

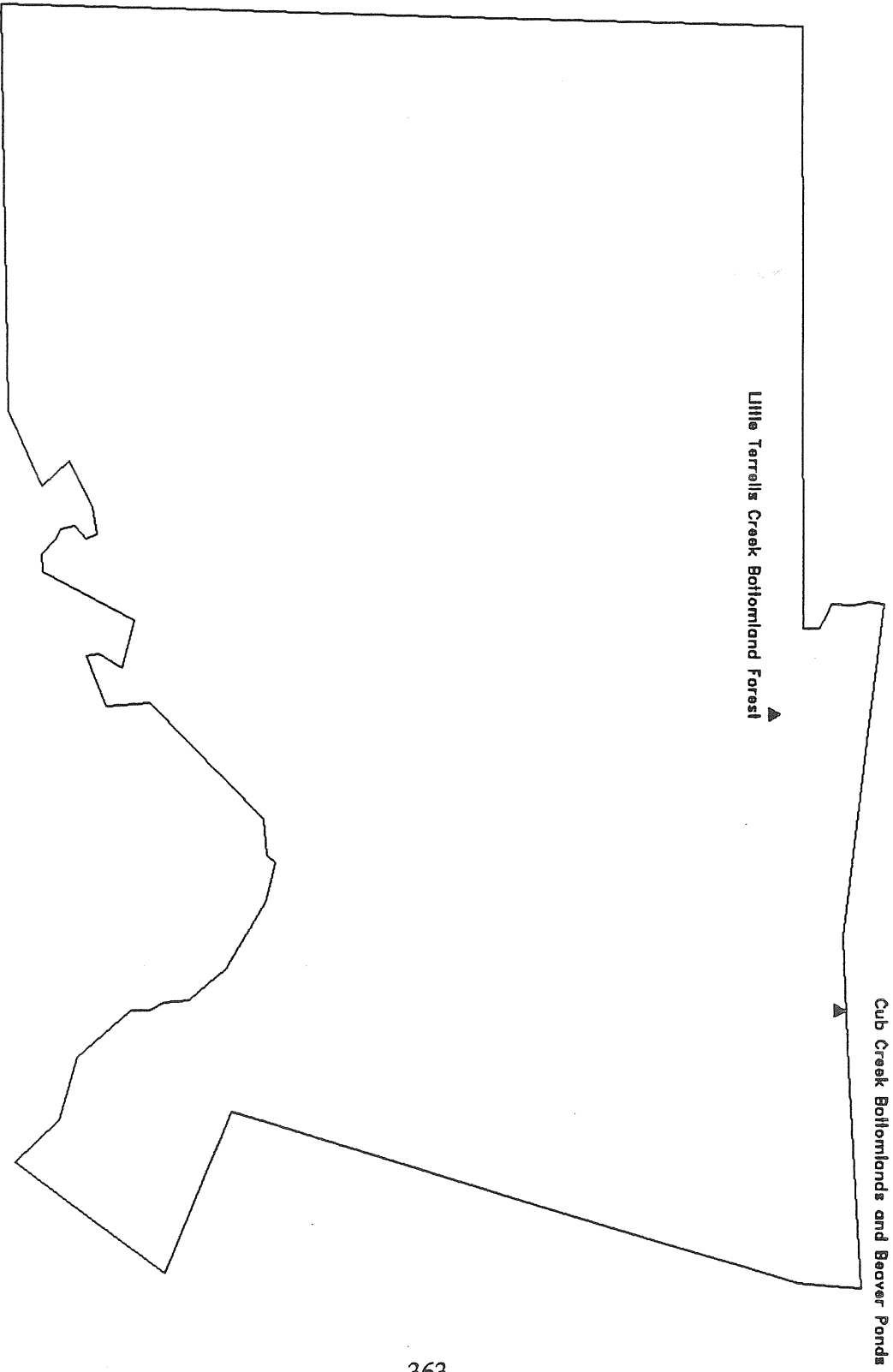
## BOTTOMLANDS ALONG SMALLER STREAMS

Streams 30 feet wide or less occupy a far greater surface area in the county than do the major rivers. Although they may not contain as many rare species, they may be equally important to the area's wildlife in providing water, food, travelways, and other resources. They also contain several habitat features that are missing along larger streams. Flooding, while still frequent in low-lying areas, is not as ravaging as in the big rivers. This more stable environment allows silt to build up in floodplains, favoring the growth of rich bottomland forests. The lack of frequent scouring also allows old oxbows to develop distinctive communities of amphibians, dragonflies, and other organisms not found in the major rivers. The same is true for the numerous seeps and springs that occur at the junction between slopes and bottomlands. Furthermore, the canopy above these smaller streams is typically closed, creating a cool, shaded environment. The slow waters, abundant nutrients, and sheltered conditions make these small streams important spawning areas for many of the fish that as adults only inhabit the larger rivers.

We have already treated a number of smaller streams under other headings (e.g., Roberson Creek, Old Quarry Creek, and Indian Creek), all of which have some feature that is relatively unusual for the Piedmont. In this section we deal with examples that would once have been fairly widespread. Although typical in this regard, intact streamside bottomlands are quite rare: most have been cut down for timber or are currently in cultivation. Apart from a few that we will discuss in the following sections, which are important elements of major wildlife reservoirs, there are only two small stream bottomlands that we felt were sufficiently outstanding to mention on their own.



Figure 29. Piedmont Stream Bottomlands





**SITE NAME:** Little Terrells Creek Bottomland Forest

**SIGNIFICANCE:** County

**INTEGRITY:** Good

**THREATS:** Medium -- development of adjoining area for housing; continued clearcutting on adjacent tracts

**PROTECTION STATUS:** Part of this area has been proposed for inclusion in a conservation easement to be donated to the Triangle Land Conservancy

**JURISDICTION:** Baldwin Township

**OWNERSHIP:** Private

### **SUMMARY OF SIGNIFICANT FEATURES:**

1. A large spring at the northeast side of this tract is a breeding site for Thorey's grayback dragonfly (Tachopteryx thoreyi), a species considered significantly rare in North Carolina.
2. The bottomland forest along the creek is one of the more mature such stands remaining in the county. Several willow oaks and shagbark hickories reach impressive size.

### **GENERAL SITE DESCRIPTION:**

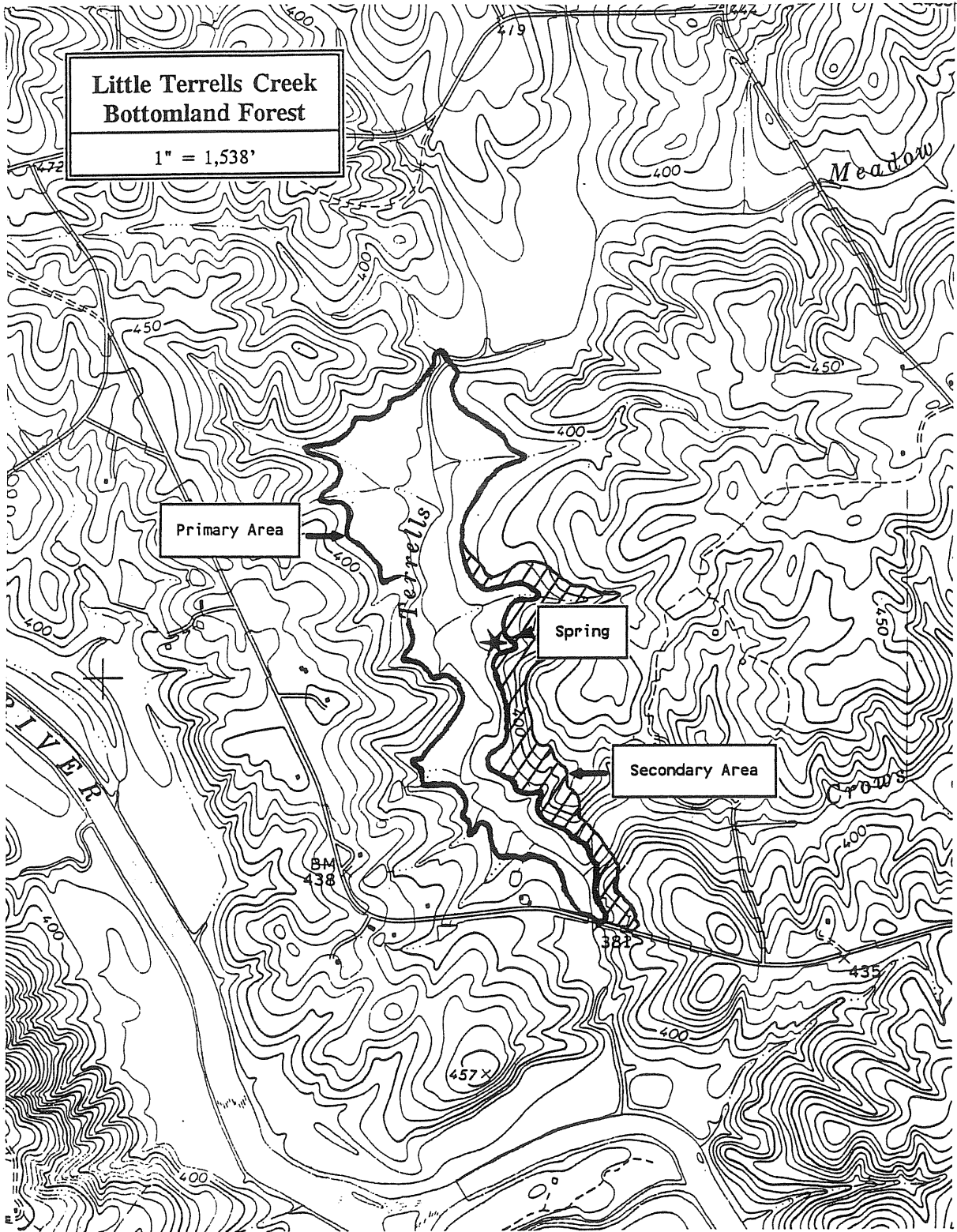
The floodplain along Little Terrells Creek is for the most part representative of tertiary streams of the slate belt. Alluvial deposits form fairly narrow to moderately wide strips along one or both sides of the creek. The stream meanders slightly towards its lower end and small oxbow ponds can be found in the wider parts of the bottomlands. The relatively steep rocky slope along the east side has several small to large springs located along its margins, further contributing to the overall diversity of the wetland habitats present on this tract.

Unlike many of the bottomland forests of the piedmont, this one has escaped recent disturbance. Its fairly rich soils support a diversity of plant species. Impressively large individuals of willow oak (Quercus phellos) and shagbark hickory (Carya ovata) stand out in a canopy that also includes sycamore (Platanus occidentalis), river birch (Betula nigra), water oak (Q. nigra), sweet gum (Liquidambar styraciflua), tulip tree (Liriodendron tulipifera) and green ash (Fraxinus pennsylvanica). Silky dogwood (Cornus amomum), possumhaw (Ilex decidua) and storax (Styrax grandifolia) are components of the shrub community. The sparse herb layer includes cardinal flower (Lobelia cardinalis), royal fern (Osmunda regalis), sensitive fern (Onoclea sensibilis) and lizard's tail (Saururus cernuus).

Although small bottomlands such as this do not contain the abundance of animal species found in the larger alluvial forests along the rivers, this site possesses a higher number of species than average, several of which are indicative of the good condition of the forest. Among the birds these include Kentucky and hooded warblers (Oporornis formosus and Wilsonia citrina), Louisiana waterthrushes (Seiurus motacilla), scarlet tanagers (Piranga olivacea), wood ducks (Aix sponsa), and red-shouldered hawks (Buteo lineatus). Large congregations of breeding amphibians use the pools scattered throughout the floodplain. Species observed in the early spring included marbled salamander (Ambystoma opacum), spring peeper (Pseudacris crucifer), and upland chorus frog (P. triseriata). These pools also harbor species of dragonflies characteristic of bottomland forests, particularly the fawn damer (Boyeria vinosa), great blue skimmer (Libellula vibrans), and slaty skimmer (L. incesa); other dragonflies, such as the black-shouldered spinyleg (Dromogomphus spinosus) and common sanddragon (Progomphus obscurus), inhabit the stream itself. The most interesting species found on this tract was yet another dragonfly, Thorey's grayback (Tachopteryx thoreyi), a species that only breeds in permanent mucky springs and is considered significantly rare virtually throughout its range. One other noteworthy invertebrate was a purseweb spider (Sphodros atlanticus), an uncommon animal most often found in mature bottomlands along small streams.

#### **CONSERVATION RECOMMENDATIONS:**

The proposal to include most of this tract within a conservation easement to be held by the Triangle Land Conservancy is the best means of protection. However, the adjoining slopes and bottomland areas upstream are still subject to clearcutting and development for housing. Buffer strips need to be protected either through additional conservation easements or simple agreements worked out with local landowners.







## **SITE SURVEY REPORT**

**Site name:** Little Terrells Creek Bottomland Forest  
**County:** Chatham

**Date(s):** 18/XII/88, 15/III/89, 7/VI/89

### **Surveyors:**

Stephen P. Hall, Ph.D  
NC Natural Heritage Program  
P.O. Box 27687  
Raleigh, NC 27611-7687  
(919) 733-7701

Marjorie Boyer  
NC Plant Conservation Program  
P.O. Box 27647  
Raleigh, NC 27611  
(919) 733-3610

**Size:** 110 primary acres + 36 secondary acres = 146 total acres

**Quad:** Bynum

**Province:** Piedmont

**Watershed:** Terrells Creek (northern) --> Haw River --> Cape Fear River

**Location and directions:** Area bounded on the south and east by SR 1525 (the creek is named Ferrel's Creek on the county road map but Terrells Creek on the USGS topo; a second, larger, and better-known Terrells Creek exists on the south side of the Haw River)

### **Landowners and addresses:**

**Owners contacted and attitude:** The site was toured with Dolly Hunter who is developing the property with Ann Joyner; a conservation easement is under negotiation with the Triangle Land Conservancy

**General landscape description:** See Site Description

### **Physical description**

**Aspect:** Flat

**Slope:** Flat

**Topographic position:** Alluvial Flat

**Hydrology:** Terrestrial

**Moisture:** Seasonally Wet

**Elevation:** 370 - 400'

**Geology:** Alluvial (adjacent slopes are felsic igneous complex)

**Soils:** Appling Stony Sandy Loam

**Comments on physical description:** The stream is perennial and fairly low energy; floodplain is narrow near the road but widens to the north

## Biological description

Community # 1: Piedmont Alluvial Forest (from floristic survey by Julie Moore)

**Vegetation structure:** Forest

**Position in landscape and relation to other communities:** Bottomland

**Quality and condition:** Good

**Size:**

**Dominants (\*) and important species:**

### Canopy:

*Acer rubrum*  
*Carya glabra*  
*Carya ovata*  
*Carya tomentosa*  
*Diospyros virginiana*  
*Fraxinus americana*  
*Liquidambar styraciflua*  
*Liriodendron tulipifera*  
*Pinus echinata*  
*Pinus taeda*  
*Quercus alba*  
*Quercus coccinea*  
*Quercus falcata*  
*Quercus prinus*  
*Quercus rubra*  
*Quercus stellata*  
*Quercus velutina*  
*Ulmus rubra*

### Shrubs and vines:

*Aesculus sylvatica*  
*Campsis radicans*  
*Ceanothus americanus*  
*Chionanthus virginicus*  
*Corylus americana*  
*Crataegus uniflora*  
*Elaeagnus umbellata*  
*Gaylussacia frondosa*  
*Lonicera sempervirens*  
*Parthenocissus quinquefolia*  
*Rhus radicans*  
*Rosa carolina*  
*Sorbus arbutifolia*  
*Styrax grandifolia*  
*Vaccinium stamineum*  
*Vaccinium tenellum*  
*Viburnum acerifolium*  
*Viburnum rafinesquianum*  
*Viburnum rufidulum*

### Subcanopy:

*Cercis canadensis*  
*Cornus florida*  
*Ilex opaca*  
*Juniperus virginiana*  
*Nyssa sylvatica*  
*Oxydendrum arboreum*  
*Sassafras albidum*  
*Ulmus alata*

Herbs:

Agrimonia pubescens  
Arisaema triphyllum  
Aristolochia serpentaria  
Asplenium platyneuron  
Aster sp.  
Aureolaria virginica  
Chimaphila maculata  
Desmodium rotundifolium  
Elephantopus carolinianus  
Euphorbia corollata  
Galium sp.  
Goodyera pubescens  
Heuchera americana  
Hexastylis arifolia  
Hieraceum gronovii  
Houstonia caerulea  
Iris cristata  
Malaxis unifolia  
Podophyllum peltatum  
Polygonatum biflorum  
Polypodium polypodioides  
Polystichum acrostichoides  
Potentilla canadensis  
Rhynchosia tomentosa  
Sanicula canadensis  
Smilacena racemosa  
Tipularia discolor  
Uvularia sessilifolia

## Biological description

**Community # 2:** Dry-mesic Oak-Hickory Forest (buffer strip outside natural area; from floristic survey by Julie Moore))

**Vegetation structure:** Forest

**Position in landscape and relation to other communities:** Slopes to ridgetop

**Quality and condition:** Good

**Size:**

**Dominants (\*) and important species:**

### Canopy:

Acer floridanum  
Acer rubrum  
Carya cordiformis  
Carya glabra  
Carya ovata  
Carya tomentosa  
Fagus grandifolia  
Juglans nigra  
Liquidambar styraciflua  
Liriodendron tulipifera  
Quercus alba  
Quercus falcata  
Quercus rubra  
Quercus velutina  
Ulmus rubra

### Shrubs and vines:

Aesculus sylvatica  
Campsis radicans  
Chionanthus virginicus  
Elaeagnus umbellata  
Lindera benzoin  
Lonicera japonica  
Lonicera sempervirens  
Parthenocissus quinquefolia  
Rhus radicans  
Rosa carolina  
Styrax grandifolia  
Viburnum acerifolium  
Viburnum prunifolium  
Viburnum rafinesquianum  
Vitis rotundifolia

### Subcanopy:

Cercis canadensis  
Cornus florida  
Ilex opaca  
Juniperus virginiana  
Nyssa sylvatica  
Ostrya virginiana  
Oxydendrum arboreum  
Ulmus alata

Herbs:

Agrimonia pubescens  
Anemone virginiana  
Arisaema triphyllum  
Aristolochia serpentaria  
Aster divaricatus  
Aster sp.  
Athyrium asplenioides  
Aureolaria virginica  
Botrychium dissectum  
Chamaelirium luteum  
Chimaphila maculata  
Cimicifuga racemosa  
Desmodium rotundifolium  
Dioscorea villosa  
Galium circaezans  
Galium tinctorium  
Geranium maculatum  
Goodyera pubescens  
Hepatica americana  
Heuchera americana  
Hexastylis arifolia  
Houstonia caerulea  
Houstonia purpurea  
Iris cristata  
Ligusticum canadense  
Lobelia nuttallii  
Luzula echinata  
Mitchella repens  
Podophyllum peltatum  
Polygonatum biflorum  
Polypodium polypodioides  
Polystichum acrostichoides  
Ranunculus hispidus  
Rhynchosia tomentosa  
Sanicula canadensis  
Smilacena racemosa  
Stellaria pubera  
Thalictrum thalictroides  
Tiarella cordifolia  
Uvularia perfoliata  
Uvularia sessilifolia  
Viola papilionacea  
Viola sp.

Zizia aptera

**Biological description**

**Community # 3: Piedmont Alluvial Forest (from floristic survey by Julie Moore)**

**Vegetation structure:** Forest

**Position in landscape and relation to other communities:** Riparian strip along creek

**Quality and condition:** Good to fair

**Size:**

**Dominants (\*) and important species:**

**Canopy:**

Betula nigra  
Fraxinus pennsylvanica  
Liquidambar styraciflua  
Liriodendron tulipifera  
Platanus occidentalis  
Quercus nigra  
Quercus phellos

**Subcanopy:**

Carpinus caroliniana

**Shrubs and vines:**

Alnus serrulata  
Cornus amomum  
Ilex decidua  
Lindera benzoin  
Lonicera japonica  
Myrica cerifera  
Rosa multiflora  
Rosa palustris  
Sambucus canadensis  
Styrax grandifolia

**Herbs:**

Athyrium asplenioides  
Boehmeria cylindrica  
Cimicifuga racemosa  
Galium circaeazans  
Juncus effusus  
rr Lemna perpusilla  
Lobelia cardinalis  
Lysimachia ciliata  
Onoclea sensibilis  
Osmunda regalis  
var. spectabilis  
Polystichum acrostichooides  
Ranunculus hispidus  
Saururus cernuus  
Thalictrum thalictroides  
Tiarella cordifolia  
Viola papilionacea  
Viola sp.

**Special status species**

**State-listed species:**

Animals:

sr Tachopteryx thoreyi

**Potential for other special status species:** An unsuccessful search was made for Hemidactylum during its nesting season; it may yet be found, however, in same sphagnum bog as Tachopteryx.

**Other noteworthy species or features:**

Plants:

rr Lemna perpusilla

**Site condition**

**Site integrity:** Good

**Average DBH of canopy trees:**

**Maximum DBH of canopy trees:**

**Fire regime:** Natural

**Logged:** Within last 30-40 years

**Evenness of canopy:** Natural

**Ditched/drained:** No

**Stream channelized:** No

**Dredged/filled:** No

**Understory cleared:** No

**Grazed:** No

**ORV damaged:** No

**Other disturbances:** Housing development along edge of natural area

**Adjacent Land Uses:** Forest and residential

**Significance of site:** County

**Discussion:** See Site Description

**Protection considerations and management needs:** Agreement on conservation easement should be completed for bottomland; buffer strip on steep slopes should also be included.

**Determination of survey boundaries:** Encloses bottomland and lower slopes in area under consideration for conservation easement; additional bottomland upstream belongs to the same community but was not surveyed.

**Priority for further study:** Medium (for Hemidactylum)

**Specimens collected:**

**Photographs:** Tachopteryx thoreyi

**Others knowledgeable about the site:** Julie Moore

**References:** Moore, J.H. 1988. Basic Biological Survey; "Indian Landing"

**Topo map:** Attached

**Sketch map:** None



## PLANT SPECIES LIST

List is: Nearly Complete

- |  |  |
|--|--|
| <p> <i>Botrychium dissectum</i> (6)<br/> <i>Osmunda regalis</i><br/>             var. <i>spectabilis</i> (7)<br/> <i>Athyrium asplenioides</i> (11)<br/> <i>Onoclea sensibilis</i> (11)<br/> <i>Polystichum acrostichoides</i> (11)<br/> <i>Asplenium platyneuron</i> (13)<br/> <i>Polypodium polypodioides</i> (14)<br/> <i>Pinus echinata</i> (16)<br/> <i>Pinus taeda</i> (16)<br/> <i>Juniperus virginiana</i> (18)<br/> <i>Arisaema triphyllum</i> (32)<br/>           rr <i>Lemna perpusilla</i> (33)<br/> <i>Juncus effusus</i> (40)<br/> <i>Luzula echinata</i> (40)<br/> <i>Chamaelirium luteum</i> (41)<br/> <i>Polygonatum biflorum</i> (41)<br/> <i>Smilacena racemosa</i> (41)<br/> <i>Uvularia perfoliata</i> (41)<br/> <i>Uvularia sessilifolia</i> (41)<br/> <i>Dioscorea villosa</i> (43)<br/> <i>Iris cristata</i> (46)<br/> <i>Goodyera pubescens</i> (49)<br/> <i>Malaxis unifolia</i> (49)<br/> <i>Tipularia discolor</i> (49)<br/> <i>Saururus cernuus</i> (50)<br/> <i>Myrica cerifera</i> (52)<br/> <i>Carya cordiformis</i> (53)<br/> <i>Carya glabra</i> (53)<br/> <i>Carya ovata</i> (53)<br/> <i>Carya tomentosa</i> (53)<br/> <i>Juglans nigra</i> (53)<br/> <i>Alnus serrulata</i> (54)<br/> <i>Betula nigra</i> (54)<br/> <i>Carpinus caroliniana</i> (54)<br/> <i>Corylus americana</i> (54)<br/> <i>Ostrya virginiana</i> (54)<br/> <i>Fagus grandifolia</i> (55)<br/> <i>Quercus alba</i> (55)<br/> <i>Quercus coccinea</i> (55)<br/> <i>Quercus falcata</i> (55)         </p> | <p> <i>Quercus nigra</i> (55)<br/> <i>Quercus phellos</i> (55)<br/> <i>Quercus prinus</i> (55)<br/> <i>Quercus rubra</i> (55)<br/> <i>Quercus stellata</i> (55)<br/> <i>Quercus velutina</i> (55)<br/> <i>Ulmus alata</i> (56)<br/> <i>Ulmus rubra</i> (56)<br/> <i>Boehmeria cylindrica</i> (59)<br/> <i>Aristolochia serpentaria</i> (62)<br/> <i>Hexastylis arifolia</i> (62)<br/> <i>Stellaria pubera</i> (71)<br/> <i>Anemone virginiana</i> (76)<br/> <i>Cimicifuga racemosa</i> (76)<br/> <i>Hepatica americana</i> (76)<br/> <i>Ranunculus hispidus</i> (76)<br/> <i>Thalictrum thalictroides</i> (76)<br/> <i>Podophyllum peltatum</i> (77)<br/> <i>Liriodendron tulipifera</i> (80)<br/> <i>Lindera benzoin</i> (84)<br/> <i>Sassafras albidum</i> (84)<br/> <i>Heuchera americana</i> (94)<br/> <i>Tiarella cordifolia</i> (94)<br/> <i>Liquidambar styraciflua</i> (95)<br/> <i>Platanus occidentalis</i> (96)<br/> <i>Agrimonia pubescens</i> (97)<br/> <i>Crataegus uniflora</i> (97)<br/> <i>Potentilla canadensis</i> (97)<br/> <i>Rosa carolina</i> (97)<br/> <i>Rosa multiflora</i> (97)<br/> <i>Rosa palustris</i> (97)<br/> <i>Sorbus arbutifolia</i> (97)<br/> <i>Cercis canadensis</i> (98)<br/> <i>Desmodium rotundifolium</i> (98)<br/> <i>Rhynchosia tomentosa</i> (98)<br/> <i>Geranium maculatum</i> (101)<br/> <i>Euphorbia corollata</i> (107)<br/> <i>Rhus radicans</i> (110)<br/> <i>Ilex decidua</i> (112)<br/> <i>Ilex opaca</i> (112)<br/> <i>Acer floridanum</i> (115)         </p> |
|--|--|

*Acer rubrum* (115)  
*Aesculus sylvatica* (116)  
*Ceanothus americanus* (119)  
*Parthenocissus*  
    *quinquefolia* (120)  
*Vitis rotundifolia* (120)  
*Viola papilionacea* (130)  
*Viola* sp. (130)  
*Elaeagnus umbellata* (134)  
*Ligusticum canadense* (140)  
*Sanicula canadensis* (140)  
*Zizia aptera* (140)  
*Nyssa sylvatica* (141)  
*Cornus amomum* (142)  
*Cornus florida* (142)  
*Chimaphila maculata* (145)  
*Gaylussacia frondosa* (145)  
*Oxydendrum arboreum* (145)  
*Vaccinium stamineum* (145)  
*Vaccinium tenellum* (145)  
*Lysimachia ciliata* (147)  
*Diospyros virginiana* (150)  
*Styrax grandifolia* (152)  
*Chionanthus virginicus* (153)  
*Fraxinus americana* (153)  
*Fraxinus pennsylvanica* (153)  
*Aureolaria virginica* (166)  
*Campsis radicans* (167)  
*Galium circaezans* (173)  
*Galium* sp. (173)  
*Galium tinctorium* (173)  
*Houstonia caerulea* (173)  
*Houstonia purpurea* (173)  
*Mitchella repens* (173)  
*Lonicera japonica* (174)  
*Lonicera sempervirens* (174)  
*Sambucus canadensis* (174)  
*Viburnum acerifolium* (174)  
*Viburnum prunifolium* (174)  
*Viburnum rafinesquianum* (174)  
*Viburnum rufidulum* (174)  
*Lobelia cardinalis* (178)  
*Lobelia nuttallii* (178)  
*Aster divaricatus* (179)  
*Aster* sp. (179)

*Elephantopus carolinianus* (179)  
*Hieraceum gronovii* (179)

## ANIMAL SPECIES LIST

List is: Medium-thorough

### Vertebrates:

i Aix sponsa  
 i Buteo lineatus  
 i Coccyzus erythrophthalmus  
 Archilochus colubris  
 Melanerpes carolinus  
 Picoides pubescens  
 Empidonax virescens  
 Sayornis phoebe  
 Cyanocitta cristata  
 Corvus brachyrhynchos  
 Parus carolinensis  
 Parus bicolor  
 Thryothurus ludovicianus  
 Polioptila caerulea  
 Hylocichla mustelina  
 Vireo olivaceus  
 Parula americana  
 Dendroica pinus  
 i Seiurus aurocapillus  
 i Seiurus motacilla  
 i Oporornis formosus  
 i Wilsonia citrina  
 Piranga olivacea  
 Cardinalis cardinalis  
 Scalopus aquaticus  
 Sciurus carolinensis  
 Procyon lotor  
 Odocoileus virginianus  
 Ambystoma opacum  
 Hyla chrysoscelis  
 Pseudacris triseriata

### Invertebrates:

Papilio glaucus  
 Feniseca tarquinius  
 Celastrina ladon  
 Phyciodes tharos  
 Polygonia interrogationis  
 Polygonia comma  
 Nymphalis antiopa  
 Vanessa atalanta rubria  
 Hermeuptychia hermes sosybius  
 Megisto cymela  
 Ancyloxypha numitor  
 sr Tachopteryx thoreyi  
 Progomphus obscurus  
 Dromogomphus spinosus  
 Boyeria vinosa  
 Perithemis tenera  
 Libellula incesta  
 Libellula vibrans  
 i Sphodros atlanticus



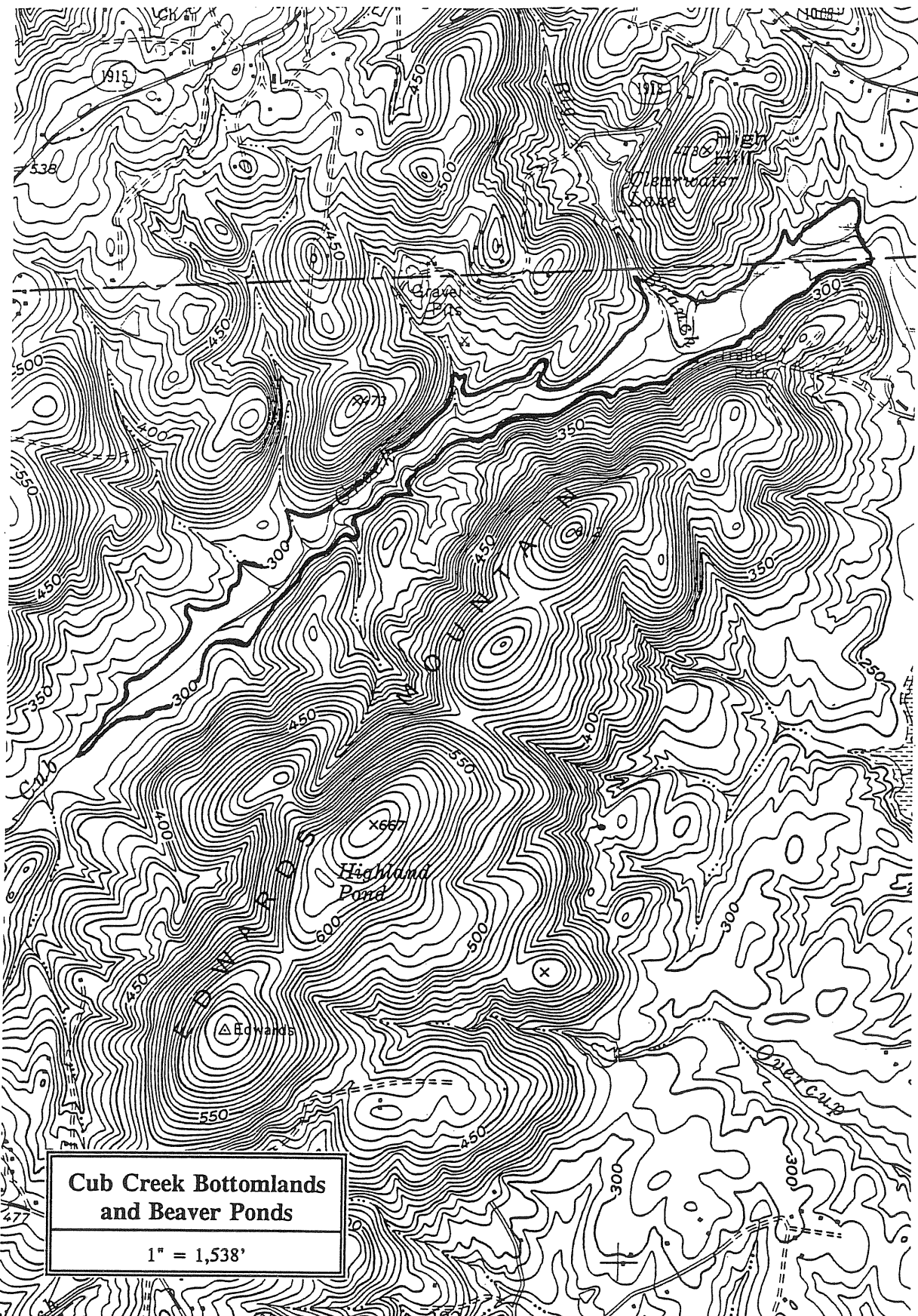
native bittercress Cardamine pensylvanica. Groundpine (Lycopodium obscurum), a regionally rare clubmoss, grows among pines at the upper end of the flat floodplain area.

The breeding bird count for this site of 34 species is intermediate between that of the alluvial forests of the larger rivers and the narrower bottomlands of the smaller piedmont streams; even more species could probably have been recorded if visits were made during May and June. Most of the characteristic warblers of piedmont bottomlands were observed, including hooded and Kentucky warblers (Wilsonia citrina and Oporornis formosus), present due to dense thickets of bottomland shrubs, and Louisiana waterthrush (Seiurus motacilla), yellow-throated warbler (Dendroica dominica), and northern parula warbler (Parula americana), all typical of streamside habitats. Barred owls (Strix varia), wood ducks (Aix sponsa), kingfishers (Megaceryle alcyon), and Acadian flycatchers (Empidonax flavescens) were other characteristic bottomland birds observed during the inventory. The extensiveness of this woodlands, especially when coupled with the uplands of Edwards Mountain, explains the presence of pileated woodpeckers (Dryocopus pileatus), while the observation of white-breasted nuthatches (Sitta carolinensis), rare birds in Chatham County, is explained by the many large individual hardwoods that persist in along the floodplain or on the adjoining slopes. The occurrence at this site of red-headed woodpeckers (Melanerpes erythrocephalus), yellowthroats (Geothlypis trichas), and indigo buntings (Passerina cyanea), on the other hand, is due to the large cleared areas that surround several beaver impoundments located along the lower part of the creek.

One other animal is particularly noteworthy. The significantly rare Thorey's grayback dragonfly (Tachopteryx thoreyi) inhabits a spring located at the base of the Edward's Mountain slope. This is one of only three populations of this species known from Chatham County.

#### **CONSERVATION RECOMMENDATIONS:**

The best means of protecting this site would be to include it within an overall conservation easement or land owner covenant for the Edwards Mountain natural area. Otherwise, the landowners should be alerted to the significance these bottomland tracts have as wildlife habitat and movement corridors. Ideally, a shift in forestry management practices should be encouraged away from the use of clearcutting to the use of selective cutting, shelterwood management, and other less disruptive measures.



**Cub Creek Bottomlands  
and Beaver Ponds**

1" = 1,538'



## **SITE SURVEY REPORT**

**Site name:** Cub Creek Bottomland and Beaver Ponds  
**County:** Chatham

**Date(s):** 5/VIII/88, 14/VI/89

### **Surveyors:**

Stephen P. Hall, Ph.D  
NC Natural Heritage Program  
P.O. Box 27687  
Raleigh, NC 27611-7687  
(919) 733-7701

Marjorie Boyer  
NC Plant Conservation Program  
P.O. Box 27647  
Raleigh, NC 27611  
(919) 733-3610

**Size:** 100 acres

**Quad:** Farrington

**Province:** Piedmont

**Watershed:** Cub Creek --> Haw River --> Cape Fear River

**Location and directions:** Section of creek upstream and downstream from end of SR 1780, north side of Edwards Mountain

### **Landowners and addresses:**

**Owners contacted and attitude:** Suzy Starnes

**General landscape description:** See Site Description

### **Physical description**

**Aspect:** Flat

**Slope:** Flat

**Topographic position:** Alluvial flat

**Hydrology:** Terrestrial

**Moisture:** Frequently flooded to moist

**Elevation:** 270'

**Geology:** Farrington Granite

**Soils:** White Store Sandy Loam

**Comments on physical description:** A long stretch of relatively unbroken bottomland located beneath the steep north-facing slopes of Edwards Mountain



## Biological description

### Community # 1: Piedmont Alluvial Forest

**Vegetation structure:** Forest

**Position in landscape and relation to other communities:** Floodplain

**Quality and condition:** Fair

**Size:**

#### **Dominants (\*) and important species:**

##### Canopy:

*Juglans nigra*  
*Liquidambar styraciflua*  
*Liriodendron tulipifera*  
*Pinus taeda*  
*Platanus occidentalis*  
*Quercus michauxii*  
*Ulmus americana*

##### Subcanopy:

*Carpinus caroliniana*  
*Cercis canadensis*  
*Magnolia tripetala*  
*Morus rubra*  
*Ulmus alata*

##### Shrubs and vines:

*Anisostichus capreolata*  
*Campsis radicans*  
*Corylus americana*  
*Lindera benzoin*  
*Parthenocissus quinquefolia*  
*Rhus radicans*  
*Rubus sp.*  
*Smilax sp.*  
*Staphylea trifolia*  
*Vitis rotundifolia*

##### Herbs:

*Arisaema triphyllum*  
*Athyrium asplenoides*  
*Cardamine pensylvanica*  
*Carex sp.*  
*Chaerophyllum tainturieri*  
*Chrysogonum virginianum*  
*Cimicifuga racemosa*  
*Claytonia virginica*  
*Desmodium sp.*  
*Dryopteris sp.*  
*Erythronium umbilicatum*  
*Eupatorium fistulosum*  
*Impatiens capensis*  
*Laportea canadensis*  
*Ligusticum canadense*  
*Lobelia cardinalis*  
*Lycopodium obscurum*  
*Medeola virginiana*  
*Microstegium vimineum*  
*Onoclea sensibilis*  
*Osmunda cinnamomea*  
*Oxalis violacea*  
*Phytolacca americana*  
*Polygonum sp.*  
*Polystichum acrostichoides*  
*Prunella vulgaris*  
*Ranunculus recurvatus*  
*Rudbeckia laciniata*  
*Sanicula canadensis*  
*Saururus cernuus*  
*Woodwardia areolata*

**Special status species**

**State-listed species:**

Animals:

sr Tachopteryx thoreyi

**Potential for other special status species: Low**

**Other noteworthy species or features:**

Plants:

rr Lycopodium obscurum

Animals:

rr Melanerpes erythrocephalus

**Site condition**

**Site integrity: Fair**

**Average DBH of canopy trees:**

**Maximum DBH of canopy trees:**

**Fire regime: Natural**

**Logged: Within last 20 years**

**Evenness of canopy: Natural**

**Ditched/drained: No**

**Stream channelized: No**

**Dredged/filled: No**

**Understory cleared: No**

**Grazed: No**

**ORV damaged: No**

**Other disturbances: Houses on adjoining slopes**

**Adjacent Land Uses: Forest and residential**

**Significance of site: County**

**Discussion: See Site Description**

**Protection considerations and management needs: Landowners should be alerted to the importance of bottomland forests to wildlife**

**Determination of survey boundaries:** Encloses the least disturbed area of bottomland that was actually surveyed on the ground; other areas, both upstream and downstream, could contain similar types of communities, although the area immediately upstream has been cut relatively recently.

**Priority for further study:** Low

**Specimens collected:**

**Photographs:**

**Others knowledgeable about the site:** Julie Moore, Jay Carter

**References:**

**Topo map:** Attached

**Sketch map:** None

**Plant Species List:** See Community # 1

**List is:** Medium-thorough

## ANIMAL SPECIES LIST

List is: Medium-thorough

### Vertebrates:

i Aix sponsa  
 i Coccyzus erythrophthalmus  
 i Strix varia  
 Archilochus colubris  
 Megaceryle alcyon  
 rr Melanerpes erythrocephalus  
 Melanerpes carolinus  
 Picoides pubescens  
 Colaptes auratus  
 i Dryocopus pileatus  
 Contopus virens  
 Empidonax virescens  
 Cyanocitta cristata  
 Parus carolinensis  
 Parus bicolor  
 i Sitta carolinensis  
 Thryothurus ludovicianus  
 Polioptila caerulea  
 Hylocichla mustelina  
 Dumatella carolinensis  
 Vireo flavifrons  
 Vireo olivaceus  
 Parula americana  
 Dendroica dominica  
 i Seiurus aurocapillus  
 i Seiurus motacilla  
 i Oporornis formosus  
 Geothlypis trichas  
 i Wilsonia citrina  
 Piranga rubra  
 Piranga olivacea  
 Cardinalis cardinalis  
 Passerina cyanea  
 Carduelis tristis  
 Didelphis marsupialis  
 Sciurus carolinensis  
 Castor canadensis  
 Ondatra zibethica  
 Procyon lotor

### Vertebrates (cont.):

Odocoileus virginianus  
 i Terrapene carolina  
 Desmognathus fuscus  
 Bufo americanus  
 Bufo woodhousei fowleri  
 Acris crepitans  
 Hyla chrysoscelis  
 Rana catesbeiana  
 Rana clamitans

Invertebrates:

Papilio glaucus  
Papilio troilus  
Feniseca tarquinius  
Everes comyntas  
Celastrina ladon  
Limenitis arthemis astyanax  
Enodia portlandia  
i Satyroides appalachia  
Ancyloxpha numitor  
Poanes zabulon  
sr Tachopteryx thoreyi  
Progomphus obscurus  
Dromogomphus spinosus  
Libellula vibrans  
Plathemis lydia  
Antrodiaetus unicolor