

Tanessa Hartwig (Hudsonia Ltd., P.O. Box 5000, Annandale, NY 12504), Heidi Bock (Antioch New England Graduate School, 40 Avon St., Keene, NH 03431), Zara Dowling (Bard College, Annandale, NY 12504), and Erik Kiviat (Hudsonia Ltd., P.O. Box 5000, Annandale, NY 12504)

Characteristics and Management of Nesting Habitat Constructed for Blanding's Turtle in Southeastern New York

Blanding's turtles (*Emys blandingii*) are a Threatened species in New York, largely due to habitat degradation. In 1996-97 3 ha of nesting habitat were constructed to mitigate the loss of habitats destroyed during a school expansion in Dutchess County, NY. To determine nesting habitat characteristics, we followed females to their nest site and estimated vegetation variables within 1 m and soil characteristics within 0.3 m of the nest and a random site. Nesting females selected soils with more gravel in wetter spring seasons and more sand in drier seasons; hatchling productivity and length/weight ratio did not differ among years. Nest sites had less vegetation cover than random sites. As vegetation in the nesting areas became overgrown females traveled farther to nest, increasing their exposure to hazards such as vehicles and mowing equipment. In 2006, eight experimental plots were created to determine Blanding's turtles' reactions to different management techniques. Each plot consisted of three 5 x 7 m treatments: mowed, handweeded, and tilled. After exposure to all three treatments, seven turtles nested in tilled areas and two nested in mowed. However, seven turtles left the site before being returned and eventually nesting on artificial plots. Nesting Blanding's turtles often travel long distances, and this habit needs to be addressed when building nest habitat or determining conservation zones. Nesting habitat should include a variety of sparsely-vegetated, friable, and coarse-textured soils to accommodate varying weather conditions. In addition, long-term management of the nesting habitat should be incorporated in the construction plan.