

Habitat Use and Home Range of Eastern Box Turtle (*Terrapene carolina carolina*) in North Georgia Piedmont

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The Eastern Box Turtle (*Terrapene carolina carolina*) is a terrestrial species native to the eastern United States. Eastern Box Turtles are experiencing range-wide population decline and are classified as vulnerable by the International Union for the Conservation of Nature. Despite this, little research has been conducted regarding home range and habitat use in the Southeastern US. Therefore, since May 2013, we have conducted a radiotelemetry study to investigate factors that influence Box Turtle movement, habitat use, and survival in the Northeastern Piedmont region of Georgia. The study site is composed of mixed hardwood-pine uplands primarily comprised of oaks and maples, mesic and upland areas dominated by Chinese privet (*Ligustrum sinense*), beaver-created wetland, and maintained utility line areas. Our research includes 21 radio-transmitted turtles that are tracked on foot by homing 1-2 times a week. From spring 2013 to winter 2017, an average of 74 radiolocations (range: 6 to 166) per turtle were collected. Home ranges (100% minimum convex polygon) varied from less than 1 to over 6 ha. Radiotracked turtles primarily used mixed-upland areas and areas dominated by Chinese privet. The assessment of habitat use and home ranges will continue throughout 2017 with tracking and further data analysis.

Keywords: *Terrapene carolina*, radiotelemetry, home range, habitat use, *Ligustrum sinense*