eastern Maine lowlands by melting blocks of glacial ice. Others are clear tarns in high mountains, with outlets too steep for fish to ascend. Still others are simply too acidic for fish. All probably have been fishless since the glaciers receded.”*⁷²

A survey of research work accomplished in Baxter State Park indicates little or no work has been done to establish baseline invertebrate species assemblages for fishless ponds in the Park, although Schilling, Loftin and Huryn have studied differences in macroinvertebrate communities in fishless headwater and kettle lakes compared to lakes with introduced fish in Maine⁷³. It is important that the Park work to develop better baseline information on this increasingly rare natural resource.

4.4.2.8.8 Action

The Park should work with IF&W staff and with the academic community to explore and promote opportunities for appropriate research on fishless ponds in the Park.



4-4-5 Hikers at Fishless Chimney Pond

4.4.2.9 Snowmobiles

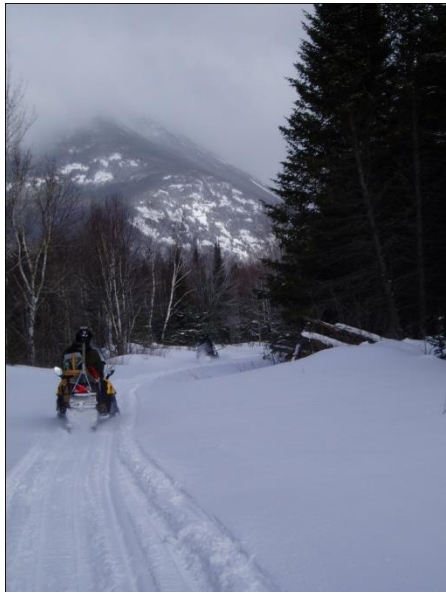
Although the term “traditional use” is often applied to snowmobiles, motorized snow travel has been a popular recreational use in Maine for roughly two generations, arising rapidly in the State after early snow machines (“snow travelers”) became more reliable, useful and affordable in the mid 1960’s. The evolution of Park rules regarding snowmobile use in the Park is an interesting study in recreational policy in a wilderness area. As snowmobiles became available to the public and began to appear in the woods of northern Maine, Percival Baxter expressed his concerns to then Park Supervisor Helon Taylor in a 1965 letter:

“In regard to the Motor Skis I have thought this over and have this suggestion to make. These skis should be prohibited in the Park except for one for you as Supervisor to use in case of emergencies. I feel strongly about this for they will frighten away the wild animals and we certainly would not see a caribou again.”

⁷²Murray Carpenter, *On a Hunt for Fishless Lakes, Teeming With Life*; New York Times, April 27, 2009.

⁷³ Schilling, Loftin, Huryn; “Effects of introduced fish on macroinvertebrate communities in historically fishless headwater and kettle lakes”, Elsevier, Biological Conservation 142; 3030-3038; 2009

Snowmobiles use was unregulated in the Park until 1968, when the Baxter State Park Authority, increasingly concerned with snowmobile use and mindful of Baxter's concerns, revised Park Rules to limit snowmobile use to the Park Tote Road and a limited number of



4-4-6 Snowmobiling the Tote Road

service or connecting roads. This status was contested by those who felt that snowmobiles should not be allowed in the Park and in 1976 the Authority, in consideration of an Attorney General opinion, revised Park Rules to prohibit snowmobile use in the Park. This ruling was immediately contested by those in favor of snowmobile use in the Park and in 1979 the Authority petitioned the Maine Superior Court for instructions on the legality of permitting snowmobiles in the Park. The court eventually ruled that the Authority was not prohibited from permitting snowmobile use in the Park. The court based its judgment on the recognition that the Authority had to balance the dual objectives of provision of access to the Park and the protection of wilderness resources. This ruling was challenged and upheld. In 1981, the Authority revised the rules to permit snowmobile use on the Park Tote Road and a limited number of other access

points.

The policy governing the use of snowmobiles in the Park was one of the most divisive and contentious issues in the Park's history. However, the policy implemented in 1981 has served the Park successfully for more than a quarter of a century, weathering an explosive growth in the snowmobile trail system around the Park and in Maine as well as a tremendous evolution in snowmobile technology, comfort, and speed.

Park policy prohibits grooming of the Park Tote Road for recreational snowmobile use. This policy is based on two considerations: that a groomed Tote Road would encourage unsafe snowmobile speeds on the narrow and winding Park Tote Road; and that a groomed Tote Road would increase snowmobile use and conflict with wildlife protection and with cross country skiers who share portions of the Tote Road. The Park Tote Road averages approximately 15' for 20 miles of the total 46 mile length and only slightly wider for the remaining 25 miles. Tote Road sight distances are often under 20' and there are literally dozens of blind or tight corners on the Tote Road from Matagamom to Togue Pond Gate. The Park has had one fatality and several injuries from snowmobile accidents on the Park Tote Road.

The Park provides excellent early season snowmobiling when snow depths are sufficient to cover the Park Tote Road, but insufficient to permit grooming on local ITS and woods trails outside the Park. Later in the winter, usually by mid-January, snow depths are sufficient to permit widespread grooming of all trails – snowmobile use on the ungroomed and often rough Park Tote Road declines as snowmobilers move to the groomed, smoother and faster ITS system.

Although Park Rule 1.3 ([Rules – sec. 10.33](#)) requires individuals to register upon entering the Park, snowmobilers often fail to register. The Park installs infrared counters in various locations in order to acquire accurate total and trend data on snowmobile use. As would be expected, snow and weather conditions are the primary drivers in snowmobile use in the Park. In the winter of 2009-10, over 2,500 snowmobiles entered the Park at either Togue or Matagamon Gates. Significant portions of the Park Tote Road have shared use by both snowmobilers and cross country skiers, usually entering or leaving from multi-day backcountry excursions in the Park. Conflicts between these groups have been rare and the Park has no record of injuries resulting from skier/snowmobile collisions.

Park Rangers utilize Park snowmobiles to patrol areas of the Park, and the Park annually establishes snowmobile access to Chimney Pond Campground and Russell Pond Campground to allow for the transport of maintenance, building and campground operational supplies. In response to the high recreational use and severe environment, the Park also provides backcountry alpine ranger coverage at Chimney Pond Campground during the winter months and staff travels to and from their duty station by snowmobile. Although backcountry areas are accessible to Park staff by snowmobile, Park policy encourages and expects staff to utilize snowmobiles for backcountry access only when necessary in the performance of their jobs. Volunteers assisting Park staff in the winter are required to travel on Park snowmobiles if accessing backcountry locations with or without a staff member present.

4.4.2.10 *Research and Monitoring*

Research

Research is allowed in Baxter State Park under strict guidelines designed to protect the wilderness environment.

In 2010, BSP files contained approximately 66 completed reports or proposals of research ([research report file list – sec. 10.31](#)) conducted in Baxter State Park (including promised reports never submitted to the Park by researchers). Other research, most commonly accomplished by other State agencies as part of statewide survey initiatives (i.e., the Stream Habitat Survey conducted by IF&W and a study on lake whitefish in Webster Lake) occurred outside of the Park's review process and was not included in the Park's research records. The majority of research conducted in the Park has been centered around vegetation with a focus on the relatively rare vascular plants, bryophytes and lichens in the alpine zone on Katahdin. Other areas of research in the Park have included work on vertebrates, invertebrates, birds, fish, geology, forests and recreation management. Surprisingly, a relatively small number (approximately 3) projects have been undertaken in the study of water quality in the Park.

Proposed research is administered through the Park's Information and Education department by the Park Naturalist. Protocols for the submission of research requests and the conduct of research in the Park are provided in the Park's our Guidelines for Scientific Studies ([sec. 10.26](#)). The Park Naturalist acts as a liaison between researchers and the Park, forwarding proposals to the Baxter Park Research Committee ([sec. 3.5.2](#)) for their recommendations to

the Park Director and Authority ([sec. 3.5.1](#)). Research applications should be submitted at least 6 months prior to the expected start date.

In considering proposals for research in the Park, Park staff and research committee members focus on evaluating the potential benefits that the research may provide against the conflicts that specimen collecting and/or organism mortality may pose to the Park's primary mission, particularly as it applies to the "forever wild" or wilderness portion of the Park. The issue is clearly defined in the Guidelines for Scientific Studies:

"The essential question we will be asking ourselves, when considering any research proposal, but particularly one involving collecting will be, "How does this proposed action further our efforts to protect and preserve this area for all generations?" The applicant must be able to show that the project cannot be undertaken elsewhere and collection is essential to the project yet removal of the item will be benign."

It is this fundamental effort to comply with the mission and directives of the Park while permitting research that may be beneficial to the wider world outside the Park that provides the primary challenge to Park staff and the research committee in evaluating proposals for research in the Park. From the perspective of the Park's mission, research involving non-destructive monitoring to objectively assess populations and habitat quality within the Park are most likely to be directly beneficial to the Park's primary mission of resource protection. There may be other specific elements of species or materials quality or interrelationships that may also be helpful in the management of the Park. In 2010, the Park began discussions with the research committee regarding the adoption of a more proactive approach to research in the Park.

This approach would allow the academic and greater research community to tailor research proposals that would be desired by the Park. This process would hopefully streamline the review process and remove the uncertainty faced by researchers developing proposals for research within the Park.

4.4.2.10.1 Action

Work with the BSP Research Committee and others to develop a list of desired or preferred research in the Park. This list could take the form of a list of important information gaps that, if answered by relevant research, would directly address specific Park concerns regarding future management.

Monitoring

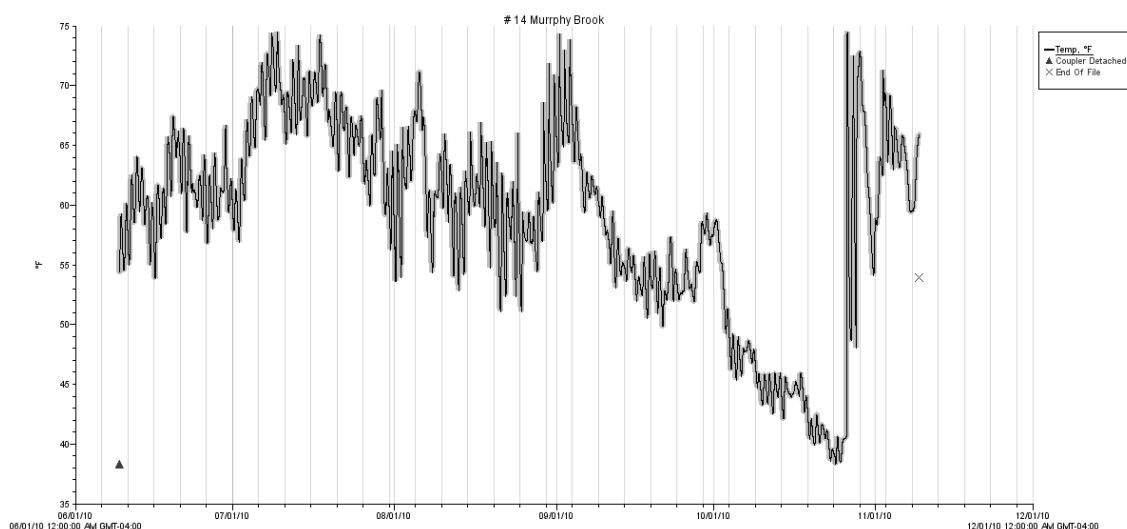
As mentioned above, non-destructive monitoring to objectively assess populations and habitat quality within the Park is an important source of information directly applicable to the Park's management efforts. Continuous monitoring efforts including regular and repeatable protocols implemented over time often provide the most useful data for long term management efforts. The Park currently conducts a significant amount of resource monitoring:

Annual Park monitoring

- High Elevation (2,900' – 4,500') Bird surveys
- Katahdin Arctic butterfly surveys
- Mountain Plant Watch stations
- Purple Loosestrife surveys
- Maine Loon Watch
- Upland Terrestrial Amphibian surveys (SFMA)

Continuous Periodic Monitoring

- Stream temperature monitoring (SFMA)
- Air temperature monitoring (SFMA)
- Snow depth/weather monitoring (Chimney Pond)
- Forest Inventory and Structural Data (SFMA, every 10 years)
- BSP Tote Road Width Monitoring (every 5-10 years)
- Wildcat survey (SFMA – occasional)
- Fish population and health (IF&W – periodic)



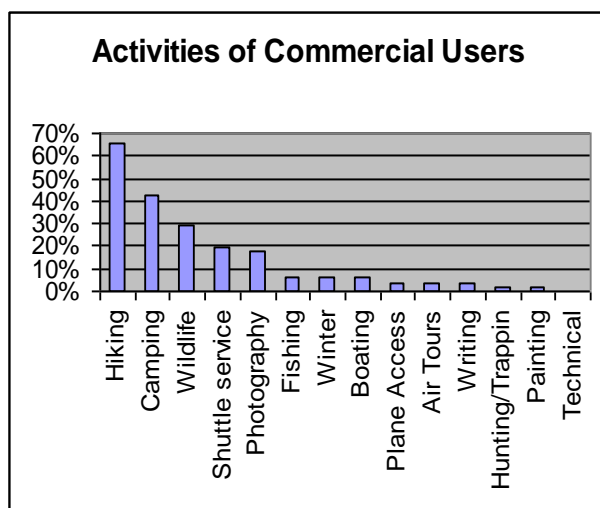
4-4-7 Water temperature data from Murphy Brook

The Park is currently working with research efforts addressing soil and forest type mapping and aquatic invertebrate assemblages in the Park. The acquisition of this data will provide important baseline data against which future changes can be evaluated and the need for management action can be assessed. Baseline data or regular monitoring protocols on other key resources such as water quality, invertebrate indicator species such as dragonfly species (order *Odonata*), and mayfly species (order *Ephemeroptera*) unique to the Park are possible areas where additional efforts would be beneficial to the Park.

Continue to work with other State agencies and the research community to develop long-term sustainable, affordable inventory and monitoring efforts that will benefit long-term Park management.

4.4.2.11 Commercial and Visitor Use

Commercial use has been a concern in Park management since 2003. The Park defines commercial use as *any use when an individual/organization receives any form of compensation for services provided in the Park OR an individual/organization intends to possibly produce products for sale as a result of visiting the Park*. In 2004, the Park conducted an informal survey of Park visitors from using the Park gatehouses as points of contact. 107 surveys were distributed and 53 were returned. The results of the survey indicated that approximately 2% of the Park's summer users declared themselves as commercial users. The survey analysis is based on a limited number of returned surveys and relied on a willingness of the responder to declare a commercial orientation. In consideration of these facts, the Park



views the commercial use rate indicated by the 2004 survey work to be a minimum and that the actual rate is somewhat higher. More importantly, anecdotal experience and contacts of Park staff with visitors suggest that commercial use or commercial use impacts to Park visitors and resources are increasing.

The Park currently administers a number of policies regarding commercial use including limits on organized camp group use of Chimney Pond campground during July and August and

4-4-8 From 2004 Park Survey

restrictions on the use of the Day Use Parking Reservation program by commercial users. A

number of other use issues have been addressed by the Park. While these issues aren't the exclusive domain of commercial users and can arise in campground and trails in the Park as a result of family and social group use without any commercial orientation, many of the conflicts in resource protection and the wilderness experience most often arise in the context of commercial use of the Park. Consequently, these issues are addressed below.

Large Group Use

⁷⁴ “Large parties are not common in most wildernesses, but when encountered they diminish other visitors’ experiences (Cole, Watson, and Roggenbuck, 1995) and, almost inevitably, impact a larger area than smaller parties (Cole 1986). Managers already limit party size in many places (Washburn and Cole 1983), but this technique needs to be supplemented with education and information. Frequently, large parties are sponsored by organizations that are easier to contact than independent users, and they may be willing to cooperate with wilderness managers.

The question of what limits to place on party size is controversial and becoming more so all the time. Should group size be limited to six, nine, twelve or fifteen? There is no perfect and completely defensible answer. However, commercial outfitters complicate the question, as do wilderness experience programs that require some reasonable group size to remain cost-effective and economically viable as a business or program (Ewert et al. 1999). Good information on visitor use, user impacts and carrying capacities, plus some common sense, are needed to make these decisions. The deciding factors on party size will vary from area to area and are derived by using wilderness planning procedures.”

The management of large groups in Park campgrounds and trails is an issue the Park has struggled with for years. The Park currently restricts group sizes in organized campgrounds to a maximum of 12 persons and requires prior registration for day use groups of 12 or more (Park Rules and Regulations, 1.2. and 2.1 [in sec. 10.33](#)).

Non-commercial family and social group gatherings is a significant part of group use in campgrounds, but large groups also frequently result from use by organized entities such as outing clubs, youth camps, church groups etc. While these groups may often not be overtly commercial in nature, the motivation to bring large groups to the Park almost always has some benefit to the operation and existence of the organization. Significant and continuing experience indicates that some groups circumvent the campground rule by making reservations under various names without declaring that the individuals are connected as a group. Once in the campground the physical and social impacts that distinguish groups become apparent and Park staff work to address the issues. This circumventing of the Park rules regarding group use has increased in the past decade at the same time other land management agencies have exerted more controls, motivating large camping and hiking groups to gravitate to the Park. Park ranger staff will be responding more frequently in the coming years with more direct enforcement when groups are discovered in campgrounds including relocating groups to group areas or separate campsites at least one mile apart. The Park should continue interpretation and education efforts aimed at large group use as discussed above in [section .3.3 Audience Profiles](#).

⁷⁴Chad P. Dawson, John C Hendee; Wilderness Management – Stewardship and Protection of Resources and Values; International Wilderness Leadership Foundation; 2009; p.450

4.4.2.11.1 Action

Clarify the policies and enforcement actions involving group use of campground campsites as well as improving outreach to potential group users prior to their arrival at the Park.



4-9 Large Group on the Saddle Trail

The physical and social impacts of large groups on trails is identical to the impacts of groups in campgrounds, but the increased physical impacts of groups on trails can often occur in fragile habitats much less able to recover than the more hardened sites of an organized campground. The 2010 Park [Rules and Regulations](#), section 2.1 ([sec. 10.33](#)) states that *“Prior registration is required for day use groups of 12 or more people. Registration may be made by telephone beginning April 1, and should be made as far in advance as possible.”* While this rule helps provide Park staff with some prior notification of large day use groups, the Park has no policy to limit group use. The implementation of the Day Use Parking Reservation System provided group hike organizers with a system to guarantee access to Katahdin trailheads. This was an unintended consequence of a program designed for Maine families and typical 2-6 person hiking groups. Responding to the ability to assure access to Katahdin trailheads, the Park

received registration requests from college outing groups planning on hiking groups of 80+ students in each group to Baxter Peak.

4.4.2.11.2 Action

Develop a permit system day use hiking groups including criteria and thresholds regarding group hiking use in the Park and daily maximum limits on groups accessing Baxter Peak, the Traveler Loop and other major peaks in the Park.

Resolved: At their scheduled May 17, 2012 meeting, the Baxter State Park Authority approved a change to the Park Rules and Regulations specifying that **“The maximum size of hiking groups shall be 12 persons. Affiliated groups on the same trail separated by less than one mile shall be considered one group.”** The Park Rules and Regulations were revised through the APA process and the revised rule was implemented at the start of the 2013 hiking season.

Media Productions

Increasingly in recent years, the Park has fielded requests to conduct media production efforts in the Park. At least in part, these requests are usually clearly commercial in nature and almost always driven by a direct profit motivation. These efforts can include low level aircraft flights over Baxter Peak, Katahdin and the Tableland at peak use times during the summer to capture film footage and photographs, wildlife photography and filming, unsolicited interviews, including lights and cameras, of Park visitors, and efforts to involve or incorporate Park visitors into pre-determined scenes or film sequences, both with and without the knowledge or permission of the visitors. Media projects can often include storylines that are inaccurate and misrepresent the Park’s mission and regulations resulting in visitor confusion. The portability and other improvements in digital film and still photography equipment and quality over the past decade, combined with the increasingly unique wild landscape of the Park suggest that the frequency and intensity of these requests is likely to continue to increase in the future. The strong profit motivation of some media production efforts compels producers, directors and film crews to sidestep, circumvent or completely ignore existing Park rules and regulations and resource protection policies. In order to address this concern, the Park developed a Media Policy to administer media activities in the Park and ensure that Park resources and the experience of Park visitors were adequately protected from the impacts of media productions. The Media Policy requires a permit for commercial media activities in the Park as well as addressing other issue such as photo archives and resale policies. While this policy has been useful, the business of media productions is varied and complex.

4.4.2.11.3 Action

Review and improve the existing Media Policy by considering other policies in use and the major concerns of the Park regarding media use.

Resolution: On October 5, 2012, the Baxter State Park Authority approved a revised policy **“Special Permit for Media Projects in Baxter State Park ([sec. 10.34](#)). The revised policy includes a specific definition of media projects, a description of permissible projects, and a permit application (see [Record of Amendments](#) for additional information).**

Photography

Landscape and wildlife photography have long been popular visitor activities in the Park, especially at Sandy Stream Pond near Roaring Brook Campground and increasingly, at Stump Pond just below Abol Campground on the Park Tote Road. At times during the fall, when the color change in leaves coincides with moose activity in Sandy Stream and Stump Pond, use by commercial photographers is often heavy and intense. Commercial use includes part-time or amateur photographers, and full-time professional photographers working either individually or as a guide and instructor leading groups of amateurs for a fee.



4-4-10 Photographers at Sandy Stream Pond.
Photo by Laurie Rich

Although almost all visitors to the Park are equipped to take a photograph while in the Park, the combination of the autumn foliage, moose and other Park wildlife species and the stunning backdrop of Katahdin combine to attract many commercial photographers from Maine and much farther. Since 2008, Park management has been evaluating this use in order to address a number of issues including:

- the development of social pathways along the edges of Sandy Stream and Stump Pond;
- the effects of photographers around the pond edge on the natural movement of moose and other wildlife to and from the ponds;
- the interference and potential harassment of moose in their natural habitat by photographers trying to get an unusual photograph;
- the use of viewing platforms and boardwalks exclusively, and often for extended periods of time, by photographers – excluding or inhibiting the use of the areas by hikers or other Park users.

Consideration of data collected on this issue and discussion has indicated some appropriate steps the Park should take.

4.4.2.11.4 Action

Design and install larger, clearer and more direct signage at both Sandy Stream and Stump Ponds during the fall photography season specifying appropriate use policies. If signs signage is not effective at resolving the issues, implement a permit policy for all photographers using tripods during the fall photography season.

Gathering

For generations, the gathering of food items by individuals and families for personal consumption has long been an activity in the Park including before the Park was established or envisioned by the donor. Fishing is an integral part of the culture of Maine and her people and the Park works closely with the Department of Inland Fisheries and Wildlife to carefully and intelligently manage this complex resource to both protect the quality and uniqueness of the Park's fisheries and to provide quality opportunities for Park visitors to fish in Park lakes and ponds.

In addition to fishing, Park visitors have collected other popular food items as well, principally fiddlehead ferns and blueberries, raspberries and strawberries. The berry industry in Maine is well developed and a variety of blueberry and strawberries are available at farms and markets in season. The collection sites for these fruits in the Park is often a closely held secret by Park visitors – the collecting is hard enough for these wild fruits without competition. In recent years, Park Gate Attendants have noted individuals leaving the Park with volumes of fiddleheads exceeding the amounts reasonable or expected for personal consumption. In some cases, the same individuals have been seen selling fiddleheads at impromptu roadside stands. Such use would clearly exceed the long-standing policy of gathering for human consumption. This concern was addressed in section 4.11 of the 2010 Park rules revision which states: *“The removal from, or introduction of natural objects, materials or plants or animals to the Park is prohibited, with the exceptions that fish and other wildlife may be collected for personal use only in authorized areas of the Park as defined in 3.1 and 4.2 above and that berries and fiddleheads may be collected for personal use only. Gathering or berries or fiddleheads for sale or commercial purposes is prohibited.”*

This rule currently restricts collectors to berries and fiddleheads and prohibits the collection of more specific and possibly rare items such as mushrooms or ginseng, of which the latter would almost certainly be sought after and collected for commercial purposes.

5 Providing Recreational Opportunities – Core Function 2

In this section of the plan, the Park's systems for providing recreation are described, including a description of the Park landscape, the typical recreational activities that take place in the Park, a description of the facilities the Park provides for frontcountry and backcountry recreation, and a description of the reservation system the Park employs to allot the limited facilities and ensure fair and equitable access to recreation opportunities in the Park. Resource protection issues involving recreational opportunities are discussed in [Section 4: Protecting Park Resources](#).

5.1 Description of Recreational Activities

“Everything in connection with the Park must be left simple and natural and must remain as nearly as possible as it was when only the Indians and the animals roamed at will through these areas. I want it made available to persons of moderate means who with their boys and girls, with their packs of bedding and food, can tramp through the woods, cook a steak and make flapjacks by the lakes and brooks. Every section of this area is beautiful each in its own way. I do not want it locked up and made inaccessible; I want it used to the fullest extent but in the right unspoiled way.”⁷⁵

The Park provides a number of typical recreational activities, many of which were mentioned or described by Percival Baxter and all of which are important to Park visitors. While a segment of the resource protection efforts of Park management works to address landscape level concerns, most Park policies address one or more of the activities listed below and seek to adequately protect the Park environment from overuse and ensure that natural processes can proceed uninterrupted by human activity. In this plan, recreational activities, and the facilities the Park provides to accommodate them, will be described in this section.

The majority of visitors entering the Park enjoy the Park as individuals, sometimes alone but typically with friends and family. The Park is also a destination for larger (more than 12 persons) groups including large family groups, organized groups from schools, colleges, universities, youth camps, churches, scouting and others. A small portion of the Park's users enter the Park as commercial guides or institutional enterprises and many of the activities described below include a small component of commercial users. Commercial use includes the guiding of other individuals or groups in exchange for compensation, or the use of the Park to obtain specific products – wildlife photographs for example, that can be sold for a profit. . The existence of a formal or informal agreement involving the provision of a service or capture of a product in exchange for compensation is the primary factor in identifying commercial use of the Park. The existence of the profit motive can result in behaviors and responses inconsistent with non-commercial visitors and can lead to social and resource protection concerns.

⁷⁵ Percival Baxter; Formal Communications in which Baxter describes his intentions for the use of the Park to Governor Hildreth and the Maine Legislature; Jan 2, 1945.

5.1.1 Hiking

Without question, hiking is the leading activity in the Park. Hiking occurs in all seasons in the Park, but most winter hiking is focused on winter climbing in the Chimney Pond area. In the



5-5-1 Hiking in Baxter Park

2010 summer season, Park hiking statistics (statistics- sec. 11.36) indicate that more than 80,000 people registered for a hike somewhere in the Park. Percival Baxter intended that the Park be “..available for those who love nature and are willing to walk and make an effort to get close to nature.”⁷⁶

A significant portion of the hiking activity in the Park is focused on Katahdin. Approximately 25,000 people registered for a hike on one of the three Katahdin access trailheads during the summer of 2010. While the great majority of Park hikers confine their trip to marked trails

within the Park, a small percentage of more adventurous visitors plan and execute hikes to locations without trail access. The Park has no firm data on the amount of off-trail travel that occurs in the Park, but bushwhacking has long been a pastime for the most experienced and hardest of Park visitors and requires navigational skills as well as the ability to travel through the rough and heavily vegetated terrain of the Park without impacting vegetation or leaving marks of passing. The Park has no restrictions on bushwhacking that don't apply to marked trails. Adherence to *Leave No Trace* ([LNT principles- sec. 10.14](#)) and *hikeSafe* ([h/S principles – sec. 10.15](#)) principles are expected when bushwhacking as well as other activities in the Park. In addition, it is strongly recommended that visitors planning any off-trail travel in the Park leave a detailed itinerary with a Park Ranger and do not travel alone.

5.1.2 Camping

Camping is one of the primary activities provided by the Park. The Park provides three types of camping experience: drive-up, walk-in, and backcountry. Camping in the Park is currently limited to the spring-summer-fall period of May 15 to October 15 and the winter season of December 1-March 31. Camping during the late fall and early spring periods has been limited due to the uncertainty regarding road access to the Park. Typically, periods exist both in early spring and late fall when camping could occur.

5.1.2.1 Action

Evaluate opportunities to extend the camping season in the Park.

The Park provides a variety of options for rustic, primitive camping sites including lean-tos, tent sites, bunkhouses, cabins and special areas for larger camping over 12 persons. These facilities are discussed in greater detail in section [4.3 below](#). The Park provides both frontcountry camping opportunities - sites accessible by vehicles or a short walk of several hundred feet or backcountry opportunities for backpackers and backcountry travelers

⁷⁶ Percival Baxter; Formal Communications in which Baxter describes his intentions for the use of the Park to Governor Hildreth and the Maine Legislature; Jan 2, 1945.

interested in experiencing the most remote and pristine areas of the Park. Frontcountry sites are usually located within an organized campground and include access to Ranger staff, firewood, maps, books, daily weather and other information. Backcountry sites are located as single sites on ponds and streams within the Park and have no provisions for amenities other than what the visitor carries in.

Typically, about 33% of the people entering the park intend to camp for one night or more. In 2010, the Park registered 20,577 camper-nights ([statistics – sec 10.14](#)) with an average stay per camper of 2.45 nights. Fee assessed for the rental of camping sites in the Park provides a significant (20-25%) portion of the Park’s annual operating revenue.

5.1.3 Fishing

Fishing is also a popular activity in the Park. The Park’s numerous streams, ponds and lakes provide a variety of opportunities for anglers. Most Park fishing occurs in the summer, although a few Park waters such as Lower Togue Pond and Park lakes extending beyond Park boundaries such as Webster and Matagamon also provide opportunities for winter ice fishing. Regulations regarding catch limitations and acceptable gear are determined by fisheries biologists with the Department of Inland Fisheries and Wildlife (IF&W) in consultation with Park staff. Fish stocking is applied to a number of the ponds within the Park and IF&W conducts regular surveys on Park ponds to monitor the composition of fish populations, growth and condition and basic elements of water quality. Park management is working with IF&W fisheries biologists to complete management plans for all Park ponds and to address the protection of native brook trout populations in the Park. A more comprehensive discussion of fisheries management in the Park can be found in [Park Fisheries, section 5.4.2.7](#) below.

5.1.4 Canoeing/Kayaking

Canoeing and more recently, kayaking are traditional outdoor activities perfectly suited to the Park landscape. The numerous small and large ponds and lakes provide a variety of opportunities for both novice and advanced canoeists and kayakers. The Park provides over



5-5-2 Canoeists on Daicey Pond

90 canoes and kayaks ([canoe inventory- sec.11.48](#)) for public rental. Rental costs are a \$1/hr or \$8/day. In 2010, the Park collected \$13,111 from canoe and kayak rentals, mostly on the “honor system”. The Park’s streams provide limited opportunities for canoeing or kayaking due to their generally fast and rock-strewn waters and difficult accessibility. Webster Stream has long been a popular canoe route although it is difficult to access and must

be part of a multi-day trip. Aside from Webster Stream, none of the major streams in the Park (Trout Brook, Nesowadnehunk, Wassataquoik, and Sandy Stream are controlled by dams or upstream devices. Consequently, strong rain events can produce rapid and significant rises in water levels over short periods of time on most Park streams. Webster Stream levels can be

modified by “stop logs” inserted or removed from the dam at the east end of Telos Lake. The dam is controlled by the Bureau of Parks and Lands and operated by Allagash Wilderness Waterway staff. Changes in the stop log placement are infrequent and consequently the behavior of Webster Stream reflects natural rainfall events during the summer months and reflects human actions at the dam in the fall and spring months when the dam is altered to adjust the pond levels in the Telos/Round/Chamberlain Lakes complex.

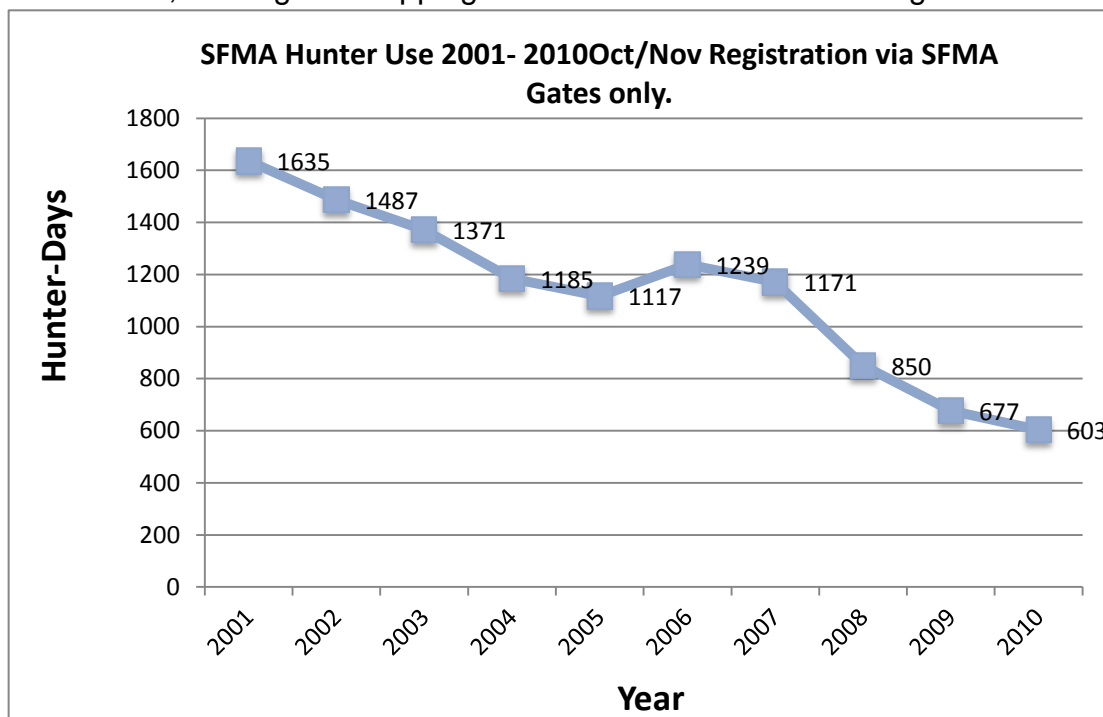
5.1.5 Wildlife Viewing

Wildlife viewing is a common pursuit of Park visitors and one of the most common experiences mentioned by visitors when reflecting on a visit to the Park. A pervasive objective of Park policies is to keep wildlife wild. In the wildlife sanctuary portion of the Park, wildlife has lost some fear of humans and moose and deer will readily visit campgrounds and other areas with significant human use. Managing the enthusiastic interaction of Park visitors with wildlife that have lost a portion of their innate fear of humans without encouraging wildlife to become dependent on humans for food or view humans as an easy food source is a constant effort of Park staff and management.

5.1.6 Hunting/Trapping

Hunting is currently allowed on 52,627 acres (25.1%) in the Park ([Park use zone map – sec. 10.9](#)). Letters and other documents left by Percival Baxter suggest that, barring other concerns, he would have designated all the land he donated to form the Park as wildlife sanctuary. When strong local concerns arose regarding the loss of hunting opportunities on parcels Baxter had purchased and was preparing to add to the Park in 1954, 1955 and 1962, (parcels 24, 26, 27 and 28), Baxter included provisions for hunting and trapping when he submitted these lands to the legislature for acceptance. Moose hunting and the hunting of animals over bait are not permitted in the Park under Park Rule 3.1. Hunting and trapping has become a significant recreational activity on these lands, and in particular the lands included in the Scientific Forest Management Area. The management efforts of the last 25 years have included the construction of over 70 miles of forest management road in the SFMA. After a lengthy review considering the donor’s intentions regarding roads in the Park, the Authority limited vehicle access for recreational purposes to approximately 20 miles of forest management road in the SFMA. This access provides approximately the same length of road available in the SFMA as when Baxter purchased the lands, although the condition of the road and the distribution of the access is much better than in 1955. All side roads in the SFMA are open to foot traffic and the area has developed a regular clientele of hunters who visit the area year after year. In accordance with Park Rule 1.3 ([Park Rules – sec.10.33](#)), hunters are asked to complete a simple registration form when entering the SFMA. In the 10 years from 2001 to 2010 the SFMA recorded an average of 1,134 hunter/trapper-days per year. With the

exception of 2006/7, hunting and trapping use in the area declined throughout the 2001-10



period.

Visitors also can access Park hunting lands from the one mile section of the Park Tote Road between Trout Brook Crossing and Wadleigh Brook. This section of the Park Tote Road travels through the Scientific Forest Management Area ([SFMA map – sec. 10.4](#)). In 2007, the Park constructed a connecting link road from the Park Tote Road to the SFMA forest management road system to improve staff access for management and patrol and to allow the SFMA staff to provide tour access from the Park Tote Road for forest management tours of the SFMA. Access to this road is tightly controlled out of respect for the North Maine Woods system.

5.1.6.1.1 Action

Identify and evaluate additional hunting opportunities for visitors in the northern end of the Park.

5.1.7 Photography

"With the protection of wild life the deer, the moose and the birds no longer will fear man and gradually they will come out of their forest retreats and show themselves. I want hunting with cameras to take the place of hunting with guns."⁷⁷

Photography is one of the most common activities in that takes place in the Park and photographers have been trying to capture the landscape and people in the Park on film for



5-5-3 Photographers at Sandy Stream Pond

more than a century. Most photography activity takes place as a subset to a primary activity like hiking, camping or fishing, and a sample of these photographs, taken by Park visitors can be viewed on Park locations portrayed on [Google Earth](#). In addition to the “point and shoot” visitor, serious amateur and professional photographers visit the Park for opportunities to photograph wildlife or the Park’s

landscape clothed in the colors and texture of the season. Commercial use of the Park is most evident in

the activity of fall photography, when photographers with expensive equipment and “big glass” arrive at the Park in search of fall foliage photos or a mature bull moose or ideally, both together. In recent years, Park management has been working to evaluate and mitigate impacts from visitor use in the areas preferred by photographers. Commercial use of the Park is discussed in more detail below in section 5.4.2.1.

5.1.8 Snowmobiling

The issue of snowmobiling in the Park was one of the most contentious and controversial issues addressed by the Baxter State Park Authority in the last 50 years. Percival Baxter approved of the first “motor-toboggan” purchased by the Park to assist then Park Superintendent Helon Taylor with his winter patrols of the Park. Although he approved of the purchase for Superintendent Taylor, Baxter articulated clear concerns about expanding the use to Park visitors.

"In regard to the Motor Skis I have thought this over and have this suggestion to make. These skis should be prohibited in the Park except for one for you as Supervisor to use in case of

⁷⁷ Percival Baxter; Formal Communications in which Baxter describes his intentions for the use of the Park to Governor Hildreth and the Maine Legislature; Jan 2, 1945.

emergencies. I feel strongly about this for they will frighten away the wild animals and we certainly would not see a caribou again."⁷⁸

Snowmobiling by Park visitors was prohibited in the Park until 1968, when the Authority revised Park rules to allow snowmobiling on the Park Tote Road (then known as the Park Perimeter Road). In 1976, based on an opinion from the office of the Maine Attorney General, the Authority amended the Park rules again to prohibit snowmobiling. As the prevalence of snowmobiles and snowmobiling grew as a public recreational activity, the Authority continued



5-5-4 A Snowmobiler in Baxter State Park

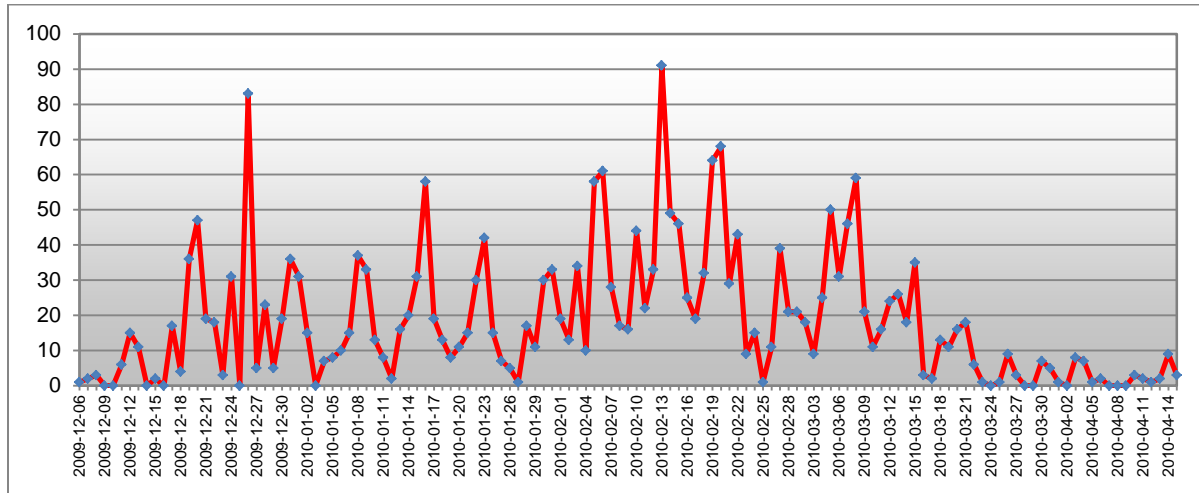
to consider the issue and requested a ruling from the Maine Superior Court regarding the Authority's discretion regarding the use of snowmobiles in the Park. Based on the Superior Court ruling, in 1981 the Authority revised the Park rules to permit public snowmobiling on the Park Tote Road and several other specific access points. The Authority's decision survived a court challenge and the 1981 ruling and remains the current policy regarding snowmobiling in the Park.

Grooming is not permitted on the Park Tote Road for safety and wildlife concerns, although local groomers do work 1.5 miles of the Logan Pond Road within the Park. The Park provides excellent snowmobiling in the early winter before sufficient snow has fallen to permit grooming of the numerous Interconnected Trail System (ITS) and local trails in the region. Later in the winter, when the local trails are in prime condition, the deep snow on the Tote Road becomes rough and uneven, and less desirable for snowmobiling. The Logan Pond road was a popular trail prior to the Park Authority's purchase of the land in 1993 and the Authority allowed use of this trail, including grooming, to continue without modification.

In the winter of 2008-09, the Park counted more than 1,100 snowmobiles on the Park Tote Road as detailed on the BSP Annual Snowmobile Count Summary ([full summary – sec 10.21](#)). Snowmobilers must share approximately 3 miles of the Tote Road on the southern end of the Park and almost 10 miles of the Tote Road on the northern end of the Park with backcountry skiers headed for destinations in the Park's interior. Since 1981, there have been no recorded incidents involving snowmobiles and skiers.

⁷⁸ Percival Baxter in a letter to Park Supervisor Helon Taylor, May 11, 1965. The caribou reference in the letter likely refers to the unsuccessful 1965 effort to reintroduce woodland caribou to the Park.

Snowmobile Use in the Togue Pond Area – 12/6/09 – 4/15/10



5.1.9 Ice and Rock Climbing

Technical climbing has long been an important activity to a relatively small, but highly skilled segment of Park visitors. Centered primarily on a number of referenced ascents in the Great or South Basin of Katahdin, climbers have been coming to the Park for decades to test themselves against the challenging exposures of Katahdin granite in a wilderness setting. The Park has no specific requirements regarding certain gear, equipment or certification, but the Park does offer clear recommendations regarding the gear and skills necessary to safely explore and climb in the Park. Ice climbing is a very popular pursuit out of Chimney Pond in the winter months and the Pamola side of the South Basin usually provides a good supply of ice for climbing.

5.1.10 Backcountry Skiing



5-5-5 Backcountry Skiers at Basin Pond

The Park is a popular destination for winter excursions. Most of the winter use in the Park is focused on multi-day backcountry trips into Chimney Pond. Visitors usually travel to Chimney Pond from the parking lot on Katahdin Forest Management property at Abol Bridge. The trip from Abol to Chimney Pond is approximately 17 miles and includes an elevation gain of approximately 2300'. Most parties headed for Chimney Pond stay in the bunkhouse at

Roaring Brook on the first night of their trip and head into Chimney on the following day. Most parties are strong enough to make the mostly downhill trip all the way from Chimney to Abol Bridge in one day. Other visitors execute trips in the north end of the Park, traveling from the end of the plowed blacktop road on State Route 159 to the bunkhouse at Trout Brook Farm or South Branch Pond and then possibly on to Russell Pond. Almost all of these parties travel on skis, either carrying backpacks or pulling tote sleds loaded with their gear. Park Rangers access both Chimney Pond and Russell Pond by snowmobile for operational needs and so the trail is often

broken out, but heavy snows and the variable patrol schedules of the Rangers often leave skiers to break their own trail in the wilderness.

In addition to trail skiing, a small portion of winter users are interested in skiing the snow filled basins on Katahdin. While this activity is perfectly suited to the wilderness of the Park, bowl skiers must have a sound understanding snow properties and the necessary training to assess avalanche hazard.

5.1.11 Day Use Picnicking/Swimming

The Park provides 18 sheltered picnic tables and numerous uncovered tables for planned or impromptu picnic stops at various locations within the Park. During the summer months, Park visitors often combine picnicking with swimming at the Park's more popular swimming sites such as Ledge Falls and Togue Pond Beach.

5.1.12 Gathering

The gathering of edibles from the Park is another long tradition for a segment of Park users. Many Park visitors have favorite sites for picking blueberries and raspberries and each spring the Park sees a number of visitors enter to pick fiddleheads – the emerging stalks of young ferns. There are unquestionably other natural food items that visitors are gathering including mushrooms. While these consumptive activities have a long tradition and an estimated very minor effect on the Park they have also been traditionally oriented to individual and family use, in recent years the Park has seen a growing number of gatherers who collect items for resale to the public outside the Park. The gathering of berries or fiddleheads for commercial resale or distribution is prohibited by Park rule 4.11([Park Rules – sec.10.33](#)).

5.1.13 Other Activities

There are many other activities that visitors pursue while in the Park including painting, bicycling on the Park Tote Road, stargazing, birding and motor boating on Park border lakes (Webster Lake, Nesowadnehunk Lake, Matagamon Lake and Upper and Lower Togue Ponds).

“En Plein Air” painting, a French expression describing the activity of painting outside, has long been a practice in Maine dating back to Frederick Church, a well known American landscape painter who spent considerable time in the Katahdin area and in 1895 crafted a famous painting of Katahdin from the south shore of Millinocket Lake. Numerous artists from Maine and around the world have produced works inspired by the Park's landscape. In 2009, the Park implemented a Visiting Artist Program to provide an annual opportunity for one Maine artist to have uninterrupted time in the Park to work while also providing an opportunity for Park visitors to learn more about the artists skills and work and to “see the Park through the Artist's eyes”.

5.2 Description of Recreational Facilities

5.2.1 Summary of Primary Access Roads in Baxter State Park.

Park donor Percival Baxter was cautious about the existence and use of roads in the Park. He was specific that decisions about roads would be left to the judgment of the Baxter State Park Authority. The Park currently maintains approximately 60 miles of gravel surfaced road providing vehicle access to the Park for recreation.

Park Access Road – (Park map- sec. 11.1) this 0.7 mile segment of road extends from the Park's southern boundary at Caribou Pit to the start of the Park Tote Road at Togue Pond Gate. The majority of this road segment was blacktopped by the Maine Department of Transportation prior to the Park assuming ownership and maintenance responsibilities in 1998.

Park Tote Road - The primary access road in the Park is the Park Tote Road (length 46 miles). Formerly called the "Perimeter Road". This roadway extends from the southern Park property near the Togue Pond Gatehouse and exits the Park a short distance east of the Matagamon Gatehouse in the north end of the Park. The Park Tote Road originated as a winter logging road known as the Millinocket-Sourdnahunk Tote Road and, along with the Roaring Brook Road described below, was referenced numerous times by Percival Baxter in both the Deeds of Gift and Formal Communications. Over the period of the creation of the Park and later during Baxter's lifetime, the Park Tote Road was extended from its original terminus at Nesowadnehunk Field northward, eventually linking to existing roads along Matagamon Lake and providing both north and south access points to the Park.

Roaring Brook Road – this 8 mile road extends from Togue Pond Gate at approximately 600' elevation and rises to 1,489' elevation at its terminus at Roaring Brook Campground. The Roaring Brook Road provides access to the busiest day use parking lot in the Park and one of the Park's most active campgrounds and backcountry trailheads. The trailhead to the Katahdin Lake region, and access to the Bear Brook Group Area, the Rum Service Area, and one of the Park's three gravel sources are all located on the Roaring Brook Road.

Abol Pond Road – this 0.3 mile road provides access to multiple staff housing facilities, the Abol Service Area and a picnic area located at the west end of Abol Pond.

Daicey Pond Road- this 1.3 mile road leaves the Park Tote Road just south of Foster Field and provides access to Daicey Pond Campground and a popular day-use trailhead to Little and Big Niagra Falls.

Kidney Pond Road – this 1.3 mile road leaves the Park Tote Road at Foster Field and provides access to Kidney Pond Campground via a bridge over Nesowadnehunk Stream.

South Branch Pond Road – this 2.15 mile road leaves the Park Tote Road at Trout Brook Crossing and provides access to the Park's largest campground and popular backcountry trailhead at South Branch Pond.

Wadleigh Mountain Road – this 12.7 mile road in the Scientific Forest Management Area south of Webster Stream is accessed 6 miles west of the western Park boundary from mile 46 of the privately owned and maintained Telos Road. This road provides visitor access for recreation and forest management observation in the southern portion of the SFMA.

Brayley Ridge Road - – this 7.5 mile road in the Scientific Forest Management Area north of Webster Stream is accessed 6 miles west of the western Park boundary from mile 51.5 of the privately owned and maintained Telos Road. This road provides visitor access for recreation and forest management observation in the northern portion of the SFMA.

Baxter State Park provides several types of recreational facilities for visitor use in the Park ([Park Facilities map- sec 11.1](#)). Each facility type is recognized in the reservation system.

5.2.2 Park Trails

If campgrounds are the heartbeat of the Park, then the Park trails are the arteries that tie the Park together. The Park was intended by Percival Baxter to be *"available for those who love nature and are willing to walk and make an effort to get close to nature."*

BSP has an extensive system of approximately 220 miles of hiking trail. These trails provide both day use hiking access to lakes, ponds, streams and mountain peaks within the Park as well as access to backcountry campgrounds and campsites. The existing trail system provides limited options for multi-day backcountry hiking between remote sites.

Along with recently constructed trails, existing Park trails include “legacy” trails with an extensive history of use within the Park dating from periods well prior to the establishment of the Park by Percival Baxter. These trails have statewide, regional and national significance including northern terminus of the Appalachian Trail.

Many of the Park trails, particularly all older trails, were constructed without modern design consideration and utilize the fall line for access to mountain peaks. The Park has expended considerable effort over the past 25 years to install drainage and erosion control structures on



these steep mountain trails in order to protect the Park’s resources while providing opportunities for hiking use. While the Park’s efforts in trail maintenance reconstruction and hardening work have been extensive over the past twenty years, efforts to relocate trails to improve design and reduce long-term maintenance have been rare.

The continuing popularity of Katahdin as a hiking destination has resulted in high levels of hiking use on many Katahdin access trails. For example, the Chimney Pond Trail (hiker statistics- sec 11.36) typically registers more than

8,000 hikes/year. These trails are often among the steepest in the Park and also provide access to the Katahdin Tableland, an alpine, treeless expanse with some of the most rare and endangered flora and fauna in Maine.

Since the formation of the Park was completed by the donor in 1962, Park management has both closed trails and constructed new trails. No guidance existed for the consideration of these trail decisions and most were made based on local concerns regarding the specific trail in question or the presented attractions of a proposed new trail. This activity has been significant. In the late 1980's the Park maintained about 175 miles of trail compared to the current 218. This 25% increase in trail mileage reflects not only new trail construction added to the Park system, but significant miles of trail closed. In order to establish a specific linkage between the decisions to add trails to the Park's system and the number and organization of staff devoting hours to trail maintenance, the Park developed the [Trail Support Index \(sec. 10.52\)](#). Along with the [Trail Support Index](#), an additional tool the [Trail Evaluation Matrix \(sec. 10.51\)](#), and new policy proposal, [Trail Free Zones \(map- sec. 10.2\)](#), was developed to help the Park work toward a more comprehensive view of trail management,. The Trail Evaluation Matrix and the Trail Free Zones proposal are discussed in detail in [section 4.4.2.5 above](#). Trail maintenance is discussed in more detail in [section 7.4 below](#).

In the last 15 years, the Park has utilized its developing GIS platform to assemble a range of trail data into a spatially viewable and useful database. This data includes information on trail lengths, hiker use, slope, and use type. Park management is currently working toward the addition of specific trail maintenance inventory data to this data base.

The Park's trail system includes a somewhat limited number of backcountry loops allowing visitors to develop a multi-day backpacking itinerary from a single trailhead without utilizing the same trail for most of the trip. Existing loop opportunities are the Freezeout/Wadleigh Brook/Frost Pond loop originating at Trout Brook Farm or alternately at the Wadleigh Brook Trailhead on the Park Tote Road, a series of short loop opportunities in the Five Ponds area originating at trailheads at Trout Brook Farm or South Branch Pond and a short loop opportunity in the Katahdin Lake area originating at the Katahdin Lake trailhead at Avalanche Field on the Roaring Brook Road. Limited backpacking loop opportunities are available out of Roaring Brook campground involving the Wassataquoik Stream and Russell Pond trails. A more complete and longer loop out of Roaring Brook involves a strenuous climb to the Tableland and is utilized by more experienced backpackers.

The segment of Park visitors interested in multi-day backcountry trips have expressed disappointment in the limited options in a relatively large Park for loop itineraries departing and returning to the same trailhead. In recent years, two ideas have been proposed that together, would significantly increase the options for multi-day backcountry trips in the Park.

- In the process of assimilation planning for the Katahdin Lake parcel, the extension of Park trails northward on the east side of South and North Turner Mountains to Wassataquoik Stream and then west along the stream to connect with existing Park trails was raised as a consideration.

- In the discussion about comprehensive trail management in the Park, former Park Trail Supervisor Lester Kenway proposed a connecting trail from the Northwest Basin trail to the Wassataquoik Lake trail via the Annis Brook valley between Fort and Mullen Mountains.

These proposed trail locations are illustrated in the Trail Free Zones and Backcountry Trail Proposal Map ([map- sec. 10.2](#)). These two ideas involve approximately 10 miles of trail. If implemented, they would substantially increase the opportunity for extended multi-day trips originating at trailheads at Avalanche Field, Roaring Brook and Nesowadnehunk Field. The extension of the North Katahdin Lake trail northward from the Twin Pond area would require trail construction on land outside the boundaries of Baxter Park. These trail proposals are discussed in greater detail below in [section 5.4.2.5](#)

5.2.2.1.1 Action

Utilize a comprehensive approach to the consideration of expanding multi-day backpacking opportunities, including the application of the Trail Evaluation Matrix and the Trail Support Index.

5.2.3 Lean-tos and Tent sites:

Lean-tos and tent sites, the most traditional type of campsite in the Maine woods, provide the most common type of recreational facility in the Park. The Park provides 88 lean-tos and 95 tent sites, 66% of these sites are located in one of the 10 organized campgrounds in the Park with 34% located in backcountry.

Lean-tos and tent sites account for approximately 75% of the Park's annual camper nights and 53% of the annual camping revenue.

Lean-tos and tent sites provide 74% of the Park's total daily capacity.

Most lean-to capacities are 4 persons, with some 6 person leantos available in backcountry locations. Most tent site capacities are 6 persons. To protect lean-to sites from expanding impacts, campers are not allowed to set up tents at lean-to sites unless the tent can be placed inside the leanto.



5-5-6 Park Lean-to at Davis Pond

Park lean-tos consist of a mixture of stick-built and log structures. Since the mid 1990's, the Park has been working to replace stick-built lean-tos with cedar log lean-tos of a consistent and proven design. While the log structures are more expensive to construct than a structure using dimensional lumber, the log lean-tos have a more traditional look and feel and can be expected to provide an indefinitely long useful life with proper maintenance.

5.2.3.1 Action

Continue to replace stick-built or decaying lean-tos with cedar log leantos as time and available labor permits. At the time of replacement, issues such as need for replacement or modification of location should be evaluated.

5.2.4 Cabins

The recreational facility with the lowest vacancy rate in the Park, cabins are provided at two of the Park's organized campgrounds. Formerly operated as sporting camps, Daicey Pond and Kidney Pond Campgrounds provide a total of 21 small cabins with capacities ranging from 2 persons to 6 persons.

Rental cabins account for approximately 19% of the Park's annual camper nights and 34% of the annual camping revenue.

Cabins provide 7% of the Park's total daily capacity.

Park cabins include a wood stove, gas lights and simple, rustic furniture including mattresses on bunks. As larger structures including doors, windows and log walls, Park cabins require more continuous, skilled, and expensive maintenance to avoid serious rot or settling issues. Although the Park has worked diligently in recent years to implement regular maintenance procedures for Park cabins and to educate Park staff about maintenance concerns, for some of the Park log structures, lack of maintenance in the past has resulted in serious current maintenance needs.

5.2.4.1.1 Action

Continue to monitor and evaluate log large log structures, including rental cabins, and work to develop a maintenance, or if necessary, a removal/replacement plan for cabins.

5.2.5 Bunkhouses

The Park operates five (5) bunkhouses located at Roaring Brook, Chimney Pond, Russell Pond, Nesowadnehunk Field and South Branch Pond Campgrounds. The capacities of Park bunkhouses range from 8 to 10 people with the exception of the small bunkhouse at Nesowadnehunk Field which holds 4 people. Bunkhouses are often rented by small groups and families as a more sheltered, but still very rustic, accommodation within an organized campground. Notwithstanding that bunkhouse space is often used by families and groups, the available bunks in each bunkhouse are rented as individual sites and as such bunkhouses often contain individuals unrelated and unknown to each other.

Bunkhouses account for approximately 6.5% of the Park's annual camper nights and 6% of the annual camping revenue.

Bunkhouses provide 3% of the Park's total daily capacity.

Bunkhouses include propane lighting, wood stoves and limited rustic furniture including bunks without mattresses. The Park is working to armor the cooking sideboards provided in the bunkhouses to provide more protection from camp stove and cooking use. All of the

Park's bunkhouses are available for winter camping use and the bunkhouses at Chimney Pond and Roaring Brook receive significant winter use.

5.2.6 Group Areas

The Park provides four (4) areas for group camping in the Park at Bear Brook, Foster Field, Nesowadnehunk Field and Trout Brook Farm. These areas are designed to hold larger (over 12 persons) family, church, scouting, private camp, outing club and other associated groups who wish to visit the Park. The capacities of the group areas range between 42 and 50 persons and group areas are usually designed to include separate sites available for reservation by different groups, although it is not uncommon for all available sites to be reserved by a single group. Although two of the Park's group areas are included within the confines of an organized campground (Nesowadnehunk and Trout Brook Farm), all group areas are located with significant physical separation from individual campsites to accommodate the additional noise and activity typically characterized by most large groups.

Capacities:

Group areas account for approximately 15% of the Park's annual camper nights and 8% of the annual camping revenue.

Group areas provide 16% of the Park's total daily capacity.

5.2.7 Picnic Areas

The Park maintains 18 sheltered picnic areas and numerous unsheltered picnic tables for day use picnicking in the Park. Picnic areas typically include a covered shelter over one or two accessible tables and a nearby toilet facility. Most, but not all picnic areas include a fire ring or grill. With the exception of the picnic shelter at Dwelley Pond, all picnic areas are available at a roadside location. Six of the Park's picnic areas are located within organized campgrounds (Roaring Brook, Nesowadnehunk Field, South Branch Pond and Trout Brook Farm, Abol and Katahdin Stream).

5.2.7.1.1 Action

Examine available options to relocate the picnic area at Roaring Brook to a site more available and discernible by the public. The current picnic area is located along Roaring Brook somewhat behind the campground in an area not readily noticeable by most Park visitors.

5.2.8 Day Use Swimming

Baxter State first began to administer the lands around Upper and Lower Togue Pond under a lease in the late 1980's. The Park applied significant restoration efforts to the waterfront including erosion control and re-vegetation work. In 1993 the Park acquired through fee purchase from Georgia Pacific Corporation, most of the land around and between Upper and Lower Togue Ponds. The Park then established a carry-in, carry-out day use picnic facility at Togue Pond Beach. This area includes several small "pocket beaches", picnic tables, stand-up grills for cooking, and toilet, changing room and parking facilities. The area is very popular for day use swimming and picnicking with local people.

5.2.9 Long Distance Hiking Facility – The Birches

Located near Katahdin Stream Campground, the Park provides “The Birches” to accommodate long-distance hikers (hiking more than 100 miles directly continuous and immediately prior to entering the Park) who may not be able to predict their specific time of arrival or who may lack the ability to contact and utilize the Park’s reservation system. Accommodating primarily Appalachian Trail hikers, the Birches consist of two 4 person lean-tos and a tent platform. The maximum capacity for the site is 12.

5.2.10 Katahdin Lake Wilderness Camps

Katahdin Lake Wilderness Camps is a privately owned backcountry sporting camp operating under lease on Park land acquired as part of the Katahdin Lake parcel gifted to the Park in 2006. KLWC administers a separate reservation system providing 10 cabin rental options along with options for meal plans. Both KLWC and Park day-users access the Katahdin Lake area from Park designated parking areas at the Katahdin Lake trailhead at Avalanche Field.

5.2.11 Information, Education and Control Facilities

Baxter State Park Headquarters

The Baxter State Park Headquarters is the location of the Park’s reservation office and includes the reservation staff, the Park’s primary base 2-way radio, information and educational materials including an informational slide show in the Park’s small auditorium. The reservation office operates from 8am to 4pm each day and 7 days/week between Memorial Day and Labor Day.

Baxter State Park Visitor Center

The Park operates a visitor information center at Togue Pond a short distance before reaching the Togue Pond Gatehouse. The Visitor Center was established in 1994 and the visitor center staff provides information and education to Park visitors approaching the Park. The opportunity for visitors to gain information at the visitor center substantially reduces the amount of time gatehouse staff must spend with visitors, improving the smoothness of gatehouse operations and reducing the time visitors may have to wait in line prior to reaching the gatehouse. The Visitor Center also provides maps and books for sale as well as a limited inventory of safety related hiker gear such as water bottles, whistles and flashlights. The Visitor Center hours vary, but are geared for operation during the busiest visitor periods and include 7 days/week operation during the summer months.

Baxter Park Gatehouses

Baxter State Park operates two gatehouses as control, information and education facilities. The Togue Pond Gatehouse accommodates about 85% of the traffic into the Park and serves as a hub of operations in the southern end of the Park. This Gatehouse administers the Day Use Parking Reservation program for Katahdin-access trailheads. The Matagamon Gatehouse accommodates about 15% of the total vehicle traffic into the Park and serves as a hub for operations in the northern end of the Park. The Park gatehouses operate from 5

am to 10 pm 7 days/week from May 15 to October 15 with shorter hours from October 15 to the close of gatehouse operations at the end of November.

5.2.12 Park Campgrounds

Most of the Park's individual recreation facilities are contained in and administered by one of the Park's organized campgrounds ([Park Facilities map- sec. 10.1](#)). The Park operates 10 campgrounds; 8 frontcountry (accessible by vehicle) and 2 backcountry (accessible by foot only). Campgrounds include supplies and amenities not available at backcountry campsites including on-site staff to provide information, education, advice and recommendations, posted information regarding current weather forecast and other pertinent information, the ability to purchase helpful maps and books, prepared firewood, and possibly evening programs and communal cooking and meeting opportunities.

Development of the Park's campgrounds began early in the tenure of Park creation and extended from 1938 (Chimney Pond) to 1987 (Kidney Pond). Although each of the Park's campgrounds exhibits their own unique quality and atmosphere, most of the campgrounds are similar in their organization and the staff and visitor facilities included.

The Park has worked diligently for the past decade to construct and install the necessary features to provide wheelchair accessibility to at least one campsite per campground (usually a tent site) and to provide accessibility to outhouses or privies, picnic shelters and other roadside public sites in the Park. While the Park has made considerable headway in this effort, maintenance is needed on much of the original work in pathway hardening and parking designations.

5.2.12.1.1 Action

Organize and conduct an annual effort toward regular evaluation and upkeep of accessible sites in the Park.

Roaring Brook

Established: 1950. Current capacity: 102

Percent of Park camping use: 13.6%

Percent of Park camping revenue: 14%

Operating Season: May 15- Oct. 15

Camping Facilities:

- 9 lean-tos
- 10 tent sites (1 accessible)
- 10 person bunkhouse

One of the Park's busiest campgrounds, and the preferred trailhead for hiking to Chimney Pond and Katahdin, as well as the popular Sandy Stream Pond. Roaring Brook also provides close access to the Avalanche Field trailhead for Martin Ponds, the Katahdin Lake day use

shelter and canoes, and Katahdin Lake Wilderness Camps. Roaring Brook also administers the Bear Brook Group Area.

The campground includes parking areas for day use and camping as well as a day use picnic site. Staff facilities include a Ranger Camp, a garage/shop building, a smaller staff camp, and an administrative facility known as the Roaring Brook Spike Camp. The Ranger Camp includes an office and large information board, and a Katahdin mountain model. The Roaring Brook Spike camp is a common field post for trail crew and other volunteers. Facilities include a separate shower house providing wood-fired hot water. Two tent platforms near northwest of the garage provide wall tent lodging opportunities for contracted trail crew work.

Abol Campground

Established: 1958. Current capacity: 100 persons

Percent of Park camping use: 9.2%

Percent of Park camping revenue: 8%

Operating Season: May 15- Oct. 15

Camping Facilities:

- 12 lean-tos
- 9 tent sites (1 accessible)

Set in a northern hardwood forest along Abol Stream and near the base of Abol Slide, Abol is the closest campground to Togue Pond Gate and a trailhead for Katahdin hiking.

Campground facilities include a Ranger Camp with campground office, smaller staff camp, a garage/shop and a picnic area. Abol also includes a day-use parking area.

Katahdin Stream Campground

Established: 1939. Current capacity: 110 persons

Percent of Park camping use: 12.2%

Percent of Park camping revenue: 12%

Operating Season: May 15- Oct. 15

Camping Facilities:

- 12 lean-tos
- 9 tent sites (1 accessible)

One of the oldest campgrounds in the Park, Katahdin Stream is a popular family campground providing access to Katahdin via the Appalachian Trail as well as access to numerous streams and ponds in the Kidney / Daicey area. Katahdin Stream also administers "The Birches" Long Distance Hiking facility and the Foster Field Group Area.

Facilities at Katahdin Stream include a Ranger camp with campground office, and smaller staff camp, a garage/shop facility, and picnic area included in the campground. Katahdin Stream also includes a significant area for day-use parking.

Daicey Pond Campground

Established: 1970. Current capacity: 35 persons

Percent of Park camping use: 7.1%

Percent of Park camping revenue: 16%

Operating Season: May 15- Oct. 15

Camping Facilities:

- 10 cabins of varied design and size (1 accessible)

Located on the shore of its namesake pond, Daicey Pond Campground is one of the Park's favored destinations and offers great views and fishing on Daicey Pond and hiking access to many other backcountry ponds, Nesowadnehunk Stream, and mountain peaks. Summer evening programs are often scheduled at Daicey Pond.

Daicey Pond began as a logging camp before the turn of the 20th century and in 1899 Maurice York began to operate a sporting camp on the site. Known for most of the 1900's as "York's Twin Pines Camp", After Baxter's completion of the purchase of the land in 1945, Daicey was operated as a private sporting camp within Baxter State Park through a lease arrangement with the Baxter State Park Authority. Following Percival Baxter's clearly stated wish that eventually all leases end in the Park, in 1970, the Authority declined to renew the lease and negotiated an agreement to purchase the existing structures for \$45,000. The Park assumed operation of the camps and opened the campground to public visitation in 1971.

Facilities include a Ranger Camp, a campground office and volunteer camp, an accessible Library cabin, a small barn for firewood storage and a workshop. Daicey Pond also includes a day-use parking area.

Kidney Pond Campground

Established: 1987. Current capacity: 42 persons

Percent of Park camping use: 8.1%

Percent of Park camping revenue: 18%

Operating Season: May 15- Oct. 15

Camping Facilities:

- 12 cabins of varied design and size (1 accessible)

Located on the shore of its namesake pond, Kidney Pond Campground is a favorite campground for Park's visitors. The campground provides trail and canoe access to numerous local ponds and mountains.

Built by Irving and Lyman Hunt in 1899⁷⁹ and operated private for over 80 years, the history of Kidney Pond campground is similar to Daicey Pond campground. The Baxter Park Authority assumed control and ownership of the camps in 1987 and after removing about 50% of the

⁷⁹ John Neff; Katahdin, An Historic Journey, Legends, Exploration and Preservation of Maine's Highest Peak; 2006

buildings, electric power and primitive septic systems, the Park opened the campground to Park visitors in 1989.

Facilities include a Ranger Camp with campground office, an administrative camp assigned as trail crew lodging, a small camp with cooking facilities used for Park events and staff group cooking, a pole barn for storage and a garage/shop building, an accessible library/meeting room facility used primarily for Park meetings, staff training and evening programs, and a small storage building.

Nesowadnehunk Field Campground

Established: 1952. Current capacity: 108 persons (group area not included)

Percent of Park camping use: 5.0%

Percent of Park camping revenue: 6%

Operating Season: May 15- Oct. 15

Camping Facilities:

- 11 lean-tos
- 4 person bunkhouse
- 9 tent sites (1 accessible)

Established in 1952, Nesowadnehunk is the most remote of the Park's roadside campgrounds and provides easy access to Ledge Falls, a popular swimming spot during hot summer weather. Characterized by the slowly receding open field remaining as a reminder of the area's history as a logging camp, this campground provides trailhead access to Russell Pond via the Wassataquoik Lake Trail and day hikes to Doubletop Mountain. Nesowadnehunk Field Campground was re-structured in 2005-2008. All leantos were moved to the former group area field and the bridge over Nesowadnehunk Stream is open to foot traffic only and is used to access several walk-in tent sites. The campground receives strong occupancy only during July and August, serving to a degree as an overflow site when other campgrounds in the Park are full.

Facilities at Nesowadnehunk Field include a Ranger Camp with campground office, and a garage/shop structure with attached woodshed. Nesowadnehunk Field also contains an accessible day-use picnic area within the campground.

South Branch Pond Campground

Established: 1952. Current capacity: 176 persons

Percent of Park camping use: 12.3%

Percent of Park camping revenue: 10%

Operating Season: May 15- Oct. 15

Camping Facilities:

- 12 lean-tos
- 21 tent sites

- 8 person bunkhouse

South Branch Pond is the Park's largest campground and is popular with families who return year after year. The campground provides trail access to local ponds in the Fowler region, a nature trail, a short trail to South Branch Falls, as well as day hikes on South Branch Mountain and North Traveler and the very challenging Traveler Loop Trail. The campground trailhead also provides access to Russell Pond Campground via the Pogy Notch Trail.

Campground facilities include a Ranger camp with office, a smaller staff cabin, a garage/workshop, a small wood shed and an 8-person bunkhouse. A day-use picnic shelter is also situated in the campground.

Trout Brook Farm Campground

Established: 1969. Current capacity: 82 persons (group area not included)

Percent of Park camping use: 7.9%

Percent of Park camping revenue: 5%

Operating Season: Memorial Day - Oct. 15

Camping Facilities:

- 14 tent sites
- 1 lean-to

Occupying the large open field of a former logging camp located along Trout Brook, Trout Brook Farm is one of the Park's quietest campgrounds and provides a great base for exploring Matagamon Lake and backcountry hiking and camping in the northern part of the Park. Facilities include a Ranger Camp, a staff housing and administrative camp with a campground office, a garage shop facility, a propane and fuel storage depot and a day-use picnic site.

Chimney Pond Campground - (Backpacking Only)

Established: 1938. Current capacity: 46 persons (includes 10 person bunkhouse)

Percent of Park camping use: 6.9%

Percent of Park camping revenue: 7%

Operating Season: June 1 - Oct. 15

Camping Facilities:

- 9 lean-tos
- 10 - person bunkhouse

The Park's oldest campground (originally established in 1924, before the creation of the Park), Chimney Pond is one of the most



iconic campgrounds in Baxter State Park and one of two backcountry campgrounds in the Park. Chimney Pond's history predates the formation of the Park. The campground was formally established with the construction of a Ranger Camp by the State of Maine in 1924. At that time the land was privately owned and maps portrayed the area around and including Katahdin as "Katahdin Park Game Preserve". From 1924 until his untimely accidental death in 1942, Roy Dudley served as Chimney Pond Ranger, providing entertainment and important guidance and recommendations to an increasing number of visitors. Chimney Pond provides day hiking access to all Katahdin peaks and to Russell Pond Campground via Davis Pond and the Northwest Basin Trail.. In the late 1970's and early 1980's, the spruce-budworm epidemic swept through Maine, and resulted in the loss of much of the forest cover around the campground. Today the area has regrown and the open views of the walls of the south basin are slowly disappearing.

Chimney Pond campground serves as the Park's premier, and only, outpost in the sub-alpine zone. The campground is the Park's only campground to be busy both in summer and winter and is the only campground with fully scheduled winter ranger coverage. In order to reduce the long-term impacts of human use, human waste at Chimney Pond is composted during the summer months using an open air system. In the winter months waste is captured and transported to a frontcountry holding vault.

The Chimney Pond Ranger is responsible for deciding the class day for hiking and climbing ([Class Day System – sec. 10.34](#)) in both the summer and winter months and Chimney Pond is a common base for Search and Rescue incidents and training.

Facilities include a Ranger camp with campground office and attached workshop, a small storage shed, a 10-person crew camp, a 4 person yurt, a 10-person bunkhouse and a day use shelter. Chimney Pond also operates a waste composting facility including collection bins and drying racks.

Russell Pond Campground - (Backpacking Only)

Established: 1950. Current capacity: 48 persons (includes 8-person bunkhouse)

Percent of Park camping use: 3.8%

Percent of Park camping revenue: 4%

Operating Season: May 15 - Oct. 15

Camping Facilities:

- 5 lean-tos
- 3 tent sites
- 8 person bunkhouse

Russell Pond is the most remote campground in Baxter State Park and one of two backcountry campgrounds in the Park. Russell Pond provides very good fishing for wild eastern brook trout in local ponds and access to Wassataquoik Stream, Wassataquoik Lake and several popular backcountry campsites.

Facilities include a Ranger Camp with campground office, a 4 person crew camp, a small workshop building, a small storage building and an 8 person bunkhouse.

5.2.13 Campground Statistics

The following charts help provide some objective measures of the Park's various recreation facilities and ten organized campgrounds. It is important to note however, that a purely objective rendering of occupancy rates or revenue per day cannot provide an assessment of the campground's value from the standpoint of the Park's mission toward providing wilderness quality experiences and a variety of locales and settings for Park visitors. The Park has long recognized the economic and occupancy differences displayed in this type of assessment of campground performance. In some cases, the statistics provide a skewed view. For example, in this assessment, all revenue administered through a campground is attributed to that campground. In the case of Trout Brook Farm, this means that space for 100 people in backcountry sites with inherently low use levels are included in the campground capacities, significantly lowering the calculated occupancy rate of the campground. Another consideration is that the occupancy rates as displayed don't reflect monthly variations. Some campgrounds are fairly busy all summer long while others are very busy in the peak summer months and markedly less busy in the shoulder season months. In general, the Park considers all campgrounds as a group, but the data provided below does provide an idea of the general function and operation of the various campgrounds in the Park.

Baxter State Park Revenue and Use Statistics by Campground (from 2009 data)

Facility Type	Total Annual Revenue	2009 Camper Site Nights	Annual Operating Days	Capacity**	% of Total Camper Use	% of Total Annual Revenue	Annual Site Night Capacity	Annual Rev/Operating Day	Occupancy Rate
Roaring Brook	\$82,284	8,482	153	162	19%	14%	24,786	\$538	34%
Abol	\$45,470	4,301	153	100	9%	8%	15,300	\$297	28%
Katahdin Stream	\$70,315	7,852	153	160	17%	12%	24,480	\$460	32%
Daicey Pond	\$95,003	3,309	153	35	7%	16%	5,355	\$621	62%
Kidney Pond	\$103,351	3,772	153	42	8%	18%	6,426	\$675	59%
Nesowadnehunk Field	\$34,318	3,862	153	164	9%	6%	25,092	\$224	15%
South Branch Pond	\$60,681	6,043	153	184	13%	10%	28,152	\$397	21%
Trout Brook Farm	\$29,678	1,976	142	196	4%	5%	27,832	\$209	7%
Chimney Pond	\$41,031	3,404	137	50	8%	7%	6,850	\$299	50%
Russell Pond	\$23,751	2,288	153	60	5%	4%	9,180	\$155	25%
	\$585,882	45,289							

Baxter State Park Revenue Statistics by Facility Type (from 2009 data)

Facility Type	Total Annual Revenue	% of Total Revenue	Daily Park-Wide Capacity	% of Total Capacity
Lean-to	\$168,120	29%	360	30%
Tent site	\$141,770	24%	514	44%
Cabin	\$198,354	34%	77	7%
Bunkhouse	\$33,396	6%	40	3%
Group Area	\$44,673	8%	190	16%
	\$586,313		1,181	

5.3 The Reservation System

The Park operates a robust reservation system that continues to evolve toward current technology and visitors preferences. In the 2010 summer season, Park visitors made more than 7,000 reservations ([reservation statistics- sec. 10.13](#)). In addition to the reservation process, the reservation staff serves as an important outlet for information and education regarding trip planning and the appropriate use of the Park and Park resources. In 2010, the Reservation office fielded over 10,000 phone calls. These calls are a mixture of visitors calling to secure a reservation or visitors who have or are considering a reservation and desire current and specific information on campground, trail, stream and hiking conditions, fishing activity, equipment needs and a host of other issues and concerns. Additionally, along with Togue and Matagamon Gatehouses, the reservation office provides primary radio coverage and dispatch service for Park operations during the summer months. The reservation office staff also provides retail sales service for Park maps and books sold at Headquarters as well as operating the Park's informational slide presentation in the reservation office auditorium.

For most of the Park's history, reservations for campsites in the Park were very effectively managed through a large format bound reservation book. The book included single large format pages for each day of the summer reservation season listing all available reservable sites in the Park. Reservation clerks would confirm a reservation by manually entering the party's name in the appropriate place on the appropriate pages reflecting their length of stay. After payment was confirmed, the reservation confirmation would be handwritten and sent by mail to the camper. Reservations in advance of the camping season were made either by mail or over the counter at Park Headquarters. Once the camping season was underway, reservations could be made in the Park, with Park staff relaying reservation information via two-way radio to Reservation staff at Park Headquarters who would then update the reservation book in pencil.

In 2003, the Park began to shift its reservation system to a digital format. This shift included the establishment of hardware systems for data storage and security, development of unique code to operate the system and the training of reservation staff. This shift was very successful and over the next 7 years the Park continued to work to further develop the system. In 2003, the Park opened reservations to credit card payments via telephone for reservations within 10 days of the reservation date. This window was later increased to 14 days. In 2009, the ability for visitors to view the real-time reservation status of all rental sites was added to the Park's website. In 2011, the Park will provide on-line reservation capability for reservations made within 14 days of arrival. In general, the Park is behind most current vendors in providing unlimited on-line reservation capability, but the Park's careful, deliberate and economical development over the past 7 years has avoided any serious system crashes or data loss events that are an ever-present risk of all-digital systems while keeping the annual development costs for hardware and software within the means of the Park's budget ([see section 8 - Data Maintenance](#)).

5.3.1.1.1 Action

Continue to steadily develop the reservation system to provide accessible real-time availability and increasing online reservation capability while controlling costs and maintaining secure operating and backup systems.

5.3.2 Opening Day and the Camping Reservation Process

Prior to 2004 the reservation process for the camping season started each year early in January at or near the first business day of the year. Over the years from the late 1980's to the early 2000's, the number of people that arrived at Park Headquarters to make a desired reservation in person grew each year. Beginning in 1989, the Park implemented a process and procedure geared to accommodate the large numbers of people arriving on the opening day of reservations. This process eventually necessitated the rental of off-site rooms to hold people (the numbers exceeded the fire code limitations for available rooms at Park Headquarters) and a ticket system to guarantee the order of service for people who arrived early in the morning and would have to wait several hours for service at the reservation desk. Eventually, the opening day process extended to several consecutive days and consumed the efforts of all available Park staff as well as several volunteers. Many people would arrive at Park Headquarters several days in advance to secure places at the front of the line and local news outlets began to include footage from opening day on their evening broadcasts. Although considerable space was available in the Park after Opening Day, the coverage had the effect of convincing many Maine people that most available campsites in the Park were reserved on opening day. As the Opening Day event grew in size and duration (eventually extending into several days), questions and concerns regarding the fairness, expense and equity of the process grew as well. In 2003, the Park staff worked with the Park Advisory committee to examine the issue and in 2004 the Baxter State Park Authority approved a series of limitations on opening day in order to control the growth of the process and provide a fairer and more equitable opportunity to all Maine citizens to secure a reservation in the Park. Implemented in 2005, the new policy limited reservations on opening day to no more than 20% of the available sites in any campground on any day. In addition, reservation volume was limited to a maximum of two reservations per person. This change resulted in a significantly smaller crowd on opening day with 97% of the seasonal rental capacity remaining available at the end of the day. The policy also established a rolling reservation plan – allowing reservations to be made anytime within 120 days of the arrival date for the reservation. This spread the administration work of the reservation process out over the winter and spring months and provided a more fair and equitable opportunity for campers to make a reservation.

5.3.3 Reservation Pricing

The Park assesses reasonable fees for camping in the Park while recognizing the important role that camping fees play in supporting Park operations. The Park uses a fee review protocol ([fee protocol – sec. 10.42](#)) to assess fee rates every two years. The protocol reviews fees against objective indices such as the change in average per capital wages in Maine, the Consumer Price Index (CPI) and rates for charged by other entities for comparative facilities in the region. For more information, see [section 9.1.2 - Fees for Camping](#).

5.3.4 Day Use Parking Reservations

Baxter State Park's Day Use Parking Reservation (DUPR) program was approved by the Baxter State Park Authority on May 11, 2009 for implementation in 2010 and review in 2012. The program reflected over 9 months of deliberation by Park staff and Advisory members. The program was a response to the concerns of staff and Authority members about complaints of Maine hikers who felt that popular trailheads in Baxter State Park accessing Katahdin were simply too hard to get into under the first-come, first-serve basis and that the uncertainty of being able to access a Katahdin trailhead resulted in their decision not to plan a Katahdin hike.

The current program recognizes and preserves limits on available parking for each of the three Katahdin-access trailhead parking lots at Roaring Brook (35 spaces), Abol (16 spaces) and Katahdin Stream (25 spaces) Campgrounds. The parking lot limits were implemented in the mid 1980's as a tool to balance the Park's primary responsibility to protect park resources with the secondary responsibility to provide recreational opportunities. The limits on Katahdin access parking acts to cap the total number of people that are likely to hike Katahdin access trails towards Baxter Peak on a clear, sunny summer day at around 450 people. Under current limits there may still be more than 150 people on or near Baxter Peak at midday, and trail maintenance work on Katahdin access trails continues to consume a significant portion of the Park's trail maintenance effort.

The 2010 DUPR program allowed advance reservation of all available parking spaces for each of the Katahdin-access trailhead parking lots. To maintain or improve the access rate for Maine residents, day use parking reservations are available to Maine residents after April 1 for any summer hiking date. Non-residents can make a reservation no earlier than 14 days before their reservation date. A \$5 fee is assigned for each DUPR to cover the cost of additional staff to administer the system through the Park reservation office. To prevent individuals or groups from monopolizing the system, a maximum of 3 DUPRs/month were allowed for any single visitor. In the initial year of the DUPR program, 5,000 DUPRs were made by Park visitors. The Park gathered relevant statistics on DUPR use and Katahdin access parking composition ([Roaring Brook parking stats- sec.10.17](#)) during the summer season to help assess the effectiveness of the system and define appropriate adjustments to the program to streamline the operability and improve the convenience of the system to Park visitors while continuing to protect Katahdin trails from overuse. A primary objective of the DUPR program was to remove the uncertainty of the former first-come, first-serve process for access to a Katahdin trailhead so that hikers could more confidently plan a Katahdin hike. One clear indicator that this objective was accomplished was that large groups began scheduling access to Katahdin trailheads using the DUPR system. The impact of large (> 12) hiking groups on mountain wilderness trails and peaks is substantially higher than typical family or friend groups from 1-6 hikers⁸⁰. Limits on group use is one of the most common traits shared in the management of wilderness areas around the world. After one year of operation, data indicates that the DUPR program has been successful in providing Maine people the opportunity to plan and enjoy a

⁸⁰ Chad P. Dawson, John C Hendee; Wilderness Management – Stewardship and Protection of Resources and Values; International Wilderness Leadership Foundation; 2009; p.450

Katahdin hike with certainty. Opportunities remain to improve and streamline the operability of the program and to address issues of large group use on Katahdin.

6 Conducting Exemplary Forest Management – Core Function 3

6.1 Introduction

The Scientific Forest Management Area (SFMA) is comprised of 28,585 acres in the northwest corner of the Park ([location map- sec. 10.3](#))

The foundation of forest management is planning for the future. Management activities must be guided by comprehensive planning work that examines all aspects of forestry, including but not limited to: forest vegetation development, silviculture, resource economics, biodiversity, water quality wildlife habitat, and recreation use. These factors have to be considered at multiple time scales both short term (0-10 years) and long term (10-100 years). As one would expect such planning work is complex and time consuming. Planning is also inherently imperfect, as the complexity of forest systems and the human communities that seek to manage them, can never fully be distilled into words on a page. Nor are they static, but rather represent a moving target that changes even as a manager composes his or her plan. However the “perfect” cannot be allowed to stand as an enemy of the “good” and forest management by definition must be guided by robust planning efforts.

The Scientific Forest Management Area ([SFMA operational map- sec. 10.4](#)) has been managed using planning documents revised at the start of each decade beginning with the first plan developed in 1980 by Park forester George Ruopp. Subsequent plans in 1988 and 1998, formulated by Park resource manager Jensen Bissell, have provided guidance for management activities in the SFMA. Currently, an updated plan is being developed which will be completed in 2012.

The management planning process will develop a plan that combines existing management strategies with a landscape level approach that seeks to orchestrate management actions across the entire land base over a defined period of time. Individual stand prescriptions and harvest schedules will result from planning that seeks to balance current and future stand level forest conditions with the “big picture”, the conditions across the management area. A principle element in the planning process is the development of management objectives coupled with measureable criteria to be used in evaluating achievement of those objectives. The planning effort will rely heavily upon the integration of spatial data and forest inventory information. This data package will enable the development of a “forest portfolio” suitable for use with landscape level forest modeling software. Forest models permit managers to develop potential management scenarios and evaluate them using defined measurable criteria to determine achievement of management objectives. Integrating the results of forest modeling tools with practical on the ground knowledge of Park staff members will enable the development of a schedule of management actions that balances management objectives over the timeline of the planning document and the longer time scales inherent to forest development in the region. This planning effort will incorporate the best of traditional forestry knowledge with the most current science and technological tools to ensure that the

management of the SFMA maintains the high standards set by Governor Baxter and previous forest managers.

The Scientific Forest Management Area has been actively managed for over 30 years. In that time the area has undergone important changes due to both natural and human caused events and activities. Disturbance events have shaped the forest in important ways. Management activities like harvesting and road building have influenced forest conditions and patterns. Forest management is a complex endeavor which attempts to guide forest vegetation patterns to achieve outcomes desired by human communities. Forests, like all natural systems, exist in not as static entities but rather as constantly changing vegetative, animal, geologic, and climate communities. SFMA management has been defined by the effort to work with and within these changing systems rather than against or outside them. This theme is in keeping with the directives of Governor Baxter and the concept of scientific forestry. A principle related challenge for Park staff members is to keep management current with the latest scientific knowledge while remaining a valid “showcase” for other practitioners in the State and beyond.

The spruce budworm outbreak of the late 1970's and early 1980's resulted in both immediate and long lasting changes to the forest species composition and structure. The results of the human response to this event continue to exert a similar influence on the forests of the SFMA and the region as a whole. The return of the spruce budworm to the forests of Northern Maine and the SFMA is inevitable, the only question is when and what the results of a new outbreak will entail. Planning for management responses to disturbance events like an insect outbreak or similar large scale forces like hurricanes and wildfire are critical elements in the SFMA management.

Important upcoming management decisions involve determining how much area should be managed with multi-age and even-aged silvicultural systems. These questions must be considered alongside those involving the percent of forest area designation as reserve or riparian status. Decisions of this type should be considered at the landscape level as part of a comprehensive approach to management planning.

Economic and social conditions necessarily influence financial and contractual decisions involving SFMA management. Continued increases in road tolls, fuel prices, and potential corresponding reductions in market opportunities may require creative solutions. Attempting to anticipate future market conditions is fraught with challenges and unanticipated outcomes. The SFMA will have to continue to rely upon its strengths in the production of higher value sawlog products while continuing to develop niche market opportunities like tone-wood and other high value specialty products. The continuation of FSC certification may play a role in securing such opportunities.

6.2 SFMA Trust Directives

Added to the Park in 1954 and 1955 by Park donor Percival Baxter, the Scientific Forest Management Area ([map- sec. 10.4](#)) is governed by trust communications. The communications represent the sentiments of a conservationist written over 50 years ago, but the sincere intent of Baxter's words remain as clear today as more than half a century ago. The philosophies, management procedures and plans detailed within and appended to this plan are extensions of these communications:

*Baxter Communications to Governor Muskie, Senate and House of Representatives,
97th Legislature – 1955*

"This 3,569 acre area will be available both for recreation and for scientific forestry management and can be made to produce a continuing crop of timber to be harvested and sold as are potatoes or any other product of the soil."

"It long has been my purpose to create in our forests a large area wherein the state may practice the most modern methods of forest control, reforestation and production.... This new 3569 acres is an excellent location for this purpose."

"In my travels in foreign lands I have seen beautiful great forests that for centuries have been producing a crop of wood without depletion. In Sweden, Norway, Finland, Germany, Chile, Russia and elsewhere what has been done by scientifically controlled forestry can be done in Maine. I now make it possible for the state to try a major experiment here at home, an experiment that can mean much for our future timber supply, which all admit is the chief natural resource of our State."

"The terms of this gift are identical with those of the three thousand five hundred sixty-nine (3,569) acres; Public Park, Public Forest, Public Recreational and Scientific Forestry Purposes and Reforestation. I want this township to become a show place for those interested in forestry, a place where a continuing timber crop can be cultivated harvested and sold; where reforestation and scientific cutting will be employed; an example and an inspiration to others. What is done in our forests today will help or harm the generations who follow us."

"This Township six (6) Range ten (10) is what is termed by woodsmen 'good growing land'. An area with an abundance of wildlife, especially moose. Fishing and hunting will be allowed under the general Fish and Game Laws of the State."

Private and Special Laws 1955, Chapter 61

"All harvesting of said products shall be done according to the most approved practices of Scientific forestry and all revenue derived from the sale of said products shall be used by said state for the care, management and protection of Baxter State Park as now or hereafter defined."

Private and Special Laws 1955, Chapter 171

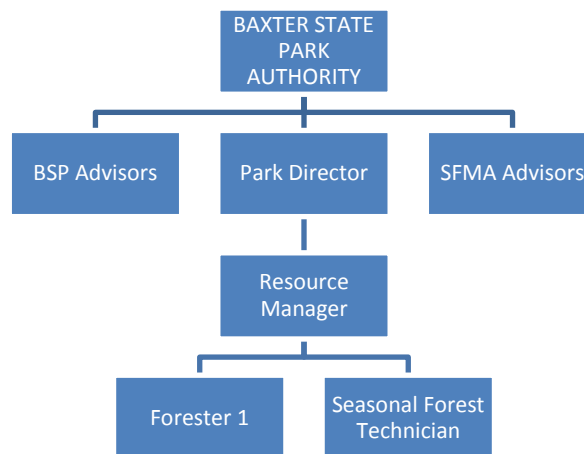
“The trees harvested may be cut and yarded on the premises but no manufacturing operations shall be carried on within said township. All revenue derived from the sale of timber shall be used by the State IN TRUST for the care, management and protection of Baxter State park as now and hereafter defined and the said twenty-five thousand twenty-five (25,025) acres forever shall be held by said State as Trustee in Trust...”

Private and Special laws 1955, Chapter 2

“The State of Maine is authorized to clean protect and restore areas of forest growth damaged by Acts of Nature such as blowdowns, fire, floods, slides, infestation of insects and disease or other damage caused by Acts of Nature in order that the forest growth of the Park may be protected, encouraged and restored.”

6.3 SFMA Administrative Structure

The SFMA represents about 14% of the land area of Baxter State Park and is administered by the following individuals and groups ([Park map – sec. 10.1](#)) :



- *Baxter State Park Authority* – Composed of the Commissioner of Inland Fisheries and Wildlife, the Director of the Maine Forest Service and the Maine Attorney General, this body holds complete and total responsibility for the administration, policy and management of Baxter State Park.
- *Park Director* – Holds responsibility for the operation, management and day-to-day protection and preservation of Baxter State Park. As needed, develops and proposes policy management and personnel actions for review and action by the Authority.
- *Resource Manager* - Holds responsibility for the long-term planning and day-to-day management and operations on the SFMA as well as other administrative responsibilities within Baxter State Park as determined by the Park Director.
- *Forester 1* – In concert with the Resource Manager, conducts and directs field operations within the SFMA.
- *SFMA Advisors* – This standing committee of 15 volunteer citizens serves at the pleasure of the Authority and works closely with the Resource Manager to provide continuity, expertise and advice on a wide range of issues regarding management of the SMFA.
- *BSP Advisors* – This standing committee of 15 volunteer citizens serves at the pleasure of the Authority and works closely with the Park Director to provide continuity, expertise and advice on a wide range of issues regarding management of the ‘forever wild’ portions of the Park.

6.4 Landscape Description

The forests of the SFMA as we know them today began to develop about 12,000 years ago as the Laurentide ice sheet melted northward out of New England. Over the next 1000 years the land that would become the SFMA developed a tundra ecology and the first human inhabitants left evidence of their presence. The following 1000 years brought a steady emergence of forest growth:

“The development of the first forest in northern New England disrupted the Paleo-Indian culture. Northern boreal forests of spruce and fir support relatively little herbaceous vegetation and therefore offer little subsistence for gregarious herbivores like the caribou. Some of the large herbivores, such as musk ox and caribou, remained on the tundra, drifting gradually northward out of the region. Many other species simply died out, no longer able to find enough forage.”⁸¹

The retreating glaciers left the SFMA with a generally flat to rolling terrain, with west to east ridges interspersed with streams and bogs. The highest point in the management area, Wadleigh Mountain, is located in the southeastern corner of the SFMA and rises to 1203 feet above mean sea level. The lowest areas, in the north and eastern sections of Township 6, Range 10 WELS – where the land begins to slope toward the East Branch of the Penobscot River – are approximately 760 feet above mean sea level. Most of the area lies between 800 – 1000 feet above mean sea level (U.S. Geological Survey, 1955).

Most of the 29, 537 acres of the SFMA are underlain by sandstones and shales from the older Devonian period, with a thin cover of glacial tills. Overlying these, Wadleigh Mountain is composed of Traveler Rhyolite of volcanic ash origin. Between Wadleigh Mountain and the Traveler Mountains lies the younger Devonian Trout Brook formation composed of sandstones, shales and ironstones. Glacial outwash deposits lie along the Trout Brook valley.

Over the ensuing 8000 years, as the climate gradually warmed, the forests of the SFMA developed from the boreal forest now found further to the north into the spruce and fir dominated Acadian or ‘spruce flat’ forest. This forest is characterized by poor or moderately drained soils over compressed glacial till or areas of shallow soil over bedrock (Leak and Riddle, 1979). U. S. Department of Agriculture Bulletin 544 of 1917 offers of description:

“...Spruce, birch, soft maples, white pine, hemlock, and balsam are the characteristic trees in mixture... The presence of black ash, which is usually accompanied by considerable balsam, denotes condition bordering on the swamp type. The presence of sugar maple, on the other hand, denotes a transition to the hardwood lands. White pine of good quality formerly occurred in abundance in this type in both Maine and the Adirondacks..... Spruce attains an intermediate development here, while birch and the better hardwoods are inferior in development as compared with the same species growing on the hardwood lands..... Windfall is not uncommon, and as a result young, even-aged stands of spruce are found occupying the ground where this has taken place.....”

A landmark study by Ralph S. Hosmer in 1902-3 in nearby Big Moose Township described a tract of “virgin forest” of 20 acres on somewhat similar sites as the SFMA. Over ninety percent of the stand comprised five species – spruce (65.4%), yellow birch (14.3%), sugar maple

⁸¹ From a synthesis paper on the effect of forest practices in northern forest lands, C.R. Foss, L.S. Deming, S.F. Gage, Audubon Society of New Hampshire, 1992

(5.7%), paper birch (4.1%), and balsam fir (2.7%)⁸² The maximum diameter of spruce measured on the site was 27 inches. In most respects, this description would probably apply reasonably well to the forests of the SFMA around the start of the *nineteenth* century, although human use of the resource over the next two centuries altered the forest mosaic in many ways.

6.5 Description of the Managed Landscape

The SFMA is marked by a diversity of forest conditions that span a broad spectrum of natural community types. Within the SFMA boundaries are a range of vegetation assemblages, structures, and development stages. This diversity is complimented by the range of management designations termed “Management Unit Class”. About 2/3 of the area is open to some type of management activity, while 14% of the total forest area is designated with reserve status and is not open to management manipulations. An area equal to that of the reserves (15%) is classed as riparian area, a designation which can either mirror those of the operational units, or instead follow that of the reserves.

Mgt Unit Class	GIS Acres	Percent Area
NA	417	1%
Operational	19254	67%
Reserve	3861	14%
Riparian	4150	15%
Wetland	893	3%
Total	28576	100%

Over the last 30 years over 60 miles of road have been constructed to access nearly all of the SFMA designated for management activities. In this time nearly all of the operational management units have seen at least 1 treatment. As a result the SFMA is just beginning a new round of silvicultural treatments that will consider the past actions, the forest response, and the updated planning objectives for the SFMA as a whole.

This section provides a brief overview of the management of this unique and interesting area of the Park. The comprehensive summary of the data and policies guiding the management of the SFMA can be found in the [Scientific Forest Management Area Management Plan](#).

⁸² “A Study of the Maine Spruce” by Ralph S. Hosmer, as part of the Maine Forest Commissioner’s Report of 1903, Table 4, p. 79.

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7 Maintaining Park Property – Core Function 4

The maintenance function at Baxter State Park is complex and substantial and involves a number of distinct categories. In general, the size and wild nature of the Park combine to obscure the size of the maintenance load that the Park requires to operate. Currently, well in excess of 300 structures exist in the Park, along with more than 215 miles of hiking trail. The Park has approximately 60 miles of public access road drained by over 400 culverts and three bridges. In addition, the Park owns and maintains a significant fleet of vehicles and equipment. Primary maintenance of Park roads and facilities is accomplished primarily through the efforts of Park staff members led by the Maintenance and Transportation Supervisor ([org chart- sec. 11.12](#)) who works in the operations wing under the supervision of the Chief Ranger. The Maintenance and Transportation Supervisor supervises an Auto Mechanic and a Park Carpenter who in turn supervises a seasonal assistant. In addition to the formal maintenance department employees, seasonal and year-round Ranger and Campground staff members provide significant assistance to the Park in performing various maintenance work under the supervision and at the direction of the Maintenance and Transportation Supervisor. Maintenance of Park trails is also performed under the supervision of the Chief Ranger directing a Trails Supervisor. The Trails Supervisor supervises two seasonal Trail Crew Leaders who work with intern crews and a significant volunteer program to effect trail maintenance and construction during the summer and fall season. Facilities maintenance in the Park is also assisted by a significant volunteer program. Finally, the Park contracts to private vendors for a limited, but important segment of work in both facilities and trail.

In addition to the maintenance of hard assets like roads, trails and structures, the Park also spends a considerable effort in the maintenance of data. This area, which includes an ever-growing catalogue of data for the Park reservation system, accounting and personnel systems, day use parking program, forest management data and digitally stored photography, website information and many other facets of Park management, is of increasing importance to the Park.

A more complete understanding of the maintenance effort in Baxter Park can be explored with specific descriptions in the following maintenance areas:

- 1. Structures**
- 2. Roads**
- 3. Vehicles**
- 4. Trails**
- 5. Signs**
- 6. Property and Administrative Boundary Lines**
- 7. Communications (radios, towers, repeaters)**
- 8. Data**

7.1 Structures

"I want pleasant foot trails built and attractive campsites laid out in the valleys, by the brooks and on the shores of the waters; sites where simple forest leantos and small log cabins are available for those who love nature and are willing to walk and make an effort to get close to nature."⁸³

The maintenance of structures within the Park is accomplished by the Park Carpenter supervised by the Maintenance and Transportation Supervisor. The Park Carpenter supervises a seasonal assistant during the summer months.



Figure 7-1 Daicey Pond Ranger Camp

In addition to the designated maintenance staff, BSP Rangers, Campground Rangers and Gatehouse Attendants all assist in the basic maintenance of structures including simple construction and repair, painting, caulking, roofing and other maintenance work. The Park has contracted work in larger construction projects, mostly involving the construction of employee lodging facilities. Staff lodging at the Hemlock Road camps in the SFMA, several camps in the Abol Field complex and two significant additions to the Millinocket Headquarters facility was constructed

under contract with a local builder. The Park has also contracted skilled individuals to work on special projects such as in place repair of round log structures. Other larger projects such as the Daicey Pond Ranger Camp, the Nesowadnehunk Ranger Camp, the Crew Camp facility at Trout Brook Farm and storage barns at Abol and Matagamon Service Areas and garages at Nesowadnehunk and Katahdin Stream were constructed under the leadership of the Park Carpenter with assistance from Park staff.



Figure 7-2 Blunder Pond Shelter

Baxter Park also administers a significant volunteer program directing volunteers in a variety of maintenance activities. Volunteers have also constructed, with assistance from Park staff, all of the six large group shelters in the SFMA and Bear Brook and Foster Field Group Camping Areas. Volunteers and Park staff members have also combined to construct at least a dozen cedar log leantos over the past 20 years. Several Park stick-built leantos were also prefabricated and donated to Baxter State Park by volunteer Frank Trautmann.

The structure inventory for the Park includes the following:

⁸³ Percival P. Baxter, *Formal Trust Communications*, 1945.

- 100 toilets or outhouses - most constructed on concrete vaults or holding tanks of 1000-2000 gallon capacity.
- 88 log leantos – about 50% of the Park’s campsites include one of these iconic three sided structures. BSP leantos include a mix of stick-built log-sided leantos and more traditional cedar log leantos.



Figure 7-3 Martin Pond Lean-to

- 55 employee facilities including large lodging facilities, garages, workshops, small camps.
- 22 picnic shelters – including 7 large shelters at Park group camping or day use sites.
- 21 rental cabins – located at Daicey Pond and Kidney Pond Campgrounds.
- 6 pole barns
- 3 buildings including an office facility, garage/shop and warehouse/lodging facility on the Millinocket Headquarters campus.

The age and condition of structures in the Park varies considerably and includes significant structures only a few years old such as the Ranger Camp facility at Daicey Pond, to cabins constructed over a half century ago and inherited by the Park with the termination of sporting camp leases. Baxter State Park has an extensive inventory of housing units within its boundaries, ranging from crew camps, seasonal quarters to year-round homes. The intent of these facilities is to provide housing for individuals and employees employed, assigned to facilities, assigned to duties, or for responsibilities carried out in the interest, benefit, and operation of Baxter State Park.

The trust communications, both formal and informal (link) are clear that Percival Baxter was concerned about the proliferation of buildings in the Park. For the past 20 years, the Park has used changes in use assignments or points of major repair to a structure to evaluate the need for that structure. The complex changes in the building inventory over the past twenty years reflect a number of considerations. The removal of many small buildings, such as the log cabins on the east shore of Upper Togue Pond that the Park used when the land was leased to the Park, was replaced by a larger staff housing facility at Abol Field. In this case, both economically and environmentally, the replacement of many smaller pond-side buildings with one larger building away from the water was a sound choice. Over the past two decades, many buildings have been added, but more have been removed:

Removed	Added
Martin Camp - Matagamom Lake	Abol Field Crew Camp
Davignau Camp – Matagamom Lake	Abol Field Trails End Camp
Webster Boathouse	Abol Field Pine Camp
McCarthy Field Barn	Abol Field Shop
McCarthy Field Camp	Pole Barns – Abol & Mata Serv. Areas
Telos Gatehouse	Daicey Pond Ranger Camp
Nesowadnehunk Crew Camp	Daicey Pond Cabin 10
Nesowadnehunk Ranger Camp	Trout Brook Farm Staff Camp
Nesowadnehunk Shop	7 Large Shelters (Group Areas & SFMA)
Nesowadnehunk Woodshed	Nesowadnehunk Ranger Camp
Nesowadnehunk Year-Round Camp	Nesowadnehunk Shop
Garage/Shop/Woodshed	Picnic Shelter at Trout Brook Farm
Kidney Pond -approx. 18 buildings	SFMA Small Crew Camps South (2)
Mountain View Storage Shed	SFMA Large Crew Camp South (1)
Mountain View Camp	SFMA Sled, Storage and Pump Sheds
Katahdin Stream DOT Camp	
Doubletop Camp	
Roaring Brook Spike Camp dingle	
Lower Togue Store Building	
Lower Togue Canoe Shed	
Daicey Pond Cabin 9	
Daicey Pond Cabin 10	
Kidney Pond Library – Kitchen	
Hidden Camp	

From an administrative standpoint, the addition of buildings is easy and the removal of buildings is difficult. The removal of buildings, even those in very poor conditions, often runs counter to our instinctive need to conserve resources. Much like closing trails, when we remove a building, we find that each building has its supporters. When the building is in reasonably good condition, the action is even more difficult, as we combine the memories that individuals have surrounding that structure with the reluctance to “waste” resources - even if the removal is clearly an action in accordance with the Trust Communications of the Park donor.

Proposals for the addition of buildings, much like trails, most often arise as single, positive ideas from Park staff members and are couched in terms of greater efficiency, safety and economy. Without a careful adherence to wilderness principals and a comprehensive view of the Park, this incremental addition of structures would result in congested campgrounds and recreation sites and threaten the wilderness atmosphere intended by the donor. It is a basic human trait to work to improve things – it seems to be part of our nature. Fully embraced and given sufficient time, this trait would lead to significant development in the Park both in campgrounds and other areas – all with the best of intentions, but undeniably contrary to the

donor's intent. Constant vigilance by Park management to stem curb or resist this natural human trait is critically important if the Park is to remain rustic, primitive and wild.

7.1.1.1.1 Action

Continue to work to develop evaluation criteria and an assessment protocol for structures in the Park and seek to retain as few structures as necessary to effectively operate the Park and provide for public safety.

While most of the structures in the Park such as leantos, picnic shelters, outhouses and sheds are simple and rustic and require relatively little maintenance, many staff and some rental facilities include propane appliances such as cookstoves, refrigerators, water heaters and lights, as well as windows, sinks, showers, flush toilets, chimneys, doors and woodstoves. In addition, some significant facilities such as bunkhouses, ranger and crew camps at Chimney and Russell Pond are located in backcountry settings without road access. All Park structures, regardless of their location, require continuous maintenance and a certain level of component replacement as items break or reach the end of their useful life.

The Park currently maintains only limited data on the condition, location and contents of these structures and spatial data on the location of Park structures is currently not included in the Park's GIS database. The ability to view Park structures spatially and to apply queries and filters to the important attributes regarding individual structures such as use category, size, age, condition, contents, maintenance history etc, would significantly increase the Park's ability to intelligently plan and prioritize structure maintenance.

7.1.1.1.2 Action

Tabulate Park-related data spatially and conditionally using GPS-capable field data computers to facilitate future planning efforts.

Most of the 100 toilets or outhouses maintained by the Park utilize 1,000 gallon concrete vaults for the collection of waste. Depending upon use, most Park outhouse waste is pumped out



Figure 7-4 Septic Waste Disposal Site

once or twice per season into a the mobile holding tank of a licensed septic service and transported to a Maine Dept of Environmental Protection permitted septic waste disposal site located north of the Park Tote Road near the Scientific Forest Management Area boundary. The site is permitted by the DEP for the spreading of 76,608 gallons of waste annually with the Park normally spreading between 15,000 and 20,000 gallons of septic waste per year on the site. Each year, Park staff performs necessary mowing and other maintenance duties on

the site.

The Park Headquarters complex is heated primarily with oil with furnaces in the Headquarters building, the garage/shop and the warehouse. The garage/shop receives primary heating from a wood furnace with an oil furnace providing back-up and some shoulder season use. In an average year the Park burns an average of 3,200 gallons to heat the facilities at the Headquarters campus. With oil prices currently approaching \$3.50/gallon, oil is a significant annual expense for the Park. All forecasts and available data indicate that the cost of oil will continue to rise with rising instability or constraints on supply.



7-5 BSP Headquarters

7.1.1.1.3 Action

Conduct a thorough review of available wood systems and installation costs and consider any workable options for a converting the Park's heating system to a more locally controlled and renewable resource.

The Park also spends around \$10,000 annually to supply electricity to the Headquarters campus. Similar to heating systems, the Park should conduct an energy audit of the Headquarters campus as a step in examining possible energy saving measures the Park could take to reduce its energy use or to acquire electric energy from sources other than the grid. The Park's reservation system requires electrical power to function. Although the Park's systems have some limited battery back-up capability, any longer term (> 2 hours) power failure will suspend the reservation process. In the summer months, this would be very disruptive to Park operations and visitor convenience.

7.1.1.1.4 Action

Review options and installation costs for emergency power generation to protect the Park from unanticipated long-term power outages.

The inventory of Park facilities includes some structures that will involve significant cost if, and when, their replacement is scheduled. The three major bridges in the Park at Trout Brook Crossing, Little Nesowadnehunk Stream on the Tote Road and Nesowadnehunk Stream on the Kidney Pond Road, will each involve well over \$50,000 if they were to be replaced today. The large culverts at Avalanche Brook and Abol Logan will also be considerable expenses to the Park if they are replaced.

The Park should carefully consider all options before replacing these structures. An example of such a consideration is the large bridge over Nesowadnehunk Stream at Nesowadnehunk Field Campground. This bridge has been closed to vehicle traffic since 2008. This bridge was

originally constructed to provide vehicle access to the Park when the Park operated a formal entrance at Nesowadnehunk Field via the Williams Pond Road. With the closing of this gate in 1989 and the deterioration of this bridge, the impending costs of maintaining the bridge suggested that moving the facilities at Nesowadnehunk Campground to the “Park side” of the bridge would be the most cost effective long-term action for the Park. This move was completed in 2008.

Notwithstanding a comprehensive review of the need for structures prior to replacement, many large structures and buildings in the Park will eventually warrant replacement. In order to provide funding for these projects as they arise, the Park established a Capital Reserve Fund in 2006. This fund would be held to fund the structure replacement projects over \$50,000.

7.1.1.1.5 Action

The annual Park budget process [\(see section 8.9 below\)](#) should consider applying available revenues to the Capital Reserve Fund in order to gradually increase the Capital Reserve fund.

7.2 Park Road Maintenance

"The purpose of Baxter State Park is to have a Wilderness area forever to be kept as a Wilderness without the accessories of civilization. This means that the roads should not be boulevards, only they would be reasonably safe. With too many improvements the Wilderness idea will no longer be maintained and I shall be pleased if you will give consideration to the matter.

*I find that those who visit the Park do not mind the crooked roads or the many turn-outs; in fact these give a little zest to the journey. People feel that they at last in an unspoiled region. This I hope to maintain."*⁸⁴



The Park has 60 miles of public access roadway ([Park map- sec. 10.1](#)). An overview of the Park's road system is provided above [in sec. 4.1.5](#) and [sec. 4.1.6](#). Public roads within the Park are graded gravel roads (improved gravel) and consist of the following road segments:

- Park Tote Road - 47 miles
- Roaring Brook Road -7.8 miles
- Abol Pond Road - 0.3 miles
- Daicey Pond Road - 1.3 miles
- Kidney Pond Road - 1.3 miles –
- South Branch Pond Road - 2.15 miles
- Matagamon Service Area Road – 0.33 miles

With only limited exceptions, the Park roads are unchanged in alignment from the original roadway that existed when the land was gifted by Baxter to the Maine legislature(s). In 1968, just prior to Baxter's death in 1969, 2.97 miles of road was constructed linking the Roaring Brook Road to the original primary Park access road which entered the Park along Abol Stream below the outlet of Abol Pond. New road construction in 1970 around the west and north sides of Morse Mountain led to closure of the original Park Perimeter Road between Dwelley Pond and McCarty Field. This former segment of road is now a hiking trail.

In 1988, the Park constructed two short segments of road totaling approximately three miles in the vicinity of Nesowadnehunk Lake. Before 1988, the Park Tote Road (then called the Park

⁸⁴ Percival Baxter in a letter to State Highway Commission Chairman David Stevens, October, 1957.

Perimeter Road) extended onto privately owned land west of the outlet of Nesowadnehunk Lake and again east of the south end of the lake. These new road segments served to relocate the Park roads on Park property. After the new construction was completed, the old roads were discontinued and the large plate arch culvert crossing Nesowadnehunk Stream was removed.

The Park also maintains a limited number of short road sections that are restricted to public access. These sections include the access road to the Park's approved septic waste disposal site (0.82 miles – closed for public safety), a short length of road to employee housing on Lower Togue Pond (0.54 miles – closed for Camp Natarswi and BSP security), and the Logan Pond road (1.4 miles – access limited due to easement and LURC conditions) from the Park Tote Road to the Park boundary line near the northeast corner of Lower Togue Pond. The Logan Pond Road was acquired in the 1993 purchase of Upper and Lower Togue Ponds from Georgia Pacific and includes an easement to the Nature Conservancy and the Millinocket School System specifying access to their lands.

Except for a short segment of paved road that extends from the southern Park boundary at Caribou Pit north (0.6 miles) to the edge of the day use picnic area at Togue Pond, all Park roads are narrow, winding, gravel surfaced roads. These roads, although un better maintained than in Baxter's active years, remain the windy, narrow roads with numerous turn-outs described by Baxter in his letter to Chairman Stevens in 1957. Maintenance of the Park's road system has always been a challenge.

"By running over the tops of the rocks and keeping my wheels on the high places wherever possible, I managed to get the old Dodge through to the hill. All along the way we saw old cars turned bottom side up or rolled over on their sides in order to keep the trail clear. The occupants evidently went as far as they could and, owing to some mishap or sheer inability to make the grade, simply abandoned them and tipped them out of the road. We were several hours making the five miles as we were obliged to cut poles to repair smashed culverts and bridges and sometimes pry out rocks that were an unusual menace to navigation."⁸⁵

The Park utilizes a tractor-mounted brush mower to mow back vegetation from ditch lines and to maintain reasonable site distances on the many sharp turns. Over the past twenty years the Park has employed both Park staff and contracted labor to accomplish this work. Guidance in mowing is primarily oriented toward maintaining the "zest to the journey" while maintaining reasonable safety for motorists, cyclists and pedestrians traveling on Park roads at the 20 mph Park speed limit and mowing is typically quite conservative in the amount of vegetation removed.

In 1998, the Park established a protocol and implemented a Road Width Survey on the Park Tote Road between Togue Pond Gate and Nesowadnehunk Field ([survey data- sec.10.54](#)). The survey established over 100 remeasureable points on the Tote Road where existing road

⁸⁵ Lester Hall, *Katahdin Comrades*, edited by Charlotte Hall Kirkpatrick, p. 3. The passage is from Lester Halls journal describing a trip in a 1921 Dodge over between Togue Pond and Windey Pitch on what is now known as the Roaring Brook Road.

width could be measured. These points were measured again in 2003 and 2009. The average road widths for the three measurements were 15.9 feet in 1998; 15.2 feet in 2003 and 16.5 feet in 2009. The measurements indicated an increase of about 0.5 feet from 1998. This change may be attributed in part to the emphasis on road surfacing work and ditch establishment applied by the Park over the past decade, but may also be due to the judgment involved in determining the road width measurement points.

7.2.1.1.1 Action

Regularly re-measure the Tote Road width points as a guide to the maintenance of Park roads in the condition intended by the donor with the stated objective of maintaining the average measured width at or below the current measured average of 16.5 feet.

While the mower is efficient at cutting back small brush, other than blowdowns or obvious safety hazards, Park staff will not cut trees along the Tote Road without administrative review. Roadside mowing has no effect on tree growth and the narrow width of the Park roads allows trees to extend branches across and completely shade and enclose the roadway in many places in the Park. While this is in general in keeping with the donor's wishes, a balance must be maintained that allows the occasional traffic of larger vehicles (road graders, dump trucks, log trucks, heavy equipment on trailers, septic waste removal vehicles etc.) engaged in regular Park maintenance or operational activities to travel on Park roads without incurring significant damage from striking tree limbs and branches.

"Hardly a car came over the road without damaging the under portions, scraping the sides and bottoms, and breaking tires, spring and crankcases. Trucks were also damaged, including the new Park truck and the Forestry Department's truck as well."⁸⁶

Before 1999, the Park roads were maintained by the Maine Department of Transportation (MDOT) using a grader for most of the busier roads on the south end of the Park and various combinations of smaller equipment for the northern Park roads. Partly in response to political complications arising from the inclusion of federal dollars in MDOT's funding and in part due to increasing workloads of the MDOT resulting in less attention to Park road maintenance, the Park and MDOT agreed that the Park would assume the maintenance responsibilities for roads inside Baxter Park. Primary summer road maintenance is now funded by the Park and performed under contract, employing a grader for regular summer road maintenance and a gravel screen and dump trucks as necessary for the preparation and hauling of gravel for repairs and road surfacing.

In the waning years of MDOT maintenance, very little surfacing work was done on Park roads. For the past ten years, the Park has applied a regular effort to apply surfacing in an effort to address many miles of roads without enough surfacing to allow effective grading. To address the long-term needs for surfacing Park roads, the Park established or enlarged four gravel sources located in the northern (Matagamon Service Area), central (Nesowadnehunk Field)

⁸⁶ Park Supervisor Harold Dyer describing Park roads in the BSP Management Plan of 1941.

and southern (Abol and Rum Brook Service Areas) regions of the Park ([map- sec.10.5](#)). These pits provide the Park with local material for the preparation of screened gravel or bank-run stockpiles to be stored for emergency repair. Developing local sources inside the Park also reduces the potential for the introduction of exotic/invasive plants imported in gravel and surfacing material obtained from an outside source.

Surfacing of the gravel roads within the Park, is expensive and includes gravel pit preparation, gravel screening, loading, trucking and final grading of spread gravel. A recent account of surfacing costs estimated total costs in the neighborhood of \$10-14,000/mile dependent upon the surfacing amount and the distance from the gravel source to the surfacing point. To resurface each mile of public access road every 15 years, the Park needs to surface 4 miles of road each year (60 miles of road /15 years/mile = 4 miles/year).

At current costs, this amount of surfacing is not affordable by the Park, suggesting that careful determination of necessary gravel placement and stewardship of existing and applied gravel is very important.

In addition to surfacing, grading, ditching and road shaping, drainage is provided by over 300 cross drain culverts and road crossing structures ([culvert map- sec. 10.6](#)). Culverts range in size from 6" minor cross drains to the large corrugated pipe arch structures installed at Avalanche Brook on the Roaring Brook Road and under a short causeway between two sections of Abol Pond on the Park Tote Road. Many of the existing culverts in the Park were installed in the 1970's or earlier and the pipe classes run include standard corrugated metal pipe (cmp) as well as discarded iron pipe from local paper mills and other heavy industry. Approximately 75% of the Parks culverts are standard corrugated metal pipe ranging from 12" to 24". Pipes between 30" and 42" account for 21% of the total, with culverts and arch pipes 48" and larger accounting for the remaining 4%, including 15 culverts 72" or larger. The largest plate arch culvert in the Park is the 14' culvert at Avalanche Brook on the Roaring Brook Road.



7-6 Avalanche Stream Culvert

Finally, there are three bridges in the Park road system:

- A 58 foot span single-span rolled girder bridge on concrete abutments over Trout Brook (see photo below) just west of the South Branch Pond Road. Constructed in 1965.
- A 25' span bridge over Little Nesowadnehunk Stream (see photo below) at Nesowadnehunk Field placed on rock gabions. Constructed in 1979
- A 60 foot long single-span steel pony truss ("Bailey Bridge") on timber abutments crossing Nesowadnehunk Stream on the Kidney Pond Road (see photo below). Constructed in 1979.



7-7 Bridge at Trout Brook Crossing



7-8 Little Nesowadnehunk Stream Bridge



7-9 Kidney Pond Road Bridge across Nesowadnehunk Stream

An additional 49 foot bridge on treated timber abutments provides foot access across Nesowadnehunk Stream to the walk-in tent sites at Nesowadnehunk Field and the northern trailhead for the Doubletop Mountain Trail. This bridge formerly carried vehicle traffic until 2009 when the restructuring of Nesowadnehunk Field campground was completed. The decision to reorganize the campground reflected, in part, long term concerns regarding the costs of maintaining this deteriorating bridge for vehicles to access the 10 lean-tos on the west side of the Nesowadnehunk Stream at Nesowadnehunk Field Campground. The bridge was originally constructed in 1979 and provided vehicle access to the Park via the Williams Pond Road. After this Park access was discontinued in 1989, the bridge only provided access to the portion of the campground west of the stream. Along with other concerns, it became difficult for Park administration to justify the approaching considerable expense in repair or reconstruction work that would be necessary to maintain the bridge in a condition that would safely permit public vehicle traffic. A plan was initiated in 2006 and completed in 2009 that moved all campground structures on the northeast side of Nesowadnehunk Stream, and installed walk-in tent sites and a composting privy on the southeast side. The bridge is now blocked to vehicular access, but should provide safe access for foot traffic to campsites and the Doubletop trailhead for many more years.



7-10 Nesowadnehunk Stream Bridge at Nesowadnehunk Field (closed)

The Park has contracted work on the east abutment of the Kidney Pond Road Bailey Bridge, and plans to perform additional abutment work on the west abutment in 2011. While this bridge is an engineering marvel, these structures were fabricated circa the 1940's and specific parts necessary for maintenance may require local tooling. The remaining two bridges in the Park are in reasonable good condition, but regular maintenance has been sporadic and the eventual replacement would require a large capital outlay from the Park. To address this eventual need, the Park began building a Capital Reserve Fund in 2006 funded as a part of the regular annual budgeting process.

The Park maintenance staff has regularly replaced culverts on an as-needed basis, but assuming a 30 year average life span, the Park should replace approximately 15 culverts per year to keep ahead of anticipated problems. The Park has not been replacing culverts at this rate, and more concerning, the Park has not replaced a single larger (>4' diameter) pipe in at least 20 years. Replacing larger pipes, or performing significant repairs to any of the three bridges in the Park, requires careful advance planning as traffic flows will be disrupted for at least 24 hours and sometimes longer. Large culvert replacement work usually involves significant 2nd or 3rd order streams and should be scheduled during the summer months when water levels are typically low, but these times also coincide with the Park's highest traffic rates. The replacement of a 7' plate arch like the one crossing the Park Tote Road at Abol Pond would take up to three days – halting all traffic flow up the west side of the Park from Togue Pond Gate. This culvert was installed when this section of the Tote Road was constructed in 1968 and is now over 40 years old.

Of equal concern to the Park's ability to replace an aging culvert infrastructure is the decision as to what to replace it with. Climate change discussion and most research suggest that Maine will experience more severe weather events and short term extremes in precipitation may be more likely. A 2009 UMO study "Maine's Climate Future: An Initial Assessment" (<http://climatechange.umaine.edu/research/publications/climate-future>) included,

“More frequent large storms and scouring flows will damage habitat, especially where aquatic systems are already stressed by increased runoff, poor water quality, and siltation of lakes and stream beds. These disruptions ripple through watersheds, altering stream flows and re-distributing sediments, affecting infrastructure such as the size and ratings of culverts and bridges. As a result, roadway flooding, dam breaches, or washouts may occur more frequently.”⁸⁷

7.2.1.1.2 Action

Begin a regular program of replacement of aging culverts 48” and larger in diameter. The potential effect of climate change, and fish passage should be considered carefully in the replacement of drainage structures, stream crossings and bridges throughout the Park.

Replacement of existing culverts with culverts of a larger size may be both economically and environmentally prudent. Trends in annual precipitation and individual precipitation events should be considered in the replacement of road bridges and smaller stream crossing structures such as hiking trail service bridges (see below) as well.

7.3 Vehicles and Equipment

In addition to physical structures such as buildings, bridges and culverts, the Park also owns, utilizes and maintains a variety of vehicles and equipment. The maintenance of vehicles and equipment is accomplished by an auto mechanic supervised by the Maintenance and Transportation Supervisor. The auto mechanic is responsible for repair and maintenance programs and activities on a wide variety of Park vehicles and equipment described below. Maintenance is accomplished at the garage facility on the Millinocket Headquarters campus. Most vehicles and equipment are stored at the Millinocket yard during the winter months or when not in use, but some equipment is left in the Park over the winter months in secure locations to be available for use early in the spring.

⁸⁷ Jacobson, G.L., I.J. Fernandez, P.A. Mayewski, and C.V. Schmitt (editors). 2009. Maine's Climate Future: An Initial Assessment. Orono, ME: University of Maine.
<http://www.climatechange.umaine.edu/mainesclimatefuture/>



7-11 BSP Garage and Carpenters Shop

The Maintenance and Transportation Supervisor and the auto mechanic are responsible for the repair and maintenance of a significant fleet of vehicles including cars, vans, trucks, dump trucks, backhoes, snowmobiles and boats, a small farm tractor, a forklift, and a small chipper ([vehicle inventory- sec.10.46](#)). In addition to standard rolling stock, the Park also owns, utilizes and maintains a significant number of snowmobiles ([snowmobile inventory- sec.10.47](#)), a 17 foot boat with a 50 HP motor for Matagamom Lake patrol and a 16 foot boat with a 10 HP motor for travel on Webster Lake, and several smaller outboards for occasional and emergency use on Park ponds.

The Park currently maintains 31 cars, vans and pick-up trucks that are assigned to staff members to assist them in the performance of their duties in the Park. The Park has clear policies defining the expectations of employees regarding the use, maintenance and security of Park vehicles. The average age of the 31 small vehicles assigned to Park employees is 5 years, the average purchase cost is of these vehicles is \$18,940 and the average vehicle mileage is 56,418 (2010 figures).

In addition to cars, vans and pick-up trucks, the Park owns and maintains 6 dump trucks including one 1-yard, three 6-yard, one 12-yard and one 15-yard capacity dump trucks. In contrast to the small vehicle fleet, the average age of the dump truck fleet is 17 years and the average purchase cost is \$25,382 (2010 figures).

The Park continually assesses the cost of owning and maintaining a fleet of cars and trucks against other options such as rental from the Maine State Vehicle Pool, and the rental of larger dump trucks and drivers from local contractors. Large equipment is rented on occasion to supplement Park equipment on certain projects and the current large equipment fleet reflects the Park's best current judgment of the most economical and efficient balance between owning and renting.

The Maintenance and Transportation Supervisor works with the Auto Mechanic to develop and implement the vehicle replacement schedule for the staff assigned small vehicles. Vehicle replacement decisions are driven by assessed vehicle condition, existing mileage and the specific needs related to the duties of the position the vehicle serves. The regular

maintenance of Park vehicles provides the opportunity for long and economical service, but the replacement of two new and one or two used vehicles per year has been difficult for the Park budget to sustain in recent years. Over the past five years, administrative staff using vehicles for significant travel on hard-surfaced roads have moved to smaller, more fuel efficient and durable vehicles.

The larger dump truck fleet poses similar budgeting challenges. The newest larger dump truck in the fleet is a 2 ½ ton GMC dump truck purchased used in 2006 at a cost of \$48,000. Providing licensed employees to drive these larger trucks often requires training by the Park

7.3.1.1.1 Action

Carefully evaluate each replacement of heavy maintenance vehicles and weigh replacement and long term maintenance costs against benefits to the Park in efficiency, control and deferred contracting costs.

In order to efficiently provide fuel for staff vehicles stationed within the Park, several fuel depots have been established at Park Service Areas and the SFMA. Service area depots include a 2,000 gallon capacity unleaded gas and 2,000 gallon capacity diesel storage in side-by-side tanks located under a small shelter on the Abol Pond Road and a 2,000 gallon capacity tank under a similar shelter at Trout Brook Farm. The tanks are steel containerized in concrete vaults. Fuel is pumped to vehicles by hand-operated pump. The Park also stores 2,000 gallons of diesel fuel in a smaller steel and concrete tank at the Nesowadnehunk Service Area. To assist in fueling vehicles and snowmobiles in the remote SFMA, a 300 gallon stainless steel tank on a trailer is stationed at the SFMA Hemlock Road housing facilities.

Finally, the Park owns a substantial inventory of small equipment to facilitate Park operations including various equipment trailers, a woodsplitter and a bear trap, approximately 55 chainsaws, brushsaws, and polesaws assigned to the Trails division, Campground and Ranger staff and various locations in the park. The Park also owns over 90 canoes and kayaks, mostly used for rental at Park Campgrounds and backcountry ponds ([canoe inventory- sec. 10.48](#)). Providing housing for Park employees and volunteers also requires the Park to maintain an inventory of appliances, including more than 40 refrigerators, 30 water heaters, 35 cookstoves, 25 propane heaters and 70 woodstoves. Other Park maintained equipment includes 8 generators, more than 30 GPS units, and 10 Automated External Defibrillators (AED- one at each campground in the Park). Maintenance and repair of this equipment is accomplished through the attention of campground and ranger staff to assigned equipment and appliances within assigned housing and a regular purchasing program to provide continual replacement of aging appliances and equipment. In recent years, the Park has worked to evaluate equipment levels and to conserve, share or otherwise reduce the inventory levels for various types of equipment such as chainsaws or brushsaws.

7.4 Trail Maintenance

Considerable additional discussion about the Park's hiking trails can be found under [Resource Protection, section 4.4.2.5](#) and the [Provision of Recreational Opportunities, section 5.3.1](#). The maintenance of the approximately 218 miles of hiking trails within Baxter State Park is a

significant part of the total maintenance load borne by the Park. Maintenance of Park trails is performed under the supervision of the Chief Ranger directing a Trails Supervisor. The Trails Supervisor ([org chart- sec. 10.11](#)) supervises two Baxter State Park Trail Crew Leaders who work with intern crews and a significant volunteer program to effect trail maintenance and construction during the summer and fall season. The trail maintenance division controls a significant inventory of tools and equipment to assist with trail maintenance work. Trail maintenance standards are well described in the Park's Standard Operating Procedures Manual. Trail crews are provided with lodging options throughout the Park to allow the crews to stay in closer proximity to scheduled trail work and to lengthen the available time on the trail.

Park trail maintenance activity can be divided into two categories: short-term maintenance that



Figure 7-12 Step and stone work on the Saddle Trail

should be conducted annually or within 5 years and long-term or durable maintenance including most long-term trail reconstruction projects involving stone or rock work such as rock cribbing, stone steps, long scree walls, string fencing, quarry and stone transport work etc.

Short term work is a regular part of the trail crew's annual work and volunteers often provide significant assistance in the application of annual efforts such as clearing the trails of blowdowns, brushing trails to maintain trail corridors, clearing existing drainage structures of leaves, soil and debris. Park employees and volunteers contribute significant hours to short term trail maintenance by assisting with the ever-present work in corridor definition, blowdown removal and the clearing of drainage structures. Weather, particularly in terms of usually high rain events or windstorms resulting in high numbers of

blowdown trees, ensure that the short term trail maintenance load will have a high rate of variability from year to year.

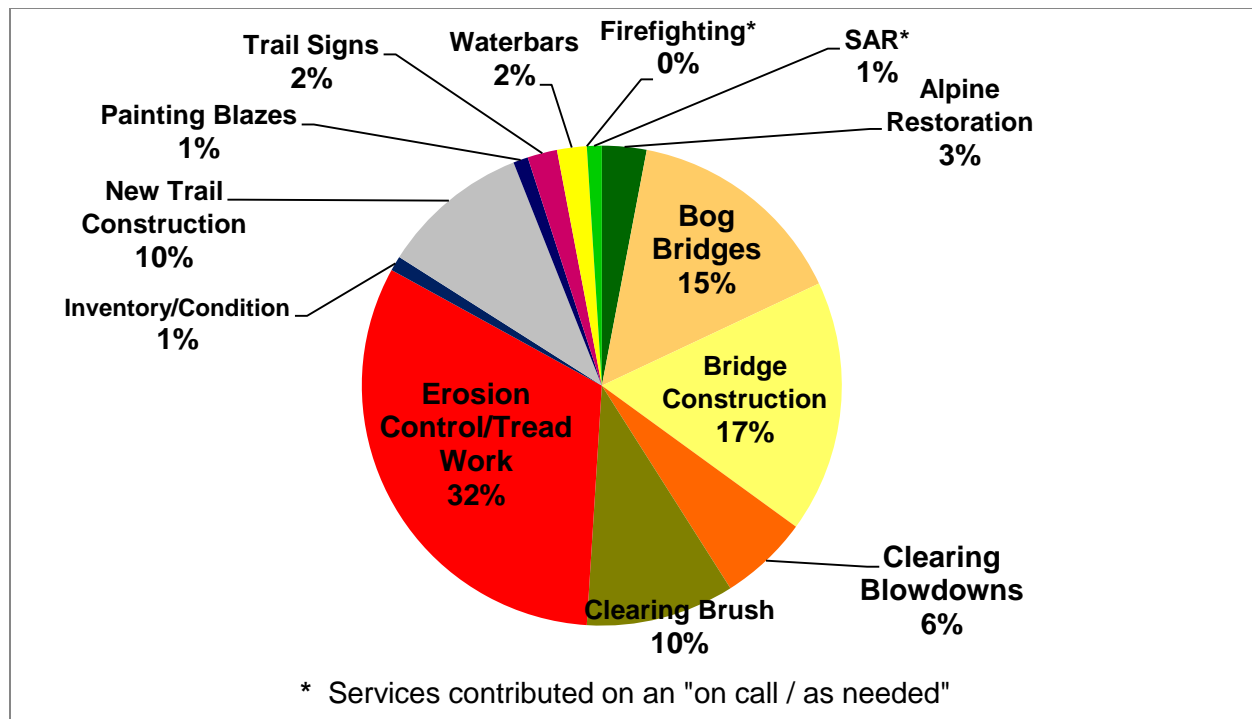


Figure 7-13 Trail Crew Division of Labor- 2009

Over the past 30 years considerable long term work has been accomplished on Park trails. Much of this effort has been focused on trails with the highest levels of hiker traffic and consequently the most erosion and maintenance needs. It would not be unreasonable to estimate that 85% of the Chimney Pond and Saddle Trails have received some type of long-term maintenance effort. The Park, working in concert with the MATC and other volunteers, is nearing the completion of a twenty year long project to install a stone staircase on the Hunt Trail above Katahdin Stream Falls. Long-term trail maintenance efforts are visible on many other popular Park trails including Abol, Hunt, South Turner, North Traveler, Marston, Helon Taylor, Wassataquoik Lake, Russell Pond and others.

The Park has applied existing GIS datasets to view the combined effects of trail use and trail slope in the Park GIS on the assumption that the steeper and more heavily used a trail is, the more likely it will require maintenance effort. The resulting map and dataset indicate areas likely to require higher than average maintenance efforts over time. Many of the Parks current trails were in place during the time that Park donor Percival Baxter acquired the land. These trails were often located on the "fall line" – directly up or down the slope or ridge line from the trailhead to the destination. Considerable effort has been devoted to try and stem the high erosion potential of these often unrelentingly steep trails. Rather than simply hardening these steep sections of trail, a more effective long term solution should include the careful consideration of relocation of the trail utilizing a combination of techniques including grade design with more moderate ascent (and longer distance), switchbacks, and full bench construction.

7.4.1.1.1 Action

Develop a multi-year plan for evaluating, designing, relocating and rehabilitating areas of fall line trail with high erosion hazards before committing to long term efforts at trail hardening on steep slopes.

In a similar vein, the Park can view a map delineating the placement of bog bridging on Park trails. Park trails currently include over 16,000 feet of bog bridging. The typical lifespan of sawn cedar bog bridging sawed on two sides to 6" thickness is 10 to 15 years. As a trail maintenance and site protection structure, bog bridging can be very effective. It also requires both financial and physical effort on several levels including the acquisition of cedar roundwood stock from the SFMA harvest operations, trucking and sawing the material to 6"



Figure 7-14 Bog bridging on the Katahdin Lake Trail

slabs, transporting the sawn bog bridging to the work site by hand, snowmobile or helicopter, and the actual cost of assembly on site by the trail crew and/or volunteers. In

most trail applications, bog bridging is used where the trail location crosses perennially or intermittently wet areas that will be damaged by light or moderate hiker traffic or where sensitive species or habitat suggest additional protection from disturbances. Many of the current locations of significant bog bridging exist on trail locations inherited by the Park at the time of purchase and often include former logging roads and pack animal trails.

7.4.1.1.2 Action

Consider available options for relocation of wet land trails to more suitable terrain to provide options for the Park to reduce its long-term trail maintenance requirements by reducing the amount of maintained bog bridging.

In addition to bog bridging, the Park maintains a number of significant trail bridges in the Park ([trail bridge inventory- sec. 10.49](#)). Since at least the mid-1990's, the Park has used the point of major maintenance or repair to actively assess the need for individual backcountry and frontcountry trail bridges in the Park. As a wilderness area, the Park does not deem trail bridges as a necessary or appropriate structure to facilitate hiking on backcountry trails. Crossing streams, even in difficult or potentially dangerous conditions, is a part of the wilderness experience. This concept is reflected in the draft stream crossing policy of the Appalachian Trail Conservancy (ATC) as well:

“Crossing Design: To preserve the natural, remote, and wild character of the Trail, stream crossings should employ the simplest means available that will provide a safe passage for Trail visitors and protect riparian and aquatic resources, including free upstream and downstream passage of aquatic organisms. A simple, well-designed ford or a few step-stones may be used for most stream crossings. Unbridged stream crossings may be impassable shortly after a storm or during late winter and spring runoff; others may provide a certain measure of challenge even

in low-water conditions. These primitive conditions are essential to the Appalachian Trail experience and deserve protection.”⁸⁸

In accordance with this policy, many large backcountry bridges in the Park have been removed including crossing structures over Abol Stream, Wassataquoik Stream, Katahdin Stream below Grassy Pond and several points on Nesowadnehunk Stream. The Park continues to apply judgment in the maintenance of stream crossing structures in or near campgrounds or on trails relatively close to campgrounds with high use rates of primarily day use hikers, i.e., Katahdin Stream Falls, Nesowadnehunk Stream at Daicey Pond Campground, Roaring Brook at Roaring Brook Campground.

The Park also continues to maintain 15 stream crossing structures providing snowmobile access to Park facilities for winter resupply or management functions. Reflecting the utility of these crossings, they are referred to as “Service Bridges” in the Park’s trail database. The Park maintains a Service Bridge over a tributary to Abol Stream on the winter access trail from the Abol snowmobile storage area to the Abol Pond Road, over several brooks on the Chimney Pond Trail, on the Katahdin Lake Trail, and on winter location of the Pogy Notch Trail. In recent years, the Park has altered the winter access route from the Abol Bridge to the Abol Pond Road. This



Figure 7-16 Trail bridge at Nesowadnehunk Stream before removal

access is a primary access route for Park staff and for winter recreationists heading into the Park. The alterations of this route were implemented primarily to avoid long-term maintenance of a large service bridge spanning the outlet of Abol Pond where it joined Abol Stream. This service bridge was removed in 2009. Further alterations of this route are being considered in an effort to establish a long-term access trail that avoids stream crossings and wet areas to the greatest extent possible.



Figure 7-15 Long Bridge on the Chimney Pond Trail

7.4.1.1.3 Action

Continue to evaluate service bridges and winter access routes and maintain only those routes necessary for efficient facilities maintenance and employee access.

7.4.2 Maintenance of the Hunt and Abol Trails at Thoreau Spring

In 2002, Park staff began to consider significant braiding and erosion of the Hunt Trail in the area 600-1000 feet north and south of the junction with the Abol Trail and the Baxter Peak Cut-off trail at Thoreau Spring. This area of trail forms the northern border of approximately 3

⁸⁸ Appalachian Trail Conservancy Draft – ATC Stream Crossings and Bridge Policy; February 16, 2011, p.1

acres of Alpine Sedge Meadow natural community type, providing critical breeding habitat for the American Pipet and Katahdin Arctic butterfly. In 2002, Park staff documented the trail concerns with photographs and in 2006 erected approximately 600' of string fencing on the Hunt Trail north and south of Thoreau Spring, to encourage the containment of hiking traffic in the defined trail corridor. In 2009, the Park contracted alpine ecologist Doug Weihrauch to study the area and provide a summary report with recommendations. Park staff and Advisors conducted three additional field surveys in 2011 and 2012 to consider options for this area and in 2011, the photo documentation captured in 2002 was replicated in order to gauge the effects of the string fencing. In 2012, the Park Director issued a [Guidance Document](#) providing summary guidance for the management of this important, fragile, and heavily used section of alpine trail.



7-17 Braided section of Hunt Trail with String Fencing and Hikers - 2011

7.4.3 Trail Support Index

In recent years, the Park has applied a more focused effort to develop a comprehensive assessment of trail installation, maintenance and management in the Park. This effort produced two specific tools and one policy addressing long-term Park-wide trail management.

Two of these tools, the Trail Evaluation Matrix ([Sec. 10.51](#)) and the Trail-Free Zones ([map- sec 10.2](#)), are discussed in [Resource Protection section 5.4.2.5](#).

In addition to the tools developed above, the Park developed the Trail Support Index ([sec. 10.52](#)) as a simple tool to objectively reflect the amount of Park resources placed into trails relative to the maintenance effort required. While changes may not be readily apparent or seem significant, the Park's trail system has undergone remarkable changes over the past 30 years. The Park's trail system was described as including 175 miles of trails in the late 1980's. The current mileage is around 218 miles. The difference of 55 miles of trail reflects more than simply additional trails that were added to the Park's system over the decades, but actually indicates a more complicated set of changes including the closure of significant trail miles as well as the ad hoc installation of new or additional trails. Most of these changes were the result of individual ideas on the part of Park staff members or other individuals and mechanisms to help insure that the Park can provide adequate trail maintenance in perpetuity were not included.

The Trail Support Index (TSI) divides the total annual work hours devoted to trail maintenance by the number of miles of maintained trail in the Park system. Reflecting that volunteers working on trails are more likely to have less training and skill in maintenance than Park or other trained trail crews, volunteer hours are discounted slightly. The division of trail work hours by the miles of maintained trails provides an index (about 63 in 2009) that can serve as an objective relative reflection of the Park's efforts on trails. While this single index is useful, an average of many indices over many years, coupled with educated judgment regarding the effectiveness of the Park's overall trail maintenance, should provide a strong threshold for assessing the Park's need to devote additional maintenance resources to trails or conversely, the ability of the Park to add trails to the system without reducing the ability to adequately maintain Park trails in the future.

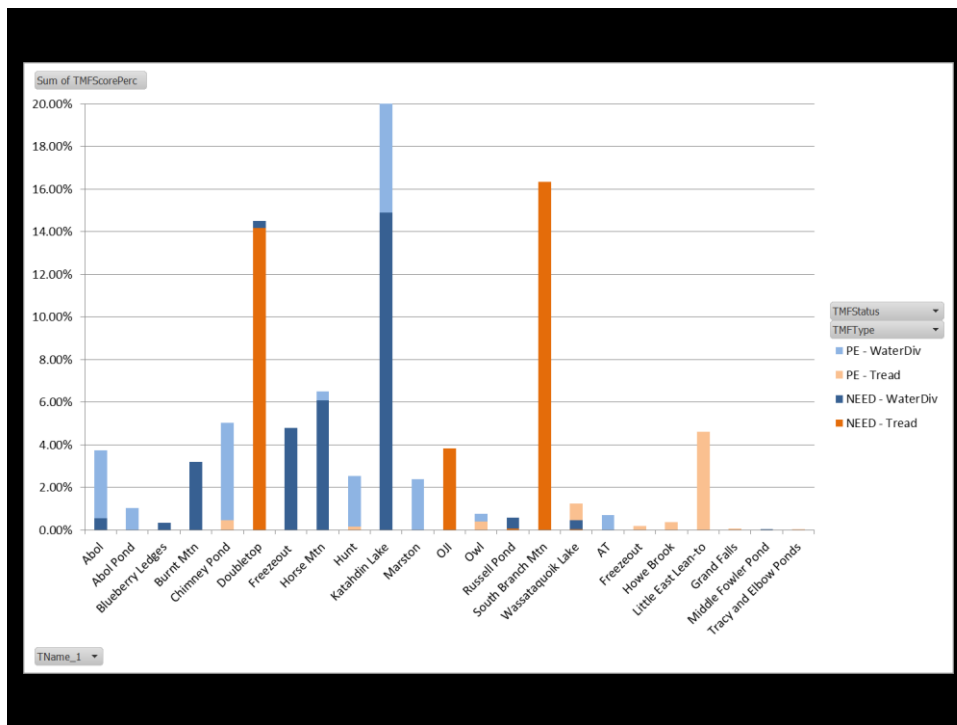
7.4.3.1.1 Action

Utilize existing data available to calculate past years Trail Support Indexes as well as to build a continuing dataset of TSI's into the future. Many years of TSI's should provide the Park with likely upper and lower thresholds as well as a useful average TSI to consider in the evaluation of decisions regarding the trail maintenance load including proposals for trail relocations, additions or closures.

Decades of trail maintenance work on Park trails have resulted in a considerable inventory of trail hardening and drainage and erosion control structures embedded in Park trails. The Park currently maintains only limited data on the condition and location of these structures and consequently the required maintenance of this structural component is largely unknown and therefore difficult to plan for. Judgment and experience of Park staff members suggest a significant backlog may exist in trail maintenance work in some areas of the Park.

7.4.3.1.2 Action

Conduct a Park-wide trail structure inventory gathering spatial and attribute data using GPS-capable field data computers to specify and quantify the existing backlog in unmet



7.5 Signs

There are approximately four hundred signs in the Park. At present, our database lacks the data to determine any verifiable number although relatively good data exists regarding trail signs. Signs include information signs on trails and in campgrounds, place name signs on campsites, leantos, campground entrances, some ponds and streams in the Park and regulatory signs such as speed limit signs and prohibition signs. In general, Park policy seeks to avoid signs whenever possible and when used, to design and erect signs in such a way as to get the message to the visitor or employee with a minimal level of obtrusiveness. The Information and Education division provides leadership and a clearinghouse on all signs in the Park other than trail signs. The Park aspires to be consistent with both messaging and presentation. Signs are generally brown with white lettering. Policy and procedure for sign approval, wording, construction standards etc is available in the Park's Standard Operating Procedures Manual.

Sign composition and erection in the Scientific Forest Management Area (SFMA) differs from the remainder of the Park due to the number of distinct forest management roads ([SFMA map-sec 10.4](#)). These roads are named and signed as an aid to visitors hunting, hiking or otherwise traveling in the SFMA. There are more than 60 signs posted in the SFMA and consequently, routed wooden signs would be too high a maintenance burden for the limited SFMA staff. Accordingly, road name signs in the SFMA are green corrugated plastic with white trim and are generally mounted without nails on available trees at the road junctions. A separate road map depicting the named roads is available for download from the Park's website as an aid to hunters and other visitors using the SFMA.

The Park hosts an important 10 mile terminal portion of the Appalachian Trail extending from Abol Bridge to Baxter Peak. The State of Maine Maintenance of the Appalachian Trail within the Park receives specific assistance and attention from the [Maine Appalachian Trail Club](#) under an ongoing agreement ([BSP-MATC Cooperative Agreement, section 10.52](#)). The MATC assigns “Trail Maintainers” with responsibility for regular brushing, clearing of blowdowns and monitoring of specific sections of the AT, including sections within the Park. Signs along the AT within the Park, including the large sign at Baxter Peak, were initially constructed, routed and placed by MATC personnel early in the Park’s history before Park staff began to consistently construct and place signs on Park trails. MATC signs on the AT included specific reference to the ATC (formerly the Appalachian Trail Club (now [the Appalachian Trail Conservancy](#)) and the MATC along with references on some signs to the Baxter State Park Authority. The Park, careful to preserve the clear legacy of autonomous management of the Baxter State Park Authority within Baxter State Park and cognizant that the AT within Baxter State Park is wholly within the control of the Baxter Park Authority, has been steadily replacing the signs on the AT within the Park with standard Park signage, consistent with other trail signs in the Park. This effort should be completed by late in 2011 or early in 2012.

In 2010, the large sign on Baxter Peak was replaced with a new sign constructed by Lester Kenway, former Park Trails Supervisor and now president of the MATC. This sign is now a standard Baxter Park sign, but includes, as have previous signs in this location, information on



Figure 7-18 Proud Hiker at Baxter Peak

AT destinations well outside of the Park. Although this sign is the property of Baxter State Park, the Park recognizes the unique significance this sign holds to the Appalachian Trail community. Accordingly, when the current sign is replaced, the Park will honor a written request to loan this sign, for a period of several years, to the AT community for display. At the end of the loan period, the sign will be returned to Baxter

State Park.

7.6 Property and Administrative Boundary Lines

“4 February 1971 – Thursday

Another 35° below zero and there is no let up. John Hinckley, Rex McBrearity, Tom Chase, Bill Orcutt and I traveled to the north line of 6 R 10 where Brayley Brook crosses the north line. From there we bushed, spotted, chained and painted 1 ¼ miles east where we joined with painted line coming from the northwest corner of 6 R 10. Rex McBrearity, Dan Watson and Mike Porter continued to work the north line of 6 R 9 bushing, spotting and painting on the west side. The weather became somewhat mild towards noon. It did come above zero making it seem like spring.”⁸⁹

⁸⁹ From the daily log of Forester and Party Chief John Walker, in his [Report on the Boundary Survey of Baxter Park](#) submitted to Forest Commissioner and Authority Chair Austin Wilkins, March 18, 1971. The survey included a crew of 6-10 men, 83 days of work and a cost of approximately \$32,000.00

The Park has 122 miles of land boundary line to maintain. This broad total includes 95 miles of exterior boundary, 3 miles of interior boundary demarcating in-holdings and 24 miles of administrative boundary demarcating hunting zones and forest management zones from wildlife sanctuary areas.

Since the Park's creation, these lines have been maintained by Park employees with assistance from volunteers and interns. Boundary line maintenance is ordinarily difficult work, but when the rugged, thickly forested and often waterlogged terrain of the Park is included in the effort, the maintenance of boundary lines can be a substantial effort. Boundary line maintenance is often most effectively accomplished in the late winter, when snowmobiles can be used to access remote areas of the property line, when water on the landscape is frozen and easily traveled over and when, hopefully, the snow has a strong crust to support relatively easy travel by snowshoe. Early in this millennium, the Park fell behind in boundary line maintenance, but in recent years Park Rangers have picked up their efforts. The Park records boundary work on the boundary line layer in the Park's GIS, and utilizes this system to identify areas most in need of marking and updating.

7.6.1.1.1 Action

Develop and adhere to a maintenance schedule utilizing Ranger staff, volunteers and cooperating abutting landowners to adequately maintain boundary lines.

In addition to the 209,501 acres of the Park, the Park also has an approximately 3 miles of boundary line maintenance responsibility on the Mt. Chase Lot and Harpswell Lot. These boundaries have been most recently marked by surveyors as a part of contracted survey work.

7.7 Communications

The Park relies on a range of devices for effective operational communication over the large and rugged geography of the Park. The primary method of communication within the Park is an extensive 2-way radio system employing a significant inventory of radios including 1 base radio at Millinocket Headquarters, 20 facility radios located in ranger camps and other administrative structures in the Park, 31 mobile radios located in Park vehicles and 48 hand-held portable radios for Ranger, staff and volunteer use ([radio inventory – sec.10.50](#)).

The Park 2-way radio system relies on a main repeater located approximately 25 miles east of the Park in Patten, Maine (Penobscot County) to effectively transmit radio communication throughout the Park. The Patten repeater works from a State of Maine, Office of Information Technology (OIT) tower and repeater building located on land owned by Baxter Park. OIT manages several repeaters on a large tower at this location. The Park has recently installed a second, lower powered repeater on a privately owned tower on Katahdin Forest Management land near Ripogenus Dam. This repeater provides both an emergency back-up to the primary repeater in Patten as well as improved local coverage and communication on the west side of the Park.

Private land mobile radio (LMR) systems—including municipal government and State and local public safety systems—use blocks of radio spectrum called channels. (See Radio Spectrum9766.) Historically, LMR systems have used 25 kHz-wide channels. In December 2004, the Federal Communications Commission mandated that all private LMR users operating below 512 MHz move to 12.5 kHz narrowband voice channels and highly efficient data channel operations by January 1, 2013. [1] This migration complements a National Telecommunications and Information Administration mandate for more rapid Federal agency migration to 12.5 kHz narrowband operation by January 1, 2008. The earlier Federal deadline affects State and local FCC licensees that interface or share frequencies with Federal radio systems⁹⁰

The Park became aware of the FCC narrowbanding mandate in 2008 and has been planning for the budgeting and operational steps to convert the Park's significant radio inventory to narrowband compliant equipment by the January, 2013 deadline. The Park plans to be nearly fully compliant, including the installation of a new base radio at Millinocket Headquarters, by mid-2011.

The Park also operates a short range Traveler Station based on a small tower located on the Headquarters campus in Millinocket. This station broadcasts a continuous loop message, managed and maintained by the Information and Education division that is available to visitors approaching the Park by vehicle on an AM band. The TIS broadcasts to a range of approximately 1.5 miles. The message availability and specific band are advertised to travelers on roadside signs located on State Route 157 outside Millinocket.

Aside from 2-way radios, the Park has incorporated other communication instruments into the organizational structure. In order to improve management communication on an individual and small team level, the Park has issued cell phones to rangers and a limited number of operational employees and has issued email and internet capable smart phones to the administrative team. Current Park operations center all reservation activity out of the reservation office in Millinocket during the daytime business hours in the summer camping season. After the reservation office closes at 4pm each day, reservation authority is shifted to Togue Pond Gate. As the reservation office developed more specific camping and day use parking reservation data needed by Togue Pond Gate, it became apparent that the electronic transfer of this data to the gate would free up personnel from driving a hard copy of the data 20 miles from Millinocket Headquarters to Togue Pond every day of the summer season. In 2008, a satellite dish was installed near the Togue Pond Gatehouse. This dish allows the Gatehouse Attendants to acquire the data on a daily basis via email using the gate's solar panel to provide the limited power necessary to access email via the dish and to print the hard copy of the reservation information. With the roll out of the Day Use Parking Program in 2010, DUPR data is relayed to the gate in the same fashion.

In addition to the Togue Pond Gatehouse, the SFMA also has a satellite dish installation at the primary Hemlock Road crew camps. This provides for daily communication with harvesting

⁹⁰ From: National Institute of Justice webpage(<http://www.ojp.usdoj.gov/nij/topics/technology/communication/radios/fcc-narrowbanding.htm>) "Understanding FCC Narrowbanding Requirements"

crews including data updates on harvesting position and progress and serves as an emergency communication for crews and for any incidents involving SAR.

While the Park has incorporated cell phones and smartphones and acted proactively to meet the narrowbanding deadline, the Federal mandate included significant costs to the Park and may result in less effective radio coverage over the mountainous terrain of the Park. Communications technology in general appears to be a rapidly changing environment. Despite the significant costs to the Park for the narrowband retrofit, there is no assurance that technological development will not produce a superior, attractive, and costly alternative form of communication technology in the near future.

7.7.1.1.1 Action

Remain vigilant to improvements in communication technology and to the extent possible, maintain as many viable options as possible to accommodate forms of communication that may be developed in the future.

7.8 Data Maintenance

“Worked in office all day - monthly reports, bills, letters & accounts. Many callers.”

From former Park Supervisor Helon Taylor’s Weekly Work Report for Sunday, June 12, 1964. Supervisor Taylor, working with a typewriter from the Camp at Togue Pond, wrote more than 1,000 letters per year.

Although invisible to most visitors, the management and maintenance of data in digital form is one of the most important challenges facing the Park. In the administration of 60 employees and the management of the impacts from 60,000 – 70,000 visitors each year, the intelligent collection, application and protection of data has become a significant part of the duties of most of the park staff.

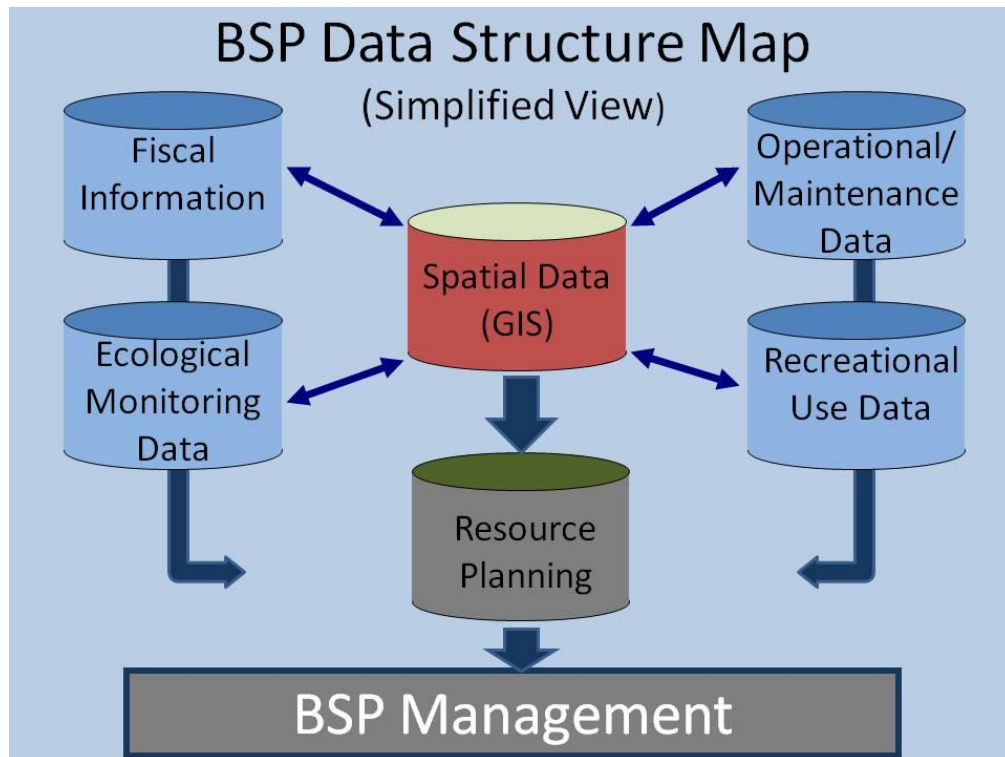
The Park currently manages 28 computers (13 desk tops and 15 laptops), 5 hand held GPS enabled field computers and more than 30 GPS units.

The current server/backup system consists of two servers connected by a fiber link between 2 Nortel routers owned and managed by the state. Management and maintenance of the Park’s data systems and software is provided by two part-time contracted technicians.

The main Server is located in the park HQ building, in the network head room. It runs all applications, and stores data for most other park functions. The main server runs a Microsoft Windows 2003 and SQL server which supports two databases, Park reservations and park asset management. Both are accessed by client computers using a web interface. In addition to this, the server runs a commercial specialized archival software database of photos, artifacts and historic documents. It also serves as the main storage point of all GIS data for the Park and SFMA and as a repository for individual user and park departmental workgroup data.

The Park also operates and maintains a significant amount of spatial data through *ArcInfo* software. As with much of the Park’s data management, initial systems and datasets were developed to assist with the large amount of data necessary to manage and administer the Scientific Forest Management Area of the Park. Continuous data collection on forest structure

and resources has been a part of the SFMA for the past 20 years. The Park is now at the point where existing datasets holding SFMA and Park data can be arranged in relational databases and linked directly to spatial data existing in the Park's GIS. Use of data in this way can provide an exponential increase in the Park's ability to assess resource use, trends, problems and potentials and improve the Park's ability to make good short and long term policy and planning decisions.



The Park currently works to collect and manage data for several distinct functions.

7.8.1 Fiscal and Administrative Data

The Park manages active systems using current software to manage financial, personnel, and inventory records through the business and human resource offices supervised by the Park Business Manager. Park employees are engaged in the Maine.gov email system through the Maine Office of Information Technology (OIT) and the Park maintains policies regarding the appropriate use and management of email.

The Park administers an active and effective website that garnered between 20,000 and 30,000 hits per month during the summer months of its first year after launch in 2010. The website is hosted by INFORME (Inform Maine) and maintained by Park administrative team members working with a private website designer. The website is a primary access point for operation reports and information including the Park's annual report and special operational or planning reports, including this management plan.

The Park manages a robust computerized reservation system. A database holds information on Park visitors and active links are available through the Park's website to allow viewers to view current reservation status of sites throughout the Park. Visitors can make camping

reservations and Day Use Parking Reservations for Katahdin trailheads on-line with some limitations to duration and location of stay. Access is over the state network through a secure proxy arrangement between the BSP main server and the BSP website (hosted by INFORME). All Park reservations are administered through the Park's reservation office. The Park also is working to archive a substantial record of photographs in both original digital and scanned digital formats. This effort is discussed above in more detail in [section 5.3.6](#), Interpretative Tools Used in Baxter State Park.

7.8.2 Operational and Maintenance Data

The Park currently has a significant amount of data on Park facilities. Some of this data was expressed in related sections above and includes data on buildings, vehicles, equipment, and infrastructure such as roads, culverts, bridges and trails. Current technology available to the Park will enable the existing attribute datasets to be oriented spatially and integrated with the Park's GIS layers.

7.8.3 Recreational Use Data

The Park currently records and manages a significant amount of use data annually. This data includes camper and day user data collected continuously through the reservation system and in the field by gatehouse attendants and many field staff and reservation office personnel. The Park publishes much of this data annually such as the number of vehicles ([sec. 10.18](#)) and people ([sec. 10.19](#)) entering the Park, the hiking use on Park trails ([sec. 10.15](#)), and the number of camper-nights recorded ([sec. 10.14](#)). This has provided the Park with a rich record of Park use data available for application in the consideration of management issues and policy. The ability to link related data such as hiking trail use (now collected from field sign out sheets) with the relevant trail segments on the Park's GIS trails layer now exists.

7.8.4 Ecological Monitoring Data

The Park has substantial amounts of data, residing on Park computer servers and in other locations, regarding a wide range of ecological resources occurring within Park boundaries. Examples of these datasets include: rare, threatened and endangered species of plants and animals, water body and watershed conditions, forest cover types, vegetation above and below treeline. Data collected in the Park by various researchers exists in both electronic and hardcopy formats. Researchers and resource professionals continue to gather new data and add to existing datasets, in conjunction with both State-wide efforts and as singular efforts specific to the Park. As mentioned above, the SFMA has a substantial amount of forest structure, soil, wetland, wildlife, and harvest monitoring data. The maintenance of these datasets, administered through database systems enables efficient continued data accumulation and analysis. While much of the tabular data regarding SFMA resources has been integrated with spatial data, some monitoring data for other areas in the Park require additional manipulation before being integrated with spatial features.

7.8.4.1.1 Action

Refine existing datasets to a consistent format, to ensure that current and future data is collected in consistent formats and that as much data as possible is oriented spatially and linked with the Parks GIS system.

7.8.5 Data Distribution

As the amount of data gathered and assembled by the Park has increased, so have the requests from others for the use of this data. Requests have come from other State agencies seeking to broaden or refine existing datasets, from researchers evaluating existing resource data and condition, and from commercial entities seeking to use Park data for products such as maps and guides. Spatially oriented data such as the Park's trail, road and facilities layers often contain large amounts of attribute data not required by the requesting party, or incomplete or inaccurate data that is a work in progress.

7.8.5.1.1 Action

Develop simplified datasets and GIS layers and provide them to MEGIS (Maine Geographic Information Services) for posting on their public access data catalog.

In the event that a specific request is made for spatial or non-spatial data that requires the Park to commit significant time and effort to the preparation of the data for distribution, the Park will assess a reasonable fee to cover the costs incurred for any time and materials invested in meeting the request.

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8 Protecting the Public and Staff – Core Function 5

8.1 Public Safety

In general, the Park works to ensure that the visitor's sense of freedom and the spirit of wilderness shall be interfered with as little as possible, consistent with the Park's need to provide for reasonable public safety and emergency assistance. Emphasis will continue to be placed on resource protection and providing information, education and interpretive activities that make the visitor aware of the hazards of using an undeveloped area and their responsibility for their own safety, consistent with the degree of difficulty of the activity they are pursuing.

Baxter Park utilizes six commissioned Baxter Park Rangers (5 BSP Rangers and 1 Deputy Chief Ranger) to conduct public safety and law enforcement activities in the Park. The Park seeks to apply law enforcement powers to maintain a positive and constant presence in the park to inform, educate, and lastly, to regulate and enforce rules when needed.

In 2009, legislation was submitted at the request of Baxter State Park to decriminalize violations of Park Rules from a Class E crime to a civil penalty. This legislation was enacted and a violation of the Park Rules became a civil penalty in 2010, punishable by a fine of up to \$1,000. A typical fine for a violation of a Park Rule is \$200. This change improved the conviction rate for summonses issued by BSP Rangers and is expected to encourage visitors to more effectively read and comply with Park Rules.

The Baxter State Park Rules and Regulations ([sec. 10.33](#)) have been revised regularly since 1951. The last revision was in 2010. This revision introduced a new format dividing the Rules into 7 sections:

1. Camping
2. Hiking and Day Use
3. Hunting, Trapping and Fishing
4. Resource Protection and Wilderness Preservation
5. Vehicles and Transportation
6. Administration
7. Violations

The 2010 revision also clarified, simplified and streamlined the rules. Section 4.- Resource Protection and Wilderness Preservation remains the largest category in the Park Rules and Regulations.

Sworn BSP Law Enforcement Rangers have wide ranging, state-wide powers of law enforcement equal to a Game Warden. BSP Rangers participate in required annual training as mandated by the Maine Criminal Justice Academy. The Park provides written law enforcement and standard operating procedures through a Baxter State Park Law Enforcement Manual and a Duty Officer Manual. In 2010, Baxter State Park Rangers issued

26 summons ([sec. 10.22](#)) and 62 warnings ([sec. 10.23](#)). Approximately one third of the issued summons in 2010 were for speeding violations with the remaining two thirds for fish and game violations and various infractions of Park Rules. Law Enforcement Rangers in Baxter Park generally apply the force of the summons only if and when information, education and warnings have not been effective.

The Park has implemented a number of distinct information reporting and advisory protocols available on a daily basis to inform visitors of natural conditions that merit special attention or could prove hazardous.

The Park reports the weather daily to Park Headquarters, each Ranger Station and both Gatehouses. The weather is posted at the Ranger Stations and Gatehouses so hikers, campers and other visitors can check the expected weather and conditions and make more informed plans for their activities in the Park.

The Park regularly posts trail conditions and weather alerts on its website and during daily Park radio announcements. The Park's policy is to keep trails open to the public unless, in the judgment of Park staff members, truly dangerous conditions exist, or if conditions pose a significant threat to resource protection. Typical examples of dangerous conditions prompting trail closure would be a rime ice coating of rock and ground surfaces on steep mountain trails around Katahdin or the Traveler Loop when hikers would likely be equipped only for summer condition hiking and climbing or dangerously high water conditions at unbridged stream crossings on the Russell Pond Trail or Wassataquiok Stream Trail between Roaring Brook and Russell Pond. In the spring and occasionally in the fall, Park trails above treeline on Katahdin may be closed to protect the trail treadway and adjacent fragile alpine communities when soils are softened by a daily freeze-thaw cycle.

In addition to the daily trail condition updates, the Park also issues Heat Index Warnings ([sec. 11.44](#)) to hikers when temperature and humidity on Park trails suggests that heat exhaustion and heat stroke are of specific concern. In the winter, the Park will issue wind-chill warnings to hikers and climbers traveling out of Chimney Pond.

8.2 Wildland Fire Management

To address the concern for wildfire in the Park, the Park has worked with the Maine Forest Service to develop a Baxter State Park Fire Plan (see separate website posting). The Plan is reviewed every five years. The Park also works closely with the Maine Forest Service during the spring, summer and fall, to track and monitor fuel moisture and calculated burning indexes in the Park. The Park maintains fire equipment at each campground including pumps and hose lengths to enable Park staff to engage any discovered fire with water from a nearby source. This equipment is tested yearly and park staff members receive training in the use and maintenance of the equipment.

When the burning index indicates that a high potential exists for escaped or untended fires to spread quickly to uncontrollable sizes, the Park works closely and cooperatively with Maine Forest Service personnel to determine appropriate steps the Park should take to reduce the risk of escaped fire. Some examples of steps the Park would take to address high fire danger would be to restrict or ban open campfires in any of the backcountry sites, or to restrict access to forest management roads in the SFMA.

8.3 Emergency Management Planning

The Park is currently working to develop a large scale Emergency Management Plan to determine the necessary steps, resources and procedures to follow in the event that a significant natural or human-caused disturbance substantially impaired travel or safety in the Park. Significant natural events include severe windstorms, unexpected and heavy autumn snow and ice storms, and severe rain events resulting in the washout of roads over streams. The Emergency Management Plan will include protocols for evacuation of employees and visitors, medical assistance, resource protection, restoration of access routes and equipment and personnel source lists.

8.3.1.1.1 Action

Complete an Emergency Management Plan to formalize the process, steps and communications that would occur in the event of a large scale incident such as a major forest fire, hurricane or tornado, serious flooding or a variety of other scenarios.

Lastly, the Park maintains an active and robust website. This site contains a depth and variety of information aimed at helping Park visitors have a more enjoyable and safer visit to the Park while having a minimal impact on Park resources.

8.4 Search and Rescue

The Search and Rescue function is administered through the Chief Ranger working with Law Enforcement Rangers and seasonal field staff. Guidance and protocol for search and rescue is provided in the Park's Standard Operating Procedures Manual and the Duty Officer Manual.

The rugged terrain and changeable weather of the Park's environment, coupled with the sometimes poor decisions and unpreparedness exhibited by Park visitors, contribute to an average of 25-40 recorded incidents per year. Since 1998, the majority of these incidents have been self evacuations (45/year), but many visitors are "benighted"⁹¹ (20/year) or exhausted (10/year), or out of food or water (7/year). A smaller number require longer and larger search or evacuation team organization and/or air assist evacuations. Cooperators in air assist evacuations are the 126th Army National Guard Medivac Unit out of Bangor, and the Maine Forest Service. Since 1998 the Park has averaged 1 litter evacuation and 3 helicopter evacuations per year. Significant and lengthy searches are much less common than rescues

⁹¹ Unable to travel on Park trails after dark due to the lack of a flashlight, headlamp or other illumination device

or assistance, but the Park has had a number of significant searches in its history. If a lost or missing person is not found in a short period of time, modern search protocol requires a substantial and rapid expansion of personnel and expertise to conduct a wide area search. This protocol is beyond the Park's capacity to execute, and the Park relies on a continuing Memorandum of Understanding with Maine's Inland Fisheries and Wildlife ([MOU text- sec. 11.43](#)). The MOU specifies mutual reporting and training obligations and details a five step sequence in SAR including a hand-off of SAR responsibilities to IF&W if the Park is not successful in resolving the SAR incident in 48 hours.

Park statistical data on search and rescue indicates clearly that the most common first responder to injuries and incidents in the Park is a Park staff member. In backcountry locations such as Chimney Pond and Russell Pond where assistance can often take several hours or more, consequently, these backcountry rangers are considered a single source in incident management resource. Accordingly, the Park has developed a Medical Training Plan to administer the training of Park employees and to provide written protocols for the administration of first aid by Park staff members in the Park ([MTP text – sec 11.45](#)). This training includes CPR, Wilderness First Aid (WFA) and Wilderness Advanced First Aid (WAFA) and Wilderness First Responder (WFR). Protocols described in the Plan include anaphylaxis, wound management, cardiopulmonary resuscitation, spine injuries, joint dislocations, and severe asthma. Employees are trained to the level appropriate for their duty station (frontcountry or backcountry) and responsibility level. The Park has entered into an agreement with Dr. Steven Diaz of Maine General Medical Center to provide services as Medical Director. As Medical Director, Dr. Diaz provides oversight on the medical training program and the specifics of the written protocols included in the Plan.

8.4.1.1.1 Action

Review and refine the Medical Training Plan to improve the training and application of emergency medical services in the Park.

First aid equipment and gear and supplies are maintained by the Park at administrative and ranger stations throughout the Park. Individual staff members working in the Park are provided first aid kits for vehicles and backpacks. The equipment, gear and supplies stored at different locations at the Park are often inconsistent in content, storage place and arrangement.

8.4.1.1.2 Action

Standardize ranger camp and other frontcountry first aid and rescue equipment and supply sets to facilitate rapid location and inventory of first aid supplies by any available park staff members.

8.5 Volunteer Search and Rescue Associations

Some incidents in the Park require large numbers of people to effectively resolve. Examples include extended searches where Park staff has been unable to locate an individual or group for 24 hours or more, and litter evacuations over steep terrain or more than 2 miles from a trailhead. In these and other instances, the Park draws on a community of volunteer Maine Search and Rescue groups. Volunteer SAR groups include personnel with a wide range of

training and experience – from novice to very experienced individuals with steep terrain rope and rigging skills, high levels of medical training and trained search-dog teams. Many of these groups hold training sessions in the Park at least once per year. Maine search and rescue groups are organized under an umbrella organization: Maine Search and Rescue (MESAR). The Park's Chief and Deputy Chief Ranger attend MESAR meetings whenever possible.

8.6 Fatalities

According to Park records, more than 70 people have died in the Park. Cardiac events or other sudden and serious medical conditions are two to three times more likely (28%) to be the cause of a fatality in the Park than other prominent causes such as drowning (8%), exposure (10%), injuries sustained from falls (8%) and sadly, suicides (7%). In part due to the large role cardiac events have played in the Park's record of fatalities, Automated External Defibrillators (AED) have been installed at each of the Park's 10 organized campgrounds, including the backcountry campgrounds at Russell Pond and Chimney Pond. A substantial portion of the information distributed by the Park is aimed at giving Park visitors the necessary information to avoid becoming one of these unfortunate statistics. While we hope we never have another fatality in the Park, experience suggests that we will. Fatalities are difficult events for all involved, including families, companions, other Park visitors and often, Park staff. The Park and the Maine Attorney General's office have implemented specific protocols for secure sites and investigations in the event of a fatality. In addition, the Park has developed a post incident debriefing protocol for any staff involved as a first responder or assisting in the evacuation of a fatality in the Park.

8.7 Employee Safety

The Park is committed to fostering a culture of safety awareness in the Park. The Standard Operating Procedures Manual for Baxter State Park includes a number of safety policies and procedural guidelines to help ensure safety in the workplace. These policies include policies and procedures for Park employees regarding:

- Office Safety
- Vehicle Safety
- Pets in the Workplace
- Snowmobile Safety
- Building Safety
- Ground Safety Procedures for Personnel working near or with a Blackhawk Helicopter
- The Use of Safety Equipment
- The Use of Chainsaws
 - Includes a policy for employees and a policy for volunteers.
- The Use of Woodsplitters
- The Use of Heavy Equipment
- Bloodborne Pathogens

In addition to published policies distributed to staff members, all Park personnel meet monthly during the winter months to discuss Park operations, policy issues and pertinent safety issues such as ice safety, hypothermia, use and care of cutting instruments and treatments and care

protocols for various typical first aid scenarios. During the summer months, Supervisory Rangers work regularly with staff members regarding safety briefings and concerns.

9 Managing Fiscal Resources – Core Function 6

9.1 Revenue Sources

Baxter State Park is classified as a quasi-state agency, and operates from revenues acquired through a combination of sources:

- Park Trust Fund Revenues
- Fees for Camping
- Forest Products Revenue from the SFMA
- Non-Resident Entrance Fees
- Miscellaneous Sources

9.1.1 Park Trust Fund Revenues

Revenues from endowments provide approximately 65% of the Park's annual operating revenues. Percival Baxter left two trust funds totaling about 11 million dollars, which became available after his death in 1969. Baxter left the principal fund, the Baxter Trust, to his family bank, the Boston Safe and Deposit Company. Boston Safe was eventually acquired by Mellon Bank, which has since been acquired by the Bank of New York. Baxter specified that revenue generated by this fund be delivered to the Authority for use in the care and maintenance of Baxter State Park. Since 1970, unused revenue has been deposited in a second fund, the Investment Management Fund. This fund is managed by Bank of New York Mellon together with the larger Baxter Trust. Baxter left a third trust fund to the State of Maine. This fund is managed by the State Treasurer along with several other State of Maine trust funds by contracting management services to several fund managers.

The revenues from the Park trust funds have contributed roughly two thirds of the total annual revenues needed to operate the Park, consequently, the effective long-term management and stewardship of the Park Trusts is vitally important. The management of the funds is also very complex and the Park is assisted in this effort by an Investment Committee consisting of knowledgeable experts. The Investment Committee is guided by an Investment Policy Statement ([IPS - sec. 10.56](#)) which defines the principal objectives and parameters of management of the Park trusts. In general, the Park seeks to identify a long-term sustainable income flow from the trust funds that grows at a rate equal to or better than inflation. This means that the Park seeks to manage the trusts at a long-term performance level sufficient to provide annual income to the Park and still maintain value after inflation. To gauge this performance over time, the Park uses a Stewardship Index ([sec. 10.58](#)).

9.1.1.1.1 Action

Continue to work closely with the Investment Committee and fund managers to revise and refine the Investment Policy Statement to better ensure effective and stable long-term revenue from Park trust funds.

9.1.2 Fees for Camping

Fees assessed for camping in the Park provide approximately 20% of the Park's annual operating revenues. The Park assesses reasonable fees for camping in the Park while recognizing the important role that camping fees play in supporting Park operations. The Park uses a fee review protocol to assess fee rates every two years ([full protocol- sec. 10.42](#)). The protocol reviews fees against objective indices such as the change in average per capital wages in Maine, the Consumer Price Index (CPI) and rates charged by other entities for comparative facilities in the region. The fee review protocol was most recently implemented in 2009. While no fee increase or decrease was recommended in this review, the review did include a recommendation for a change in the structure that fees are assessed – from a per-person rate to a per-site rate for the rental of Park camping sites and facilities. This change was enacted in 2010, simplifying the Park reservation pricing structure and allowing the Park to move forward toward providing on-line reservation capabilities for Park visitors. In late 2010, the Park Authority approved a recommendation to reduce the rate for backcountry sites from \$30 per night to \$20 per night to bring the rates more in line with rates charged by other entities for comparative facilities in the region. Although subject to significant impacts from weather, travel costs and other factors, fees for camping will continue to provide an important segment of the Park's revenue stream into the future.

9.1.3 Forest Products Revenue from the SFMA

Revenues from the sale of forest products from the SFMA provide approximately 9% of the Parks annual operating revenues. The SFMA operates through a separate enterprise account and harvests and sells approximately 8,000 cord-equivalents of product per year, grossing around \$1,000,000 in wood products sales. After payments to contractor(s) for harvesting and trucking services, the net profits from wood sales are deposited in the Park's operating fund in May of each year.

Percival Baxter established the SFMA to provide ...*"a show place for those interested in forestry, a place where a continuing timber crop can be cultivated, harvested and sold; where reforestation and scientific cutting will be employed; an example and an inspiration to others. What is done in our forests today will help or harm the generations who follow us."*⁹² Although harvesting and wood products revenues are an important part of SMFA management, it is important to remember that they represent only one outcome of the active long-term management of a complex system with many other outcomes, including, but not limited to, clean water and air, protection of soil resources

⁹² *Baxter Communications (1955) to Governor Muskie; Senate and House of Representatives, 97th Legislature*

and wildlife habitat, recreation and carbon storage. Decisions on harvest areas, products and volumes are always considered in the complexity of the SFMA as a living landscape. Wood product prices are subject to pressures from local, and now global, forest product markets. Consequently, volumes and products can and will vary from year to year in the SFMA as management continues to remain focused on the management objectives as expressed by Percival Baxter.

9.1.4 Non-Resident Entrance Fees

Entrance fees assessed to non- Maine residents provide approximately 3% of the Park's annual operating revenues. The Park currently charges \$14 for non-resident vehicles to enter the Park. This fee is adjusted along with camping fees, based on the outcome of the Fee Review Protocol ([sec. 10.42](#)). Unlike the State Park system, Baxter Park does not assess a differential fee for camping based on residence status – in part this is due to the fee assessed non-residents to enter the Park. *No fee is assessed for Maine residents to enter the Park and the Park should take all practicable measures to extend this practice in perpetuity.*

9.1.5 Miscellaneous Revenues

Executive Order 28 FY08/09 ([sec. 10.53](#)) empowers “*the Baxter State Park Authority to accept any and all gifts and bequests to Baxter State Park so long as any such gift or bequest is made without encumbrances, stipulations, conditions or qualifications.*” In addition to the four primary revenue sources discussed above, the Park is assisted by unrestricted donations from the [Baxter Park Wilderness Fund](#), a private trust formed in 2007. The BPWT provided \$85,000 in the form of unrestricted donations to the Park's 2011 fiscal year budget. The Park also receives financial support from the [Friends of Baxter Park](#) – a private non-profit advocacy group. The FBSP have provided unrestricted donations and significant assistance toward trail maintenance in the form of the support of contract trail crews through direct support and grant assistance. Lastly, the Park receives regular small donations ranging from ten to several thousands of dollars each year from Park visitors.

Small donations are added to a donation fund that the Park uses to purchase needed, but unbudgeted equipment, supplies and services. Search and rescue equipment and training, trail maintenance equipment, picnic and group shelters, canoes and contracted trail maintenance work are examples of typical expenditures from the donation account. Unrestricted donations over \$1,000 must be formally accepted by the Baxter State Park Authority. The Park provides a list of donors and donations to the Authority and the Governor each year in accordance with guidance specified in Executive Order 28 FY08/09.

Other miscellaneous revenues include fees assessed for the sale of fishing licenses, sale of Park vehicles and other equipment and interest income derived from cash the Park deposits in the State Pool account prior to use in operations. Miscellaneous revenues provide approximately 3% of the Park's annual operating revenues

9.2 Economic Impact of the Park

The Park has been a significant recreation destination and a stable employer in the region for at least four decades and has an important impact on the economy of the Millinocket region. In 2007, the Park conducted an economic impact study aimed at determining the economic impacts of the Park on Maine and the local region around the Park⁹³. The Maine State Planning Office provided critical assistance in developing the results from the survey data and released a summary statement on the survey:

Economic Impact of Spending by Visitors to Baxter State Park

Maine State Planning Office, August 1, 2008

During the summer of 2007, Baxter State Park Authority conducted a survey that estimated spending by visitors to the park. Survey respondents reported how much they spent during their visit and en route to the park. The table below estimates the economic activity supported in Maine by visitors to Baxter State Park. The estimates were developed using the U.S. Bureau of Economic Analysis's RIMS II input-output model.

The "economic impact" of spending by visitors to Baxter State Park essentially refers to the amount of new money they added to a state's economy. "New money" means money that would not have entered the state's economy but for their visit to the park. It is not a measure of total spending by all visitors to Baxter. It includes spending by non-residents, either on day or overnight trips, and by Maine residents on overnight trips. It does not include spending by Maine residents on in-state day trips. It includes the ripple effect of increased demand for goods and services experienced by other Maine businesses.

Based on the survey conducted by the park authority, out-of-state visitors and Maine overnight visitors spent an estimated \$3.8 million⁹⁴ on goods and services in Maine. That spending supported an additional \$3.1 million in indirect spending by local businesses and households. Therefore, the total economic activity in Maine generated by visitors to Baxter State Park was \$6.9 million, sustaining the equivalent of 87 full-time jobs and \$2 million in household earnings.

Table 1: Baxter State Park: Impact on Economic Activity, Earnings, and Employment in Maine

Direct Economic Impact		Total Economic Impact (Direct + Indirect)		
Economic Activity (millions)	Economic Activity (millions)	Earnings (millions)	Jobs (FTE)	
\$3.8	\$6.9	\$2.0	87	

DISCLAIMER

⁹³ The full study is posted on the Park website: <http://www.baxterstateparkauthority.com/other/otherReports.html>

⁹⁴ Following the logic of the initial study, total spending was derived by multiplying survey spending by .79, representing the percent of respondents who indicated Baxter was their primary destination, and dividing by .127, representing the percent of survey visitors to total park visitors. Spending for Maine overnight visitors was derived from spending for all Maine visitors by multiplying by .307, representing the percentage of Maine visitors who were overnight visitors in 2007, as measured by gatehouse and reservation statistics.

9.2.1.1.1 Action

Repeat the Economic Impact Survey by 2020 to assess any changes in the Park's local and state-wide economic impact.

9.3 Budget Process

The Park is included in the Bureau of Budget annual budget process and follows the timelines and submission dates provided by the BOB regarding fiscal year annual work programs. Park employees are part of the Maine employee system and participate in insurance and retirement plans similar to other State employees. The Park operates consistent with the State Budget process on a July 1 – June 30 fiscal year and employs a staged process to develop the annual budget:

1. The Park begins to develop the fiscal year budget six months prior to the start of the fiscal year with the development of estimated revenues.
2. The Administrative team combines project, staffing and capital proposals for the coming fiscal year and a draft expenditure budget is prepared by the Director and Business Manager and compared to the estimated revenues.
3. If necessary, the administrative team makes adjustments and modifications to the expenditure budget until it is within the projected revenue budget.
4. The resulting draft budget is presented to the Advisory committee for comment and discussion and additional modifications are made as warranted.
5. The final annual budget is presented to the Baxter State Park Authority at the May meeting.
6. The approved fiscal year budget numbers are provided to the Bureau of Budget.

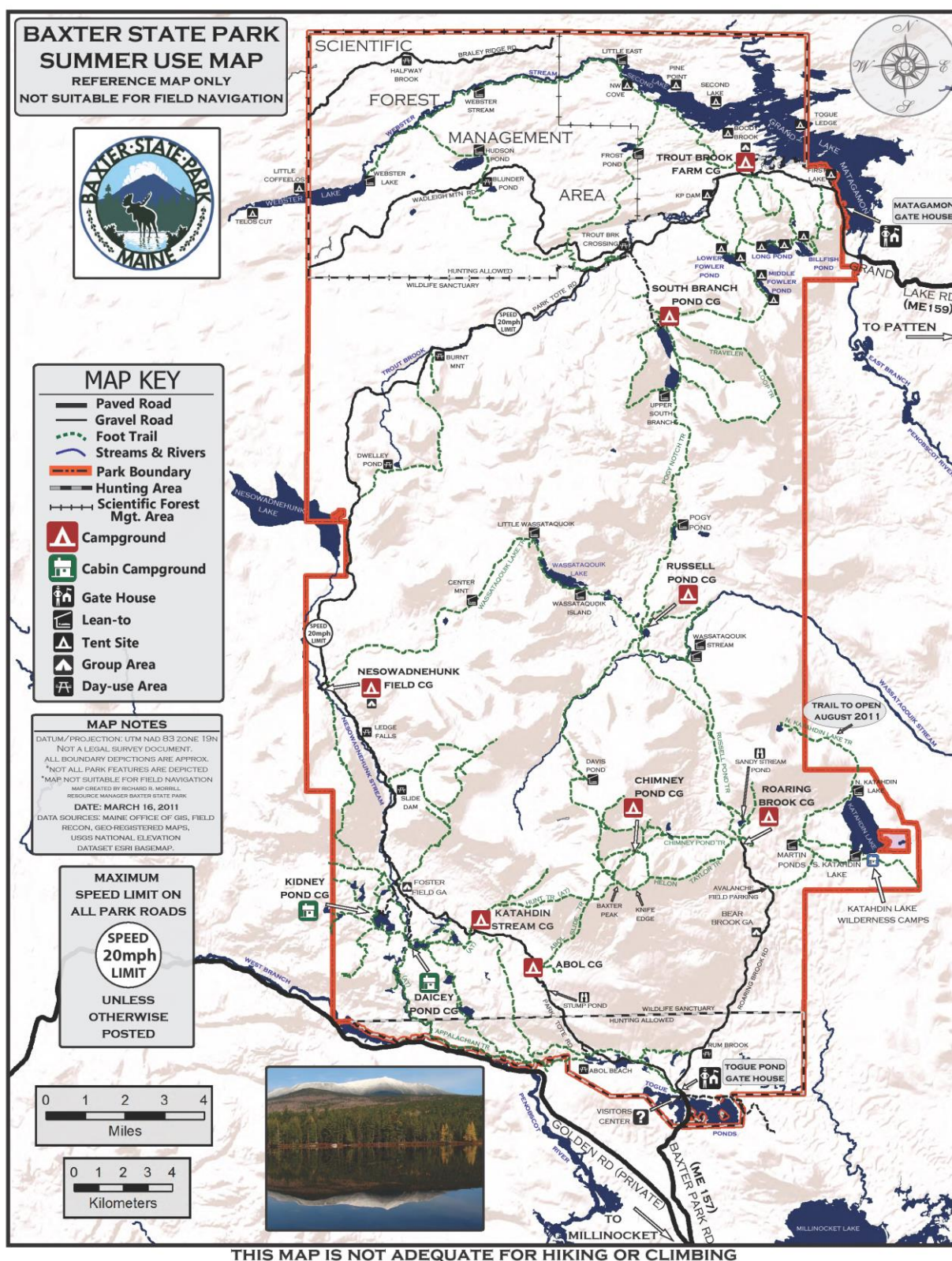
9.4 Financial Audits

The Park schedules regular system audits with auditors provided by the Maine State Auditor's office. The most recent audit ([2010 audit report- sec. 10.59](#)) was performed during 2010 and covered principally the areas of Park financial administration involving inventories, cash receipts, account payables and reservations.

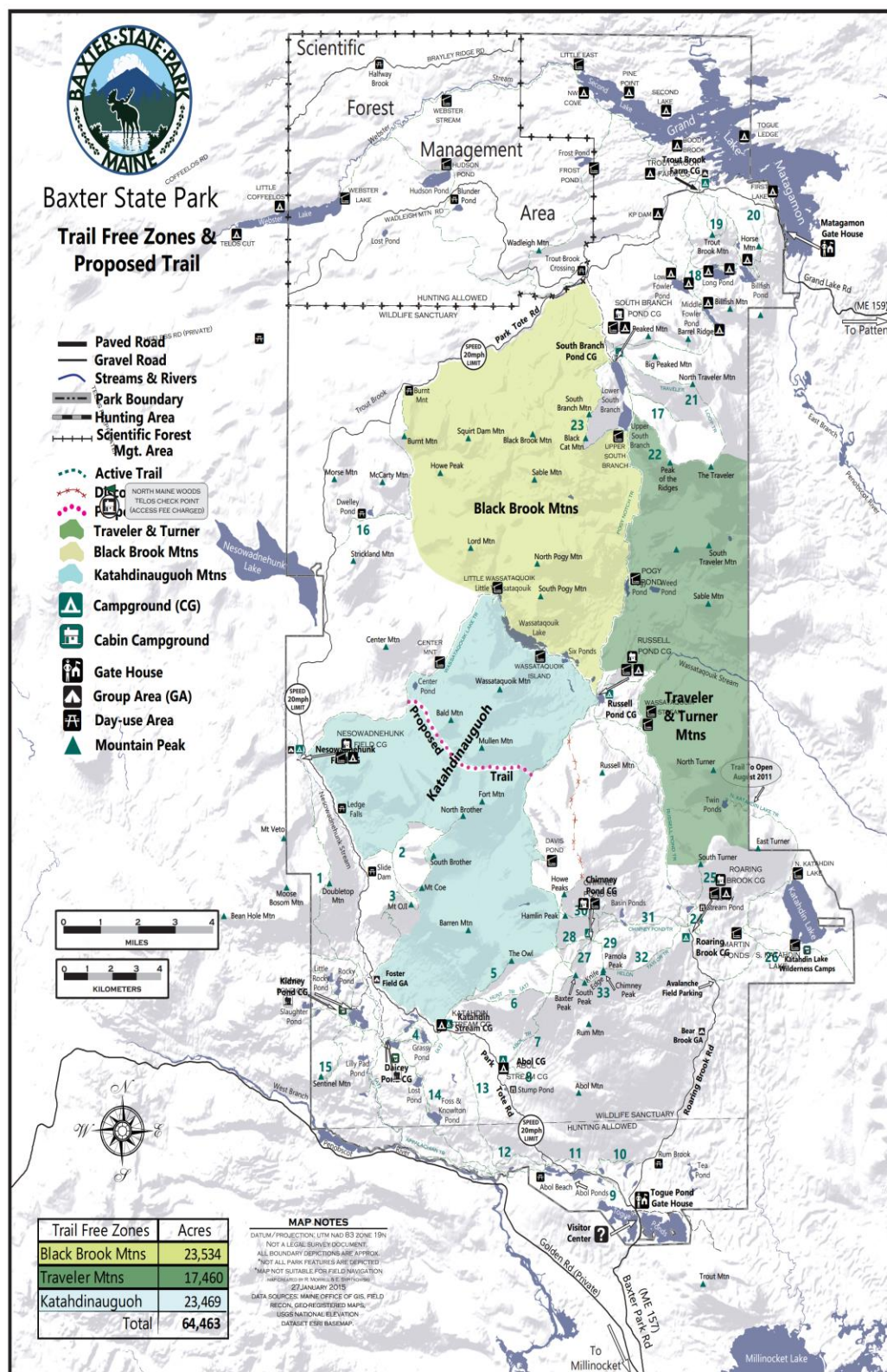
9.4.1.1.1 Action

Ensure appropriate financial controls and oversight through regularly scheduled audits covering rotating areas of Park operations.

10.1 Park Facilities Map



10.2 Park Trail Free Zones and Backcountry Trail Proposal Map

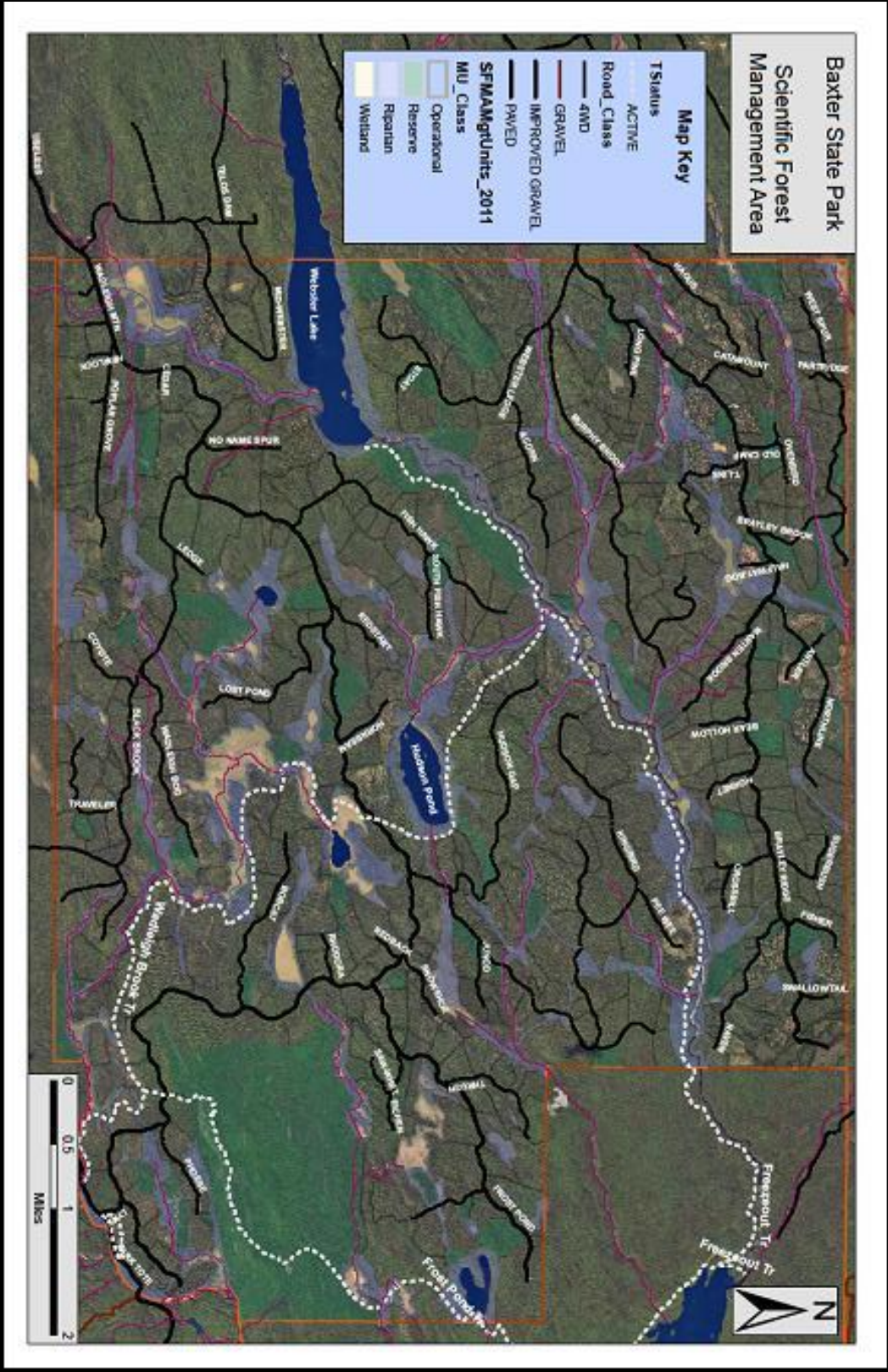


Baxter State Park
Scientific Forest Management Area

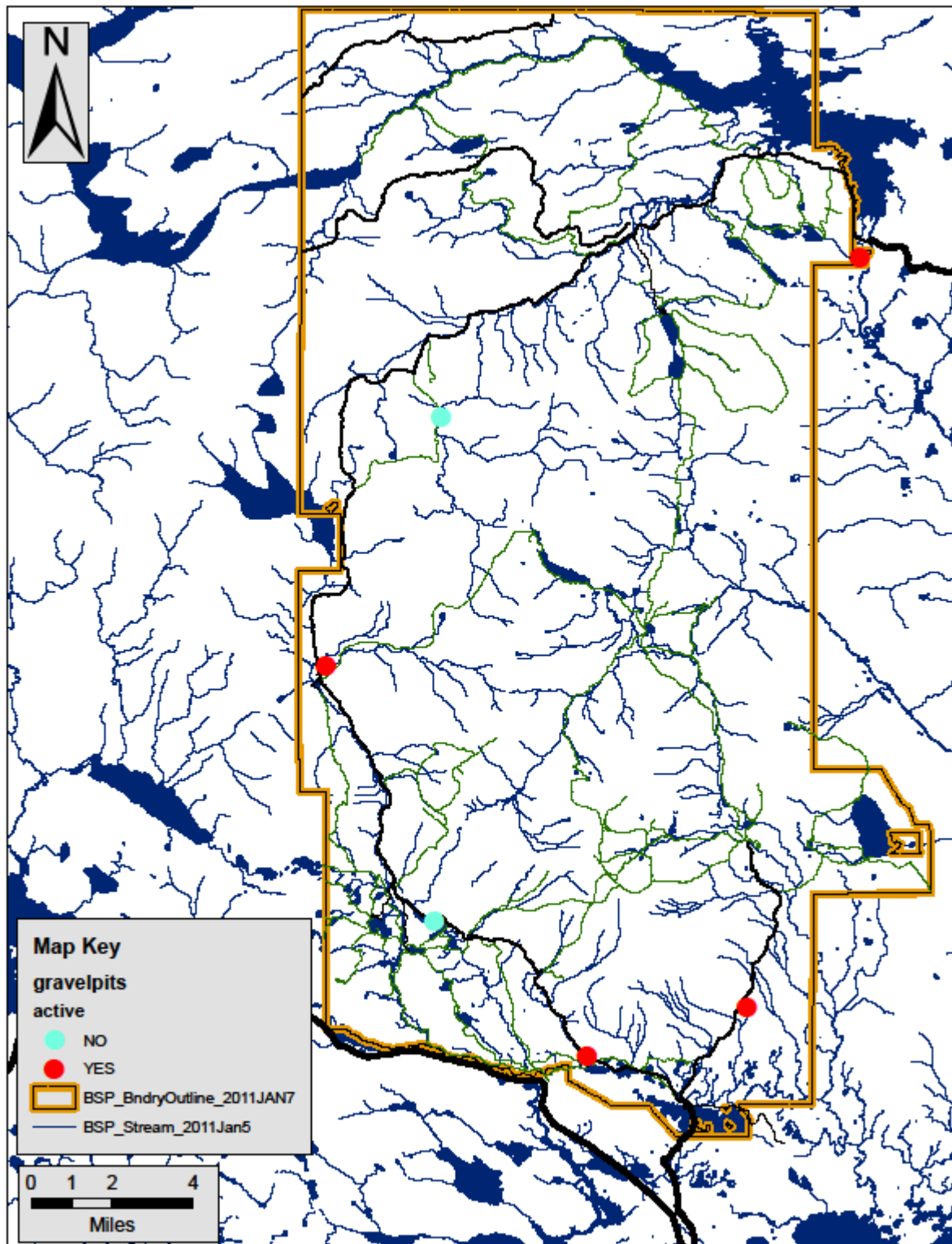
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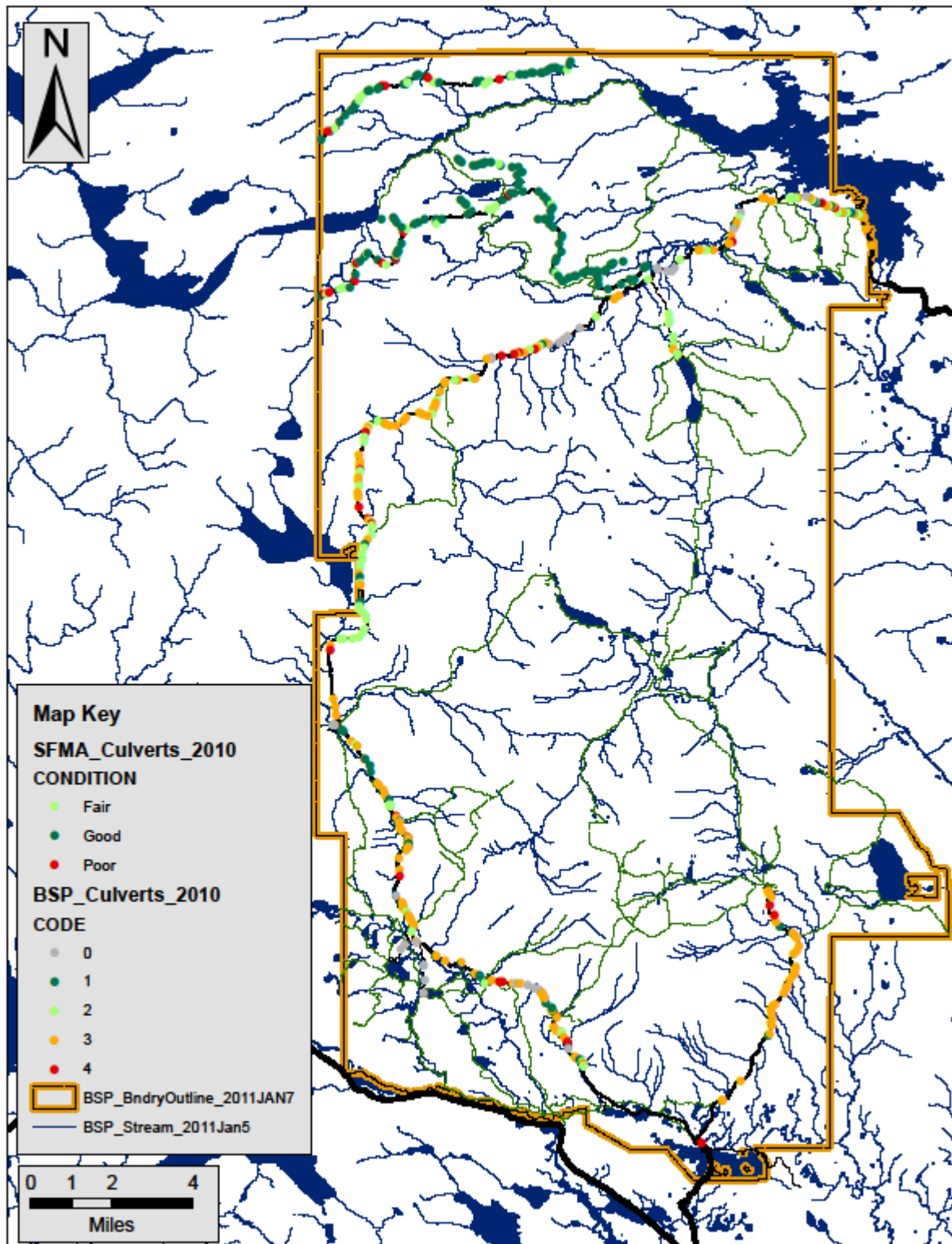
10.4 SFMA Operational Map



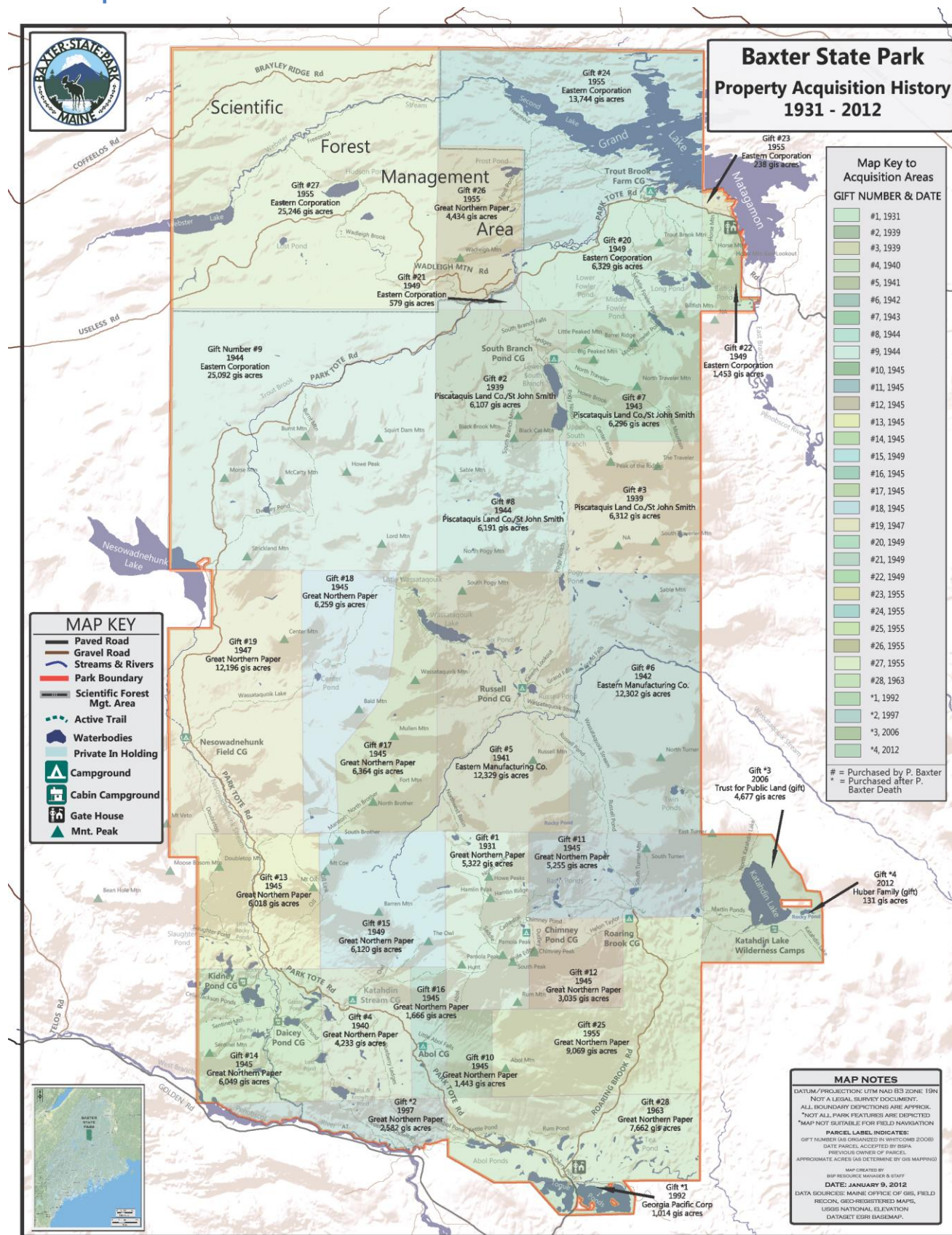
10.5 Baxter State Park Gravel Source Map



10.6 Baxter State Park Culvert Map

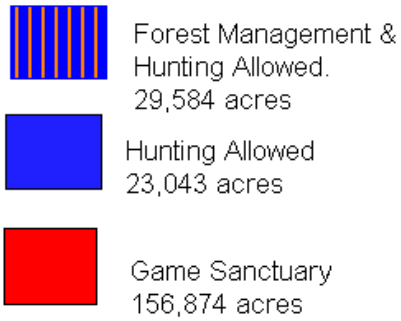


10.7 Acquisition Record

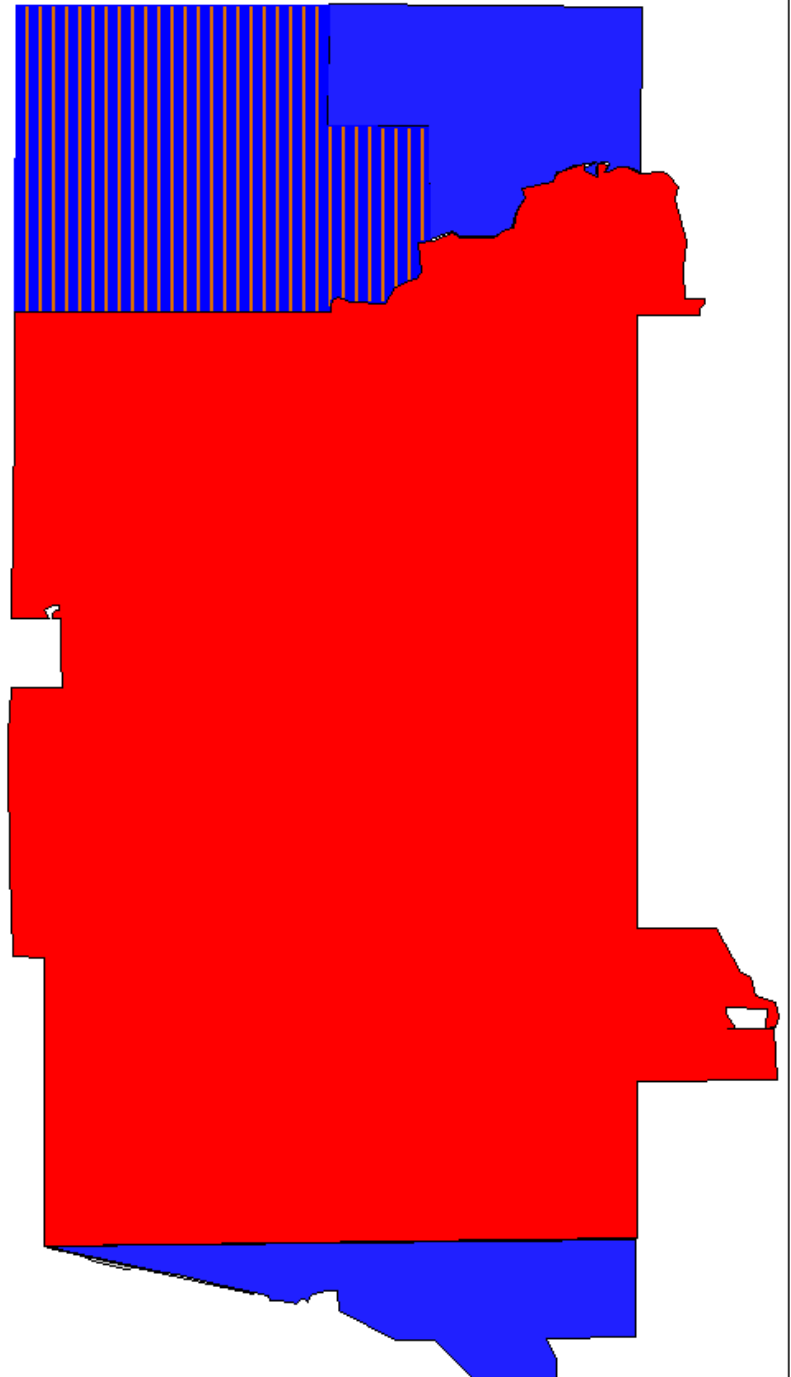


10.8 Park Use Zones

BSP USE ZONE LEGEND



Total Acres: 209,501



Title 12: CONSERVATION

Part 2: FORESTS, PARKS, LAKES AND RIVERS

Chapter 211: STATE PARKS

Subchapter 3: BAXTER STATE PARK

§901. Designation; payments to forestry district

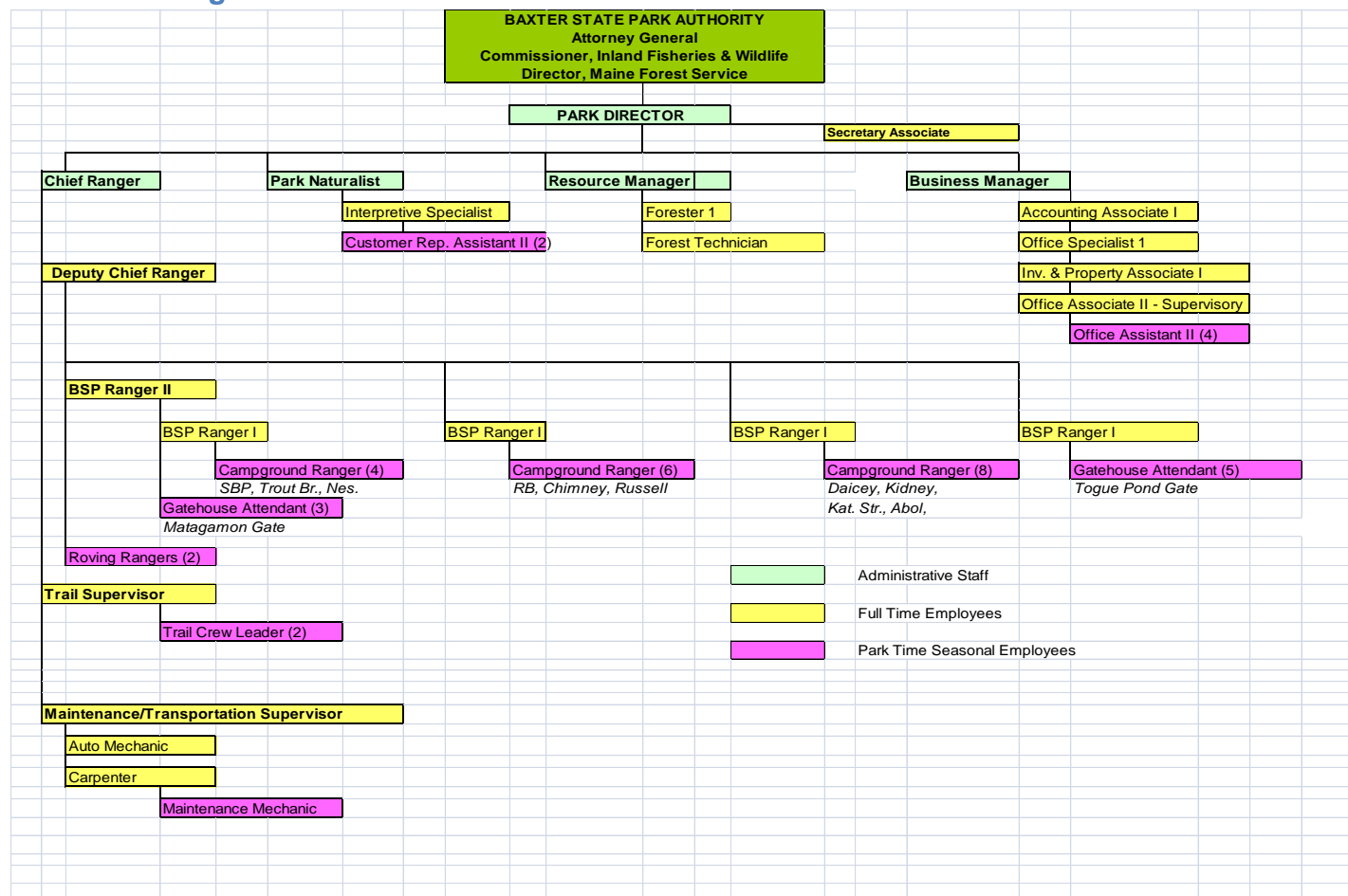
All the lands in Townships 2, 3, 4, 5 and 6, Range 9 W.E.L.S. and in Townships 3, 4, 5 and 6, Range 10 W.E.L.S., Piscataquis County, and Township 6, Range 8 W.E.L.S., Penobscot County, that have been donated and conveyed to the State in trust by Percival Proctor Baxter and all lands in the Townships 2, 3, 4, 5 and 6, Range 9 and in Townships 3, 4, 5 and 6, Range 10, and in Township 6, Range 8 and all lands in Piscataquis and Penobscot Counties that hereafter shall be donated and conveyed to the State by Percival Proctor Baxter in trust for state forest, public park and public recreational purposes are named and shall hereafter be named "Baxter State Park" in honor of the donor, and the same hereafter shall forever be so designated on the official maps and records of the State. They shall be under the joint supervision and control of, and shall be administered by the Director of the Bureau of Forestry, the Commissioner of Inland Fisheries and Wildlife and the Attorney General, and the commissioner, director and Attorney General shall have full power in the control and management of the same, under the title of Baxter State Park Authority, as authorized by Title 5, section 12004-G, subsection 11. The authority shall receive moneys available from trust funds established by the donor of the park and shall include fees collected, income from park trust funds invested by the Treasurer of State and other miscellaneous income derived from the park for maintenance and operation of the park. [1989, c. 503, Pt. B, §56 (AMD).]

The authority is further designated the agency of the State to receive such sums as are, from time to time, paid to the State by the trustee under clause THIRD of a certain inter vivos trust dated July 6, 1927, as from time to time amended, created by said Baxter for the purchase or other acquisition of additional land for said Baxter State Park, and for the purchase of other lands for recreational or reforestation purposes, and the authority is authorized to expend such sums so received for such purposes and shall hold and use such lands as specified in the trust. [1985, c. 107, §2 (AMD).]

SECTION HISTORY

1965, c. 226, §17 (RPR). 1967, c. 504, (AMD). 1969, c. 557, §3 (AMD). 1971, c. 477, §2 (AMD). 1973, c. 87, (AMD). 1973, c. 460, §18 (AMD). 1975, c. 497, §3 (AMD). 1983, c. 556, §3 (AMD). 1983, c. 812, §77 (AMD). 1985, c. 107, §2 (AMD). 1989, c. 503, §B56 (AMD).

10.10 BSP Organization Chart - 2010



10.11 Baxter State Park Use Statistics

Baxter State Park Statistics

Year	# of People					Vehicles	Visitor Days
	Resident	Non-resident	Total People	Day Users	Campers		
1972	42,998	48,159	91,157	68,678	22,479	30,132	129,661
1973	47,502	51,549	99,051	72,201	26,850	31,807	135,438
1974	42,737	38,685	81,422	59,171	22,251	26,298	107,487
1975	39,052	29,799	68,851	49,767	19,084	23,538	101,951
1976	36,926	28,364	65,290	44,999	20,291	20,784	101,293
1977	36,169	22,552	58,721	40,560	18,161	19,444	100,539
1978	49,419	27,491	76,910	55,534	21,376	24,955	128,829
1979	40,836	23,092	63,928	42,636	21,292	20,779	117,530
1980	45,012	25,474	70,486	47,568	22,918	22,894	127,962
1981	44,914	25,373	70,287	44,781	25,506	25,963	132,332
1982	49,518	26,613	76,131	52,752	23,379	25,062	134,281
1983	43,825	25,680	69,505	47,935	21,570	23,118	128,389
1984	47,564	22,611	70,175	50,630	19,545	23,642	126,532
1985	46,321	26,492	72,813	51,114	21,699	24,966	130,843
1986	49,459	25,579	75,038	53,856	21,182	26,674	130,003
1987	50,612	31,415	82,027	58,993	23,034	29,348	143,090
1988	46,908	30,679	77,587	54,710	22,877	27,498	141,608
1989	50,440	30,194	80,634	55,765	24,869	28,476	147,562
1990	46,913	30,622	77,535	54,330	23,205	27,381	144,253
1991	47,306	32,028	79,334	54,579	24,755	28,191	147,481
1992	48,110	34,417	82,527	58,330	24,197	32,546	156,487
1993	49,673	33,419	83,092	58,584	24,508	32,950	154,001
1994	47,918	32,619	80,537	57,175	23,362	31,337	148,272
1995	48,361	34,783	83,144	57,648	25,496	33,954	153,941
1996	43,658	33,925	77,583	53,221	24,362	31,770	146,370
1997	41,722	32,968	74,690	51,973	22,717	31,923	137,674
1998	42,431	34,632	77,063	53,374	23,689	32,042	141,719
1999	42,569	34,714	77,283	54,014	23,269	29,705	141,060
2000	39,903	34,818	74,721	51,721	23,000	27,024	137,994
2001	40,940	31,975	72,915	51,057	21,858	26,883	134,618
2002	38,428	33,226	71,654	49,437	22,217	26,604	133,227
2003	36,027	28,688	64,715	44,433	20,282	24,952	122,630
2004	35,483	28,057	63,540	43,345	20,195	24,281	119,597
2005*	31,972	24,095	56,067	38,515	17,552	21,155	105,250
2006	33,402	25,014	58,416	39,720	18,455	22,582	106,449
2007	34,874	25,850	60,724	41,612	18,941	20,822	109,424
2008	31,577	23,862	55,439	37,506	17,808	20,724	109,285
2009	34,992	24,869	59,861	40,096	19,599	22,425	107,988
2010	36,717	26,904	63,621	42,913	20,577	22,162	
	42,646	30,289	72,935	50,903	22,010	26,328	129,554
	58.5%	41.5%		69.8%	30.2%		

* In 2005, a late spring delayed trail and campground openings for up to 2 weeks.
 visitor day = camper nights + gatehouse headcount (A visitor staying in the park two nights would spend three days in the Park. Camper nights counts the nights in the Park, gatehouse headcount adds the extra camper day plus includes day users.)

10.12 Figure 10-12010 Reservation Office Statistics

RESERVATION OFFICE STATS - 2010 SEASON														
	Site Nights	Adults	Junior	Child	Counter Reservations	Mail Reservations	Radio Reservations	Telephone Reservations	Winter Reservations	Telephone Calls	Office Visitors	Mail Received	Information Packets Sent	Videos Shown
Jan	538	538	0	0	98	71	0	0	41	300	100	95	30	0
February	1442	1442	0	0	13	165	0	0	19	350	220	184	15	10
March	1189	1185	4	0	26	498	0	0	9	415	300	581	14	15
April	0	0	0	0	33	845	0	0	0	772	100	900	15	13
May	2461	2131	300	33	55	775	20	111	0	900	102	800	10	10
June	8544	7641	750	153	85	580	59	399	0	1700	130	620	7	12
July	18637	14400	3726	511	62	464	83	523	0	1850	400	500	15	20
August	22018	17858	3623	537	83	385	111	493	0	1700	300	400	7	50
September	12235	11388	720	127	44	172	89	398	0	1320	220	200	12	30
October	4527	4313	144	70	16	9	40	120	0	250	40	20	2	2
November	0	0	0	0	28	54	0	0	82	277	81	70	12	2
December	127	127	0	0	0	24	0	0	24	200	45	35	10	0
TOTALS	71718	61023	9267	1431	543	4042	402	2044	175	10034	2038	4405	149	164

OFFICE VISITORS INCREASE DUE TO CENSUS

10.13 BSP Camper-Night Summary – 2010

BAXTER STATE PARK Camper Night Summary, 2010																	
TOTAL CAMPER NIGHTS (Summer)				50,902				% OF SUMMER				% OF WINTER CAMP-				%	
TOTAL CAMPERS (Summer)				20,755				SUMMER CAMPER				WINTER CAMPER				NIGHT	PARK
NIGHTS PER CAMPER (Summer)				2.45				SUMMER CAMPER				WINTER CAMPER				NIGHT	PARK
	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	TOTAL	NIGHT	DEC.	JAN.	FEB.	MAR.	TOTAL	NIGHT	TOTAL	TOTAL	
CAMPGROUNDS																	
Roaring Brook	270	1080	1748	1794	1356	222	6470	16%	24	30	140	112	306	25%	6776	16%	
Abol	168	1803	1283	1803	758	221	6036	14%	3	2	45	20	70	6%	6106	14%	
Katahdin Stream	258	1038	1647	1881	996	62	5882	14%	1	4	15	1	21	2%	5903	14%	
Daicey Pond	270	563	812	879	764	505	3793	9%	10	29	74	32	145	12%	3938	9%	
Kidney Pond	191	585	874	1062	821	126	3659	9%	0	6	50	29	85	7%	3744	9%	
Nesowadnehunk	117	291	799	1384	464	100	3155	8%	10	6	18	7	41	3%	3196	7%	
Trout Brook Farm	63	139	447	251	125	90	1115	3%	3	2	8	4	17	1%	1132	3%	
South Branch Pond	156	493	2039	2734	945	12	6379	15%	0	32	62	24	118	10%	6497	15%	
Russell Pond	128	355	380	573	306	12	1754	4%	7	25	39	8	79	6%	1833	4%	
Chimney Pond	Closed	584	913	968	748	214	3427	8%	23	44	138	153	358	29%	3785	9%	
Campground Total	1621	6931	10942	13329	7283	1564	41670	82%	81	180	589	390	1240	100%	42910	82%	
GROUP AREAS																	
Bear Brook	109	466	626	640	330	126	2297	35%							2297	35%	
Foster Field	0	169	654	595	442	0	1860	29%							1860	29%	
Nesowadnehunk	88	128	595	608	210	0	1629	25%		C	L	O	S	E	D	1629	25%
Trout Brook Farm	0	104	57	424	79	57	721	11%							721	11%	
Group Area Total	197	867	1932	2267	1061	183	6507	13%							6507	12%	
OUTLYING SITES																	
Katahdin Lake Area	0	7	48	15	60	12	142	5%									
South Branch Pond	44	18	65	100	57	57	341	13%							341	13%	
Fowler	47	52	40	103	45	28	315	12%							315	12%	
Webster	84	2	191	316	118	17	728	27%							728	27%	
AT Shelter/Thr Birches	0	26	111	166	150	56	509	19%		C	L	O	S	E	D	509	19%
Davis	Closed	36	56	62	45	7	206	8%							206	8%	
Wassataquoik Area	8	24	119	169	116	48	484	18%							484	18%	
Outlying Total	183	165	630	931	591	225	2725	5%							2725	5%	
TOT. CAMP NIGHTS	2001	1050	13504	16527	8935	1972	50902	100%	81	180	589	390	1240	100%	52142	100%	
% OF PARK TOTAL	4%	0.02	26%	32%	17%	4%	98%		0%	0%	1%	1%	2%		100%		

10.14 BSP Registered Hikes - 2010

BAXTER STATE PARK TRAIL USE SUMMARY - 2010									
REGISTERED HIKES PER PERSON PER TRAIL									
	MONTH						TRAIL	AREA	% OF
TRAIL NAME	MAY	JUN	JUL	AUG	SEPT	OCT	TOTAL	TOTAL	TOTAL
KATAHDIN STREAM:									
Hunt	287	1,327	2,798	3,390	1,815	972	10,589		
Owl	28	48	161	207	117	61	622		
Grassy Pond	25	64	143	175	57	42	506		
O.J.I.	30	16	44	86	56	18	250		
A.T. South	17	185	154	106	52	13	527		
Blueberry Ledges	18	37	106	68	27	20	276		
KAT STR TOTALS	405	1,677	3,406	4,032	2,124	1,126	12,770	12,770	16%
ABOL:									
Abol Trail	183	546	1,150	1,609	803	114	4,405		
Abol Falls	12	16	81	65	37	22	233		
Abol Pond/Stream	20	15	31	12	51	0	129		
Blueberry Ledges	43	72	315	285	84	0	799		
AT North	55	128	200	463	301	0	1,147		
Foss & Knowlton	2	16	6	8	9	0	41		
Kettle Ponds	0	0	0	0	11	0	11		
Cranberry Pond	0	0	0	0	0	0	0		
ABOL TOTALS	315	793	1,783	2,442	1,296	136	6,765	6,765	8%
ROARING BROOK:									
Chimney	2	2,034	3,571	3,910	2,851	1,324	13,692		
Helon Taylor	71	332	592	872	432	104	2,403		
Sandy Stream	593	1,283	2,304	1,949	1,500	827	8,456		
South Turner	183	110	209	285	225	137	1,149		
Russell Pond	71	159	202	247	195	69	943		
Nature Trail	28	23	16	25	47	2	141		
Katahdin Lake	37	95	220	100	129	1	582		
Martin Ponds	7	7	11	0	40	6	71		
North Katahdin Lake	0	0	0	101	8	5	114		
RRG BK TOTALS	992	4,043	7,125	7,489	5,427	2,475	27,551	27,551	34%
SOUTH BRANCH POND:									
South Branch Falls	9	57	329	496	194	120	1,205		
Ledges	27	26	91	192	64	65	465		
Howe Brook	24	71	163	238	76	26	598		
North Traveler	22	52	169	410	142	56	851		
Center Ridge	0	20	46	35	19	7	127		
Traveler Loop	3	17	41	128	61	42	292		
South Branch Mountain	15	12	62	198	46	33	366		

Pogy Notch	36	37	106	162	67	42	450		
Burnt Mountain	0	0	41	0	0	19	60		
Middle Fowler	0	4	0	4	10	0	18		
SO BRANCH TOTALS	136	296	1,048	1,863	679	410	4,432	4,432	5%
NESOWADNEHUNK:									
Double Top	34	60	188	269	117	71	705		
Marston	44	75	144	297	184	57	757		
Wassataquoik Lake	11	3	19	48	9	15	105		
Dwelley Trail	11	23	66	82	29	31	242		
NESO TOTALS	100	161	417	696	339		1,809	1,809	2%
continued...									
Registered hikes per person per trail, continued									
TRAIL NAME	MAY	JUN	JUL	AUG	SEPT	OCT	TRAIL TOTAL	AREA TOTAL	% OF TOTAL
CHIMNEY POND:*									
Dudley	CL	231	375	576	3,910	27	5,119		
Cathedral	CL	665	1,271	1,346	872	169	4,323		
Saddle	CL	518	1,037	1,223	1,949	598	5,325		
Hamlin	CL	32	33	51	285	23	424		
North Basin	CL	16	61	11	247	27	362		
North West Basin	CL	22	13	9	25	4	73		
North Peaks	CL	0	0	0	0	0	0		
CHIMNEY TOTALS	0	1,484	2,790	3,216	7,288	848	15,626	15,626	19%
DAICEY POND:									
Niagara Falls	331	502	1,146	1,596	645	286	4,506		
Daicy Pond Nature Trail	40	48	62	109	103	30	392		
Lost Pond Trail	5	12	14	42	28	10	111		
Sentinel Mountain Trail	0	0	0	5	33	0	38		
A.T. to Katahdin	9	30	54	95	73	15	276		
Daicey to Grassy	15	17	39	70	46	12	199		
Daicey to Elbow	6	11	19	25	3	0	64		
Daicey to Kidney	0	0	0	32	17	5	54		
DAICEY TOTALS	406	620	1,334	1,974	948	358	5,640	5,640	7%
KIDNEY POND:									
Double Top	35	20	77	90	98	40	360		
Sentinel Mountain Trail	70	71	231	378	231	144	1,125		
Rocky Pond	52	51	114	117	86	25	445		
Draper Pond	25	30	26	38	18	23	160		
Kidney Pond Circuit	7	18	36	98	74	61	294		
Celia & Jackson	19	37	45	33	41	15	190		
Windy Pitch/Niagara/ Lily	17	8	12	37	20	29	123		
Slaughter Pond	0	11	14	36	22	19	102		
KIDNEY TOTALS	225	246	555	827	590	356	2,799	2,799	3%
RUSSELL POND:									
Russell Pond Trail	16	39	56	86	72	18	287		
Wassataquoik Stream	36	85	114	105	78	35	453		
Pogy Notch Trail	0	17	23	38	14	18	110		

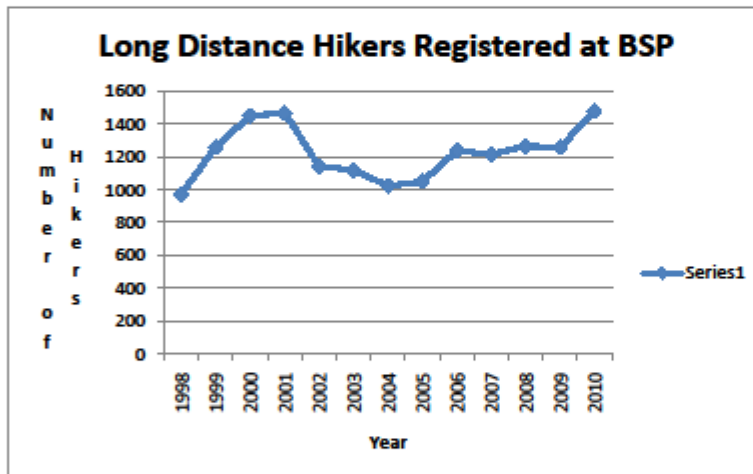
Wassataquoik Lake	40	96	103	151	143	33	566		
North West Basin Trail	5	39	70	87	56	15	272		
Grand Falls Trail	7	53	30	78	49	17	234		
Lookout Trail	2	14	21	21	19	13	90		
RUSSELL TOTALS	106	343	417	566	431	149	2,012	2,012	2%
TROUT BROOK FARM:									
Horse Mountain	0	15	36	126	55	50	282		
Five Ponds	46	24	37	64	30	26	227		
Fowler Pond	42	39	38	104	40	29	292		
Freezeout	0	2	29	43	51	5	130		
Frost Pond	0	0	10	19	14	0	43		
Trout Brook Mountain	14	28	60	214	66	50	432		
Wadleigh Brook	9	0	8	29	19	0	65		
TROUT BR. TOTAL	111	108	218	599	275	160	1,471	1,471	2%
MONTHLY TOTALS	2,796	9,771	19,093	23,704	19,397	6,018	80,875	80,875	100%
% OF TOTAL	36%	7%	15%	41%	19%	11%	100%	100%	
*Early spring arrival allowed opening of Dudley, Cathedral, and Saddle Trails to open in May. Dudley/Cathedral Trails closed 10/08/2010 due to snow.									

10.15 Long Distance Hiker Statistics

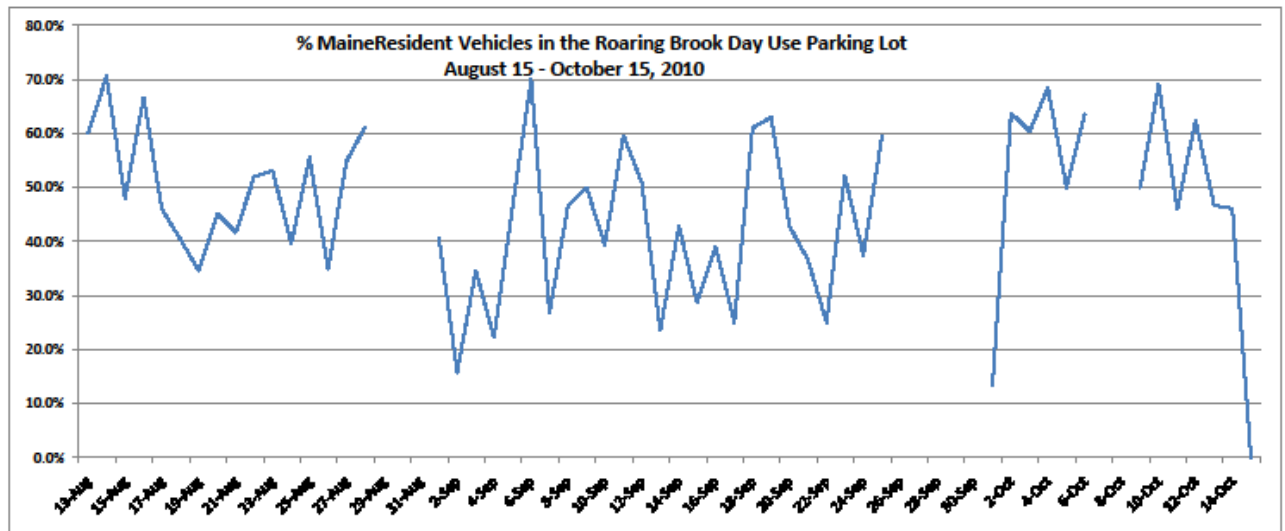
Long Distance Hikers Registered at BSP

Year	Total	North	South	Flip-Flop	Section	IAT/Other
1998	970	401	125	38	406	N/A
1999	1258	504	206	70	478	N/A
2000	1449	540	234	86	589	N/A
2001	1466	599	234	79	554	N/A
2002	1142 *	532	188	89	328	5
2003	1117	541	193	60	320	3
2004	1021	500	178	46	292	5
2005	1049	482	151	58	357	1
2006	1236	500	189	65	480	2
2007	1215	451	184	74	501	5
2008	1265	486	244	88	443	4
2009	1256	543	252	84	375	2
2010	1476	567	256	122	528	3

*Please note, 2002 stats may be unreliable due to staff shortages and lack of training for the 2002 season.

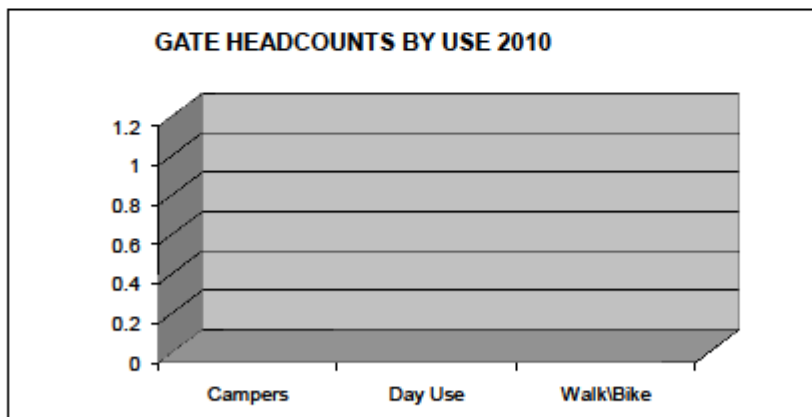


10.16 Roaring Brook Resident Parking Statistics



10.17 BSP Vehicles per Gate - 2010

BAXTER STATE PARK 2010 GATE COUNTS/VEHICLE PER GATE					
	VEHICLES				% OF
	RES	NON-RES	PASS	TOTAL	TOTAL
TOGUE POND GATE					
May	797	313	22	1132	
June	1609	1100	0	2709	
July	2415	2195	30	4640	
August	2700	2618	43	5361	
September	1486	1558	9	3053	
October	964	801	17	1782	
TOGUE TOTAL	9971	8585	121	18677	84%
MATAGAMON GATE					
May	264	34	0	298	
June	316	99	0	415	
July	650	214	0	864	
August	711	302	0	1013	
September	355	184	0	539	
October	226	130	0	356	
MATAGAMON TOTAL	2522	963		3485	16%
TOTAL GATES	12493	9548		22162	



10.18 BSP People per Gate - 2010

BAXTER STATE PARK 2010 GATE COUNTS - PEOPLE PER GATE									
	CAMPERS			DAY USE			WALK/ BIKE	TOTAL COUNT	% BY GATE
	RES	NON-RES	TOTAL	RES	NON-RES	TOTAL			
TOGUE POND GATE									
May	436	302	738	1592	454	2046	9	2793	
June	1624	1095	2719	2719	1771	4490	16	7225	
July	2125	2228	4353	5094	4317	9411	35	13799	
August	2732	2308	5040	5515	5223	10738	17	15795	
September	1633	1363	2996	3342	3020	6362	4	9362	
October	697	565	1262	2423	1778	4201	5	5468	
TOGUE POND TOTAL			17108			37248	86	54442	85.6%
MATAGAMON GATE									
May	200	41	241	429	51	480	3	724	
June	224	73	297	555	172	727	0	1024	
July	804	225	1029	1135	368	1503	10	2542	
August	845	385	1230	1093	501	1594	26	2850	
September	371	102	473	445	299	744	6	1223	
October	133	66	199	420	197	617	0	1433	
MATAGAMON TOTAL			3469			5665	45	9179	14.4%
TOTAL GATES			20577			42913	131	63621	

10.19 Day Use Parking Statistics - 2010

DAY USE PARKING RESERVATIONS - 2010 SUMMARY DATA

	Roaring Brook DUPRS				Katahdin Stream DUPRS				Abol DUPRS				Class Day
	Resrvd	Claimed	Undaimed	% Undlmed	Resrvd	Claimed	Undaimed	% Undlmed	Resrvd	Claimed	Undaimed	% Undlmed	
Sum:	3106	1990	1116	36%	1121	651	467	42%	710	401	312	44%	2.06
Ave:	20.2	12.9	7.2	36%	7.3	4.2	3.0	42%	4.6	2.6	2.0	44%	
Sum: 6/26-9/12	2291	1467	824	36%	854	494	357	42%	523	290	233	45%	
Ave: 6/26-9/12	29.0	18.6	10.4	36%	10.8	6.3	4.5	42%	6.6	3.7	2.9	45%	
Sum: RB=40	1800	1188	612	34%	782	445	337	43%	541	290	251	46%	
Ave: RB=40	40.0	26.4	13.6	34%	17.4	9.9	7.5	43%	12.0	6.4	5.6	47%	
Total Reservations =	4937												
Roaring Brook filled 40 days out of 157 (25% of the time)													
Between 6/26 and 9/12 Roaring Brook filled 34 days out of 78 (43.5% of the time)													
								2010	1	2	3	4	
								# Class da	29	93	16	11	
Roaring Brook closed on 45 days (23 days or 51% class I)								% of total	19.2%	61.6%	10.6%	7.3%	
Katahdin Stream closed 12 days								Average Class Day = 2.06					
Abol closed 14 days								2009	35	77			
									23.2%	51.0%			
Vehicles in Roaring Brook Lot*													
Average % ME vehicles in RB lot					49.4%								
Average % ME vehicles when > 30 cars					50.2%								
Average % ME vehicles when > 40 cars					51.5%								
# Days > 50 cars in RB lot*					15								
# Days > 55 cars in RB lot*					8								
# Days > 60 cars in RB lot*					5								
Average # cars in lot					35.9								
* = Sample limited to > 8/15 only													

10.20 BSP Annual Snowmobile Count Summary

Baxter State Park Final Snowmobile Activity Report Winter 2009 - 2010

	09-10	08-09
<u>Togue and Matagamon areas (Interior / Tote Rd.)</u>		
Total snowmobile counts from Matagamon and Togue gates:	4059	3278
Number of pedestrians counted (going in <u>and</u> out both gates):	951	954
Total snowmobile counts less pedestrians:	3108	2324
One half the snowmobile count will represent the number of actual snowmobiles that visited Baxter State Park through the Matagamon and Togue areas:	1554	1162

Dwelley Pond / Tote Road by-pass

Total snowmobile counts, represents amount of through traffic.

These numbers already captured at Togue and Matagamon:

776 364

Roaring Brook Road & Katahdin Lake Trail

Roaring Brook Road snowmobile count (less BSP visitors, including BSP staff, Katahdin Lake staff & visitors):

1233* 1273*

Katahdin Lake Tr. (includes K.L. staff, BSP staff & K.L. visitors):

742* 591*

*The counts for the Roaring Brook Road and Katahdin Lake Tr. are totals.

The actual number (capturing BSP & KL staff) would be half, less KL visitors

10.21 BSP Summons Record - 2010

2010 BSP USAC COURT CASES

DATE	CASE#	VIOLATION	DESCRIPTION	FINE	DISPOSITION	TYPE
4/27/2010	2010-57-01	Title 12 § 13056	Watercraft	\$100	Guilty	Civil
5/12/2010	2010-56-06	BSP Rule 17	Unauthorized Climbing	\$200	Guilty	Civil
5/12/2010	2010-56-06	BSP Rule 17	Unauthorized Climbing	\$200	Guilty	Civil
5/12/2010	2010-56-06	BSP Rule 17	Unauthorized Climbing	\$200	Guilty	Civil
7/3/2010	2010-58-04	BSP Rule 7	Unauthorized Camping	\$200	Guilty	Civil
7/30/2010	2010-57-04	BSP Rule 1.2	Unauthorized Camping	\$200	Guilty	Civil
8/3/2010	2010-59-06	BSP Rule 4.3	Unauthorized Fire	\$200	Guilty	Civil
9/4/2010	2010-57-25	BSP Rule 5.4	Speeding	\$200	Guilty	Civil
9/25/2010	2010-57-27	BSP Rule 4.1	Pet in Park	\$200	Guilty	Civil
10/6/2010	2010-59-08	BSP Rule 1.2	Unauthorized Camping	\$200	Guilty	Civil
10/11/2010	2010-57-31	Title 12 § 12604	Fishing Closed Season	N/A	FTA / Warrant	Criminal E
10/11/2010	2010-57-31	Title 12 § 12604	Fishing Closed Season	N/A	FTA / Warrant	Criminal E
10/11/2010	2010-57-31	Title 12 § 12604	Fishing Closed Season	\$100	Guilty	Criminal E
10/11/2010	2010-59-10	BSP Rule 1.2	Unauthorized Camping	\$200	Guilty	Civil
10/11/2010	2010-59-10	BSP Rule 1.3	Failure to Register	\$200	Guilty	Civil
10/11/2010	2010-59-10	BSP Rule 1.2	Unauthorized Camping	\$100	Guilty	Civil
10/11/2010	2010-59-10	BSP Rule 1.3	Failure to Register	\$100	Guilty	Civil

2010 BSP VSAC TRAFFIC INFRACTIONS

DATE	CASE#	VIOLATION	DESCRIPTION	FINE	DISPOSITION	TYPE
6/27/2010	2010-58-03	Title 29-A 2073 (3)	Speeding (Radar)	\$137	Guilty	Civil
7/7/2010	2010-56-10	Title 29-A 2073 (3)	Speeding (Radar)	\$215	Guilty	Civil
7/7/2010	2010-56-11	Title 29-A 2073 (3)	Speeding (Radar)	\$137	Guilty	Civil
7/7/2010	2010-56-12	Title 29-A 2073 (3)	Speeding (Radar)	\$215	Guilty	Civil
7/8/2010	2010-56-13	Title 29-A 2073 (3)	Speeding (Radar)	\$119	Guilty	Civil
7/23/2010	2010-59-04	Title 29-A 2073 (1)	Speeding (Clock)	\$119	Guilty	Civil
8/12/2010	2010-56-14	Title 29-A 2073 (3)	Speeding (Radar)	\$119	Guilty	Civil
9/12/2010	2010-56-22	Title 29-A 2073 (3)	Speeding (Radar)	\$137	Guilty	Civil
10/3/2010	2010-58-13	Title 29-A 2073 (3)	Speeding (Radar)	\$137	Guilty	Civil

10.22 BSP Courtesy Warning Record - 2010

2010 BSP Law Enforcement Courtesy Warnings

DATE	CASE #	LOCATION	ADDRESS	VIOLATION	
1/28/2010	2010-56-01	Chimney Pd. Trail	Upton, MA	Unauthorized Snowmobile	
1/28/2010	2010-56-02	Chimney Pd. Trail	Ashland, MA	Unauthorized Snowmobile	
1/28/2010	2010-56-03	Chimney Pd. Trail	Natick, MA	Unauthorized Snowmobile	
3/16/2010	2010-56-04	Abol Pond	Windham, ME	Unauthorized Snowmobile	
3/11/2010	2010-56-05	Togue Pond Beach	Pittsburgh, PA	Vehicle on Snowmobile Tr.	
6/10/2010	2010-56-07	Nes. Lt. #11	New Britain, CT	Unauthorized Camping	
6/13/2010	2010-58-01	Togue Beach	Prospect, ME	Loud Music	
6/15/2010	58-2010-02	Caribou Pit	Partlow, VA	RV left at No Parking Zone	
6/21/2010	2010-57-02	Tote Rd. TBF Area	Windham, ME	Speeding	
6/21/2010	2010-57-03	Tote Rd./Horseback	Lisbon, ME	Speeding	
6/23/2010	2010-56-10	Abol Campground	Southbury CT	Imprudent Speed	
6/23/2010	2010-56-08	Rum Picnic Area	Laurel, MD	Speeding	
7/2/2010	2010-57-04	Round/Rocky Pond	NB, Canada	Speeding	Speeding
7/3/2010	2010-59-01	Baxter Pk., Katahdin	NB, Canada	Solicitation	
7/3/2010	2010-59-02	Baxter Pk., Katahdin	NB, Canada	Solicitation	
7/4/2010	2010-58-05	Tote Rd., Togue	Worcester, MA	Speeding	
7/6/2010	2010-58-06	Togue Beach	Millinocket, ME	Cruelty to birds	
7/10/2010	2010-59-03	Tote Rd./Tracy Pond	Caribou, ME	Speeding	
7/18/2010	2010-57-05	RB Rd./Aval Field	Fair Haven, NJ	Speeding	
7/18/2010	2010-57-06	RB Rd./Aval Field	Hulls Cove, ME	Speeding	
7/18/2010	2010-57-07	RB Rd./Aval Field	Falmouth, ME	Speeding	
7/18/2010	2010-57-08	RB Rd./Aval Field	Marlton, NJ	Speeding	
7/29/2010	2010-53-03	T2R9 BSP Tote Rd	Lakewood, NJ	Imprudent Speed	
7/30/2010	2010-56-14	Togue Pond Gate	Quebec, Canada	Unauthorized Entry	
7/31/2010	2010-59-05	Tote Rd., Abol CG	Bangor, ME	Invalid Permit	
8/1/2010	2010-57-11	So.Branch Pd. Rd.	Waterville, ME	Speeding	
8/3/2010	2010-59-06	Katahdin Lake	Wilmington, MA	Camping Violation	
8/6/2010	2010-57-12	Abol CG/Tote Rd.	Windham, NH	Speeding	
8/7/2010	2010-59-07	Abol CG, TS#18	Brighton, MA	Disturbance in Campground	
8/12/2010	2010-57-13	Tote Rd.-Nes. Lake	Dunedin, FL	Speeding	
8/12/2010	2010-57-14	Telos/Thisell Gate	Glastonbury, CT	Speeding	
8/12/2010	2010-57-15	Lynx Rd-Tote Rd.	Austin, TX	Speeding	

10.23 Leave No Trace Principals – Baxter State Park

Leave No Trace in Baxter State Park

Governor Baxter demonstrated the value of Leave No Trace in Baxter State Park long before it became a standard for outdoor recreation when he stated, "...I want it used to the fullest extent but in the right unspoiled way." Baxter State Park embraces the national Leave No Trace Center for Outdoor Ethics guiding principles as they apply to the Park. Check the Baxter State Park website – www.baxterstateparkauthority.com and the Leave No Trace website - www.lnt.org - for more information.



Plan Ahead and Prepare

- *Learn about the area before you hike: learn the climate, topography, and the BSP rules and regulations.
- *Be prepared for your trip by bringing proper gear and clothing. Per BSP regulation, carry a working flashlight and extra batteries, just in case you are stranded in the dark.



Travel and Camp on Durable Surfaces

- *Consistent with this principle, camping in Baxter State Park is restricted to authorized sites.
- *Walk single file in the middle of the trail even when wet and muddy to protect fragile plants and habitat. Avoid creating new trails or by passes – hike only on the designated treadway.
- *Keep areas natural looking by not leaving rock piles or cutting marks into trees.



Dispose of Waste Properly

- *We are a **carry in/carry out** Park – please pack out all trash and leftover food. Protect yourself and wildlife by storing food and garbage in a tightly sealed container that is hard for animals to reach or in your vehicle.
- ***Use outhouses:** only toilet paper and human waste should go in outhouses. Pack out hygiene products – ask for a litterbag if necessary. **If below treeline with no outhouse**, deposit human waste in a cathole 6-8 inches deep at least 200 feet from water and trails, cover and disguise the hole when finished, pack out toilet paper and hygiene products. **If above treeline**, rock hop to get off trail, deposit human waste at ground level (do not dig holes), pack out toilet paper and hygiene products. Avoid urinating on vegetation, instead choose rocks and gravel away from trails and water. Help prevent water contamination.

*Wash yourself and dishes at least 200 feet from any water source. Strain dishwater through a bandana or sieve and put food scraps in a carry out/litter bag. Scatter strained dishwater 200 feet from camp or water.



Leave What You Find

*Per BSP regulation, leave plants, rocks, and historical items as you find them, so the next person can enjoy them.

*Do not build structures or carve into objects.

*Avoid introducing or transporting non-native species by cleaning boots, packs and boats prior to entering the Park.



Minimize Campfire Impacts

*Only make fires and use stoves in designated camping and picnic areas.

*Don't break branches off live trees, as these are animals' perches and homes.

*Burn all wood and coals to ash, put out campfires completely and pack out unburnables left

in the fire ring, such as tinfoil, cigarette butts and food scraps so as not to attract animals.



Respect Wildlife

*Observe animals from a distance. Do not follow or approach them, especially during sensitive

times of mating, nesting raising young and in winter when survival is hardest.

*Never feed wildlife, human food is not healthy for them. Keeping them wild will help them survive.

*Per BSP regulation, leave pets at home to protect the wildlife and your pet.



Be Considerate of Other Visitors

*Hike quietly so others can enjoy the wilderness.

*Yield to other hikers. Share the trail.

*Use pullouts to let other vehicles pass on the Park roads. The slower you go, the more you see.

By observing the seven principles of Leave No Trace and our Park rules, you can visit Governor Baxter's most generous gift to all of us – Baxter State Park in the "right unspoiled way".

10.24 Hike Safe Principals



THERE AND BACK



hikeSafe

Ten essential items you should carry on every trip:

- Map
- Compass
- Warm clothing
- Extra food and water
- Flashlight or headlamp
- Matches/firestarters
- First aid kit/repair kit
- Whistle
- Rain/wind gear
- Pocket knife

hikeSafe: It's Your Responsibility



The Hike Responsibility Code was developed and is endorsed by the White Mountain National Forest and New Hampshire Fish and Game.

For more on how you can hike safe and HikeSafe's educational programs and initiatives, visit **www.hikesafe.com**

Imaging for this brochure was provided in part by The New Hampshire Outdoor Council.

10.25 Guidelines and Application for Research in Baxter State Park

GUIDELINES FOR SCIENTIFIC STUDIES IN BAXTER STATE PARK

Baxter State Park was donated to the people of the State of Maine by Governor Percival Baxter for the dual purposes of maintaining a portion of Maine's forest as forever wild and to provide primitive recreational opportunities to people of the State of Maine he so loved. The goals and objectives of the Authority and its staff, therefore, are to protect, preserve, and maintain the Park for those purposes.

As a set of unique ecosystems, the Park provides valuable opportunities for scientific research and study. The Authority welcomes scientific research which will assist it in understanding the Park's natural systems in order to preserve, protect, and maintain the Park, and which may also provide a basis for comparison with other natural systems.

Scientific researchers should be aware that there are three different areas within the Park. The largest area is the Sanctuary—comprising approximately 150,564 acres. It was set aside by Governor Baxter as a place where flora and fauna would be kept forever wild with negligible human impact and as reflected by these words, "Life will live, flourish, and die in nature's endless cycle," and "The hunting of animals will be done with cameras rather than guns." Therefore, research that adversely impacts the natural systems of this area will not be approved.

A second area is the Scientific Forest Management Area (SFMA)—consisting of 28,594 acres. This area was donated by Governor Baxter as a showplace for forestry management and research. Further hunting and trapping are allowed in this area. Scientific research that might not be acceptable in the Sanctuary could potentially be conducted in the SFMA under certain circumstances such as ensuring there are no long-term impacts to the natural systems.

Finally, there is a third area—comprising 51,500 acres (22,906 acres outside of the SFMA)—where hunting and trapping are allowed. Scientific research not tolerated in the Sanctuary might be found to be acceptable here, but with greater scrutiny than occurs in the SFMA.

The Authority wishes to emphasize that there is a balance between the Governor's clear and unequivocal desire that the Park, particularly the Sanctuary, be kept forever wild, and the need to better understand the Park in order to preserve, maintain, and protect this ecological gem. A better understanding of ecosystems is beneficial. In proposing research in the Park, researchers must be conscious of these considerations in planning any studies. Therefore, in respect to these objectives, the following criteria are used in evaluating requests for scientific research;

1. Impact to the Park. Emphasis and priority will be given to research projects that have a minimal impact on the natural resources of the Park, but consideration will be given to any reasonable scientific studies. The Park will not allow research that involves removal or destruction of geological specimens or features; construction of permanent structures; alteration of terrain; permanent markings; or removal, destruction, or loss of life of plants and animals in the sanctuary. According to Park donor, Percival P. Baxter, the Park is to be left in its natural wild state. The removal of any natural object, no matter how benign the impact, changes the natural state of the Park. As we enter the 21st century, the scientific interest in the Park is at an all-time high. Annually we receive requests from many researchers seeking approval for collecting organisms or objects found in the Park. At the same time the demand for primitive camping and hiking opportunities increases every year. The rapidly growing necessity for humans to be able to visit an area where, in policy and in practice, human influence is deliberately minimal, and nature rules in all its

complexity, is precisely the need BSP is designed to meet. Our preservation mandate requires compromises on everyone's part including researchers. The essential question we will be asking ourselves, when considering any research proposal, but particularly one involving collecting will be, "How does this proposed action further our efforts to protect and preserve this area for all generations?" The applicant must be able to show that the project cannot be undertaken elsewhere and collection is essential to the project yet removal of the item will be benign. Considering this rationale, it should be evident that there will rarely be an instance where the value of collecting outweighs the value of preserving the Park in its natural state. It should be mentioned here that the likelihood of a permit being granted for collecting is slightly higher in the regions of the Park known as the Scientific Forest Management Area and the additional areas in which hunting and trappings are allowed. These areas represent a more actively managed approach to natural resources and generally speaking, conducting research and collecting is more appropriate in the SFMA.

2. Funding. In general, the Park will not fund scientific research from its annual budget. The Park will consider funding research that will provide data and management recommendations for specific management issues within the Park. If funding is requested, applications must be made two (2) years prior to expecting funding.
3. Applications. Applications for permission to conduct research in the Park must be made in adherence with the following categories and lead-time. The Park will circulate the proposal to a Director's Research Committee.

CATEGORY I: Requires only short-term approval (minimum of two (2) weeks notice) of Park Director. Projects in this category include any based purely on unobtrusive visual or auditory observation such as bird census, photographing fir waves, etc. This category applies to studies requiring no Park provided quarters or services, no collecting or waivers of any other Park Rules & Regulations, and no temporary site alteration (flagging, etc.).

CATEGORY II: Requires six (6) month lead-time for project approval in order to allow the Director's Research Committee and the Director to review the proposal and make recommendations. Category II proposals may, by design, request waiver of certain Park Rules & Regulations (use of playback tapes, use of snowmobile in staff only zones, etc.), and use of Park facilities/services. The greater complexity of study design and requests necessitates more lead-time so all responsible parties are informed and have a chance to offer their recommendations.

CATEGORY III: Requires nine (9) month lead-time for project approval in order to ensure full involvement of the Authority, the Park Director, and the Director's Research Committee. Category III proposals include all requests for any sort of collecting in Baxter State Park. Category III proposals also include re-introductions and any other proposed research deemed controversial enough by the Director and DRC to warrant the required lead-time.

Compliance with the deadline guarantees thorough consideration of the proposal, not necessarily approval. Failure to comply with the lead-times specified in these categories is sufficient reason alone for the Park Director to deny approval of the proposal.

The application must contain the following:

1. Title
2. Name Researcher
3. Researcher's credentials

4. Benefits to be derived from the research
 5. Detailed description of research
 6. Area(s) of the Park for the research
 7. Impact on the Park
 8. Budget
 9. Timetable for research and completion of project
 10. Limited to five (5) pages
-
4. The Director's Research Committee. The DRC will meet in the spring and fall of each year to review applications and make recommendations to the BSP Director. Whenever possible Committee meetings will be held at the University of Maine at Orono. Agendas will precede the meetings by two (2) weeks.
 5. Permit. Research will only be allowed in the Park after a detailed description of the proposed research and the issuance of a permit by the Park's Director. The Director, upon advice of the Director's Research Committee, may attach conditions to the permit.
 6. Staff Coordination. The Park Director shall assign a staff member to monitor the research site and program. The researcher shall coordinate implementation of the research project with the appropriate Park staff.
 7. Rules, Regulations, and Fees. Researchers in the Park shall be subject to the existing Park Rules & Regulations, and fees and include justification for using Baxter State Park.
 8. Revoking of Permit. The Park Director, at his discretion, at any time, may revoke the research permit by informing the researcher of the revocation, orally or in writing, and, if orally revoked, such shall be confirmed in writing.
 9. Liability. The Park will not be liable for the researcher's equipment or property installed or left in the Park during the course of the project.
 10. Final Report. Following the completion of a research project, all researchers are required to submit a complete report to the Baxter State Park Director identifying the results of that research project. This report must be submitted to the Director by December 31, of the year in which the research occurred. Failure to comply with these requirements will result in denial of subsequent research proposals from both the individual researcher and the supporting institutions. All reports will be kept on file for reference material at Park Headquarters, the University of Maine, and the Maine State Archives in Augusta.

10.26 State Heritage Fish Waters Legislation

12 §12461. STATE HERITAGE FISH WATERS

12 §12461. STATE HERITAGE FISH WATERS

1. Adoption of state heritage fish waters. The commissioner shall adopt by rule for each state heritage fish under Title 1, section 212-A a list of state heritage fish waters composed of lakes and ponds that contain that state heritage fish and have never been stocked according to any reliable records. The list of native brook trout waters authorized for adoption by Resolve 2005, chapter 172 is a list of state heritage fish waters for purposes of this section. Rules adopted pursuant to this subsection are major substantive rules as defined in Title 5, chapter 375, subchapter 2-A.

[2007, c. 21, §2 (AMD) .]

2. Addition of waters to list. The commissioner may adopt rules to amend a list established under subsection 1 to add a lake or pond if that lake or pond meets criteria established by the commissioner for classifying a lake or pond as a state heritage fish water. Rules adopted to add a lake or pond to a list established under subsection 1 are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

[2007, c. 21, §2 (AMD) .]

3. Removal of waters from list. The commissioner may by rule remove a lake or pond from a list established under subsection 1. Rules adopted pursuant to this subsection are major substantive rules as defined in Title 5, chapter 375, subchapter 2-A.

[2007, c. 21, §2 (AMD) .]

4. Stocking state heritage fish. The commissioner may not stock or issue a permit to stock fish in a lake or pond listed as a state heritage fish water under this section.

[2007, c. 21, §2 (AMD) .]

5. Fishing restrictions. A person may not use live fish as bait or possess live fish to be used as bait on a lake or pond listed as a state heritage fish water under this section. A person who violates this subsection commits a Class E crime.

[2007, c. 21, §2 (AMD) .]

6. Exceptions. Notwithstanding the stocking restrictions set forth in subsection 4, the commissioner may:

A. Stock Big Reed Pond in T.8, R.10, W.E.L.S. with native fish species. If sufficient brook trout from Big Reed Pond are not available, brook trout from Reed Brook and its tributaries in T.8, R.10, W.E.L.S. may be used for restocking. If arctic charr from Big Reed Pond are not available, arctic charr from an endemic arctic charr water in the State may be used for restocking. If northern redbelly dace need to be restocked in Big Reed Pond, northern redbelly dace from Reed Brook and its tributaries in T.8, R.10, W.E.L.S. may be used for restocking. [2009, c. 214, §7 (NEW) .]

[2009, c. 214, §7 (NEW) .]

SECTION HISTORY

2005, c. 180, §2 (NEW). 2007, c. 21, §2 (AMD). 2009, c. 214, §7 (AMD).

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PLEASE NOTE: The Revisor's Office cannot perform research for or provide legal advice or interpretation of Maine law to the public. If you need legal assistance, please contact a qualified attorney.

10.27 Baxter State Park Heritage Fish Ponds

"A" List Ponds (never stocked)

County	WATCODE		Lake Name	Region	List
Piscataquis	010200010602	2734	CENTER P	F	A
Piscataquis	010200010903	0594	DAISEY P	F	A
Piscataquis	010200020502	9616	DEEP P	F	A
Piscataquis	010200020204	2732	DWELLEY P	F	A
Piscataquis	010200010602	0722	ELBOW P	F	A
			FOSS & KNOWLTON		
Piscataquis	010200010904	0696	P	F	A
Piscataquis	010200020204	4232	FOWLER P (LOWER)	F	A
Piscataquis	010200020204	4220	FOWLER P (MIDDLE)	F	A
Piscataquis			GRASSY P	F	A
Piscataquis	010200020204	4236	HIGH P	F	A
Piscataquis	010200020108	2724	HUDSON P	F	A
Piscataquis	010200020204	4230	LONG P	F	A
Piscataquis	010200010901	0728	LOST P	F	A
Piscataquis	010200020502	4206	POGY P	F	A
Piscataquis	010200020502	2022	RUSSELL P	F	A
Piscataquis	010200020502	4196	SIX PONDS #3	F	A
Piscataquis	010200020502	4192	SIX PONDS #4	F	A
Piscataquis	010200010602	0726	TRACY P	F	A
Piscataquis	010200020302	4216	TRAVELER P	F	A
Piscataquis	010200020502	2026	TWIN P #1	F	A
Piscataquis	010200020502	4212	WASSATAQUOIK L	F	A
			WASSATAQUOIK L		
Piscataquis	010200020502	4214	(LIT)	F	A
Piscataquis	010200020502	4208	WEED P	F	A
Piscataquis	010200020502	2034	WHIDDEN P #1	F	A
Piscataquis	010200020502	2036	WHIDDEN P #2	F	A
Piscataquis	010200020502	2038	WHIDDEN P #3	F	A

"B" List Ponds (limited stocking history)

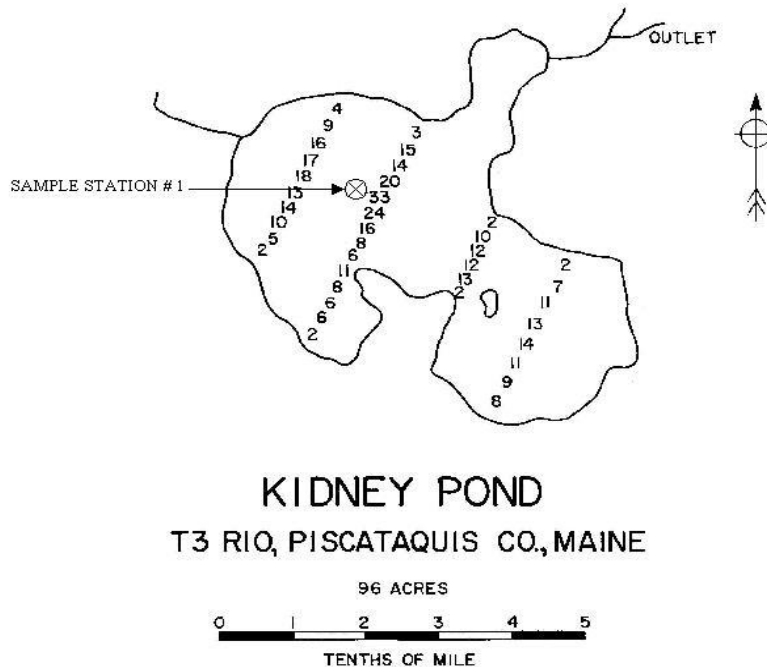
	BRANCH P (UPPER		
Piscataquis	SO)	F	B
Piscataquis	DAICEY P	F	B
Piscataquis	JACKSON P	F	B
Penobscot	KATAHDIN L		B
Piscataquis	KIDNEY P	F	B
Piscataquis	LILY PAD P	F	B
	MOUNTAIN CATCHER		
Piscataquis	P	F	B
Piscataquis	ROCKY P	F	B
Piscataquis	ROCKY P (LITTLE)	F	B
Piscataquis	ROUND P	F	B
Piscataquis	SANDY STREAM P	F	B
Piscataquis	SOURDNAHUNK L	F	B
Piscataquis	WEBSTER L	F	B
Piscataquis	WINDY PITCH	F	B

10.28 Stocked Ponds in Baxter State Park

2010 BAXTER PARK STOCKING

WATER NAME	WATCODE	ACRES	TOWN	SPECIES	AGE	STRAIN	NUMBER STOCKED
Billfish Pond	4254	70	T6R9 WELS	BKT	FF	038 (KEN)	200
Celia Pond	0712	8	T3R10 WELS	BKT	FF	038 (KEN)	250 (0)
Draper Pond	0714	10	T3R10 WELS	BKT	FF	038 (KEN)	400 (0)
Frost Pond	4238	37	T6R9 WELS	BKT	SY	038 (KEN)	500
Abol Pond	2068	70	T2R9 WELS	BKT	SY	038 (KEN)	500
Rocky Pond	2094	10	T2R9 WELS	BKT	SY	038 (KEN)	300
Round Pond (Caverly Pond)	2096	8	T2R9 WELS	BKT	SY	038 (KEN)	200
Matagamon Lake*	4260	4165	T6R8WELS	LKT	SY	NA	0 (500)
Lower Togue Pond	2084	384	T2R9 WELS	SPK	SY	NA	500

* Matagamon Lake stocking temporally suspended (forage issues). Pers. Comm: Nels Kramer 2/11.



10.29 Kidney Pond Fisheries Management Plan

Introduction

Kidney Pond is one of several good trout ponds located in the southwest corner of Baxter State Park. The pond is 96 acres in size, has a maximum depth of 33 feet and is at an elevation of 1,051 feet above mean sea level. The pond was surveyed in 1961 by AuClair and Meyer. Many of the camps and cabins on the pond were part of a set of sporting camps that were built prior to the establishment of Baxter State Park. The camps were privately operated for several years but are now a part of the Park and are operated by park personnel. Over the years some of the older buildings have been removed and some newer buildings have been constructed.

Fish Species

Brook trout
 Redbelly dace
 Rainbow smelt
 Golden shiner

Recent Stocking History

There is no record of recent stocking in this pond, however, Kidney Pond was stocked with brook trout from 1937 to 1961.

Water Quality

Water quality data is available only from the Fisheries Division of Maine Department of Inland Fisheries and Wildlife. Data from this source does not include information on phosphorous or chlorophyll levels. The pond has a maximum depth of 33 feet and does stratify during the summer however, the deeper water, below the thermocline, becomes deficient in oxygen later in the summer. There is a sufficient amount of cool, well-oxygenated water above the thermocline to maintain a healthy trout population. Mean summer pH level is 6.8, total alkalinity is 6.0 ppm and secchi disk readings range from 16 to 20 feet.

Habitat

There is adequate habitat in the pond to maintain a population of wild brook trout. A small tributary to the pond has some good gravel at its mouth for trout spawning. The lower section of the brook is used as a nursery area for many young trout. Some gravel bars around the shore are also used for trout spawning areas.

Fisheries Management History

Trout were stocked into Kidney Pond from 1937 to 1961. IF&W fisheries personnel surveyed the pond in 1961 and the recommendation was made to discontinue trout stocking. The pond was not stocked after 1961. Illegally introduced golden shiners were found in 1967 and rainbow smelt were found in 1968. Neither species appears to have had any significant effect on the trout population. In the latest fisheries survey conducted in 1995, 20 trout ranging from 8 to 14 inches in length were caught.

Current Fishing Regulations⁹⁵

Open water. Fly fishing only. Daily bag limit on trout: 2 fish.

Ice fishing. Closed to ice fishing.

Boating restrictions.

Motorboats prohibited.

Management goals and objectives.

Goal: Management category C: meet angler expectation of a catch rate of 5 to 10 brook trout per angler day ranging from 7 to 10 inches long.

Objectives: Adjust regulations as necessary to meet goal.
Maintain wild brook trout fishery.

Problems.

Management strategies.

Maintain healthy wild brook trout population.

⁹⁵ Fishing regulations can change in response to changing conditions in the pond; consequently anglers are **URGED** to consult the latest fishing regulations booklet before fishing the pond.

10.30 Research Proposals and Reports on File- BSP 2010

Geology

- 1988: **"Alpine Permafrost in Eastern North America: A Review"**. T.W. Schmidlin, Geography Department, Kent State University.
- 1989: **"Late Quaternary Glacial History of Mount Katahdin and the Nunatak Hypothesis"**. P.T. Davis, Bentley College
- 1995: **"The Trout Basal Conglomerate: Its Extent and Origins"**. Tisha Springer, M.S. Geology candidate West Virginia U.
- 2003: **Locating aquifers with seismic waves**. Dan Locke, ME Geological Survey
- 2003: **Sedimentology and Paleontology of the Trout Valley Formation**. Robert A. Gastaldo and Robert E. Nelson, Colby College
- 2005: **"An Estuarine Assemblage from the Middle Devonian Trout Valley Formation of Northern Maine"** Robert W. Selover; Robert A. Gastaldo; Robert E. Nelson
- 2005: **Sedimentology and Taphonomy of the Early to Middle Devonian plant-bearing beds of the Trout Valley Formation, Maine**. Jonathan P. Allen, U Nebraska and Robert A. Gastaldo, Colby College
- 2005: **Age of Mafic Dikes which cut through the Trout Valley Formation**. D.W. Caldwell, Boston College
- Year ? : **"Interpretation of minimum-limiting radiocarbon dates for deglaciation of Mount Katahdin area, Maine"** P. T. Davis, U. Washington and R.B. Davis, U. ME
- **"A Study of the Granite/Granophyre Transition on North Turner Mountain"**. Kyle Marvinney, St Lawrence College, in conjunction with Gary Boone and Robert Marvinney

Forest

- 1981: **"Natural Old Growth Forest Stands in Maine"**. John Grena, Maine State Planning Office
- 1983: **"Study areas for a long-term environmental monitoring program for the spruce budworm suppression project"**. Jack Witham and Malcolm Hunter, U ME, conducted for Maine Forest Service, DOC
- 1985: **"Old-Growth Forest, Subalpine Forest, and Alpine Areas in Baxter State Park"** Donald Hudson, Ronald Cannarella, Leah Garnett, and Katherine Huntington of the Chewonki Foundation
- 1986: **"Uncut Timber Stands and Unique Alpine Areas on State Lands"**. Maine State Planning Office, Critical Areas Program
- 1989: **"Response of Tree-Ring Density to Climate in Maine, U.S.A."** Laura E. Conkey
- 2007: **Long term Change at the Forest Ecotone in Northern New England**. Kimberley Beal, U. Vermont
- 2009: **Natural Disturbance Patterns in Forest Stands of the Boody Brook Natural Area in the SFMA**. Stacy J. Birch, U ME.
- 2009: **Silvicultural Options for Emulating Natural Disturbance in the Acadian Forest**. (SFMA) Nal Tero. U ME.

Vegetation

- 1978: **"Alpine Tundra Vegetation on Maine Mountains and Its Relevance to the Critical Areas Program"** Diane Ebert May, Husson College and R. B. Davis, U ME
- 1985: **"Old-Growth Forest, Subalpine Forest, and Alpine Areas in Baxter State Park"** Donald Hudson, Ronald Cannarella, Leah Garnett, and Katherine Huntington of the Chewonki Foundation
- 1986: **"Uncut Timber Stands and Unique Alpine Areas on State Lands"**. Maine State Planning Office, Critical Areas Program
- 1988: **"Notes on endangered and threatened vascular plants in Baxter State Park"** Don Hudson, Chewonki Foundation
- 1988: **"The preliminary vascular flora of Baxter State Park"**. Don Hudson, Chewonki Foundation
- 1989: **"Alpine Vegetation Study"**. Charles Cogbill and Don Hudson
- 1999: **Habitat Preference by Alpine Vegetation on Mt Katahdin**. Ken Kimball and Doug Weihrauch, Appalachian Mt Club

- 2002: **"Three additions to the lichen flora of North America from Mt. Katahdin, Maine"** Jim Hinds, Alan Fryday, and Allison Dibble
- 2002-2005: **Alpine Bryophytes and Lichens of Mt. Katahdin**, Alison Dibble, James Hinds U Maine, Norton Miller, State Museum of NY, Alan Fryday, Michigan State University
- 2003 **Fire Ecology in the Acadian Spruce-Fir Region and Vegetation dynamics following the Baxter Park Fire of 1977**. Erin Small, U ME.
- 2003: **Using Calicioid Lichens and Fungi to Assess the Ecological Continuity of Baxter State Park's Frost Pond Forest**. Steven Selva, U ME, Fort Kent
- 2004: **Rare Plant Surveys in NW Basin**. Arthur Haines (no final report).
- 2005: **Dispersal and Colonization of Orono Sedge in the SFMA of Baxter State Park**. Alison Dibble, Stewards LLC
- 2005: **Shoreline Vegetation Characterization of Stump Pond**. Jill Weber and Sally Rooney
- 2006: **Genetic Diversity in Populations of Diapensia**. Hannah Vollmer, Sterling College
- 2007: **Inventory of Vascular Plants (on Katahdin Lake parcel)**. Alison Dibble

Water

- 1987: **High Elevation Lake Monitoring in Maine**" Second paper submitted to BSP later in 1987 **"Preliminary Estimates of the Acidity Status of Major Lakes and Streams in Baxter State Park"** : J.S. Kahl, Proposed by Matthew Scott, ME D. E P., Bureau of Water Quality Control, Division of Environmental Evaluation and Lake Studies
- 1989: **"Maine's Finest Lakes: The Results of the Maine Lakes Study"** (includes Matagamon Lake) Drew Parkin, Land and Water Associates and John Lortie, Robert Humphrey, and Fred DiBello, Woodlot Alternatives
- 2009-2010: **Biological Survey of the Wassataquoik Watershed**. Roy Bouchard, ME D.E.P.

Vertebrates

- 1984: **"Occurrence of *Parelaphostrongylus tenuis* in sympatric populations of moose and white-tailed deer in Maine"**. Robin A. Clark and Terry R. Bower, Unity College
- 1985: **"Field Studies of the Yellow-Nosed Vole and the Northern Bog Lemming"**. Garrett C Clough, assisted by John Albright
- 1988-1992: **Caribou Project**, Mark McCollough, B Nichols, in cooperation with ME I. F. & W., U ME Wildlife Dept and Newfoundland Wildlife Division.
- 1990-1996: **"Influences of Timber Harvesting and Trapping on Habitat Selection and Demographic Characteristics of Marten"** Daniel Harrison and David Payer (PhD candidate), U ME. (Note: 10 year study beginning in 1988. In BSP 1990-1996)
- 2008: **Surveying for Spring Salamanders in Baxter State Park**. Trevor Persons, under contract with ME I. F. & W.

Birds

- 1987: **"Survey of Woodland Hawks: A comparison of breeding communities in 2 areas of different forest management"**. Holly Devaul, ME Cooperative Fish and Wildlife Research Unit, U. ME
- 1991: **"Distribution of Birds on New England Lakes"**. Ray Owen primary investigator and Whitman, Andrew Master's student University of Maine Wildlife. (summary in 1991 Annual Report and in file, however final report is missing.)
- 1992: **"Changes in Bird Populations in Response to Spruce Budworm Induced Habitat Changes"**. Stephen Oliveri, Spruce Budworm Research, Dept. of Conservation
- 1993: **"Manomet Observatory Avian Censusing"**. Manomet Bird Observatory
- 1996: **"Nesting Inventory, Status and Management of Peregrine Falcons in Maine, 1996"**. Andrew Weik and Todd, Charles; Endangered and Threatened Species Group, ME I. F. & W.
- 1997: **"Boreal Owl (*Aegolius funereus*) Surveys near the Appalachian Trail, Acadia National Park, and Baxter State Park in Maine"**. Michael Thompson of Woodlot Alternatives, Inc.

Fish

- 1985: **“Landlocked Arctic Charr in Maine”**. Frederick W. Kircheis of ME I.F.&W.
- 1995: : **“Micro satellite gene diversity analysis in landlocked Arctic charr, *Salvelinus alpinus*, from Maine, USA”**. Louis Bernatches, James Rhydderch, Frederick Kircheis
- 1998: **“Competition for food between splake and landlocked salmon”**. Thomas Hoffman, (M.S. student) and Dr. John Moring (supervisor) U ME Wildlife Dept. and Cooperative Fish and Wildlife Research Unit
- 2000: **“Recreational Fishing, User Activities and Fisheries Biology of the Wassataquoik Watershed-Baxter State Park, Maine.”**Jason Saucier, Unity College
- 2005: **Ecological and Morphological Characteristics of Arctic Charr in Wassataquoik Lake**. Wendy Michaud, U Maine and Mike Smith, ME I. F. & W

Invertebrates

- 1977: **“Katahdin Arctic Butterfly, *Oeneis polixenes Katahdin* Newc. in Maine and its Relevance to the Critical Areas Program”** A.E. Brower
- 2004: **Fishless Lakes Study**. Report not yet filed. Emily Schilling; Dr. Cynthia Loftin University of Maine
- 2003: **Surveying for Roaring Brook Mayfly**. Beth Swartz, Maine I. F. & W.
- 2009: **Conservation assessment of Bioinventory of Maine’s Cave Biota, With an Emphasis on Invertebrates**. Joseph Reznik, Cernegie Museum of Natural History
- 2009-2010: **Biological Survey of the Wassataquoik Watershed**. Roy Bouchard, ME D.E.P.
- **“Ant Species and Distribution in the Northeastern US.”**. Israel del Toro, U Mass. Amherst, in conjunction with the Harvard Museum of Comparative Zoology.

Management

- 1982: **“Inventory of Special Areas in the Scientific Forest Management Area Baxter State Park”**. James F. Burns, for Maine State Planning Office
- 1984: **“A Special Areas Inventory Report of Compartments 5, 6 and 11 of the Scientific Forest Management Area of Baxter State Park”**. Sally C. Rooney
- 1991: **“Standard Times for Trail Maintenance”**. Michael Hogan, Lester Kenway
- 1994: **Trail profiles**, Eric Hendrickson
- 2008: **Recreation Stewardship Scorecard**. Andrew Whitman and Ethel Wilkerson, Manomet Center for Conservation Science

Other

- **“Soil Surveys and Mapping of Baxter State Park”** coordinated by Tony Jenkins, Maine Office of Natural Resources Conservation Service

10.31 Nesowadnehunk Lake Fish as Hatchery Stock for BSP Stocking



JOHN ELIAS BALDACCI
GOVERNOR

STATE OF MAINE
DEPARTMENT OF
INLAND FISHERIES AND WILDLIFE
284 STATE STREET
41 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0041

ROLAND D. MARTIN
COMMISSIONER

June 26, 2006

Jensen Bissell
Director of Baxter State Park
Baxter State Park Authority
64 Balsam Drive
Millinocket, Maine 04462

RE: Nesowadnehunk Lake Brook Trout

Dear Jensen:

In the 1990's the Fish and Wildlife Department experimented with the development of two (2) new brook trout brood lines to supplement the Maine Hatchery Strain of brook trout. The desired traits for the new strains included genetic diversity and longevity, both of which were lacking in the older strain. Two new lines were developed with the intent of comparing their performance and retaining the strain that performed better in hatcheries as well as in the wild.

Accordingly, several hundred brook trout were captured at Nesowadnehunk Lake and at the Kennebago River over a period of four years. Genetic tests were conducted on each population, and eggs were stripped and fertilized on site. They were hatched out and raised at the Phillips Hatchery; Sourdnhunk fish were also raised at the Enfield Hatchery. Post-stocking performance of these fish was evaluated at 8 Maine lakes for a period of 4 years.

The Kennebago strain fish grew faster and survived to older ages in greater number than did the Sourdnhunk fish. In addition, the Kennebago performed better in the hatchery. The Sourdnhunk strain fish ripened late in the season and over a prolonged period; in some cases they did not ripen until December or even January. There were also much higher rates of pre- and post-spawning mortality among the Sourdnhunk fish.

For the reasons noted above, the Sourdnhunk strain was abandoned and the Kennebago strain has been retained as a brood line in Maine's hatcheries. For the Sourdnhunk strain to be reestablished, the following problems would have to be considered and overcome:

- The cost to collect hundreds of fish over a period of a minimum of 4 years is considerable.



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PHONE: (207) 287-5202

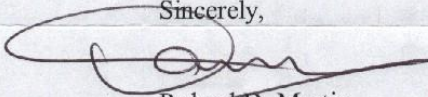
FISH AND WILDLIFE ON THE WEB:
www.mcfishwildlife.com

EMAIL ADDRESS:
ifw.webmaster@maine.gov

- Our hatchery system does not have the room to carry an additional line of brood fish. According to Hatchery Superintendent Steve Wilson, it would take four raceways to maintain the brood line.
- We note that the Sourdnahunk line is not pure, as Nesowadnehunk Lake has been stocked in the past.

As you can see, it would be very difficult at this time to develop another brook trout strain in our hatchery system. The waters in question have been stocked for many years, in some cases with more than one strain of brook trout. We do not feel that stocking Kennebago strain brook trout in these waters will unreasonably impact the wild trout populations in the respective sub drainages. Please let me know if you have any further questions.

Sincerely,



Roland D. Martin
Commissioner

pc: John Boland, Director, Fisheries Operations

p.s. Have you or your staff had a chance to prepare a draft MOU between our agency and yours?

10.32 BSP Rules and Regulations – 2010 Revision

94-293 BAXTER STATE PARK

Chapter 1: RULES AND REGULATIONS

Summary: These Rules, adopted by the Baxter State Park Authority (the "Authority") pursuant to 12 M.R.S.A. § 903, govern the use of Baxter State Park (the "Park") by the public. No provision of these Rules applies to law enforcement or administrative personnel in the course of their official duties. Any delegation of authority to the Director under these Rules includes delegation to the Director's designee. In addition to any specific provision contained in these Rules, the Director may restrict public uses or activities within the Park as necessary to preserve or protect the Park and/or to assure the safety of Park users.

1. CAMPING, RESERVATIONS AND REGISTRATION

1. The Authority and Director may establish **administrative policies and procedures** for the processing of reservations.
2. **Camping is permitted by reservation** only and only in authorized campgrounds and campsites May 15 through October 15, and December 1 through March 31. Campers must register at the gatehouse no later than 8:30 p.m. Check-out time is 11:00 a.m., and check-in time is 1:00 p.m. Tents are not permitted outside of lean-tos at lean-to sites. Camping by groups of more than 12 people is permitted only at group camping areas located at Bear Brook, Foster Field, Nesowadnehunk Field and Trout Brook Farm.
3. All **persons entering the Park by road or trail** must register their entrance at the first opportunity at a staffed gatehouse or self-registration station. Persons entering or leaving the Park by way of the Appalachian Trail must register at Katahdin Stream Campground. Persons entering the Park on foot at any other location or landing aircraft on permitted waters in the Park must register with Park Headquarters or a gatehouse in advance.

2. HIKING AND DAY USE

1. Prior registration is required for day use **groups of 12 or more** people. Registration may be made by telephone beginning April 1, and should be made as far in advance as possible.
2. **Hiking or mountain climbing** may be restricted at the discretion of the Director. Park users must be reasonably prepared and equipped for the activity they are engaged in, and must take reasonable precautions against endangering themselves or others. Hikers must carry a working flashlight. No children under the age of six (6) years are allowed above timberline. Registration of technical rock/ice climbers is required. The Baxter State Park Authority may request reimbursement of search and rescue costs in cases of reckless hikers.

3. HUNTING, TRAPPING AND FISHING

1. **Hunting and trapping** are prohibited within the Park. Use or possession of any firearm, bow and arrow, sling shot, or air rifle or pistol is prohibited. Firearms may be transported through the Park if kept in a car trunk, enclosed in a case or otherwise inaccessible to use. Bows may be transported through the Park if unstrung or enclosed in a case. This Rule does not apply north of Trout Brook and Wadleigh Brook in T6 R9;

in T6 R10; or in T2 R9 and in T2 R10 north of the West Branch of the Penobscot River, east to the thread of Abol Stream and west to the West Branch of the Penobscot River. Hunting with dogs is prohibited. In the areas within the Park where hunting and trapping are permitted, the general laws of the State pertaining to hunting and trapping apply, except that moose hunting and baiting any animals for hunting purposes are prohibited.

2. **Maine fishing laws** and the rules of the Maine Department of Inland Fisheries and Wildlife apply within the Park. Maine fishing licenses are required.

4. RESOURCE PROTECTION AND WILDERNESS PRESERVATION

1. **Pets** or other domestic animals are not allowed in the Park. Releasing or introducing any animal in the Park is prohibited.

2. No person may **feed, bait, or disturb any animal** within the Park, with the exception that baiting of animals for trapping purposes is permitted north of Trout Brook and Wadleigh Brook in T6 R9; in T6 R10; or in T2 R9 and in T2 R10 north of the West Branch of the Penobscot River, east to Abol Stream and west to the West Branch of the Penobscot River. The use of audio, visual, electronic or any other device in any way that may disturb or harass wildlife is prohibited.

3. **Fires or other cooking or heating devices** are permitted only in designated campsites or picnic areas. At Chimney Pond and Davis Pond, open fires are prohibited and only backpack-type stoves are allowed. The removal of bark from, or the cutting or defacing of live or standing dead trees is prohibited.

4. No person may leave a **fire** without totally extinguishing it, nor discard any burning cigarettes, cigars, matches, or any other burning material within the Park. Any fire outside a designated fireplace must be reported to the nearest Park Ranger at once.

5. All **trash, rubbish, litter, camping gear, equipment, and materials** carried into the Park must be carried out of the Park. No trash, rubbish, or litter shall be deposited in any type of vaulted or un-vaulted toilet.

6. Where toilets are not available, human waste must be disposed of at least 200' from water or trail by burying or by carry-out.

7. Use of any **soap or detergent**, or the disposal of **food scraps** within 200' of any waters is prohibited.

8. No person may create a **disturbance** that impairs the enjoyment of the Park by others. Campground quiet hours are posted and enforced. The use of electronic devices in any way that impairs the enjoyment of the Park by others is prohibited.

9. **Chainsaws, generators, and other power equipment** may not be operated within the Park.

10. Collection or removal of any **cultural object** from the Park is prohibited. No person may deface, paint, damage, mutilate, or vandalize any cultural object or any structure or sign within the Park. Possession of paint or marking materials, or tampering with, altering, or removing any sign, marker, or structure, is prohibited. Driving nails or permanently installing any object is prohibited. The use of metal detectors or similar devices is prohibited.

11. The removal from, or introduction of **natural objects, materials, plants or animals** to the Park is prohibited, with the exceptions that fish and other wildlife may be collected for personal use in authorized areas of the Park as defined in 3.a. and 4.b., above and that berries and fiddleheads may be collected for personal use only. Gathering of berries or fiddleheads for sale or commercial purposes is prohibited.

12. **Research** studies within the Park require a special use permit issued by the Director. Requests for use of the Park for research studies must be submitted to the Director in writing nine months in advance of the proposed research, except as expressly authorized by the Director.

5. VEHICLES AND TRANSPORTATION

1. No **vehicle** over nine (9) feet high, seven (7) feet wide, or 22 feet long for a single vehicle or 44 feet long for combined units may enter the Park. Oversize units may be authorized to use the Park road system by special use permit, subject to conditions set by the Director. The Director may restrict the use of vehicles by persons without camping reservations.
2. Within each campground or picnic area, all **vehicles** must park in designated areas. A maximum of two vehicles may park at each campsite for which parking space is provided. No vehicle may park on the traveled portion of any Park road, or obstruct a designated parking space.
3. All **vehicles** must display an entrance permit while in the Park. Vehicles parked overnight without an entrance permit displayed or with an invalid permit may be towed away at the owner's expense.
4. No person may operate any **vehicle** within the Park so as to endanger any person or property, nor operate a vehicle in excess of 20 miles per hour, or the posted speed limit, whichever is less.
5. The operation of **Motorized trail bikes and ATV's** (all-terrain vehicles) is prohibited within the Park. The operation of **Motorcycles** is prohibited on unpaved roads within the Park. **Bicycles** are allowed only on maintained roads within the Park with the exception of roads in the Scientific Forest Management Area (SFMA) where bicycles are prohibited.
6. Take off and landing of **aircraft** in the Park is prohibited except on Matagamon, Nesowadnehunk, and Webster Lakes. Persons landing aircraft on permitted waters in the Park must register with Park Headquarters or a gatehouse in advance. "Aircraft" is defined to include any machine or device capable of deriving support in the atmosphere from the reactions of the air, including, but not limited to model craft, hot air balloons, hang gliders, para-sails and para-gliders.
7. All **boats** and canoes left in the Park and not registered with Park Headquarters will be disposed of as abandoned property. The use of motor boats or outboard motors in the Park is prohibited except on Matagamon, Nesowadnehunk, and Webster Lakes. Outboard motors of ten (10) horsepower or less are permitted on Upper and Lower Togue Ponds.
8. **Snowmobiles** may be used on Matagamon, Nesowadnehunk and Webster Lakes and Lower Togue Pond, and on the following road or trail segments within Baxter State Park:
 - A. The Park Tote Road between the southern Park boundary at so-called Caribou Pit and the Park boundary just south of Matagamon Landing;
 - B. The so called Logan Pond Road along the north shore of Lower Togue Pond;
 - C. The spur road between the Park Tote Road and Camp Phoenix; and
 - D. The existing trail along the East Branch of the Penobscot River from Second Lake Matagamon to the northern boundary of the Park.

Unauthorized use of snowmobiles in any other portion of the Park is prohibited. Operators of snowmobiles must comply with all requirements of State Law.

6. ADMINISTRATION

1. The Authority may from time to time establish **fees** for the use of the Park by the public.
2. All **groups of five (5) or more persons under 16 years of age** must be accompanied by at least one (1) person, of at least 18 years of age, responsible for the supervision of a maximum of five (5) youths.
3. **During periods of forest fire danger or other emergency conditions**, the Authority or Director may close the Park or any portion thereof. No person may enter or remain in closed areas except as authorized by the Authority or Director.
4. The **sale or offering for sale** of any object or merchandise is prohibited within Baxter State Park.
5. General laws of the State pertaining to **alcohol and drugs** apply within the Park. Maine law prohibits the drinking of alcoholic beverages in public places.

7. VIOLATIONS:

A person who violates any of the rules of the Baxter State Park Authority or a condition of a permit issued under those rules commits a civil violation for which a fine of not more than \$1,000 may be adjudged. Persons violating other applicable laws within the Park may also be punished in accordance with the provisions of those laws. In addition, persons violating these rules may be required immediately to leave the Park, and the Authority may revoke the privilege of any person who violates these rules to enter the Park for a specified period.

EFFECTIVE DATE:

June 30, 1978 - refiling under APA, filing 78-18

AMENDED:

November 20, 1978 - filing 78-365 (EMERGENCY)
December 21, 1978 - filing 78-410
January 26, 1980 - filing 80-36
December 27, 1981 - Sections 3, 4, 5, 19, 23, filing 81-314
January 18, 1982 - Section 24 added, filing 82-7
January 15, 1985-- Sections 3, 4, 5, 6, 7, 8, 11, 18, filing 85-11
June 27, 1987 - Section 4, filing 87-230
April 3, 1988 - Sections 3, 5, 6, 7, 8, 21, 24, filing 88-94
September 25, 1990 - Sections 3, 5, 7, 18, filing 90-412
December 26, 1990 - Sections 3, 5, 7, 18, filing 90-561
March 28, 1991 - Section 3, filing 91-123 (EMERGENCY)
August 25, 1991 - Section 3, filing 81-323
August 25, 1991 - Sections 3, 4, filing 91-324

REPEAL & REPLACE:

February 21, 1994 - filing 94-54

AMENDED:

May 28, 1995 - Section 19, filing 95-210
May 28, 1995 - Section 21, filing 95-211

May 28, 1995 - Section 22, filing 95-212

EFFECTIVE DATE (ELECTRONIC CONVERSION):

April 13, 1996 - filing 96-117

AMENDED:

April 21, 1998 - Section 22, filing 98-177

NON-SUBSTANTIVE CORRECTIONS:

June 29, 1998 - minor spelling and formatting.

AMENDED:

February 15, 1999 - Section 31 added, filing 99-69

NON-SUBSTANTIVE CORRECTIONS:

November 6, 2002 - minor formatting and punctuation, history notes

AMENDED:

February 12, 2006 – filing 2006-73

NON-SUBSTANTIVE CORRECTIONS:

May 10, 2006 – Sections 21 and 22

10.33 Baxter State Park Hiking Class Day System (from SOP)

5. HIKING

A. CLASS DAY SYSTEM FOR MT. KATAHDIN AND TRAVELER LOOP

Class 1 - Open - a good day to hike

Class 2 - Open but not recommended for climbing.

Class 3 - Open but not recommended; one or more trails closed, trails closed to be named by Chimney Pond Ranger when setting class day.

Class 4 - Mandatory closure of all trails at trailheads.

The Ranger at Chimney Pond is responsible for determining the class day of Katahdin and Traveler Mt.

B. CUT-OFF TIMES FOR CLIMBING KATAHDIN (MAY, JUNE AND JULY)

We recommend all persons climbing above treeline get early starts to allow the best utilization of daylight hours. Recommend cut-off times are as follows:

Katahdin Stream.....	12:00 Noon
Abol.....	12:00 Noon
Roaring Brook.....	12:00 Noon
Chimney Pond.....	1:00 p.m.

As of August 1st, each campground will set its cut-off time back 1 hour for each month. This will still maintain over 8 hours of daylight beyond cut-off

CUT-OFF TIME APPLIES ONLY FOR ACCESS ABOVE TREELINE

C. DEPARTURE BEFORE 7 A.M.

Class day for climbing Katahdin will be determined at 7:00 AM. Any hikers that want to climb prior to 7:00 AM can do so at their own discretion. All hikers must register before climbing. Hikers planning to climb before 7:00 AM shall be urged to check weather forecast and register the night before.

10.34 BSP Media Policy

Baxter State Park

Special Permits for Media Projects in Baxter State Park

Katahdin and Baxter State Park are popular media subjects. During the peak summer season, Park officials field at least one interview or inquiry for photos in any given week and at least a couple film features or book projects per year requiring special attention. By articulating our expectations and goals as an agency when working with media contacts, we hope to lend more predictability to the process for both the Park and those pursuing media projects. It is our belief that the Park embodies many qualities and values that are worthwhile to share with the public at large and this policy seeks to provide a mutually beneficial framework in which this exchange of information can occur through media projects.

Definition of Media Projects

For the purposes of this policy ‘media projects’ include any projects internally or externally generated including, but not limited to, written, audio, photographic, paint, and film mediums creating product by either for-profit or non-profit entities, involving the use or application of talent, professional crew, props, product or service advertisement and intended for commercial profit and/or copyrighted or proprietary public distribution (groups or individuals other than family and friends).

Permit Requirements

An approved permit from the Director of Baxter State Park is required prior to the conduct of any project or activity with Baxter State Park that falls within the definition of Media Projects.

Permissible Media Projects

Baxter State Park permits media projects when possible while still meeting the mission of the Park. The natural attributes of the Park including scenery, sounds, weather and seasons make the Park a popular site for photographers and film makers.

Media projects are generally permissible in Baxter State Park when the activities necessary to complete the project can be conducted within the Rules and Regulations governing visitor use and protection of the Park and the necessary actions and work are not disruptive to other visitors or wildlife in the Park. All media projects must comply with Park Rules including, but not limited to:

BSP Rule Section 1 - Camping, reservations, registration, camping maximum group size.

BSP Rule Section 2 - Day use hiking group size (recommended maximum of 12 on any Park trail.

BSP Rules Section 4 - Pets, protection of wildlife and plants, fires, carry-in, carry-out, disturbances, use of power equipment, protection of cultural objects.

BSP Rules Section 5 - Vehicle size limits, parking, speed limits, motorcycles and ATV's, aircraft, snowmobiles, motorboats.

BSP Rule Section 6 - Supervision of minors, solicitation and use of alcohol and drugs.

Additionally, media projects and activities must comply with existing Park policies such as day use parking access policies at popular Katahdin trailheads, (see Baxter State Park website pages): <http://www.baxterstateparkauthority.com/hiking/hikingParking.html>, wildlife-only designated areas around Park ponds popular with moose and other wildlife: <http://www.baxterstateparkauthority.com/outdoors/outdoorWildlife.html> and **Leave No Trace** practices: <http://www.baxterstateparkauthority.com/miscPages/lnt.html>

Non-permissible Media Projects

Any project that, in the judgment of the Park Director, violates one or more of the Baxter State Park Rules and Regulations and/or conflicts with operational policies.

Permit Application

Permit applications may be downloaded from the Park website. If you need to visit the Park to scout for filming locations prior to filing an application, please visit our website [baxterstateparkauthority.com](http://www.baxterstateparkauthority.com) for information about the Park or contact Park Headquarters at 207.723.9500.

Please include complete information in your application. If significant staff resources are required to evaluate your application, you will be billed for the additional costs. Therefore, in the interest of efficiency, feel free to attach maps, diagrams, script pages, storyboards, vehicle and equipment lists, crew lists, call sheet, itineraries, shot lists, etc., with your application to assist Park staff in evaluating your request.

- Most applications should be processed within 14 days if complete and not requiring alteration.
- Projects involving multiple locations, complex logistics, or coordination with other visitor activities require a minimum of 21 days to process.
- Projects that require environmental or cultural resource evaluation must be submitted no less than 30 days before the start of proposed activities and may require additional time dependent upon project complexity.
- **Park managers will not sign location release agreements.**

Baxter State Park has limited staff and on-duty staff are fully committed to existing work in resource protection, recreation management and public safety. Park Rangers and other staff may monitor the activities and conduct of media projects in Baxter Park but media projects that suggest the need for significant monitoring or on-site presence of Park staff will not be permitted.

Violation of Park Rules or existing policy by the media Permittee or other project personnel may result in citations for Rule violations and/or immediate revocation of the permit and expulsion of project personnel from Baxter State Park.

Please submit the application form as far in advance as possible.

Mail completed applications to:

Jensen Bissell, Park Director
Baxter State Park
64 Balsam Drive
Millinocket, ME 04462

Documents can also be faxed or emailed but will not be processed until payment has been received:
(see Media Permit Fee Schedule below)

Jensen.Bissell@maine.gov
(207) 723-9500

Insurance Requirements

Proof of insurance issued by a U.S. company must accompany the permit application for video/filming projects permitted for 3 days or longer. The insurance certificate must identify the production company by name and business address; if the Permittee uses a different name than listed on insurance policy, the relationship between insured company and Permittee's company must be identified. The Baxter State Park Authority (64 Balsam Drive, Millinocket, ME 04462) will be named as an additional insured on the insurance certificate.

The minimum acceptable amount of liability insurance is \$1 million for most video/filming projects. High-risk activities or activities that may have the potential for resource impact require higher liability amounts. Smaller low-risk projects or still photography may be eligible for a reduction to \$500,000. Contact the Park for details. A request for a permit may be denied if there is no proof of adequate insurance. Personal homeowner's liability is not acceptable. The certificate should be generated by the insurance company. Handwritten certificate holder information is unacceptable. We will accept a faxed copy of the certificate until your insurance company can mail us the original.

Pre-Project Steps

After approval of an application and before the activity begins, the Permittee should meet with the Park Director, or designee, to:

- Review the final terms/conditions, scheduling and any special instructions pertaining to the respective project
- Provide an original certificate of insurance, and if required, a bond
- Pay estimated costs, if required
- Sign and obtain a copy of the Special Use Permit

Activities not specified in the permit will not be allowed. No activities on Baxter State Park property may begin until the permit has been approved by the Park Director and agreed to by the Permittee.

Permit Fees

Media Permit fee schedule:

Permitted project 1-2 consecutive days	\$60
Permitted project 3-5 consecutive days	\$100
Permitted project more than 5 consecutive days	\$200

Permit Conditions

Permittee must comply with all Rules and Regulations of Baxter State Park. Specific conditions and restrictions related to existing resource protection, recreation management and public safety policies will be noted on the permit. All federal, state and local laws and regulations apply to the operation of vehicles and equipment. Project activities may be monitored or checked by Baxter State Park Rangers or staff. The Permittee must keep the permit in possession while engaged in the permitted project in Baxter State Park. The Permittee must produce the permit for inspection when asked to do so by Park Rangers or staff.

FOR MORE INFORMATION ABOUT FILMING AND PHOTOGRAPHY PERMITS IN BAXTER STATE PARK:
Jensen.Bissell@maine.gov OR (207) 723-9500



Baxter State Park Media Permit Application

Applicants: please complete the required information below and return to:

Director, Baxter State Park
64 Balsam Drive
Millinocket, ME 04462

Permittee Contact Information:

Name: _____

Business Name: _____

Address: Street/P.O./ City/Town/zip: _____

Tel:

Business: _____

Mobile: _____

Email: _____

Website: _____

Vehicle Information

Vehicle(s) make/color: _____

Vehicle license number and State of registration: _____

Gate(s) accessed (circle applicable): **Togue Pond** **Matagamon**

Project Information

Project Duration (circle applicable): **1-2 days** **3-5 days** **more than 5 days**

Project Dates: start: _____ end: _____

Project Type (circle applicable):

Still Photography

Film-

Recording

Other (describe: _____)

A narrative of what the project is. If video production includes storyboards, diagrams, script pages, shot lists, vehicle, crew and equipment lists, itineraries etc., these should be included in the project description:

[illegible]

Sites, locations in BSP where project activities will take place (campgrounds, picnic areas, geographic place names such as peaks, ponds, streams, trailheads or trails etc).

Personnel

Are others involved in a professional relationship in this project – working for you or independently collaborating under your direction?

List of project personnel – names & addresses:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Permit Confirmation (to be completed by BSP):

Relevant Rules and Policies of Concern

BSP will list and detail any existing rules and policies relevant to the project.

Read and Agree Box

The Permittee will check and sign agreement stating:

- Relevant Rules and Policies of Concern have been read, understood and the Permittee agrees to comply.
- Permittee understands that Permit must be in possession while in BSP engaged in project activities and displayed upon request to Park Rangers or staff
- Permittee understands that failure to comply may result in citations for violations of Park rules and immediate expulsion of all project personnel from Baxter State Park.
- The Baxter State Park Director and Baxter State Park Authority retain the right to cancel any permit at any time if cancellation is determined by these parties to be in the best interest of the Park.

10.35 BSP Interpretive Resources

BAXTER STATE PARK

Interpretive Resources

	Visitor Contact positions																																															
	General printed handout materials		Site and/or Audience Specific Handout		Public Health/ Safety/ Trip Planning Notices		Bulletin Boards/ Displays on site		Mail Enclosures		Targeted Mailings**		3-D models		Summer Children's programming		Summer Evening programming		Campground Visits on request		Nature Trails		Indiv. Campground Histories		Visual Archives		Automated Slideshow		Videos for viewing		Loaner videos		Traveler Information Radio Station		Hiker Info Line		Website		Write/ Author/ Media collaboration		Student/ Public phone/ email info services		Staff Newsletter/ Division annual Reports		Professional conference poster sessions		Outreach programming	
Millinocket	*	*		*	*	*	*	*	*	*	*	*		*									*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Togue Gate	*	*		*	*																																											
Matagamon Gate	*	*		*	*																																											
Visitor Center	*	*	*	*	*							*																																				
Scientific Forest Management Area	*		*	*	*											*	*	*		*			*														*	*	*	*	*	*	*					
Roaring Brook	*	*	*	*	*							*						*	*	*		*																										
Abol	*	*	*	*	*							*					*	*	*		*																											
Katahdin Stream	*	*	*	*	*							*		*	*	*	*	*	*		*																											
Daicey Pond	*	*	*	*	*								*	*	*	*	*	*	*		*		*																									
Kidney Pond Camps	*	*	*	*	*								*	*	*	*	*	*	*		*		*																									
Nesowadnehunk	*	*		*	*									*	*	*	*	*	*		*																											
South Branch Pond	*	*	*	*	*							*	*	*	*	*	*	*	*		*																											
Trout Brook Farm	*	*	*	*	*								*	*	*	*	*	*	*		*																											
Russell Pond	*	*		*	*																																											
Chimney Pond	*	*	*	*	*							*		*		*																																
Harpswell Lot			?		?																																											
Mt Chase Lot			?	?	?																																											

10.36 BSP Core Postings List

CORE BSP BULLETIN BOARD POSTINGS-

required at every Park duty station – these postings are supplemented with campground specific postings, as well.

General information:

- Welcome to BSP
- A Brief History
- Leave No Trace
- hikeSafe
- Weather
- Summer program notices
- Wildlife watchers – ethics
- Rules & regulations

Camping

- Campground Map
- Seasonal camping dates
- Campground specific information

Hiking:

- Cut-off times
- Are you ready for Katahdin/Traveler?
- Class days
- Hiker safety & trip planning
- Daypack essentials
- Hikers sign in/sign out
- What to do with human waste
- Alpine zones
- Trail profile
- Specific area hikes/map
- Flashlight – rule/reg

Safety:

- Water treatment
- Lightning safety
- Heat index

10.37 BSP Winter Core Postings

Winter Core Postings for BSP

General Information

- Welcome to Baxter State Park – same as summer welcome posting
- A Brief History – same as summer posting
- Leave No Trace – winter Leave No Trace guidelines
- Weather
- Rules and Regulations – same as summer posting
- Winter Mileage
- Winter policies
- Did You Know – snowmobiling, etc.
- Trails Not Groomed or Maintained in the Winter
- Winter Administrative Procedures

Camping

- Signs for winter cabin use at DP, KP and bunkhouses
- Winter Use for CP Bunkhouse
- Winter Group Size
- Campground specific information

Hiking

- Travel and Terrain
- Winter Users! – color code system
- Attention Winter Campers going to Roaring Brook from Abol Bridge
- Attention Winter Campers going from ___ to Abol Bridge
 - Roaring Brook
 - Abol Campground
 - Katahdin Stream Campground
 - Daicey Pond Campground
 - Kidney Pond Campground
- Day –Use Winter Hikers and Climbers
- With a Group Want to Climb Solo from CP

Safety

- hikeSafe
- Water Treatment – same as summer posting
- Lightning safety – same as summer posting
- Wind Chill chart
- Avoiding Cold Injuries
- 5 Essentials to staying warm
- All Park Users – SAR information

10.38 Long Distance Hiker Info Sheet

KATAHDIN LONG DISTANCE HIKERS

What You Need to Know for Your Entry into Baxter State Park

Overnight Camping

Until October 15th - At BSP's Long Distance Hikers site, "The Birches" near Katahdin Stream Campground: Visitors hiking at least 100 continuous miles and arriving at Baxter State Park without reservations may stay at "The Birches" site (limited to one night stay), which has a capacity of no more than 12 (two 4-person lean-tos and one tent platform). *At the Birches, a per person fee of \$10 applies.* Large groups or commercial entities will not use the Birches, but will use their advance knowledge of trip itineraries to work with the BSP reservation system.

At Katahdin Stream Campground –Check with any ranger for availability of a regular public site (2011 prices: Per site fee – Lean-to \$30 and Tent-site \$30 (max. capacities apply.). Availability is least likely in August and on fall weekends, most likely mid-week after Labor Day. *Friends/family meeting you for the day may make a Day Use Parking Reservation (DUPR).* Check our website www.baxterstateparkauthority.com for details.

Phone-in/Online Reservations: for regular campground sites (not the Birches), 14 or fewer days before the desired date, can be made using a credit card over the phone (207) 723-5140 or by going online. Online reservations have some limitations, check the website for details. However, as has always been the case, **ranger stations inside the Park do not accept credit cards.** The Park does not allow "work for fee" camping or other discounts. Please take care of all your food, supply and payment needs before entering.

After October 15th - There is NO overnight camping ANYWHERE within the Park so you will need to: Camp at the private Abol Bridge Campground OR the Maine DOC Abol Pines Campsite just downriver of Abol Bridge. Both charge fees. There are no other options for authorized overnight camping near the trail after October 15. Your hike to the summit is thus **15 miles (one way)** from this area outside the Park. Most late hikers end up staying in a motel in Millinocket instead, and hire a taxi to shuttle them in and out of the Park on the day of their hike.

Your Climb of Katahdin

Until October 15th - No restrictions unless a Class III (some trails closed) or IV Day (all trails closed at trailheads) is declared in the morning, when all climbing is prohibited. A Class III or IV Day is declared when there are dangers and risks to (1) hikers, (2) those who may have to be called on for Search and Rescue efforts, and (3) the fragile alpine environment itself. *Call the Hiker Info line at 207 723-INFO (4636) for up-to-date information on hiking conditions in the Park.*

After October 15th - The Park is open for Day Use only (sunrise to sunset) to ALL hikers (regular visitors as well as Long Distance Hikers), *conditions permitting.* Again, restrictions apply on Class III Days and no climbing is allowed on Class IV Days, which are more frequently declared at that time of the year due to ice and snow. Vehicular access to the Park usually ends completely by November 1 or whenever winter conditions prohibit safe, low-impact vehicle travel.

The ATC, the MATC and the Park all strongly recommend you complete your climb of Katahdin before October 15th - after that there is too high risk of winter conditions and increased likelihood of harm to the environment. If you do not feel you can reach Katahdin by that date you may wish to "Flip-Flop", climbing Katahdin earlier and returning to the rest of your hike afterwards.

For further details to help you plan your visit to the Park, please ask for the brochure "[Long Distance Hiker's Guide to Baxter State Park](#)" by contacting BSP or private hostels and campgrounds along the trail in New Hampshire and Maine. Contents include: BSP's philosophy of management, arrangements for pets, meeting friends/family in the Park, terrain conditions, Class Days, mail and messages, and much more. The Park telephone number is (207) 723-5140. **Find us on the web:** www.baxterstateparkauthority.com

Thank you!

Baxter State Park

Appalachian Trail Conservancy

Maine Appalachian Trail Club

10.39 Fee Review Protocol

Protocol for the Review of BSP Camping Fees.

Review Date: April 2009

I. Background:

BSP operates independently of the General Fund and receives no State revenues for Park operation. The Park receives some outside funding from unsolicited donations but these donations are unpredictable and generally amount to significantly less than 1% of our annual budget.

Park operations are funded by a combination of revenues from Trust Endowments, fees for the use of camping facilities, revenues from the sale of forest products from the Scientific Forest Management Area, entrance fees charged to non-Maine registered vehicles, sale of bundled firewood for campfires, fees for the use of Park canoes, and a variety of miscellaneous fees including (sale of books & maps, fishing licenses etc).

In the past few years, considerable attention has been given to specifying policy for the management of Trust Endowments. The resulting spending policy places limits on the withdrawals from BSP Endowment Funds in order to help insure the protection of the fund principal and the ability of the funds to provide, in perpetuity, a level of revenue equal to or greater than the current level.

With the strict definition of endowment spending levels, it is important that interior sources of revenue act as an expandable (and contractible) component of Park revenues to address the gap between endowment revenues and the spending levels necessary to operate the Park.

The principal sources of user-based revenue in Baxter State Park are:

- **Fees for the use of winter and summer camping facilities (cabins, lean-tos, tent-sites, bunkhouses and group areas)**
- **Non-resident entrance fees**
- **Canoe rentals**
- **Firewood bundle sales**

Fees for the use of winter and summer camping facilities (cabins, lean-tos, tent-sites, bunkhouses and group areas), and non-resident entrance fees have been periodically adjusted based on the perceived need for revenues to offset the costs of Park operations. Fees for canoe rentals and firewood bundles have been set based on criteria less oriented to revenue production and more oriented to resource protection. This protocol is meant to serve as a tool to guide the which would help define a regular interval between fee reviews and embed objectivity and consistency into the review process.

II. Fee Review Protocol:

A. Review Process

The fee review process should begin with a review by the Director and Administrative Team members. Once completed, a proposal to increase, decrease, or maintain fees is forwarded to review by the BSP Finance Committee and then the full Advisory Committee. After consideration of review comments, the Director may then forward the proposal to the BSP Authority for consideration.

If approved, the Park would implement a communications plan to broadcast the planned adjustments to Park users and change appropriate Park brochures and hand-outs.

- Proposal preparation by Park Director/Staff
- Proposal to review - BSP Finance/Advisory Committees
- Final proposal for consideration - BSP Authority
- Implement communications plan and change of brochures/handouts.

B. Review Interval

Rule #2 of BSP Rules and Regulations states:

“FEES: The Authority may from time to time establish fees for the use of the Park by the public.”

This rule establishes the Authority’s ability to adjust fees periodically as an administrative process within BSP.

- Review interval should be biennial, taking place on every even-numbered year.
- Based on this timeline, staff review of fees should take place in the fall (November), if determined by the Director an adjustment is necessary, the Advisory would review in early winter and Authority review and either approve or reject the proposal at the March or May meeting allowing for summer posting of notices, and communications and fall amendment of brochures.

C. Review Criteria

The following criteria *Criteria*, with associated *Indicators*, are suggested to guide the fee review process.

Criterion 1:

Fees would be set to supply a minimum percentage of annual Park expenditures.
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As stated in the Background section, fees must “act as an expandable (and contractable) component of Park revenues to address the gap between endowment revenues and the spending levels necessary to operate the Park”. Endowment management has focused on ensuring that the trust funds provide a perpetual flow of income equal to or greater than current real (after inflation) levels. Consequently, the trust endowments should be viewed as somewhat independent from Park operations and should not be expected to react to significant changes in Park needs that exceed normal increases from inflation. In addition, without adjustment inflation would, over time, erode the real income derived from fees. In consideration of these realities, a comparison of the percentage of annual revenue expected from camping fees against the anticipated annual expenditures may provide a useful indicator of the need for a fee adjustment. The chart below displays this relationship over the last 18 years.

FEE REVENUES AS A PERCENTAGE OF EXPENDITURES						
FISCAL YEAR*	EXPENDITURES	CAMPING REVENUES	ENTRANCE FEES	CANOE/FIREWOOD **	TOTAL FEES	FEES/EXP %
2008	3,124,801	676,912	114,415	30,718	\$822,045	26.31%
2007	3,153,014	627,926	110,104	25,826	\$763,856	24.23%
2006	2,879,416	629,776	108,778	24,613	\$763,167	26.50%
2005	2,819,915	610,235	117,965	26,737	\$754,937	26.77%
2004	\$2,806,340	\$707,405	\$109,331	\$26,705	\$843,441	30.05%
2003	\$2,474,608	\$657,104	\$97,951	\$27,651	\$782,706	31.63%
2002	\$2,546,675	\$573,298	\$95,194	\$28,251	\$696,743	27.36%
2001	\$2,405,991	\$592,435	\$97,925	\$28,435	\$718,795	29.88%
2000	\$2,212,398	\$563,269	\$100,676	\$26,727	\$690,672	25.50%
1999	\$2,254,430	\$546,538	\$102,050	\$28,181	\$676,769	24.20%
1998	\$2,213,014	\$540,488	\$94,967	\$26,194	\$661,649	24.40%
1997	\$2,083,874	\$538,142	\$91,350	\$24,218	\$653,710	25.80%
1996	\$1,966,603	\$565,949	\$92,450	\$25,069	\$683,468	28.80%
1995	\$1,704,226	\$559,509	\$92,289	\$22,916	\$674,714	32.80%
1994	\$1,644,065	\$534,676	\$91,249	\$21,044	\$646,969	32.50%
1993	\$1,599,347	\$512,720	\$92,310	\$21,044	\$626,074	32.10%
1992	\$1,545,186	\$466,250	\$89,354	\$17,436	\$573,040	30.20%
1991	\$1,513,215	\$347,114	\$86,357	\$10,642	\$444,113	22.90%
1990	\$1,452,184	\$342,116	\$82,554	\$9,277	\$433,947	23.60%
Average:						27.66%

*SFMA pass-thru \$ subtracted from actual total in FY95

*Firewood bundles sales started in FY93

** Includes ~ \$100-200/year in camp stove rental money

- The chart indicates that this percentage has varied over the decade with a low of around 23% and a high of over 32%. The average for the period is 27.7%, about the same as the previous fee review(27.9%) **The suggested minimum target percentage is 29% - this target has not been met since 2004.** This target is an applied judgment principally expressing the importance of the Park user fees providing a stable portion of overall Park revenues.

Criterion 2: Fees must be affordable to average Maine citizen

In accordance with Percival Baxter's wishes, the Park should be ***"made available to persons of moderate means..."***. Fees should be considered to be affordable to the average Maine resident. Several possible benchmarks can be considered to determine fee affordability:

Indicator 1:

Change in Maine Per Capita Income levels⁹⁶ since the last BSP fee adjustment (previous fee review measured the changes from 2003-2005).

Maine per capital income

⁹⁶ <http://www.bea.gov/regional/spi/default.cfm?satable=SA04>

1995-2007		
CALENDAR YEAR	ME per capita inc.	% CHANGE
1995	20,140	0
1996	21,203	5.28%
1997	22,179	4.60%
1998	23,596	6.39%
1999	24,484	3.76%
2000	25,973	6.08%
2001	27,323	5.20%
2002	27,816	1.80%
2003	28,795	3.52%
2004	30,169	4.77%
2005	30,772	2.00%
2006	32,254	4.82%
2007	33,962	5.30%

Tot Change since 2005 **10.10%**

These data suggests display an increase in the income of Maine citizens since the last fee increase.

Indicator 2:

Change in Consumer Price Index since the last BSP fee adjustment (previous fee review measured the changes from 2003-2005).

Using the published CPI for All Urban Consumers⁹⁷, an example of the index over time is as follows:
Consumer Price Index - All Urban Consumers

12 Months Percent Change															
Series Id:		CUUR0100SA0													
Not Seasonally Adjusted															
Area:		Northeast urban													
Item:		All items													
Base Period:		1982-84=100													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	HALF1	HALF2
1999	1.5	1.5	1.5	1.9	2.0	2.1	2.1	2.1	2.5	2.5	2.5	2.5	2.1	1.8	2.3
2000	2.8	3.5	3.8	3.3	3.2	3.4	3.7	3.3	3.4	3.2	3.4	3.3	3.4	3.3	3.4
2001	3.4	2.9	2.9	3.2	3.5	3.5	2.9	2.9	2.4	2.1	1.9	1.6	2.8	3.3	2.3
2002	1.5	1.8	1.8	2.0	1.7	1.3	1.8	2.3	2.4	2.6	2.8	2.9	2.1	1.7	2.5
2003	3.0	3.0	3.2	2.6	2.7	2.7	2.8	2.6	2.9	2.9	2.6	2.8	2.8	2.8	2.7
2004	2.8	2.7	2.9	3.5	3.7	4.3	3.9	3.4	3.2	3.6	3.8	3.6	3.5	3.3	3.6
2005	3.4	3.5	3.7	3.8	3.2	2.5	3.4	3.8	4.8	4.4	3.7	3.5	3.6	3.4	4.0

⁹⁷ <http://www.bea.gov/regional/spi/action.cfm> - Bureau of Economic Analysis

2006	4.1	3.9	3.3	3.8	4.6	5.1	4.6	4.5	2.6	1.7	2.3	3.0	3.6	4.1	3.1
2007	2.3	2.4	2.6	2.2	2.3	2.3	2.0	1.6	2.4	3.1	4.0	3.8	2.6	2.3	2.8
2008	3.9	4.0	3.9	3.9	4.3	5.0	5.7	5.5	5.2	4.0	1.7	0.7	4.0	4.2	3.8
2009	0.5														

The CPI indicates a modest, but significant rise of over 10% in general price levels since the last BSP fee review in 2006.

Indicator 3:

Comparison to similar public and private facilities in the Katahdin region and New England.

	<u>Rates for year 2006:</u>	<u>Rates for 2008</u>
Acadia (Blackwoods, Seawall):	\$20/tent site (drive-in)	\$20/tent site
Acadia (Isle au Haut):	\$25/tent site	\$25/tent site
White Mtn Nat. Forest:	\$16-\$18/tent-site	\$18/tent site
AMC Hut (self-service)	\$25/person/night	\$33/pers/night
ME –DOC		
Aroostook	\$12/- \$15/site	\$12-\$15/site
Camden Hills	\$15-\$20/site	\$15-\$25/site
Lamoine	\$15-\$20/site	\$15/\$25/site
Peaks/Kenny	\$15-\$20/site	\$15-\$25/site
GNP W. Branch Cabin	\$92/night (6 bunks, no max occupancy limit)	\$97/night
Katahdin Shadows	\$ 21/site \$ 25/site (– 2 person cabin)	\$22/site \$26/site
Big Moose Inn	\$ 13/pers/night \$ 10/pers/night – \$ 42/pers/night	\$13/pers/night (lean-to) \$10/pers/night (tent site) \$45/pers/night (weekday cabin)
Northern Outdoors	\$ 11/pers/night	\$11/pers/night (tent site - average)
Baxter State Park	\$ 9/pers/night – (leantos & tent sites)	\$10/pers/night

\$ 25/person/night \$27/pers/night
(cabins -base rate)

Because of differing specifics in facilities offered by other private and public entities, comparison is difficult, but a general comparison can be made. Although BSP is a publicly owned park, it receives no public funding and therefore may be more comparable to private sites. Fees noted for private facilities probably do not include sales tax, which is charged in addition to the listed rates. Sales tax is inclusive in fees charged by Baxter State Park.

Criterion 3:

Fees must be clear and understandable to the user and practically administered

Baxter State Park currently assesses fees based on a per person rate. Additional rates have been introduced for different ages and family rates. Every change in party size after the initial reservation requires a transaction.

The option to transition to a fee-per-site system has been discussed several times in the past.

Section III of this review includes a proposal to change the bulk of the Park's user fees for camping facilities from a per-person to a per-site format.

III. Fee Adjustment Proposal:

Camping fees and canoe rentals

Proposal:

This fee review proposes a change in the fee format from a per-person based schedule to a site-based schedule. This change has been discussed many times in past reviews but never implemented. The rationale is discussed at length below.

Lean-tos, Tent sites and Cabins: Implement the following schedule of per-site fees for Park camping facilities:

Lean-tos & tent sites: \$30/night.

Cabins:

2 bed cabin:	\$55/night
3 bed cabin:	\$75/night
4 bed cabin:	\$105/night
6 bed cabin	\$140/night

Bunkhouse: Retain bunkhouse rates at \$10/person/night.

Group Areas: Increase group area rates from \$6/person/night - \$36/site minimum to \$7/person/night and \$40/site minimum.

Non-resident entrance fees: Increase from \$13 to \$14 per vehicle.

Canoe rental: No change.

Firewood bundles: No change at this time, may be increased as needed to cover program costs.

General Discussion and Rationale:

Park use dropped steadily from 1999 to 2005 before turning slightly upward until 2008 when total headcounts decreased but camper-nights increased. We will continue to monitor and research trends in the use of the Park. Discussion continues regarding the changes in demographics and associated preferences or aversions to outdoor recreation activities. While these are serious long-term changes to consider, we are also concerned about the possible effects of short-term economic declines for the northeast and the US. The current severe recession has reduced revenue production from the Park including revenues provided by Park trust funds. This downward pressure on revenues from trusts has put more pressure on other sources of Park revenue, including fees.

While the changes in per capital Maine earnings and inflation indices detailed under Indicators 1 and 2 in the protocol above mark a modest, but significant increase from the last review, the period from January 2009 to the present was not included in the review data. This has been a difficult period for wage earners in our economy and has likely produced at best, very modest inflation. More importantly, the historic depth of the current recession and the uncertain economic future suggest caution in applying the protocol without careful consideration. The current economic disconnect has significantly reduced the value of the Park's endowment, upon which the Park relies to provide roughly 65% of revenues for annual operations. While the likelihood of a reduced revenue stream suggests that the Park would benefit from raising fees, it is clear that this need must be balanced by the ability of the average Maine citizen to afford to camp in the Park.

The option of moving the primary rental sites in the Park (lean-tos, tent sites and cabins) to a per-site rate has been discussed many times. This pricing structure is by far the most common in the area. Disadvantages in this structure include a higher per capita cost for Park users that camp as singles or couples. Advantages include lower per capita costs for larger groups in lean-tos or cabins and fee schedule that is markedly easier for Park visitors to understand and apply and provides greater simplicity in the operation of our reservation, accounting and payment systems.

Because revenues from camping provide a significant portion of the Park's annual revenue stream, it is important that the conversion to a per-site schedule provide revenues at least equal to the revenues received from the current per-person rates. To make this conversion, we determined the total revenue for each site type and divided this sum by the actual rented site-nights for the 2008 season. We considered the assembled site-night and revenue totals carefully, aware that a miscalculation will have a direct effect on Park income. While we feel the site-night fees are an accurate calculation, it is not possible to assign all the cabin revenues to a specific capacity cabin (some fees are collected in the field and are tallied to the office as a lump sum). In most of the conversions, we rounded to the high side to ensure that adequate revenue will be received. We will review our camping revenues carefully after the 2010 season to confirm that the conversion from per-person to per site met the stated goals.

IV. Communications Plan:

Park staff must make a persistent and thorough effort to communicate approved fee adjustments to the Park users and general public. Suggested methods should include, but not be limited to posting of expected fee increases at:

- Park Headquarters
- Togue and Matagamon Gatehouses
- Campground Offices
- Hiker registration points in Park campgrounds
- The Park Visitor Center
- On the Park website

In addition to postings, a fee adjustment summary sheet including the specific fee adjustments, timing and a brief summary of the adjustment rationale should be prepared for distribution as inclusions in requests for Park information, reservation paperwork, and at Park gates to all Park users.

Contact should be made 2 to 3 months prior to the effective date of the fee adjustment (probably October or November) with local print media to run a short piece describing the fee adjustments and the associated rationale.

Fee adjustments should be included as agenda items in public speaking sessions of Park staff.

This fee adjustment and change to per-site rates could be implemented in January of 2010.

V. Supporting Data

BAXTER STATE PARK 2009 FEES

Summer Rates beginning January 15,2009

Site Transfers	\$20.00
Lean-to (per person)	\$10.00
Lean-to minimum	\$20.00
Tent-site (per person)	\$10.00
Tent-site minimum	\$20.00
Tent-site family rate	\$20.00
Bunkhouse (per person)	\$10.00

Cabins

Adult (per person)	\$27.00
Children 7-16 years old	\$16.00
Children 0-6 years old	FREE
2-person cabin minimum	\$49.00
3-person cabin minimum	\$68.00
4-person cabin minimum	\$90.00
6-person cabin minimum	\$146.00

Group Areas

Per person	\$6.00
Group site minimum	\$36.00
Entrance fees (per vehicle)	\$13.00
Season Pass	\$39.00

Winter Rates beginning November 1, 2008

Chimney Pond Bunkhouse	\$38.00
Other Bunkhouse (per person)	\$19.00
Lean-to (per person)	\$13.00
Cabin (per person)	\$32.00

There is no vehicle fee assessed for Maine residents!

Steps to determine site-night fees for lean-tos and tent sites:

- Add number of site for each month by campground

- Add gate revenue to reservation office revenue for each campground per month
- Totaled revenue for all campgrounds by month
- Divided monthly revenue by total site nights per month to get avg. fee per site per night for each month
- Added avg. site night for each month and divided by number of months

TOTAL SITE NIGHT PER MONTH BY CAMPGROUND

Cmpgrd	May	June	July	August	Sept	Oct
RB	42	382	658	663	572	259
Abol	68	205	509	589	237	140
KS	84	411	636	666	417	210
NES	0	189	545	806	343	122
SBP	105	204	642	925	417	229
TBF	29	190	382	317	175	103
CP	0	139	268	276	274	112
Totals	328	1720	3640	4242	2435	1175

TOTAL REVENUE PER MONTH BYCAMPGROUND

	May	June	July	August	Sept	Oct
RB	\$1,042.00	\$10,214.00	\$22,597.00	\$22,879.00	\$5,940.00	\$7,139.00
ABOL	\$1,510.00	\$6,020.00	\$14,720.00	\$16,570.00	\$16,204.00	\$3,630.00
KS	\$2,082.00	\$11,278.00	\$22,324.00	\$22,652.00	\$11,416.00	\$6,044.00
NES	\$280.00	\$1,754.00	\$9,780.00	\$17,775.00	\$3,735.00	\$2,510.00
SBP	\$2,022.00	\$4,414.00	\$15,585.00	\$23,591.00	\$9,368.00	\$4,903.00
TBF	\$1,886.00	\$3,754.00	\$8,272.00	\$12,822.00	\$3,348.00	\$2,240.00
CP	\$0.00	\$5,421.00	\$10,616.00	\$10,890.00	\$10,181.00	\$4,347.00
TOTALS	\$8,822.00	\$42,855.00	\$103,894.00	\$127,179.00	\$60,192.00	\$30,813.00

Avg fee per site night per month

May	June	July	August	Sept	Oct
\$26.90	\$24.92	\$28.54	\$29.98	\$24.72	\$26.22

Avg cost site night	\$27
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Site-Night Calculations - Daicey Pond August 2008

2 Bed Cabins

#3- open site nights 0 (not reserved)

#7-open site nights 0

#6-open site nights 14

Total site nights reserved for the month of August 79

Total people: adults 77, children (7-16) and (under 6) =0

Total money \$4,104.00
Average price of cabin per night: \$51.95

3 Bed Cabins

#8-open site nights 1 (not reserved)
Total site nights reserved for the month of August- 30
Number of people- Adults 24, (7-16) 7, (6 under) 0
Total money \$2,133.00
Average price of cabin per night: \$71.10

4 Bed Cabins

#1-open site nights 0 (not reserved)
#2-open site nights 2
#4-open site nights 4
#5-open site nights 0
#9- open site nights 1
Total site nights reserved for the month of August 148
Number of people- Adults 157, (7-16) 28, (under 6) 11
Total money \$14,064.00
Average price of cabin per night: \$95.03

6 Bed Cabins

#10-open site nights 0
Total nights reserved for the month of August -31
Number of people- Adults 48, (7-16) 12
Total money \$3631.00
Average price of cabin per night: \$117.13

Note: 3/31/09- Update "Add on" money that was collected at the gate or Daicey Pond for the whole month of August was \$918.00.

Site-Night Calculations - Kidney Pond 2008

2 Bed Cabins

#5- open site nights 12 (not reserved)
#10- open site nights 0
#11- open site nights 0
#12-open site nights 3
Total site nights reserved for the month of August 109
Number of people- Adults 84 (7-16) - 4 kids
Total money \$5832.00
Average price of cabin per night: \$53.50* per site

3 Bed Cabins

#3- open site nights 3 (not reserved)
#4-open site nights 4

Total site nights reserved for the month of August 55
Number of people- Adults 40, (7-16) 6, 1 (under 6)
Total money \$3916.00
Average price of cabin per night: \$71.20* per site

4 Bed Cabins

#1- open site nights 1 (not reserved)
#2-open site nights 2
#8-open site nights 1
#9-open site nights 0
Total nights reserved for the month of August 120
Number of people- Adults 114, (7-16) 36, 9 (under 6)
Total money \$11472.00
Average price of cabin per night: \$95.60* per site

6 Bed Cabins

#6-open site nights 0
#7-open site nights 4 (not reserved)
Total nights reserved for the month of August 58
Number of people- Adults 83, (7-16) 16, (under 6) 10
Total money \$6376.00
Average price of cabin per night: \$109.93* per site

***Does not include add on people from the gatehouse.**

3/31/09- Update "Add on" money that was collected at the gate or Kidney pond for the whole month of August was \$1,625.00. Looking over the number of people that paid ahead of time in the system I would say a high number of "add ons" were for cabin #6 and #7 (6 beds).

10.40 BSP-IF&W Memorandum of Agreement for Search and Rescue in Baxter State Park

Memorandum of Agreement: IF&W and BSP regarding S&R in BSP

Memorandum of Understanding Between Inland Fisheries & Wildlife and Baxter State Park Authority Millinocket, Maine

The Department of Inland Fisheries and Wildlife is responsible for persons lost, injured, stranded, or drowned. The Department, when it is demonstrated to be in the best interest of the public, may make written agreements with other agencies or organizations to assume all or part of this responsibility.

Baxter State Park personnel are well trained, well equipped, and have the desire and ability to carry out preliminary and routine SAR within the confines of Baxter State Park.

The Departments of Inland Fisheries & Wildlife and Baxter State Park agree that it is desirable for the Baxter State Park Authority to continue to provide responses to reports of lost, injured, stranded, or drowned persons within the confines of Baxter State Park.

The Department of Inland Fisheries & Wildlife agrees to continue to provide Search and Rescue Services to Baxter State Park when requested by the BSP Director or Chief Ranger.

Baxter State Park Authority agrees to:

1. To provide an annual search and rescue report to the Department of Inland Fisheries & Wildlife by March 15.
2. Conduct periodic training programs with the Department of Inland Fisheries & Wildlife and other agencies in order to maintain or improve present high readiness SAR status.
3. Adhere to the following five-step sequence in the cooperative SAR program between Baxter State Park and Inland Fisheries & Wildlife:
 - Step 1. Immediate response to ascertain if there is a situation at BSP that warrants a search and/or rescue. Carry out the initial phases of the search with BSP personnel.
 - Step 2. Unless the SAR incident is a priority 1 incident, after 48-hours of SAR operations Baxter State Park will request the assistance of the Department of Inland Fisheries & Wildlife in determining the need for alerting and/or calling out the overhead search team. Baxter State Park to apprise the Warden Service Lieutenant/Statewide Officer of the Day of the situation.
 - Step 3. To assist Inland Fisheries & Wildlife overhead team and to summon and coordinate such volunteer groups as may be required to assist.
 - Step 4. To provide support, food, berthing, and materials that may be necessary to carry out a prolonged SAR mission.
 - Step 5. To assist in suspension of mission by demobilizing the mission and continuing the search on a reduced basis.
4. Baxter State Park will contact the Department of Inland Fisheries & Wildlife personnel in all drownings where there is need for body recovery.

This agreement shall remain in effect until terminated by either party.

10.41 Heat Index Protocol (from SOP Manual)

Heat Index - What is it?

Heat Index—(Apparent Temperature) - This index is an accurate measure of how hot it feels (in degrees) when moisture (relative humidity) is added to the actual air temperature.

The heat index is an estimate of how hot the day's weather will feel to visitors in the area. It is determined by a combination of the day's predicted high temperature and humidity. The heat index is based on someone standing in the shade and would be 10-15 degrees higher in full sun (above tree-line) given the same temperature.

Why has BSP implemented a Heat Index Warning for the Weather Report?

Due to an increase in heat related rescues over the last few years (especially early in the season), Baxter State Park will be advising hikers of high heat index days with a heat index warning posted on the weather reports at duty stations. Visitors should use this information to help make safe judgments and plan their day's activities accordingly for themselves and their groups.

What will staff do when a Heat Index Warning day is announced?

When preparing the morning weather report, the Chimney Pond Ranger will either use the National Weather Service forecast or use a standardized chart (see Heat Index Chart on next page) to consider issuing heat index for the day.

Discretion is granted to the Chimney Pond Ranger to NOT call a Heat Index warning day when one should otherwise be called. This discussion should only be exercised by the Chimney Pond Ranger when the day is, due to localized mountain weather conditions, highly unlikely to be as hot as is predicted. Such a localized weather condition may include but would not be limited to heavy cloud cover that an experienced ranger might expect would not dissipate in time for the day to reach its forecasted heat potential.

The Chimney Pond Ranger is encouraged to consult with the supervisory ranger or Deputy Chief Ranger during warm weather when the possibility of heat warning issues exists.

On warning days, all duty stations will affix the heat index warning stickers to the morning weather report (next to but not covering the class day section on the bottom) to alert visitors for the potential of heat related problems on these days.

Place a real sticker here – rather than trying to duplicate the

Rangers, when in their normal conversations with the public, should encourage visitors to take it easy/avoid over exertion, pack extra water (above and beyond the usual recommended 2 liters/person for mountain hikes) and monitor their groups for cramps, exhaustion and other heat related symptoms. These are Park recommendations and trails will remain open to visitors. It maybe important to emphasize turn around times due to the fact that hiking in veryhot conditions is slower than usual hiking, and that rescues on these days may be slower than usual because of health concerns for rescuers due to the heat.

NOAA's National Weather Service

Heat Index

Temperature (°F)

Relative Humidity (%)	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	126	130					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

Caution

Extreme Caution

Danger

Extreme Danger

10.42 BSP Medical Training Plan – 2010 (draft)

Medical Training & Certification of Baxter State Park Staff

The need for up to date training and recognized certification to respond to medical emergencies in Baxter State Park is of paramount importance. Park Rangers and other staff can be asked to respond to medical emergencies at any time throughout the park.

Depending on weather conditions and the location and nature of the incident, response could take hours. Staff resources and equipment are supplemented by volunteer search & rescue teams and other agencies when needed.

The response by Baxter State Park to medical emergencies is done as a first response to emergencies. The level of care is described in the *Wilderness Protocols* section. Injured parties will be transferred to EMS or asked to seek further medical care if transported in a private vehicle from the park. Park vehicles should only be used to transport if the patient is stable and then only to their vehicle or other transportation. Requests for SAR teams, ALS, helicopter support, or other assistance will be made through the chain of command by the Duty Officer or Incident Commander.

Roadside Campgrounds and trails within 1 mile of the park tote road- response times to these areas are typically less than 2 hours when the roads are open to wheeled motor vehicles.

-Medical Training- staff whom is assigned to these areas shall be trained and certified at the **16 hour Wilderness First Aid (WFA) level**.

Backcountry Campgrounds and interior trails- response times in these areas can be longer than 2 hours to definitive care.

-Medical Training- staff whom is assigned to these areas shall be trained and certified at the **36 hour Wilderness Advanced First Aid (WAFA) level**.

The 36 hour Wilderness Advanced First Aid (WAFA) level and, when available, the **36 hour Wilderness First Responder (WFR)** upgrade training is required for Baxter State Park Rangers.

Training Opportunities- Baxter State Park will offer WFA training on an annual basis for new staff and returning staff for recertification. WAFA and WFR Bridge (explain Bridge) training will be open to seasonal staff at no charge when offered at Baxter State Park.

Baxter State Park requires that field staff also attend an 8 hour SAR class offered concurrently with the annual WFA on the same certification/ recertification schedule.

<u>Required Medical Training Level</u>	<u>Baxter State Park classified positions</u>				
	CR - F/C	CR - B/C	CR - Rvng	BSP1	TR Ldr
16 Hour Wilderness First Aid (WFA)	X				
36 Hour Wilderness Advanced First Aid (WAFA)		X	X		X
36 Hour Wilderness First Responder (WFR)				X	

If staff would like to further their medical certification they are free to do so on their own time and cost. No Baxter State Park employee will be authorized to use equipment or protocols higher than described.

Wilderness Protocols

Authorization Criteria- the use of these protocols is authorized for employees of Baxter State Park under the following condition;

- The employee is scheduled and on the job for Baxter State Park
- The transportation time to a hospital exceeds two hours except in the case of an anaphylactic reaction in which no minimum transport time is required
- The employee holds an unexpired Wilderness Advanced Life Support (WALS), Wilderness EMT (WEMT), Wilderness First Responder (WFR), Wilderness Advanced First Aid (WAFA), or Wilderness First Aid (WFA) certification from Wilderness Medical Associates (or current certification and documented additional training in the wilderness protocols approved by the Chief Ranger). WAFA certified employees may only use protocols 1, 2, and 3. WFA certified employees may only use protocols 1.

Protocol 1: Wound Management

In the management of all wounds, bleeding must be controlled using well-aimed direct pressure with whatever means are necessary. Control of severe bleeding is a higher priority than wound cleaning. Once bleeding has been controlled:

Open Wounds

1. Remove foreign particulate material as completely as possible.
2. Wash the surrounding skin with soap and water.
3. Irrigate the wound with at least 100 ml (ideally 1000 ml) of the cleanest water available. A final wash should be made with water of drinking quality.
4. Highly contaminated wounds (i.e., some particulate material remaining, deep punctures, devitalized tissue within and/or surrounding the wounds, bites, open fractures, injuries involving damage to underlying structures, or other similar type wounds) should be irrigated with and covered by a bandage soaked in a 1% providine-iodine solution.
5. Cover the wound with a sterile bandage and immobilize the area if possible. Splint if necessary. Do not close with sutures or adhesive closures (butterflies).
6. Change the bandage and clean the wound daily with soap and clean water.
7. Facilitate drainage in all infected wounds (i.e., red hot, extremely tender, swollen, drainage of purulent material.)
8. Assess need for tetanus and rabies prophylaxis. High risk wounds require tetanus prophylaxis every five years, all others every ten.
9. If the wound was the result of an animal bite, assess the risk for rabies exposure. The probability of rabies exposure varies by geographic location and the type of animal. Check with state or local health agency for recommendations. Generally, a period of several days between bite and immunization is considered safe, depending on the bite location on the patient's body.

Shallow Wounds (Abrasions and Burns)

1. Cleanse the wound with soap and the cleanest water available. Rinse with drinking quality water.
2. Apply an antibacterial ointment or cream and cover with a sterile bandage. Immobilize wound area if possible.
3. Inspect the wound and change the bandage daily.

Impaled Objects

1. Only remove impaled objects when they interfere with safe transport or they cannot be effectively stabilized (i.e., will cause more damage if left in place) and then only if removal can be done safely and easily.
2. Treat as an open wound (see above).

Protocol 2: Cardiopulmonary Resuscitation (CPR)

This protocol applies only to normothermic patients (core temperature > 90° F, 32° C) in cardiac arrest. Chest compressions are initiated for patients in cardiac arrest evidenced by pulselessness. To be effective, CPR must be started promptly. Even then, its benefits in the back country are limited.

1. Assess and treat according to standard CPR protocols.
2. If cardiac arrest persists continuously for over 30 minutes of sustained chest compressions and assisted ventilations all treatment may be stopped.

Protocol 3: Spine Injuries

In an urban context, all patients that are involved in a traumatic event that may have caused a spine injury are treated as though they are spine injured. In a wilderness context, clearing a potential spine injury when there is a positive mechanism for such an injury requires careful evaluation that focuses on patient reliability, nervous system function, and spinal column stability. Adequate time must be allowed for the evaluation. Repeat examinations may be necessary.

1. Assess for mechanism of spine injury. If positive or uncertain mechanism exists, protect the spine by hand stabilizing it in the in-line position.
2. Do a thorough evaluation including a history and physical examination. To rule out a spinal injury, the patient must meet all of the following criteria:
 - a. Patient must be reliable. The patient must be cooperative, sober, and alert, and must be free of other distracting injuries significant enough to mask the pain and tenderness of the spine injury.
 - b. Patient must be free of spine pain and tenderness.
 - c. Patient must have normal motor/sensory function in all four extremities:
 - i. Finger abduction/adduction or hand/wrist extension (check both hands)
 - ii. Foot plantar flexion/extension or great toe dorsiflexion (check both feet)
 - iii. Normal sensation to pain and light touch in all four extremities
 - iv. Exception: If reduced function in one particular extremity can be attributed with certainty to a condition unrelated to a potential spine injury (because the motor/sensory assessment contain built-in redundancy).

3. If a spine injury has not been ruled out, the patient must be fully immobilized except in the following case: in a wilderness context, with a reliable patient who has normal motor/sensory function, if spine pain and tenderness can be isolated to the lumbar area, the patient's head may be left free. Likewise, if the injury involves only the c-spine, the hips may be left free for patient comfort.
4. Transport patient to hospital.

Protocol 4: Joint Dislocations

This protocol specifically applies to dislocations of the shoulder, patella, and digits resulting from an indirect force; all other potential dislocations should be treated as one would treat any other potentially unstable joint injury (i.e., splint in a position that maintains stability and neurovascular function while facilitating transport). A history confirming that there has been no direct injury to the affected joint and an examination with findings consistent with a dislocation must be obtained prior to treatment. The following procedures should be stopped if pain increases and/or if resistance is encountered.

Shoulder

1. Check and document distal neurovascular function including sensation over the deltoid region of the affected side.
2. With the patient supine and while sitting adjacent to the dislocated shoulder, apply gentle traction to the arm to overcome muscle spasm. Gradually abduct and externally rotate the arm until it is at a 90 degree angle to the patient's body. This is most easily achieved by keeping the elbow in the 90 degrees of flexion throughout the maneuver. Hold the arm in this position ("baseball throwing position") and maintain traction until the dislocation has been reduced.
3. An alternative method of reduction takes advantage of gravity. Ten pounds is secured to the patient's arm while she is lying flat down (prone) with her arm hanging unsupported. This process can be facilitated if the rescuer stabilizes the upper portion of the scapula with one hand while rotating the lower tip medially with the other. Reassess and treat in the same fashion after the reduction is complete.
4. Once either the reduction is reduced or the rescuer decides to discontinue reduction attempts, adduct the humerus so that the elbow is alongside the body. Then internally rotate the arm across the body and sling and swathe.
5. Reassess and document distal neurovascular status.
6. Transport patient to hospital.

Patella

1. Check and document distal neurovascular function.
2. Gently straighten the patient's knee and flex the hip. If the patella does not spontaneously reduce, gently guide the displaced patella medially into its normal anatomic position.
3. Splint the knee in a neutral position (10-15 degrees of flexion).
4. Reassess and document distal neurovascular status.
5. Transport patient to hospital.

Digits (Fingers and toes, not including thumb)

1. Check and document distal neurovascular function.
2. Apply axial traction distal and counter-traction proximal to the dislocated joint until the dislocation has been reduced.
3. Splint in the anatomical position.
4. Reassess and document distal neurovascular status.
5. Transport patient to hospital.

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10.43 BSP Vehicle Inventory - 2010

BAXTER STATE PARK VEHICLES (12/13/10)												
REG. #	SVC. #	ASSIGNED	YEAR	MAKE	TYPE	SERIAL #	VALUE AT PURCH.	YEAR PURCH.	SPRING '08 MILEAGE	Barcode Page #	FA #	Asset ID #
BSP-1	1	J. BISSELL	2010	SUBARU FORESTER	4X4 UTILITY SUV	JF2SH6AC8AG726745	\$20,816	2009	26,082	N/A	20100001448	700
BSP-2	2	B. WOODARD	2006	GMC CANYON	4X4 TRK EXT CAB	1GTD136768307951	\$21,862	2006	51,706	44	65155	603
BSP-3	25	SFMA RES. MGR.	2003	GMC SIERRA	4X4 TRK	1GTEK19V73E377498	\$22,024	2003	90,267	27	54270	145
BSP-4	22	J. HOEKWATER	2004	FORD ESCAPE	4X4 UTILITY SUV	1FMYU93174KB34185	\$17,820	2005	103,700	40	59189	157
BSP-5	30	I. NEEDELL	2004	GMC TK1590	4X4 TRK	1GTEK14VX4Z350197	\$27,879.55	2004	97,081	34	56458	148
BSP-6	4	S. GUAY	2010	FORD F150	4X4 TRK	1FTEX1EW3AFC1148	\$21,264	2010	4000			729
BSP-7	29	POOL VEHICLE was SFMA	2000	GMC TK1590	4X4 TRK	1GTEK14V6YE414894	\$18,921	2000	114,355	7	46947	150
BSP-8	18	R. ANGOTTI	2008	GMC SIERRA	4X4 TRK	1GTEK14C08E217444	\$19,340	2008	22016		20090000467	669
BSP-9	26	M. MARTIN	2003	GMC SIERRA	4X4 TRK	1GTEK14V13Z275484	\$21,042	2003	104,245	26	54078	152
BSP-10	24	C. KENNEDY	2009	GMC	TRK	1GDHC44K69E110205	\$25,649.27	2009	12451	N/A	20100001460	689
BSP-11	31	SPARE was S. Guay	2004	GMC SIERRA	4X4 TRK EXT CAB	2GTEK19T841380086	\$33,605	2004	134,653	34	56457	134
BSP-12	14	ABOL	2004	CHEV CC1590	TRK	1GCEC14X54Z137639	\$13,975	2005	41,035	38	57395	124
BSP-13	11	TR. CREW	2005	CHEV BC211311	TRK CREW CAB	1GCHK23U35F97214C	\$21,484	2008	50,476		20080000460	648
BSP-14	27	R. TICE	2010	FORD F150	4X4 TRK	1FTEX1EW5AFC1148	\$21,264	2010	6,561			730
BSP-15	19	TR. CREW	1998	GMC	4X4 TRK	1GTGK29R9WE52687	\$22,975	1999	127,598	21	43813	128
BSP-16	16	M. WINSLOW	2000	GMC TK1590	4X4 TRK	1GTEK14V7YE400695	\$18,839	2000	98,156	7	46948	129
BSP-17												
BSP-18	8	KATAHDIN STR.	2009	CHEV	TRK	1GCEC14X89Z107509	\$16,323	2009	9004	N/A	20100001462	690
BSP-19	20	NESOW.	2002	CHEV SILVERADO	TRK	1GCEC14W02Z17828	\$12,350	2004	55,721	36	57238	132
BSP-20	13	62/TR. CREW	2008	GMC SIERRA	4X4 TRK EXT. CAB	1GTHK29K18E216774	\$23,090 cap \$3,896	2008	13,356		20090000466	670
BSP-21	9	POOL VEHICLE	1997	GMC SAFARI	VAN	1GKEL19W3VB54424	\$16,545	1999	82,928	8	44602	136
BSP-22	7	DAICEY PD.	2006	GMC TS15403	TRK	1GTCS148168140274	\$13,000	2007	16,367		20080000072	612

10.44 BSP Snowmobile Inventory - 2010

BAXTER STATE PARK SNOWMOBILE INVENTORY (10/22/10)

SERVICE #	CALL #	NAME	ME. REG.	MODEL YEAR	YEAR PURCH	MAKE/MODEL	TRACK	SERIAL #	COST	FA #	Barcode Page #	Asset ID #	CERT. OF ORIGIN
100		WOODARD	123ME	2007	2008	SKIDOO V-800 SKANDIC SWT	SWT	YH2SFP7B27R000481	\$9,650	64744	45	601	
101		WOODARD under repair	12W8Z	2009	2009	SKIDOO V-800 SKANDIC SWT	SWT	YH2SL59B79R001458	\$9,404	20100001464		703	yes
102	52	MORRILL reg. Track	3920A	2002	2001	SKIDOO 500 SKANDIC WT	ST	YK3S210002R000080	\$5,590	51159	35	75	
103													
104	62	SANNICANDRO	125BS	2007	2008	SKIDOO V-800 SKANDIC SWT	SWT	YH2SFP7B97R000445	\$9,074	(65175(old)) 20100001476	45	602	yes
105	69	ANGOTTI	12J4S	2009	2008	SKIDOO V-800 SWT	SWT	YH2SL59B29R000816	\$9,404	20100001474		674	yes
106	60	BRACE	12J4T	2009	2008	SKIDOO V-800 SWT	SWT	YH2SL59B39R000949	\$9,404	20100001477		675	yes
107	53	GUAY	12W8Y	2009	2009	SKIDOO V-800 SKANDIC SWT	SWT	YH2SL59B39R001473	\$9,404	20100001483		702	yes
108	87	WILLIAMSON	10S2F	2004	2003	SKIDOO 440 SKANDIC LT	ST	YK3S268434R000050	\$5,337	54852	29	81	yes
109		MATA POOL	10S2H	2004	2003	SKIDOO 550 SKANDIC WT	ST	YK3S223404R000152	\$6,066	54851	29	82	yes
110	57	MARTIN	12BAH	2007	2007	SKIDOO V-800 SKANDIC SWT	SWT	YH2SFP7B27R000741	\$8,325	20080000279		645	yes
111	54	MACARTHUR	12BAJ	2008	2007	SKIDOO V-800 SKANDIC SWT	SWT	YH2SL58B38R000923	\$8,643	20080000280		646	yes
112	56	TICE	12W8X	2009	2009	SKIDOO V-800 SKANDIC SWT	SWT	YH2SL59B89R001498	\$9,404	20100001465		701	yes
113													
114		ABOL POOL	5210C	2001	2000	SKIDOO 500 SKANDIC WT	ST	YK3S181521R000036	\$5,550	47295	35	87	yes
115			112PP	2006	2005	SKIDOO 550 SKANDIC WT	ST	YH2SFG6B16R000245	\$6,201.85	60907	42	93	yes
116		MATA POOL	112PR	2006	2005	SKIDOO 550 SKANDIC WT	ST	YH2SFG6B36R000244	\$6,201.85	60909	42	102	yes
117	55	HOEKWATER	112PS	2006	2005	SKIDOO 550 SKANDIC SWT	SWT	YH2SFE6B96R000790	\$6,614.85	60908	42	163	yes
118													

10.45 BSP Canoe and Kayak Inventory – 2010

BAXTER STATE PARK CANOES

9/21/2010

LOCATION	MAKE	MODEL	SERIAL #	YEAR PURCH.	ASSET ID #
ABOL PIT	GRUMMAN	17' ALUM.	GBMN0786E090		325
CAVERLY POND	OLD TOWN	DISCOVERY 158	XTC71706E999	1999?	632
DAICEY PD.	OLD TOWN	DISCOVERY 169	XTC68358D494		312
DAICEY PD.	OLD TOWN	DISCOVERY 169	XTC66446C494		313
DAICEY PD.	OLD TOWN	DISCOVERY 169	XTC61530B494		314
DAICEY PD.	OLD TOWN	DISCOVERY 169	XTC70736O494		315
DAICEY PD.	OLD TOWN	DISCOVERY 169	XTC98206E595		316
DAICEY PD.	OLD TOWN	DISCOVERY 169	XTC00483D909	2009	686
DAICEY PD.	OLD TOWN	DISCOVERY 169	XTC20672E595		318
DP-ELBOW PD.	GRUMMAN	15'			324
DP-FOSS & KNOWLTON	OLD TOWN	DISCOVERY 169	XTC15073F888		319
DP-GRASSY PD.	GRUMMAN	15'			322
DP-GRASSY PD.	OLD TOWN	KINEO 169	XTC04594F404	2006	323
DP-GRASSY PD.	OLD TOWN	DISCOVERY 169	XTC05684F606	2007	613
DP-LOST PD.	GRUMMAN	15' ALUM.	20087-G-5-15		320
DP-LOST PD.	GRUMMAN	15' ALUM.	1599-G-5-18		321
KATAHDIN LAKE	OLD TOWN	DISCOVERY 169	XTC02388E505	2005	311
KATAHDIN LAKE	OLD TOWN	KINEO 169	XTC04592F404	2006	348
KATAHDIN LAKE N LT	OLD TOWN	KINEO 158	XTC0432A505	2006	154
KATAHDIN LAKE S LT	OLD TOWN	DISCOVERY 169	XTC05864K203	2003	310
KIDNEY PD.	OLD TOWN	DISCOVERY 169	XTC86259H495		326
KIDNEY PD.	OLD TOWN	DISCOVERY 169	XTC86205H495		327
KIDNEY PD.	OLD TOWN	DISCOVERY 169	XTC86944S495		328
KIDNEY PD.	OLD TOWN	DISCOVERY 169	XTC86280H495		329
KIDNEY PD.	OLD TOWN	DISCOVERY 169	XTC86221H495		330
KIDNEY PD.	OLD TOWN	DISCOVERY 169	XTC86247H495		331
KIDNEY PD.	OLD TOWN	DISCOVERY 169	XTC87013S495		332
KIDNEY PD.	OLD TOWN	DISCOVERY 169	XTC86220H495		333
KP-BIG ROCKY	GRUMMAN		13359-G-5-17		334
KP-BIG ROCKY	GRUMMAN		13365-G-5-17		335
KP-BIG ROCKY	GRUMMAN	17'	GBMN0817E090		336
KP-CELIA	GRUMMAN	17'	GBMN0816E090		338
KP-DRAPER	OLD TOWN	KINEO 169	XTC12658H405	2006	347
KP-JACKSON	GRUMMAN	17'	GBMN0785E090		339
KP-LILY PAD	GRUMMAN	17'	GBMN0784E090		340
KP-LILY PAD	GRUMMAN	17'	GBMN0790E090		341
KP-LILY PAD	OLD TOWN	DISCOVERY 169	XTC03798C707	2007	614
KP-LITTLE ROCKY	GRUMMAN		GBM48656J788		345
KP-WINDY PITCH	GRUMMAN				343
MARTIN PD LT	OLD TOWN	DISCOVERY 169	XTC61460B494		317
NESOWADNEHUNK	GRUMMAN	ALUM.	4991-G-SK-15		349
POGY POND	OLD TOWN	DISCOVERY 169	XTC40506E696	1996	283
RP-DEEP PD.	OLD TOWN	DISCOVERY 169	XTC38236D393	1993	358
RP-SIX PONDS	OLD TOWN	DISCOVERY 169	XTC23891K293	1993	359
RP-SIX PONDS	OLD TOWN	DISCOVERY 169	XTC41509F696	1996	360
RP-WASS. LK.	OLD TOWN	KINEO 169	XTC04602F404	2006	346
RP-WASS. LK.	OLD TOWN	DISCOVERY 169	XTC04435F303	2003	353
RP-WASS. LK.	OLD TOWN	DISCOVERY 169	XTC94480H798	1998	354

RUSSELL PD.	OLD TOWN	DISCOVERY 169	XTC17085G293	1993	350
RUSSELL PD.	OLD TOWN	DISCOVERY 169	XTC18427G293	1993	351
RUSSELL PD.	OLD TOWN	DISCOVERY 169	XTC38254D393	1993	352
RUSSELL PD.	OLD TOWN	DISCOVERY 169	XTC17140G293	1993	355
RUSSELL PD.	OLD TOWN	DISCOVERY 169	XTC60577A494	1994	357
S. BRANCH PD.	OLD TOWN	DISCOVERY 169	XTC94232H798	1196	284
S. BRANCH PD.	OLD TOWN	DISCOVERY 169	XTC94218H798	1997	285
S. BRANCH PD.	OLD TOWN	DISCOVERY 169	XTC94205H798	1997	286
S. BRANCH PD.	OLD TOWN	DISCOVERY 169	XTC94463H798	1997	287
S. BRANCH PD.	OLD TOWN	DISCOVERY 169	XTC22192E898	1998	288
S. BRANCH PD.	OLD TOWN	DISCOVERY 169	XTC25349J293	1999	289
S. BRANCH PD.	OLD TOWN	DISCOVERY 169	XTC55583A999	1999	290
S. BRANCH PD.	OLD TOWN	DISCOVERY 169	XTC55492A999	1999	291
S. BRANCH PD.	OLD TOWN	DISCOVERY 169	XTC07635B101	2001	292
S. BRANCH PD.	OLD TOWN	DISCOVERY 169	XTC01248J102	2002	293
S. BRANCH PD.	OLD TOWN	DISCOVERY 169	XTC23670J293	1993	294
TBF	OLD TOWN	DISCOVERY 169	XTC39008E393	1993	295
TBF	OLD TOWN	DISCOVERY 169	XTC01070E101	2001	302
TBF	OLD TOWN	DISCOVERY 169	XTC01076E101	2001	303
TBF	GRUMMAN	17' ALUM.	GBM48644J788		304
TBF	GRUMMAN	17' ALUM.	GBM48655J788		306
TBF	GRUMMAN	17' ALUM.	GBMN0788E090		307
TBF	GRUMMAN	17' ALUM.	GBMN0783E090		308
TBF	GRUMMAN	17' ALUM.	GBMN0782E090		309
TBF	GRUMMAN	17' ALUM.	GBM21522D585		
TBF 1ST LAKE SITE	GRUMMAN	17' ALUM.	GBM21521D585		305
TBF BILLFISH	GRUMMAN	17' ALUM.	GBMN2653J889		301
TBF LONG POND	GRUMMAN	17' ALUM.			296
TBF LONG POND	GRUMMAN	17' ALUM.			297
TBF LOW FOWLER	GRUMMAN	17' ALUM.			298
TBF LOW FOWLER	GRUMMAN	17' ALUM.			299
TBF LOWER FOWLER	OLD TOWN	DISCOVERY 169	XTC00481D909	2009	687
TBF MID FOWLER	GRUMMAN	17' ALUM.	GBM21523O585		300
was DRAPER	GRUMMAN	17' ALUM.	12048-G-SK-17		344
WEBSTER LAKE	OLD TOWN	DISCOVERY 169			361
S. BRANCH PD.	OLD TOWN	DISCOVERY 169	XTC57747H011	2010	758
S. BRANCH PD.	OLD TOWN	DISCOVERY 169	XTC57769H011	2010	759
TOGUE POND	OLD TOWN	DISCOVERY 169	XTC57767H011	2010	760
RUSSELL PD.	OLD TOWN	DISCOVERY 169	XTC57771H011	2010	761

BAXTER STATE PARK KAYAKS

SOUTH BRANCH	OLD TOWN	OTTER RUSH	GRN/BLK	TOP HATCH	190
SOUTH BRANCH	OLD TOWN	OTTER RUSH	GRN/BLK		190
DAICEY PD	OLD TOWN	OTTER RUSH	GRN/BLK		190
DAICEY PD	OLD TOWN	OTTER RUSH	GRN/BLK		190
KIDNEY PD	OLD TOWN	OTTER RUSH	GRN/BLK		190
KIDNEY PD	OLD TOWN	OTTER RUSH	GRN/BLK		190

10.46 BSP Trail Bridge Inventory - 2010

BAXTER STATE PARK - TRAIL BRIDGE INVENTORY

TRAIL NAME	CONTROL #	TOTAL LENGTH (FT.)	# SPANS	YEAR LAST REPLACED	TYPE
Abol Pond	1	16'	1	2008	Low Profile
Abol Stream	2	60'	3	2009	Service
Abol Stream	3	26'	1	2010	Service
Appalachian Trail	4	55'	1	1998	Service
Appalachian Trail	5	82'	3	1998	Service
Appalachian Trail	6	19'	1	1997	Low Profile
Appalachian Trail	7	8'	1	2002	Low Profile
Appalachian Trail	8	50'	2	2008	Low Profile
Appalachian Trail	9	12'	1	1995	Hiking
Appalachian Trail	10	29'	1	2006	Hiking
Chimney Pond	11	50'	3	1996	Service
Chimney Pond	12	25'	1	2010	Service
Chimney Pond	13	35'	2	2004	Service
Chimney Pond	14	215'	12	1994	Service
Chimney Pond	15	81'	5	1992	Service
Chimney Pond	16	73'	6	2010	Service
Chimney Pond	17	36'	2	2010	Service
Fowler Brook	18	55'	3	2001	Hiking
Freezeout	19	112'	3	1992	Hiking
Freezeout	20	40'	?	2001	Hiking
Katahdin Lake	21	37'	2	2009	Service
Katahdin Lake	22	70'	3	2009	Service
Katahdin Stream OG	23	60'	2	2002	Hiking
Kettle Ponds	24	45'	3	1992	Hiking & Skiing
Pogy Notch	25	70'	3	2001	Service
Pogy Notch	26	65'	3	2002	Service
Russell Pond Trail	27	75'	3	2004	Hiking
Sandy Stream Pond	28	32'	1	2009	Hiking
Sandy Stream Pond	29	8'	1	1994	Boardwalk
Sandy Stream Pond	30	14'	1	1996	Hiking
Sandy Stream Pond	31	32'	3	2009	Boardwalk
Sandy Stream Pond	32	191'	13	1993	Hiking
Sentinel Mtn.	33	55' - 70'	?	1994	Hiking/Low Profile
Tracy & Elbow Pond	34	62'	?	1996	Hiking
Tracy & Elbow Pond	35	64'	?	1996	Hiking
Wassataquoik Str.	36	32'	2	1998	Low Profile
Wassataquoik Str.	37	16'	1	1998	Low Profile

10.47 BSP Radio Inventory - 2010

BAXTER STATE PARK RADIOS (ALL VHF) 12/01/10				(Sorted by Use and then Location)		Narrow Band Compliant	Need
Use code: B=Base F=Facility H=Handheld O=Other S=Supply T=Tower U=Unknown V=Vehicle						Do not Replace	Future Need
LOCATION	MAKE / TYPE	USE	MODEL	SERIAL #	YEAR	BSP #	ASSET ID #
HEADQUARTERS - OLD	MOTOROLA BASE (tone)	B	C73RCB-3116E-SP320	301CFJ0005	1980'S		192
HEADQUARTERS - NEW	KENWOOD TKR-750K	B	TKR-750K	B0500376	2010		222
Spare	MOTOROLA MARA TRAC	F	T73XTA7DA3BK	776AUJ0274	1990'S	BSP 0650	195
54/MACARTHUR RESIDENCE	MOTOROLA	F	3516	GJ011X			
SUPPLY was Abol/scratchy transmission	MOTOROLA MAX TRAC 300	S	DA3MJA7JA5AK	428TZA3376	1990'S		267
CHIMNEY POND	MOTOROLA MAX TRAC 300	F	DY3MJA7DA5CK	428ATJ2506	1990'S	BSP 0622	203
DAICEY POND	MOTOROLA CM300	F	CM300 (M50KQF9AA1N)	922TKE1631	2009	BSP 2756	680
HQ BACKUP	GENERAL ELECTRIC	F	PHOENIX-SX	4153575	1970'S	BSP 157	208
KATAHDIN LAKE (they have their own too)	GENERAL ELECTRIC	F	PHOENIX-SX	4080218	1970'S		262
KATAHDIN STREAM	MOTOROLA CDM1550	F	M25KKF9DP6N	001THL2305	2007	BSP 2732	637
KIDNEY POND	MOTOROLA CM300	F	CM300 (M50KQF9AA1N)	922TKC3116	2009	BSP 2758	681
MATAGAMON GATE	MOTOROLA MAX TRAC 300	F	D43MJA7DA5CK	428HOL5117	1990'S		224
NESOWADNEHUNK	MOTOROLA CDM1550LS	F	M25KKF9DP6N	001TGS3230	2006	BSP 1922	597
PINE CAMP (was at TP camp)	MOTOROLA CDM1550	F	AAM25KKF9AA5AN	103TDLQ216	2003	BSP 646	250
ROARING BROOK	MOTOROLA CDM 1550	F	AAM25KKF9AA5AN	103TA0B239	2001	BSP 2691	233
RUSSELL POND	MOTOROLA MAX TRAC	F	D43MJA7DA5CK	428ATJ2505		BSP 886	236
SOUTH BRANCH POND	MOTOROLA CDM1550	F	AAM25KKF9AA5AN	103TDNU339	2003	BSP 649	244
SUPPLY	MOTOROLA MAX TRAC	S	D43MJA7JA5AK	428TUG2563			787
TOGUE PD CAMP	MOTOROLA RADIUS	F	RADIUS GM300	159TYGD769	1990'S	BSP 1906	177
TOGUE POND GATE	MOTOROLA MAX TRAC 300	F	D43MJA7JA5AK	428TZA3381	1990'S	BSP 1746	268
TROUT BROOK FARM	MOTOROLA CDM1550LS	F	M25KKF9DP6N	001TGS3226	2006		598
TROUT BROOK FARM 57 CAMP	MOTOROLA MAX TRAC 300	F	D43MJA7DA5CK	428HOL5115	1990'S		225
VISITOR CENTER	MOTOROLA CM300	F	CM300 (M50KQF9AA1N)	922TKC3318	2009	BSP 2755	682
WEBSTER LAKE	GENERAL ELECTRIC	F	PHOENIX-SX		1970'S		
50/BISSELL	MOTOROLA EX-600 XLS	H	AAH38KDH9DU6AN	004TDJ5555	2003		168
51/WOODARD	MOTOROLA EX600 XLS	H	AAH38KDH9DU6AN	004TDJB878	2003		170
52/ RES. MGR.	MOTOROLA HT-750	H	AAH25KDC9AA3AN	672TJQF343	2008	BSP 2753	665
53/GUAY	MOTOROLA EX600XLS	H	AAH38KDH9DU6AN	004HEL5838	2004		239
54/MACARTHUR	MOTOROLA HT-600	H	H43SVU7160BN	651APC2974	1989		256
55/HOEK WATER	MOTOROLA EX600 XLS	H	AAH38KDH9DU6AN	004TDJB901	2003		187
57/MARTIN	MOTOROLA HT-750	H	H25KDC9AA3N	672THPD115	2007		641
58/WINSLOW	MOTOROLA HT-750	H	H25KDC9AA3N	672THPD120	2007		642
59/NEDELL	MOTOROLA EX600XLS	H	AAH38KDH9DU6AN	004HEL5932	2004		238
60/BRACE	MOTOROLA EX600 XLS	H	AAH38KDH9DU6AN	004TDJ5560	2003		276
69/ANGOTTI	MOTOROLA EX600XLS	H	AAH38KDH9DU6AN	004HEW1126	2005		257
70/KENNEDY	MOTOROLA HT-600	H	H43SVU7160BN	651APC2973	1989	BSP 564	255
87/WILLIAMSON	MOTOROLA EX 600	H	AAH38KDH9AA6AN	#004TCE2566	2002	BSP 2900	191
ABOL	MOTOROLA JT-1000	H	H01KDH9PA3AN	402TZJ0823Z	2000		245
CHIMNEY POND	MOTOROLA HT-600	H	H43SVU7160BN	651AQL3940	1990'S		204
CHIMNEY POND	MOTOROLA HT-600	H	H43SVU7160BN	651APC2976	1989		205
CHIMNEY POND	MOTOROLA JT-1000	H	H01KDH9PA3AN	402TZA3722Z	1990'S	BSP 2385	206
CHIMNEY POND MTN PATROL/SCA	MOTOROLA JT-1000	H	H01KDH9PA3AN	402TYE9011Z	1990'S		212
DAICEY POND	MOTOROLA JT-1000	H	H01KDH9PA3AN	402TBE1883Z	2002		223
GEORGE /71	MOTOROLA MT-1000	H	H43GCU7180AN	751ATJ1562	1990'S		227
I & E	MOTOROLA HT-220	H	33FFNL100E	231ACE0322	1970'S	BSP164	186
I & E	MOTOROLA JT-1000	H	H01KDH9PA3AN	402TBE1880Z	1990'S	BSP 689	188
I & E	MOTOROLA HT-750	H	AAH25KDC9AA3AN	672TJQF341	2008	BSP 2751	662
I & E	MOTOROLA JT-1000	H	H01KDH9PA3AN	402TZA3767Z	1999		216
KATAHDIN STREAM	MOTOROLA HT-220	H	H33FFNL100E	231ACE0316	1990'S		251
KATAHDIN STREAM	MOTOROLA JT-1000	H	H01KDH9PA3AN	402TZJ2697Z	2000		252
KIDNEY POND	MOTOROLA HT-600	H	HT-600	651APC2981	1989		182
NESOWADNEHUNK	MOTOROLA HT-220	H		P73F65	1970'S		270

10.48 BSP Trail Evaluation Matrix

Baxter State Park Trail Evaluation Matrix

Trail Rating = Total Social Values minus Total Resource/Safety Concerns

Trail Name	Social Values					Resource/Safety Concerns					Total - Resource/Safety Concerns	Trail Rating
	Trail Attraction 1 to 5	Legacy Value 0 to 3	Wilderness Value 1 to 4	Service or Access Value 0 to 3	Diverse Hiking Opportunities 1 to 3	Maintenance Effort 1 to 5	Resource Threat 0 to 4	Unintended Use Potential 0 to 3	Safety Issues 0 to 3	Total - Social Values		
Abol	4	3	3	0	2	5	4	0	3	12	12	0
Abol Pond	1	0	3	1	3	1	0	2	2	8	5	3
Abol Stream	2	0	2	3	2	1	2	3	0	9	6	3
AT DP to KS	3	3	2	0	2	2	1	0	0	10	3	7
AT North @ Abol Br	3	3	3	0	3	4	0	3	3	12	10	2
Barrel Ridge	1	1	4	0	1	3	0	0	1	7	4	3
Baxter Peak Cut-off	1	3	4	0	3	3	4	0	1	11	8	3
Blueberry Ledges	2	0	1	1	3	1	0	3	0	7	4	3
Cathedral	3	2	3	0	2	5	4	0	3	10	12	-2
Cathedral cut-off	3	2	3	0	2	5	4	0	1	10	10	0
Caverly Lookout	1	2	4	0	3	4	0	0	0	10	4	6
Celia-Jackson Ponds	1	2	2	0	2	1	0	0	0	7	1	6
Center Ridge	1	2	4	0	1	3	2	0	1	8	6	2
Chimney Pond	5	3	2	3	2	4	2	0	0	15	6	9
Cranberry Pond	1	0	1	0	3	1	0	1	0	5	2	3
Doubletop (KP)	1	2	4	0	2	3	0	0	2	9	5	4
Doubletop (Nes)	2	2	4	0	2	3	0	0	1	10	4	6
DP Nature	2	1	1	0	3	1	0	0	0	7	1	6
Dudley	3	2	3	0	2	5	4	0	3	10	12	-2
Dwelle Pond	1	1	2	2	3	1	0	0	0	9	1	8
Five Ponds	1	1	3	2	2	3	0	0	0	9	3	6
Foss Knowlton	1	0	2	1	3	2	0	2	0	7	4	3
Fowler Ponds	1	2	2	0	2	3	0	0	0	7	3	4
Fowler Brook	1	2	3	2	3	2	0	1	0	11	3	8
Freezeout	1	2	4	0	2	3	0	0	0	9	3	6
Frost Pond	1	0	4	0	2	3	2	0	0	7	5	2
Grand Falls	1	2	4	0	2	4	0	0	0	9	4	5
Grassy Pond	2	0	2	0	2	1	1	0	0	6	2	4

Baxter State Park Trail Evaluation Matrix

Trail Rating = Total Social Values minus Total Resource/Safety Concerns

Trail Name	Social Values					Resource/Safety Concerns					Total - Resource/Safety Concerns	Trail Rating
	Trail Attraction 1 to 5	Legacy Value 0 to 3	Wilderness Value 1 to 4	Service or Access Value 0 to 3	Diverse Hiking Opportunities 1 to 3	Maintenance Effort 1 to 5	Resource Threat 0 to 4	Unintended Use Potential 0 to 3	Safety Issues 0 to 3	Total - Social Values		
Hamlin Peak Cut-Off	1	2	4	0	1	5	3	0	3	19	11	8
Hamlin Ridge	1	2	4	0	1	5	4	0	3	8	12	-4
Helon Taylor	3	2	3	0	1	5	3	0	3	9	11	-2
Horse Mtn	1	2	2	0	2	3	2	0	0	7	5	2
Horse Mtn East Spur	1	0	4	0	3	1	1	0	1	8	3	5
Howe Brook	3	1	3	0	3	4	0	0	2	10	6	4
Hunt	5	3	3	0	2	5	4	0	3	13	12	1
Katahdin Lake	1	3	2	3	3	3	0	3	0	12	6	6
Katahdin Lake Canoe	1	0	2	3	3	3	1	0	0	9	4	5
Kettle Pond	1	0	1	1	3	2	0	0	0	6	2	4
Knife Edge	3	3	3	0	3	5	0	0	3	12	8	4
Lily Pad Pond	1	2	2	0	3	3	0	0	0	8	3	5
Lily/Windy/Niagra	1	2	2	0	2	1	0	0	0	7	1	6
Little Abol Falls	2	2	1	0	3	2	0	0	0	8	2	6
Little Rocky Pond	1	2	2	0	2	2	0	0	0	7	2	5
Lost Pond	1	1	2	3	2	1	0	0	0	9	1	8
Lower Fowler Pond	1	2	3	0	2	2	0	0	0	8	2	6
Marston	2	2	4	0	1	4	0	0	2	9	6	3
Martin Ponds	1	0	2	0	2	3	0	0	0	5	3	2
Middle Fowler Pond	1	1	3	0	2	2	0	0	0	7	2	5
N. Katahdin Lake	1	0	3	2	2	3	0	1	0	8	4	4
North Basin	1	2	4	0	2	3	2	0	2	9	7	2
North Basin Cutoff	1	2	3	0	3	3	0	0	2	9	5	4
North Peaks	1	2	4	0	1	5	4	0	3	8	12	-4
North Traveler	2	2	3	0	2	4	3	0	2	9	9	0
NW Basin	1	2	4	0	2	5	4	0	3	9	12	-3
OJI	1	2	3	0	1	4	2	0	2	7	8	-1
OJI Link	1	1	4	0	2	4	2	0	0	8	6	2
Owl	2	2	3	0	2	3	0	0	1	9	4	5

Baxter State Park Trail Evaluation Matrix

Trail Rating = Total Social Values minus Total Resource/Safety Concerns

Trail Name	Social Values					Resource/Safety Concerns					Total - Resource/Safety Concerns	Trail Rating
	Trail Attraction 1 to 5	Legacy Value 0 to 3	Wilderness Value 1 to 4	Service or Access Value 0 to 3	Diverse Hiking Opportunities 1 to 3	Maintenance Effort 1 to 5	Resource Threat 0 to 4	Unintended Use Potential 0 to 3	Safety Issues 0 to 3	Total - Social Values		
Owl	2	2	3	0	2	3	0	0	1	9	4	5
Pogy Notch	3	2	4	3	1	3	0	0	0	13	3	10
Rocky Pond	1	2	1	0	2	1	0	0	0	6	1	5
Rum Pond	1	0	1	1	2	1	0	0	0	5	1	4
Russell Pond	3	2	4	2	1	4	0	0	3	12	7	5
S. Turner Mtn	3	2	2	0	3	4	0	0	0	10	4	6
Saddle	3	3	3	0	1	5	4	0	3	10	12	-2
Sandy Stream Pond	5	2	1	0	3	4	1	0	0	11	5	6
Sentinel Mtn	3	2	2	0	3	3	0	0	0	10	3	7
Sentinel Link	2	2	2	0	2	1	0	0	0	8	1	7
Slaughter Pond	1	2	3	0	2	2	0	3	0	8	5	3
South Branch Mtn	2	2	4	0	1	3	0	0	0	9	3	6
Traveler Mtn	1	0	4	0	3	5	3	0	3	8	11	-3
Trout Brook Mtn	1	2	2	0	3	2	0	0	0	8	2	6
Wadleigh Brook	1	0	3	0	2	3	0	0	0	6	3	3
Wassataquoik Lookout	1	0	4	0	1	3	0	0	0	6	3	3
Wassataquoik Lake	2	1	4	1	2	4	1	0	0	10	5	5
Wass. Lk. (Neso)	1	1	4	1	2	4	1	0	0	9	5	4
Wass. Lk. (Russell)	2	2	4	1	2	4	0	0	0	11	4	7
Wassataquoik Stream	2	3	4	1	2	4	0	0	3	12	7	5
Windy Pitch Pond	1	2	2	0	1	3	0	0	0	6	3	3

10.49 Trail Evaluation Matrix Guide

Trail Matrix Guide

This is a guide to assigning values to Baxter State Park hiking trails using the Trail Evaluation Matrix

Maintenance Effort

5 = All trails above treeline on Katahdin or the Traveler Loop.

4 = Trails with a maintenance index value $>10,000$ ($\text{index value} = \text{trail use} \times \text{trail slope}$) or any trail more than 4 miles from a trailhead or road access point or any trail with $>500'$ of bog bridging more than 1 mile from a road access point.

- Examples: Most Katahdin access trails below treeline, NW Basin, N.Katahdin Lake north of N. KL LT, Wass. Lake, much of the Marston system, Freezeout and Wass. Lake trail (bog bridging).

3 = Trails with a maintenance index value $>2,000$ and 1-4 miles from a trailhead or road access point or with $>300'$ of bog bridging more than 1 mile from a road access point.

- Examples: Doubletop, North Basin, Five Ponds and Fowler system, Foss and Knowlton (bog bridging)

2 = Trails with a maintenance index value $>2,000$ and <1 mile from a trailhead or road access point

- Examples: Cranberry Pond, Kettle Pond, Celia/Jackson, Lily Pad Pond, Little Abol Falls

1 = Trails with a low trail maintenance index value and <4 miles from the trailhead or road access point

Resource Threat

4 = Trail location crosses or enters areas of high ecological sensitivity, or habitat including threatened or endangered flora/fauna.

3 = Trail location crosses or enters areas of high ecological sensitivity, or habitat including rare or sensitive flora/fauna.

2 = Trail location passes near ($<1000'$) from of high ecological sensitivity, habitat including rare or threatened flora/fauna.

1 = Trail location enters significant area previously un-trailed and/or undisturbed or adds trail to areas with significant existing trail footage.

0 = No identified threats

Unintended Use Potential

3 = Trail has high potential for unintended access or use (outside or unauthorized). Trail originates or includes a section outside the Park boundary or provides easy (<0.5 mile) access to untrailed peaks, ponds or other sensitive points of attraction. Trail suggests the potential for the development of unauthorized connections or cut-thru trails to other existing trails.

- Examples: Slaughter Pond, Polly Pond, planned extension of N. Katahdin Lake trail to Twin Ponds.

2 = Trail has some potential for unintended access or use (outside or unauthorized). Trail improves bushwhack access to remote peaks/ponds, but distance is still more than 0.5 miles. Trail has potential for light patrol/unauthorized camping.

- Examples: Northwest Basin trail (improves access to Mullen Pond)

1 = Trail may have remote potential to initiate development of unintended connectors or bushwhack trails.

- Examples: all Katahdin Lake parcel trails, all West Branch Purchase trails

0 = No anticipated potential for unintended use

Trail Attraction

5 = >6000 registered hikes/year

- Examples: (exclusive): Hunt, SSP, Chimney

4 = 3000-6000 registered hikes/year

- Examples: Abol, Niagras,

3 = 1000 -3000 registered hikes/year

- Examples: Pogy Notch, Dudley, Howe Brook, Russell Pond, Saddle, Cathedral

2 = 500 – 1000 registered hikes/year

- Examples: S.Branch Mtn, Marston, Owl, N. Traveler

1 = <500 registered hikes/year

- Examples: Grand Falls, Horse Mtn, Hamlin Ridge, Doubletop

Legacy Value

3 = Important trail established well prior to the formation of the Park. Usually with history of cross-cultural use.

- Examples: Abol and most Katahdin access trails and AT, Chimney Pond, , Wass. Stream Trail.

2 = Important trail established between 1930 – 1972. Includes most Park trails

- Examples: Katahdin Lake Trail, NW Basin, Freezeout Trail, Russell Pond Trail, pond access trails from Kidney and Daicey, Doubletop, Marston system, Five Ponds/Fowler system, Wass Lake, Pogy Notch

1 = Trail constructed between 1972 - 1990.

- Examples: Wassataquoik Lake, Middle Fowler Pond, Howe Brook

0 = Trails constructed after 1990 (<25 years old) or proposed trails with moderate to minimal wilderness characteristics.

- Examples; Cranberry Pond, Kettle Pond, Deer Pond, Abol Falls, Martin Ponds, N. Katahdin Lake, Blueberry Ledges, Foss Knowlton, Traveler Loop, Frost Pond

Wilderness Value

4 = Trail provides unique wilderness opportunity and exemplifies the potential for human/wilderness interaction in the Park. Typically backcountry trails with lower use rates.

- Examples: NW Basin, Davis Pond, Wass. Stream Trail, Wass Lake Trail, Russell Pond, Pogy Notch, Marston/Coe system, (Freezeout? Traveler Loop?)

3 = Trail provides significant but not exemplary wilderness opportunity. Includes low elevation trails in uniform landscapes.

- Examples: Freezeout , Katahdin access trails, Traveler Loop, Frost Pond, Doubletop, Five Ponds/Fowler system, Owl, N. Katahdin Lake, AT from Abol to Daicey

2 = Trail constructed during the Park's tenure. Not too remote. Few wilderness characteristics, but wild. Generally moderate to high use rates.

- Examples: Trout Brook Mountain, Horse Mtn. S. Turner Mtn. Slaughter Pond, Owl, Wadleigh Brook, Katahdin Lake Trail, Martin Pond Loop, Foss Knowlton

1 = Recently constructed trails with moderate to minimal wilderness characteristics – purpose often to reach viewpoint, or convenient point of interest or to provide expanded hiking opportunities. Includes any trail with high or very high use rates.

- Examples; SSP, Cranberry Pond, Kettle Pond, Deer Pond, Abol Falls, Burnt Mtn

Service or Access

3 = Trail provides both service* and hiker access to Park maintained facility

- Examples: Chimney Pond, Abol Stream, Katahdin Lake, Pogy Notch

2 = Trail provides primary hiker access to Park maintained facility or other facility

- Examples: Russell Pond, any trails with backcountry sites,

1 = Trail provides alternate service or hiker access to Park maintained facility

- Example: Wass. Stream

0 = most park trails

**Service access refers to staff access by foot or snowmobile necessary to supply a Park facility with materials and equipment necessary for maintenance, patrol or protection.*

Diversity of Hiking Opportunities

1 = Trail provides typical mountain or backcountry hiking.

- Examples: Mt. Coe, Doubletop, South Branch Mtn., Owl

2 = Trail provides typical hiking but with some unique characteristics – long/short length, remoteness, or other features not typically represented by the majority of Park trails.

- Examples: Wass Lake, Freezeout, Frost Pond

3 = Trail provides opportunities not found in most Park trails including educational opportunities, short hikes

- Examples: Katahdin Lake, Sentinel, S. Turner, Horse Mtn., Cranberry/Kettle Pond, FIA trail, nature trails.

Safety Issues

3 = Trail has >1 crossing of a significant brook or stream likely to produce unsafe conditions after heavy rains or winter trail with potential for avalanche exposure. Requires long (>24hrs) or technical rescue effort.

- Example: Saddle Trail (winter)

2 = Trail has crossing of a significant brook or stream likely to produce unsafe conditions after extreme weather events or trail sections with potential for flooding after heavy rains. Difficult or technical rescue relatively close to frontcountry.

- Example: Sentinel xing of Nes. Strm at Daicey Pond CG, Russell Pond, Wass Strm, AT below Niagara

1 = Trail has **above treeline** exposure for more than one mile.

- Examples: Katahdin Trails and Traveler Loop above treeline

0= No identified safety issues

10.50 Hunt Trail-Thoreau Spring Summary Guidance

Issue: Hunt Trail at Thoreau Springs/Sedge Meadow Community

Background:

In 2002, Baxter Park staff began to consider options to address the braiding and widening of the Hunt trail approximately 0.1 mile east and west of Thoreau Spring on the Tableland of Katahdin. A number of photographs of this trail section were taken by Park staff in 2002 to help illustrate the concern.

At that time, consideration of the trail issues included the recognition that this section of the trail bordered an alpine Sedge Meadow community type, one of the rarest community types on the Katahdin Tableland and in New England. The Sedge Meadow Community type likely exists in Maine only on the Tableland of Katahdin and then only in three discreet locations, with the Thoreau Spring site (11,115 square meters or 2.5 acres) being as large or larger than the two other sites.⁹⁸

In 2006, Park staff installed approximately 0.25 miles of “string fencing” within most of the area of braided trail east and west of Thoreau Spring. The fencing was later extended 0.05 miles (2009?) to cover additional trail to the east.

The string fencing has been included in the patrol responsibilities of Alpine Stewards, and is visited by other Park staff and trail crew during routine work patrols on the Tableland. The string usually lasts for 1-2 years and staff has improved the overall maintenance effort of the fencing so that the fencing is clearly delineated through the majority of the hiking season.

In 2009, the Park Director and Naturalist led Baxter State Park Advisory members on a site visit to the area, to familiarize the advisors with the complex of landscape, trail, vegetation and wildlife concerns.

As a result of continued staff discussion, the Park contracted with Alpine Ecologist Doug Weihrauch of the Appalachian Mountain Club to conduct a site exam of the area to provide more specific geographic definition of the different natural community type in the area and to provide a possible set of alternatives to address the long-term protection of the Katahdin Tableland Sedge Meadow community. Doug submitted his report in November of 2010 (posted separately), and listed three options including a recommended option.

In July of 2011, the Park Director and Trail Crew Supervisor examined the area. The current condition of the string fencing was examined at length as well as on-site consideration of the options developed

⁹⁸ Alpine Sedge Meadow is not to be confused with the Tussock Sedge Meadow on p.266 of the **Natural Landscapes of Maine; A Guide to Natural Communities and Ecosystems** by Gawler and Cutko, MNAP, 2010. Alpine sedge meadow is rare enough in Maine that it was not included in this publication.

by Weihrauch. As a result of this visit, additional options for future option were developed. Shortly after this visit, the original 2002 trail photos of braided trail sections were re-taken by an Alpine Steward. These closely matched photos provide the opportunity to compare the effects of 4.5 growing seasons of string fencing on the areas of braided trail (see photo sets below). At this time, the options listed below were developed and considered.

In August of 2012, Park staff and BSP Advisory members⁹⁹ visited the area again to consider the options. After this visit, specific resolution actions were developed (see below).



10 From left: Nale, Ritchie, Bissell, Morrill, Goetz, Hoekwater. 8/12

⁹⁹ BSP staff: Bissell, Hoekwater, Morrill. BSP Advisors: Ritchie, Nale, Goetz

Options:

The primary issue of concern is the preservation and protection of the Sedge Meadow Community Type – a very rare community type providing habitat utilized by accordingly rare vertebrate and invertebrate species.

The secondary issue under consideration involves the restoration of a degraded and braided trail corridor to a reasonable and stable width in a manner which is maintainable over time.

This issue involves the combination of natural habitat and wildlife use characteristics, trail management and construction logistics and recreational use patterns in a tightly interwoven condition, consequently, the determination of the most acceptable long-term resolution is particularly complex. Any action or combination of actions selected will require some judgment of anticipated risks against potential benefits and the end value and effectiveness of any selected course of action will not be apparent for some number of years.

1. Maintain current trail locations with remedial measures.

This option would retain all existing trails in their current locations. The following measures are proposed to protect or improve the current trail conditions:

- a. Renew existing fencing (new posts and string) along the Hunt Trail east and west of Thoreau Spring. The comparison of 2002 and 2011 photos from this trail section indicate that the string fencing is limiting trail traffic to the trail corridor and facilitating the re-vegetation of adjacent trail braids. This conclusion was also supported by the recent field visit.
- b. Extend string fencing approximately 250' west of the current fencing to incorporate a remaining section of braided trail.
- c. Relocate a short section of the existing string fencing on the Hunt Trail west of Thoreau Spring to dry ground. A short section of the fenced trail location is in running water draining from Thoreau Spring. Relocating the fencing 6-10' north (into an old trail braid) would allow re-vegetation of this wet area and eliminate the tendency of hikers to step outside the fencing to avoid the wet treadway.
- d. Remove and re-blaze the white AT blazes in appropriate locations. Some of the original blazing remains on the former trail treadway which is now outside the string fencing. Removing this blazing and re-blazing inside the fencing will solidify hiker's use of the fenced treadway and reduce confusion.
- e. Begin extracting scree wall material from displaced trail sections to existing corridor. In several areas the fenced treadway has allowed the adjacent braided treadways to re-vegetate. Some of these sites were the original trail location and the scree wall material is apparent in the former treadway. This material could be gradually removed and utilized to further define the current fenced treadway.
- f. Begin extracting new material from the identified quarry south of the eastern end of the current fenced trail for corridor additional treadway definition east of Thoreau Spring.

- g. Establish string fencing on the Abol Trail from the large cairn where the Abol Trail reaches the Tableland to the junction with the Hunt Trail at Thoreau Spring. This trail segment is now becoming braided.
2. Relocate Hunt Trail to the north.

This option was the favored option proposed by Weihrauch and would require the construction of 625 meters of new trail through Heath Alpine Ridge Community, the most common community type on the Tableland. Weihrauch recognized that the current trail location appears to border the natural boundary of the Sedge Meadow Community type and relocation of the trail may not result in any significant change to the footprint of the S/M community at Thoreau Spring.

Although Weihrauch stated it would be *“fairly easy to maintain a defined treadway, once established”*, it seems important to note that this area is as flat and unobstructed by rocks as the original trail area that was braided so severely. It may be reasonable to assume that a trail relocation to this location would also require fencing or significant scree wall and stumble stone work to prevent the same problems from developing over the coming decades.

Although the terrain does not pose many obstacles to new trail establishment, there are some serious logistical challenges to successfully relocating this segment of trail. Weihrauch suggests re-positing vegetation and A horizon soils from the new trail segment to the retired segment to provide protection and a seed source for re-vegetation to the closed trail. This is logical, but logistically difficult given the active nature of the Hunt Trail. The complete establishment of a new trail segment and the successful closure of the current segment (without the availability of brush or other materials to discourage use) combined with the Tableland weather which makes scheduling uncertain and extended work periods unlikely, are additional concerns.
3. Reroute Abol Trail (from at or below the 1st cairn on Tableland) westward to join the Hunt Trail near the west end of the string fencing.

This option would involve establishing approximately 300 meters of new trail through Heath Alpine Ridge Community type as well as a small area of Windswept Alpine Ridge Community. This relocation would be near, but would not include, an Alpine Snowbank Community type to the west of the relocation.

This option would result in the opportunity to re-vegetate a significant section of the Sedge Meadow Community type that is currently impacted by this trail, which crosses directly through the type.

Similar to option 2 above, challenges exist in the successful closure of the current Abol Trail location after the new trail is established. In the short term (first 5 years minimum) the combination of clear signage and stumblestones would be necessary to discourage both inadvertent and intentional hiker use. Beginning the relocation in the heavy rocks above the top of the Abol Slide but well below the Tableland rim should be considered

to help the hiker feel that they are still heading more or less toward their likely destination on Baxter Peak.

4. Reroute Abol Trail (from at or below the 1st cairn on Tableland) to the north-northeast to join the Hunt Trail at the east end of the string fencing.

This option would involve establishing approximately 400 meters of new trail through Heath Alpine Ridge Community type as well as a small area of Windswept Alpine Ridge Community.

This option is identical in concerns and benefits to Option 3 above, but with more trail construction. A significant difference in this option is that hikers with a Baxter Peak destination would continue to feel they are heading toward their destination and consequently, this trail re-location may be easier to successfully accomplish in terms of successful abandonment of the current trail location through the Sedge Meadow.

A concern has been expressed that American pipits using the Sedge Meadow as habitat may be more concerned with hiking traffic located above the Sedge Meadow in elevation. Most of this new trail location would be 100+ meters from the Sedge Meadow Community type.

This trail location also establishes a junction with the Hunt Trail above Thoreau Springs and near an identified quarry location for trail materials. Assuming that most Katahdin hikers use the same trail for ingress and egress to Baxter Peak, establishing the Abol/Hunt Trail junction at a point above (east of) Thoreau Spring would have the potential to reduce the overall hiker impact at Thoreau Spring.

This trail location would also establish a significant length of trail somewhat in parallel with the Hunt Trail.

5. Combine options 3 and 4 with the closure of the Hunt Trail between the east and west junctions of the relocated Abol Trail Connectors. This option is discussed as Option 3 by Weihrauch.
6. Combine options 1 and 3; Combine options 1 and 4; Combine options 2 and 3; Combine options 2 and 4.

Resolution:

After careful consideration, it was concluded that the risks of trail relocation in an area with limited trail construction resources, abundant and multiple rare natural communities providing critical habitat for endangered and threatened species, and long-term ingrained hiking use patterns, posed too great a risk for additional habitat degradation. The option of relocating the Tableland segment of the Abol Trail may not overcome the desire of hikers to directly access Thoreau Spring. The existing flat and even topography also suggests that even a successfully relocated trail would eventually invite the same braiding and trail definition issues that are of concern on the Hunt Trail.

Significant site degradation and erosion was noted at the point where the Abol Trail tops out onto the edge of the Tableland as well as areas of braided trail developing in the segment of the Abol Trail between Thoreau Spring and the point where the trail begins the steep descent toward Abol Slide.

Additionally, it was noted that alpine vegetation is beginning to re-establish within eroded sections of the Hunt Trail outside of the corridor now defined by string fencing installed in 2006.

Lastly, consideration was given to the need for additional signs explaining to hikers the need for and reasoning behind the string fencing (habitat and rare species protection) as well as more muted signs encouraging hikers to stay inside the fenced trail corridor.

Action Items:

1. Continue to maintain the established string fencing on the Hunt Trail.
2. Install new string fencing on the Abol Trail from the Hunt Trail junction at Thoreau Spring to the edge of the Tableland.
3. Relocate the existing white blazing on the Hunt (AT) Trail to coincide with the current fenced trail corridor.
4. Install large (18"x 24") informational signs at each end of the string-fenced trail sections to explain the reasoning behind the fencing to hikers.
5. Install periodic smaller (9" x 12") signs closer to ground level outside the fenced trail corridor encouraging hikers to stay within the fenced corridor.
6. Continue to monitor the trail sections. Capture additional matched photos in 2016.



7. Brief all staff (including Alpine Steward interns) on these measures. Include public orientation to concepts of string fencing, critical habitat and hiker impact to all Katahdin trailhead campground ranger expectations.

Matched photo sets:



Photo1: 2011



2002



Photo2: 2011



2002



Photo3: 2011



2002



Photo4: 2011



2002



Photo5: 2011

2002



Photo6: 2011

2002



Photo7: 2011

2002



Photo8: 2011



2002



Photo9: 2011



2002

10.51 Trail Support Index

Trail Support Index

(based on 2009 actuals and estimates)

Personnel	# staff	weeks	hours/wk	total hrs	
Trail Supr	1	52	40	1000	actual
Trail Crew Ldrs	2	26	40	2020	actual
Trail Crew Interns	14	12	40	4963	actual
MCC Crews	6	6	40	2187	actual
BSP Staff (non-trail)	20	26	2	1040	estimated
Volunteers		[= 2528 hrs x 0.9)*		2040	actual
Total 2009 Hours devoted to trail maintenance in BSP:				13250	

Total Hours (13,250) /Total Trail Miles (212) =

62.5

Proposal : the target trail maintenance index is 65 or below.

* volunteer hours considered equal to 90% of staff hour

10.52 Executive Order 28FY08/09 - Donations



OFFICE OF
THE GOVERNOR

NO. 28 FY 08/09
DATE April 7, 2009

AN ORDER AUTHORIZING THE BAXTER STATE PARK AUTHORITY TO ACCEPT GIFTS AND BEQUESTS

WHEREAS, Governor Percival Proctor Baxter most generously gave Baxter State Park and funds to maintain it to the people of the State of Maine; and

WHEREAS, other munificent individuals and groups wish to donate to Baxter Park in order to preserve Governor Baxter's vision; and


WHEREAS, the Baxter State Park Authority was established in order to follow the wishes and intent of Governor Baxter, and in doing so the Authority oversees the trust funds and monies to maintain and preserve the Park, 12 M.R.S.A. §900; and

WHEREAS, I, as Governor, am authorized to accept any and all gifts and bequests to the State of Maine or any of its branches of government, and no other state official may accept any gift or bequest to the State or any of its branches of Government, with a greater value than \$50, unless specifically authorized to do so by law or unless empowered to do so by the Governor, 2 M.R.S.A. §5;


NOW, THEREFORE, I, John Elias Baldacci, Governor of the State of Maine, do hereby empower the Baxter State Park Authority to accept any and all gifts and bequests to Baxter State Park so long as any such gift or bequest is made without encumbrances, stipulations, conditions or qualifications. In exercising this authorization, the Baxter State Park Authority shall inform the Governor of any gift or bequest over \$1,000 at the time of receipt, and, in addition, the Baxter State Park Authority shall submit a report to the Governor of the State of Maine at the end of each fiscal year setting forth any gifts or bequests made to Baxter State Park that year, including the name of the donor and the amount donated.

Effective Date

The effective date of this Executive Order is April 7, 2009.


John E. Baldacci, Governor

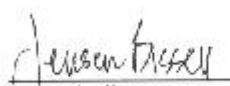
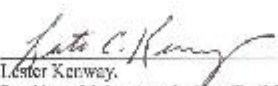
10.53 BSP – MATC Trail Cooperative Agreement

		
AUTHORITY MEMBERS JUDITH D. CHASE DIRECTOR OF STATE PARKS & FORESTS ROBERT D. WATSON COMMISSIONER OF REVENUE & TAXATION JANET HILL ATTORNEY GENERAL	STATE OF MAINE INFORMATION www.baxterstateparkauthority.com 207.733.6100	PARK HEADQUARTERS 1000 BAKER STREET BAXTER, MAINE 04903 207.733.6100 207.733.6100


**COOPERATIVE AGREEMENT
FOR MAINTENANCE OF THE APPALACHIAN TRAIL
BETWEEN BAXTER STATE PARK
AND THE MAINE APPALACHIAN TRAIL CLUB**

The Baxter State Park Authority retains all authority for the administration of the Appalachian Trail within the boundaries of Baxter State Park. To the extent allowed by the Deeds of Trust whereby the Park was established and is governed, the BSPA agrees to authorize the MATC to perform general maintenance to the Appalachian Trail footpath within the boundaries of Baxter State Park. The MATC agrees to meet the standards for trail maintenance as stated in the Baxter State Park Trail Maintenance Standards and Rules and Regulations, and the MATC also agrees to work actively with the Park in planning, executing, and recruiting volunteers for larger scale technical projects involving trail erosion abatement and bridge construction on areas of the Appalachian Trail within Baxter State Park.

This agreement shall take effect immediately upon signature of the parties listed below, and remain in effect for a period of five (5) years from the date of execution.

 Agnes Russell, Director of Baxter State Park	 Lester Kenney, President, Maine Appalachian Trail Club
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Date: <u>November 3, 2009</u>	Date: <u>November 3, 2009</u> <u>11/8/09</u>
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 recycled paper "TO PRESERVE AND PROTECT"

10.54 Road Width Protocol – Park Tote Road

BAXTER STATE PARK ROAD WIDTH SURVEY

SUMMARY DATA SET

									1998
VEH ODMTR	MSRMNT SEC #	REF POINT #	GPS COORDINATES	REF POINT DESCRIPTION	STATION	FT	IN	1998 RD WTH	WHL FTGE
0 1.5	1	1.00	45.83897/068.91418	TOGUE GATEHOUSE	N/A			N/A	N/A
		1.10		18" HEMLOCK 6' FROM RIGHT SIDE OF ROAD	1	18	6	222	0
		1.20			2	18	5	221	50
		1.30			3	19	6	234	100
		1.40			4	21	0	252	150
		1.50			5	22	0	264	200
		1.60			6	22	0	264	250
		1.70			7	21	9	261	300
		1.80			8	21	10	262	350
		1.90			9	21	0	252	400
3.15	2	2.00	45.84544/068.94075	EVEN W/ GATEPST @ START OF NESO TOTE	10	20	4	244	450
		2.10			11	17	10	214	0
		2.20			12	16	5	197	50
		2.30			13	16	5	197	100
		2.40			14	16	9	201	150
		2.50			15	19	6	234	200
		2.60			16	18	4	220	250
		2.70			17	16	8	200	300
		2.80			18	16	0	192	350
		2.90			19	15	9	189	400
4.25	3	3.00	45.85754/068.95090	LRG ROCK BEHIND CURVING WHITE PINE	20	16	2	194	450
		3.10			21	15	10	190	0
		3.20			22	16	3	195	50
		3.30			23	16	3	195	100
		3.40		CULVERT @ 137'	24	17	2	180	150
		3.50			25	15	0	166	200
		3.60			26	13	10	168	250
		3.70		TURNOUT @ 310'-350' (319'-356')	27	14	0	182	300
		3.80			28	15	2	180	350
		3.90			29	15	0	180	400
5.25	4	4.00	45.86802/068.96137	CULVERT @ SHARP TURN JST PST STUMP PD	30	15	2	182	450
		4.10		BACK PART OF TURN	31	17	0	204	0
		4.20		CULVERT @ 96'	32	19	0	228	50
		4.30			33	16	1	193	100
		4.40			34	14	8	176	150
					35	17	7	211	200

		4.50		CULVERT @ 211'	36	17	11	215	250
		4.60			37	17	3	207	300
		4.70		CULVERT @ 337'	38	17	10	214	350
		4.80		ROCK @ 370' ON LEFT	39	18	6	222	400
		4.90			40	16	9	201	450
7	5	5.00	45.88447/068.97828	4' HIGH ROCK ON IMMED LFT EDGE OF RD	41	16	2	194	0
		5.10			42	14	3	171	50
		5.20			43	14	6	174	100
		5.30			44	15	4	184	150
		5.40		CULVERT @ 183'	45	16	2	194	200
		5.50		TURNOUT @ 250'-300'	46	17	6	210	250
		5.60			47	16	5	197	300
		5.70			48	15	7	187	350
		5.80			49	16	8	200	400
		5.90			50	16	0	192	450
8.7	6	6.00	45.88980/069.00679	@ 50' PST OLD RD TO RT BLCKED W/ROCKS	51	16	3	195	0
		6.10			52	15	2	182	50
		6.20			53	16	8	200	100
		6.30			54	17	0	204	150
		6.40			55	17	0	204	200
		6.50			56	18	4	220	250
		6.60		TURNOUT 250'-310'	57	14	0	168	320
		6.70			58	15	1	181	350
		6.80			59	14	0	168	400
		6.90		TURNOUT 410-453	60	14	10	178	450
10.35	7	7.00		23" OLD YELLOW BIRCH ALONE @ RD EDGE	61	15	1	181	0
		7.10		TURNOUT 65'X20'	62	13	8	164	100
		7.20		120'-189'	63	16	2	194	150
		7.30			64	15	0	180	200
		7.40			65	14	8	176	250
		7.50			66	14	6	174	300
		7.60			67	15	3	183	350
		7.70			68	16	0	192	400
		7.80		TURNOUT BLOCKED W/ROCK @ 405'	69	17	9	213	450
		7.90			70	17	1	205	500
12	8	8.00	45.91615/069.04538	LRG ROCK @ HD OF RVR DRIVER'S GRAVE	71	14	4	172	0
		8.10			72	15	0	180	50
		8.20		TURNOUT 40'X6' 67'X7'	73	13	6	162	17
		8.30			74	16	3	195	150
		8.40			75	15	0	180	200
		8.50			76	13	11	167	250
		8.60		BARKED (BLAZE) Y BIRCH 10" @ 320'	77	12	10	154	300
		8.70			78	12	4	148	350
		8.80			79	13	0	156	400
		8.90			80	11	7	139	450

13.4	9	9.00	45.93287/069.04050	BOULDER ON RT SIDE OF RD 0.1 MILE AFTER CULVERT @ 46' ON LEFT	81	15	0	180	0			
		9.10			82	13	8	164	50			
		9.20			83	12	8	152	100			
		9.40			84	16	8	200	200			
		9.50			85	13	6	162	250			
		9.60			86	14	5	173	300			
		9.70			87	16	0	192	350			
		9.80			88	15	7	187	400			
		9.90			89	14	5	173	450			
		9.95			90	16	11	203	500			
15.05	10	10.00	45.95205/069.05049	ROCK IN DRIVEWAY OF DOUBLETOP-CAMP CULVERT @ 50' TURN AROUND AT 150	91	14	8	176	0			
		10.10			92	14	3	171	50			
		10.20			93	14	8	176	100			
		10.30			94	15	3	183	200			
		10.40			95	14	10	178	250			
		10.50			96	14	0	168	300			
		10.60			97	15	0	180	350			
		10.70			98	15	0	180	400			
		10.80			99	16	8	200	450			
		10.90			100	16	6	198	500			
16.6	11	11.00	45.96906/069.06507	LRG ROCK @ RIGHT SIDE OF ROAD JUST LEFT 30'X6' TURNOUT 130'160' CULVERT @ 250'	101	11	10	142	0			
		11.10			102	11	6	138	50			
		11.20			103	12	6	150	100			
		11.30			104	15	0	180	200			
		11.40			105	13	10	166	250			
		11.50			106	14	10	178	300			
		11.60			107	17	6	210	350			
		11.70			108	15	8	188	400			
		11.80			109	15	5	185	450			
		11.90			110	14	6	174	500			
17.45				BRIDGE AT LITTLE NESOWADNEHUNK				16	6	191.16		
				AVERAGE ROAD WIDTH IN FEET - ALL POINTS				15.93				

10.55 Interpretive Publication List

Handouts by I&E (list created 01 11)

Wildnotes – Park newspaper

Brochures:

- Alpine Tundra Brochure
- Long Distance Hiker Brochure
- Day Use Hiking Map
- Winter Use Information Brochure BSP-43
- Roaring Brook Nature Trail brochure BSP-13
- Daicey Pond Nature Trail brochure BSP-14
- South Branch Nature Trail brochure BSP-15
- Jr. Ranger Manual BSP 70

Handouts:

- Outlying Campsites BSP-29A
- Baxter State Park Wildlife Listing and backside The Deer Came Right Up To Me! BSP-17
- Wildflowers to Look For in Baxter State Park BSP-18
- Baxter State Park Bird List and backside Principles of Ethical Field Practices BSP-49
- The Moose BSP-23
- Black Bear Alert and backside The Deer Came Right Up To Me BSP-2
- The Common Loon BSP-102
- Woodchuck BSP-21
- The Beaver BSP-22
- Red Squirrel BSP-24
- Eastern Chipmunk BSP-24 backside
- The American Marten BSP-26
- Black Bear BSP-90
- Coyote BSP-25
- Baxter State Park Purpose BSP-48
- Baxter State Park Abbreviated Version of Open Water Fishing Regulations – Updated yearly by the Deputy Chief Ranger BSP-30A
- Baxter State Park Fisheries – Surveyed Waters with Fish BSP-30
- Technical Rock Climbing at Katahdin BSP-33
- Native American Names and Terminology BSP-19
- A Geology Trip from Roaring Brook to Blueberry knoll and Chimney Pond Area BSP-35
- Commercial Use in Baxter State Park BSP-39
- Waste Reduction Tips for Campers BSP-89
- A Brief History of Our Park BSP119
- Welcome to Baxter State Park & Mountain Climbing and Day Hiker Tips BSP16
- Winter Administrative Procedures BSP-43B
- Naturalist Adventure Pack Use Agreement BSP-20

Investment Policy Statement for the BSP Investment Management Account

INTRODUCTION

The principal purpose of this Statement is to provide long term direction to the Authority for the investment of the Park's quasi-endowment fund (the Investment Management Account or IMA) and for the spending of its income. A secondary purpose is to describe for future Authority members, Advisory Committee members, and staff the underlying logic and philosophy supporting this Statement.

Setting investment policy is the most critical phase of the entire investment process. The effects of a good or bad policy can be more important than the effects of good or poor investment management.

To be successful, an investment policy needs to be appropriate for its institution. It needs to match the needs of the institution (future liabilities, in an accounting sense) to the financial assets most likely to meet those needs. The best way to minimize investment risk is to match, as closely as possible, the timing of future liabilities with the timing of future cash flows from the portfolio assets.

The policy statement also has to withstand "trustee risk" — the possibility that, at some stress point (most frequently an extreme point in the stock or bond markets), those who oversee the funds will react in a manner detrimental to the long term health of the endowment. Authority members, like other trustees, tend to serve only a few years at a time, and those who adopt this Policy Statement today will not be here ten or twenty years from now to maintain the steady course that is one prerequisite of a successful investment plan. For that reason this Statement contains an introductory section presenting the principles upon which the policy is based.

This Statement applies only to those funds under the direct control of the Authority, and not to the trust funds under the control of the State Treasurer and BNY Mellon.

Finally, this Statement contains two special terms that need explanation. The first is "real." In an investment context, real means after taking inflation into account. If the quasi-endowment funds grew from \$5 million to \$10 million over a period when the cost of living doubled, the funds would be said to have maintained their real market value over that period. If the interest and dividends generated by the funds grew from \$200,000 to \$440,000 during that time, then the real income from the funds would have grown by ten per cent. The distinction between nominal and real market values and income is very important for long term investors.

The second term is "spendable income." This is the amount of cash that the Park withdraws and spends. The cash income that the funds receive from dividends and interest may be higher or lower than spendable income. Generally it pays to give the investment manager flexibility in the securities they choose to purchase. While the cash income from these securities will probably be close to the spendable income that the Park withdraws, the two do not need to be exactly the same.

I. PRINCIPLES

For the sake of those who will succeed us, we outline below the principles that have guided us in establishing the policies set forth in this Statement.

We are long term investors. This enables us to purchase long term assets, such as equities, which tend to have high returns over many years but whose price volatility precludes their use by those with shorter time horizons. In addition, the longer time horizon may allow for ownership of “less liquid” investment opportunities. By keeping our long term focus in mind at all times, we hope to weather the periodic bad times when investors with short term orientations tend to quit the game. We expect this long term view to provide us with better results than will be earned by those who pick short term investments or who abandon ship during turbulent times.

We believe it is better to own than loan. We expect the stock market to provide greater total returns than the bond market does. However, we commit to a continued focus on the importance of appropriate asset allocation as a foundation for fund performance. We also recognize that certain debt instruments may, from time to time, provide “equity like” characteristics and return opportunities. We say this in a long term sense, knowing that both economies and markets suffer periodic (but normally brief) declines, and knowing that there have been and will always be periods when certain asset classes will outperform others.

We expect the relationship between the economy, the stock market, and inflation that has existed for the past 50 years to continue. We expect the Global economy to show modest real growth over full business cycles, after allowance for occasional recessions. We expect stock prices to grow slightly faster than inflation, although the naturally volatile nature of the stock market will make such growth invisible except when observed over periods of several decades. We expect cash dividends from stocks also to grow slightly faster than inflation, and to fluctuate much less than stock prices do.

We expect continued inflation. We believe some inflation is a natural by-product of our political process. Its timing and severity we cannot predict, but we believe it will be of sufficient magnitude that to ignore it would threaten our ability to meet our long term objectives.

Our definition of risk is not always the common one. Most investors define investment risk in terms of the volatility of short term total returns. This definition is appropriate for funds with a very short term time horizon, but inappropriate for perpetual funds such as the Investment Fund (or the Park’s trust funds). Our endowment bears three potential kinds of risk. One comes from any mismatch between the natural cash flows out of the endowment (the amount spent by the Park) and the cash flows coming in (from dividends and interest). Another source is the possibility that the assets in the funds do not do what we or the investment manager expects them to. The final form of risk is that of reacting inappropriately at an emotional period, most likely after a severe market decline. We hope to minimize these risks to as great a degree as is possible without harming the endowment’s long term objectives

II. OBJECTIVES

Recognizing that the primary purpose of establishing objectives is to provide guidelines for subsequent actions, and that the establishment of these guidelines neither ensures their achievement nor limits what might be actually achieved, these are the investment objectives in order of priority.

- (1) To provide as much spendable income as possible for the Park now and in the future, with neither period favored at the expense of the other.
- (2) To have the spendable income be somewhat predictable in the near term, and to have the spendable income not decline significantly at any time.

- (3) To keep the market value of the endowment assets whole, after inflation, while recognizing that normal security price gyrations may keep market values over- or underpriced for several years at a time.
- (4) To avoid risks which might reasonably impair the ability to meet Objectives 1, 2, and 3.

III. STRATEGY

Because of the very long term nature of its liabilities, and the need for growing income and market values to offset inflation, the Investment Fund ordinarily will have a bias for equities. However, it is recognized that the financial landscape periodically provides opportunities that go beyond owning a simple stock. As such, the ideal strategy will be one that is inclusive of all appropriate asset classes. The investment manager(s) may deviate from this standard whenever they deem it advisable, but only within the limits set down below in Section IV.

The normal asset allocation for this Fund will be 25% bonds, 75% equities (including Special Opportunities, and a negligible amount of cash.

The primary objective of the equity portion of the portfolio will be to provide spendable income that grows at least as fast as the inflation rate. The principal category of equity investments will be common stocks, with primary emphasis on high quality stocks in companies that are financially sound and that have favorable prospects for earnings growth.

The second category of investments will encompass a broad range of alternative strategies and will be considered under the umbrella term of “Special Opportunities”. The purpose of investing in alternatives includes, but is not limited to, enhancing diversification through less-market-dependent strategies, and seeking positive absolute rates of return regardless of the general direction of equity and fixed-income markets. These Special Opportunities investments are to be used by the manager in a manner consistent with the level of due diligence, research, and ongoing analysis employed on all their investments. *As no list of investment instruments or strategies can be all-inclusive, the investment manager will seek appropriate communication with the BSP Authority before employing alternative types of instruments or strategies.*

The objective of the bond portfolio will be, first, to dampen overall portfolio price volatility enough (hopefully) to dissuade future overseers from liquidating stocks at an adverse moment, and second, to provide a high but stagnant income stream to supplement the modest current income from stocks.

IV. RESTRICTIONS

While realizing that all investments involve both uncertainty and risk, and that bearing some (but not all) kinds of risk brings long term rewards, the Authority does not wish to take unnecessary risks with the endowment portfolio. Asset allocation will be bound by the following limits.

	<u>minimum</u>	<u>maximum</u>	<u>target</u>
Cash	0%	5%	0%
Bonds	15%	35%	25%
Equities (US & International)	60%	80%	70%
Special Opportunities	0%	15%	5%

The Authority expects the equity portfolio to be fairly diversified across industries as well as individual issues. For example, no single stock may represent more than 10% of the equity portfolio, and a more normal weighting should be considerably less.

V. SPENDING POLICY

The amount of spendable income annually withdrawn from the Investment Fund shall be determined by Park staff with the advice of the BSP Investment Committee, and shall be subject to approval by the Baxter Park Authority.

VI. PERFORMANCE MEASUREMENT & EVALUATION

Ultimately, the success of these Funds will be measured by comparison with their stated objectives. The long term performance will be the result partly of the constraints and guidelines established in this Statement, and partly the results of the investment manager's actions.

The inflation measure will be the Consumer Price Index for Urban Consumers or its successor.

To monitor the intermediate term performance of the Investment Fund, the Authority intends to compare the investment manager's results to a baseline portfolio invested 25% in the Barclays Capital Aggregate Bond Index and 75% in the Standard & Poor's 500, with annual rebalancing.

VII. SUPERVISION

The Authority may delegate supervisory responsibility for these funds to the Investment Committee or one of its subcommittees, however it requires that those delegates:

- (1) meet with the investment manager at least twice a year to monitor the performance of the funds and the manager's compliance with these guidelines;
- (2) review this Policy Statement at least once a year to ensure that it remains appropriate and complete; and
- (3) report to the Authority on a timely basis the results of these meetings and any other pertinent information regarding the funds.

VIII. INSTRUCTIONS FOR THE INVESTMENT MANAGER

The Authority requests prompt notice of any change in (1) the manager's fundamental investment strategy, (2) company policy regarding number of accounts managed per individual, (3) key personnel, or (4) firm ownership. It also requests prompt notice of any deviations from the restrictions outlined in section IV.

The Authority requests that the manager provide quarterly statements showing the separate performance of the stock and bond portions of the accounts, as well as results for the whole portfolio. It asks that such figures follow the standards of the Committee for Performance Presentation Standards of the Financial Analysts Federation. In addition, each quarterly report should include a summary of activity during the period, the reason for such activity, and a statement concerning the tactics currently in use for carrying out the mandate of the Authority. The latter two items (reason & statement) may be presented orally rather than in writing.

Revised by the Finance Subcommittee: April 5, 2000

Approved by the BSP Authority: July 11, 2000

Amended (section V): July 2003

Amended (removal of Reserve Fund and other changes): December 12, 2006

Amended (Special Opportunities and other changes): May 2011

10.57 2010 BSP Audit Report



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**INDEPENDENT ACCOUNTANT'S REPORT
ON APPLYING AGREED-UPON PROCEDURES**

Jensen Bissell
Director
Baxter State Park Authority
64 Balsam Drive
Millinocket, Maine 04462

Dear Mr. Bissell,

At your request, we have performed certain agreed-upon procedures, as enumerated below, with respect to the accounting for inventories, cash receipts, accounts payable and reservations, for the period July 1, 2008 to June 22, 2010. This agreed-upon procedure engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of the specified parties. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purposes.

Procedures

We designed our approach to determine if policies and procedures were adequately in place to prevent the misappropriation of assets and transactions.

Our procedures included:

1. Interviewing key personnel to gain an understanding of the process and procedures set forth for each agreed-upon procedure to determine the extent of tests to perform;
2. Selecting a sample of transactions or items and applying procedures to ensure the proper recording of assets along with appropriate supporting documentation;
3. Determining if procedures are in place to limit the risks associated with misappropriation of assets and proper recording of transactions.

Agreed Upon Procedures, Results & Recommendations

1.) Reservation System (Including Reservations, Refunds and Transfers)

Baxter's Reservation System has undergone a major transformation since the last Agreed-Upon Procedures performed in 2004. The Park has transitioned to a fully operational computerized system to record reservations on a yearly basis. Inquiry and observation of the system in place enabled the auditors to gain an understanding of the computer reservation system and provided the basis for our testing. Testing, inquiry and observation was our method to determine if the system is meeting Baxter's objectives. Testing included selecting samples of each reservation area mentioned above and performing manual recalculations, verifying rates, checking accuracy of reservation information and reviewing procedures identified by staff as key control steps. We concluded that the

reservation system appears to be performing adequately to meet Baxter's specific objectives regarding reservations, refunds and transfers. Personnel also appear to be well trained and knowledgeable about the system's process and daily duties to ensure proper recording of reservations. Through discussions with staff we determined that the reservation procedures manual has not been updated since the full electronic reservation system was implemented and is now out of date.

Recommendation 1: *We recommend that Baxter develop a written set of policies and procedures to ensure efficiency and consistency within the reservation system. Written procedures will enable Baxter personnel to properly train new and existing employees to comply with standards set forth.*

2.) Cash Receipts (Including Headquarters, Gatehouses, Campgrounds and Reservation System)

We utilized inquiry and observations as well as walkthroughs to gain an understanding of the cash receipts system and process as they are related to Baxter State Park. Through conversations with key personnel we were able to gain an understanding of which activities within the Park generate money and how each of those areas handles cash receipts. From this understanding we developed several tests to review each area. The tests included selecting a random sample of cash recipients from the collection sites above with a review of documentation and a walkthrough on cash handling. The tests, inquiries and observations were the basis for our assessment. Based on our audit procedures, it appears that the process and procedures are reasonable to minimize the risk of misappropriation of assets. However, none of the procedures for handling cash at headquarters have been written or documented.

Recommendation 1: *We recommend that Baxter develop a written set of policies and procedures to ensure efficiency and consistency in regards to the recording of cash receipts. Written procedures will enable Baxter personnel to properly train new and existing employees to comply with standards set forth.*

Recommendation 2: *Baxter personnel who transport the funds from Baxter Headquarters to the bank should be accompanied by an additional person or the deposit should be handled by a Baxter law enforcement officer for safety considerations.*

Recommendation 3: *Money transferred from the headquarters to the bank should be transported in a locked bag.*

3.) Accounts Payable (Includes Payables and Quick Books Pro)

We utilized inquiry and observations as well as walkthroughs to gain an understanding of the payable process and the Quick Books Pro system and process as they are related to Baxter State Park. From this understanding we developed tests to review each area. The tests, inquiries and observations were the basis for our determinations

Payables – Copies of all payables are kept in-house in a locked filing cabinet in the account associate's office. The payables agree with the advantage system and Quick Books. This process has remained relatively unchanged for many years. The Auditor(s) selected and reviewed 15 Payment Vouchers (PVs). Results appeared to fulfill the test criteria of: 1) amount in supporting documentation ties-out to PV; 2) documentation is adequate; 3) the amount is properly coded. However, 11 PV's did not meet the criteria of having an authorizing signature. These 11 were requests for replenishment checks from the State. According to the account associate, two copies are made: one that is sent to the State seeking replenishment; and one that is held for support, both of which should be signed. The State requires an authorizing signature on the cover letter before they will send the check. It appears that only the copy sent to the State is signed.

Recommendation 1: *We recommend that Baxter develop a written set of policies and procedures to ensure efficiency and consistency with the monitoring and recording of payables. Written procedures will enable Baxter personnel to properly train new and existing employees to comply with standards set forth.*

Quick Books Pro – Testing revealed that check disbursement information recorded using Quick Books Pro appears accurate. Auditors were able to re-create reconciliations based on bank statements together with Quick Books information and Advantage information. Also, observation of monthly bank reconciliations confirmed that they are being performed. This process has remained unchanged for many years. Although segregation of duties appears weak, there are some compensating factors to take into consideration since it is a small office with limited available staff. The business manager receives copies of all bank statements, Quick Books Pro summaries, and bank statement reconciliations.

Recommendation 1: *We recommend that Baxter develop a written set of policies and procedures which include computer and office security procedures to ensure efficiency and consistency with the monitoring and recording of transactions for all bank accounts. Written procedures will enable Baxter personnel to properly train new and existing employees to comply with standards set forth.*

Recommendation 2: *It is recommended that bank deposits always be counted and initialed by two people and that monthly bank reconciliations are performed by someone other than the Account Associate.*

4.) Inventory (Includes Daicey Campground, Carpenter's Shop and Garage)

Overview

Auditors developed inventory tests to determine if procedures are in place to mitigate the risk of misappropriation of assets. Based on the results for each location shown below, the Auditors have determined specific recommendations for each location, as well as a broad set of recommendations that can be utilized by each department.

Overall recommendations for the process of inventories:

Recommendation 1: *We recommend that Baxter develop a written set of policies and procedures to ensure efficiency and consistency with the monitoring, recording and tracking of inventories. Written procedures will enable Baxter personnel to properly train new and existing employees to comply with inventory policies.*

Recommendation 2: *Baxter's procedures for the assessing of inventory items should be based on a dollar threshold limit. Items above the threshold should be reviewed more closely on a yearly basis and items below the threshold could be viewed less frequently.*

Recommendation 3: *Maintaining adequate records, as well as consistency with placing and recording control numbers for all inventory items deemed significant, will help to ensure accurate inventory accounts.*

Recommendation 4: *We understand that tools and other equipment leave the inventory facilities in order to carry on operations within the Park. Developing a "sign-out" process for inventory will help keep track of inventory items and hold employees accountable for the items that are signed out and used in operations.*

Recommendation 5: *Segregation of duties is a fundamental element of internal controls with the basic concept that no employee or groups of employees should be in a position both to penetrate and to conceal errors or frauds in the normal course of their duties an annual inventory count should be conducted by a responsible person who is outside the normal chain of control of inventory items within the department.*

I. Daicey Pond Campground

The Auditors reviewed 20 inventory items that they believed to be high priced items. The inventory testing consisted of matching 10 items from the inventory listing to the actual physical items located within the garage. During the walk-through of the campground, the Auditors judgmentally selected another 10 inventory items and matched the items to the inventory listing. Based on the results listed below, we find the campground inventory procedures are not adequate to minimize risk. In nine instances inventory items were not provided with a control number. One incident involved a pair of chaps which could not be located within the Daicey Pond Shop. Campground personnel believed the pair of chaps was borrowed by a fellow ranger recently.

Recommendation 1: Segregation of Duties is needed. *A campground ranger who is in a direct position to record, authorize use and hold custody of assets should not be solely responsible for their inventory. A simple solution would be to ask a roving ranger to perform the campground's annual inventory count.*

II. Carpenter Shop

The Auditors reviewed 30 inventory items that they believed to be high priced items. The inventory testing consisted of matching 15 items from the inventory listing to the actual physical items located within the shop. During the walk-through of the shop, the Auditors judgmentally selected another 15 inventory items and matched the items to the inventory listing. Based on the results listed below, we feel the carpenter's shop inventory procedures are not adequate to minimize risk. There were 22 instances where inventory items were not provided with a control number. There was one instance of an inventory item provided with a control number label, however the object and control number was not recorded in the inventory listing. There was one additional item located in the shop that the auditors observed. The item was not recorded in the inventory listing and did not have a control number. The carpenter was not aware of the tool and stated it was either fairly new or hardly used. Some items were located within the carpenter's shop, carpenter's truck or in the carpenter's trailer located at an offsite location before Togue Gate.

Recommendation 1: Segregation of Duties is needed. *A carpenter who is in a direct position to record, authorize use and hold custody of assets should not have responsibility for maintaining accountability of those assets. A simple solution would be to ask a mechanic from the garage to perform the carpenter's shop annual inventory count.*

III. Garage

The Auditors reviewed 30 inventory items that they believed to be high priced items. The inventory testing consisted of matching 15 items from the inventory to the actual physical items located within the garage. During the walk-through of the garage, the Auditors judgmentally selected another 15 inventory items and matched the items to the inventory listing. Based on the results we feel the garage's inventory procedures are not adequate to minimize risk. Inventory count was not conducted for 2009. There are 17 instances where inventory items were not provided with a control number. There is one instance of an item provided with a control number; however the physical item did not contain the control number. In two instances, inventory items had a control number label, however the number was not recorded in the inventory listing. Furthermore, there was one instance of an inventory item that could not be located within the garage. The auditee was able to find the item at an offsite work location.

Recommendation 1: *Inventory count was not performed in 2009. We recommend personnel complete a physical inventory count to ensure consistency with prior year inventory reviews and to determine whether any other issues exist.*

Recommendation 2: Segregation of Duties is needed. *A mechanic who is in a direct position to record, authorize use and hold custody of assets should not bear responsibility for maintaining inventory of those assets. A simple solution would be to ask a carpenter from the carpenter's shop to perform the garage's annual inventory count.*

We were not engaged to and did not conduct an examination, the objective of which would be the expression of an opinion on the inventories, cash receipts, accounts payable and reservation system processes. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

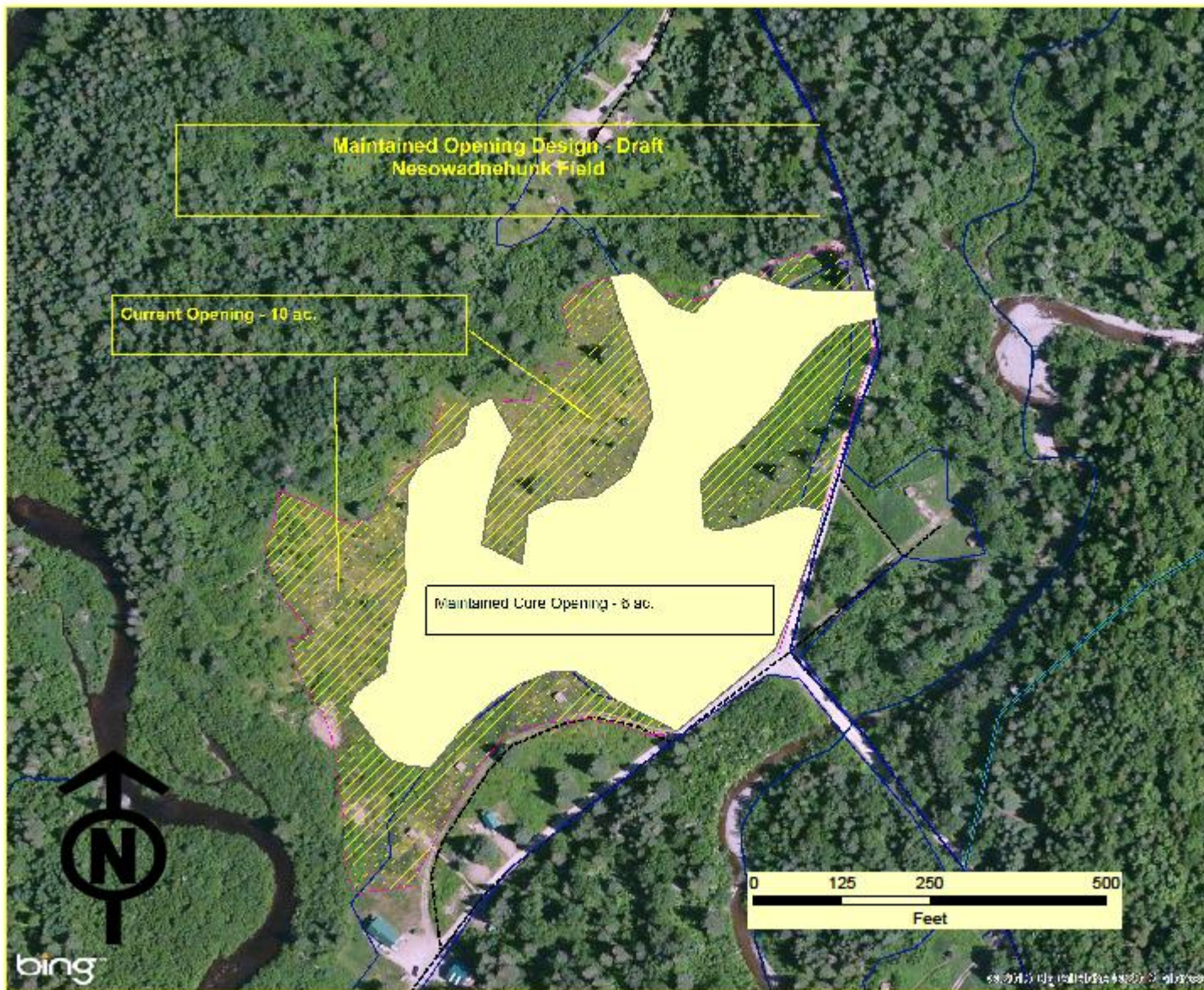
This report is intended solely for the information and use of the staff of Baxter State Park Authority and is not intended to be and should not be used by anyone other than these specified parties.

NERIA R. DOUGLASS, JD, CIA
STATE AUDITOR

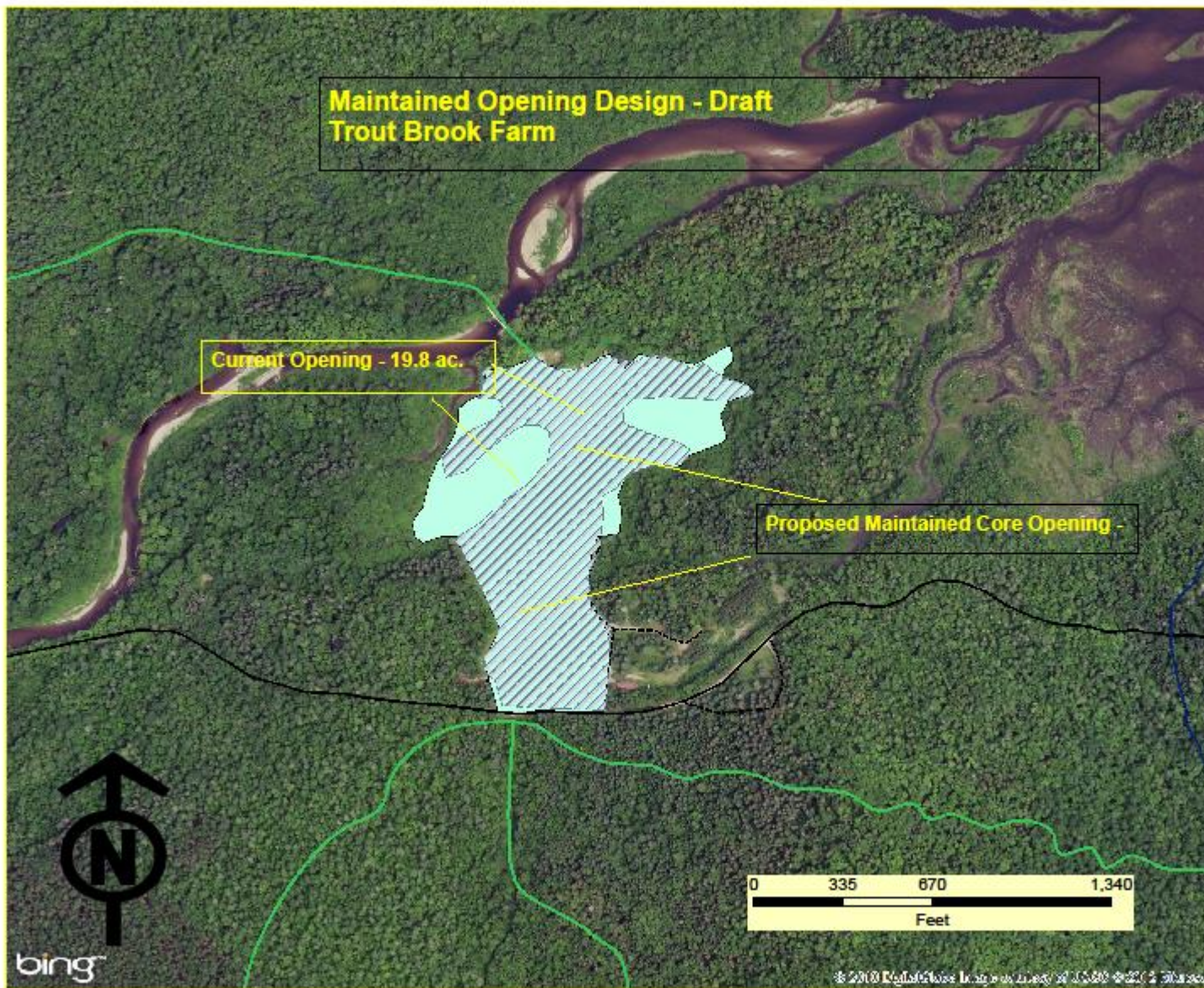
A handwritten signature in cursive script, appearing to read "Neria R. Douglass", written in dark ink.

July 16, 2010

10.58 Open Area Maintenance Plan – Nesowadnehunk Field



10.59 Open Area Maintenance Plan – Trout Brook Farm



Working List of Invasive and Potentially Invasive Species In BSP

Detected and Treated Invasives

<i>Lythrum salicaria</i>	Purple Loosestrife
<i>Phragmites australis</i>	Common Reed

Potential Invasives (Not yet Detected in Park)

<i>Alliaria petiolata</i>	Garlic Mustard
<i>Berberis thunbergii</i>	Japanese barberry
<i>Celastrus orbiculatus</i>	Oriental bittersweet
<i>Fallopia japonica</i>	Japanese knotweed
<i>Frangula alnus</i>	glossy buckthorn
<i>Hydrilla verticillata</i>	hydrilla
<i>Lonicera morrowii</i>	Morrow's honeysuckle
<i>Lonicera tartarica</i>	Tartarian honeysuckle
<i>Myriophyllum heterophyllum</i>	variable watermilfoil
<i>Myriophyllum spicatum</i>	Eurasian watermilfoil
<i>Poa nemoralis</i>	wood bluegrass
<i>Potamogeton crispus</i>	curly pondweed
<i>Rhamnus cathartica</i>	common buckthorn

Species of Special Concern Slated for Action in 2013

<i>Robinia hispida</i>	Bristly locust
<i>Frangula alnus</i>	Glossy buckthorn (Park HQ)

This list was compiled using information from Maine Natural Areas Program and is subject to updates as species listed above and other invasive species are found in the Park.

10.61 Baxter Bibliography

Bibliography – Baxter State Park

This list comprises historical and informational books regarding Baxter State Park. Baxter State Park makes no guarantee that the list is complete. There are many other books that consider in part or passing Baxter State Park and Percival P. Baxter

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10.62 BSP Prioritized Action Plan: 2011-2020

Prioritized Action Items - - Draft Management Plan	Ave Imp and Urg Ratings	<p>Importancy Rating: 1 Very Important, must be done; 2 Important, should be done; 3 Somewhat Important, could be done if time and money allow; 4 Not Important</p> <p>Urgency Rating: 1 Very Urgent, high priority, should be done ASAP; 2 Urgent, should be done soon; 3 Somewhat Urgent; 4 Not Urgent</p>
M/P Sec		Ave
4.4.1.1.1	1.70	<i>Develop an effective decision process to determine acceptable and appropriate actions and timelines to address invasive species identified in the Park.</i>
4.4.2.6.1	1.70	<i>To address long-term soil erosion potential, develop a multi-year plan for evaluating, designing, relocating and rehabilitating areas of fall line trail with high erosion hazards before committing to long term efforts at trail hardening on steep slopes. (see also 7.4.1.1.1)</i>
5.3.1.1.1	1.70	<i>Continue to steadily develop the reservation system to provide accessible real-time availability and increasing online reservation capability while controlling costs and maintaining secure operating and backup systems.</i>
7.1.1.1.4	1.70	<i>Review options and installation costs for emergency power generation to protect the Park from unanticipated long-term power outages.</i>
7.4.1.1.1	1.70	<i>Develop a multi-year plan for evaluating, designing, relocating and rehabilitating areas of fall line trail with high erosion hazards before committing to long term efforts at trail hardening on steep slopes. (See also 4.4.2.6.1)</i>
8.3.1.1.1	1.80	<i>Complete an Emergency Management Plan to formalize the process, steps and communications that would occur in the event of a large scale incident such as a major forest fire, hurricane or tornado, serious flooding or a variety of other scenarios.</i>
9.1.1.1.1	1.80	<i>Continue to work closely with the Investment Committee and fund managers to revise and refine the Investment Policy Statement to better ensure effective and stable long-term revenue from Park trust funds.</i>
4.4.2.8.5	1.90	<i>Work closely with IF&W fisheries biologists to develop or incorporate an action plan and decision model into the Park's management plan to ensure appropriate and timely action in the case of the discovery of an introduction of an invasive fish species into Park waters.</i>
4.4.2.4.1	1.92	<i>Determine the management objectives regarding the maintained openings at Trout Brook Farm and Nesowadnehunk Field Campgrounds and develop a long-term plan to meet the desired objectives.</i>

4.4.2.11.1	2.00	<i>Clarify the policies and enforcement actions involving group use of campground campsites as well as improving outreach to potential group users prior to their arrival at the Park.</i>
5.2.12.1.1	2.00	<i>Organize and conduct an annual effort toward regular evaluation and upkeep of accessible sites in the Park.</i>
7.1.1.1.5	2.00	<i>The annual Park budget process should consider applying available revenues to the Capital Reserve Fund in order to gradually increase the Capital Reserve fund.</i>
7.2.1.1.2	2.00	<i>Begin a regular program of replacement of aging culverts 48" and larger in diameter. The potential effect of climate change, and fish passage should be considered carefully in the replacement of drainage structures, stream crossings and bridges throughout the Park.</i>
8.4.1.1.2	2.00	<i>Standardize ranger camp and other frontcountry first aid and rescue equipment and supply sets to facilitate rapid location and inventory of first aid supplies by any available park staff members.</i>
4.3.3.1.1	2.10	<i>Develop a comprehensive interpretive training program provided to new and continuing seasonal employees to improve the visitor experience in the Park.</i>
4.3.3.1.5	2.10	<i>Consider the establishment of a BSP- employed patrol position to orient this group and facilitate their experience in the Park.</i>
4.4.2.6.5	2.20	<i>Employ the Trail Support Index in any and all proposals regarding changes to the current trail system, including relocations, closures and new trail construction.</i>
4.4.2.8.1	2.20	<i>Work with IF&W fisheries management to explore and implement cooperative and joint efforts to restore the Nesowadnehunk hatchery strain for use in stocking Park ponds.</i>
4.4.2.8.3	2.20	<i>Work with IF&W to develop an inventory on non-native fish in Park waters and an accordant response plan for any Park waters with non-native fish.</i>
4.4.2.10.2	2.20	<i>Continue to work with other State agencies and the research community to develop long-term sustainable, affordable inventory and monitoring efforts that will benefit long-term Park management.</i>
7.1.1.1.3	2.20	<i>Conduct a thorough review of available wood systems and installation costs and consider any workable options for a converting the Park's heating system to a more locally controlled and renewable resource.</i>
7.6.1.1.1	2.20	<i>Develop and adhere to a maintenance schedule utilizing Ranger staff, volunteers and cooperating abutting landowners to adequately maintain boundary lines.</i>
7.7.1.1.1	2.20	<i>Remain vigilant to improvements in communication technology and to the extent possible, maintain as many viable options as possible to accommodate forms of communication that may be developed in the future.</i>
4.4.2.6.2	2.30	<i>Implement a Park-wide trail structure inventory gathering spatial and attribute data using GPS-capable field data computers to specify and quantify the existing backlog in unmet trail maintenance needs and to facilitate future planning efforts. (See also 7.4.1.1.5)</i>

4.4.2.8.2	2.30	<p>Work with IF&W staff to complete and execute a Memorandum of Understanding defining and guiding the direction and relationship between BSP and IF&W regarding fisheries management in the Park.</p>
4.4.2.8.4	2.30	<p>Work with various State agencies to assess the threat of non-native fish migration into the Park, including relative risk of existing non-native species and the relative potential for movement based on the existence or lack of natural barriers on existing waterways leading into the Park.</p>
4.4.2.11.2	2.30	<p>Develop a permit system day use hiking groups including criteria and thresholds regarding group hiking use in the Park and daily maximum limits on groups accessing Baxter Peak, the Traveler Loop and other major peaks in the Park.</p>
4.4.2.11.4	2.30	<p>Design and install larger, clearer and more direct signage at both Sandy Stream and Stump Ponds during the fall photography season specifying appropriate use policies. If signs signage is not effective at resolving the issues, implement a permit policy for all photographers using tripods during the fall photography season.</p>
7.4.1.1.5	2.30	<p>Conduct a Park-wide trail structure inventory gathering spatial and attribute data using GPS-capable field data computers to specify and quantify the existing backlog in unmet trail maintenance needs and to facilitate future planning efforts. Seek perpetual and innovative strategies to increase the resources available to address outstanding trail maintenance needs in the Park. (See also 4.4.2.6.2)</p>
8.4.1.1.1	2.30	<p>Review and refine the Medical Training Plan to improve the training and application of emergency medical services in the Park.</p>
4.3.7.1.1	2.40	<p>Develop Short Term Interpretive Plans, for each duty station in the Park as a bridge to the development of permanent site-specific Interpretive Plans.</p>
4.3.7.3.1	2.40	<p>Produce site-specific Interpretive Plans for each duty station in the Park.</p>
4.4.2.3.1	2.40	<p>Continue to implement the road-width monitoring protocol every 5-10 years to ensure that the character and nature of the Park Tote Road remain appropriate to the natural wild state of the Park. (See also 7.2.1.1.1)</p>
4.4.2.8.7	2.40	<p>Consider the replacement of road culverts, particularly larger culverts, with structures that better facilitate fish passage.</p>
4.4.2.10.1	2.40	<p>Work with the BSP Research Committee and others to develop a list of desired or preferred research in the Park. This list could take the form of a list of important information gaps that, if answered by relevant research, would directly address specific Park concerns regarding future management.</p>
7.2.1.1.1	2.40	<p>Regularly re-measure the Tote Road width points as a guide to the maintenance of Park roads in the condition intended by the donor with the stated objective of maintaining the average measured width at or below the current measured average of 16.5 feet. (See also 4.4.2.3.1)</p>
7.4.1.1.4	2.40	<p>Utilize existing data available to calculate past years Trail Support Indexes as well as to build a continuing dataset of TSI's into the future. Many years of TSI's should provide the Park with likely upper and lower thresholds as well as a useful average TSI to consider in the evaluation of decisions regarding the trail maintenance load including proposals for trail relocations, additions or closures.</p>

4.4.2.6.3	2.50	<i>Establish five Trail-Free Zones (see figure 5. below) within the Park totaling 64,463 acres, in which new trail construction will be prohibited</i>
7.1.1.1.1	2.50	<i>Continue to work to develop evaluation criteria and an assessment protocol for structures in the Park and seek to retain as few structures as necessary to effectively operate the Park and provide for public safety.</i>
7.8.5.1.1	2.50	<i>Develop simplified datasets and GIS layers and provide them to MEGIS (Maine Geographic Information Services) for posting on their public access data catalog.</i>
4.4.2.1.1	2.60	<i>Remeasure the water chemistry of representative low and high elevation Park ponds with similar or identical protocols as the HELM project as part of a long-term monitoring program.</i>
4.4.2.6.4	2.60	<i>Employ the Trail Evaluation Matrix in any and all proposals regarding changes to the current trail system, including relocations, closures and new trail construction.</i>
4.4.2.6.6	2.60	<i>Improve effective lines of communication with adjoining landowners. In situations where the Park and the adjoining landowner share similar management and recreational use objectives, the Park should work to develop effective criteria to evaluate proposals to extend recreational uses across property lines.</i>
4.4.2.11.3	2.60	<i>Review and improve the existing Media Policy by considering other policies in use and the major concerns of the Park regarding media use. Resolved 10/5/12 – see Record of Amendments.</i>
7.1.1.1.2	2.60	<i>Tabulate Park-related data spatially and conditionally using GPS-capable field data computers to facilitate future planning efforts. (See also 7.8.4.1.1)</i>
7.4.1.1.2	2.60	<i>Consider available options for relocation of wet land trails to more suitable terrain to provide options for the Park to reduce its long-term trail maintenance requirements by reducing the amount of maintained bog bridging.</i>
7.8.4.1.1	2.60	<i>Refine existing datasets to a consistent format, to ensure that current and future data is collected in consistent formats and that as much data as possible is oriented spatially and linked with the Parks GIS system.</i>
9.2.1.1.1	2.60	<i>Repeat the Economic Impact Survey by 2020 to assess any changes in the Park's local and state-wide economic impact.</i>
7.3.1.1.1	2.63	<i>Carefully evaluate each replacement of heavy maintenance vehicles and weigh replacement and long term maintenance costs against benefits to the Park in efficiency, control and deferred contracting costs.</i>
4.4.2.5.2	2.70	<i>Develop specific and Park-wide criteria for the evaluation and mitigation of campsite erosion and other site damage concerns at Park campgrounds.</i>
4.4.2.8.6	2.70	<i>Work with IF&W personnel to complete the study work on Nesowadnehunk Stream and to consider possible actions to speed or enhance the natural restoration process on degraded streams in the Park.</i>
5.1.2.1.0	2.70	<i>Evaluate opportunities to extend the camping season in the Park.</i>
4.3.3.1.2	2.80	<i>Information/education should develop interpretive strategies specific to the SFMA area under the guidance and with the support of the SFMA Resource Manager.</i>

4.3.3.1.4	2.80	<i>Participate in local and regional efforts that provide a forum for BSP representatives to educate commercial users on the Park's mission and appropriate ways they can enjoy the Park within those parameters.</i>
5.2.4.1.1	2.80	<i>Continue to monitor and evaluate log large log structures, including rental cabins, and work to develop a maintenance, or if necessary, a removal/replacement plan for cabins.</i>
7.4.1.1.3	2.80	<i>Continue to evaluate service bridges and winter access routes and maintain only those routes necessary for efficient facilities maintenance and employee access.</i>
4.4.2.8.8	2.90	<i>The Park should work with IF&W staff and with the academic community to explore and promote opportunities for appropriate research on fishless ponds in the Park.</i>
5.2.2.1.1	2.90	<i>Utilize a comprehensive approach to the consideration of expanding multi-day backpacking opportunities, including the application of the Trail Evaluation Matrix and the Trail Support Index.</i>
5.2.3.1.0	2.90	<i>Continue to replace stick-built or decaying lean-tos with cedar log leantos as time and available labor permits. At the time of replacement, issues such as need for replacement or modification of location should be evaluated.</i>
4.3.3.1.3	3.00	<i>Develop a list of commercial/institutional Park users.</i>
4.3.3.1.6	3.00	<i>Develop and maintain regular contacts within the governmental and non-governmental tourism sector, including film and press promotion bureaus.</i>
5.1.6.1.1	3.20	<i>Identify and evaluate additional hunting opportunities for visitors in the northern end of the Park.</i>
4.4.2.5.1	3.30	<i>Consider the installation of a bear line at Russell Pond and the provision (rental) of bear canisters in the backcountry as a Park policy.</i>
5.2.7.1.1	3.70	<i>Examine available options to relocate the picnic area at Roaring Brook to a site more available and discernable by the public. The current picnic area is located along Roaring Brook somewhat behind the campground in an area not readily noticeable by most Park visitors.</i>

Baxter State Park Management Plan Record of Amendments

Format: Date/Editor/Page Reference/Description of amendment

10/24/12; JBissell; p.13; reference and link to the Record of Amendments page was added.

10/25/12; JBissell; p.18-19; references to the Huber Lot as an inholding were amended to reflect the gifting of the Huber Lot to the Baxter State Park Authority on January 12, 2012.

10/25/12; JBissell; p.115; Resolution to Action Item 4.4.2.11.3 Media Policy Revisions – notation of revised media policy and media project application approved by BSPA on 10/5/12. Updated policy and permit application inserted in plan.

10/30/12; JBissell; p.152; Added hyperlink to the SFMA Management Plan approved by the BSPA 10/5/12.

12/28/12; JBissell; p.174; Added content regarding the examination and summary guidance developed for the section of the Hunt and Abol Trails near Thoreau Spring. Inserted Summary Guidance Document to Appendix and provided hyperlink from the text in section 7.4.2 to the Summary Guidance Document.

1/25/13; JBissell; p 94; Added text defining the resolution of Action Item 4.4.2.6.3 – Trail Free Zones

1/25/13; JBissell; p. 177-178 and p.94; Added text defining the resolution of Action items 7.4.3.1.2 and 4.4.2.6.2 respectively through the completion of a Trails Inventory.

1/28/13; JBissell; p115; Added text describing the resolution of Action Item 4.4.2.11.2 through a revision of Park Rules to limit the size of hiking groups on Park trails.

4/10/13; JBissell; p91; added resolution text for action item 4.4.2.4.1 regarding the management of vistas and open areas as approved by the BSPA on March 20, 2013.

4/10/13; JBissell; p84; replaced existing text on Invasive species with text and guidance approved by the BSPA on March 20, 2013 to address the original action item: 4.4.1.1.1: ***“Develop an effective decision process to determine acceptable and appropriate actions and timelines to address invasive species identified in the Park.”*** (action item removed)