

**Research Report**

**University of Michigan Biological Station**

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**Fred R. Cagle**

## Natural History of Turtles in the Douglas Lake Region

This problem is so inclusive that each summer's work is necessarily divided into several separate projects. Much of the work has been a continuation of studies started during the summer of 1937. Emphasis this summer has been placed on a statistical study of the turtle population in Nigger Creek and the marking and release of specimens.

### A. Study of egg-laying habits.

Nests were observed at Nigger Creek, Nichols Bog and Fontinalis Run. The most active part of the egg-laying occurs before camp opens. During the summer of 1939 this phase of the work will be made in early June.

Three clutches of eggs were brought into the laboratory for experimental work on incubation. Although kept under conditions approximating those in the field, no eggs were successfully incubated. This work is to be continued during the winter in an effort to establish reliable degree hour incubation records.

### B. Marking, collection of data, release of turtles.

Turtles were collected in Nigger Creek and Douglas Lake. Detailed data was taken on 200 turtles from these areas. These specimens were released at one of the releasing stations, Douglas Lake or Nigger Creek.

Forty specimens marked last summer were recovered, studied and released.

Statistics collected yielded valuable information  
in regard to the following factors:

1. Growth rates.
2. Attainment of sexual maturity.
3. Movement of individuals. Extent of territory utilized by an individual.
4. Injury repair; development of scar tissue.
5. Correlation of plate malformation with growth.
6. Secondary sex characters.
7. Sex ratios.
8. Age groupings.
9. Reactions of individuals introduced into different type habitat and subsequent adaptation to that new habitat.

C. Correlation of activities of turtles and weather conditions.

Daily observations have been made of captive specimens, and frequent observations have been made at Nigger Creek. This study has yielded much of interest and more definite study is to be conducted during the summer of 1939.