

APPLICATION FOR
SCIENTIFIC STUDY IN
BAXTER STATE PARK

1. TITLE Surveys and Conservation Planning in a Regional Context for the Wood Turtle (*Glyptemys insculpta*) in Maine
2. NAME OF RESEARCHER: Derek Yorks
3. RESEARCHER'S CREDENTIALS: Maine Dept. of Inland Fisheries and Wildlife reptile specialist with Wildlife Research and Assessment Section (WRAS), Bangor.
4. BENEFITS TO BE DERIVED FROM RESEARCH: This work will establish a baseline of knowledge for wood turtle populations within Baxter State Park. Wood turtles are of conservation concern throughout their range and in Maine they are a State Special Concern species. Wood turtles are a long-lived species whose population trends are best assessed over a long period and this effort will facilitate that work in the future. Data collected will be included in a regional analysis and conservation planning effort including a regionwide genetic analysis.
5. DETAILED DESCRIPTION OF RESEARCH: We will follow standardized time- and area-constrained sampling protocols developed by the North East Wood Turtle Working Group (NEWTWG) to sample 1 or 2 sites in the park during the 2015 and 2016 field seasons. During all surveys teams of 1-4 surveyors will spend 1 hour per stream kilometer searching the stream and stream banks (within 10m of stream) for wood turtles during the appropriate season and under optimal weather conditions. Surveys may include just 1 kilometer or multiple consecutive kilometers of stream depending on habitat at the site. When turtles are found the timed survey will be paused while surveyors record the location, measurements, and weight of each turtle. We will collect blood and also mark and photograph each turtle. 0.1 – 0.4 cc of blood will be drawn from the caudal vein of each newly captured adult turtle (for up to 20 turtles from a population). Turtles will be marked by filing small notches in the marginal scutes of the carapace using a triangular metal file. After processing individual turtles, the survey will be resumed until the hour time limit and end of the kilometer is reached.
6. AREA(S) OF THE PARK FOR THE RESEARCH: 2 streams within the park appear likely to support wood turtles. Trout Brook in the north of the park is of principal interest because a number of turtles have been observed and the habitat appears to be excellent. Within Trout Brook the area upstream from the confluence with Fowler Brook is of greatest interest. Of secondary interest within the park is Nesowadnehunk Stream in the southwest near the Daicey pond

campground where the stream is rather slow flowing (upstream of Big Niagara Falls).

7. **IMPACT ON THE PARK:** These surveys will not have any negative impact on the park. They do require surveyors to venture off-trail but the survey methodology (as described above) is very much low-impact with respect to the flora and fauna.
8. **BUDGET:** MDIFW No additional money is needed for this research which is funded with a multi-state USFWS Competitive State Wildlife Grant and with MDIFW funds.
9. **TIMETABLE FOR RESEARCH AND COMPLETION OF APPLICATION:** We would like to conduct preliminary surveys with the help and guidance of park staff during the spring of 2015 (May/June). After we have located stream sections with wood turtles we will revisit these sections 6 times. The 6 surveys will occur in either Fall 2015, Spring 2016, or Fall 2016 with 3 surveys in one season and the other 3 surveys occurring in another season (e.g. 3 surveys Fall 2015 and 3 surveys Spring 2016).

(USE ADDITIONAL SHEET[S] IF NECESSARY).

DATE: 3/20/2015