North Carolina Wildlife Federation
Habitat Restoration Proposal: Lake Tomahawk Park
September 22nd, 2025

Description: Much of the land surrounding Lake Tomahawk is managed as lawn and turf grass. This category of land use provides little to no value for birds, pollinators, and other wildlife species. Breeding birds rely on caterpillars and soft bodied insects to successfully nest and raise young. Native trees like oak, cherry, birch, maple, and willow support hundreds of caterpillars and other insects these birds rely on compared to landscapes managed for lawn and turf grass which support none.

Native plants are the foundation of our terrestrial food webs. Healthy food webs provide us with clean air, clean water, flood mitigation, erosion control, carbon sequestration and much more. Animal pollinators like bees, moths, flies, and butterflies are responsible for the pollination of more than 75% of all flowering plants. These plants include our native asters, black-eyed Susans, goldenrods, sunflowers, and blueberries which are critical hosts for North Carolina's native bee species. Lawn and turf grass provide a sterile environment and do little to support our pollinators.

By increasing the native vegetative landscape and reducing lawn and turf grass at Lake Tomahawk Park, the Town of Black Mountain can restore habitat for native wildlife and benefit from improved ecosystem services like reduced stormwater runoff and erosion, climate regulation, and pollination among others. Shifting from lawn to naturalized areas will also reduce the demand for mowing, and greatly improve soil health in the park over time.

To begin restoring critical habitat at Lake Tomahawk Park, North Carolina Wildlife Federation (NCWF) has identified a site in the park to engage volunteers and community leaders in habitat restoration efforts. We chose this site because it currently has no established native vegetation, receives full sun, and is adjacent to high use areas. The site listed is appropriate for both trees and pollinator plants; however, pollinator plants require more initial site preparation (e.g., remove existing vegetation, soil prep) and often are more challenging to establish. It is the recommendation of NCWF to begin with the planting of established nursery grown trees.

NCWF is offering to donate up to $10,000 dollars for this project that will include native trees, native shrubs, mulch, compost, and educational signage (signage and shrubs to be installed in 2026).

Recommendation

- **Timeline:** Planting trees is best done in the fall season. The months of October and November are preferred. During this time trees are dormant, or going dormant, and have the entire cool season to spend growing and establishing their roots. Watering requirements are minimal, and pruning is not required. We are proposing a workday to install the trees on November 15th, 2025 from 9AM - 3PM.

  Two weeks prior to the November tree planting, NCWF will mark off the planting area using flags or paint lines. We are requesting that the Town mow the area as low to the ground as possible prior to the planting.

  Following the tree planting, NCWF will eliminate the grass in between the newly planted trees using cardboard and mulch/leaf litter put down in December, 2025. In the fall of 2026, NCWF will plant understory shrubs to fill in the space with the Town's approval. The area will not need to be mowed or weed wacked once the trees are planted.

- **Spacing:** 12-15 ft on center, or 144-225 sq ft per tree.
  - Smaller trees could be planted more densely

- **Species:** A mix of the following overstory and understory trees will be used ranging in size from 3 to 15-gallon containers. The exact selection of the trees will be determined by nursery availability.
  - Acer rubrum (red maple)
  - Acer saccharum subsp. nigrum (black maple)
  - Acer leucoderme (chalk maple)
  - Amelanchier arborea (serviceberry)
  - Betula nigra (river birch)
  - Cercis canadensis (eastern redbud)
  - Cornus Alterniflora (Alternate-leaf dogwood)
  - Cornus florida (flowering dogwood)
  - Magnolia virginiana (sweet-bay magnolia)
  - Prunus caroliniana (Carolina cherry-laurel)
  - Quercus alba (white oak)
  - Quercus rubra (northern red oak)
  - Quercus palustris (pin oak)
  - Quercus shumardii (Shumard oak)
  - Taxodium distichum (bald cypress)

- **Site preparation:** It is recommended that holes be predrilled with a 4"-8" auger. Volunteers will then use spades to finish prepping the holes and installing the trees. Trees will be mulched around the base after planting. It is reasonable to assume that a large group of 25-40 volunteers can plant over 50 trees in one shift if the holes are pre dug and the trees have been staged.

- **Volunteer Workday:** NCWF Swannanoa Valley WILD! will promote the event and recruit 25-40 volunteers. NCWF Staff and local Swannanoa Valley WILD! Chapter leaders will be onsite to facilitate the workday and provide instruction to volunteers. The Town of Black Mountain will be listed as a partner. Pictures and videos will be shared with the Town of Black Mountain following the workday.

- **Maintenance:** We are asking the town to help water the trees. NCWF Swannanoa Valley WILD! volunteers can step in and water as needed. Before the tree planting and with the Town's approval, we will confirm a watering schedule in writing following the rough outline below. 2026 shrub planting will require a similar watering schedule.
    - Daily for the first week.
    - Once every 3 days for 1 month
    - Once a week for 1 month
    - As needed until roots are established

Proposed Planting Site:



Size: 0.3 acres; 13,068 sq ft
Number of trees:

- 12 ft on center: 90 trees
- 15 ft on center: 58 trees