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Time: 900 – 1500

Location: University of North Georgia – Gainesville, Ga

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

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The Eastern Box Turtle (*Terrapene carolina*) is a terrestrial species native to the Eastern United States from New Hampshire to Georgia. *Terrapene carolina* is experiencing range-wide population decline and is classified as vulnerable by the International Union for the Conservation of Nature. Despite the species' status, little research has been conducted regarding home range and habitat use in the Southeastern US. To contribute to the knowledge of the species in this region, we have conducted a radiotelemetry study since 2013 to investigate factors that influence *T. carolina* movement, survival, and habitat use 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 wetlands; and maintained utility line areas. Our research includes 28 radio-transmitted turtles that are tracked on foot by homing 1-2 times a week. From Spring 2013 to October 2017 we collected an average of 61 radiolocations (range: 1 to 176) per turtle. Home ranges (100% minimum convex polygon) varied from >1 to >10 ha. Radiotracked turtles primarily used mixed-upland areas and regions dominated by *L. sinense*. Overall, *L. sinense* was the most prevalent understory vegetation at *T. carolina* radiolocations. The assessment of habitat use and home ranges will continue throughout 2018 with tracking and further data analysis.