

Request for the Development of a Conservation Management Plan for the Greene Tract, Chapel Hill, NC

Dear Members of the Chapel Hill Town Council,

- The Greene Tract is an area of high ecological significance, possessing one of the highest concentrations of breeding sites in North Carolina for the Four-toed Salamander, a state listed species of Special Concern; at least five separate breeding sites are currently known to exist within this tract
- Several other populations of Four-toed Salamanders have been documented downstream in the larger system of watersheds connected by the Greene Tract. These include several areas in Duke Forest, the Johnson Mill TLC Preserve, Blackwood Farm County Park, and the New Hope Game Lands.
- Headwaters connections – probably the most important for linking populations of this species – have become very rare not only within this region but across the state overall. Consequently, the ones that exist in the Greene Tract may play a vital role in maintaining the ecological integrity and genetic viability of the populations throughout the New Hope Watershed, one of the major strongholds for this species in the state
- Given the state-level importance of this particular set of populations, a conservation plan should be developed for its protection
- This should include protection for the breeding sites themselves including:
 - protection from runoff from adjoining developments
 - prohibition of infrastructure development in or near any of the wetlands on this tract
 - routing of trails well away from the breeding sites in order to avoid the effects of trampling or other disturbances caused by human traffic
- Additionally, the habitat used by the adults of this species need protection, including:
 - Maintaining a forested buffer of 250 meters around the breeding sites and the riparian connectors located in between
 - Allowing the forest to mature into hardwood-dominated stands

- A full natural heritage survey should be done at the Greene Tract to determine whether there are additional species or natural communities of conservation concern
 - This tract was not visited during the two previous Natural Heritage Inventories conducted in Orange County
 - The survey conducted in 2000 by Goldstein and Associates was done during February, when many species are dormant and cannot be observed; the Four-toed Salamander was a species that was targeted in this survey but – as admitted in this report – could not be adequately surveyed at that time; the same was true for the rare plants that were targeted
- Based on the information obtained from a more thorough survey, conducted during the growing season, a comprehensive conservation plan should be created
 - This plan should be used to guide conservation and management decisions within the natural area itself
 - It should also be used to steer development, infrastructure, recreation, and other human uses away from the most sensitive environmental areas

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