

Appendix E

– Endangered Species Information

-Natural Heritage Element Occurrences in Wake County

-Natural Heritage Element Occurrences in Planning Area

TABLE E-1

Wake County Listed Species

Major Group	Scientific Name	Common Name	State Status	Federal Status	State Rank	County Status
Amphibian	<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	T		S2	Current
Amphibian	<i>Hemidactylium scutatum</i>	Four-toed Salamander	SC		S3	Current, Obscure
Amphibian	<i>Necturus lewisi</i>	Neuse River Waterdog	SC		S2	Current
Bird	<i>Peucaea aestivalis</i>	Bachman's Sparrow	SC	FSC	S3B,S2N	Current
Bird	<i>Haliaeetus leucocephalus</i>	Bald Eagle	T	BGPA	S3B,S3N	Current
Bird	<i>Picoides borealis</i>	Red-cockaded Woodpecker	E	E	S2	Historical
Bird	<i>Vireo gilvus</i>	Warbling Vireo	SR		S2B	Current
Butterfly	<i>Pontia protodice</i>	Checkered White	SR		S1S2	Current
Caddisfly	<i>Dibusa angata</i>	a caddisfly	SR		S2	Current
Crustacean	<i>Cambarus davidi</i>	Carolina Ladle Crayfish	SR		S2S3	Current
Crustacean	<i>Orconectes carolinensis</i>	North Carolina Spiny Crayfish	SC		S3	Current
Dragonfly or Damselfly	<i>Coryphaeschna ingens</i>	Regal Darner	SR		S2?	Current
Dragonfly or Damselfly	<i>Gomphus septima</i>	Septima's Clubtail	SR	FSC	S2	Current
Freshwater Bivalve	<i>Fusconaia masoni</i>	Atlantic Pigtoe	E	FSC	S1	Current
Freshwater Bivalve	<i>Strophitus undulatus</i>	Creeper	T		S2	Current
Freshwater Bivalve	<i>Alasmidonta heterodon</i>	Dwarf Wedgemussel	E	E	S1	Current
Freshwater Bivalve	<i>Lampsilis radiata</i>	Eastern Lampmussel	T		S1S2	Current
Freshwater Bivalve	<i>Lasmigona subviridis</i>	Green Floater	E	FSC	S1	Current
Freshwater Bivalve	<i>Villosa constricta</i>	Notched Rainbow	SC		S3	Current
Freshwater Bivalve	<i>Elliptio roanokensis</i>	Roanoke Slabshell	T		S1	Current
Freshwater Bivalve	<i>Alasmidonta undulata</i>	Triangle Floater	T		S2	Current
Freshwater Bivalve	<i>Elliptio lanceolata</i>	Yellow Lance	E	FSC	S1	Current
Freshwater Fish	<i>Noturus furiosus</i>	Carolina Madtom	T	FSC	S2	Historical
Freshwater Fish	<i>Lampetra aepyptera</i>	Least Brook Lamprey	T		S2	Current
Freshwater Fish	<i>Notropis volucellus</i>	Mimic Shiner	SR		S2	Historical
Mammal	<i>Myotis septentrionalis</i>	Northern Myotis	SR	PE	S3	Historical
Mammal	<i>Myotis austroriparius</i>	Southeastern Myotis	SC	FSC	S2	Historical

Major Group	Scientific Name	Common Name	State Status	Federal Status	State Rank	County Status
Mammal	<i>Condylura cristata</i> pop. 1	Star-nosed Mole - Coastal Plain population	SC		S2	Current
Moss	<i>Tortula plinthobia</i>	A Chain-teeth Moss	SR-O		S1?	Historical
Moss	<i>Archidium donnellii</i>	Donnell's Archidium	SR-O		S1	Current
Moss	<i>Campylopus oerstedianus</i>	Oersted's Campylopus	SR-D		S1	Historical
Moss	<i>Sphagnum subsecundum</i>	Orange Peatmoss	SR-P		S1	Historical
Moss	<i>Cleistocarpidium palustre</i>	Prairie Pleuridium	SR-D		S1	Current
Vascular Plant	<i>Dichanthelium</i> sp. 9	A Witch Grass	SR-L		S2	Historical
Vascular Plant	<i>Buchnera americana</i>	American Bluehearts	E		S1	Historical
Vascular Plant	<i>Thermopsis mollis</i>	Appalachian Golden-banner	SC-V		S2	Current, Historical
Vascular Plant	<i>Magnolia macrophylla</i>	Bigleaf Magnolia	T		S2	Current
Vascular Plant	<i>Lindera subcoriacea</i>	Bog Spicebush	SR-T	FSC	S2S3	Current
Vascular Plant	<i>Trifolium reflexum</i>	Buffalo Clover	T		S1S2	Current, Historical
Vascular Plant	<i>Acmispon helleri</i>	Carolina Birdfoot-trefoil	SC-V	FSC	S3	Current
Vascular Plant	<i>Cirsium carolinianum</i>	Carolina Thistle	E		S2	Historical
Vascular Plant	<i>Clematis catesbyana</i>	Coastal Virgin's-bower	SR-P		S2	Historical
Vascular Plant	<i>Cardamine douglassii</i>	Douglass's Bittercress	T		S2	Current
Vascular Plant	<i>Liatris squarrulosa</i>	Earle's Blazing-star	SR-P		S2	Current
Vascular Plant	<i>Matelea decipiens</i>	Glade Milkvine	SR-P		S3	Current, Historical
Vascular Plant	<i>Cyperus granitophilus</i>	Granite Flatsedge	T		S2	Current, Historical
Vascular Plant	<i>Pseudognaphalium helleri</i>	Heller's Rabbit-Tobacco	SR-P		S3	Current, Historical
Vascular Plant	<i>Paspalum fluitans</i>	Horsetail Crown Grass	SR-P		S1	Current
Vascular Plant	<i>Gillenia stipulata</i>	Indian Physic	T		S2	Current
Vascular Plant	<i>Carex reniformis</i>	Kidney Sedge	T		S1	Historical
Vascular Plant	<i>Fothergilla major</i>	Large Witch-alder	SR-T		S3	Current
Vascular Plant	<i>Ruellia humilis</i>	Low Wild-petunia	E		S1	Historical

Major Group	Scientific Name	Common Name	State Status	Federal Status	State Rank	County Status
Vascular Plant	<i>Rhus michauxii</i>	Michaux's Sumac	E	E	S2	Current, Historical
Vascular Plant	<i>Heteranthera multiflora</i>	Multiflowered Mud-plantain	SR-P		S1	Current
Vascular Plant	<i>Isoetes piedmontana</i>	Piedmont Quillwort	E		S2	Current
Vascular Plant	<i>Ruellia purshiana</i>	Pursh's Wild-petunia	SC-V		S2	Historical
Vascular Plant	<i>Carex tetanica</i>	Rigid Sedge	SR-P		S1	Historical
Vascular Plant	<i>Dichanthelium annulum</i>	Ringed Witch Grass	SR-P		S1	Historical
Vascular Plant	<i>Polygala senega</i>	Seneca Snakeroot	SR-D		S2	Current
Vascular Plant	<i>Portulaca smallii</i>	Small's Portulaca	T		S2	Current, Historical
Vascular Plant	<i>Scutellaria australis</i>	Southern Skullcap	E		S1	Historical
Vascular Plant	<i>Micranthes pensylvanica</i>	Swamp Saxifrage	E		S1	Current
Vascular Plant	<i>Monotropsis odorata</i>	Sweet Pinesap	SC-V	FSC	S3	Historical
Vascular Plant	<i>Scutellaria nervosa</i>	Veined Skullcap	E		S1	Historical
Vascular Plant	<i>Trillium pusillum</i> var. <i>virginianum</i>	Virginia Least Trillium	E	FSC	S1	Current
Vascular Plant	<i>Pycnanthemum virginianum</i>	Virginia Mountain-mint	SR-P		S1?	Current
Vascular Plant	<i>Tradescantia virginiana</i>	Virginia Spiderwort	T		S1	Current
Vascular Plant	<i>Didiplis diandra</i>	Water Purslane	SR-P		S1	Current, Historical
Vascular Plant	<i>Solidago radula</i>	Western Rough Goldenrod	E		S1	Historical
Vascular Plant	<i>Agastache nepetoides</i>	Yellow Giant-hyssop	SR-P		S1	Historical

Sources: NCNHP Database, 2014

TABLE E-2

Natural Heritage Element Occurrences Near the Town of Holly Springs Planning Area

Scientific Name	Common Name	County Status	State Status	Federal Status	Aquatic	Wetland
Bird						
<i>Haliaeetus leucocephalus</i>	Bald Eagle	Current	T	BGPA	N	Y
<i>Peucaea aestivalis</i>	Bachman's Sparrow	Current	SC	FSC	N	N
<i>Picoides borealis</i>	Red-cockaded Woodpecker	Historical	E	E	N	N
Amphibian						
<i>Hemidactylium scutatum</i>	Four-Toed Salamander	Current	SC		N	Y
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	Current	T		N	Y
<i>Necturus lewisi</i>	Neuse River Waterdog	Historical	SC		Y	N
Dragonfly or Damselfly						
<i>Coryphaeschna ingens</i>	Regal Darner	Current	SR		Y	N
Vascular Plants						
<i>Carex tetanica</i>	Rigid Sedge	Historical	SR-P		N	N
<i>Tradescantia virginiana</i>	Virginia Spiderwort	Current	T		N	N
<i>Rhus michauxii</i>	Michaux's Sumac	Current	E	E	N	N
<i>Didiplis diandra</i>	Water Purslane	Current	SR-P		N	N

Key:

State Status

E = Endangered

T = Threatened

SC = Special Concern

SR, -P = Significantly Rare, -Peripheral

Federal Status

E = Endangered

BGPA = Bald and Golden Eagle Protection Act

FSC = Federal Species of Concern

A Natural Heritage Element Occurrence point represents the centroid of an area covered by a species or community and is therefore only as accurate as the data source that identified it. The NC Natural Heritage Program database assigns a radius, or "precision" value to each element occurrence of 500 feet, 1 mile, or 5 miles. The occurrences listed above were within, at most, 5 miles of the Planning Area.

Aquatic and wetland categories refer to a species' preferred habitat.

Below is a description of the applicable status key codes, per NHP website (<http://www.ncnhp.org/web/nhp/gis-download>).

(E) Endangered - "Any species or higher taxon of plant whose continued existence as a viable component of the State's flora is determined to be in jeopardy" (GS 19B 106: 202.12).

(T) Threatened - "Any resident species of plant which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range" (GS 19B 106:202.12).

(SC) Special Concern - "Any species of wild animal native or once-native to North Carolina which is determined by the Wildlife Resources Commission to require monitoring but which may be taken under regulations adopted under the provisions of this Article." (Article 25 of Chapter 113 of the General Statutes; 1987).

(SR) Significantly Rare - Any species which has not been listed by the N.C. Wildlife Resources Commission as an Endangered, Threatened, or Special Concern species, but which exists in the state (or recently occurred in the state) in small numbers and has been determined by the N.C. Natural Heritage Program to need monitoring. Significantly Rare species include "peripheral" species, whereby North Carolina lies at the periphery of the species' range (such as Hermit Thrush), as well as species of historical occurrence with some likelihood of re-discovery in

the state. Species considered extirpated in the state, with little likelihood of re-discovery, are given no N.C. Status (unless already listed by the N.C. Wildlife Resources Commission as E, T, or SC).

(SR-P) Significantly Rare - Peripheral - The species is at the periphery of its range in North Carolina. These species are generally more common somewhere else in their ranges, occurring in North Carolina peripherally to their main ranges, mostly in habitats which are unusual in North Carolina.

(BGPA) Bald and Golden Eagle Protection Act - Bald Eagles were removed from the federal list of threatened and endangered species on August 9, 2007, and are no longer protected under the Endangered Species Act. However, Bald Eagles remain protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The Bald and Golden Eagle Act prohibits anyone from taking, possessing, or transporting a Bald Eagle (*Haliaeetus leucocephalus*) or Golden Eagle (*Aquila chrysaetos*), or the parts, nests, or eggs of such birds without prior authorization. This includes inactive nests as well as active nests. Take means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb. Activities that directly or indirectly lead to take are prohibited without a permit. For more information, see the Code of the Federal Register: 50 Part 22 or visit the USFWS website: <http://www.fws.gov/midwest/MidwestBird/EaglePermits/index.html>

(FSC) Federal Species of Concern - Formerly defined as a taxon under consideration for which there is insufficient information to support listing. "... the [Fish and Wildlife] Service is discontinuing the designation of Category 2 species as candidates in this notice. The Service remains concerned about these species but further biological research and field study are needed to resolve the conservation status of these taxa. Many species of concern will be found not to warrant listing, either because they are not threatened or endangered or because they do not qualify as species under the definition in the [Endangered Species] Act. Others may be found to be in greater danger of extinction than some present candidate taxa. The Service is working with the States and other private and public interests to assess their need for protection under the Act. Such species are the pool from which future candidates for listing will be drawn." (Federal Register, February 28, 1996).