

Moving Forward: Considerations for Protecting Wetland-associated Amphibian and Reptile Biodiversity

(H. Gruner, Connecticut Association of Wetland Scientists 2022 Conference)

1. Within northern Fairfield and Litchfield counties west of the Housatonic River, calcareous wetland systems may support bog turtles. Consult the USFWS bog turtle recovery plan for guidance:
https://www.fws.gov/northeast/pafo/pdf/REVISED%20Phase%201%20and%202%20Protocols_04.29.20_FINAL.pdf
2. Recognize the value of ephemeral wet depressions and seasonally flooded areas within agricultural fields and sand/gravel pits. Those located below 500' may support species of high conservation concern including eastern spadefoot, Fowler's toad, and leopard frogs
3. Conservation of vernal pools should consider the surrounding "concentric conservation zones" (0-100', 100-750') and consider directional habitat connectivity on a landscape scale
4. Recognize that vernal pools embedded within swamps ("i.e., cryptic pools") are frequently not recognized or appropriately delineated. An optimal conservation strategy would use the delineated wetland boundary of the swamp as the basis to measure the critical terrestrial habitat (CTH)
5. Consider the hydrological range (saturated to permanently flooded) of wetland habitats present and the biological dependencies (nexus between them)
6. Consider the conservation value of early-successional wetland habitats. Recognize that these are usually a very small portion of the overall wetland complex and extremely vulnerable.
7. In northern CT at elevations above 500' consider a 300' forested buffer on each side of high gradient/cold water stream/seepage systems to protect northern spring salamander populations
8. In general, a 300' conservation zone should be considered around rivers and streams occupied by wood turtles. For regionally significant sites, a conservation zone of 1,000' should be considered (Jones et al 2018; www.northeastturtles.org)