

## Orange County Natural Areas Inventory

### SEVENMILE CREEK/CANE CREEK MACROSITE

New Site 2004

**Site Number:** Macrosite #1

**Size:** 5,795 acres

**Site Significance:** Regional

**USGS Quads:** Efland, White Cross, and  
Saxapahaw

The Sevenmile Creek/Cane Creek Macrosite provides a vital cross-watershed link between Cane Creek, which flows into the Haw/Cape Fear River drainage, and Sevenmile Creek, which flows into the Eno/Neuse drainage. The area encompasses a broad diversity of habitat types, from dry chestnut oak forest on high hilltops to wet bottomland forest and from a reservoir lake to rich mesophytic forest. Four standard sites are included in this macrosite.

The Sevenmile Creek/Cane Creek Macrosite is of regional significance. The large size of the tract provides sufficient habitat for wide-ranging species like bobcat, red fox, gray fox, turkey, and roosting black vultures. Several species are very local or rare in the lower piedmont, such as eastern chipmunk (*Tamias striatus*), blue cohosh (*Caulophyllum thalictroides*), and yellow lady's slipper (*Cypripedium calceolus* var. *pubescens*). High hills at Camp Chestnut Ridge (E04) and Crabtree Creek Monadnock Ridge (E05) support extensive oak-hickory forests on slopes and mature chestnut oak forests on summit ridges. Sevenmile Creek Sugar Maple Bottom (E06) has the richest deciduous forest in the county, with basic-soil plants like southern sugar maple (*Acer barbatum*), maidenhair fern (*Adiantum pedatum*), a small population of the state-rare ginseng (*Panax quinquefolius*), and blue cohosh. Cane Creek and Sevenmile Creek are still relatively clean, as evidenced by otter and a state-rare mussel, the notched rainbow (*Villosa constricta*). A state-rare fish, Carolina darter (*Etheostoma collis*), used to occur where the Cane Creek Reservoir now exists and may well still exist elsewhere in Cane Creek. The macrosite provides breeding habitat for many neotropical migrant birds.

In addition to those named above, species rare in North Carolina that have been documented within the macrosite include eastern isopyrum or false rue-anemone (*Enemion biternatum*), last seen prior to damming of Cane Creek, and purple fringeless orchid (*Platanthera peramoena*), last seen in 1988 near Sevenmile Creek.

## Orange County Natural Areas Inventory

### CRABTREE CREEK MONADNOCK RIDGE

Updated 2004

**Site Number:** E05

**Size:** 825 acres

**Site Significance:** County

**USGS Quadrangle:** Efland

**SIGNIFICANT FEATURES:** Although somewhat cut over, this area includes some of the largest undeveloped tracts south of I-85, and serves thus as one of the more important wildlife reservoirs in the county. Stretching several miles from Camp Chestnut Ridge (EO4) to Sevenmile Creek (EO6), this tract also forms an important link in an overland wooded corridor connecting the Cape Fear (Haw) and Neuse (Eno) River systems. The presence of several mature stands of chestnut oak (*Quercus prinus*) in combination with the younger successional stands provides optimal habitat for turkey, bobcat, deer, and other upland game animals.

**NATURAL COMMUNITIES:** Dry-Mesic Oak—Hickory Forest, Piedmont Monadnock Forest

**GENERAL DESCRIPTION:** Although this tract shows signs of having been recently cut in many places, several mature stands of chestnut oak forest still persist along this ridge and even within the pine stands a thick seedling layer of chestnut oaks (*Quercus prinus*) testifies to the eventual return of this community if left alone. For wildlife, this type of disturbance is not so severe as would be the development of the ridge for residences. Although many species remain undocumented for this site, the presence of woodland edges, old fields, and younger stands of forest, in combination with the mature tracts, should enhance the area for many species of game animals, including deer (*Odocoileus virginianus*), cottontail (*Sylvilagus floridanus*), groundhog (*Marmota monax*), wild turkey (*Meleagris gallopavo*), bobwhite (*Colinus virginianus*), and mourning dove (*Zenaida macroura*). As a consequence of abundant prey, carnivores also do well in such situations and this site should provide optimal habitat for red fox (*Vulpes vulpes*), gray fox (*Urocyon cinereoargenteus*), and bobcat (*Lynx rufus*).

**MANAGEMENT AND PROTECTION:** Orange County protects a small portion as part of the larger Seven Mile Creek Preserve. Landowners should be informed of the significance of the natural values of their property. Forest culture practices should involve selective cutting to allow, for regeneration of native chestnut oak forest.

**OWNERSHIP:** Orange County, Private

**REFERENCES:** Sather, D. and S. Hall. 1988. Inventory of the Natural Areas and Wildlife Habitats of Orange County, North Carolina, Appendix B: Biological Documentation of Sites. N.C. Natural Heritage Program, DENR, Raleigh, NC.

## Orange County Natural Areas Inventory

### SEVENMILE CREEK SUGAR MAPLE BOTTOM

Updated 2004

**Site Number:** E06

**Size:** 88 acres

**Site Significance:** Regional

**USGS Quadrangle:** Efland

**SIGNIFICANT FEATURES:** This is the richest bottomland remaining in the county. All other rich, basic bottomlands along upland streams have been brought under cultivation. Nowhere else occurs such a large stand of southern sugar maple (*Acer barbatum*), hackberry (*Celtis laevigata*), and swamp chestnut oak (*Quercus michauxii*). The most important value of this site, however, is the amazingly profuse herb layer. Particularly impressive are the large patches of such regionally rare species as maidenhair fern (*Adiantum pedatum*) and blue cohosh (*Caulophyllum thalictroides*); this is, in fact, the only known site for the blue cohosh in Orange County and much of the surrounding Piedmont. Two other state-listed plants also found here are ginseng (*Panax quinquefolius*), which is documented from only five sites in the county, and purple fringeless orchid (*Platanthera peramoena*), which has been documented only at this site within the county; (however not re-verified in 2001 because permission to access site was not granted by landowner).

The creek also possesses a well-developed fish and freshwater mussel fauna, including the notched rainbow mussel (*Villosa constricta*), a state-listed species. River otter (*Lutra canadensis*) and red-shouldered hawk (*Buteo lineatus*), two regionally rare species, are also present.

**NATURAL COMMUNITIES:** Basic Mesic Forest

**GENERAL DESCRIPTION:** Most of the natural area is on the southeast side of the creek, but also included on the northwest side is a mucky drainage ditch containing the purple fringeless orchid (*Platanthera peramoena*). Several of the prime features of this site are associated with its topographic occurrence as a narrow bottomland located within an upland stream valley. The deep and rich circumneutral soil is the result of a long, gentle alluvial deposition on the floodplain and lower slopes, and the richness and depth of this soil in turn are responsible for the outstanding growth of plant life. The trees illustrating the lush condition of the bottomland include southern sugar maple (*Acer barbatum*), swamp chestnut oak (*Quercus michauxii*), hackberry (*Celtis laevigata*), black walnut (*Juglans nigra*), and shagbark hickory (*Carya ovata*), while the shrub layer is likewise composed of such basophilic species as bladdernut (*Staphylea trifolia*), redbud (*Cercis canadensis*), spicebush (*Lindera benzoin*), and hazelnut (*Corylus americana*). By 2001, much of the northeastern portion of the site, including where the blue cohosh and ginseng grow, had suffered from hurricanes and many canopy and understory trees had blown down. That has created areas of treefalls and abundant new saplings, making passage difficult.

The basic pH of the soil together with the cool, moist conditions provided by the lengthy north-facing lower portion of the slope (which is directly adjacent to the floodplain and thus receives occasional alluvial deposition), also accounts for the rich herbaceous flora.

Particularly noteworthy is the large growth of blue cohosh (*Caulophyllum thalictroides*), a species disjunct from the mountains and found only in this site in Orange County; over 500 individuals of this species were counted in 1987 and similar numbers existed in 2001. Growing amid the cohosh are other species more typical of the mountains than of the eastern Piedmont, including thick growths of maidenhair ferns (*Adiantum pedatum*) and scatterings of ginseng (*Panax quinquefolius*), a species considered of special concern within the entire state. Other spring wildflowers adding to the luxuriance of this slope are foamflower (*Tiarella cordifolia* var. *collina*), windflower (*Thalictrum thalictroides*), bloodroot (*Sanguinaria canadensis*), hepatica (*Hepatica americana*), and toothwort (*Cardamine angustata*). One other noteworthy species included in this natural area, although growing in a drainage ditch located across the creek from the other montane plants, is the purple fringeless orchid (*Platanthera peramoena*), a species listed as state rare-peripheral within North Carolina.

In addition to indirectly contributing to the rich plant life of this natural area, the stream flowing through this site provides a diversity of habitats for animals, including extensive areas of riffles as well as sandy-bottomed pools. Despite some degree of siltation due to runoff from fields upstream, this portion of Sevenmile Creek still harbors healthy populations of darters, shiners, pickerels, and other species of fish, along with abundant mussels. Included in this fauna is the notched rainbow (*Villosa constricta*), a state rare mussel, which has been found at only four other sites within the county. Reflecting the good fishing in the creek is the presence of river otter (*Lutra canadensis*), a regionally rare species. Resident great horned owls (*Bubo virginianus*) and red-shouldered hawks (*Buteo lineatus*) similarly reflect the good condition of the bottomland forest.

Altogether, the aesthetic quality of the site is excellent; many of the trees exceed two feet in diameter, indicating a long history without disturbance. The fact that it adjoins the protected lands of the historic Moorefields estate further adds to its attractiveness as one of the best of the county's natural areas.

**MANAGEMENT AND PROTECTION:** The county-owned portion is managed for permanent protection as part of the Seven Mile Creek Preserve; the adjoining Moorefields historic site is managed as a wildlife preserve. The site should be preserved as county owned natural area in conjunction with adjacent Moorefields historic site.

**OWNERSHIP:** Orange County, Private

**REFERENCES:**

Mansberg, L. 1986. Site Survey Report: Sevenmile Creek. N.C. Natural Heritage Program, DENR, Raleigh, NC.

Sather, D. and S. Hall. 1988. Inventory of the Natural Areas and Wildlife Habitats of Orange County, North Carolina, Appendix B: Biological Documentation of Sites. N.C. Natural Heritage Program, DENR, Raleigh, NC.