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Basking Habitat Characteristics of Blanding's Turtles in Natural and Constructed Wetlands in Southeastern New York

Blanding's turtles (*Emys blandingii*) are a Threatened species in New York. In 1996-97 1 ha of wetland habitat was constructed to mitigate the loss of a wetland destroyed during a school expansion in Dutchess County, NY. Organic sods with intact herbaceous and shrubby vegetation were moved from the destroyed wetland to the constructed wetlands to accelerate their development. Logs and stumps were transported from the destroyed wetland to serve as basking areas. We studied microhabitat by radiotracking individuals to their exact location and recording habitat variables from 2000-2002. Blanding's turtles were associated with shallow water depths ($\bar{x} = 30$ cm) and areas of abundant vegetation (total cover $\bar{x} = 87\%$) which included the shrub buttonbush (*Cephalanthus occidentalis*). Turtles were often found in beds of submerged or floating vegetation at the edge of emergent vegetation (natural wetlands) or near exposed logs (constructed wetlands). The turtles basked on exposed surfaces in the early morning, but were submerged in floating plant materials by late morning. In constructed wetlands, Blanding's turtles were associated with less cover and warmer water than in nearby natural wetlands. Females basked in the constructed wetlands more often than males, and females moved into these wetlands before and after nesting. Constructed wetlands provided basking and foraging habitat in the spring and early summer, and staging or rehydrating areas for nesting females. Basking habitat should include shallow water areas with submerged and floating vegetation, interspersed with emergent vegetation and basking substrates such as logs. Some basking habitat should be near nesting areas.