

Eastern Box Turtle Project

A project began in 2008 to investigate the Eastern Box Turtle population along three streams in Fayetteville, GA: Horton Creek near the Flint River, Ginger Cake Creek, and Whitewater Creek near the confluence of these two streams.

The basic procedure is to search the selected habitats looking for turtles. There were/are several questions under consideration for these searches:

1. Locate all of the population in each of the areas,
2. Measure each individual for length, width (at the g-to-r outer scute) and height,
3. Mark data sheets with sex,
4. Photograph each individual,
5. Note any unusual or interesting characteristic,
6. Using a hand-held Global Positioning System (GPS) device, record exact data on location,
7. Take field notes of habitat where turtle is located,
8. Estimate distance from local stream,
9. A sequential numbered tag is attached to the lower rear portion of the turtle shell and that number is recorded on the field data sheet, and,
10. Record weather information, including last rain if known.

Once the data is obtained, field notes are processed into individual turtle data sheets which include a printed photograph of each turtle. The GPS data is downloaded to a Garmin map on a computer to display the turtle location. Multiple locations of the tagged turtles are noted and a later determination of the distance from the first recording is made. All basic data is transferred to an Excel-based data sheet for the entire population(s).

As the investigation progressed, additional questions arose, especially when compared to other box turtle studies being carried on elsewhere in the country. Of particular concern is the distance the turtles move (initial results indicate these populations move further than other studies show); Why the turtles are using some areas in small groups (apparently) while none are found in habitats that look identical? Is there any correlation between shell markings or is this random and simply a genetic characteristic of populations? Where are the turtles spending most of their time? Why are they found some days and not others? And other similar questions.

Once adequate information is available in the three areas, probably one additional year of data, other locations around Fayette County and surrounding counties will be selected by working with local schools to set up similar data collection programs on natural areas under public ownership. No publication related to the turtles has been generated to this point.