

PROBLEMS AND STRATEGIES FOR SPOTTED TURTLE MANAGEMENT IN MAINE

Prepared by: Mark McCollough
January 14, 1992

Problem 1: Basic life history, population, and habitat utilization and availability data are not available to make management decisions.

Strategy 1.1: Initiate intensive studies of population abundance and habitat utilization on study area(s) in southern Maine.

Strategy 1.2: Conduct a systematic survey of population distribution and abundance throughout spotted turtle range in southern Maine.

Strategy 1.3: Initiate long-term (minimum 5 to 7 years) studies of a marked population to document population trends and population dynamics (natality, mortality, survival).

Strategy 1.4: Use population data to conduct a minimum viable population analysis to define "self-sustaining population."

Strategy 1.5: Use habitat utilization data, wetland inventory, remote sensing, and cartographic data to conduct a landscape analysis to assess habitat availability.

Strategy 1.6: Design a habitat protection strategy for spotted turtles by 1996.

Problem 2: Population and habitat enhancement techniques are relatively undeveloped for this species.

Strategy 2.1: Investigate techniques for population enhancement for this species including captive rearing of young, excluding predators from nests, and minimizing vehicle mortality.

Strategy 2.2: Investigate techniques for habitat enhancement including assessing the affects of impounded wetlands, creation of nesting habitat, and creating wetlands especially on state-owned land.

Problem 3: Interim protection measures are needed to maintain habitat suitability until a more comprehensive habitat protection program is developed.

Strategy 3.1: Track current occurrences in the Natural Heritage Database.

Spotted Turtle Problems and Strategies

Strategy 3.2: Develop management guidelines for tracked sites.

Strategy 3.3: Review all permit applications that could affect tracked sites to minimize habitat loss.

Strategy 3.4: Encourage revision of state wetland protection measures to include small wetlands (< 10 acres) and vernal pools in southern Maine.

Problem 4: Management benefiting spotted turtles and their habitats requires cooperation, support, and funding from landowners, land managers, and the public.

Strategy 4.1: Provide technical assistance on spotted turtle management, especially wetland protection, to state, federal, and private entities that own or manage land with supporting spotted turtle populations.

Strategy 4.2: Prepare and distribute interpretive and informational materials including magazine articles, brochures, interpretive posters, press releases, and public service announcements.