

Nesting site creation for the eastern spiny softshell in NY

Populations of the spiny softshell turtle in New York State are restricted to bays and lakes in the state's central region. Study of one site during the early 1990s indicated that suitable nesting habitats were degraded or unavailable. In 1996, the NYS Department of Environmental Conservation (DEC) constructed an artificial 8 x 11 m sand-based nesting mound and erected cyclone fencing on three sides to exclude predators. Since 1996, the site has been monitored for hatching success and depredation. Over 3,000 hatchlings have emerged from the site since 1996; roughly 2,500 of these were spiny softshells. The nesting mound also attracts nesting females of four additional turtle species, including the common map turtle (*Graptemys geographica*). Only one case of site-wide nest depredation has occurred in 12 years. In 2006, the nest site was subdivided into 108 randomly arranged 0.9 x 0.9 m plots of three habitat types: bare sandy soil, vegetation, or bare sand/gravel mix. Spiny softshell use of the mound did not change but the number of map turtle nests increased from an average 7 nests/yr prior to 2006 to 40 nests in 2006. This suggests that by offering a mosaic of nesting habitats, a greater number of species can benefit from protection. An unappreciated challenge to managing artificial nest sites is the control of weedy invasive plants. Stewardship recommendations should stress the need for multi-species nesting studies and management plans.