

Natural Heritage Program  
List of Rare Animal Species of North Carolina  
2016  
*revised 4 April 2017*

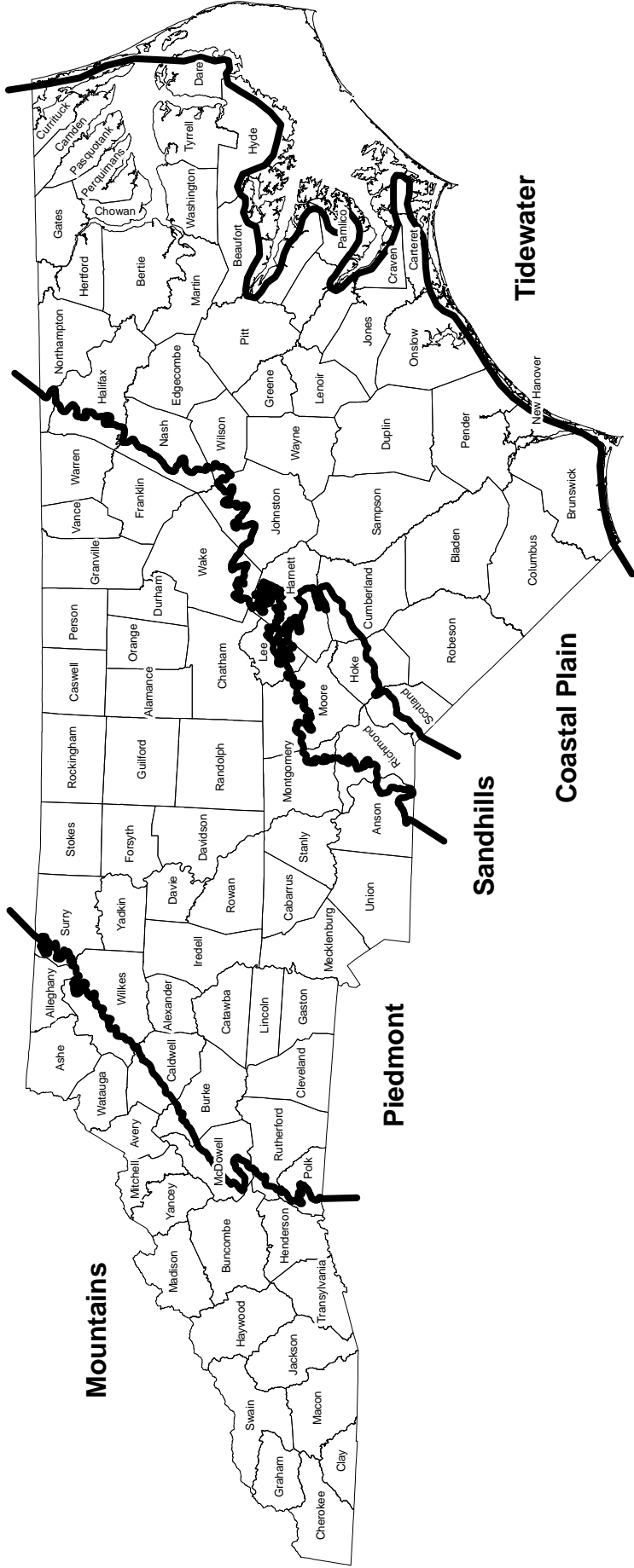


Neuse River Waterdog (*Necturus lewisi*) photo by Jeff Beane

Compiled by  
Judith Ratcliffe, Zoologist  
John Finnegan, Conservation Information Manager  
Suzanne Mason, Conservation Information Manager

North Carolina Natural Heritage Program  
N.C. Department of Natural and Cultural Resources  
Raleigh, NC 27699-1651

[www.ncnhp.org](http://www.ncnhp.org)



**THE COUNTIES AND PHYSIOGRAPHIC PROVINCES OF NORTH CAROLINA**

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This list is dynamic and is revised frequently as new data become available. New species are added to the list, and others are dropped from the list as appropriate. The list is published periodically, generally every two years. Further information may be obtained by contacting the North Carolina Natural Heritage Program, Department of Natural and Cultural Resources, 1651 MSC, Raleigh, NC 27699-1651 and the North Carolina Wildlife Resources Commission, 1701 MSC, Raleigh, NC 27699-1701. Additional information on rare species, as well as a digital version of this list, can be obtained from the Natural Heritage Program's website at [www.ncnhp.org](http://www.ncnhp.org).

## TABLE OF CONTENTS

|  |     |
|--|-----|
| NORTH CAROLINA RARE ANIMAL LIST .....                  | 1   |
| EXPLANATION OF STATUS AND RANK CODES FOR ANIMALS ..... | 2   |
| Mammals .....  | 11  |
| Birds.....   | 15  |
| Reptiles .....   | 22  |
| Amphibians.....  | 26  |
| Freshwater Fishes.....                                 | 30  |
| Mollusks: Freshwater Bivalves.....                     | 38  |
| Mollusks: Freshwater and Terrestrial Gastropods .....  | 43  |
| Arachnids .....  | 52  |
| Crustaceans .....                                      | 54  |
| Insects: Mayflies .....                                | 57  |
| Insects: Stoneflies .....                              | 59  |
| Insects: Caddisflies .....                             | 60  |
| Insects: Dragonflies and Damselflies.....              | 62  |
| Insects: Butterflies .....                             | 66  |
| Insects: Moths .....                                   | 71  |
| Insects: Grasshoppers and Katydid .....                | 81  |
| Insects: Beetles.....                                  | 84  |
| Insects: True Bugs.....                                | 85  |
| NORTH CAROLINA ANIMAL WATCH LIST .....                 | 87  |
| Mammals .....  | 89  |
| Birds.....   | 91  |
| Reptiles .....   | 95  |
| Amphibians.....  | 97  |
| Freshwater Fishes.....                                 | 99  |
| Mollusks: Freshwater Bivalves.....                     | 102 |
| Mollusks: Freshwater and Terrestrial Gastropods .....  | 103 |
| Arachnids .....  | 106 |
| Crustaceans .....                                      | 107 |
| Insects: Mayflies .....                                | 110 |
| Insects: Stoneflies .....                              | 112 |
| Insects: Caddisflies .....                             | 114 |
| Insects: Dragonflies and Damselflies.....              | 120 |

|   |     |
|---|-----|
| Insects: Flies.....                                 | 123 |
| Insects: Butterflies .....                          | 124 |
| Insects: Moths .....                                | 126 |
| Insects: Grasshoppers and Katydid .....             | 138 |
| Insects: Beetles.....                               | 141 |
| Insects: Bees.....                                  | 143 |
| ENDEMIC ANIMALS IN NORTH CAROLINA.....              | 145 |
| EXTIRPATED ANIMALS IN NORTH CAROLINA .....          | 149 |
| POTENTIAL NEW TO NORTH CAROLINA ANIMALS.....        | 151 |
| SIGNIFICANT 2016 REVISIONS TO THE ANIMAL LIST ..... | 157 |
| INDEX OF SCIENTIFIC NAMES.....                      | 159 |

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Many staff members of the N.C. Natural Heritage Program (NCNHP) were involved in the preparation and creation of this 2016 document. Dr. Harry LeGrand, former NCNHP Vertebrate Zoologist, developed the foundation of the Rare Animal List during his tenure with our program - his efforts are carried forward with greatest appreciation. Jame Amoroso entered numerous animal records into the database over the past two years and Linda Rudd made substantial revisions to the introduction and helped to compile this final document. Misty Buchanan, our Director, provided invaluable guidance throughout the list preparation and review of the final draft.

The Endangered, Threatened, and Special Concern species lists of the North Carolina Wildlife Resources Commission make up the majority of vertebrate and mollusk species on the Rare Animal List. Scientific Councils compile recommendations for consideration by the Commission and upon approval these become legally protected species in North Carolina – the efforts of the Councils are very much appreciated.

The invertebrate lists have been developed with the assistance of taxa experts: Steve Hall (various groups including land snails, dragonflies and damselflies, moths, and grasshoppers and katydids), John Cooper (crayfishes), Trish MacPherson, Kathy Herring, Dave Lenat, Dave Penrose, Eric Fleek, and Steven Beatty (mayflies, stoneflies, and caddisflies, beetles), Dale Schweitzer (various groups but especially moths), Bo Sullivan (butterflies and moths), and Amy VanDevender (land snails). The dragonfly and damselfly lists were developed through collection records of Duncan Cuyler, with his data provided to NCNHP by Steve Roble and Bill Mauffray.

This volume is dedicated in memory of John Finnegan (1960 - 2016)  
for his friendship and 20 years of unfailing service to the State of North Carolina,  
supporting the conservation of its natural heritage.





## **NORTH CAROLINA RARE ANIMAL LIST**

The North Carolina Natural Heritage Program (NCNHP) conducts and maintains an inventory of known locations of rare animals and plants in the state as part of its mission to support conservation of natural areas. The primary functions of this inventory list are its use 1) in determining priorities for protection of the state's most important natural areas and the animals and plants contained therein, 2) in determining priorities for inventory, and 3) by public agencies and private persons for environmental assessment and land management planning.

The NCNHP is charged under the Nature Preserves Act (G.S. 143B-135.250 to -135.272) with compiling and maintaining information relevant to the protection of North Carolina's most important natural areas. NCNHP takes the lead role in North Carolina in the inventory of the state's natural diversity and the identification of important natural areas and rare species habitats. The list incorporates the most recent federal status designations determined by the U.S. Fish and Wildlife Service (USFWS) for all animal taxa native to North Carolina. This list also includes North Carolina legal status information from the N.C. Wildlife Resources Commission (NCWRC). NCWRC is responsible for the listing and protection of the state's nongame species of mammals, birds, reptiles, amphibians, freshwater fishes, mollusks, and crustaceans, under N.C. General Statutes - Chapter 113 Article 25. The NCNHP, NCWRC, and USFWS work cooperatively to ensure the continued survival of all of North Carolina's rich fauna. Over the past 25 years and continuing in the future, the advice and protection designations (for example, Endangered, Threatened, and Special Concern) of scientific councils and committees have been considered in the creation of the list.

Many species that lack formal legal protection are nonetheless imperiled in North Carolina. Therefore, NCNHP collects data on these species in addition to those classified under the three protection designations above and places them in two categories: Significantly Rare (SR) and Watch List (W). These species receive no special legal protection status; rather, the designation is used to convey information about the species' rarity within the state. The tracking of SR species, along with Endangered, Threatened, and Special Concern species, plays a critical role in how NCNHP evaluates natural areas for their importance in conservation of the state's native biodiversity. These status categories are defined in this list under "N.C. Status."

Because of the difficulty in gathering data for marine and estuarine fishes, marine invertebrates, millipedes, scorpionflies, most beetles, ants, and annelids, these animals are no longer tracked or included on the Rare or Watch lists. NCNHP requests locality and population data on the species listed in this publication. Survey forms have been provided on our website: [www.ncnhp.org](http://www.ncnhp.org). The most current information about the range of tracked species in North Carolina is also available there. Information, including maps and datasets, on animals, plants, and communities nationwide may be found on NatureServe Explorer ([www.natureserve.org](http://www.natureserve.org)).

### **LIST FORMAT**

Species are grouped by major taxa. Vertebrate animals are arranged by class, beginning with the most phylogenetically advanced (mammals). Within a given taxon, species are listed alphabetically by scientific name. The following information is presented for each species on the list: N.C. Status, U.S. Status, N.C. Rank, Global Rank, Physiographic Province/Region, Habitat, and Counties of Occurrence.

## EXPLANATION OF STATUS AND RANK CODES FOR ANIMALS

### Status Codes

In North Carolina, all state status (Endangered, Threatened, and Special Concern) changes must be approved by the N.C. Wildlife Resources Commission and published in the State Register for public comment. These taxa are given state protection under the State Endangered Species Act (G.S. 113-331 to 113-337). Significantly Rare and Watch List are NCNHP designations only, not affording official state protection.

United States Status is designated by the U.S. Fish and Wildlife Service (USFWS) and the U.S. National Marine Fisheries Service (USNMFS) in accordance with the U.S. Endangered Species Act of 1973 (USESA), as amended. Plants and plant varieties, (including fungi and lichens), animal species and subspecies, and vertebrate populations are considered for Endangered or Threatened status according to the criteria established under the USESA. Proposals and determinations to add taxa or populations to the Lists of Endangered and Threatened Wildlife and plants are published in the Federal Register. Additionally, the USFWS and the USNMFS periodically publish a Notice of Review or Notice of Reclassification in the Federal Register that presents an updated list of plant and animal taxa that are regarded as candidates or proposed for possible addition to the Lists of Endangered and Threatened Wildlife and Plants. Contact the Asheville or Raleigh Ecological Services Field Offices for more information.

### N.C. STATUS – ANIMALS

| N.C.<br>STATUS<br>CODE | STATUS                  | DEFINITION  |
|------------------------|-------------------------|---|
| E                      | Endangered              | Any native or once-native species of wild animal whose continued existence as a viable component of the state's fauna is determined to be in jeopardy or any species of wild animal determined to be an Endangered species pursuant to the Endangered Species Act. (G.S. 113-25.)   |
| T                      | Threatened              | Any native or once-native species of wild animal which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, or one that is designated as a Threatened species pursuant to the Endangered Species Act. (G.S. 113-25.)   |
| SC                     | Special Concern         | Any species of wild animal native or once-native to North Carolina which is determined by the NCWRC to require monitoring but which may be taken under regulations adopted under the provisions of the Article. (G.S.113-25)  |
| SR                     | Significantly Rare      | Any species which has not been listed as an Endangered, Threatened, or Special Concern species, but which exists in the state (or recently occurred in the state) in small numbers (generally fewer than 100 statewide populations) and has been determined by the NCNHP to need monitoring. Significantly Rare species include species of historical occurrence with some likelihood of rediscovery in the state and species substantially reduced in numbers by habitat destruction, direct exploitation, or disease. |
| SR-G                   | Significantly Rare-Game | Species is a game animal or a furbearer, and therefore (by law) cannot be listed for state protection as E, T, or SC.   |

| <b>N.C. STATUS CODE</b> | <b>STATUS</b> | <b>DEFINITION</b>   |
|-------------------------|---------------|---|
| WL                      | Watch List    | Any other species believed to be rare and of conservation concern in the state but not warranting active monitoring at this time. |

### U.S. STATUS – ANIMALS

| <b>U.S. STATUS CODE</b> | <b>STATUS</b>                        | <b>DEFINITION</b>  |
|-------------------------|--------------------------------------|--|
| E                       | Endangered                           | A taxon that is in danger of extinction throughout all or a significant portion of its range (Public Law 93-205 87 Stat. 884).   |
| T                       | Threatened                           | A taxon that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range (Public Law 93-205 87 Stat. 884).  |
| C                       | Candidate                            | Taxa for which the USFWS has on file enough substantial information on biological vulnerability and threat(s) to support proposals to list them as endangered or threatened. Proposed rules have not yet been issued because this action is precluded at present by other listing activity. Development and publication of proposed rules on these taxa are anticipated. The USFWS encourages state and other federal agencies as well as other affected parties to give consideration to these taxa in environmental planning (Federal Register, 28 February 1996). Taxa formerly considered “Category 1” are now considered “Candidate.”                               |
| FSC                     | Federal Species of Concern           | “FSC” is an informal term. It is not defined in the federal Endangered Species Act. In North Carolina, the Asheville and Raleigh Field Offices of the U.S. Fish and Wildlife Service define FSC as those species that appear to be in decline or otherwise in need of conservation and are under consideration for listing or for which there is insufficient information to support listing at this time. Subsumed under the term FSC are all species petitioned by outside parties and other selected focal species identified in USFWS strategic plans, state Wildlife Action Plans, Professional Society Lists (e.g. AFS, FMCS), or NatureServe State Program Lists. |
| BGPA                    | Bald and Golden Eagle Protection Act | The Bald and Golden Eagle Protection Act (Eagle Act)(16U.S.C. 668-668d) prohibits take of bald and golden eagles and provides a statutory definition of “take” that includes “disturb.” The USFWS has developed National Bald Eagle Management Guidelines to provide guidance to land managers, landowners, and others as to how to avoid disturbing bald eagles. For additional information please see <a href="http://www.fws.gov/migratorybirds/baldeagle.htm">http://www.fws.gov/migratorybirds/baldeagle.htm</a> .  |
| EXP                     | Experimental Population              | A taxon listed as experimental (either essential or nonessential). Experimental, nonessential populations of endangered species (e.g., red wolf) are treated as threatened species on public land, for consultation purposes, and a species proposed for listing on private land.  |
| P_                      | Proposed                             | Species proposed in the Federal Register as a status different from its current federal status.  |

| U.S. STATUS CODE | STATUS                                     | DEFINITION  |
|------------------|--|---|
| T (S/A)          | Threatened due to Similarity of Appearance | Section 4 (e) of the USESA authorizes the treatment of a species (subspecies or population segment) as endangered or threatened even though it is not otherwise listed as endangered or threatened if (a) the species so closely resembles in appearance an endangered or threatened species that enforcement personnel would have substantial difficulty in differentiating between the listed and unlisted species, (b) the effect of this substantial difficulty is an additional threat to an endangered or threatened species, and (c) such treatment of an unlisted species will substantially facilitate the enforcement and further the policy of the USESA [Federal Register 4 November 1997, Volume 62(213):59605-59623]. |
| T-4(d)           | Threatened with a 4(d) Rule                | Section 4(d) of the ESA allows special regulations for threatened species that modify normal ESA protections when it is determined that such a modification is necessary and advisable to provide for the conservation of that species. A 4d rule is specific to the particular plant or animal for which it was created. For additional information, see links at <a href="http://www.fws.gov/midwest/endangered/mammals/nlba/">http://www.fws.gov/midwest/endangered/mammals/nlba/</a> .  |

### Ranking System

Natural Heritage Programs and the NatureServe Network have developed a consistent method for evaluating the relative imperilment of both species and ecological communities. These assessments led to the designation of a conservation rank. These ranks provide an estimate of extinction risk. Conservation rank values have been assigned over the past 30 years by the NCNHP, NatureServe, and a large number of collaborators in government agencies, universities, natural history museums, botanical gardens, and other conservation organizations. This information has been developed primarily to help in guiding conservation and informing environmental planning and management.

Conservation ranks are either state (S) or global (G) and are based on a one-to-five scale, ranging from critically imperiled (S1 or G1) to demonstrably secure (S5 or G5). These assessments are based on the best available information, considering a variety of factors such as abundance, distribution, population trends, and threats. Global ranks apply to the species throughout its range. The system is widely used by nationwide agencies and organizations, as the best available scientific and objective assessment of a species' imperilment throughout its range.

A rank involving two numbers indicates uncertainty. For example, an S2S3 or a G2G3 rank indicates that the species may be S2 or S3 (or G2 or G3), but that existing data do not allow that determination to be made.

**N.C. RANK – ANIMALS**

| <b>N.C. RANK</b> | <b>NUMBER OF EXTANT OCCURRENCES</b> | <b>DESIGNATION</b>   | <b>DESCRIPTION</b>  |
|------------------|-------------------------------------|----------------------|---|
| S1               | 1-5                                 | Critically Imperiled | Critically imperiled due to extreme rarity or some factor(s) making it especially vulnerable to extirpation (local extinction) from the state. Typically 5 or fewer occurrences or very few remaining individuals (<1,000).   |
| S2               | 6-20                                | Imperiled            | Imperiled due to rarity or some factor(s) making it very vulnerable to extirpation from the state. Typically 6 to 20 occurrences or few remaining individuals (1,000 to 3,000).   |
| S3               | 21-100                              | Vulnerable           | Vulnerable to extinction either because rare or uncommon, found only in a restricted range (even if abundant at some locations), or due to other factors making it vulnerable to extirpation. Typically 21 to 100 occurrences or between 3,000 to 10,000 individuals.   |
| S4               | 101-1,000                           | Apparently Secure    | Apparently secure and widespread, usually with more than 100 occurrences and more than 10,000 individuals.  |
| S5               | 1,001+                              | Secure               | Common, widespread, and abundant. Essentially ineradicable under present conditions. Typically with considerably more than 100 occurrences and more than 10,000 individuals.  |
| SH               | 0?                                  | Historical           | Of historical occurrence, with some expectation that it may be rediscovered. Its presence may not have been verified in the past 20 years. Upon verification of an extant occurrence, SH-ranked elements would typically receive an S1 rank. Note: an element is not automatically assigned an SH (or SX) rank if it has not been verified in the past 20 years; some effort must have been made to locate or relocate occurrences. |
| SX               | 0                                   | Presumed Extirpated  | Believed to be extirpated. Has not been located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.   |
| SU               | Unknown                             | Unrankable           | Currently unrankable due to lack of information or substantially conflicting information about status or trends. More information is needed.  |
| SNR              | Unknown                             | Not Ranked           | Statewide rank not yet assessed.  |

| N.C. RANK | NUMBER OF EXTANT OCCURRENCES | DESIGNATION    | DESCRIPTION   |
|-----------|------------------------------|----------------|---|
| SNA       | N/A                          | Not Applicable | A conservation status rank is not applicable because the element is not a suitable target for conservation for one of these reasons: <ul style="list-style-type: none"> <li>• Hybrid – an interspecific hybrid without conservation value;</li> <li>• Exotic Origin – not native to North Carolina;</li> <li>• Accidental/Nonregular – outside usual range and not regularly found in North Carolina;</li> <li>• Not Confidently Present – never documented as present in NC;</li> <li>• Synonym – the taxon is not recognized by the NCNHP.</li> </ul> |
| S_B       | 1-?                          | Breeding       | Rank of the breeding population in the state. Used for migratory species only. Ex: Bachman's sparrow ( <i>Peucaea aestivalis</i> ) is S3B,S2N).   |
| S_N       | 1-?                          | Nonbreeding    | Rank of the nonbreeding population in the state. Used for migratory species only. Ex: Bachman's sparrow.  |
| S_?       | ---                          | Uncertain      | Denotes inexact or uncertain numeric rank.  |

**GLOBAL RANK – ANIMALS**

| GLOBAL RANK | NUMBER OF EXTANT POPULATIONS | DESIGNATION          | DESCRIPTION   |
|-------------|------------------------------|----------------------|---|
| G1          | 1-5                          | Critically Imperiled | Critically imperiled globally because of extreme rarity or because of some factor(s) making it especially vulnerable to extinction. Typically five or fewer occurrences or very few remaining individuals (<1,000) or acres (<2,000) or linear miles (<10).             |
| G2          | 6-20                         | Imperiled            | Imperiled globally because of rarity or because of some factor(s) making it very vulnerable to extinction. Typically 6 to 20 occurrences or few remaining individuals (1,000 to 3,000) or acres (2,000 to 10,000) or linear miles (10 to 50).                           |
| G3          | 21-100                       | Vulnerable           | Vulnerable globally either because very rare throughout its range, found only in a restricted range (even if abundant at some locations), or other factors making it vulnerable to extinction. Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals. |

| <b>GLOBAL RANK</b> | <b>NUMBER OF EXTANT POPULATIONS</b> | <b>DESIGNATION</b>         | <b>DESCRIPTION</b>   |
|--------------------|-------------------------------------|----------------------------|--|
| G4                 | 101-1,000                           | Apparently Secure          | Uncommon but not rare (although it may be rare in parts of its range, particularly on the periphery) and usually widespread. Apparently not vulnerable in most of its range, but possibly cause for long-term concern. Typically more than 100 occurrences and more than 10,000 individuals.   |
| G5                 | 1,001+                              | Secure                     | Common, widespread, and abundant (although it may be rare in parts of its range, particularly on the periphery). Not vulnerable in most of its range. Typically with considerably more than 100 occurrences and more than 10,000 individuals.  |
| GH                 | 0?                                  | Historical                 | Known only from historical occurrences, but with some expectation that it may be rediscovered. May still be extant; further searching is needed.   |
| GX                 | 0                                   | Presumed Extinct           | Believed to be extinct throughout its range (e.g., passenger pigeon) with virtually no likelihood that it will be rediscovered. Not located despite intensive searches of historical sites and other appropriate habitat.  |
| GU                 | Unknown                             | Unrankable                 | Currently unrankable due to lack of information or due to substantially conflicting information about status or trends; need more information.   |
| GNR                | Unknown                             | Not Ranked                 | Global rank not yet assessed.  |
| G_T_               | ---                                 | Subspecies or Variety Rank | As an example, G4T1 would apply to a subspecies of a species with an overall rank of G4, but the subspecies warranting a rank of G1.   |
| G ?                | ---                                 | Uncertain                  | Denotes inexact or uncertain numeric rank.   |
| G_Q                | ---                                 | Questionable Taxonomy      | Taxonomic classification that may reduce conservation priority. Distinctiveness of this entity as a taxon at the current level is questionable. Resolution of this uncertainty may result in change from a species to a subspecies or inclusion of this taxon in another taxon, with the resulting element having a lower-priority conservation status rank. |

**Physiographic Province/Region.** The provinces/regions in which the species is known to occur are indicated. This should not be regarded as the only province(s) or regions(s) of the state in which the species could occur; our knowledge of the fauna of North Carolina is still very imperfect. The provinces are abbreviated as follows:

| ABBREVIATION | PROVINCE/REGION        | DESCRIPTION   |
|--------------|------------------------|---|
| M            | Mountains (Blue Ridge) | All parts of North Carolina west of the foot of the Blue Ridge Escarpment.  |
| P            | Piedmont               | All parts of North Carolina east of the foot of the Blue Ridge Escarpment and west of the Fall Line, including outlying “foothill” ranges, such as the Brushy, Uwharrie, Sauratown, and South mountains. This province is shallowly underlain by crystalline metamorphic, igneous, or (rarely) consolidated sedimentary rocks.  |
| S            | Sandhills              | Portions of Cumberland, Harnett, Hoke, Lee, Moore, Richmond, Scotland, and Montgomery counties consisting mostly of deep aeolian sands of the Middendorf and Pinehurst formations (Cretaceous to Tertiary age). The Sandhills are really part of the coastal plain but are here distinguished because of their distinctive geomorphology and vegetation. Areas somewhat resembling the Sandhills region but occurring in other parts of the state (such as Carolina bay rims and aeolian or beach ridge deposits in the outer Coastal Plain) are considered part of the Coastal Plain Province. |
| C            | Coastal Plain          | All parts of North Carolina east of the Fall Line, but excluding the Sandhills region and those portions associated with Tidewater. Generally consisting of unconsolidated sands, silts, clays, and peats, though rarely shallowly underlain by consolidated coquina limestone (“marl”).  |
| T            | Tidewater              | Areas associated with tidal water, such as the ocean and barrier islands, sounds, estuaries, and mainland brackish or salt marshes.   |

**Habitat.** The known habitats are described; as with provinces, these should not be regarded as the only possible habitats of the species in the state.

**Counties of Known Occurrence.** Following the description of habitats is a listing of the known counties of occurrence in the NCNHP database. We request information about any new occurrences in the state. County names are followed by symbols (defined below) if the species has not been recently verified within the county.

|   |   |
|---|---|
| * | All recorded occurrences in the county are either extirpated, have not been found in recent surveys, or have not been surveyed recently enough to be confident they are still present. Unsurveyed occurrences are regarded as historical after 20-40 years, the number of years depending on the species and the amount of habitat alteration in the area. An asterisk should not be regarded as a definitive statement that the species is gone from the county but indicates that its continued existence is uncertain. |
|---|---|



The zoological exploration of North Carolina is far from complete, and many additional county records will be found, generally (but not always) in proximity to counties listed. Most species that do not have county of occurrence information listed are new to the Rare List and county status information had not been compiled at the time of publication. For nearly all vertebrate species, and for many invertebrate species, this listing of counties on the Rare List is complete or reasonably complete. Visit the Natural Heritage Program website for the most up-to-date county occurrence information: [www.ncnhp.org](http://www.ncnhp.org).

### NUMBER OF ANIMAL TAXA BY STATUS

Numbers in the table indicate number of taxa – generally species as well as valid unique varieties and subspecies – for each group and status. Because many taxa have both an N.C. and a U.S. status, totals cannot be added across a complete line. The total number of species in North Carolina is an estimate of the species that do occur or have occurred at one time in the state.

| GROUP                             | APPROXIMATE<br>NUMBER IN<br>NORTH CAROLINA | N.C. STATUS |    |     |     | U.S. STATUS |                  |             |
|-----------------------------------|--|-------------|----|-----|-----|-------------|------------------|-------------|
|                                   |  | E           | T  | SC  | SR  | E           | T                | Other       |
| Mammals                           | 120  | 6           | 2  | 13  | 9   | 7           | 1 T; 1<br>T-4(d) | 1 EXP       |
| Birds                             | 475  | 9           | 4  | 23  | 28  | 9           | 3                | 2<br>BGPA   |
| Reptiles                          | 75   | 5           | 4  | 11  | 9   | 3           | 1                | 2<br>T(S/A) |
| Amphibians                        | 90   | 1           | 4  | 12  | 15  | -           | -                |             |
| Freshwater<br>Fishes              | 245  | 12          | 16 | 28  | 23  | 4           | 2                |             |
| Freshwater<br>Bivalves            | 85   | 21          | 11 | 7   | 8   | 9           | -                |             |
| Gastropods                        | 250+                                       | 4           | 10 | 24  | 52  | -           | 1                | 1 C         |
| Arachnids                         | ?  | -           | -  | -   | 13  | 1           | -                |             |
| Crustaceans                       | ?  | 1           | -  | 11  | 11  | -           | -                |             |
| Mayflies                          | ?  | -           | -  | -   | 18  | -           | -                |             |
| Stoneflies                        | ?  | -           | -  | -   | 9   | -           | -                |             |
| Caddisflies                       | ?  | -           | -  | -   | 20  | -           | -                |             |
| Dragonflies<br>and<br>Damselflies | 190  | -           | -  | -   | 40  | -           | -                |             |
| Butterflies                       | 175  | -           | -  | -   | 38  | 1           | -                |             |
| Moths                             | 2670+                                      | -           | -  | -   | 108 | 1           | -                |             |
| Grasshoppers<br>and Katydid       | 140  | -           | -  | -   | 26  | -           | -                |             |
| Beetles                           | ?  | -           | -  | -   | 6   | 1           | -                |             |
| True Bugs                         | ?  | -           | -  | -   | 1   | -           | -                |             |
| Bees                              | ?  | -           | -  | -   | 1   | 1           | -                |             |
| <b>Totals</b>                     | ---  | 59          | 51 | 129 | 435 | 37          | 9                |             |



| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence)   | Status    |            | Rank      |               |
|---|-----------|------------|-----------|---------------|
|   | N.C.      | U.S.       | N.C       | Global        |
| <b>Mammals</b>  |           |            |           |               |
| <i>Canis rufus</i><br><b>Red Wolf</b><br>C: swamps, pocosins, extensive forests (Beaufort, Dare, Hyde, Tyrrell, Washington)   | <b>SR</b> | <b>EXP</b> | <b>S1</b> | <b>G1Q</b>    |
| <i>Cervus elaphus</i><br><b>Elk</b><br>M: mid- to -high elevation meadows, grass balds (released in Great Smoky Mountains NP) (Haywood, Jackson, Swain)   | <b>SC</b> |            | <b>S1</b> | <b>G5</b>     |
| <i>Condylura cristata pop. 1</i> (= <i>C. cristata parva</i> )<br><b>Star-nosed Mole - Coastal Plain population</b><br>SC: moist meadows, bogs, swamps, bottomlands [mountain population not of concern] (Bladen, Brunswick, Columbus, Craven, Cumberland, Currituck*, Dare, Hoke, Mecklenburg*, Moore, New Hanover*, Pender, Pitt, Randolph, Richmond*, Robeson*, Sampson, Scotland*, Wake, Washington*)   | <b>SC</b> |            | <b>S2</b> | <b>G5T2Q</b>  |
| <i>Corynorhinus rafinesquii macrotis</i><br><b>Eastern Big-eared Bat</b><br>CS: roosts in hollow trees, old buildings, and beneath bridges, usually near water (Beaufort, Bertie, Bladen, Brunswick, Camden, Chowan, Columbus, Craven, Currituck, Dare, Duplin, Gates, Hoke, Johnston, Martin, Nash, New Hanover, Northampton, Pender, Perquimans, Richmond, Robeson, Sampson, Tyrrell, Washington, Wayne*) | <b>SC</b> | <b>FSC</b> | <b>S3</b> | <b>G3G4T3</b> |
| <i>Corynorhinus rafinesquii rafinesquii</i><br><b>Rafinesque's Big-eared Bat</b><br>M: roosts in caves, mines, and hollow trees, usually near water (Alexander*, Buncombe*, Burke, Cherokee*, Graham, Haywood, Jackson, Macon, Madison*, Swain, Transylvania)   | <b>T</b>  | <b>FSC</b> | <b>S2</b> | <b>G3G4T3</b> |
| <i>Corynorhinus townsendii virginianus</i><br><b>Virginia Big-eared Bat</b><br>M: roosts in caves (and rarely in mines), especially in limestone areas (Avery, Watauga, Yancey)   | <b>E</b>  | <b>E</b>   | <b>S1</b> | <b>G3G4T2</b> |
| <i>Glaucomys sabrinus coloratus</i><br><b>Carolina Northern Flying Squirrel</b><br>M: high elevation forests, mainly spruce-fir (Ashe, Avery, Buncombe, Caldwell, Graham, Haywood, Henderson, Jackson, McDowell, Mitchell, Swain, Transylvania, Watauga, Yancey)  | <b>E</b>  | <b>E</b>   | <b>S2</b> | <b>G5T2</b>   |
| <i>Lasiurus intermedius floridanus</i><br><b>Florida Yellow Bat</b><br>CP: roosts in Spanish moss and other thick vegetation near water, often in longleaf pine habitats (Brunswick, Mecklenburg, New Hanover)  | <b>SC</b> |            | <b>S1</b> | <b>G4G5T4</b> |
| <i>Microtus chrotorrhinus carolinensis</i><br><b>Southern Rock Vole</b><br>M: rocky areas at high elevations, forests or fields (Avery, Haywood, Jackson*, Macon, Swain, Transylvania, Yancey)  | <b>SC</b> |            | <b>S3</b> | <b>G4T3</b>   |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence)  | Status      |               | Rank        |             |
|--|-------------|---------------|-------------|-------------|
|  | N.C.        | U.S.          | N.C         | Global      |
| <b><i>Mustela nivalis</i></b><br><b>Least Weasel</b><br>M: fields and forests, mostly at high elevations (Avery, Buncombe, Haywood, Henderson, Jackson, Madison*, Mitchell*, Swain, Transylvania, Watauga, Yancey*)  | <b>SR-G</b> |               | <b>S2</b>   | <b>G5</b>   |
| <b><i>Myotis austroriparius</i></b><br><b>Southeastern Bat</b><br>CSPM: roosts in buildings, hollow trees; forages near water; mainly in the Coastal Plain (Bertie, Bladen, Camden, Chowan, Clay, Columbus, Craven, Currituck, Gates, Halifax, Hoke, Johnston, Jones, Martin, Moore, New Hanover, Onslow, Pender, Richmond, Robeson, Scotland, Wake*)  | <b>SC</b>   | <b>FSC</b>    | <b>S2</b>   | <b>G4</b>   |
| <b><i>Myotis grisescens</i></b><br><b>Gray Bat</b><br>M: roosts in caves; forages mainly over open water (Buncombe, Haywood, Madison, Swain, Transylvania, Yancey)   | <b>E</b>    | <b>E</b>      | <b>S1</b>   | <b>G4</b>   |
| <b><i>Myotis leibii</i></b><br><b>Eastern Small-footed Bat</b><br>M: roosts in hollow trees and in rock crevices (warmer months), in caves and mines (winter) (Alleghany, Avery, Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Rutherford, Swain, Transylvania, Watauga, Wilkes, Yancey)  | <b>SC</b>   | <b>FSC</b>    | <b>S2</b>   | <b>G4</b>   |
| <b><i>Myotis lucifugus</i></b><br><b>Little Brown Bat</b><br>MPC: roosts in buildings (summer), in caves and mines (winter) (Avery, Buncombe, Burke, Cherokee, Clay, Cleveland, Craven, Graham, Haywood, Henderson*, Jackson, Macon, Madison, McDowell, Mitchell, Rutherford, Stokes, Swain, Transylvania, Watauga, Wilkes, Yancey)  | <b>SR</b>   |               | <b>S3</b>   | <b>G3</b>   |
| <b><i>Myotis septentrionalis</i></b><br><b>Northern Long-eared Bat</b><br>MPC: roosts in hollow trees and buildings (warmer months), in caves and mines (winter); mainly in the mountains (Ashe, Avery, Bertie, Buncombe, Burke, Camden, Cherokee, Clay, Currituck, Dare, Davidson, Gates, Graham, Haywood, Henderson, Jackson, Lee, Macon, Madison, McDowell, Mitchell, New Hanover, Polk, Rutherford, Swain, Transylvania, Wake*, Washington, Watauga, Wilkes, Yancey) | <b>SR</b>   | <b>T-4(d)</b> | <b>S2</b>   | <b>G1G2</b> |
| <b><i>Myotis sodalis</i></b><br><b>Indiana Bat</b><br>M: roosts in hollow trees or under loose bark and snags (warmer months), in caves (winter) (Cherokee, Graham, Haywood, Jackson*, Mitchell, Rutherford, Swain)  | <b>E</b>    | <b>E</b>      | <b>S1S2</b> | <b>G2</b>   |
| <b><i>Neotoma floridana floridana</i></b><br><b>Florida Eastern Woodrat</b><br>C: forests, mainly in moist areas (Brunswick*, Carteret*, New Hanover, Onslow, Pender)  | <b>T</b>    |               | <b>S1</b>   | <b>G5T5</b> |

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|--|-------------|------------|-------------|---------------|
|  | N.C.        | U.S.       | N.C         | Global        |
| <i>Neotoma magister</i><br><b>Allegheny Woodrat</b><br>MP: rocky places and abandoned buildings in deciduous or mixed forests in the northern mountains and adjacent Piedmont (Ashe, Avery, Buncombe, Burke, Caldwell, Iredell, McDowell, Mitchell, Watauga, Wilkes*, Yancey)  | <b>SC</b>   | <b>FSC</b> | <b>S2S3</b> | <b>G3G4</b>   |
| <i>Perimyotis subflavus</i><br><b>Tricolored Bat</b><br>MPSC: roosts in clumps of leaves (mainly in summer), caves, rock crevices, and other dark and sheltered places (Alleghany*, Avery, Bertie, Bladen, Buncombe, Burke, Camden, Carteret, Cherokee, Clay, Cleveland, Craven, Davidson, Gates, Graham, Haywood, Henderson, Jackson, Jones, Lenoir, Macon, Madison, McDowell, Onslow, Orange, Polk, Robeson, Rutherford, Stokes, Swain, Transylvania, Wake, Washington, Watauga, Wilkes, Yancey) | <b>SR</b>   |            | <b>S3</b>   | <b>G2G3</b>   |
| <i>Peromyscus leucopus buxtoni</i><br><b>Buxton Woods White-footed Deermouse</b><br>T: maritime forests in Cape Hatteras vicinity (endemic to this area) (Dare)  | <b>SC</b>   | <b>FSC</b> | <b>S1</b>   | <b>G5T1</b>   |
| <i>Peromyscus leucopus easti</i><br><b>Pungo White-footed Deermouse</b><br>T: dunes and maritime thickets along coast south to Corolla (Currituck)   | <b>SC</b>   |            | <b>S1</b>   | <b>G5T1</b>   |
| <i>Peromyscus polionotus</i> (= <i>P. polionotus colemani</i> )<br><b>Oldfield Deermouse</b><br>P: sandy, fallow fields near South Carolina line (Cleveland, Mecklenburg, Rutherford)  | <b>SC</b>   |            | <b>S1</b>   | <b>G5</b>     |
| <i>Sorex dispar blitchi</i><br><b>Southern Rock Shrew</b><br>M: high elevation forests with talus or rocky slopes (Avery, Buncombe, Caldwell, Haywood, Henderson, Jackson, Macon, Mitchell, Swain, Transylvania, Watauga, Yancey)  | <b>SC</b>   |            | <b>S3</b>   | <b>G4T3T4</b> |
| <i>Sorex palustris punctulatus</i><br><b>Southern Water Shrew</b><br>M: stream banks in montane forests (Avery, Buncombe, Clay, Haywood, Jackson, Macon, Swain, Watauga)   | <b>SC</b>   | <b>FSC</b> | <b>S3</b>   | <b>G5T3</b>   |
| <i>Sorex sp. 1</i><br><b>an undescribed shrew</b><br>C: early succession fields, possibly low pocosins (endemic to eastern North Carolina) (Dare, Hyde)  | <b>SR</b>   |            | <b>S1S2</b> | <b>G2Q</b>    |
| <i>Spilogale putorius</i><br><b>Eastern Spotted Skunk</b><br>MP: forests with rocks, cliffs, and other den sites (Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Cherokee*, Graham*, Haywood, Henderson*, Jackson, Macon*, McDowell, Mitchell*, Rutherford, Swain, Transylvania, Wilkes, Yancey)   | <b>SR-G</b> |            | <b>S2</b>   | <b>G4</b>     |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence)  | Status      |                          | Rank        |             |
|--|-------------|--------------------------|-------------|-------------|
|  | N.C.        | U.S.                     | N.C         | Global      |
| <b><i>Sylvilagus obscurus</i></b><br><b>Appalachian Cottontail</b><br>M: dense cover of montane woods and thickets (Alleghany, Ashe, Avery, Buncombe, Caldwell, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison, Mitchell, Swain*, Transylvania, Watauga, Yancey) | <b>SR-G</b> | <b>FSC</b>               | <b>S3</b>   | <b>G4</b>   |
| <b><i>Synaptomys cooperi helaletes</i></b><br><b>Dismal Swamp Southern Bog Lemming</b><br>C: low pocosins, early succession wetlands (Beaufort, Craven, Gates, Jones, Pasquotank*, Perquimans*)  | <b>SR</b>   |                          | <b>S2S3</b> | <b>G5T3</b> |
| <b><i>Trichechus manatus</i></b><br><b>West Indian Manatee</b><br>T: warm waters of estuaries and river mouths (Beaufort, Brunswick, Carteret, Craven, Currituck, Dare, Hyde, Jones, Lenoir, New Hanover, Onslow, Pamlico, Pender, Pitt)                                   | <b>E</b>    | <b>T</b><br>(2017-03-30) | <b>S1N</b>  | <b>G2</b>   |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence) | Status |      | Rank |        |
|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

### Birds

|   |           |             |                |             |
|---|-----------|-------------|----------------|-------------|
| <i>Accipiter striatus</i><br><b>Sharp-shinned Hawk</b><br>MPS: forests and woodlands (for nesting) [breeding evidence only] (Avery, Caldwell, Durham, Jackson, Mitchell*, Orange, Watauga, Yancey)  | <b>SR</b> |             | <b>S2B,S4N</b> | <b>G5</b>   |
| <i>Aegolius acadicus</i><br><b>Northern Saw-whet Owl</b><br>M: spruce-fir forests or mixed hardwood/spruce forests (for nesting) [breeding season only] (Avery, Buncombe, Clay, Graham, Haywood, Jackson, Macon, Madison, Mitchell, Swain, Transylvania, Watauga, Yancey)                     | <b>T</b>  | <b>FSC</b>  | <b>S2B,S2N</b> | <b>G5</b>   |
| <i>Ammodramus henslowii</i><br><b>Henslow's Sparrow</b><br>C: clearcut pocosins and other damp weedy fields [breeding season only] (Beaufort, Bertie, Brunswick, Carteret, Columbus, Edgecombe, Gates, Martin, Onslow, Pender, Pitt, Wilson)  | <b>SC</b> | <b>FSC</b>  | <b>S1B,S1N</b> | <b>G4</b>   |
| <i>Aquila chrysaetos</i><br><b>Golden Eagle</b><br>MC: grass balds or fields amid remote and extensive forests in higher mountains, near waterfowl impoundments or large lakes in coastal areas [regular wintering sites] (Alleghany, Hyde, Mitchell, Wilkes, Yancey)                         | <b>SR</b> | <b>BGPA</b> | <b>SXB,S1N</b> | <b>G5</b>   |
| <i>Botaurus lentiginosus</i><br><b>American Bittern</b><br>CT: fresh or brackish marshes [breeding evidence only] (Beaufort, Carteret, Hyde, Pamlico)   | <b>SR</b> |             | <b>S1B,S3N</b> | <b>G5</b>   |
| <i>Catharus guttatus</i><br><b>Hermit Thrush</b><br>M: spruce-fir forests; sparingly in northern hardwood forests [breeding evidence only] (Ashe, Avery, Buncombe, Graham, Haywood, Jackson, McDowell, Mitchell, Swain, Transylvania, Watauga, Yancey)  | <b>SR</b> |             | <b>S2B,S5N</b> | <b>G5</b>   |
| <i>Catharus ustulatus</i><br><b>Swainson's Thrush</b><br>M: spruce-fir forests [breeding evidence only] (Buncombe, Mitchell, Yancey)  | <b>SR</b> |             | <b>S1B,S5N</b> | <b>G5</b>   |
| <i>Certhia americana</i><br><b>Brown Creeper</b><br>M: high elevation forests, favoring spruce-fir mixed with hardwoods [breeding evidence only] (Avery, Buncombe, Burke, Caldwell, Clay, Graham, Haywood, Jackson, Macon, Madison, McDowell, Mitchell, Swain, Transylvania, Watauga, Yancey) | <b>SC</b> |             | <b>S3B,S5N</b> | <b>G5</b>   |
| <i>Charadrius melodus circumcinctus</i><br><b>Piping Plover - Interior subspecies</b><br>T: ocean beaches and island-end flats [wintering only]   | <b>E</b>  | <b>E</b>    | <b>S1N</b>     | <b>G3T3</b> |

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|---|-----------|----------|------------------|-------------|
|   | N.C.      | U.S.     | N.C              | Global      |
| <i>Charadrius melodus melodus</i><br><b>Piping Plover - Atlantic Coast subspecies</b><br>T: ocean beaches and island-end flats [breeding evidence only] (Brunswick, Carteret, Currituck, Dare, Hyde, New Hanover, Onslow, Pender)                                     | <b>T</b>  | <b>T</b> | <b>S1B,S1N</b>   | <b>G3T3</b> |
| <i>Charadrius wilsonia</i><br><b>Wilson's Plover</b><br>T: beaches, island-end flats, estuarine islands [breeding evidence only] (Brunswick, Carteret, Dare, Hyde, New Hanover, Onslow, Pender)   | <b>SC</b> |          | <b>S2B</b>       | <b>G5</b>   |
| <i>Chondestes grammacus</i><br><b>Lark Sparrow</b><br>S: barren, sandy fields with scattered saplings in the sandhills region [breeding evidence only] (Cumberland, Hoke, Montgomery, Moore, Richmond, Scotland)  | <b>SR</b> |          | <b>S1B</b>       | <b>G5</b>   |
| <i>Circus cyaneus</i><br><b>Northern Harrier</b><br>T: extensive brackish marshes (for nesting) [breeding evidence only] (Carteret, Dare, Hyde)   | <b>SR</b> |          | <b>S1B,S4N</b>   | <b>G5</b>   |
| <i>Coccyzus erythrophthalmus</i><br><b>Black-billed Cuckoo</b><br>M: deciduous forests, mainly at higher elevations [breeding evidence only] (Ashe, Avery, Buncombe, Burke, Caldwell, Haywood, Henderson, Jackson, McDowell, Mitchell, Transylvania, Watauga, Yancey) | <b>SR</b> |          | <b>S2B</b>       | <b>G5</b>   |
| <i>Columbina passerina</i><br><b>Common Ground-Dove</b><br>T: dunes, sandy fields, margins of maritime woods and thickets [breeding evidence only] (Brunswick*, New Hanover*, Pender*)  | <b>SR</b> |          | <b>SXB</b>       | <b>G5</b>   |
| <i>Dolichonyx oryzivorus</i><br><b>Bobolink</b><br>M: meadows and other grasslands [breeding evidence only] (Ashe, Haywood, Henderson, Transylvania, Watauga)   | <b>SR</b> |          | <b>S1B</b>       | <b>G5</b>   |
| <i>Egretta caerulea</i><br><b>Little Blue Heron</b><br>TC: forests or thickets on maritime islands, rarely in swamps or at ponds [breeding evidence only] (Brunswick, Carteret, Columbus, Cumberland, Currituck, Dare, Hyde, Jones, New Hanover, Pender, Robeson)     | <b>SC</b> |          | <b>S3B,S3N</b>   | <b>G5</b>   |
| <i>Egretta thula</i><br><b>Snowy Egret</b><br>TC: forests or thickets on maritime islands, rarely in swamps or at ponds [breeding evidence only] (Brunswick, Carteret, Columbus, Currituck, Dare, Hyde, New Hanover, Robeson)   | <b>SC</b> |          | <b>S2S3B,S3N</b> | <b>G5</b>   |



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|--|-----------|-------------|------------------|-------------|
|  | N.C.      | U.S.        | N.C              | Global      |
| <i>Egretta tricolor</i><br><b>Tricolored Heron</b><br>T: forests or thickets on maritime islands [breeding evidence only] (Brunswick, Carteret, Currituck, Dare, Hyde, New Hanover)  | <b>SC</b> |             | <b>S3B,S3N</b>   | <b>G5</b>   |
| <i>Elanoides forficatus</i><br><b>Swallow-tailed Kite</b><br>C: swamps and bottomlands near lower Cape Fear River, often forages over nearby fields or marshes [breeding evidence only] (Bladen)   | <b>SR</b> |             | <b>S1B</b>       | <b>G5</b>   |
| <i>Empidonax alnorum</i><br><b>Alder Flycatcher</b><br>M: high elevation shrub/sapling thickets [breeding evidence only] (Alleghany, Ashe, Avery, Buncombe, Haywood, Jackson, Mitchell, Watauga, Yancey)   | <b>SR</b> |             | <b>S2B</b>       | <b>G5</b>   |
| <i>Falco peregrinus anatum</i><br><b>American Peregrine Falcon</b><br>MT: cliffs (nesting); coastal ponds and mudflats (foraging in winter) [breeding evidence; regular wintering sites] (Alleghany*, Avery, Brunswick, Buncombe, Burke, Carteret, Dare, Haywood, Henderson, Hyde, Jackson, Macon, Madison, Mecklenburg, Rutherford, Stokes*, Surry, Swain, Transylvania, Wilkes*, Yancey)   | <b>E</b>  |             | <b>S1B,S2N</b>   | <b>G4T4</b> |
| <i>Falco sparverius</i><br><b>American Kestrel</b><br>MPSC: open country, such as extensive farmland; nests in cavities [breeding evidence only] (records not yet entered)   | <b>SR</b> |             | <b>S2B,S5N</b>   | <b>G5</b>   |
| <i>Gelochelidon nilotica</i> (= <i>G. nilotica aranea</i> )<br><b>Gull-billed Tern</b><br>T: sand flats on maritime islands [breeding evidence only] (Brunswick, Carteret, Dare, Hyde, New Hanover, Onslow)  | <b>T</b>  |             | <b>S1S2B</b>     | <b>G5</b>   |
| <i>Haematopus palliatus</i><br><b>American Oystercatcher</b><br>T: estuaries, oyster beds, mudflats [breeding evidence only] (Brunswick, Carteret, Dare, Hyde, New Hanover, Onslow, Pender)  | <b>SC</b> |             | <b>S2S3B,S3N</b> | <b>G5</b>   |
| <i>Haliaeetus leucocephalus</i><br><b>Bald Eagle</b><br>PCTM: mature forests near large bodies of water (nesting); rivers, lakes, and sounds (foraging) [breeding evidence only] (Anson, Beaufort, Bertie, Bladen, Brunswick, Burke, Cabarrus, Camden*, Carteret, Catawba, Chatham, Cherokee, Chowan, Clay, Cleveland, Columbus, Craven, Currituck, Dare, Davidson, Durham, Edgecombe, Franklin, Gaston, Gates, Graham, Granville, Guilford, Halifax, Harnett*, Haywood, Hyde, Iredell, Johnston, Jones, Lee*, Lenoir, Macon, Martin, Mecklenburg, Montgomery, Nash, New Hanover, Northampton, Onslow, Orange, Pamlico, Pasquotank, Pender, Perquimans, Pitt, Rowan, Rutherford, Stanly, Surry, Swain, Tyrrell, Union, Vance, Wake, Warren, Washington, Wayne, Wilkes, Yadkin) | <b>T</b>  | <b>BGPA</b> | <b>S3B,S3N</b>   | <b>G5</b>   |

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|--|-----------|------------|------------------|-------------|
|  | N.C.      | U.S.       | N.C              | Global      |
| <i>Himantopus mexicanus</i><br><b>Black-necked Stilt</b><br>T: fresh or brackish ponds and impoundments [breeding evidence only] (Beaufort, Brunswick, Carteret, Currituck, Dare, New Hanover, Onslow, Pamlico)  | <b>SR</b> |            | <b>S1B</b>       | <b>G5</b>   |
| <i>Hydroprogne caspia</i><br><b>Caspian Tern</b><br>T: sand flats on maritime islands [breeding evidence only] (Dare, Hyde)  | <b>SR</b> |            | <b>S1B,S2N</b>   | <b>G5</b>   |
| <i>Ixobrychus exilis</i><br><b>Least Bittern</b><br>TCP: fresh or brackish marshes [breeding evidence only] (Beaufort, Brunswick, Carteret, Craven*, Currituck, Dare, Hyde, Moore*, New Hanover, Onslow, Pamlico, Pender, Tyrrell*, Washington, Wayne) | <b>SC</b> |            | <b>S2S3B</b>     | <b>G5</b>   |
| <i>Laterallus jamaicensis</i><br><b>Black Rail</b><br>TCP: brackish marshes, rarely fresh marshes [breeding evidence only] (Beaufort, Carteret, Currituck, Dare, Hyde, New Hanover, Onslow, Pamlico)   | <b>SC</b> | <b>FSC</b> | <b>S2S3B,S2N</b> | <b>G3G4</b> |
| <i>Loxia curvirostra</i><br><b>Red Crossbill</b><br>M: coniferous forests, preferably spruce-fir (Ashe, Avery, Buncombe, Burke, Caldwell, Haywood, Jackson, McDowell, Mitchell, Swain, Transylvania, Watauga, Yancey)                                  | <b>SC</b> | <b>FSC</b> | <b>S3B,S3N</b>   | <b>G5</b>   |
| <i>Mycteria americana</i><br><b>Wood Stork</b><br>CT: swamps, fresh or brackish ponds (foraging) [breeding evidence and regular non-breeding sites] (Bladen, Brunswick, Columbus, Robeson, Sampson)  | <b>E</b>  | <b>T</b>   | <b>S1B,S1N</b>   | <b>G4</b>   |
| <i>Nyctanassa violacea</i><br><b>Yellow-crowned Night-Heron</b><br>CPT: inland swamps; woods or thickets on maritime islands [breeding evidence only] (Carteret, Dare, Durham, Forsyth, Guilford, Mecklenburg)   | <b>SR</b> |            | <b>S2B</b>       | <b>G5</b>   |
| <i>Passerculus sandwichensis</i><br><b>Savannah Sparrow</b><br>M: grassy fields and pastures [breeding evidence only] (Alleghany, Ashe, Watauga)   | <b>SR</b> |            | <b>S2B,S5N</b>   | <b>G5</b>   |
| <i>Passerina ciris</i><br><b>Painted Bunting</b><br>T: maritime shrub thickets and forest edges [breeding evidence only] (Brunswick, Carteret, New Hanover, Onslow, Pender)  | <b>SC</b> | <b>FSC</b> | <b>S3B</b>       | <b>G5</b>   |
| <i>Pelecanus occidentalis</i><br><b>Brown Pelican</b><br>T: maritime islands [breeding evidence only] (Brunswick, Carteret, Dare, Hyde, New Hanover)   | <b>SR</b> |            | <b>S3B,S4N</b>   | <b>G4</b>   |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence)  | Status |      | Rank    |        |
|--|--------|------|---------|--------|
|  | N.C.   | U.S. | N.C     | Global |
| <i>Peucaea aestivalis</i><br><b>Bachman's Sparrow</b><br>CSP: open longleaf pine forests, old fields [breeding evidence only] (Bladen, Brunswick, Buncombe*, Carteret, Chatham, Columbus, Craven, Cumberland, Halifax, Harnett, Hoke, Jones, Macon*, Moore, New Hanover, Onslow, Pender, Richmond, Robeson*, Sampson, Scotland, Wake*, Warren*)  | SC     | FSC  | S3B,S2N | G3     |
| <i>Phalacrocorax auritus</i><br><b>Double-crested Cormorant</b><br>CPT: lakes with scattered trees, coastal sand bars (nesting) [breeding evidence only] (Carteret, Chatham, Craven)   | SR     |      | S1B,S5N | G5     |
| <i>Picoides borealis</i><br><b>Red-cockaded Woodpecker</b><br>CSP: mature open pine forests, mainly in longleaf pine [breeding evidence only] (Anson*, Beaufort, Bertie*, Bladen, Brunswick, Camden, Carteret, Chatham*, Columbus, Craven, Cumberland, Currituck, Dare, Duplin*, Edgecombe*, Gates, Greene*, Halifax*, Harnett, Hertford, Hoke, Hyde, Johnston, Jones, Lee*, Lenoir*, Montgomery, Moore, Nash*, New Hanover, Northampton*, Onslow, Pamlico*, Pender, Pitt*, Richmond, Robeson, Sampson, Scotland, Tyrrell, Wake*, Washington, Wayne*, Wilson*) | E      | E    | S2      | G3     |
| <i>Plegadis falcinellus</i><br><b>Glossy Ibis</b><br>T: forests or thickets on maritime islands [breeding evidence only] (Brunswick, Carteret, Currituck, Dare, Hyde, New Hanover)   | SC     |      | S1S2B   | G5     |
| <i>Poecile atricapillus</i><br><b>Black-capped Chickadee</b><br>M: high elevation forests, mainly spruce-fir [breeding evidence only] (Avery, Buncombe*, Caldwell, Haywood, Jackson, Swain, Transylvania, Watauga, Yancey*)  | SC     | FSC  | S3      | G5     |
| <i>Poocetes gramineus</i><br><b>Vesper Sparrow</b><br>M: high elevation pastures and grassy fields [breeding evidence only] (Ashe, Avery, Haywood, Mitchell, Watauga)  | SC     |      | S2B,S2N | G5     |
| <i>Porphyrio martinicus</i><br><b>Purple Gallinule</b><br>C: freshwater ponds with floating vegetation [breeding evidence only] (Brunswick*, Carteret*, Onslow*, Robeson*)   | SR     |      | SHB     | G5     |
| <i>Riparia riparia</i><br><b>Bank Swallow</b><br>MP: high, vertical banks for nesting [breeding evidence only] (Avery, Wilkes*)  | SR     |      | S1B     | G5     |
| <i>Rynchops niger</i><br><b>Black Skimmer</b><br>T: sand flats on maritime islands [breeding evidence only] (Brunswick, Carteret, Dare, Hyde, New Hanover, Onslow, Pender)   | SC     |      | S2B,S3N | G5     |

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|--|-----------|------------|------------------|-------------|
|  | N.C.      | U.S.       | N.C              | Global      |
| <b><i>Setophaga cerulea</i></b><br><b>Cerulean Warbler</b><br>MC: mature hardwood forests; steep slopes and coves in mountains, natural levees in Coastal Plain [breeding evidence only] (Alleghany*, Ashe, Bertie, Buncombe, Caldwell, Clay, Graham, Halifax, Haywood, Henderson, Jackson*, Johnston*, Macon, Madison, Martin, McDowell, Mitchell, Northampton, Polk, Rutherford, Swain, Transylvania, Watauga, Wilkes, Yancey) | <b>SC</b> | <b>FSC</b> | <b>S2B</b>       | <b>G4</b>   |
| <b><i>Setophaga coronata</i></b><br><b>Yellow-rumped Warbler</b><br>M: spruce-fir forests, especially in immature stands [breeding evidence only] (Avery, Haywood, Mitchell, Swain, Yancey)  | <b>SR</b> |            | <b>S1B,S5N</b>   | <b>G5</b>   |
| <b><i>Setophaga magnolia</i></b><br><b>Magnolia Warbler</b><br>M: spruce-fir forests, especially in immature stands [breeding evidence only] (Avery, Buncombe, Caldwell, Graham, Haywood, Jackson, McDowell, Mitchell, Transylvania, Watauga, Yancey)  | <b>SR</b> |            | <b>S2B</b>       | <b>G5</b>   |
| <b><i>Setophaga virens waynei</i></b><br><b>Black-throated Green Warbler - Coastal Plain population</b><br>C: nonriverine wetland forests, especially where white cedar or cypress are mixed with hardwoods [breeding evidence only] (Beaufort, Bladen, Brunswick, Camden, Carteret, Craven, Cumberland, Dare, Gates, Hyde, Jones, Onslow, Pamlico, Tyrrell, Washington)   | <b>SR</b> | <b>FSC</b> | <b>S2S3B</b>     | <b>G5T3</b> |
| <b><i>Sphyrapicus varius</i> (= <i>S. varius appalachiensis</i>)</b><br><b>Yellow-bellied Sapsucker</b><br>M: mature, open hardwoods with scattered dead trees [breeding evidence only] (Ashe, Avery, Buncombe, Clay*, Graham, Haywood, Jackson, Macon, Madison, Mitchell*, Swain, Transylvania, Watauga, Yancey)  | <b>SC</b> |            | <b>S2S3B,S5N</b> | <b>G5</b>   |
| <b><i>Spiza americana</i></b><br><b>Dickcissel</b><br>PC: fallow fields and pastures with tall forbs [breeding evidence for consistent year-to-year sites only] (Carteret)   | <b>SR</b> |            | <b>S2B,SZN</b>   | <b>G5</b>   |
| <b><i>Sterna dougallii dougallii</i></b><br><b>Roseate Tern</b><br>T: sand flats on maritime islands [breeding evidence only] (Carteret*, Dare*)   | <b>E</b>  | <b>E</b>   | <b>SHB</b>       | <b>G4T3</b> |
| <b><i>Sterna hirundo</i></b><br><b>Common Tern</b><br>T: sand flats on maritime islands [breeding evidence only] (Brunswick*, Carteret, Dare, Hyde, New Hanover, Onslow, Pamlico*, Pender)   | <b>SC</b> |            | <b>S2B</b>       | <b>G5</b>   |
| <b><i>Sternula antillarum</i></b><br><b>Least Tern</b><br>T: beaches, sand flats, open dunes, gravel rooftops [breeding evidence only] (Brunswick, Carteret, Craven, Currituck, Dare, Hyde, New Hanover, Onslow, Pender)   | <b>SC</b> |            | <b>S3B</b>       | <b>G4</b>   |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence)  | Status    |            | Rank             |           |
|--|-----------|------------|------------------|-----------|
|  | N.C.      | U.S.       | N.C              | Global    |
| <i>Thryomanes bewickii</i><br><b>Bewick's Wren</b><br>M: woodland borders or openings, farmlands or brushy fields, at high elevations [breeding evidence only] (Ashe*, Avery*, Buncombe*, Haywood*, Henderson*, Jackson*, Macon*, Transylvania*, Watauga*) | <b>E</b>  |            | <b>SXB</b>       | <b>G5</b> |
| <i>Tyto alba</i><br><b>Barn Owl</b><br>MPCT: extensive open country, nesting in old buildings, silos, large tree cavities [breeding evidence only] (Madison)   | <b>SR</b> |            | <b>S2S3B,S3N</b> | <b>G5</b> |
| <i>Vermivora chrysoptera</i><br><b>Golden-winged Warbler</b><br>M: old fields and successional hardwoods [breeding evidence only] (Alleghany, Ashe, Avery, Clay, Graham, Haywood, Jackson, Macon, Madison, Watauga)  | <b>SC</b> | <b>FSC</b> | <b>S2S3B</b>     | <b>G4</b> |
| <i>Vermivora cyanoptera</i><br><b>Blue-winged Warbler</b><br>M: low elevation brushy fields and thickets [breeding evidence only] (Alleghany, Ashe, Buncombe*, Cherokee, Graham*, Macon, Rutherford)   | <b>SR</b> |            | <b>S2B</b>       | <b>G5</b> |
| <i>Vireo gilvus</i><br><b>Warbling Vireo</b><br>MP: groves of hardwoods along rivers and streams [breeding evidence only] (Alleghany, Ashe, Avery, Bertie, Buncombe, Caldwell, Cleveland, Forsyth, Halifax, Henderson, Macon*, Orange, Wake, Watauga)      | <b>SR</b> |            | <b>S2B</b>       | <b>G5</b> |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence) | Status |      | Rank |        |
|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

### Reptiles

|  |           |               |                |             |
|--|-----------|---------------|----------------|-------------|
| <i>Alligator mississippiensis</i><br><b>American Alligator</b><br>CT: fresh to slightly brackish lakes, ponds, rivers, and marshes (Beaufort*, Bladen, Brunswick, Carteret, Columbus, Craven, Cumberland*, Currituck, Dare, Duplin, Gates, Hoke*, Hyde, Jones, Lenoir*, New Hanover, Onslow, Pamlico, Pender, Pitt*, Robeson, Sampson, Scotland, Tyrrell, Washington)  | <b>T</b>  | <b>T(S/A)</b> | <b>S3</b>      | <b>G5</b>   |
| <i>Apalone spinifera spinifera</i><br><b>Eastern Spiny Softshell</b><br>M: large streams in the French Broad system (Buncombe, Henderson*, Madison)  | <b>SC</b> |               | <b>S1</b>      | <b>G5T5</b> |
| <i>Caretta caretta</i><br><b>Loggerhead Seaturtle</b><br>T: nests on beaches; forages in ocean and sounds (Brunswick, Carteret, Currituck, Dare, Hyde, New Hanover, Onslow, Pender)  | <b>T</b>  | <b>T</b>      | <b>S3B,S3N</b> | <b>G3</b>   |
| <i>Chelonia mydas</i><br><b>Green Seaturtle</b><br>T: nests on beaches; forages in ocean and sounds (Brunswick, Carteret, Dare, Hyde, New Hanover, Onslow, Pender)   | <b>T</b>  | <b>T</b>      | <b>S1B,SUN</b> | <b>G3</b>   |
| <i>Crotalus adamanteus</i><br><b>Eastern Diamondback Rattlesnake</b><br>C: pine flatwoods, savannas, pine-oak sandhills (Bladen*, Brunswick*, Carteret, Columbus*, Craven*, Cumberland*, Duplin*, Jones*, New Hanover*, Onslow, Pender, Robeson*, Sampson*)  | <b>E</b>  | <b>FSC</b>    | <b>S1</b>      | <b>G4</b>   |
| <i>Crotalus horridus</i><br><b>Timber Rattlesnake</b><br>CMP: wetland forests in the Coastal Plain; rocky, upland forests elsewhere [NHP tracking only den/hibernacula sites and selected isolated populations] (Alexander, Alleghany, Anson, Ashe, Avery*, Beaufort, Bertie, Bladen, Brunswick, Buncombe, Burke, Cabarrus, Camden, Carteret, Catawba, Cherokee, Chowan, Clay*, Cleveland, Columbus, Craven, Cumberland, Currituck, Dare, Davidson, Duplin, Durham, Gaston, Graham, Granville, Haywood, Henderson, Hoke, Hyde, Jackson, Jones, Lenoir, Lincoln, Macon, Madison, McDowell, Mecklenburg, Mitchell*, Montgomery, Moore, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Pitt, Polk, Randolph, Richmond, Robeson, Rutherford, Sampson, Scotland, Stanly, Stokes, Surry, Swain, Transylvania, Tyrrell, Union, Wake, Washington, Watauga, Wayne, Wilkes, Yadkin) | <b>SC</b> |               | <b>S3</b>      | <b>G4</b>   |
| <i>Deirochelys reticularia</i><br><b>Chicken Turtle</b><br>SC: quiet waters of ponds, ditches, and sluggish streams (Bladen, Brunswick, Carteret, Columbus, Craven*, Cumberland, Dare*, Duplin*, Hoke, New Hanover, Onslow, Pender, Richmond, Robeson, Sampson, Scotland, Wayne*)  | <b>SR</b> |               | <b>S3</b>      | <b>G5</b>   |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence)   | Status    |               | Rank           |              |
|---|-----------|---------------|----------------|--------------|
|   | N.C.      | U.S.          | N.C            | Global       |
| <i>Dermochelys coriacea</i><br><b>Leatherback Seaturtle</b><br>T: oceans, rarely in sounds (Brunswick, Carteret, Craven*, Currituck, Dare, Hyde, New Hanover, Onslow)   | <b>E</b>  | <b>E</b>      | <b>S1B,SUN</b> | <b>G2</b>    |
| <i>Farancia erythrogramma</i><br><b>Rainbow Snake</b><br>CS: swamps, lakes, rivers, and other sluggish water (Beaufort, Bertie, Bladen, Brunswick, Camden*, Carteret*, Chowan, Columbus, Craven, Cumberland*, Currituck, Dare, Duplin*, Gates, Harnett, Hertford*, Hoke*, Hyde, Johnston*, Jones*, Lenoir*, Moore*, New Hanover, Onslow*, Pamlico*, Pasquotank*, Pender, Perquimans*, Pitt*, Robeson, Sampson, Tyrrell, Washington) | <b>SR</b> |               | <b>S3</b>      | <b>G4</b>    |
| <i>Glyptemys muhlenbergii</i><br><b>Bog Turtle</b><br>MP: bogs, wet pastures, wet thickets (Alexander*, Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Catawba, Cherokee*, Clay, Forsyth, Gaston, Graham, Henderson, Iredell*, Macon, McDowell, Mitchell, Rutherford, Surry, Transylvania, Watauga, Wilkes, Yancey)   | <b>T</b>  | <b>T(S/A)</b> | <b>S2</b>      | <b>G3</b>    |
| <i>Graptemys geographica</i><br><b>Common Map Turtle</b><br>M: rivers in the Hiwassee system (Cherokee)   | <b>SR</b> |               | <b>S1</b>      | <b>G5</b>    |
| <i>Heterodon simus</i><br><b>Southern Hognose Snake</b><br>SC: sandy woods, particularly pine-oak sandhills (Bladen, Brunswick, Carteret*, Craven*, Cumberland*, Duplin, Edgecombe, Hoke, Jones*, Moore, New Hanover, Onslow, Pender, Pitt*, Richmond, Robeson, Sampson, Scotland, Wake, Wayne)   | <b>SC</b> | <b>FSC</b>    | <b>S2</b>      | <b>G2</b>    |
| <i>Lampropeltis getula sticticeps</i><br><b>Outer Banks Kingsnake</b><br>T: maritime forests, thickets, and grasslands on the Outer Banks (endemic to North Carolina) (Carteret*, Currituck*, Dare*, Hyde)  | <b>SC</b> |               | <b>S2</b>      | <b>G5T2Q</b> |
| <i>Lepidochelys kempii</i><br><b>Kemp's Ridley Seaturtle</b><br>T: ocean and sounds (Beaufort, Brunswick, Carteret, Currituck, Dare, Hyde, New Hanover, Onslow, Pamlico)  | <b>E</b>  | <b>E</b>      | <b>S1B,SUN</b> | <b>G1</b>    |
| <i>Liodytes pygaea</i><br><b>Black Swampsnake</b><br>C: in lush vegetation of ponds, ditches, or sluggish streams (Brunswick*, Carteret*, Craven*, Dare*, Hyde, New Hanover*, Onslow, Pender, Tyrrell*)   | <b>SR</b> |               | <b>S2</b>      | <b>G5</b>    |
| <i>Liodytes rigida</i><br><b>Glossy Crayfish Snake</b><br>C: marshes, cypress ponds, other wetlands (Bladen, Brunswick, Carteret*, Columbus, Craven, Dare, Hoke*, Hyde*, Jones*, New Hanover*, Onslow, Robeson, Tyrrell)  | <b>SR</b> |               | <b>S2S3</b>    | <b>G5</b>    |

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|---|-----------|------------|-------------|-------------|
|   | N.C.      | U.S.       | N.C         | Global      |
| <b><i>Malaclemys terrapin</i></b><br><b>Diamondback Terrapin</b><br>T: salt or brackish marshes, estuaries (Beaufort, Brunswick, Carteret, Dare, Hyde, New Hanover, Onslow, Pamlico, Pender)  | <b>SC</b> | <b>FSC</b> | <b>S3</b>   | <b>G4</b>   |
| <b><i>Masticophis flagellum</i></b><br><b>Coachwhip</b><br>SCTP: dry and sandy woods, mainly in pine/oak sandhills (Anson, Bladen, Brunswick*, Carteret*, Columbus, Craven*, Cumberland, Harnett, Hoke, Lenoir, Montgomery, Moore, New Hanover, Onslow, Pender, Richmond, Sampson, Scotland, Stanly, Union, Wayne)  | <b>SR</b> |            | <b>S3</b>   | <b>G5</b>   |
| <b><i>Micrurus fulvius</i> (= <i>M. fulvius fulvius</i>)</b><br><b>Eastern Coralsnake</b><br>CS: pine-oak sandhills, sandy flatwoods, maritime forests (Bladen, Brunswick*, Cumberland*, Harnett*, Hoke*, Moore*, New Hanover, Onslow*, Pender, Robeson, Scotland*)   | <b>E</b>  |            | <b>S1</b>   | <b>G5</b>   |
| <b><i>Nerodia sipedon williamengelsi</i></b><br><b>Carolina Watersnake</b><br>T: salt or brackish marshes (endemic to North Carolina) (Beaufort, Carteret, Currituck, Dare, Hyde, Pamlico)  | <b>SC</b> |            | <b>S3</b>   | <b>G5T3</b> |
| <b><i>Ophisaurus attenuatus</i></b><br><b>Slender Glass Lizard</b><br>CPSM: old fields, wooded edges, open woods (Beaufort, Bertie, Bladen, Brunswick, Chatham, Cherokee, Chowan, Clay, Columbus, Durham, Edgecombe, Franklin, Gates, Halifax, Harnett, Iredell, Johnston, Lenoir, Orange, Pitt, Stanly, Vance, Wake, Warren, Wilson) (Bertie*, Bladen*, Brunswick*, Chatham*, Cherokee, Chowan, Columbus*, Durham*, Gates, Harnett*, Johnston*, Lenoir*, Pender, Pitt, Stanly*, Vance*, Wake, Warren*) | <b>SR</b> |            | <b>S2</b>   | <b>G5</b>   |
| <b><i>Ophisaurus mimicus</i></b><br><b>Mimic Glass Lizard</b><br>C: pine flatwoods, savannas, pine/oak sandhills (Bladen*, Brunswick, Carteret, Columbus*, New Hanover*, Onslow*, Pender, Sampson*)   | <b>SC</b> | <b>FSC</b> | <b>S1</b>   | <b>G3</b>   |
| <b><i>Pituophis melanoleucus melanoleucus</i></b><br><b>Northern Pinesnake</b><br>SCM: dry and sandy woods, mainly in pine/oak sandhills (Brunswick, Cherokee, Clay, Cumberland*, Graham*, Harnett, Hoke, Montgomery, Moore, New Hanover, Richmond, Rutherford, Scotland, Swain*)   | <b>SC</b> | <b>FSC</b> | <b>S2</b>   | <b>G4T4</b> |
| <b><i>Plestiodon anthracinus</i></b><br><b>Coal Skink</b><br>M: rocky slopes, wooded hillsides, roadbanks (Avery, Buncombe*, Caldwell, Clay, Graham*, Haywood, Henderson*, Jackson, Macon, Polk, Rutherford, Swain*, Transylvania, Wilkes)  | <b>SR</b> |            | <b>S2S3</b> | <b>G5</b>   |



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|---|-----------|------|-----------|---------------|
|   | N.C.      | U.S. | N.C       | Global        |
| <i>Sistrurus miliarius miliarius</i><br><b>Carolina Pigmy Rattlesnake</b><br>CSP: pine flatwoods, pine/oak sandhills, other pine/oak forests (Beaufort, Bladen, Brunswick, Carteret, Cleveland*, Craven, Cumberland, Gaston, Harnett, Hoke, Hyde, Lee, Montgomery, Moore, New Hanover, Onslow, Pamlico, Pender, Pitt, Richmond, Sampson, Scotland, Tyrrell, Washington) | <b>SC</b> |      | <b>S3</b> | <b>G5T4T5</b> |
| <i>Sternotherus minor</i> (= <i>S. minor peltifer</i> )<br><b>Loggerhead Musk Turtle</b> (= <b>Stripeneck Musk Turtle</b> )<br>M: streams and rivers in Mississippi drainage (Cherokee, Madison)  | <b>SC</b> |      | <b>S1</b> | <b>G5</b>     |
| <i>Trachemys scripta troostii</i><br><b>Cumberland Slider</b><br>M: rivers in French Broad drainage (Madison)   | <b>SR</b> |      | <b>S1</b> | <b>G5T4</b>   |

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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

### Amphibians

|  |           |            |             |                 |
|--|-----------|------------|-------------|-----------------|
| <i>Ambystoma mabeei</i><br><b>Mabee's Salamander</b><br>CS: shallow ephemeral wetlands, such as Carolina bays, vernal pools, and sinkholes (Bladen, Brunswick, Carteret*, Columbus*, Cumberland, Dare*, Duplin, Hoke, New Hanover*, Onslow, Pender*, Perquimans*, Robeson, Sampson, Scotland)  | <b>SR</b> |            | <b>S2</b>   | <b>G4</b>       |
| <i>Ambystoma talpoideum</i><br><b>Mole Salamander</b><br>MP: breeds in fish-free semipermanent woodland ponds; forages in adjacent woodlands (Alleghany, Buncombe, Cherokee, Clay, Davidson, Granville, Guilford, Henderson, Macon, McDowell, Montgomery, Person, Polk, Richmond, Rockingham, Rowan, Stanly, Surry, Transylvania, Union, Yadkin)       | <b>SC</b> |            | <b>S2S3</b> | <b>G5</b>       |
| <i>Ambystoma tigrinum</i> (= <i>A. tigrinum tigrinum</i> )<br><b>Eastern Tiger Salamander</b><br>SC: breeds in fish-free semipermanent ponds; forages in adjacent woods, usually sandy pinewoods (Cumberland, Hoke, Richmond, Robeson, Scotland, Wake)   | <b>T</b>  |            | <b>S2</b>   | <b>G5</b>       |
| <i>Anaxyrus quercicus</i><br><b>Oak Toad</b><br>CS: pine flatwoods and savannas, pine sandhills where near water (Beaufort, Bladen, Brunswick*, Carteret, Craven*, Cumberland, Dare, Duplin*, Gates, Harnett, Hyde*, Johnston*, New Hanover, Onslow, Pamlico*, Pender, Perquimans, Richmond, Robeson, Sampson, Scotland, Tyrrell, Washington, Wilson*) | <b>SR</b> |            | <b>S3</b>   | <b>G5</b>       |
| <i>Aneides aeneus</i><br><b>Green Salamander</b><br>M: damp, shaded crevices of cliffs or rock outcrops in deciduous forests (southern mountains) (Henderson, Jackson, Macon, Polk, Rutherford, Transylvania)  | <b>E</b>  | <b>FSC</b> | <b>S2S3</b> | <b>G3G4</b>     |
| <i>Cryptobranchus alleganiensis alleganiensis</i><br><b>Eastern Hellbender</b><br>M: large and clear fast-flowing streams (Alleghany, Ashe, Avery, Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, Mitchell, Swain, Transylvania, Watauga, Yancey)  | <b>SC</b> | <b>FSC</b> | <b>S3</b>   | <b>G3G4T3T4</b> |
| <i>Desmognathus folkertsi</i><br><b>Dwarf Black-bellied Salamander</b><br>M: small streams and seeps in forests (Clay)   | <b>SR</b> |            | <b>S1</b>   | <b>G2</b>       |
| <i>Desmognathus organi</i><br><b>Northern Pygmy Salamander</b><br>M: spruce-fir and other high elevation forests; northeast of the French Broad River (Ashe, Avery, Buncombe, Caldwell, McDowell*, Mitchell, Watauga, Yancey)  | <b>SR</b> | <b>FSC</b> | <b>S2</b>   | <b>G3</b>       |

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|--|-----------|------------|-------------|-------------|
|  | N.C.      | U.S.       | N.C         | Global      |
| <b><i>Desmognathus wrighti</i></b><br><b>Southern Pygmy Salamander</b><br>M: mid- to high elevation forests, often in spruce-fir; west of the French Broad River (Clay, Haywood, Henderson, Jackson, Macon, Swain, Transylvania)   | <b>SR</b> | <b>FSC</b> | <b>S2S3</b> | <b>G3</b>   |
| <b><i>Eurycea junaluska</i></b><br><b>Junaluska Salamander</b><br>M: forests near seeps and streams in the Cheoah River system [records from Cherokee and Clay represent specimens of uncertain taxonomy] (Cherokee, Clay, Graham)   | <b>T</b>  | <b>FSC</b> | <b>S1S2</b> | <b>G3</b>   |
| <b><i>Eurycea longicauda longicauda</i></b><br><b>Longtail Salamander</b><br>M: moist woods and floodplains; small ponds for breeding (Alleghany*, Clay, Graham, Haywood, Macon, Watauga)  | <b>SC</b> |            | <b>S1S2</b> | <b>G5T5</b> |
| <b><i>Eurycea quadridigitata</i></b><br><b>Dwarf Salamander</b><br>C: pocosins, Carolina bays, pine flatwoods, savannas, and other wetland habitats (Bladen*, Brunswick, Columbus, Hoke, Pender, Robeson, Scotland)  | <b>SC</b> |            | <b>S2</b>   | <b>G5</b>   |
| <b><i>Hemidactylum scutatum</i></b><br><b>Four-toed Salamander</b><br>MPC: pools, bogs, and other wetlands in hardwood forests (Alamance*, Avery, Bladen, Buncombe, Chatham, Cherokee, Clay, Cumberland*, Duplin, Durham, Franklin, Gates, Graham, Granville, Henderson, Macon, McDowell, Mitchell, Montgomery, Moore, Nash, Orange, Pender, Person, Polk*, Randolph, Rockingham, Stanly, Stokes, Surry, Transylvania, Wake, Wilkes, Yadkin) | <b>SC</b> |            | <b>S3</b>   | <b>G5</b>   |
| <b><i>Hyla andersonii</i></b><br><b>Pine Barrens Treefrog</b><br>SC: pocosins, bay forests, boggy areas (Bladen, Cumberland, Harnett, Hoke, Johnston*, Jones, Lee*, Moore, Onslow, Pender, Richmond, Robeson, Sampson, Scotland, Wayne)  | <b>SR</b> |            | <b>S3</b>   | <b>G4</b>   |
| <b><i>Hyla versicolor</i></b><br><b>Common Gray Treefrog</b><br>PM?: deciduous or mixed forests, often near water; primarily near VA border (Caswell, Person, Warren*)   | <b>SR</b> |            | <b>S2S3</b> | <b>G5</b>   |
| <b><i>Necturus lewisi</i></b><br><b>Neuse River Waterdog</b><br>PC: rivers and large streams in Neuse and Tar drainages (endemic to North Carolina) (Beaufort*, Craven, Durham, Edgecombe, Franklin, Granville, Greene, Halifax, Johnston, Jones, Lenoir, Nash, Orange, Person, Pitt, Vance, Wake, Warren, Wayne, Wilson)  | <b>SC</b> | <b>FSC</b> | <b>S2</b>   | <b>G2</b>   |
| <b><i>Necturus maculosus</i></b><br><b>Mudpuppy</b><br>M: rivers and large streams in New, French Broad, and Little Tennessee drainages (Alleghany, Ashe, Buncombe*, Henderson, Macon, Madison, Transylvania)  | <b>SC</b> |            | <b>S1</b>   | <b>G5</b>   |

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| <i>Plethodon amplus</i><br><b>Blue Ridge Gray-cheeked Salamander</b><br>M: mesic forests in the Hickorynut Gorge vicinity (endemic to this area) (Buncombe, Henderson, Rutherford)  | SR     | FSC  | S2   | G2      |
| <i>Plethodon aureolus</i><br><b>Tellico Salamander</b><br>M: forests in the Unicoi Mountains (Cherokee, Graham)   | SR     |      | S2?  | G2G3    |
| <i>Plethodon chatahoochee</i><br><b>Chatahoochee Slimy Salamander</b><br>M: moist forests in the southwestern counties, close to the Georgia border (Cherokee, Clay)  | SR     |      | S1?  | G2G3    |
| <i>Plethodon cheoah</i><br><b>Cheoah Bald Salamander</b><br>M: mesic forests on Cheoah Bald (endemic to this area) (Graham, Swain)  | SR     | FSC  | S1S2 | G1G2    |
| <i>Plethodon meridianus</i><br><b>South Mountain Gray-cheeked Salamander</b><br>P: mesic forests of the South Mountains (endemic to this area) (Burke, Cleveland, McDowell, Rutherford)                                     | SR     | FSC  | S2   | G2      |
| <i>Plethodon ventralis</i><br><b>Southern Zigzag Salamander</b><br>M: moist areas of talus slopes or rock outcrops in hardwood forests (Buncombe, Haywood, Henderson*, Madison, Yancey)                                     | SC     |      | S1   | G4      |
| <i>Plethodon wehrlei</i><br><b>Wehrle's Salamander</b><br>P: upland forests (low mountains near Virginia border) (Alleghany, Stokes, Surry, Wilkes)   | T      |      | S1S2 | G4      |
| <i>Plethodon welleri</i><br><b>Weller's Salamander</b><br>M: high elevation forests in northern mountains, mainly in spruce-fir and to a lesser degree, northern hardwood forests (Ashe, Avery, Mitchell, Watauga*, Yancey) | SC     | FSC  | S2   | G3      |
| <i>Plethodon yonahlossee pop. 1</i> (= <i>P. longicrus</i> )<br><b>Crevice Salamander</b><br>M: Hickorynut Gorge area (endemic to this area); crevices in moist shaded rocks (Buncombe, Henderson, McDowell, Rutherford)    | SC     |      | S2   | G4T1T2Q |
| <i>Pseudacris brachyphona</i><br><b>Mountain Chorus Frog</b><br>M: ditches, pools, and other small wet areas near forests, in extreme southwestern mountains (Cherokee, Clay)   | SC     |      | S2   | G5      |

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| <b><i>Pseudacris nigrita</i></b><br><b>Southern Chorus Frog</b><br>CS: ditches, Carolina bays, and other temporary shallow pools and ponds (Beaufort*, Brunswick*, Carteret*, Columbus*, Cumberland, Hoke, Onslow*, Pender, Pitt*, Robeson, Sampson*, Scotland)                                  | <b>SR</b> |            | <b>S2</b>   | <b>G5</b>    |
| <b><i>Pseudacris ornata</i></b><br><b>Ornate Chorus Frog</b><br>SC: swamps, savannas, wooded ponds and pools (Beaufort*, Bladen, Brunswick*, Carteret*, Craven, Cumberland, Hoke, New Hanover*, Onslow, Robeson*, Sampson*, Scotland)  | <b>SR</b> |            | <b>S1S2</b> | <b>G4</b>    |
| <b><i>Rana capito capito</i></b><br><b>Carolina Gopher Frog</b><br>SC: breeds in temporary fish-free pools; forages in sandy woods, especially pine-oak sandhills (Beaufort*, Bladen*, Brunswick, Carteret, Cumberland, Hoke, Jones*, New Hanover*, Onslow, Pender, Robeson*, Sampson, Scotland) | <b>T</b>  | <b>FSC</b> | <b>S1</b>   | <b>G3</b>    |
| <b><i>Rana heckscheri</i></b><br><b>River Frog</b><br>SC: river floodplains, such as pools or borrow pit ponds (Cumberland*, Moore*, Robeson*, Sampson*, Scotland*)  | <b>SC</b> |            | <b>SH</b>   | <b>G5</b>    |
| <b><i>Rana sylvatica pop. 3</i></b><br><b>Wood Frog -- Coastal Plain population</b><br>C: mesic to moist hardwood forests (Hyde, Tyrrell)  | <b>SR</b> |            | <b>S1</b>   | <b>G5TNR</b> |

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### Freshwater Fishes

|  |           |            |           |             |
|--|-----------|------------|-----------|-------------|
| <i>Acipenser brevirostrum</i><br><b>Shortnose Sturgeon</b><br>TC: brackish water of large rivers and estuaries; spawns in freshwater areas (Anson*, Beaufort*, Bertie, Bladen, Brunswick, Camden, Carteret, Chowan, Columbus, Craven*, Currituck, Dare, Hyde, New Hanover, Onslow*, Pamlico*, Pasquotank, Pender, Perquimans, Pitt*, Richmond*, Tyrrell, Washington) | <b>E</b>  | <b>E</b>   | <b>S1</b> | <b>G3</b>   |
| <i>Acipenser fulvescens</i><br><b>Lake Sturgeon</b><br>M: large rivers of Tennessee drainages (Madison*)   | <b>SC</b> | <b>FSC</b> | <b>SX</b> | <b>G3G4</b> |
| <i>Acipenser oxyrinchus</i><br><b>Atlantic Sturgeon</b><br>TC: coastal waters, estuaries, large rivers (Beaufort, Bertie, Brunswick, Camden, Carteret, Chowan, Craven, Currituck, Dare, Gates, Halifax, Hertford, Hyde, Martin, New Hanover, Northampton, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Pitt, Tyrrell, Washington)                                | <b>E</b>  | <b>E</b>   | <b>S2</b> | <b>G3</b>   |
| <i>Ambloplites cavifrons</i><br><b>Roanoke Bass</b><br>PC: streams in Neuse and Tar systems (Chatham, Durham, Edgecombe*, Franklin, Granville, Halifax, Johnston*, Lee, Montgomery, Moore, Nash, Orange, Person, Pitt*, Randolph, Richmond, Rockingham, Vance, Warren, Wilson)   | <b>SR</b> | <b>FSC</b> | <b>S2</b> | <b>G3</b>   |
| <i>Aplodinotus grunniens</i><br><b>Freshwater Drum</b><br>M: French Broad River (Madison)  | <b>SC</b> |            | <b>S1</b> | <b>G5</b>   |
| <i>Carpionodes carpio</i><br><b>River Carpsucker</b><br>M: French Broad and Cane rivers (Madison, Mitchell, Yancey)  | <b>SC</b> |            | <b>S1</b> | <b>G5</b>   |
| <i>Carpionodes cyprinus</i><br><b>Quillback</b><br>M: French Broad drainage (Davidson, Davie, Halifax, Madison, Mitchell, Northampton, Rockingham, Stokes, Yancey)   | <b>SR</b> |            | <b>S2</b> | <b>G5</b>   |
| <i>Carpionodes sp. cf. cyprinus</i><br><b>Carolina Carpsucker</b><br>P: Yadkin-Pee Dee, Catawba, Broad, and Roanoke drainages (Anson, Burke, Catawba*, Cleveland, Davidson, Davie, Forsyth, Iredell*, McDowell, Mecklenburg*, Montgomery, Polk, Richmond, Rowan, Rutherford, Stanly, Yadkin)   | <b>SR</b> |            | <b>S2</b> | <b>GNR</b>  |
| <i>Carpionodes sp. cf. velifer</i><br><b>Atlantic Highfin Carpsucker</b><br>PC: Catawba, Pee Dee, and Cape Fear rivers (Anson*, Bladen, Catawba*, Gaston*, Iredell*, Mecklenburg*, Richmond*)  | <b>SC</b> | <b>FSC</b> | <b>S1</b> | <b>GNR</b>  |

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| <i>Clinostomus sp. 1</i><br><b>Smoky Dace</b><br>M: Little Tennessee and Hiwassee drainages (Cherokee, Clay, Graham, Jackson, Macon, Swain)   | <b>SC</b> | <b>FSC</b> | <b>S2</b> | <b>G5T3Q</b> |
| <i>Cottus caeruleomentum</i><br><b>Blue Ridge Sculpin</b><br>P: Dan drainage (Stokes)   | <b>SC</b> |            | <b>S1</b> | <b>G4</b>    |
| <i>Cottus carolinae</i><br><b>Banded Sculpin</b><br>M: French Broad and Pigeon drainages (Cherokee, Clay, Haywood, Madison)   | <b>T</b>  |            | <b>S1</b> | <b>G5</b>    |
| <i>Cyprinella sp. 1</i><br><b>Thinlip Chub</b><br>CS: Cape Fear, Lumber, and Pee Dee drainages (Anson, Bladen, Columbus, Cumberland, Hoke, Moore, Richmond, Robeson, Sampson, Scotland)   | <b>SC</b> |            | <b>S2</b> | <b>G2Q</b>   |
| <i>Elassoma boehlkei</i><br><b>Carolina Pygmy Sunfish</b><br>C: streams and canals in Waccamaw drainage (Brunswick, Columbus)   | <b>T</b>  | <b>FSC</b> | <b>S2</b> | <b>G2</b>    |
| <i>Enneacanthus chaetodon</i><br><b>Blackbanded Sunfish</b><br>CS: many drainages, particularly Lumber and Waccamaw (Bertie*, Bladen, Brunswick, Columbus, Craven*, Cumberland, Duplin*, Gates, Harnett*, Hoke, Johnston*, Lenoir*, Martin*, Montgomery*, Moore, Nash*, New Hanover, Pender*, Richmond, Robeson, Sampson, Scotland, Wayne*) | <b>SR</b> |            | <b>S3</b> | <b>G3G4</b>  |
| <i>Enneacanthus obesus</i><br><b>Banded Sunfish</b><br>C: most Atlantic drainages (Beaufort, Bertie, Bladen, Brunswick, Carteret, Columbus, Craven, Cumberland, Dare*, Duplin*, Gates, Harnett*, Hertford, Hyde*, Johnston, Jones, New Hanover, Northampton, Onslow, Pender, Pitt, Robeson, Sampson*, Tyrrell*, Washington)                 | <b>SR</b> |            | <b>S3</b> | <b>G5</b>    |
| <i>Erimonax monachus</i><br><b>Spotfin Chub</b><br>M: Little Tennessee River; formerly in French Broad drainage (Buncombe*, Graham, Macon, Madison*, Swain)   | <b>T</b>  | <b>T</b>   | <b>S1</b> | <b>G2</b>    |
| <i>Erimystax insignis</i><br><b>Blotched Chub</b><br>M: primarily French Broad drainage (Buncombe, Cherokee, Clay, Henderson, Madison, Mitchell, Transylvania, Yancey)  | <b>SR</b> |            | <b>S2</b> | <b>G4</b>    |

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| <i>Etheostoma acuticeps</i><br><b>Sharphead Darter</b><br>M: Toe and Cane drainages (Mitchell, Yancey)  | <b>T</b>  | <b>FSC</b> | <b>S1</b> | <b>G3</b>   |
| <i>Etheostoma collis</i><br><b>Carolina Darter</b><br>P: Roanoke, Tar, Neuse, Cape Fear, Yadkin--Pee Dee, and Catawba drainages (Alamance, Anson, Cabarrus, Chatham, Davidson, Durham*, Granville, Guilford, Mecklenburg, Montgomery, Moore, Orange*, Person, Randolph, Richmond, Stanly, Union, Vance) | <b>SC</b> | <b>FSC</b> | <b>S3</b> | <b>G3</b>   |
| <i>Etheostoma inscriptum</i><br><b>Turquoise Darter</b><br>M: streams of Savannah drainage (Jackson*, Macon*, Transylvania)   | <b>T</b>  |            | <b>S1</b> | <b>G4</b>   |
| <i>Etheostoma jessiae</i><br><b>Blueside Darter</b><br>M: streams in Mills River system (Henderson*)  | <b>SC</b> |            | <b>SX</b> | <b>G4</b>   |
| <i>Etheostoma kanawhae</i><br><b>Kanawha Darter</b><br>M: New drainage (Alleghany, Ashe, Watauga)   | <b>SR</b> |            | <b>S3</b> | <b>G4</b>   |
| <i>Etheostoma mariae</i><br><b>Pinewoods Darter</b><br>SC: streams of Lumber drainage, mainly in the sandhills; and Little Pee Dee drainage (Bladen, Hoke, Montgomery, Moore, Richmond, Robeson*, Scotland)   | <b>SC</b> | <b>FSC</b> | <b>S2</b> | <b>G3</b>   |
| <i>Etheostoma perlongum</i><br><b>Waccamaw Darter</b><br>C: Lake Waccamaw, and sparingly in the Waccamaw River (endemic to North Carolina) (Columbus)   | <b>T</b>  | <b>FSC</b> | <b>S1</b> | <b>G1Q</b>  |
| <i>Etheostoma podostemone</i><br><b>Riverweed Darter</b><br>P: large streams in Dan River system (Caswell, Rockingham, Stokes)  | <b>SC</b> |            | <b>S2</b> | <b>G4</b>   |
| <i>Etheostoma simoterum</i><br><b>Tennessee Snubnose Darter</b><br>M: streams of French Broad drainage (Madison)  | <b>SC</b> |            | <b>S1</b> | <b>G3G4</b> |
| <i>Etheostoma thalassinum</i><br><b>Seagreen Darter</b><br>MP: Catawba and Broad drainages (Alexander, Avery, Buncombe*, Burke, Caldwell, Catawba, Cleveland, Gaston, Lincoln, McDowell, Polk, Rutherford)  | <b>SR</b> |            | <b>S3</b> | <b>G4</b>   |
| <i>Etheostoma vulneratum</i><br><b>Wounded Darter</b><br>M: streams of Little Tennessee and French Broad drainages (Graham, Jackson, Macon, Madison*, Swain, Transylvania)  | <b>SC</b> | <b>FSC</b> | <b>S2</b> | <b>G3</b>   |



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| <i>Exoglossum laurae</i><br><b>Tonguetied Minnow</b><br>M: New drainage (Alleghany, Ashe, Watauga)   | <b>SR</b> |            | <b>S2</b>   | <b>G4</b>   |
| <i>Exoglossum maxillingua</i><br><b>Cutlip Minnow</b><br>P: streams of Dan River system (Rockingham, Stokes)   | <b>SC</b> |            | <b>S1</b>   | <b>G5</b>   |
| <i>Fundulus cf. diaphanus</i><br><b>Lake Phelps Killifish</b><br>C: Lake Phelps (endemic to this lake) (Tyrrell, Washington)   | <b>SR</b> | <b>FSC</b> | <b>S1</b>   | <b>G1Q</b>  |
| <i>Fundulus chrysotus</i><br><b>Golden Topminnow</b><br>C: Waccamaw drainage (Brunswick, Columbus)   | <b>SR</b> |            | <b>S1S3</b> | <b>G5</b>   |
| <i>Fundulus waccamensis</i><br><b>Waccamaw Killifish</b><br>C: Lake Waccamaw (endemic to North Carolina) (Columbus)  | <b>SC</b> | <b>FSC</b> | <b>S1</b>   | <b>G1</b>   |
| <i>Heterandria formosa</i><br><b>Least Killifish</b><br>C: streams and lakes near Wilmington (Brunswick, New Hanover, Pender)  | <b>SC</b> |            | <b>S2</b>   | <b>G5</b>   |
| <i>Hiodon tergisus</i><br><b>Mooneye</b><br>M: French Broad River (Henderson*, Madison)  | <b>SC</b> |            | <b>S1</b>   | <b>G5</b>   |
| <i>Hybopsis rubrifrons</i><br><b>Rosyface Chub</b><br>M: Savannah drainage (Transylvania)  | <b>T</b>  |            | <b>S1</b>   | <b>G4</b>   |
| <i>Ichthyomyzon bdellium</i><br><b>Ohio Lamprey</b><br>M: French Broad and Cane drainages (Madison, Mitchell, Yancey)  | <b>SR</b> |            | <b>S1</b>   | <b>G3G4</b> |
| <i>Ictiobus bubalus</i><br><b>Smallmouth Buffalo</b><br>M: French Broad drainage [reservoir populations in Atlantic Slope are not tracked] (Anson, Davidson, Davie, Madison, Mitchell, Montgomery, Richmond, Stanly, Yancey) | <b>SR</b> |            | <b>S1</b>   | <b>G5</b>   |
| <i>Ictiobus niger</i><br><b>Black Buffalo</b><br>M: French Broad River (Madison)   | <b>SR</b> |            | <b>S1</b>   | <b>G5</b>   |

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| <i>Lampetra aepyptera</i><br><b>Least Brook Lamprey</b><br>CP: Tar and Neuse drainages (Edgecombe, Franklin, Halifax, Johnston, Jones*, Lenoir, Pitt*, Wake, Warren)                   | <b>T</b>  |            | <b>S2</b> | <b>G5</b>    |
| <i>Lethenteron appendix</i><br><b>American Brook Lamprey</b><br>M: French Broad drainage (Madison)   | <b>T</b>  |            | <b>S1</b> | <b>G4</b>    |
| <i>Luxilus chrysocephalus</i><br><b>Striped Shiner</b><br>M: French Broad and Hiwassee drainages (Buncombe, Cherokee, Macon, Mitchell, Yancey)   | <b>SC</b> |            | <b>S1</b> | <b>G5</b>    |
| <i>Menidia extensa</i><br><b>Waccamaw Silverside</b><br>C: Lake Waccamaw (endemic to North Carolina) (Columbus)  | <b>T</b>  | <b>T</b>   | <b>S1</b> | <b>G1</b>    |
| <i>Micropterus coosae</i><br><b>Redeye Bass</b><br>M: Savannah and Broad drainages (Burke*, Henderson, Transylvania)   | <b>SR</b> |            | <b>S1</b> | <b>G5</b>    |
| <i>Moxostoma ariommum</i><br><b>Bigeye Jumprock</b><br>P: Dan drainage (Caswell, Forsyth, Rockingham, Stokes)  | <b>T</b>  |            | <b>S2</b> | <b>G4</b>    |
| <i>Moxostoma breviceps</i><br><b>Smallmouth Redhorse</b><br>M: Tennessee drainages (Cherokee, Jackson, Macon, Madison, Mitchell, Swain, Yancey)  | <b>SR</b> |            | <b>S2</b> | <b>G5</b>    |
| <i>Moxostoma robustum</i><br><b>Robust Redhorse</b><br>P: Pee Dee River; formerly in tributaries of this river (Anson, Burke*, Davidson*, Davie*, Iredell*, Richmond, Stanly*, Union*) | <b>E</b>  | <b>FSC</b> | <b>S1</b> | <b>G1</b>    |
| <i>Moxostoma sp. 2</i><br><b>Sicklefin Redhorse</b><br>M: Hiwassee and Little Tennessee drainages (Cherokee, Clay, Graham, Jackson, Macon, Swain)                                      | <b>T</b>  |            | <b>S2</b> | <b>G2Q</b>   |
| <i>Moxostoma sp. 3</i><br><b>Carolina Redhorse</b><br>P: Cape Fear and Pee Dee drainages (Anson, Chatham, Harnett*, Lee, Montgomery, Moore, Randolph, Richmond, Stanly)                | <b>T</b>  | <b>FSC</b> | <b>S2</b> | <b>G1G2Q</b> |
| <i>Notropis bifrenatus</i><br><b>Bridle Shiner</b><br>C: streams in lower Neuse and Chowan drainages (Craven, Hertford, Jones*)  | <b>E</b>  | <b>FSC</b> | <b>S1</b> | <b>G3</b>    |

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|---|-----------|------------|-------------|------------|
|   | N.C.      | U.S.       | N.C         | Global     |
| <i>Notropis chalybaeus</i><br><b>Ironcolor Shiner</b><br>C: coastal plain rivers and creeks (Beaufort*, Bertie*, Bladen, Brunswick, Carteret, Chowan*, Columbus, Craven*, Cumberland*, Duplin, Edgecombe*, Gates*, Greene*, Halifax*, Harnett, Hertford, Hoke, Johnston, Jones, Lenoir*, Martin, Moore*, Nash*, New Hanover*, Northampton, Onslow, Pender*, Richmond, Robeson, Sampson*, Scotland, Wake, Wayne*, Wilson*) | <b>SR</b> |            | <b>S2S3</b> | <b>G4</b>  |
| <i>Notropis lutipinnis</i><br><b>Yellowfin Shiner</b><br>MP: Savannah, Little Tennessee, and Broad drainages [only the Savannah drainage is listed as SC] (Jackson, Macon, Transylvania)  | <b>SC</b> |            | <b>S2</b>   | <b>G4Q</b> |
| <i>Notropis mekistocholas</i><br><b>Cape Fear Shiner</b><br>P: Cape Fear drainage (endemic to North Carolina) (Chatham, Harnett, Lee, Moore, Randolph)  | <b>E</b>  | <b>E</b>   | <b>S1</b>   | <b>G1</b>  |
| <i>Notropis micropteryx</i><br><b>Highland Shiner</b><br>M: French Broad, Little Tennessee, and Hiwassee drainages (Buncombe, Cherokee, Clay, Haywood, Jackson, Macon, Madison, Mitchell, Swain, Transylvania*, Yancey)   | <b>SR</b> |            | <b>S2</b>   | <b>G5</b>  |
| <i>Notropis sp. 1</i><br><b>Kanawha Rosyface Shiner</b><br>M: New drainage (Alleghany, Ashe, Watauga)   | <b>SR</b> |            | <b>S2</b>   | <b>GNR</b> |
| <i>Notropis volucellus</i><br><b>Mimic Shiner</b><br>MPC: New, French Broad, Little Tennessee, Tar, and Neuse drainages (Alleghany, Ashe, Avery, Durham*, Franklin, Granville, Greene*, Halifax, Johnston*, Jones, Lenoir, Madison, Mitchell, Nash*, Orange*, Person, Pitt*, Swain, Vance, Wake*, Warren, Yancey)   | <b>SR</b> |            | <b>S2</b>   | <b>G5</b>  |
| <i>Noturus eleutherus</i><br><b>Mountain Madtom</b><br>M: French Broad drainage (Madison)   | <b>SC</b> |            | <b>S1</b>   | <b>G4</b>  |
| <i>Noturus flavus</i><br><b>Stonecat</b><br>M: Nolichucky, French Broad, and Little Tennessee drainages (Macon, Madison, Swain, Yancey)   | <b>E</b>  |            | <b>S1</b>   | <b>G5</b>  |
| <i>Noturus furiosus</i><br><b>Carolina Madtom</b><br>CP: Tar and Neuse drainages (endemic to North Carolina) (Craven*, Durham*, Edgecombe, Franklin, Granville, Greene*, Halifax, Johnston, Jones*, Lenoir*, Nash, Pitt*, Vance, Wake*, Wayne*, Wilson)   | <b>T</b>  | <b>FSC</b> | <b>S2</b>   | <b>G2</b>  |
| <i>Noturus gilberti</i><br><b>Orangefin Madtom</b><br>P: Dan drainage (Stokes)  | <b>E</b>  | <b>FSC</b> | <b>S1</b>   | <b>G2</b>  |

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| <i>Noturus sp. 2</i><br><b>Broadtail Madtom</b><br>C: Cape Fear, Waccamaw, and Lumber drainages (Bladen, Brunswick*, Columbus, Cumberland, Duplin*, Hoke, Moore*, Pender*, Richmond*, Robeson, Sampson, Scotland) | <b>SC</b> | <b>FSC</b> | <b>S1</b> | <b>G2</b>   |
| <i>Percina burtoni</i><br><b>Blotchside Logperch</b><br>M: South Toe drainage; formerly in French Broad drainage (Buncombe*, Yancey)  | <b>E</b>  | <b>FSC</b> | <b>S1</b> | <b>G2G3</b> |
| <i>Percina caprodes</i><br><b>Logperch</b><br>M: Tennessee drainages (Alleghany, Ashe, Haywood, Madison)  | <b>T</b>  |            | <b>S1</b> | <b>G5</b>   |
| <i>Percina gymnocephala</i><br><b>Appalachia Darter</b><br>M: New drainage (Alleghany, Ashe, Watauga)   | <b>SR</b> |            | <b>S2</b> | <b>G4</b>   |
| <i>Percina nigrofasciata</i><br><b>Blackbanded Darter</b><br>M: Savannah drainage (Transylvania)  | <b>T</b>  |            | <b>S1</b> | <b>G5</b>   |
| <i>Percina oxyrhynchus</i><br><b>Sharpnose Darter</b><br>M: New drainage (Alleghany, Ashe)  | <b>SC</b> |            | <b>S1</b> | <b>G4</b>   |
| <i>Percina rex</i><br><b>Roanoke Logperch</b><br>P: Dan drainage (Caswell, Rockingham)  | <b>E</b>  | <b>E</b>   | <b>S1</b> | <b>G1G2</b> |
| <i>Percina squamata</i><br><b>Olive Darter</b><br>M: Tennessee drainages (Cherokee, Haywood, Henderson, Jackson, Macon, Madison, Mitchell, Swain, Yancey)   | <b>SC</b> | <b>FSC</b> | <b>S2</b> | <b>G3</b>   |
| <i>Percina williamsi</i> (= <i>P. macrocephala</i> )<br><b>Sickle Darter</b> (= <b>Longhead Darter</b> )<br>M: formerly in French Broad River (Buncombe*)   | <b>SC</b> | <b>FSC</b> | <b>SX</b> | <b>G2</b>   |
| <i>Phenacobius teretulus</i><br><b>Kanawha Minnow</b><br>M: New drainage (Alleghany, Ashe, Watauga)   | <b>SC</b> |            | <b>S3</b> | <b>G3G4</b> |
| <i>Polyodon spathula</i><br><b>Paddlefish</b><br>M: French Broad River (Buncombe*, Henderson*, Madison*, Transylvania*)   | <b>E</b>  | <b>FSC</b> | <b>SH</b> | <b>G4</b>   |

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| <i>Sander canadensis</i><br><b>Sauger</b><br>M: French Broad and Hiwassee drainages (Cherokee*, Haywood*, Madison)  | <b>SR</b> |            | <b>S1</b> | <b>G5</b>   |
| <i>Semotilus lumbee</i><br><b>Sandhills Chub</b><br>S: Sandhills streams in the Cape Fear, Lumber, and Yadkin--Pee Dee drainages (Cumberland, Harnett, Hoke, Montgomery, Moore, Richmond, Scotland) | <b>SC</b> | <b>FSC</b> | <b>S2</b> | <b>G3G4</b> |
| <i>Thoburnia hamiltoni</i><br><b>Rustyside Sucker</b><br>P: Dan drainage (Stokes)   | <b>E</b>  | <b>FSC</b> | <b>S1</b> | <b>G3</b>   |

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|   | N.C.   | U.S. | N.C  | Global |

### Mollusks: Freshwater Bivalves

|  |           |            |           |             |
|--|-----------|------------|-----------|-------------|
| <i>Alasmidonta heterodon</i><br><b>Dwarf Wedgemussel</b><br>PC: Tar and Neuse drainages, mainly near Fall Line (Franklin, Granville, Halifax, Johnston, Nash, Orange*, Vance, Wake, Warren, Wilson)  | <b>E</b>  | <b>E</b>   | <b>S1</b> | <b>G1G2</b> |
| <i>Alasmidonta raveneliana</i><br><b>Appalachian Elktoe</b><br>M: Tennessee drainages (Buncombe*, Graham, Haywood, Henderson, Jackson, Macon, Mitchell, Swain, Transylvania, Yancey)   | <b>E</b>  | <b>E</b>   | <b>S1</b> | <b>G1</b>   |
| <i>Alasmidonta sp. 2</i><br><b>Freshwater Mussel (Uwharries region)</b><br>P: Pee Dee drainage streams in Uwharries region (endemic to North Carolina) (Anson*, Montgomery, Randolph)  | <b>SR</b> |            | <b>S2</b> | <b>G1?</b>  |
| <i>Alasmidonta undulata</i><br><b>Triangle Floater</b><br>PC: Roanoke, Chowan, Tar, Neuse, Cape Fear drainages (Caswell, Chatham, Durham, Edgecombe, Franklin, Gates, Granville, Guilford, Halifax, Harnett, Hertford, Johnston, Jones, Lee, Montgomery, Moore, Nash, Northampton, Orange, Person, Pitt, Randolph, Vance, Wake, Warren, Wayne, Wilson) | <b>T</b>  | <b>FSC</b> | <b>S3</b> | <b>G4</b>   |
| <i>Alasmidonta varicosa</i><br><b>Brook Floater</b><br>PM: along Blue Ridge escarpment of Catawba and Yadkin--Pee Dee drainages; Cape Fear drainage (Burke, Caldwell, Chatham, Forsyth, Granville, McDowell, Moore, Orange, Randolph, Surry, Wilkes, Yadkin)   | <b>E</b>  | <b>FSC</b> | <b>S2</b> | <b>G3</b>   |
| <i>Alasmidonta viridis</i><br><b>Slippershell Mussel</b><br>M: Little Tennessee and French Broad drainages (Henderson, Macon, Swain, Transylvania)   | <b>E</b>  | <b>FSC</b> | <b>S1</b> | <b>G4G5</b> |
| <i>Anodonta couperiana</i><br><b>Barrel Floater</b><br>C: Cape Fear drainage (Bladen, New Hanover*)  | <b>E</b>  |            | <b>S1</b> | <b>G4</b>   |
| <i>Anodonta implicata</i><br><b>Alewife Floater</b><br>C: Chowan, Roanoke, Cape Fear, and Pee Dee drainages (Anson, Bertie, Chowan*, Gates, Halifax, Hertford, Montgomery, Northampton, Richmond, Sampson, Stanly, Washington)   | <b>T</b>  |            | <b>S2</b> | <b>G5</b>   |
| <i>Cyclonaias tuberculata</i><br><b>Purple Wartback</b><br>M: New River (Alleghany)  | <b>E</b>  |            | <b>S1</b> | <b>G5</b>   |

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| <i>Elliptio dilatata</i><br><b>Spike</b><br>M: New, Little Tennessee, and Hiwassee drainages (Alleghany, Ashe, Cherokee, Clay, Macon, Swain, Watauga)   | <b>SC</b> | <b>FSC</b> | <b>S2</b> | <b>G5</b>    |
| <i>Elliptio fisheriana</i><br><b>Northern Lance</b><br>CP: many Atlantic drainages, mainly from the Fall Line eastward (Columbus, Franklin, Gates, Granville, Halifax, Hertford, Johnston, Martin, Nash, Northampton, Pitt, Stokes, Wake, Warren, Wilson)   | <b>SR</b> |            | <b>S3</b> | <b>G4</b>    |
| <i>Elliptio folliculata</i><br><b>Pod Lance</b><br>C: Cape Fear, Lumber, and Yadkin--Pee Dee drainages (Anson, Bladen, Brunswick, Columbus, Cumberland, Duplin*, Harnett, Montgomery, Pender*, Richmond, Sampson, Stanly)   | <b>SC</b> |            | <b>S2</b> | <b>G2G3Q</b> |
| <i>Elliptio lanceolata</i><br><b>Yellow Lance</b><br>PC: Tar and Neuse drainages (Edgecombe, Franklin, Granville, Halifax, Johnston, Nash, Vance, Wake, Warren, Wayne)  | <b>E</b>  | <b>FSC</b> | <b>S2</b> | <b>G2G3</b>  |
| <i>Elliptio marsupiobesa</i><br><b>Cape Fear Spike</b><br>C: Cape Fear and Neuse drainages (endemic to North Carolina) (Bladen, Craven, Cumberland, Duplin, Johnston, New Hanover, Pender, Pitt, Robeson, Sampson)  | <b>SC</b> |            | <b>S2</b> | <b>G3Q</b>   |
| <i>Elliptio roanokensis</i><br><b>Roanoke Slabshell</b><br>PC: Roanoke, Tar, Neuse, White Oak, Cape Fear, Lumber, and Yadkin--Pee Dee drainages (Anson, Bladen, Chatham, Craven, Cumberland, Durham, Edgecombe, Franklin, Granville, Halifax, Harnett, Johnston, Jones, Lee, Lenoir, Montgomery, Moore, Nash, Northampton, Onslow, Pitt, Randolph, Richmond, Stanly, Wake, Warren, Wayne, Wilkes, Wilson) | <b>T</b>  | <b>FSC</b> | <b>S3</b> | <b>G3</b>    |
| <i>Elliptio steinstansana</i><br><b>Tar River Spinymussel</b><br>PC: Tar drainage, very rare in Neuse drainage (endemic to North Carolina) (Edgecombe, Franklin, Halifax, Johnston, Nash, Pitt*, Warren)  | <b>E</b>  | <b>E</b>   | <b>S1</b> | <b>G1</b>    |
| <i>Elliptio waccamawensis</i><br><b>Waccamaw Spike</b><br>C: Lake Waccamaw and vicinity (endemic to North Carolina; possibly in adjacent South Carolina) (Brunswick, Columbus)  | <b>T</b>  | <b>FSC</b> | <b>S1</b> | <b>G2G3Q</b> |
| <i>Fusconaia masoni</i><br><b>Atlantic Pigtoe</b><br>CP: Roanoke, Tar, Neuse, Cape Fear, Yadkin--Pee Dee drainages (Beaufort*, Bladen, Caswell, Chatham, Cumberland*, Durham, Edgecombe, Franklin, Granville, Halifax, Harnett*, Johnston, Montgomery, Moore, Nash, Northampton*, Orange, Pender, Person, Pitt, Randolph, Sampson, Union, Vance, Wake, Warren, Wayne*, Wilson)                            | <b>E</b>  | <b>FSC</b> | <b>S3</b> | <b>G2</b>    |

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| <b><i>Fusconaia subrotunda</i></b><br><b>Longsolid</b><br>M: Hiwassee, Little Tennessee, and French Broad drainages (Buncombe, Cherokee, Clay, Macon, Swain, Transylvania)   | <b>SR</b> | <b>FSC</b> | <b>S1</b> | <b>G3</b>   |
| <b><i>Lampsilis cariosa</i></b><br><b>Yellow Lampmussel</b><br>PC: Chowan, Roanoke, Neuse, Tar, Cape Fear, Lumber, Yadkin--Pee Dee drainages (Alamance, Anson, Bladen*, Chatham, Columbus, Cumberland, Davie, Durham, Edgecombe, Franklin, Gates, Granville, Halifax, Harnett, Hertford, Johnston, Lee, Montgomery, Moore, Nash, Northampton, Orange, Pender*, Person, Pitt, Randolph, Richmond, Rockingham, Rowan, Sampson*, Stanly, Vance)                           | <b>E</b>  | <b>FSC</b> | <b>S3</b> | <b>G3G4</b> |
| <b><i>Lampsilis fasciola</i></b><br><b>Wavyrayed Lampmussel</b><br>M: French Broad, Pigeon, Hiwassee, and Little Tennessee drainages (Cherokee, Clay, Graham, Haywood, Jackson, Macon, Mitchell, Swain, Yancey)  | <b>SC</b> |            | <b>S2</b> | <b>G5</b>   |
| <b><i>Lampsilis fullerhati</i></b><br><b>Waccamaw Fatmucket</b><br>C: Lake Waccamaw and vicinity (endemic to North Carolina and adjacent South Carolina) (Columbus)  | <b>T</b>  | <b>FSC</b> | <b>S1</b> | <b>G1Q</b>  |
| <b><i>Lampsilis radiata</i></b><br><b>Eastern Lampmussel</b><br>CP: Chowan, Roanoke, Tar, Neuse, Cape Fear, Yadkin--Pee Dee drainages (Alamance, Anson, Bertie*, Bladen, Cabarrus, Chatham, Chowan*, Columbus, Craven, Davidson, Durham, Edgecombe, Franklin, Gates, Granville, Halifax, Hertford, Johnston, Jones, Lee, Montgomery, Nash, Northampton, Orange, Pender, Person, Pitt, Randolph, Richmond, Rowan, Sampson*, Stanly, Union, Wake, Warren, Wayne, Wilson) | <b>T</b>  |            | <b>S3</b> | <b>G5</b>   |
| <b><i>Lampsilis sp. 2</i></b><br><b>Chameleon Lampmussel</b><br>PC: Tar, Neuse, Cape Fear, and Yadkin Pee Dee drainages (Anson, Durham, Franklin, Granville, Nash, Orange, Person, Vance, Warren)  | <b>SR</b> | <b>FSC</b> | <b>S2</b> | <b>G1</b>   |
| <b><i>Lampsilis splendida</i></b><br><b>Rayed Pink Fatmucket</b><br>CP: Lake Waccamaw and Waccamaw River, Yadkin-Pee Dee River (Anson, Columbus, Richmond)   | <b>SR</b> | <b>FSC</b> | <b>S1</b> | <b>G3</b>   |
| <b><i>Lasmigona decorata</i></b><br><b>Carolina Heelsplitter</b><br>P: Catawba and Pee Dee drainages (endemic to this area in North Carolina and adjacent South Carolina) (Cabarrus*, Mecklenburg, Union)  | <b>E</b>  | <b>E</b>   | <b>S1</b> | <b>G1</b>   |
| <b><i>Lasmigona holstonia</i></b><br><b>Tennessee Heelsplitter</b><br>M: formerly in Valley Creek in Cherokee County (Cherokee*)   | <b>E</b>  | <b>FSC</b> | <b>SH</b> | <b>G3</b>   |



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| <b><i>Lasmigona subviridis</i></b><br><b>Green Floater</b><br>CPM: Roanoke, Tar, Neuse and Yadkin--Pee Dee drainages; New and Watauga drainages (Alleghany, Ashe, Durham, Edgecombe, Franklin, Granville, Halifax, Johnston, Montgomery, Nash, Northampton, Orange, Person, Pitt, Randolph, Rockingham, Stokes, Wake, Watauga)  | <b>E</b>  | <b>FSC</b> | <b>S2</b> | <b>G3</b>   |
| <b><i>Leptodea ochracea</i></b><br><b>Tidewater Mucket</b><br>CP: Chowan, Roanoke, and Tar drainages, and abundant in Lake Waccamaw (Bertie, Chowan, Columbus, Edgecombe, Gates, Halifax, Hertford, Martin, Northampton, Pitt, Warren, Washington)  | <b>T</b>  |            | <b>S2</b> | <b>G3G4</b> |
| <b><i>Ligumia nasuta</i></b><br><b>Eastern Pondmussel</b><br>C: Chowan, Roanoke, Neuse, Tar, Cape Fear, and Yadkin--Pee Dee drainages (Anson, Bertie, Brunswick*, Chowan, Gates, Halifax, Hertford, Martin, Montgomery, Nash*, Northampton, Pitt, Richmond, Stanly, Washington)   | <b>T</b>  |            | <b>S2</b> | <b>G4</b>   |
| <b><i>Pegias fabula</i></b><br><b>Littlewing Pearlymussel</b><br>M: Little Tennessee River; formerly in Valley River in Cherokee County (Cherokee*, Macon, Swain)   | <b>E</b>  | <b>E</b>   | <b>S1</b> | <b>G1</b>   |
| <b><i>Pleurobema collina</i></b><br><b>James Spinymussel</b><br>P: Dan and Mayo rivers (Rockingham, Stokes)   | <b>E</b>  | <b>E</b>   | <b>S1</b> | <b>G1</b>   |
| <b><i>Pleurobema oviforme</i></b><br><b>Tennessee Clubshell</b><br>M: French Broad, Little Tennessee, and Hiwassee drainages (Cherokee, Clay, Macon, Swain, Transylvania)   | <b>E</b>  | <b>FSC</b> | <b>S1</b> | <b>G2G3</b> |
| <b><i>Pleuronaia barnesiana</i></b><br><b>Tennessee Pigtoe</b><br>M: Little Tennessee and Hiwassee rivers (Cherokee, Macon)   | <b>E</b>  | <b>FSC</b> | <b>S1</b> | <b>G2G3</b> |
| <b><i>Potamilus alatus</i></b><br><b>Pink Heelsplitter</b><br>M: French Broad River (Madison)   | <b>SR</b> |            | <b>S1</b> | <b>G5</b>   |
| <b><i>Strophitus undulatus</i></b><br><b>Creeper</b><br>PCM: Roanoke, Tar, Neuse, Cape Fear, Yadkin--Pee Dee, Catawba, Broad, and French Broad drainages (Alamance, Alexander, Anson, Buncombe, Burke, Cabarrus, Caswell, Catawba, Chatham, Davidson*, Durham, Edgecombe, Forsyth, Franklin, Gaston, Granville, Halifax, Harnett*, Henderson, Johnston, Jones, Lee, Mecklenburg, Montgomery, Moore, Nash, Orange, Person, Pitt, Polk*, Randolph, Richmond, Rockingham, Stanly, Surry, Transylvania, Union, Vance, Wake, Warren, Wilson, Yadkin) | <b>T</b>  |            | <b>S3</b> | <b>G5</b>   |

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| <b><i>Toxolasma pullus</i></b><br><b>Savannah Lilliput</b><br>PC: Cape Fear, Lumber, and Yadkin--Pee Dee drainages (Chatham, Columbus, Lee, Montgomery, Moore, Orange, Randolph, Stanly, Union)   | <b>E</b>  | <b>FSC</b> | <b>S2</b>  | <b>G2</b>  |
| <b><i>Villosa constricta</i></b><br><b>Notched Rainbow</b><br>PC: Roanoke, Tar, Neuse, Yadkin--Pee Dee, and Catawba drainages (Alamance, Alexander, Anson, Burke, Cabarrus, Caswell, Catawba, Chatham, Davidson*, Duplin, Durham, Edgecombe, Franklin, Granville, Guilford, Halifax, Harnett, Johnston, Lee*, McDowell, Mecklenburg, Montgomery, Moore, Nash, Orange, Person, Randolph, Richmond, Rockingham, Rowan*, Stanly, Stokes, Union, Vance, Wake, Warren, Wilson) | <b>SC</b> | <b>FSC</b> | <b>S3</b>  | <b>G3</b>  |
| <b><i>Villosa delumbis</i></b><br><b>Eastern Creekshell</b><br>PC: Cape Fear, Lumber, Yadkin--Pee Dee, and Catawba drainages (Alamance, Anson, Bladen, Brunswick*, Burke, Cabarrus, Caldwell, Chatham, Columbus, Cumberland, Davidson*, Duplin, Gaston, Guilford, Harnett, Iredell, Lee, Mecklenburg, Montgomery, Moore, Orange, Pender, Randolph, Richmond, Rockingham, Sampson, Stanly, Union, Yadkin)  | <b>SR</b> |            | <b>S4</b>  | <b>G4</b>  |
| <b><i>Villosa iris</i></b><br><b>Rainbow</b><br>M: Hiwassee and Little Tennessee drainages; formerly in French Broad drainage (Cherokee, Clay, Jackson, Macon, Swain)   | <b>SC</b> |            | <b>S2</b>  | <b>G5Q</b> |
| <b><i>Villosa trabalis</i></b><br><b>Cumberland Bean</b><br>M: Hiwassee River (Cherokee)  | <b>SR</b> | <b>E</b>   | <b>SH</b>  | <b>G1</b>  |
| <b><i>Villosa vanuxemensis</i></b><br><b>Mountain Creekshell</b><br>M: Hiwassee River; documented from Hiwassee and French Broad drainages in Tennessee (Cherokee, Clay)  | <b>T</b>  |            | <b>S1?</b> | <b>G4</b>  |
| <b><i>Villosa vaughaniana</i></b><br><b>Carolina Creekshell</b><br>P: Cape Fear, Yadkin--Pee Dee, and Catawba drainages (endemic to North Carolina and adjacent South Carolina) (Alamance, Anson*, Cabarrus, Chatham, Guilford, Lee, Mecklenburg, Montgomery, Moore, Orange, Randolph, Richmond, Rowan, Stanly, Union)  | <b>E</b>  | <b>FSC</b> | <b>S3</b>  | <b>G2</b>  |

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|   | N.C.   | U.S. | N.C  | Global |

### Mollusks: Freshwater and Terrestrial Gastropods

|   |           |            |             |             |
|---|-----------|------------|-------------|-------------|
| <i>Allogona profunda</i><br><b>Broad-banded Forestsnail</b><br>M: mixed hardwood forests (Avery, Mitchell)                                      | <b>SR</b> |            | <b>S2S3</b> | <b>G5</b>   |
| <i>Amnicola sp. 1</i><br><b>Waccamaw Snail</b><br>C: Lake Waccamaw and adjacent Big Creek (endemic to North Carolina) (Columbus)                | <b>SC</b> |            | <b>S1</b>   | <b>G1</b>   |
| <i>Anguispira knoxensis</i><br><b>Rustic Tigersnail</b><br>M: around large rotting logs near limestone outcrops (Swain*)                        | <b>SR</b> |            | <b>SH</b>   | <b>G1G2</b> |
| <i>Anguispira strongyloides</i><br><b>Southeastern Tigersnail</b><br>MP: forested areas with high pH soils (Clay, Graham, McDowell, Rutherford) | <b>SR</b> |            | <b>S2S3</b> | <b>G5</b>   |
| <i>Appalachina chilhoweensis</i><br><b>Queen Crater</b><br>M: cove hardwoods (Graham, Haywood, Madison, Swain)                                  | <b>SC</b> |            | <b>S2</b>   | <b>G4</b>   |
| <i>Appalachina sayana</i><br><b>Spike-lip Crater</b><br>M: rich upland hardwood forests (Ashe, Avery, Madison, Watauga, Yancey)                 | <b>SR</b> |            | <b>S2S3</b> | <b>G5T5</b> |
| <i>Carychium arboreum</i><br><b>Tree Thorn</b><br>M: mixed hardwood forests just north of Fontana Lake (endemic to this area) (Swain)           | <b>SR</b> |            | <b>S1?</b>  | <b>GNR</b>  |
| <i>Catinella pugilator</i><br><b>Weedpatch Ambersnail</b><br>C: marsh ecotones (Currituck)  | <b>SR</b> |            | <b>S1?</b>  | <b>G1G2</b> |
| <i>Catinella waccamawensis</i><br><b>Waccamaw Ambersnail</b><br>C: shoreline of Lake Waccamaw (endemic to this area) (Columbus*)                | <b>T</b>  | <b>FSC</b> | <b>SH</b>   | <b>G1Q</b>  |
| <i>Cincinnatia sp. 1</i><br><b>Waccamaw Siltsnail</b><br>C: Lake Waccamaw and adjacent Big Creek (endemic to North Carolina) (Columbus)         | <b>SC</b> | <b>FSC</b> | <b>S1</b>   | <b>G1</b>   |
| <i>Daedalochila sp. 1 nr. auriformis</i><br><b>a Liptooth</b><br>C: very wet clay savannas? (Brunswick)   | <b>SR</b> |            | <b>S1S2</b> | <b>GNR</b>  |

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|  | N.C.   | U.S. | N.C  | Global |
| <i>Discus bryanti</i><br><b>Sawtooth Disc</b><br>M: Watauga to Macon counties in cove hardwoods (Buncombe, Madison, Mitchell)  | SC     |      | S2   | G3     |
| <i>Discus nigrimontanus</i><br><b>Black Mountain Disc</b><br>M: talus slopes in hardwood forests (Ashe, Graham, Swain, Watauga, Yancey)  | SR     |      | S2S3 | G4     |
| <i>Discus whitneyi</i><br><b>Forest Disc</b><br>M?: Mesic to slightly drier forests, no specific locality information available  | SR     |      | S1S2 | G5     |
| <i>Elimia christyi</i><br><b>Christy's Elimia</b><br>M: Hiwassee River and tributaries (Cherokee)  | E      |      | S1   | G2     |
| <i>Euchemotrema fraternum</i><br><b>Upland Pillsnail</b><br>M: under forest litter in upland hardwood forests (Swain)  | SR     |      | S2S3 | G5     |
| <i>Ferrissia hendersoni</i><br><b>Blackwater Ancyliid</b><br>PC: Neuse, White Oak, and Cape Fear drainages (records not yet entered)   | SC     |      | SU   | G5Q    |
| <i>Fumonelix cherochalaensis</i><br><b>Rock-loving Covert</b><br>M: undersides of rock ledges in northern hardwood forests (endemic to Huckleberry Knob area) (Graham)                                     | SR     |      | S1   | GNR    |
| <i>Fumonelix clingmanica</i><br><b>Summit Covert</b><br>M: highest summits -- spruce-fir and northern hardwood forests -- in Great Smoky Mountains National Park (endemic to the park) (Swain)             | T      | FSC  | S1   | G4T4   |
| <i>Fumonelix jonesiana</i><br><b>Big-tooth Covert</b><br>M: spruce-fir and northern hardwood forests; Newfound Gap area of Great Smoky Mountains National Park (endemic to this area) (Swain)              | T      |      | S1?  | G1     |
| <i>Fumonelix langdoni</i><br><b>Talus Covert</b><br>M: in talus and under leaf litter in high elevation hardwood forests (endemic to the NC--TN state line in Great Smoky Mountains National Park) (Swain) | SR     |      | S1   | GNR    |
| <i>Fumonelix orestes</i><br><b>Engraved Covert</b><br>M: spruce-fir and northern hardwood forests; Plott Balsam mountains (endemic to this area) (Haywood, Jackson)  | T      |      | S1   | G1     |

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|  | N.C.      | U.S.       | N.C         | Global      |
| <i>Fumonelix roanensis</i><br><b>Roan Mountain Covert</b><br>M: high elevation hardwood and coniferous forests (endemic to Roan Mountain along the NC--TN state line) (Mitchell) | <b>SR</b> |            | <b>S1</b>   | <b>GNR</b>  |
| <i>Gastrocopta corticaria</i><br><b>Bark Snaggletooth</b><br>MC: rich cove forests and other forests over high pH soils (Swain)  | <b>SR</b> |            | <b>S2S3</b> | <b>G5</b>   |
| <i>Glyphyalinia clingmani</i><br><b>Fragile Glyph</b><br>M: wet leaf litter associated with seepage runs; Black Mountains (endemic to North Carolina) (Buncombe, Yancey)         | <b>E</b>  | <b>FSC</b> | <b>S1</b>   | <b>G1</b>   |
| <i>Glyphyalinia cryptomphala</i><br><b>Thin Glyph</b><br>MP: hardwood forests, mainly along river bluffs or in ravines (Haywood)   | <b>SR</b> |            | <b>S1S2</b> | <b>G5</b>   |
| <i>Glyphyalinia junaluskana</i><br><b>Dark Glyph</b><br>M: cove hardwoods; southwestern mountains (Cherokee*, Graham, Macon, Swain)  | <b>SC</b> |            | <b>S2</b>   | <b>G2</b>   |
| <i>Glyphyalinia pentadelphia</i><br><b>Pink Glyph</b><br>M: cove hardwoods; southwestern mountains (Cherokee, Clay, Graham, Macon, Swain)  | <b>SC</b> |            | <b>S2</b>   | <b>G2G3</b> |
| <i>Haplotrema kendeighi</i><br><b>Blue-footed Lancetooth</b><br>M: southwestern mountains (Macon, Swain)   | <b>SC</b> |            | <b>S1S2</b> | <b>G2</b>   |
| <i>Helicodiscus bonamicus</i><br><b>Spiral Coil</b><br>M: Nantahala Gorge vicinity (endemic to this area) (Graham, Swain)  | <b>SC</b> |            | <b>S1</b>   | <b>G1</b>   |
| <i>Helicodiscus fimbriatus</i><br><b>Fringed Coil</b><br>M: rocky soils; extreme southwestern corner of the state (Cherokee, Graham)   | <b>SC</b> |            | <b>S2</b>   | <b>G4</b>   |
| <i>Helicodiscus inermis</i><br><b>Oldfield Coil</b><br>M: open, grassy areas (Haywood, Swain)  | <b>SR</b> |            | <b>S1?</b>  | <b>G4</b>   |
| <i>Helicodiscus multidentis</i><br><b>Twilight Coil</b><br>M: river bluffs or caves, in calcium-rich soils (Macon, Madison)  | <b>SR</b> |            | <b>S1</b>   | <b>G3</b>   |

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|   | N.C.      | U.S.       | N.C         | Global      |
| <i>Helicodiscus saludensis</i><br><b>Corncob Snail</b><br>P: no habitat information; apparently restricted to NC and SC, known in the state only from South Mountains State Park (Burke)                  | <b>SR</b> |            | <b>S1?</b>  | <b>G1</b>   |
| <i>Helisoma eucosmium</i><br><b>Greenfield Rams-horn</b><br>C: Greenfield Lake (formerly), creek in Brunswick County (endemic to North Carolina) (Brunswick*, New Hanover*)                               | <b>E</b>  | <b>FSC</b> | <b>S1</b>   | <b>G1Q</b>  |
| <i>Hendersonia occulta</i><br><b>Cherrystone Drop</b><br>M: river bluffs, talus slopes, and other forested areas with high pH soils (Caldwell, Madison, Swain, Watauga, Yancey)                           | <b>SR</b> |            | <b>S2S3</b> | <b>G4</b>   |
| <i>Inflectarius downieanus</i><br><b>Dwarf Globelet</b><br>M: montane forests, but habitats not well known; reported also from Graham and Cherokee counties (Watauga)                                     | <b>SR</b> |            | <b>S1S2</b> | <b>G3</b>   |
| <i>Inflectarius ferrissi</i><br><b>Smokey Mountain Covert</b><br>M: spruce-fir and northern hardwood forests; Great Smoky Mountains and Plott Balsams (endemic to these ranges) (Haywood, Jackson, Swain) | <b>T</b>  |            | <b>S2</b>   | <b>G2</b>   |
| <i>Inflectarius subpalliatu</i><br><b>Velvet Covert</b><br>M: central mountains (Watauga to Haywood counties) (Avery, Haywood, Madison, Mitchell, Watauga)  | <b>SC</b> |            | <b>S2S3</b> | <b>G2</b>   |
| <i>Inflectarius verus</i><br><b>Fuzzy Covert</b><br>M: rich forests, known only from both the NC and TN sides of Great Smoky Mountains National Park (Haywood, Swain)                                     | <b>SR</b> |            | <b>S1?</b>  | <b>G1</b>   |
| <i>Leptoxis dilatata</i><br><b>Seep Mudalia</b><br>M: New drainage (Alleghany, Ashe, Watauga)   | <b>T</b>  | <b>FSC</b> | <b>S3</b>   | <b>G3</b>   |
| <i>Mesodon altivagus</i><br><b>Wandering Globe</b><br>M: spruce-fir and northern hardwood forests, known only from both the NC and TN sides of Great Smoky Mountains National Park (Haywood, Swain)       | <b>SR</b> |            | <b>S1?</b>  | <b>G2G3</b> |
| <i>Mesodon andrewsae</i><br><b>Balsam Globe</b><br>M: high elevation forests, from Madison County to southwestern Virginia (Avery)  | <b>SR</b> |            | <b>S2S3</b> | <b>G3</b>   |

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| <i>Mesomphix latior</i><br><b>Broad Button</b><br>M: low elevation hardwood forests (Haywood, Swain)   | <b>SR</b> |      | <b>S2S3</b> | <b>G3G4</b> |
| <i>Mesomphix pilsbryi</i><br><b>Striate Button</b><br>CP: no habitat information (Bladen, Brunswick, Craven, Gaston, Harnett, Sampson, Stanly, Union)                                    | <b>SR</b> |      | <b>S2S3</b> | <b>G4</b>   |
| <i>Mesomphix vulgatus</i><br><b>Common Button</b><br>M: a variety of forested slopes, often where steep or in ravines (Henderson, McDowell, Swain, Watauga)                              | <b>SR</b> |      | <b>S2?</b>  | <b>G4</b>   |
| <i>Novisuccinea ovalis</i><br><b>Oval Ambersnail</b><br>M: a variety of montane forests, at all elevations (Avery, Madison, Mitchell, Swain, Watauga, Yancey)                            | <b>SR</b> |      | <b>S2S3</b> | <b>G5</b>   |
| <i>Pallifera hemphilli</i><br><b>Black Mantleslug</b><br>M: high elevation forests, mainly spruce-fir (Avery, Jackson, Mitchell, Swain, Yancey*)   | <b>SC</b> |      | <b>S2S3</b> | <b>G4</b>   |
| <i>Pallifera ohioensis</i><br><b>Redfoot Mantleslug</b><br>M: under bark, logs, or leaf litter in spruce-fir forests, known from Roan Mountain (Mitchell)                                | <b>SR</b> |      | <b>S1</b>   | <b>G5</b>   |
| <i>Paravitrea andrewsae</i><br><b>High Mountain Supercoil</b><br>M: cove forests with rocky slopes; northern half of the mountains (Avery, Buncombe, Madison, Mitchell, Watauga, Yancey) | <b>SC</b> |      | <b>S2</b>   | <b>G2</b>   |
| <i>Paravitrea clappi</i><br><b>Mirey Ridge Supercoil</b><br>M: high elevations in Great Smoky Mountains National Park (endemic to this park) (Swain)                                     | <b>SC</b> |      | <b>S1S2</b> | <b>G2G3</b> |
| <i>Paravitrea lacteodens</i><br><b>Ramp Cove Supercoil</b><br>M: Graham County, possibly Cherokee County (endemic to this area) (Graham*)  | <b>SC</b> |      | <b>SH</b>   | <b>G1</b>   |
| <i>Paravitrea lamellidens</i><br><b>Lamellate Supercoil</b><br>M: forested hillsides, especially near talus slopes (Cherokee, Graham, Haywood, Macon, Swain, Yancey)                     | <b>SC</b> |      | <b>S2S3</b> | <b>G2</b>   |
| <i>Paravitrea multidentata</i><br><b>Dentate Supercoil</b><br>MP: hillsides, especially near seeps, in hardwood forests (Haywood)  | <b>SR</b> |      | <b>S2S3</b> | <b>G5</b>   |

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| <i>Paravitrea petrophila</i><br><b>Cherokee Supercoil</b><br>M: a variety of hardwood forests (Macon)   | <b>SR</b> |            | <b>S1</b>   | <b>G4</b>   |
| <i>Paravitrea placentula</i><br><b>Glossy Supercoil</b><br>MP: a variety of mesic to rich hardwood forests (Madison, Mitchell, Swain)   | <b>SC</b> |            | <b>S2S3</b> | <b>G3</b>   |
| <i>Paravitrea reesei</i><br><b>Round Supercoil</b><br>M: hillsides and ravines in hardwood forests (Madison, Watauga, Wilkes)   | <b>SR</b> |            | <b>S2?</b>  | <b>G3</b>   |
| <i>Paravitrea ternaria</i><br><b>Sculpted Supercoil</b><br>M: under moist leaf litter on wooded hillsides and slopes (endemic to Madison County and Unicoi County, Tennessee) (Madison) | <b>T</b>  | <b>FSC</b> | <b>S1</b>   | <b>G1G2</b> |
| <i>Paravitrea umbilicaris</i><br><b>Open Supercoil</b><br>M: cove forests with rocky slopes (Cherokee, Graham*, Macon, Swain)   | <b>SC</b> |            | <b>S2</b>   | <b>G2</b>   |
| <i>Paravitrea varidens</i><br><b>Roan Supercoil</b><br>M: high elevation forests (endemic to northwestern North Carolina and adjacent Tennessee) (Mitchell, Yancey)                     | <b>T</b>  | <b>FSC</b> | <b>S1S2</b> | <b>G1G2</b> |
| <i>Patera clarki clarki</i><br><b>Dwarf Proud Globe</b><br>M: forested mountainsides (Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain)   | <b>SC</b> |            | <b>S3</b>   | <b>G3T3</b> |
| <i>Patera clarki nantahala</i><br><b>Noonday Globe</b><br>M: Nantahala Gorge (endemic to this site) (Graham*, Macon*, Swain)  | <b>T</b>  | <b>T</b>   | <b>S1</b>   | <b>G3T1</b> |
| <i>Philomycus virginicus</i><br><b>Virginia Mantleslug</b><br>M: wooded hillsides at high elevations in the northern mountains (Ashe, Avery)  | <b>SR</b> |            | <b>S1S2</b> | <b>G3</b>   |
| <i>Pilsbryna nodopalma</i><br><b>Oar Tooth Bud</b><br>M: rock outcrops and rocky hillsides (Buncombe, Haywood, Madison)   | <b>SR</b> |            | <b>S1</b>   | <b>G1G2</b> |
| <i>Pilsbryna vanattai</i><br><b>Honey Bud</b><br>M: wet leaf litter next to seeps or streams (Avery*, Mitchell*, Yancey*)   | <b>SC</b> |            | <b>S1</b>   | <b>G2G3</b> |



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| <i>Planorbella magnifica</i><br><b>Magnificent Rams-horn</b><br>C: Orton Pond and pond on Sand Hill Creek; formerly Greenfield Lake (endemic to North Carolina) (Brunswick, New Hanover*)       | <b>E</b>  | <b>C</b>   | <b>S1</b>   | <b>G1</b>   |
| <i>Praticolella lawae</i><br><b>Appalachian Scrubsnail</b><br>M: mainly in sandy soil of dry pine woods and glades (Clay)   | <b>SR</b> |            | <b>S1</b>   | <b>G3</b>   |
| <i>Somatogyrus virginicus</i><br><b>Panhandle Pebblesnail</b><br>P: Eno River (Chatham, Durham)   | <b>SR</b> | <b>FSC</b> | <b>S2S3</b> | <b>G2G3</b> |
| <i>Stenotrema depilatum</i><br><b>Great Smoky Slitmouth</b><br>M: Great Smoky Mountains National Park (essentially endemic to this area) (Graham, Haywood, Swain)                               | <b>SC</b> |            | <b>S2</b>   | <b>G2</b>   |
| <i>Stenotrema sp. 1</i><br><b>Cove Slitmouth</b><br>M: cove hardwoods at lower elevations (endemic to the Great Smoky Mountains National Park and immediate vicinity) (Haywood, Swain)          | <b>SR</b> |            | <b>S1?</b>  | <b>GNR</b>  |
| <i>Striatura exigua</i><br><b>Ribbed Striate</b><br>M: swampy woods and bog margins; disjunct south from West Virginia (Swain)  | <b>SR</b> |            | <b>S1</b>   | <b>G5</b>   |
| <i>Succinea unicolor</i><br><b>Squatty Ambersnail</b><br>C: marshy areas near streams and lakes (Bertie)  | <b>SR</b> |            | <b>S1S2</b> | <b>G3G4</b> |
| <i>Triodopsis fulciden</i><br><b>Dwarf Threetooth</b><br>P: southwestern Piedmont (endemic to North Carolina) (Burke, Catawba*, Cleveland, Lincoln)   | <b>SC</b> |            | <b>S2S3</b> | <b>G1G2</b> |
| <i>Triodopsis soelneri</i><br><b>Cape Fear Threetooth</b><br>C: swampy habitats in the southeastern portion of the state (endemic to North Carolina) (Brunswick, Columbus, New Hanover, Onslow) | <b>T</b>  | <b>FSC</b> | <b>S2S3</b> | <b>G2</b>   |
| <i>Triodopsis tennesseensis</i><br><b>Budded Threetooth</b><br>M: mixed hardwoods on hillsides (Madison)  | <b>SR</b> |            | <b>S1</b>   | <b>G4</b>   |
| <i>Vallonia pulchella</i><br><b>Lovely Vallonia</b><br>no locality or habitat information; at southern edge of species' range   | <b>SR</b> |            | <b>S1S2</b> | <b>G5</b>   |

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| <i>Ventridens coelaxis</i><br><b>Bidentate Dome</b><br>M: cove forests and northern hardwood forests (Alleghany, Avery*, Madison, Watauga)  | SC     |      | S3?  | G3     |
| <i>Ventridens collisella</i><br><b>Sculptured Dome</b><br>M: wooded hillsides in hardwood forests, on high pH soils (Mitchell, Watauga)   | SR     |      | S2?  | G4     |
| <i>Ventridens decussatus</i><br><b>Crossed Dome</b><br>MP: montane oak-hickory forests (Haywood)  | SR     |      | S3?  | G3     |
| <i>Ventridens lasmodon</i><br><b>Hollow Dome</b><br>M: wooded hillsides and ravines (Madison)   | SR     |      | S1?  | G4     |
| <i>Ventridens lawae</i><br><b>Rounded Dome</b><br>MP: hillsides and ravines in hardwood forests (Avery, Burke, Caldwell, Catawba, Clay, Henderson, Macon, Madison, Swain, Transylvania) (Haywood) | SR     |      | S2S3 | G4     |
| <i>Ventridens suppressus</i><br><b>Flat Dome</b><br>no locality or habitat information; at southern edge of species' range  | SR     |      | S1S2 | G5     |
| <i>Vertigo alabamensis</i><br><b>Alabama Vertigo</b><br>C: pocosins (Bladen, Brunswick, Carteret, Craven, Greene, Moore, Pamlico, Pender, Scotland, Tyrrell)                                      | SR     |      | S2S3 | G3     |
| <i>Vertigo bollesiana</i><br><b>Delicate Vertigo</b><br>M: wooded hillsides and marshes; however, records south of PA are suspected of being <i>Vertigo gouldii</i> (Haywood)                     | SR     |      | S1S2 | G4     |
| <i>Vertigo oralis</i><br><b>Palmetto Vertigo</b><br>C: swamps and other wetland forests in the lower Coastal Plain (Beaufort, Pender)   | SR     |      | S2S3 | G5     |
| <i>Vertigo parvula</i><br><b>Smallmouth Vertigo</b><br>M: cove forests and rich slopes, at low elevations (Burke)   | SR     |      | S1   | G3     |
| <i>Vertigo sp. 3</i><br><b>a new Vertigo</b><br>C: pocosins (Bladen, Brunswick, Craven, Jones, Pamlico, Pender, Tyrrell)  | SR     |      | S2S3 | GNR    |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence)  | Status    |      | Rank        |           |
|--|-----------|------|-------------|-----------|
|  | N.C.      | U.S. | N.C         | Global    |
| <b><i>Vertigo tridentata</i></b><br><b>Honey Vertigo</b><br>PM: often around species of mints close to rock outcrops or talus slopes (Ashe, Burke, Gaston) | <b>SR</b> |      | <b>S1S2</b> | <b>G5</b> |
| <b><i>Viviparus intertextus</i></b><br><b>Rotund Mysterysnail</b><br>C: swamps in Lumber and Waccamaw drainages (Bladen, Columbus, Robeson)                | <b>SR</b> |      | <b>S2?</b>  | <b>G4</b> |
| <b><i>Zonitoides patuloides</i></b><br><b>Appalachian Gloss</b><br>M: cove hardwoods in deep leaf litter; southwestern mountains (Haywood, Macon, Swain)   | <b>SC</b> |      | <b>S2</b>   | <b>G3</b> |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence) | Status |      | Rank |        |
|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

### Arachnids

|  |    |     |      |      |
|--|----|-----|------|------|
| <i>Hypochilus coylei</i><br><b>a Lampshade Weaver</b><br>M: rock outcrops (endemic to southern mountains of North Carolina) (Buncombe, Henderson, McDowell, Polk, Rutherford)  | SR |     | S3?  | G3?  |
| <i>Hypochilus sheari</i><br><b>a Lampshade Weaver</b><br>M: rock outcrops (endemic to North Carolina) (Buncombe, McDowell, Yancey)   | SR |     | S2S3 | G2G3 |
| <i>Microhexura montivaga</i><br><b>Spruce-fir Moss Spider</b><br>M: in moss of spruce-fir forests (endemic to North Carolina and adjacent Tennessee) (Avery, Buncombe, Caldwell, Haywood, Jackson, Mitchell, Swain, Watauga, Yancey) | SR | E   | S1   | G1   |
| <i>Nesticus brimleyi</i><br><b>a Cave Cobweb Spider</b><br>M: caves (endemic to the vicinity of Bat Cave) (Polk)   | SR |     | S1?  | G1G2 |
| <i>Nesticus carolinensis</i><br><b>Linville Caverns Spider</b><br>M: caves (endemic to Linville Caverns) (McDowell)  | SR | FSC | S1   | G1?  |
| <i>Nesticus cooperi</i><br><b>Lost Nantahala Cave Spider</b><br>M: caves and along Nantahala River (endemic to this area) (Macon, Swain)   | SR | FSC | S1   | G1   |
| <i>Nesticus crosbyi</i><br><b>a Cave Cobweb Spider</b><br>M: spruce-fir forests (endemic to Mount Mitchell)  | SR |     | S1?  | G1?  |
| <i>Nesticus gertschi</i><br><b>a Cave Cobweb Spider</b><br>M: caves; Bat Cave, NC, and in Tennessee  | SR |     | S1?  | G1G2 |
| <i>Nesticus mimus</i><br><b>a Cave Cobweb Spider</b><br>M: rocky areas; known from Grandfather Mountain and Table Rock; also in Virginia   | SR |     | S2?  | G2   |
| <i>Nesticus sheari</i><br><b>a Cave Cobweb Spider</b><br>M: on ground in moist or rich forests (apparently endemic to Graham County)   | SR |     | S2?  | G2?  |
| <i>Nesticus silvanus</i><br><b>a Cave Cobweb Spider</b><br>M: habitat not indicated (apparently endemic to southern mountains of North Carolina)   | SR |     | S2?  | G2?  |

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|---|-----------|------|-------------|-------------|
|   | N.C.      | U.S. | N.C         | Global      |
| <i>Nesticus sp. 1</i><br><b>a Cave Cobweb Spider</b><br>M: habitat not indicated (known only from Jackson and Transylvania counties, NC, and Oconee County, SC) | <b>SR</b> |      | <b>S2?</b>  | <b>G2?</b>  |
| <i>Nesticus sp. 2</i><br><b>a Cave Cobweb Spider</b><br>M: on ground in forests (only known from Clay County)   | <b>SR</b> |      | <b>S1S3</b> | <b>G1G3</b> |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence) | Status |      |     | Rank   |  |
|---|--------|------|-----|--------|--|
|   | N.C.   | U.S. | N.C | Global |  |

### Crustaceans

|  |           |            |             |             |  |
|--|-----------|------------|-------------|-------------|--|
| <i>Caecidotea carolinensis</i><br><b>Bennett's Mill Cave Water Slater</b><br>P: caves (endemic to North Carolina) (McDowell*)  | <b>E</b>  | <b>FSC</b> | <b>SH</b>   | <b>G2G3</b> |  |
| <i>Cambarus acanthura</i><br><b>Thornytail Crayfish</b><br>M: pools and small creeks in the Hiwassee drainage (Cherokee)   | <b>SR</b> |            | <b>S1</b>   | <b>G4G5</b> |  |
| <i>Cambarus brimleyorum</i><br><b>Valley River Crayfish</b><br>M: streams in the Hiwassee drainage (endemic to North Carolina) (Cherokee, Clay)  | <b>SR</b> | <b>FSC</b> | <b>S2</b>   | <b>G3G4</b> |  |
| <i>Cambarus catagius</i><br><b>Greensboro Burrowing Crayfish</b><br>P: Cape Fear and Yadkin--Pee Dee drainages; Greensboro area to the Uwharries (endemic to North Carolina) (Davidson, Guilford, Montgomery, Randolph)                | <b>SC</b> |            | <b>S1</b>   | <b>G2</b>   |  |
| <i>Cambarus chaugaensis</i><br><b>Chauga Crayfish</b><br>M: streams in Savannah drainage (endemic to northwest South Carolina and adjacent North Carolina and Georgia) (Jackson, Macon, Transylvania)                                  | <b>SC</b> | <b>FSC</b> | <b>S2</b>   | <b>G2</b>   |  |
| <i>Cambarus davidi</i><br><b>Carolina Ladle Crayfish</b><br>P: Neuse and Cape Fear drainages (endemic to North Carolina) (Alamance, Caswell, Chatham, Durham, Granville, Guilford, Harnett*, Orange, Person, Rockingham, Stokes, Wake) | <b>SR</b> |            | <b>S3</b>   | <b>G3</b>   |  |
| <i>Cambarus eeseehensis</i><br><b>Grandfather Mountain Crayfish</b><br>M: Linville River above Linville Falls (endemic to this area) (Avery, Burke)  | <b>SR</b> | <b>FSC</b> | <b>S2S3</b> | <b>G1</b>   |  |
| <i>Cambarus georgiae</i><br><b>Little Tennessee Crayfish</b><br>M: streams in Little Tennessee drainage (Jackson, Macon, Swain)  | <b>SC</b> | <b>FSC</b> | <b>S2</b>   | <b>G2G3</b> |  |
| <i>Cambarus hystricosus</i><br><b>Sandhills Spiny Crayfish</b><br>S: streams in the Sandhills portion of the Cape Fear drainage (endemic to North Carolina) (Cumberland, Hoke, Moore)  | <b>SR</b> | <b>FSC</b> | <b>S2</b>   | <b>G2</b>   |  |
| <i>Cambarus johni</i><br><b>Carolina Foothills Crayfish</b><br>PM: headwater streams in the Yadkin--Pee Dee, Catawba, and Broad drainages (Alexander, Burke, Caldwell, Cleveland, Iredell, McDowell, Polk, Rutherford, Wilkes)         | <b>SR</b> | <b>FSC</b> | <b>S3</b>   | <b>G3</b>   |  |

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|--|-----------|------------|-------------|-----------------|
|  | N.C.      | U.S.       | N.C         | Global          |
| <i>Cambarus lenati</i><br><b>Broad River Stream Crayfish</b><br>P: streams in the Broad River drainage (endemic to North Carolina) (Cleveland, Polk, Rutherford)   | <b>SR</b> |            | <b>S2</b>   | <b>G2</b>       |
| <i>Cambarus nodosus</i><br><b>Knotty Burrowing Crayfish</b><br>M: seepages and other mucky areas in the Hiwassee drainage (Cherokee, Clay)   | <b>SR</b> |            | <b>S1</b>   | <b>G4</b>       |
| <i>Cambarus parrishi</i><br><b>Hiwassee Headwaters Crayfish</b><br>M: streams in Hiwassee drainage (Clay)  | <b>SC</b> | <b>FSC</b> | <b>S1</b>   | <b>G2</b>       |
| <i>Cambarus reburrus</i><br><b>French Broad River Crayfish</b><br>M: streams in the French Broad, Little Tennessee, and Savannah drainages (endemic to North Carolina) (Buncombe, Henderson, Jackson, Madison, Transylvania)   | <b>SR</b> | <b>FSC</b> | <b>S2</b>   | <b>G3</b>       |
| <i>Cambarus spicatus</i><br><b>Broad River Spiny Crayfish</b><br>P: streams in Broad River drainage (Cleveland, Polk, Rutherford)  | <b>SC</b> | <b>FSC</b> | <b>S2</b>   | <b>G3</b>       |
| <i>Cambarus tuckasegee</i><br><b>Tuckasegee Stream Crayfish</b><br>M: streams in the Tuckasegee subdrainage of the Little Tennessee drainage (endemic to North Carolina) (Jackson, Swain)  | <b>SR</b> | <b>FSC</b> | <b>S1S2</b> | <b>G1G2</b>     |
| <i>Diacyclops jeanneli putei</i><br><b>Carolina Well Diacyclops</b><br>P: dug well, in Orange County (endemic to North Carolina) (Orange*)   | <b>SC</b> |            | <b>SH</b>   | <b>G3G4T1T2</b> |
| <i>Lynceus gracilicornis</i><br><b>Graceful Clam Shrimp</b><br>C: temporary ponds, pools, and ditches (Craven, New Hanover*, Scotland)   | <b>SC</b> |            | <b>S2</b>   | <b>G5</b>       |
| <i>Orconectes carolinensis</i><br><b>North Carolina Spiny Crayfish</b><br>CP: rivers and streams in the Chowan, Roanoke, Neuse, and Tar drainages (Craven*, Edgecombe, Franklin, Gates, Granville, Greene*, Halifax, Hertford, Johnston, Jones, Lenoir*, Nash, Northampton, Pitt, Stokes, Vance, Wake, Warren, Wilson) | <b>SC</b> |            | <b>S3</b>   | <b>G3</b>       |
| <i>Orconectes virginienensis</i><br><b>Chowanoke Crayfish</b><br>C: streams and rivers in the Chowan and Roanoke drainages (Bertie, Chowan, Gates, Granville, Halifax, Hertford, Martin, Northampton, Washington)  | <b>SC</b> | <b>FSC</b> | <b>S3</b>   | <b>G3</b>       |
| <i>Procambarus braswelli</i><br><b>Waccamaw Crayfish</b><br>C: Waccamaw and Lumber drainages (endemic to North Carolina and adjacent South Carolina) (Brunswick, Columbus, Robeson, Scotland)  | <b>SC</b> |            | <b>S2</b>   | <b>G3</b>       |

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|--|-----------|------------|-----------|------------|
|  | N.C.      | U.S.       | N.C       | Global     |
| <i>Skistodiptomus carolinensis</i><br><b>Carolina Skistodiptomus</b><br>M: Lake Ravenel in Macon County (endemic to North Carolina) (Macon*) | <b>SC</b> |            | <b>SH</b> | <b>GNR</b> |
| <i>Stygobromus carolinensis</i><br><b>Yancey Sideswimmer</b><br>M: seeps at Mount Mitchell (endemic to North Carolina) (Yancey*)             | <b>SR</b> | <b>FSC</b> | <b>SH</b> | <b>G1</b>  |



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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

### Insects: Mayflies

|  |           |  |           |             |
|--|-----------|--|-----------|-------------|
| <i>Ameletus tertius</i><br><b>a mayfly</b><br>M: Wilson Creek, Panthertown Creek; also in Great Smoky Mountains National Park (Swain)  | <b>SR</b> |  | <b>S2</b> | <b>G4</b>   |
| <i>Amercaenis cusabo</i><br><b>a mayfly</b><br>C: Black River, Pee Dee River (Anson, Bladen, Richmond) (Anson, Bladen, Pender, Richmond)   | <b>SR</b> |  | <b>S1</b> | <b>G3</b>   |
| <i>Asioplax dolani</i><br><b>a mayfly</b><br>P: Neuse River (Edgecombe, Johnston, Montgomery, Polk, Union)   | <b>SR</b> |  | <b>S2</b> | <b>G4</b>   |
| <i>Attenella margarita</i><br><b>a mayfly</b><br>M: Eagle Creek (Swain)  | <b>SR</b> |  | <b>S1</b> | <b>G5</b>   |
| <i>Baetisca becki</i><br><b>a mayfly</b><br>PC: Swift Creek (Nash), Fishing Creek (Catawba, Edgecombe*, Halifax*, Nash)  | <b>SR</b> |  | <b>S1</b> | <b>G2G3</b> |
| <i>Baetisca obesa</i><br><b>a mayfly</b><br>C: rivers and streams in the Tar drainage (Edgecombe*, Pitt*)  | <b>SR</b> |  | <b>S1</b> | <b>G5</b>   |
| <i>Baetopus trishae</i><br><b>a mayfly</b><br>M: Panthertown Creek (Jackson)   | <b>SR</b> |  | <b>S1</b> | <b>G1G2</b> |
| <i>Barbaetis benfieldi</i><br><b>Benfield's Bearded Small Minnow Mayfly</b><br>M: Jacob Fork, French Broad River, Caney Fork (Buncombe, Burke*, Jackson, Transylvania)                                       | <b>SR</b> |  | <b>S1</b> | <b>G2G4</b> |
| <i>Cercobrachys etowah</i><br><b>a caenid mayfly</b><br>P: known in NC only from the Tar River (Cherokee, Cleveland, Polk, Rowan)  | <b>SR</b> |  | <b>S2</b> | <b>G4</b>   |
| <i>Choroterpes basalis</i><br><b>a mayfly</b><br>PSC: Waccamaw River, Drowning Creek, Bear Creek, Lanes Creek, UT Laurens Creek, Dutchmans Creek (Brunswick*, Chatham*, Columbus, Moore*, Richmond*, Union*) | <b>SR</b> |  | <b>S2</b> | <b>G5</b>   |
| <i>Dolania americana</i><br><b>American Sand Burrowing Mayfly</b><br>C: only known NC occurrence is from the Black River (Sampson*)  | <b>SR</b> |  | <b>SH</b> | <b>G4</b>   |

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|--|-----------|------|-----------|-------------|
|  | N.C.      | U.S. | N.C       | Global      |
| <i>Ephemerella floripara</i><br><b>a mayfly</b><br>M: Wilson Creek, Linville River, and North and South Forks of New River (Alleghany, Ashe, Burke*, Caldwell, Watauga*)   | <b>SR</b> |      | <b>S2</b> | <b>G3Q</b>  |
| <i>Homoeoneuria cahabensis</i><br><b>Cahaba Sand-filtering Mayfly</b><br>P: South Fork Yadkin River (Davie), South Fork Catawba River, Hunting Creek, Third Creek, Second Broad River (Catawba, Iredell*, Rowan*, Rutherford)        | <b>SR</b> |      | <b>S2</b> | <b>G2G3</b> |
| <i>Maccaffertium wudigeum</i><br><b>Wilson Creek "Stenonema"</b><br>M: Wilson Creek vicinity (endemic to this area) (Burke, Caldwell)  | <b>SR</b> |      | <b>S1</b> | <b>G1</b>   |
| <i>Macdunnoa brunnea</i><br><b>a mayfly</b><br>MP: French Broad River, Mills River, Hunting Creek, Leepers Creek, Yadkin River, Swift Creek (Buncombe, Davie*, Gaston, Henderson, Iredell*, Nash*, Wilkes)                           | <b>SR</b> |      | <b>S2</b> | <b>G3G4</b> |
| <i>Pseudiron centralis</i><br><b>White Sand-river Mayfly</b><br>P: Iredell County (Iredell*)   | <b>SR</b> |      | <b>S2</b> | <b>G5</b>   |
| <i>Tortopsis puella</i><br><b>a mayfly</b><br>P: only one NC specimen known, from Tar River (Franklin*)  | <b>SR</b> |      | <b>S1</b> | <b>G5</b>   |
| <i>Tsalia beneri</i><br><b>a mayfly</b><br>PM: probably widespread in clean streams and rivers with riverweed ( <i>Podostemum</i> ) (Ashe*, Buncombe*, Burke*, Caldwell, Durham, Haywood, Henderson, Iredell, McDowell*, Rockingham) | <b>SR</b> |      | <b>S3</b> | <b>G4</b>   |

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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

**Insects: Stoneflies**

|   |           |  |             |             |
|---|-----------|--|-------------|-------------|
| <i>Alloperla lenati</i><br><b>Sandhill Sallfly</b><br>SC: Lumber River at Wagram and Upper Rockfish Creek   | <b>SR</b> |  | <b>S1</b>   | <b>G2G3</b> |
| <i>Attaneuria ruralis</i><br><b>Giant Stone</b><br>MSC: Cataloochee Creek, West Fork Pigeon River, South Fork New River; Naked Creek (Ashe, Haywood, Richmond*)   | <b>SR</b> |  | <b>S2S3</b> | <b>G4</b>   |
| <i>Bolotoperla rossi</i><br><b>Smoky Willowfly</b><br>M: known from eight streams and rivers in the mountains, from Ashe County to Transylvania County (Alleghany*, Ashe*, Caldwell*, McDowell, Transylvania, Watauga*) | <b>SR</b> |  | <b>S3</b>   | <b>G4</b>   |
| <i>Haploperla fleeki</i><br><b>Piedmont Sallfly</b><br>S: Little River (Moore) (endemic to this area) (Moore)   | <b>SR</b> |  | <b>S1</b>   | <b>G1</b>   |
| <i>Hydroperla phormidia</i><br><b>Brownwater Springfly</b><br>PSC: Lumber River drainage (Columbus, Robeson)  | <b>SR</b> |  | <b>S2</b>   | <b>G3</b>   |
| <i>Megaleuctra williamsae</i><br><b>Williams' Rare Winter Stonefly</b><br>M: UT Cullasaja River, Cove Creek, Mull Creek (Swain)   | <b>SR</b> |  | <b>S1</b>   | <b>G2</b>   |
| <i>Pteronarcys comstocki</i><br><b>Spiny Salmonfly</b><br>M: medium to large cold streams in French Broad and Catawba drainages (Buncombe, Madison)   | <b>SR</b> |  | <b>S2</b>   | <b>G3</b>   |
| <i>Rasvena terna</i><br><b>Vermont Sallfly</b><br>M: small streams in the French Broad drainage (Cherokee, Transylvania)  | <b>SR</b> |  | <b>S2</b>   | <b>G4</b>   |
| <i>Zapada chila</i><br><b>Smokies Forestfly</b><br>M: small streams in Little Tennessee and New drainages (Ashe*, Swain)  | <b>SR</b> |  | <b>S1S2</b> | <b>G2</b>   |

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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

### Insects: Caddisflies

|   |           |  |            |             |
|---|-----------|--|------------|-------------|
| <i>Brachycentrus etowahensis</i><br><b>a caddisfly</b><br>M: Hiwassee River (Cherokee*)   | <b>SR</b> |  | <b>S2</b>  | <b>G3</b>   |
| <i>Ceraclea cancellata</i><br><b>a longhorned caddisfly</b><br>PSC: Naked Creek, Roanoke River, Eliis Creek, Turnbull Creek (Bertie, Richmond*)                 | <b>SR</b> |  | <b>S2</b>  | <b>G5</b>   |
| <i>Ceraclea joannae</i><br><b>Lenat's Ceraclea</b><br>P: Little River (Montgomery) (endemic to this area) (Montgomery)  | <b>SR</b> |  | <b>S1</b>  | <b>G1</b>   |
| <i>Ceraclea slossonae</i><br><b>a caddisfly</b><br>M: larger stream and rivers in New and Catawba drainages (Ashe, Burke*)                                      | <b>SR</b> |  | <b>S1?</b> | <b>G4</b>   |
| <i>Dibusa angata</i><br><b>a caddisfly</b><br>P: larger streams and rivers in Tar, Neuse, and Yadkin--Pee Dee drainages (Davie*, Durham, Rowan*, Wake*)         | <b>SR</b> |  | <b>S2</b>  | <b>G5</b>   |
| <i>Diplectrona metaqui</i><br><b>a diplectronan caddisfly</b><br>P: very small streams; known in NC only from Hanging Rock State Park (Harnett, Stokes)         | <b>SR</b> |  | <b>S3</b>  | <b>G4G5</b> |
| <i>Goerita flinti</i><br><b>a caddisfly</b><br>M: known only from Great Smoky Mountains National Park (Swain)   | <b>SR</b> |  | <b>S1</b>  | <b>G2G3</b> |
| <i>Homoplectra monticola</i><br><b>a caddisfly</b><br>M: scattered sites in central and southern mountains (Buncombe, Jackson, Macon)                           | <b>SR</b> |  | <b>S1</b>  | <b>G2G3</b> |
| <i>Hydropsyche carolina</i><br><b>a caddisfly</b><br>M: rivers and streams in Savannah, French Broad, and New drainages (Jackson, Macon*, Swain*, Transylvania) | <b>SR</b> |  | <b>S1</b>  | <b>G2G3</b> |
| <i>Hydropsyche walkeri</i><br><b>a caddisfly</b><br>M: Beech Creek (Watauga)  | <b>SR</b> |  | <b>S2</b>  | <b>G5</b>   |
| <i>Manophylax altus</i><br><b>Mount Mitchell Caddisfly</b><br>M: moist vertical rockfaces (Buncombe, Yancey)  | <b>SR</b> |  | <b>S1</b>  | <b>G2G3</b> |

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|---|-----------|------|-------------|-------------|
|   | N.C.      | U.S. | N.C         | Global      |
| <i>Nectopsyche waccamawensis</i><br><b>Waccamaw White Miller</b><br>C: Lake Waccamaw (endemic to this area) (Columbus)                                  | <b>SR</b> |      | <b>S1</b>   | <b>G1</b>   |
| <i>Oecetis sp. D</i><br><b>a caddisfly</b><br>C: Lake Waccamaw and additional sites (endemic to North Carolina) (Brunswick, Columbus)                   | <b>SR</b> |      | <b>S1</b>   | <b>G1</b>   |
| <i>Oropsyche howellae</i><br><b>a caddisfly</b><br>M: streams (Jackson*, Macon*)  | <b>SR</b> |      | <b>S2</b>   | <b>G2</b>   |
| <i>Palaeagapetus celsus</i><br><b>a caddisfly</b><br>M: small streams in headwaters of Watauga and Catawba drainages (Avery*, Watauga)                  | <b>SR</b> |      | <b>S2</b>   | <b>G5</b>   |
| <i>Polycentropus coleii</i><br><b>a caddisfly</b><br>M: high elevation streams in Great Smoky Mountains National Park (Haywood, Swain)                  | <b>SR</b> |      | <b>S1</b>   | <b>G3G4</b> |
| <i>Rhyacophila accola</i><br><b>a caddisfly</b><br>M: small streams and springs (endemic to North Carolina) (Haywood, Swain)                            | <b>SR</b> |      | <b>S1S2</b> | <b>G1G2</b> |
| <i>Rhyacophila appalachia</i><br><b>a rhyacophilan caddisfly</b><br>M: mountain streams (Cherokee, Macon, Transylvania) (Cherokee, Macon, Transylvania) | <b>SR</b> |      | <b>S2</b>   | <b>G3</b>   |
| <i>Rhyacophila celadon</i><br><b>Celadon Caddisfly</b><br>M: seeps and streams (Avery, Haywood, Swain, Watauga)   | <b>SR</b> |      | <b>S2</b>   | <b>G2G3</b> |
| <i>Rhyacophila sp. 1</i><br><b>a caddisfly</b><br>C: streams and swamps (Columbus, Moore, Pender, Robeson)  | <b>SR</b> |      | <b>S2</b>   | <b>G2G3</b> |

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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

### Insects: Dragonflies and Damselflies

|   |    |  |      |      |
|---|----|--|------|------|
| <i>Aeshna tuberculifera</i><br><b>Black-tipped Darner</b><br>M: boggy or marshy ponds (Avery, Burke, Wilkes*)   | SR |  | S1   | G5   |
| <i>Aeshna verticalis</i><br><b>Green-striped Darner</b><br>M: marshy ponds (Burke, Henderson)   | SR |  | S1   | G5   |
| <i>Arigomphus pallidus</i><br><b>Gray-green Clubtail</b><br>C: ponds, lakes, and streams (Pender)   | SR |  | S1   | G5   |
| <i>Boyeria grafiana</i><br><b>Ocellated Darner</b><br>M: rocky forest streams (Avery*, Burke, Macon, McDowell, Swain*, Watauga, Wilkes)   | SR |  | S2?  | G5   |
| <i>Calopteryx amata</i><br><b>Superb Jewelwing</b><br>M: cold, shallow, rocky rivers (Buncombe*, Graham, Haywood, Henderson*, Jackson, Macon*, Mitchell*, Swain, Transylvania*, Yancey)             | SR |  | S1S2 | G4   |
| <i>Cordulia shurtleffii</i><br><b>American Emerald</b><br>M: ponds, lakes, bogs (Burke)   | SR |  | S1   | G5   |
| <i>Coryphaeschna ingens</i><br><b>Regal Darner</b><br>C: lakes and ponds (Bladen, Carteret*, Columbus, Craven*, Durham, Gates, Granville, Jones, Martin*, Onslow, Pamlico*, Pender, Tyrrell, Wake*) | SR |  | S2?  | G5   |
| <i>Dromogomphus spoliatus</i><br><b>Flag-tailed Spinyleg</b><br>M: slow-moving rivers, or sometimes ponds, often in sunny places (Graham)   | SR |  | S1   | G4G5 |
| <i>Gomphus abbreviatus</i><br><b>Spine-crowned Clubtail</b><br>PC: rivers (Caswell, Chatham, Cumberland, Durham, Lee, Mecklenburg, Montgomery, Moore, Randolph, Union, Wake)                        | SR |  | S3   | G4   |
| <i>Gomphus adelphus</i><br><b>Mustached Clubtail</b><br>M: small rivers with rapids (Ashe, Avery, Buncombe, Haywood, Madison, Watauga, Yancey*)   | SR |  | S1S2 | G4G5 |
| <i>Gomphus australis</i><br><b>Clearlake Clubtail</b><br>C: lakes and ponds (Bladen, Brunswick, New Hanover*, Richmond, Scotland)   | SR |  | S1   | G4   |

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| <i>Gomphus borealis</i><br><b>Beaverpond Clubtail</b><br>M: lakes, ponds, streams (Mitchell*)  | SR     |      | SH   | G4     |
| <i>Gomphus cavillaris</i><br><b>Sandhill Clubtail</b><br>SC: sand-bottomed lakes and streams (Bladen, Brunswick)   | SR     |      | S1   | G4     |
| <i>Gomphus consanguis</i><br><b>Cherokee Clubtail</b><br>MP: small spring-fed streams (Burke*, Davie)  | SR     | FSC  | S1?  | G3     |
| <i>Gomphus descriptus</i><br><b>Harpoon Clubtail</b><br>M: large streams and rivers (Avery*, Haywood*, Madison)  | SR     |      | S1   | G4     |
| <i>Gomphus fraternus</i><br><b>Midland Clubtail</b><br>P: rocky rivers (Anson, Stanly)   | SR     |      | S1   | G5     |
| <i>Gomphus lineatifrons</i><br><b>Splendid Clubtail</b><br>MP: rocky rivers (Alleghany, Ashe, Avery, Durham, Haywood, Orange, Watauga)   | SR     |      | S2   | G4     |
| <i>Gomphus quadricolor</i><br><b>Rapids Clubtail</b><br>MP: rocky rivers (Buncombe, Chatham, Madison, Moore)   | SR     |      | S1?  | G3G4   |
| <i>Gomphus septima</i><br><b>Septima's Clubtail</b><br>PC: rocky rivers (Alamance, Anson, Chatham, Cumberland, Durham, Halifax, Harnett, Lee, Montgomery, Moore, Nash, Northampton, Orange, Richmond, Stanly, Union, Wake) | SR     | FSC  | S2S3 | G2     |
| <i>Gomphus ventricosus</i><br><b>Skillet Clubtail</b><br>P: rivers (Caswell, Franklin, Vance, Wake)  | SR     |      | S1S2 | G3     |
| <i>Gomphus viridifrons</i><br><b>Green-faced Clubtail</b><br>M: rivers (Alleghany*, Ashe, Macon, Madison)  | SR     |      | S1   | G3G4   |
| <i>Ladona julia</i><br><b>Chalk-fronted Corporal</b><br>M: bogs, marshes (Jackson)   | SR     |      | S1   | G5     |
| <i>Lestes congener</i><br><b>Spotted Spreadwing</b><br>M: ponds and small lakes with emergent vegetation along the margins (Alleghany, Watauga)  | SR     |      | S1   | G5     |

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|---|--------|------|------|--------|
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| <i>Lestes vidua</i><br><b>Carolina Spreadwing</b><br>C: ponds and pools (Bladen, Brunswick, Hoke, Onslow, Pender, Sampson*)   | SR     |      | S2?  | G5     |
| <i>Macromia margarita</i><br><b>Mountain River Cruiser</b><br>PM: rivers (Burke, Caldwell, Cleveland, Davie, Franklin, Granville*, Iredell, Macon, Rockingham, Transylvania*, Watauga)  | SR     | FSC  | S2?  | G3     |
| <i>Neurocordulia yamaskanensis</i><br><b>Stygian Shadowdragon</b><br>M: rivers (Alleghany*, Macon, Madison)   | SR     |      | S1?  | G5     |
| <i>Ophiogomphus aspersus</i><br><b>Brook Snaketail</b><br>M: rapids of rivers and streams (Alleghany, Ashe, Haywood*)   | SR     |      | S1   | G4     |
| <i>Ophiogomphus edundo</i><br><b>Edmund's Snaketail</b><br>P: rocky rivers and streams in the upper Piedmont and foothills (Burke, Caldwell, Rockingham)  | SR     | FSC  | S1   | G1G2   |
| <i>Ophiogomphus howei</i><br><b>Pygmy Snaketail</b><br>M: rivers (Alleghany, Ashe, Burke)   | SR     | FSC  | S1   | G3     |
| <i>Ophiogomphus mainensis</i><br><b>Maine Snaketail</b><br>M: rapids of rivers and streams (Ashe, Buncombe, Burke, Caldwell, Haywood, Jackson, Madison, Mitchell, Swain*, Watauga, Yancey)  | SR     |      | S2S3 | G4G5   |
| <i>Ophiogomphus rupinsulensis</i><br><b>Rusty Snaketail</b><br>M: rivers (Alleghany)  | SR     |      | S1   | G5     |
| <i>Progomphus bellei</i><br><b>Belle's Sanddragon</b><br>C: sand-bottomed lakes (Bladen)  | SR     | FSC  | S1   | G3     |
| <i>Somatochlora elongata</i><br><b>Ski-tipped Emerald</b><br>M: bogs, marshes, and other open wetlands with slow-moving water (Ashe, Avery, Burke, Clay*, Jackson*, Macon, Watauga)   | SR     |      | S2S3 | G5     |
| <i>Somatochlora georgiana</i><br><b>Coppery Emerald</b><br>CSP: creeks and other slow-moving acidic streams, in forested areas (Anson*, Beaufort*, Bladen*, Brunswick*, Chatham, Columbus*, Cumberland*, Duplin*, Durham, Edgecombe, Franklin*, Greene*, Harnett*, Hoke, Johnston*, Lee*, Martin*, Moore, Nash, Northampton*, Orange*, Pender*, Pitt*, Richmond*, Robeson*, Rockingham*, Sampson*, Scotland*) | SR     |      | S2?  | G3G4   |



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|  | N.C.      | U.S. | N.C         | Global      |
| <i>Stylogomphus sigmastylus</i><br><b>Interior Least Clubtail</b><br>S: small, clear streams in wooded areas (Moore*)  | <b>SR</b> |      | <b>SH</b>   | <b>G5</b>   |
| <i>Stylurus ivae</i><br><b>Shining Clubtail</b><br>CS: sandy creeks or small rivers, where waters are clean (Bladen*, Columbus*, Cumberland*, Duplin, Jones, Moore*, Pender*, Robeson, Sampson*, Scotland) | <b>SR</b> |      | <b>S2S3</b> | <b>G4</b>   |
| <i>Stylurus scudderi</i><br><b>Zebra Clubtail</b><br>M: streams and rivers (Ashe, Avery*, Jackson*, Macon*, Swain*, Watauga, Wilkes)   | <b>SR</b> |      | <b>S2?</b>  | <b>G4G5</b> |
| <i>Stylurus townesi</i><br><b>Townes' Clubtail</b><br>C: sand-bottomed small streams and rivers (Columbus*, Robeson*)  | <b>SR</b> |      | <b>SH</b>   | <b>G3</b>   |
| <i>Sympetrum obtrusum</i><br><b>White-faced Meadowhawk</b><br>M: boggy or marshy ponds and lakes (Ashe, Avery, Watauga)  | <b>SR</b> |      | <b>S1</b>   | <b>G5</b>   |
| <i>Triacanthagyna trifida</i><br><b>Phantom Darner</b><br>C: slow-flowing streams (Carteret*, Craven*, Pender, Robeson*)   | <b>SR</b> |      | <b>S1?</b>  | <b>G5</b>   |



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|  | N.C.      | U.S. | N.C         | Global    |
| <b><i>Callophrys irus</i></b><br><b>Frosted Elfin</b><br>CSPM: open woods and borders, usually in dry situations; host plants -- lupines ( <i>Lupinus</i> ) and wild indigos ( <i>Baptisia</i> ) (Brunswick, Buncombe*, Cherokee*, Columbus, Craven*, Cumberland, Franklin, Gates, Harnett, Hoke, Jones, Moore, Pender, Polk*, Richmond*, Scotland)  | <b>SR</b> |      | <b>S2</b>   | <b>G3</b> |
| <b><i>Celastrina nigra</i></b><br><b>Dusky Azure</b><br>M: rich, moist deciduous forests; host plant -- goat's-beard ( <i>Aruncus dioicus</i> ) (Buncombe, Clay, Graham, Haywood, Jackson, Macon, Mitchell, Polk, Swain*, Transylvania)  | <b>SR</b> |      | <b>S2</b>   | <b>G4</b> |
| <b><i>Chlosyne gorgone</i></b><br><b>Gorgone Checkerspot</b><br>M: woodland openings and borders; host plants -- sunflowers, rosinweeds, and other tall composites (Clay, Macon)   | <b>SR</b> |      | <b>S1?</b>  | <b>G5</b> |
| <b><i>Erora laeta</i></b><br><b>Early Hairstreak</b><br>M: deciduous forests, especially along edges of rich forests; host plants -- mainly American beech ( <i>Fagus grandifolia</i> ) (Alleghany, Ashe, Avery, Buncombe, Burke, Clay, Graham, Haywood, Jackson, Macon, Madison, Mitchell, Swain, Transylvania, Watauga, Wilkes)  | <b>SR</b> |      | <b>S2S3</b> | <b>GU</b> |
| <b><i>Erynnis martialis</i></b><br><b>Mottled Duskywing</b><br>MPSC: upland woods and wooded edges; host plant -- New Jersey tea ( <i>Ceanothus americanus</i> ) (Alleghany, Ashe, Brunswick*, Buncombe, Caswell, Clay, Cleveland, Craven*, Cumberland, Durham, Franklin, Gaston*, Graham, Granville, Henderson, Jones*, Macon*, Madison, Montgomery, Moore, Orange*, Polk, Richmond*, Rutherford, Surry, Swain, Wake*, Warren, Wayne, Yadkin) | <b>SR</b> |      | <b>S2</b>   | <b>G3</b> |
| <b><i>Euchloe olympia</i></b><br><b>Olympia Marble</b><br>M: dry, open wooded slopes, mainly on circumneutral soils; host plants -- cresses ( <i>Arabis</i> ) (Alleghany, Madison, Swain, Wilkes)  | <b>SR</b> |      | <b>S1</b>   | <b>G5</b> |
| <b><i>Euphydryas phaeton</i></b><br><b>Baltimore Checkerspot</b><br>M: bogs, marshes, wet meadows; rarely in upland woods; host plants -- turtlehead ( <i>Chelone</i> ) and false foxglove ( <i>Aureolaria</i> ) (Alleghany, Ashe, Avery, Buncombe, Graham, Haywood, Henderson, Jackson, Macon, Madison, Mitchell, Polk, Transylvania*, Watauga)   | <b>SR</b> |      | <b>S2</b>   | <b>G4</b> |
| <b><i>Euphyes berryi</i></b><br><b>Berry's Skipper</b><br>C: wet areas near ponds, canals, or marshes; host plants -- sedges ( <i>Carex</i> ) (Carteret, Columbus, Craven, Dare, Hyde, Washington)   | <b>SR</b> |      | <b>S1</b>   | <b>G2</b> |

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|  | N.C.   | U.S. | N.C  | Global |
| <i>Euphyes bimaculata</i><br><b>Two-spotted Skipper</b><br>CSPM: wet savannas, bogs, sedgy areas near wet woods; host plants -- sedges ( <i>Carex</i> ) (Alleghany, Ashe, Brunswick, Carteret, Craven, Gates, Harnett, Johnston, Jones*, Moore*, Northampton, Pender, Pitt, Vance)   | SR     |      | S2   | G4     |
| <i>Euphyes dukesi</i><br><b>Dukes' Skipper</b><br>CT: ecotones of brackish or fresh marshes with swamps; host plants -- sedges ( <i>Carex</i> ) (Beaufort, Brunswick, Craven, Currituck, Dare, New Hanover)  | SR     |      | S1S2 | G3     |
| <i>Hesperia attalus</i><br><b>Dotted Skipper</b><br>SC: pine/oak sandhills, flatwoods, mainly in Sandhills; host plants -- grasses (Brunswick*, Craven*, Cumberland, Hoke, Moore, Pender*, Richmond, Scotland)   | SR     |      | S2S3 | G3G4   |
| <i>Hesperia meskei</i><br><b>Meske's Skipper</b><br>SC: open pine woods, especially in Sandhills; host plants -- grasses (Bladen, Brunswick, Cumberland, Hoke, Moore, Onslow*, Richmond, Sampson, Scotland)  | SR     |      | S3   | G3G4   |
| <i>Megathymus cofaqui</i><br><b>Cofaqui Giant-Skipper</b><br>P: monadnocks with yucca; host plant -- <i>Yucca filamentosa</i> (Alexander, Polk*)   | SR     |      | S1   | G3G4   |
| <i>Neonympha areolatus</i><br><b>Georgia Satyr</b><br>C: savannas, wet powerline clearings, other damp grassy places; host plants -- sedges (Brunswick, Carteret, Columbus, Craven, Durham*, Hoke*, Jones*, Moore*, New Hanover, Onslow, Pender)   | SR     |      | S2   | G3G4   |
| <i>Neonympha helicta</i><br><b>Helicta Satyr</b><br>CSP: sedgy wetlands, including sandhill seeps, pocosin ecotones, and drained beaver ponds in the Sandhills, low pocosins in the northeast Coastal Plain, and wet open swales in the Piedmont; host plants -- sedges (Alamance*, Anson, Beaufort, Bertie*, Chatham*, Cumberland, Dare, Durham*, Gaston*, Gates*, Granville, Halifax, Harnett, Hoke, Hyde, Martin*, Moore, Pitt, Richmond, Scotland, Washington) (Alamance*, Anson*, Beaufort, Bertie*, Chatham, Cumberland, Dare, Durham*, Gaston*, Gates*, Granville*, Halifax*, Harnett, Hoke, Hyde, Martin*, Moore, Pitt, Richmond*, Scotland, Washington) | SR     |      | S1?  | G3G4   |
| <i>Neonympha mitchellii francisci</i><br><b>Saint Francis' Satyr</b><br>S: boggy areas, overgrown beaver ponds, and pocosin margins with sedges in sandhills; host plants -- sedges (taxon endemic to North Carolina) (Cumberland, Hoke)   | SR     | E    | S1   | G2T1   |

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|  | N.C.      | U.S.       | N.C         | Global          |
| <i>Papilio cresphontes</i><br><b>Giant Swallowtail</b><br>TCMP: primarily coastal in maritime forests or thickets; also in foothills and mountains near hoptree; host plants -- prickly-ash ( <i>Zanthoxylum</i> ), hoptree ( <i>Ptelea</i> ) (Alexander, Alleghany, Ashe, Brunswick, Buncombe, Caldwell, Carteret, Cherokee*, Currituck, Dare, Hyde, Madison, New Hanover, Onslow, Orange*, Pender, Wake, Yancey) | <b>SR</b> |            | <b>S2S3</b> | <b>G5</b>       |
| <i>Phyciodes batesii maconensis</i><br><b>Appalachian Tawny Crescent</b><br>M: woodland openings, glades, and road banks at higher elevations; host plants -- asters, mainly <i>Symphotrichum undulatum</i> (Buncombe*, Clay, Graham, Haywood, Jackson, Macon, Swain)  | <b>SR</b> | <b>FSC</b> | <b>S2</b>   | <b>G4G5T2T3</b> |
| <i>Poanes aaroni</i><br><b>Aaron's Skipper</b><br>T: brackish marshes along the northern coast and sounds; host plants -- grasses, perhaps saltgrass ( <i>Distichlis spicata</i> ) (Currituck, Dare, Hyde)   | <b>SR</b> |            | <b>S1S2</b> | <b>G4</b>       |
| <i>Polites mystic</i><br><b>Long Dash</b><br>M: bogs, wet meadows; host plants -- grasses (Alleghany, Ashe, Watauga)   | <b>SR</b> |            | <b>S1</b>   | <b>G5</b>       |
| <i>Polygonia faunus</i><br><b>Green Comma</b><br>M: spruce, fir, or hemlock forests, where mixed with hardwoods; host plants -- mainly birches ( <i>Betula</i> ) (Avery*, Buncombe, Caldwell*, Graham, Haywood, Henderson, Macon, Swain, Transylvania*, Watauga, Yancey)   | <b>SR</b> |            | <b>S1S2</b> | <b>G5</b>       |
| <i>Polygonia progne</i><br><b>Gray Comma</b><br>M: rich deciduous forests; host plants -- mainly gooseberries ( <i>Ribes</i> ) (Avery, Buncombe, Clay, Madison*, Mitchell*, Swain*, Watauga)   | <b>SR</b> |            | <b>S1</b>   | <b>G5</b>       |
| <i>Pontia protodice</i><br><b>Checkered White</b><br>PCMS: fields, pastures; host plants -- mustard species (Family <i>Brassicaceae</i> ) (Buncombe, Burke, Cabarrus, Chatham, Durham, Forsyth, Gates, Granville, Harnett, Mecklenburg, Richmond, Wake, Wayne)   | <b>SR</b> |            | <b>S1S2</b> | <b>G5</b>       |
| <i>Problema bulenta</i><br><b>Rare Skipper</b><br>T: fresh to brackish marshes with tall grasses in Wilmington area; host plant -- wild rice ( <i>Zizania aquatica</i> ), possibly other tall grasses (Brunswick, New Hanover)   | <b>SR</b> | <b>FSC</b> | <b>S1</b>   | <b>G2G3</b>     |
| <i>Pyrgus wyandot</i><br><b>Appalachian Grizzled Skipper</b><br>M: openings and edges near wooded hilltops; host plants -- mainly cinquefoil ( <i>Potentilla</i> ) (Alleghany, Ashe, Polk*)  | <b>SR</b> | <b>FSC</b> | <b>S1</b>   | <b>G1G2Q</b>    |

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| <i>Satyrium caryaevorus</i><br><b>Hickory Hairstreak</b><br>M: mid- to high elevation deciduous forests; host plants -- primarily hickories ( <i>Carya</i> ) (Ashe, Buncombe, Macon, Madison, McDowell, Watauga)  | <b>SR</b> |            | <b>S1</b>   | <b>G4</b>     |
| <i>Satyrium edwardsii</i><br><b>Edwards' Hairstreak</b><br>SM: scrubby or xeric oak woods; host plants -- mainly oaks ( <i>Quercus</i> ) (Cumberland, Harnett, Hoke, Macon, Moore, Polk*, Sampson, Scotland, Transylvania*, Watauga*)   | <b>SR</b> |            | <b>S2</b>   | <b>G5</b>     |
| <i>Satyrium favonius favonius</i><br><b>Southern Oak Hairstreak</b><br>T: maritime forests along southern coast; host plant -- oaks, especially live oak ( <i>Quercus virginiana</i> ) (Brunswick, New Hanover)   | <b>SR</b> |            | <b>S1</b>   | <b>G4G5T4</b> |
| <i>Satyrium favonius ontario</i><br><b>Northern Oak Hairstreak</b><br>PSCTM: oak-dominated woods, usually in dry sites; host plants -- oaks ( <i>Quercus</i> ) (Alleghany, Brunswick, Camden*, Carteret, Caswell, Cleveland, Cumberland*, Currituck, Dare, Durham, Hoke, Hyde*, Iredell, Mecklenburg, Montgomery, Moore, Orange, Pender*, Richmond, Wilkes) | <b>SR</b> |            | <b>S2S3</b> | <b>G4G5T4</b> |
| <i>Speyeria idalia</i><br><b>Regal Fritillary</b><br>M: wet or dry meadows, bogs, open hilltops; host plants -- violets ( <i>Viola</i> ) (Alleghany*, Ashe*, Avery*, Wilkes*)   | <b>SR</b> | <b>FSC</b> | <b>SX</b>   | <b>G3</b>     |

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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |
| <b>Insects: Moths</b>   |        |      |      |        |
| <i>Acronicta albarufa</i><br><b>Barrens Dagger Moth</b><br>S: oak glades and barrens (Cumberland, Moore, Wake*)   | SR     |      | S1S2 | G3G4   |
| <i>Acronicta dolli</i><br><b>Doll's Dagger</b><br>M: dry oak woodlands (Macon)  | SR     |      | S1S2 | G3G4   |
| <i>Acronicta perblanda</i><br><b>Cypress Daggermoth</b><br>C: cypress swamps (Craven*)  | SR     |      | SH   | G3G4   |
| <i>Acronicta sinescripta</i><br><b>a Dagger Moth</b><br>C: savannas and flatwoods (Brunswick, Pender)   | SR     |      | S1S3 | G3G4   |
| <i>Agrotis carolina</i><br><b>a Dart Moth</b><br>CS: flatwoods with pyxie-moss ( <i>Pyxidanthera</i> ) (endemic to North Carolina) (Bladen, Brunswick, Carteret, Columbus, Craven, Cumberland, Harnett, Onslow, Pender) | SR     | FSC  | S2S3 | G2G3Q  |
| <i>Apamea inebriata</i><br><b>Drunk Apamea</b><br>S: sedge meadows (Cumberland, Harnett, Moore)   | SR     |      | S1S2 | G3G4   |
| <i>Apameine new genus 2 sp. 1</i><br><b>a Cane Borer</b><br>CM: woodland canebrakes (Brunswick, Swain)  | SR     |      | S2S3 | GNR    |
| <i>Apameine new genus 2 sp. 3</i><br><b>a Canebrake Moth</b><br>CS: woodland canebrakes (Cumberland, Hoke, Martin, Northampton, Washington)   | SR     |      | S2S3 | GNR    |
| <i>Apameine new genus 2 sp. 4</i><br><b>a Cane Borer</b><br>M: woodland canebrakes (Swain)  | SR     |      | S1S2 | GNR    |
| <i>Arctia caja</i><br><b>Great Tiger Moth</b><br>M: high elevation hardwood forests (Watauga, Yancey)   | SR     |      | S1   | G5     |
| <i>Argyrostroma quadrifilaris</i><br><b>Four-lined Chocolate</b><br>CSM: pocosins and flatwoods (Bladen, Brunswick, Carteret, Columbus, Cumberland, Harnett, Hoke, Moore, New Hanover, Onslow, Pender)                  | SR     |      | S2S3 | G4     |

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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |
| <i>Bleptina sangamonica</i><br><b>a Litter Moth</b><br>CPM: habitats not known (Bladen, Macon, Montgomery, Onslow, Randolph)  | SR     |      | S1S2 | GU     |
| <i>Catocala consors</i><br><b>Consort Underwing</b><br>P: oak-hickory forests (Gaston*)   | SR     |      | SH   | G4     |
| <i>Catocala dulciola</i><br><b>Sweet Underwing</b><br>M: forests with hawthorns (Alleghany*)  | SR     |      | SH   | G3     |
| <i>Catocala grisatra</i><br><b>Grisatra Underwing</b><br>C: sandhills and dry woods with hawthorns (Bladen)   | SR     |      | S1S2 | G1G3   |
| <i>Catocala herodias</i><br><b>Herodias Underwing</b><br>P: oak forests, particularly with bear oak ( <i>Quercus ilicifolia</i> ) (Stokes)  | SR     |      | S1   | G3     |
| <i>Catocala jair</i><br><b>Jair Underwing</b><br>SC: xeric pine-oak sandhills (Bladen, Moore, New Hanover)  | SR     |      | S1S3 | G4?    |
| <i>Catocala lincolnana</i><br><b>Lincoln Underwing</b><br>C: wooded areas with hawthorns (Brunswick, Martin, Pender)  | SR     |      | S2S3 | G3G4   |
| <i>Catocala louiseae</i><br><b>Louise's Underwing</b><br>C: flatwoods and other habitats with blueberries (Bladen)  | SR     |      | S1S2 | G4     |
| <i>Catocala marmorata</i><br><b>Marbled Underwing</b><br>CMP: forests with cottonwoods or willows, especially with swamp cottonwood (Alleghany, Ashe, Brunswick, Martin, New Hanover) | SR     |      | S1S3 | G3G4   |
| <i>Catocala messalina</i><br><b>Messalina Underwing</b><br>TC: maritime forests and xeric sandhills (Dare*, New Hanover)  | SR     |      | S2?  | G4?    |
| <i>Catocala orba</i><br><b>Orba Underwing</b><br>C: levee forests with hawthorn (Martin, Northampton)   | SR     |      | S2S3 | G4     |
| <i>Cerma cora</i><br><b>Owl-eyed Bird-dropping Moth</b><br>CM: levee forests with hawthorn (Ashe, Martin, New Hanover)  | SR     |      | S2S3 | G3G4   |



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|--|--------|------|------|--------|
|  | N.C.   | U.S. | N.C  | Global |
| <i>Chaetagnela fergusonii</i><br><b>Ferguson's Sallow</b><br>CS: sandhills (Brunswick, Moore, New Hanover)   | SR     |      | S1S2 | G3G4   |
| <i>Cherokeea attakullakulla</i><br><b>Cherokee Moth</b><br>M: forests with stands of cane ( <i>Arundinaria</i> ) in the southwestern mountains (records not yet entered) | SR     |      | S2S3 | GNR    |
| <i>Cyclophora sp. 1 (culicaria of authors)</i><br><b>Sand-myrtle Geometer</b><br>C: flatwoods with sand-myrtle ( <i>Kalmia buxifolia</i> ) (Brunswick, New Hanover)      | SR     |      | S1   | G3     |
| <i>Cynia inopinatus</i><br><b>Unexpected Cynia Moth</b><br>CS: on milkweeds ( <i>Asclepias</i> ) (Harnett, Onslow, Pender)   | SR     |      | S2S3 | G4     |
| <i>Dargida aleada</i><br><b>an Armyworm Moth</b><br>T: maritime grasslands (Carteret)  | SR     |      | S1S2 | GNR    |
| <i>Dargida rubripennis</i><br><b>Pink Streak</b><br>CS: beach grasslands and sandy fields (Carteret, Dare)   | SR     |      | S2S3 | G3G4   |
| <i>Dasychira leucophaea</i><br><b>a Tussock Moth</b><br>CS: habitat not known (Moore, New Hanover)   | SR     |      | S2S3 | G4     |
| <i>Datana ranaeiceps</i><br><b>Post-burn Datana Moth</b><br>CSPM: recently burned flatwoods and sandhills (Bladen, Brunswick, Columbus, New Hanover, Onslow)             | SR     |      | S2S3 | G3G4   |
| <i>Datana robusta</i><br><b>a Prominent Moth</b><br>C: savannas, flatwoods, and sandhills (Onslow)   | SR     |      | S1S2 | G2G4   |
| <i>Derrima stellata</i><br><b>Pink Star Moth</b><br>M: habitat not known (Avery*, Transylvania*)   | SR     |      | SH   | G4     |
| <i>Digrammia ordinata</i><br><b>Amorpha Angle</b><br>CS: sandhills, mainly near the coast (Cumberland, Harnett)  | SR     |      | S2S3 | GNR    |

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|--|--------|------|------|--------|
|  | N.C.   | U.S. | N.C  | Global |
| <i>Drasteria graphica</i><br><b>Graphic Moth</b><br>T: maritime shrub thickets (Brunswick, New Hanover)  | SR     |      | S1S2 | G4     |
| <i>Eilema bicolor</i><br><b>Bicolored Moth</b><br>M: spruce-fir forests (Swain)  | SR     |      | S1S2 | G5     |
| <i>Elaphria cyanympha</i><br><b>a Midget Moth</b><br>C: sandhills (Onslow, Pender)   | SR     |      | S2S3 | G4     |
| <i>Entephria separata</i><br><b>a Geometrid Moth</b><br>M: high elevation forests or heath balds (Yancey)  | SR     |      | S1   | G4     |
| <i>Erastria coloraria</i><br><b>Broad-lined Erastria Moth</b><br>SP: open woodlands with New Jersey tea ( <i>Ceanothus americanus</i> ) (Cumberland, Moore, Richmond, Wake)            | SR     |      | S2S3 | G3G4   |
| <i>Eubaphe meridiana</i><br><b>Little Beggar Moth</b><br>CS: savannas (Brunswick, Pender)  | SR     |      | S2S3 | G4     |
| <i>Euchlaena milnei</i><br><b>Milne's Euchlaena</b><br>M: hardwood forests, perhaps in riparian areas (Swain, Watauga)   | SR     |      | S1S3 | G2G4   |
| <i>Eucoptocnemis dapsilis</i><br><b>a Dart Moth</b><br>CS: habitat not known (New Hanover)   | SR     |      | S2S3 | G4     |
| <i>Eulithis propulsata</i><br><b>Currant Eulithis Moth</b><br>M: high elevation forests (Ashe)   | SR     |      | S2S3 | G4     |
| <i>Euxoa declarata</i><br><b>Clear Dart Moth</b><br>M: habitat not known (Ashe, Avery, Haywood, Watauga)   | SR     |      | S2?  | G4G5   |
| <i>Exyra fax</i><br><b>Epauletted Pitcher-plant Moth</b><br>PC: wetlands with purple pitcher-plants (Brunswick, Carteret, Cumberland, Dare, Hoke, Montgomery, Moore, Pender, Richmond) | SR     |      | S2S3 | G4     |

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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |
| <i>Exyra ridingsii</i><br><b>a Pitcher-plant Moth</b><br>PC: wetlands with yellow pitcher-plants (Moore, Pender)                            | SR     |      | S2   | G2G4   |
| <i>Exyra semicrocea</i><br><b>a Pitcher-plant Moth</b><br>C: wetlands with pitcher-plants (Bladen, Brunswick, Moore, Onslow, Pender)        | SR     |      | S2S3 | G3G4   |
| <i>Feltia manifesta</i><br><b>Adobe Dart</b><br>CSM: xeric oak woodlands (Brunswick, Moore, New Hanover, Onslow, Pender)                    | SR     |      | S2S3 | G4     |
| <i>Franclemontia interrogans</i><br><b>Franclemont's Cane Moth</b><br>C: canebrakes (Camden, Carteret)                                      | SR     |      | S2S3 | G3G4   |
| <i>Gabara sp. 1</i><br><b>a Noctuid Moth</b><br>C: savannas and flatwoods (Brunswick, Onslow, Pender)                                       | SR     |      | S1S2 | G1G3   |
| <i>Gazoryctra sciophanes</i><br><b>a Ghost Moth</b><br>M: spruce-fir forests (Jackson)  | SR     |      | S1?  | GU     |
| <i>Grammia doris</i><br><b>Doris Tiger Moth</b><br>MP: rich forests? (Wake)   | SR     |      | S1S3 | G4?    |
| <i>Grammia placentia</i><br><b>Placentia Tiger Moth</b><br>SM: sandhills and dry forests (Moore)  | SR     |      | S2   | G3G4   |
| <i>Hadena ectypa</i><br><b>Campion Coronet</b><br>M: forests or forest edges with <i>Silene</i> (Haywood, Swain)                            | SR     |      | S1S2 | G3G4   |
| <i>Hemaris gracilis</i><br><b>Slender Clearwing</b><br>C: sandhills, barrens, and other dry heathlands; no locality data                    | SR     |      | SH   | G3G4   |
| <i>Hemeroplanis sp. 1 nr. obliquialis</i><br><b>an Owlet Moth</b><br>PS: dry woodlands with dwarf locusts (Cumberland, Hoke, Moore, Stokes) | SR     |      | S2S3 | GNR    |
| <i>Hemipachnobia monochromatea</i><br><b>Sundew Cutworm Moth</b><br>C: cranberry bogs and northern low pocosins (Dare)                      | SR     |      | S1?  | G4     |

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|--|--------|------|------|--------|
|  | N.C.   | U.S. | N.C  | Global |
| <i>Hemipachnobia subporphyrea</i><br><b>Venus Flytrap Cutworm Moth</b><br>C: savannas with Venus flytraps (endemic to North Carolina) (Bladen*, Brunswick, Carteret, Columbus, Pender) | SR     | FSC  | S1?  | G1     |
| <i>Heterocampa varia</i><br><b>a Prominent Moth</b><br>SPM: xeric pine-oak sandhills and other dry, scrub oak habitats (Cumberland, Hoke, Moore, Richmond)                             | SR     |      | S1S2 | G3G4   |
| <i>Hydriomena exculpata</i><br><b>a Geometrid Moth</b><br>M: spruce-fir forests (Yancey*)  | SR     |      | SH   | GU     |
| <i>Hypagyrtis brendae</i><br><b>Brenda's Hypagyrtis Moth</b><br>CS: Atlantic white cedar forests (Brunswick, Dare, Pender, Scotland)   | SR     |      | S2S3 | G4     |
| <i>Hypomecis buchholzaria</i><br><b>Buchholz's Gray</b><br>CS: fire-maintained glades and barrens (Carteret, Moore)  | SR     |      | S1S2 | G3G4   |
| <i>Idaea ostentaria</i><br><b>Showy Wave</b><br>CS: sandhills (New Hanover, Northampton)   | SR     |      | S2S3 | GNR    |
| <i>Idia majoralis</i><br><b>Greater Idia Moth</b><br>P: associated with woodrat nests (Stokes)   | SR     |      | S1S3 | GNR    |
| <i>Iridopsis cypressaria</i><br><b>Small Cypress Looper</b><br>C: cypress swamps (Beaufort, Brunswick, Camden, Dare, Martin, New Hanover, Onslow, Pender)                              | SR     |      | S2S3 | GU     |
| <i>Korscheltellus gracilis</i><br><b>Conifer Swift Moth</b><br>M: spruce-fir forests; no locality data   | SR     |      | S1S2 | GNR    |
| <i>Lagoa pyxidifera</i><br><b>Yellow Flannel Moth</b><br>CS: savannas, flatwoods, and sandhills (Brunswick, Cumberland, Moore, Pender)   | SR     |      | S2S3 | G4G5   |
| <i>Lemmeria digitalis</i><br><b>Fingered Lemmeria Moth</b><br>S: sedge meadows (Cumberland)  | SR     |      | S1S3 | G4     |

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|--|--------|------|------|--------|
|  | N.C.   | U.S. | N.C  | Global |
| <i>Leptostales laevitaria</i><br><b>Raspberry Wave</b><br>C: habitat not known (Brunswick, Onslow, Pender)         | SR     |      | S2S3 | G4     |
| <i>Leucania calidior</i><br><b>Cane Wainscot</b><br>C: canebrakes (Halifax, Northampton)                           | SR     |      | S1S2 | G2G4   |
| <i>Lithophane georgii</i><br><b>Large Grey Pinion</b><br>M: spruce-fir forests (Ashe, Yancey)                      | SR     |      | S1S2 | G5     |
| <i>Lithophane laceyi</i><br><b>a Pinion Moth</b><br>C: swamp forests (Brunswick, Moore, New Hanover, Pender)       | SR     |      | S1S3 | G4     |
| <i>Lithophane oriunda</i><br><b>Immigrant Pinion</b><br>M: no habitat data (Watauga)                               | SR     |      | S1?  | G4     |
| <i>Loscopia roblei</i><br><b>Roble's Cane Borer</b><br>CS: woodland canebrakes (Martin)                            | SR     |      | S2S3 | G3G4   |
| <i>Lytrosis permagnaria</i><br><b>A Geometrid Moth</b><br>M: apparently in mixed forests (Haywood, Macon) (Orange) | SR     |      | S2S3 | G3G4   |
| <i>Macrochilo sp. 1 nr. absorptalis</i><br><b>a Noctuid Moth</b><br>S: sedge meadows (Cumberland, Hoke)            | SR     |      | S1   | G3     |
| <i>Melanapamea mixta</i><br><b>a Borer Moth</b><br>CSPM: savannas, wet meadows (Transylvania)                      | SR     |      | S2S3 | GU     |
| <i>Meropleon cinnamicolor</i><br><b>a Borer Moth</b><br>T: coastal marshes (Carteret)                              | SR     |      | S1?  | GU     |
| <i>Meropleon diversicolor sullivanii</i><br><b>an Owlet Moth</b><br>T: coastal marshes (Brunswick, Craven)         | SR     |      | S1S2 | G4T1T3 |
| <i>Metalectra albilinea</i><br><b>White-lined Fungus Moth</b><br>C: no habitat information (New Hanover)           | SR     |      | S2S3 | GNR    |

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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |
| <i>Nematocampa baggettaria</i><br><b>Baggett's Nematocampa</b><br>CS: unknown habitat (Brunswick, Onslow, Pender)   | SR     |      | S1S2 | G2G4   |
| <i>Nemoria tuscarora</i><br><b>Tuscarora Emerald</b><br>M: unknown habitat (Alleghany)  | SR     |      | S1S3 | GU     |
| <i>Orgyia antiqua</i><br><b>Rusty Tussock Moth</b><br>M: unknown habitat (Haywood)  | SR     |      | S1S2 | GNR    |
| <i>Pachypolia atricornis</i><br><b>Three-horned Sallow</b><br>M: northern hardwoods and rich cove forests? (Ashe)   | SR     |      | S2S3 | G3G4   |
| <i>Papaipema appassionata</i><br><b>Pitcher-plant Borer Moth</b><br>CS: wetlands with pitcher-plants (Brunswick, Pender)  | SR     |      | S2S3 | G4     |
| <i>Papaipema astuta</i><br><b>Yellow Stoneroot Borer Moth</b><br>M: rich cove forests? (Swain)  | SR     |      | S1S2 | G2G4   |
| <i>Papaipema cerina</i><br><b>Golden Borer Moth</b><br>M: northern hardwood forests (Ashe)  | SR     |      | S1S2 | G2G4   |
| <i>Papaipema eryngii</i><br><b>Rattlesnake-master Borer Moth</b><br>C: savannas with <i>Eryngium yuccifolium</i> (known from the entire Atlantic Slope only from a single site) (Pender)          | SR     | C    | S1   | G1G2   |
| <i>Petrophora subaequaria</i><br><b>Northern Petrophora Moth</b><br>M: unknown habitat (Haywood*)   | SR     |      | SH   | G4G5   |
| <i>Photedes carterae</i><br><b>Carter's Noctuid Moth</b><br>CS: savannas and sandhills with pinebarrens sandreed ( <i>Calamovilfa brevipilis</i> ) (Bladen, Brunswick, Carteret*, Onslow, Pender) | SR     |      | S2S3 | G2G3   |
| <i>Platarctia parthenos</i><br><b>St. Lawrence Tiger Moth</b><br>M: northern hardwood forests? (Swain)  | SR     |      | S1S2 | G5     |

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|--|--------|------|------|--------|
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| <i>Protapamea louisae</i><br><b>Louisa's Cane Borer</b><br>M: canebrakes (Macon*)  | SR     |      | SH   | GNR    |
| <i>Ptichodis bistrigata</i><br><b>Southern Ptichodis</b><br>CSP: xeric sandhills (Bladen, Brunswick, Gaston, Moore, New Hanover, Onslow) | SR     |      | S2S3 | G3     |
| <i>Pygarctia abdominalis</i><br><b>Yellow-edged Pygarctia</b><br>CS: xeric sandhills (Brunswick, Moore, Onslow, Pender)                  | SR     |      | S2S3 | G3     |
| <i>Pyreferra ceromatica</i><br><b>Annointed Sallow Moth</b><br>C: flatwoods and pocosins, probably with <i>Fothergilla</i> (Craven)      | SR     |      | S1S2 | GU     |
| <i>Pyrrhia aurantiago</i><br><b>Orange Sallow Moth</b><br>CSM: dry woods with false-foxgloves ( <i>Aureolaria</i> ) (New Hanover)        | SR     |      | S1S3 | G3G4   |
| <i>Schinia bina</i><br><b>Bina Flower Moth</b><br>SC: sandhills (Brunswick*, Moore*)   | SR     |      | SH   | G4     |
| <i>Schinia carolinensis</i><br><b>Carolina Schinia Moth</b><br>CS: savannas and sandhill seeps (Pender)                                  | SR     |      | S2S3 | G3     |
| <i>Schinia jaguarina</i><br><b>Jaguar Flower Moth</b><br>CS: savannas and sandhills (Pender)   | SR     |      | S1S3 | G4     |
| <i>Schinia septentrionalis</i><br><b>Northern Flower Moth</b><br>CS: sandhills (Brunswick*, New Hanover*)                                | SR     |      | SH   | G3G4   |
| <i>Schizura apicalis</i><br><b>Plain Schizura</b><br>CSM: dry woodland and scrub habitats (Ashe, New Hanover)                            | SR     |      | S1S2 | G3G4   |
| <i>Schizura sp. 1</i><br><b>a new Prominent Moth</b><br>PC: unknown (Brunswick, Onslow, Wake)  | SR     |      | S1S2 | GU     |
| <i>Sphingicampa bisecta</i><br><b>Bisected Honey Locust Moth</b><br>P: habitats with honey locust ( <i>Gleditsia</i> ) (Chatham)         | SR     |      | S1?  | G5     |

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|--|-----------|------|-------------|-----------|
|  | N.C.      | U.S. | N.C         | Global    |
| <i>Stenoporpia polygrammaria</i><br><b>Faded Gray Geometer</b><br>P: Hanging Rock State Park (Stokes)                            | <b>SR</b> |      | <b>S1S2</b> | <b>GU</b> |
| <i>Syngrapha alias</i><br><b>Hooked Silver Y Moth</b><br>M: spruce-fir forests (Avery, Swain)                                    | <b>SR</b> |      | <b>S2?</b>  | <b>G5</b> |
| <i>Tolyte minta</i><br><b>Southern Tolyte Moth</b><br>CS: longleaf pine stands (Columbus)  | <b>SR</b> |      | <b>S2S3</b> | <b>G4</b> |
| <i>Xestia perquiritata</i><br><b>Boomerang Dart</b><br>M: spruce-fir forests (Swain)   | <b>SR</b> |      | <b>S1S2</b> | <b>G5</b> |
| <i>Zale declarans</i><br><b>Dixie Zale</b><br>T: maritime forests with live oak (Brunswick, Carteret, Dare, New Hanover, Onslow) | <b>SR</b> |      | <b>S2S3</b> | <b>G5</b> |



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|---|--------|------|------|--------|
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### Insects: Grasshoppers and Katydids

|  |    |  |      |      |
|--|----|--|------|------|
| <i>Arphia granulata</i><br><b>Southern Yellow-winged Grasshopper</b><br>C: flatwoods, sandhills (Bladen, Onslow, Pender)   | SR |  | S2S3 | G5   |
| <i>Booneacris variegata</i><br><b>Variiegated Wingless Locust</b><br>M: a variety of high elevation habitats (Avery, Transylvania)   | SR |  | S2?  | G5   |
| <i>Dendrotettix zimmermanni</i><br><b>Carolina Oak Grasshopper</b><br>M: oak woodlands (endemic to the southern end of the Appalachian Mountains) (Transylvania)                 | SR |  | S1?  | GU   |
| <i>Eotettix pusillus</i><br><b>Little Eastern Grasshopper</b><br>CS: sandhill seeps and wet pine savannas (Moore*, Onslow, Pender)   | SR |  | S2?  | G2G3 |
| <i>Melanoplus angustipennis</i><br><b>Narrow-winged Spur-throat Grasshopper</b><br>S: sandy areas in grasslands (Moore*)   | SR |  | SH   | G5   |
| <i>Melanoplus attenuatus</i><br><b>Slender-bodied Short-wing Grasshopper</b><br>C: wet swales in pinewoods (Brunswick*)  | SR |  | SH   | G2G3 |
| <i>Melanoplus carnegiei</i><br><b>Carnegie Short-wing Grasshopper</b><br>M: open pine and oak forests (Buncombe*)  | SR |  | SH   | GU   |
| <i>Melanoplus cherokee</i><br><b>Cherokee Melanoplus</b><br>M: woodlands, 1800' - 5100' (Buncombe, Haywood, Madison, Swain)  | SR |  | S2?  | G1G3 |
| <i>Melanoplus coreyi</i><br><b>a Spur-throat Grasshopper</b><br>S: flatwoods, savannas, sandhill seeps (endemic to North Carolina) (Cumberland, Hoke, Moore, Richmond, Scotland) | SR |  | S1   | GNR  |
| <i>Melanoplus deceptus</i><br><b>Deceptive Melanoplus</b><br>M: mountain slopes and tops, 4000' - 5700' (Haywood, Jackson, Macon, Madison)                                       | SR |  | S2S3 | G2G4 |
| <i>Melanoplus decoratus</i><br><b>Decorated Melanoplus</b><br>M: dry woodlands (records not yet entered)   | SR |  | S1S2 | GU   |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence)   | Status |      | Rank |        |
|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |
| <i>Melanoplus decorus</i><br><b>Decorated Spur-throat Grasshopper</b><br>C: savannas, flatwoods, low pocosins (endemic to North Carolina) (Carteret, Dare, Onslow, Pender)              | SR     |      | S2S3 | G2G3   |
| <i>Melanoplus divergens</i><br><b>Lobecercus Short-wing Grasshopper</b><br>M: glades and balds, mainly at high elevations (Haywood*, Henderson*, Jackson*, Macon*, Swain*)              | SR     |      | SH   | G2G3   |
| <i>Melanoplus eurycercus</i><br><b>a Spur-throat Grasshopper</b><br>M: no habitat information (Avery, Mitchell)   | SR     |      | S1   | G4     |
| <i>Melanoplus impudicus</i><br><b>Immodest Spur-throat Grasshopper</b><br>M: barrens and glades (Cherokee*)   | SR     |      | SH   | G4G5   |
| <i>Melanoplus mirus</i><br><b>Weldon Short-wing Grasshopper</b><br>CP: open woodlands (endemic to North Carolina) (Bladen, Halifax*, Surry*)  | SR     |      | S1?  | GH     |
| <i>Melanoplus nubilus</i><br><b>Nubile Short-wing Grasshopper</b><br>CS: flatwoods, savannas, sandhill seeps (endemic to North Carolina) (Brunswick, Cumberland, Harnett)               | SR     |      | S2   | G2G3   |
| <i>Melanoplus pachycercus</i><br><b>a Spur-throat Grasshopper</b><br>M: grassy balds and woodland openings and margins (Avery, Macon, Mitchell, Yancey)                                 | SR     |      | S1S2 | G2G3   |
| <i>Melanoplus serrulatus</i><br><b>Nantahala Short-wing Grasshopper</b><br>M: valleys and lower slopes in the Nantahala Mountains (endemic to North Carolina) (records not yet entered) | SR     |      | SH   | G1G3   |
| <i>Melanoplus similis</i><br><b>a Spur-throat Grasshopper</b><br>M: open woodlands (Cherokee*, Haywood*)  | SR     |      | SH   | G5     |
| <i>Melanoplus sylvestris</i><br><b>a Spur-throat Grasshopper</b><br>MP: deciduous forest undergrowth, especially near low-growing ericads (endemic to North Carolina) (Stokes)          | SR     |      | S1S2 | G1G3   |
| <i>Mermiria bivittata</i><br><b>Two-striped Mermiria</b><br>CT: dune grasslands and other grassy areas in or near coastal forests (Brunswick, Carteret, Dare, New Hanover)              | SR     |      | S2S3 | G5     |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence)  | Status    |      | Rank        |            |
|--|-----------|------|-------------|------------|
|  | N.C.      | U.S. | N.C         | Global     |
| <i>Mermiria intertexta</i><br><b>Intertexta Mermiria</b><br>T: coastal marshes and damp depressions (Dare, New Hanover, Onslow)                          | <b>SR</b> |      | <b>S2S3</b> | <b>G4?</b> |
| <i>Scudderia septentrionalis</i><br><b>Northern Bush Katydid</b><br>M: forests (Alleghany, Ashe)   | <b>SR</b> |      | <b>S2S3</b> | <b>G3?</b> |
| <i>Stethophyma celatum</i><br><b>Broad-winged Sedge Grasshopper</b><br>CS: wet savannas, seepage bogs (Brunswick, Onslow, Pender)                        | <b>SR</b> |      | <b>S1S2</b> | <b>G4</b>  |
| <i>Trimerotropis saxatilis</i><br><b>Lichen Grasshopper</b><br>MP: lichen-covered rock outcrops, mainly granitic domes (Alexander, Transylvania, Wilkes) | <b>SR</b> |      | <b>S2?</b>  | <b>G3</b>  |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence) | Status |      | Rank |        |
|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

**Insects: Beetles**

|   |           |          |             |             |
|---|-----------|----------|-------------|-------------|
| <i>Cicindela ancocisconensis</i><br><b>Appalachian Tiger Beetle</b><br>M: mainly sand bars or other sandy areas near rocky streams or small rivers (Haywood, Jackson)                     | <b>SR</b> |          | <b>S1S2</b> | <b>G3</b>   |
| <i>Cicindela nigrrior</i><br><b>Autumn Tiger Beetle</b><br>P: hard-packed sandy uplands (Anson, Moore*, Scotland)   | <b>SR</b> |          | <b>S1</b>   | <b>G2G3</b> |
| <i>Cicindela patruela</i><br><b>Northern Barrens Tiger Beetle</b><br>MP: sandy soil in open pine or pine-oak woods (Avery, Haywood, Macon, Mitchell, Transylvania, Wake, Watauga, Yancey) | <b>SR</b> |          | <b>S2?</b>  | <b>G3</b>   |
| <i>Ellipsoptera lepida</i><br><b>Ghost Tiger Beetle</b><br>T: sand dunes along northern coast (Dare)  | <b>SR</b> |          | <b>S1?</b>  | <b>GNR</b>  |
| <i>Nicrophorus americanus</i><br><b>American Burying Beetle</b><br>M: sites with abundance of small vertebrate carrion (Buncombe*, Yancey*)   | <b>SR</b> | <b>E</b> | <b>SH</b>   | <b>G2G3</b> |
| <i>Stenelmis gammoni</i><br><b>Gammon's Stenelmis Riffle Beetle</b><br>MP: South Fork New River, upper Yadkin River basin (Alleghany, Ashe, Iredell, Surry, Yancey)                       | <b>SR</b> |          | <b>S2</b>   | <b>G1G3</b> |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence) | Status |      | Rank |        |
|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

**Insects: True Bugs**

|  |           |  |            |             |
|--|-----------|--|------------|-------------|
| <i>Chlorochroa dismalia</i><br><b>Dismal Swamp Green Stink Bug</b><br>C: canebrakes (Craven, Harnett*, Hyde*, Onslow*) | <b>SR</b> |  | <b>S1?</b> | <b>G1G3</b> |
|--|-----------|--|------------|-------------|

**Insects: Bees**

|  |           |          |                           |           |
|--|-----------|----------|---------------------------|-----------|
| <i>Bombus affinis</i><br><b>Rusty-patched Bumblebee</b><br>MPC: Avery*, Buncombe*, Catawba*, Clay*, Durham*, Graham*, Haywood*, Henderson*, Jackson*, Macon*, McDowell*, Mitchell*, Moore*, Rowan*, Swain, Transylvania*, Wake, Watauga*, Wayne*, Wilson*, Wilkes, Yancey* | <b>SR</b> | <b>E</b> | <b>S1</b><br>(2017-03-21) | <b>G1</b> |
|--|-----------|----------|---------------------------|-----------|



## NORTH CAROLINA ANIMAL WATCH LIST

The North Carolina Animal Watch List includes species that are rare or uncommon, are not well studied, or are otherwise threatened with serious decline but for which current information does not justify placement on the Rare List by the NCNHP. Watch List species can be indicators of significant habitats, and their presence should be considered in planning natural area protection efforts, though obviously with less weight than higher priority rare species and natural communities. The NCNHP maintains digital files on these species but does not include them in its GIS maps or database. Animals placed on this list fall into a number of categories, discussed below. The NCNHP requests additional information about these species in order to clarify their status and reclassify them into other appropriate and more specific categories. Counties of known occurrence are listed for most groups. A few groups, such as birds, are migratory, and thus counties of occurrence will be misleading.

Reasons for the current placement of species on the Watch List rather than at a high rarity status (Endangered, Threatened, Special Concern, or Significantly Rare) vary. The taxonomic validity of some of these species is currently in doubt. For many of them, the NCNHP lacks adequate documentation of their historic or present extent in North Carolina; this is especially true for invertebrates. Others are known to be rare or uncommon in North Carolina but may not be native to the state, and they may or may not be declining. Some others may not necessarily be rare yet, but they are undergoing significant losses of or disturbances to their habitats. For most species, however, their actual rarity is poorly known and we are **requesting more data for every Watch List category** before such species receive a higher, and more formal, rarity status. A field survey form is provided online at <http://www.ncnhp.org/share-data/contribute/animal-survey-form>. We request that people fill out this survey form and mail it to NCNHP after visiting occurrences of these species.

The Watch List has been divided into categories, which have been devised to indicate the reasons for each species' current placement. These categories and their descriptions have been developed by the NCNHP. A number of species have been placed in two Watch categories because it is believed they may be at risk for at least two reasons.

| CATEGORY | DESIGNATION                | DESCRIPTION   |
|----------|----------------------------|---|
| W1       | Population Decline in NC   | Species that are known to be <b>declining in North Carolina</b> . The distribution or population sizes of such species in the state are fairly well known; loss of habitat is not necessarily a factor.   |
| W2       | Rare but Relatively Secure | Species whose status in N.C. is relatively well known and appear to be relatively secure at this time. While still notably rare, these species do not currently require site-specific monitoring and so are not on the Rare List. Many of these species were formerly on the Rare List; they are retained in this category because they require a lower level of monitoring to ensure their long-term security. |
| W3       | Poorly Known in NC         | Species with inadequate information about their distribution and rarity in N.C. These are generally species which appear to be rare based on museum records and field experience of NCNHP staff, consultants, and cooperating scientists. Further information is needed to determine the true status of these species in N.C.   |

| CATEGORY | DESIGNATION                         | DESCRIPTION   |
|----------|-------------------------------------|---|
| W4       | Rare but Questionable Documentation | Species that have been reported from N.C. without adequate documentation. These species should be listed at a higher level when their reported occurrence in N.C. is verified. This category includes sight records, old and vague reports for which no documentation has appeared, and, in a few cases, more recent literature reports for which we have not yet received documentation.   |
| W5       | Threat to Habitat                   | Species with increasing amounts of threats to its habitat, whether or not populations are known to be declining. These threats can include loss of habitat (e.g., the dramatic loss of maritime forests), degradation of habitat (e.g., pollution and sedimentation of rivers and streams), and disturbance to the habitat (e.g., humans and vehicles on beaches), among other types of threats. Threats can also include use of pesticides, acid rain, fire suppression, over-collection by zoologists, and other factors. |
| W6       | Rare but Believed Not Native        | Species known to occur in N.C. that current data suggest are not native to N.C. but whose native occurrence is plausible. Some of these species were previously listed at a higher level, but field investigations suggest that all known N.C. occurrences are introductions.   |



| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence) | Status |      | Rank |        |
|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

## Mammals

|   |             |          |             |              |
|---|-------------|----------|-------------|--------------|
| <i>Dasyus novemcinctus</i><br><b>Nine-banded Armadillo</b><br>CPM: many forested and scrub habitats, preferably where sandy or other loose soil is present; mainly in southern counties (Bladen, Brunswick, Catawba, Cherokee, Cleveland, Gaston, Haywood, Henderson, Jackson, Lincoln, Macon, New Hanover, Robeson, Surry, Yadkin)   | <b>W3</b>   |          | <b>SU</b>   | <b>G5</b>    |
| <i>Lasiurus cinereus</i><br><b>Hoary Bat</b><br>MP: mostly mid- to high elevation forests, sparingly into the Piedmont (breeding season only) (Avery, Buncombe, Burke, Cherokee, Clay, Graham, Haywood, Jackson, Macon, McDowell, Polk, Rutherford, Stanly, Swain, Transylvania, Watauga, Wilkes, Yancey)   | <b>W2</b>   |          | <b>S3S4</b> | <b>G3G4</b>  |
| <i>Lasiurus seminolus</i><br><b>Seminole Bat</b><br>CSPM: forages over open areas, often over water (summer); mainly in southern half of the state (Bladen, Brunswick, Buncombe, Carteret, Cherokee, Columbus, Gates, Hoke, Johnston, Jones, Lenoir, Mecklenburg, Montgomery, Moore, New Hanover, Pender, Wake)   | <b>W2</b>   |          | <b>S3</b>   | <b>G5</b>    |
| <i>Mustela frenata</i><br><b>Long-tailed Weasel</b><br>MPSC: forests, brushy areas (Alleghany, Ashe, Avery, Bertie, Bladen, Brunswick, Buncombe, Cabarrus, Catawba, Chatham, Cherokee, Clay, Craven, Currituck, Dare, Duplin, Durham, Forsyth, Gates, Guilford, Haywood, Henderson, Johnston, Jones, Lenoir, Macon, Madison, Martin, Mecklenburg, Mitchell, Montgomery, Moore, Nash, Orange, Pasquotank, Perquimans, Richmond, Robeson, Stanly, Swain, Transylvania, Union, Wake, Washington, Wilkes, Yancey)   | <b>W3</b>   |          | <b>S3S4</b> | <b>G5</b>    |
| <i>Neotoma floridana haematoreia</i><br><b>Southern Appalachian Eastern Woodrat</b><br>MP: rocky places in deciduous or mixed forests, in southern mountains and adjacent Piedmont (Buncombe, Burke, Catawba, Cherokee, Graham, Haywood, Henderson, Iredell, Jackson, Macon, Madison, McDowell, Polk, Rutherford, Swain, Transylvania)  | <b>W2</b>   |          | <b>S3S4</b> | <b>G5T4Q</b> |
| <i>Puma concolor cougar</i><br><b>Eastern Cougar</b><br>MPC: extensive forests, remote areas (Graham*, Haywood*, Swain*)  | <b>W4,E</b> | <b>E</b> | <b>SX</b>   | <b>G5TXQ</b> |
| <i>Sciurus niger</i><br><b>Eastern Fox Squirrel</b><br>SCMP: open forests, mainly longleaf pine/scrub oak (Alleghany, Anson, Ashe, Avery*, Beaufort, Bertie, Bladen, Brunswick, Buncombe*, Catawba, Chatham, Cherokee*, Clay*, Columbus, Craven, Cumberland, Davidson, Davie, Duplin, Edgecombe, Forsyth, Graham*, Halifax, Harnett, Hoke, Johnston, Lee, Macon*, Martin, Mecklenburg, Montgomery, Moore, New Hanover, Onslow, Pender, Pitt, Richmond, Robeson, Sampson, Scotland, Stokes, Surry, Swain*, Tyrrell, Union, Wake, Washington, Watauga, Wayne, Wilkes, Wilson) | <b>W2</b>   |          | <b>S3</b>   | <b>G5</b>    |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence)   | Status    |      | Rank       |              |
|---|-----------|------|------------|--------------|
|   | N.C.      | U.S. | N.C        | Global       |
| <i>Sorex hoyi</i><br><b>American Pygmy Shrew</b><br>MC: montane deciduous forests; old fields and forests in northeastern Coastal Plain (Buncombe, Burke, Camden, Cherokee, Clay, Gates, Graham, Haywood, Henderson, Jackson, Macon, Polk, Rutherford, Swain, Transylvania, Wilkes, Yancey) | <b>W2</b> |      | <b>S3</b>  | <b>G5</b>    |
| <i>Sylvilagus aquaticus</i><br><b>Swamp Rabbit</b><br>MP: swamps, floodplain forests close to the Georgia and South Carolina state lines; specimen unidentifiable to species due to poor condition (Clay*)  | <b>W4</b> |      | <b>SNA</b> | <b>G5</b>    |
| <i>Synaptomys cooperi stonei</i><br><b>Stone's Southern Bog Lemming</b><br>M: bogs and wet meadows (Avery, Buncombe, Graham, Haywood, Macon, Madison, Mitchell, Swain, Watauga, Yancey)   | <b>W2</b> |      | <b>S3</b>  | <b>G5TNR</b> |
| <i>Zapus hudsonius</i><br><b>Meadow Jumping Mouse</b><br>MP: open moist fields and brushy places, usually near water (Alleghany, Buncombe, Clay, Durham, Forsyth, Haywood, Macon, Mecklenburg, Mitchell, Swain, Wake, Watauga)  | <b>W2</b> |      | <b>S3</b>  | <b>G5</b>    |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence) | Status |      | Rank |        |
|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

### Birds

|   |              |  |                |           |
|---|--------------|--|----------------|-----------|
| <i>Accipiter gentilis</i><br><b>Northern Goshawk</b><br>M: extensive, remote forests, mainly at high elevations (for nesting) [breeding evidence only]  | <b>W3</b>    |  | <b>SUB</b>     | <b>G5</b> |
| <i>Ammodramus caudacutus</i><br><b>Saltmarsh Sparrow</b><br>T: tidal marshes [breeding season only]   | <b>W3</b>    |  | <b>SUB,S4N</b> | <b>G4</b> |
| <i>Ammodramus savannarum</i><br><b>Grasshopper Sparrow</b><br>PSCM: pastures and other grasslands [breeding season only] (Alamance, Alexander, Alleghany, Anson, Ashe, Beaufort, Brunswick, Buncombe, Cabarrus, Carteret, Caswell, Catawba, Chatham, Cherokee, Cleveland, Cumberland, Davidson, Davie, Durham, Edgecombe, Forsyth, Franklin, Gaston, Granville, Guilford, Halifax, Harnett, Haywood, Henderson, Hoke, Iredell, Johnston, Lee, Lincoln, Macon, Madison, Martin, Mecklenburg, Montgomery, Moore, Nash, New Hanover, Northampton, Onslow, Orange, Person, Pitt, Randolph, Richmond, Robeson, Rockingham, Rowan, Rutherford, Sampson, Scotland, Stanly, Union, Vance, Wake, Warren, Washington, Watauga, Wayne, Wilson, Yadkin) | <b>W1,W5</b> |  | <b>S3B,S1N</b> | <b>G5</b> |
| <i>Anas discors</i><br><b>Blue-winged Teal</b><br>TC: fresh to slightly brackish marshes, usually at impoundments [breeding evidence only] (Dare*)  | <b>W3</b>    |  | <b>SHB,S2N</b> | <b>G5</b> |
| <i>Anhinga anhinga</i><br><b>Anhinga</b><br>C: wooded lakes or ponds, or open swamps (for nesting) [breeding evidence only] (Bertie, Bladen, Brunswick, Carteret, Chatham, Columbus, Craven, Cumberland, Dare, Duplin, Halifax, Hoke, Jones, New Hanover, Robeson, Sampson)   | <b>W2</b>    |  | <b>S3B</b>     | <b>G5</b> |
| <i>Antrostomus carolinensis</i><br><b>Chuck-will's-widow</b><br>PSC: drier forest edges and open woods  | <b>W1</b>    |  | <b>S5B</b>     | <b>G5</b> |
| <i>Antrostomus vociferus</i><br><b>Eastern Whip-poor-will</b><br>MPSC: upland (dry to mesic) woodlands and forests for nesting, usually not far from fields or openings   | <b>W1</b>    |  | <b>S4B</b>     | <b>G5</b> |
| <i>Asio flammeus</i><br><b>Short-eared Owl</b><br>TC: coastal marshes [breeding season only]  | <b>W3</b>    |  | <b>SUB,S3N</b> | <b>G5</b> |
| <i>Asio otus</i><br><b>Long-eared Owl</b><br>M: high elevation forests in northern mountains [breeding season only]   | <b>W3</b>    |  | <b>SUB</b>     | <b>G5</b> |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence)   | Status       |          | Rank           |             |
|---|--------------|----------|----------------|-------------|
|   | N.C.         | U.S.     | N.C            | Global      |
| <b><i>Calidris canutus rufa</i></b><br><b>Red Knot -- Rufa subspecies</b><br>T: beaches and sand flats [wintering habitat only] (Brunswick, Carteret, Currituck, Dare, Hyde, New Hanover, Onslow, Pender)   | <b>W1</b>    | <b>T</b> | <b>S2N</b>     | <b>G4T2</b> |
| <b><i>Chaetura pelagica</i></b><br><b>Chimney Swift</b><br>MPSC: nest in chimneys, or other anthropogenic structures, foraging over all types of habitats, including cities, farm fields, and over forests. After nesting, large groups of swifts may roost communally in tall chimneys   | <b>W1</b>    |          | <b>S5B</b>     | <b>G4G5</b> |
| <b><i>Chordeiles minor</i></b><br><b>Common Nighthawk</b><br>TCSPM: dunes, sandy open areas, sandhills, gravel rooftops for nest sites [breeding evidence only] (most counties in the Coastal Plain, and scattered counties in the Piedmont and low mountains)  | <b>W1</b>    |          | <b>S3B</b>     | <b>G5</b>   |
| <b><i>Contopus cooperi</i></b><br><b>Olive-sided Flycatcher</b><br>M: montane conifer forests (mainly spruce-fir) with openings or dead trees [breeding season only]  | <b>W3,SC</b> |          | <b>SNA</b>     | <b>G4</b>   |
| <b><i>Corvus corax</i></b><br><b>Common Raven</b><br>MP: cliffs or ledges for nesting; forests or fields (mainly at high elevations) for foraging [breeding evidence only] (Ashe, Avery, Forsyth, Guilford, Haywood, Henderson, Jackson, Macon, Mecklenburg, Mitchell, Rutherford, Stokes*, Surry, Watauga, Yancey)   | <b>W2</b>    |          | <b>S3</b>      | <b>G5</b>   |
| <b><i>Empidonax minimus</i></b><br><b>Least Flycatcher</b><br>M: open hardwood forests, groves, streamside trees [breeding season only] (Alleghany, Ashe, Avery, Buncombe, Graham, Haywood, Henderson, Jackson, Macon, Madison, Mitchell, Swain, Transylvania, Watauga, Yancey)   | <b>W2</b>    |          | <b>S3B</b>     | <b>G5</b>   |
| <b><i>Empidonax traillii</i></b><br><b>Willow Flycatcher</b><br>MP: wet thickets in open country, often along streams in broad valleys [breeding season only] (Alleghany, Ashe, Avery, Buncombe, Burke, Cabarrus, Caldwell, Cherokee, Clay, Forsyth, Graham, Guilford, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Rockingham, Stokes, Surry, Swain, Transylvania, Wake*, Watauga, Wilkes, Yadkin, Yancey) | <b>W2</b>    |          | <b>S3B</b>     | <b>G5</b>   |
| <b><i>Eudocimus albus</i></b><br><b>White Ibis</b><br>TC: forests or thickets on maritime islands, rarely at ponds [breeding sites only] (Brunswick, Carteret, Columbus, Currituck, Hyde, New Hanover, Onslow, Pender)  | <b>W2</b>    |          | <b>S3B,S3N</b> | <b>G5</b>   |
| <b><i>Euphagus carolinus</i></b><br><b>Rusty Blackbird</b><br>CSP: swamps and other moist hardwood forests, usually near fields [wintering habitat only] (most counties in the Coastal Plain, and many in the Piedmont)   | <b>W1</b>    |          | <b>S3N</b>     | <b>G4</b>   |

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|--|---------------|------|----------------|--------------|
|  | N.C.          | U.S. | N.C            | Global       |
| <i>Gallinula galeata</i><br><b>Common Gallinule</b><br>TC: freshwater ponds and impoundments with much emergent vegetation [breeding season only] (Brunswick, Carteret, Craven, Currituck, Dare, Hyde, New Hanover, Onslow, Pamlico, Pender, Robeson, Wayne)   | <b>W2</b>     |      | <b>S3B,S2N</b> | <b>G5</b>    |
| <i>Geothlypis philadelphia</i><br><b>Mourning Warbler</b><br>M: high elevation shrub thickets, especially of blackberries [breeding season only]   | <b>W3</b>     |      | <b>SUB,SZN</b> | <b>G5</b>    |
| <i>Helmitheros vermivorum pop. 1</i><br><b>Worm-eating Warbler - Coastal Plain Population</b><br>C: nonriverine wet hardwoods, pocosins [breeding season only] (Beaufort, Bladen, Brunswick, Camden, Carteret, Columbus, Craven, Currituck, Dare, Gates, Hyde, Jones, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Pitt, Robeson, Tyrrell, Washington)  | <b>W5</b>     |      | <b>S3B</b>     | <b>G5TNR</b> |
| <i>Lanius ludovicianus</i><br><b>Loggerhead Shrike</b><br>PSC: fields and pastures [breeding season only] (Alamance, Alleghany*, Anson, Bladen, Brunswick, Cabarrus, Carteret*, Chatham, Cleveland, Columbus, Cumberland, Davidson, Davie, Duplin, Edgecombe, Forsyth, Franklin, Guilford, Halifax, Harnett, Hoke, Iredell, Johnston, Jones, Lee, Lenoir, Mecklenburg, Montgomery, Moore, Nash, New Hanover, Pitt, Richmond, Robeson, Rockingham*, Rutherford, Sampson, Scotland, Stanly, Transylvania*, Union, Vance*, Wake, Wayne, Wilson) | <b>SC, W2</b> |      | <b>S3B,S3N</b> | <b>G4</b>    |
| <i>Lophodytes cucullatus</i><br><b>Hooded Merganser</b><br>PMC: lakes and ponds, with dead trees for nesting [breeding evidence only] (Bladen, Burke, Chatham, Durham, Edgecombe, Guilford, Jones, Orange, Wake)   | <b>W3</b>     |      | <b>S1B,S4N</b> | <b>G5</b>    |
| <i>Nycticorax nycticorax</i><br><b>Black-crowned Night-Heron</b><br>T: maritime thickets or forests, almost always on small islands [nesting sites only] (Brunswick, Carteret, Columbus, Currituck, Dare, Hyde, New Hanover, Onslow, Pamlico, Pender)  | <b>W1</b>     |      | <b>S3B,S3N</b> | <b>G5</b>    |
| <i>Onychoprion fuscatus</i><br><b>Sooty Tern</b><br>T: sand flats on maritime islands [breeding sites only] (Dare*)  | <b>W2</b>     |      | <b>SHB,S3N</b> | <b>G5</b>    |
| <i>Podilymbus podiceps</i><br><b>Pied-billed Grebe</b><br>TC: fresh to slightly brackish ponds and impoundments, usually with fringing vegetation [breeding season only] (Beaufort, Brunswick, Carteret, Craven, Cumberland, Dare, Hyde, New Hanover, Onslow, Pamlico, Pender, Washington, Wayne)  | <b>W2</b>     |      | <b>S3B,S5N</b> | <b>G5</b>    |

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|--|--------------|------|------------------|-----------|
|  | N.C.         | U.S. | N.C              | Global    |
| <i>Rallus elegans</i><br><b>King Rail</b><br>TCP: fresh to slightly brackish marshes [breeding season only] (Brunswick, Carteret, Chatham, Cumberland, Currituck, Dare, Hyde, New Hanover, Onslow, Pamlico, Pender, Tyrrell, Wake, Washington, Wayne)  | <b>W1,W3</b> |      | <b>S3B,S3N</b>   | <b>G4</b> |
| <i>Rallus limicola</i><br><b>Virginia Rail</b><br>T: brackish to nearly fresh marshes near coast [breeding season only] (Carteret, Currituck, Dare, Hyde, Pamlico)   | <b>W3</b>    |      | <b>S3B,S5N</b>   | <b>G5</b> |
| <i>Regulus satrapa</i><br><b>Golden-crowned Kinglet</b><br>M: spruce-fir forests; hardwood forests mixed with spruce or hemlock [breeding season only] (Ashe, Avery, Buncombe, Burke, Caldwell, Graham, Haywood, Henderson, Jackson, Macon, McDowell, Mitchell, Swain, Transylvania, Watauga, Yancey)            | <b>W2,W5</b> |      | <b>S3S4B,S5N</b> | <b>G5</b> |
| <i>Sitta canadensis</i><br><b>Red-breasted Nuthatch</b><br>M: high-elevation coniferous forests, preferably spruce-fir [breeding season only] (Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Graham, Haywood, Henderson, Jackson, Macon, McDowell, Mitchell, Swain, Transylvania, Watauga, Wilkes, Yancey)  | <b>W2,W5</b> |      | <b>S3B,S4N</b>   | <b>G5</b> |
| <i>Spinus pinus</i><br><b>Pine Siskin</b><br>M: spruce-fir forests [breeding evidence only] (Avery, Buncombe, Caldwell, Haywood, Jackson, McDowell, Mitchell, Swain, Transylvania, Watauga, Yancey)  | <b>W3</b>    |      | <b>SUB,S3N</b>   | <b>G5</b> |
| <i>Sterna forsteri</i><br><b>Forster's Tern</b><br>T: salt or brackish marshes, nesting on wrack material or matted grasses [breeding sites only] (Carteret, Dare, Hyde, Pamlico)  | <b>W2</b>    |      | <b>S3B,S5N</b>   | <b>G5</b> |
| <i>Troglodytes hiemalis</i><br><b>Winter Wren</b><br>M: cool, moist forests at mid- to high elevations [breeding season only] (Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Swain, Transylvania, Watauga, Yancey) | <b>W2,W5</b> |      | <b>S3B,S5N</b>   | <b>G5</b> |
| <i>Tyrannus forficatus</i><br><b>Scissor-tailed Flycatcher</b><br>PS: extensive pastures and fields with scattered trees [breeding evidence only] (Gaston*, Moore*, Orange*, Union*)   | <b>W3</b>    |      | <b>S1?</b>       | <b>G5</b> |



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|                                 |           |  |           |           |
|---------------------------------|-----------|--|-----------|-----------|
| <b><i>Virginia valeriae</i></b> | <b>W2</b> |  | <b>S3</b> | <b>G5</b> |
|---------------------------------|-----------|--|-----------|-----------|

**Smooth Earthsnake**

CSPM: deciduous or mixed woods, usually in mesic soils (Bladen, Brunswick, Buncombe, Carteret, Chatham, Cherokee, Craven, Duplin, Durham, Franklin, Gaston, Gates, Granville, Guilford, Hoke, Iredell, Jackson, Macon, McDowell, Mecklenburg, Montgomery, Nash, New Hanover, Onslow, Orange, Pender, Pitt, Randolph, Sampson, Stanly, Swain, Union, Vance, Wake)



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| <b>Amphibians</b>   |           |            |             |                |
| <i>Desmognathus aeneus</i><br><b>Seepage Salamander</b><br>M: seeps, springs, or streams in forests in extreme southwestern counties (Cherokee, Clay, Graham, Macon)  | <b>W2</b> | <b>FSC</b> | <b>S3</b>   | <b>G3G4</b>    |
| <i>Desmognathus imitator</i><br><b>Imitator Salamander</b><br>M: cool, moist high elevation hardwood or spruce-fir forests; confined to Great Smoky Mountains National Park (Haywood, Swain)                          | <b>W2</b> |            | <b>S3</b>   | <b>G3G4</b>    |
| <i>Desmognathus imitator pop. 1</i><br><b>Imitator Salamander - Waterrock Knob population</b><br>M: cool, moist high elevation hardwood or spruce-fir forests; confined to Waterrock Knob vicinity (Haywood, Jackson) | <b>W3</b> |            | <b>S1?</b>  | <b>G3G4TNR</b> |
| <i>Desmognathus santeetlah</i><br><b>Santeetlah Dusky Salamander</b><br>M: stream headwaters and seepage areas; southwestern mountains (Graham, Haywood, Jackson, Swain)  | <b>W2</b> |            | <b>S3S4</b> | <b>G3G4Q</b>   |
| <i>Eurycea bislineata</i><br><b>Northern Two-lined Salamander</b><br>P: edges of creeks in forested areas; reported from Vance County, but no documentation available   | <b>W4</b> |            | <b>SNA</b>  | <b>G5</b>      |
| <i>Eurycea sp. 9</i><br><b>Sandhills Salamander</b><br>C: small streams in the Sandhills (Cumberland, Harnett, Hoke, Moore, Richmond, Scotland)   | <b>W3</b> |            | <b>S3</b>   | <b>G3?Q</b>    |
| <i>Plethodon glutinosus</i><br><b>Northern Slimy Salamander</b><br>M: moist wooded slopes, ravines, and floodplains; presumed to occur in the northwestern mountains  | <b>W4</b> |            | <b>SU</b>   | <b>G5</b>      |
| <i>Plethodon jordani</i><br><b>Red-cheeked Salamander</b><br>M: rich forests in the southwestern mountains, essentially restricted to Great Smoky Mountains National Park (Haywood, Swain)                            | <b>W3</b> |            | <b>S3</b>   | <b>G4</b>      |
| <i>Plethodon richmondi</i><br><b>Southern Ravine Salamander</b><br>M: moist, high-elevation forests, usually on slopes; northern mountains (Alleghany, Ashe, Avery, Caldwell, Watauga)                                | <b>W2</b> |            | <b>S3</b>   | <b>G5</b>      |
| <i>Plethodon shermani</i><br><b>Red-legged Salamander</b><br>M: moist forests in the southwestern counties (Cherokee, Clay, Graham, Macon)  | <b>W2</b> |            | <b>S3S4</b> | <b>G3</b>      |

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|                              |           |  |           |            |
|------------------------------|-----------|--|-----------|------------|
| <b><i>Rana kauffeldi</i></b> | <b>W3</b> |  | <b>SU</b> | <b>GNR</b> |
|------------------------------|-----------|--|-----------|------------|

**Atlantic Coast Leopard Frog**

C: freshwater wetlands, such as marshes and pond edges, in the northeastern portion of the province; recently described and range is poorly known (Bertie, Camden, Gates, Hertford, Martin)

|                               |           |  |           |           |
|-------------------------------|-----------|--|-----------|-----------|
| <b><i>Siren lacertina</i></b> | <b>W3</b> |  | <b>S3</b> | <b>G5</b> |
|-------------------------------|-----------|--|-----------|-----------|

**Greater Siren**

CS: lakes, ponds, and streams, especially where muddy or with weedy vegetation (Bertie, Brunswick, Chowan, Columbus, Craven, Dare, Hyde, Johnston, New Hanover, Pitt, Richmond, Robeson, Scotland, Tyrrell, Wake, Wilson)

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### Freshwater Fishes

|  |           |  |           |             |
|--|-----------|--|-----------|-------------|
| <i>Cyprinella labrosa</i><br><b>Thicklip Chub</b><br>P: Yadkin, Catawba, and Broad drainages (Anson, Burke, Caldwell, Catawba, Cleveland, Davidson, Iredell, Lincoln, McDowell, Polk, Richmond, Rowan, Rutherford, Stokes, Surry, Wilkes, Yadkin)  | <b>W5</b> |  | <b>S3</b> | <b>G4</b>   |
| <i>Cyprinella spiloptera</i><br><b>Spotfin Shiner</b><br>M: primarily New and French Broad drainages (Alleghany, Ashe, Buncombe, Cherokee, Haywood, Macon, Madison)  | <b>W5</b> |  | <b>S2</b> | <b>G5</b>   |
| <i>Cyprinella zanema</i><br><b>Santee Chub</b><br>P: Catawba and Broad drainages (Burke, Caldwell, Catawba, Cleveland, Gaston, Iredell, Lincoln, McDowell, Mecklenburg, Polk, Rutherford)  | <b>W5</b> |  | <b>S3</b> | <b>G4</b>   |
| <i>Elassoma evergladei</i><br><b>Everglades Pygmy Sunfish</b><br>C: southern Coastal Plain, mainly Waccamaw drainage (Bladen, Brunswick, Columbus, Cumberland, New Hanover, Robeson, Scotland)   | <b>W3</b> |  | <b>S3</b> | <b>G5</b>   |
| <i>Etheostoma flabellare</i><br><b>Fantail Darter</b><br>MP: Cape Fear, Neuse, and Tar drainages populations have limited distribution; Pee Dee, Roanoke, New, and French Broad populations stable (Alamance, Caswell, Chatham, Durham, Granville, Guilford, Harnett, Nash, Orange, Person, Rockingham, Vance, Wake, Warren) | <b>W5</b> |  | <b>S3</b> | <b>G5</b>   |
| <i>Etheostoma gutselli</i><br><b>Tuckasegee Darter</b><br>M: Little Tennessee and Pigeon drainages (Graham, Haywood, Jackson, Macon, Swain)  | <b>W2</b> |  | <b>S3</b> | <b>G3G4</b> |
| <i>Etheostoma rufilineatum</i><br><b>Redline Darter</b><br>M: French Broad, Little Tennessee, and Hiwassee drainages (Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Macon, Madison, Swain, Transylvania, Watauga)  | <b>W5</b> |  | <b>S3</b> | <b>G5</b>   |
| <i>Etheostoma vitreum</i><br><b>Glassy Darter</b><br>PC: Chowan, Roanoke, Tar, and Neuse drainages (Bertie, Durham, Edgecombe, Franklin, Granville, Greene, Halifax, Hertford, Johnston, Lenoir, Martin, Nash, Northampton, Pitt, Rockingham, Stokes, Vance, Wake, Warren, Washington, Wayne, Wilson)                        | <b>W5</b> |  | <b>S3</b> | <b>G4G5</b> |
| <i>Fundulus confluentus</i><br><b>Marsh Killifish</b><br>T: fresh to brackish waters along coast (Carteret, Dare, Hyde, Onslow)  | <b>W2</b> |  | <b>S3</b> | <b>G5</b>   |

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| <i>Fundulus luciae</i><br><b>Spotfin Killifish</b><br>TC: ponds and pools along coast (Brunswick, Carteret, New Hanover, Onslow)  | <b>W2</b> |      | <b>S3</b> | <b>G4</b>   |
| <i>Hypentelium roanokense</i><br><b>Roanoke Hog Sucker</b><br>P: Dan drainage   | <b>W2</b> |      | <b>S3</b> | <b>G4</b>   |
| <i>Lepomis marginatus</i><br><b>Dollar Sunfish</b><br>CP: streams and rivers of lower Piedmont and Coastal Plain (Bladen, Brunswick, Columbus, Craven, Duplin, Durham, Gaston, Greene, Hoke, Jones, Lenoir, Mecklenburg, Moore, Pitt, Richmond, Robeson, Sampson, Scotland)         | <b>W2</b> |      | <b>S3</b> | <b>G5</b>   |
| <i>Lepomis punctatus</i><br><b>Spotted Sunfish</b><br>C: most drainages in southern Coastal Plain (Anson, Bladen, Brunswick, Columbus, Craven, Duplin, Hoke, Moore, New Hanover, Pender, Richmond, Robeson, Sampson, Scotland)  | <b>W2</b> |      | <b>S3</b> | <b>G5</b>   |
| <i>Lythrurus matutinus</i><br><b>Pinewoods Shiner</b><br>CP: Tar and Neuse drainages (endemic to North Carolina) (Alamance, Durham, Edgecombe, Forsyth, Franklin, Granville, Greene, Halifax, Johnston, Nash, Orange, Person, Pitt, Vance, Wake, Warren, Wayne, Wilson)             | <b>W2</b> |      | <b>S3</b> | <b>G3G4</b> |
| <i>Moxostoma carinatum</i><br><b>River Redhorse</b><br>M: French Broad, Little Tennessee, and Hiwassee drainages (Cherokee, Graham, Macon, Madison, Swain)  | <b>W2</b> |      | <b>S2</b> | <b>G4</b>   |
| <i>Nocomis platyrhynchus</i><br><b>Bigmouth Chub</b><br>M: New drainage (Alleghany, Ashe, Watauga)  | <b>W2</b> |      | <b>S2</b> | <b>G4Q</b>  |
| <i>Notropis maculatus</i><br><b>Taillight Shiner</b><br>C: southern Coastal Plain drainages (Brunswick, Columbus, Duplin, Pender, Robeson, Sampson)   | <b>W2</b> |      | <b>S2</b> | <b>G5</b>   |
| <i>Notropis photogenis</i><br><b>Silver Shiner</b><br>M: mountain drainages (except Pigeon) (Alleghany, Ashe, Avery, Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, Mitchell, Swain, Transylvania, Watauga, Yancey)                                 | <b>W5</b> |      | <b>S3</b> | <b>G5</b>   |
| <i>Notropis rubricroceus</i><br><b>Saffron Shiner</b><br>M: most mountain drainages, but mainly French Broad and Toe (Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Haywood, Henderson, Jackson, Madison, McDowell, Mitchell, Polk, Rutherford, Transylvania, Watauga, Yancey) | <b>W5</b> |      | <b>S3</b> | <b>G4G5</b> |

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|---|-----------|------|-----------|-------------|
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| <i>Notropis scabriceps</i><br><b>New River Shiner</b><br>M: New drainage (Alleghany, Ashe, Watauga)   | <b>W2</b> |      | <b>S2</b> | <b>G4</b>   |
| <i>Percina aurantiaca</i><br><b>Tangerine Darter</b><br>M: Tennessee drainages (Buncombe, Cherokee, Clay, Graham, Haywood, Jackson, Macon, Madison, Mitchell, Swain, Watauga, Yancey)                         | <b>W2</b> |      | <b>S3</b> | <b>G4</b>   |
| <i>Phenacobius crassilabrum</i><br><b>Fatlips Minnow</b><br>M: Little Tennessee, French Broad, and Toe drainages (Avery, Buncombe, Henderson, Jackson, Macon, Madison, Mitchell, Swain, Transylvania, Yancey) | <b>W2</b> |      | <b>S3</b> | <b>G3G4</b> |
| <i>Pimephales notatus</i><br><b>Bluntnose Minnow</b><br>M: clear rocky streams as well as lakes, ponds, and rivers (Alleghany, Ashe, Avery, Cherokee, Watauga, Yancey)  | <b>W3</b> |      | <b>S3</b> | <b>G5</b>   |

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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

### Mollusks: Freshwater Bivalves

|   |              |            |            |              |
|---|--------------|------------|------------|--------------|
| <i>Elliptio cistellaeformis</i><br><b>Box Spike</b><br>CP: Neuse, Lumber, Pee Dee drainages; Lake Waccamaw (Bertie, Bladen, Chatham, Duplin, Edgecombe, Franklin, Gates, Granville, Greene, Halifax, Hertford, Johnston, Martin, Nash, Pender, Person, Pitt, Robeson, Sampson, Wake, Warren, Wayne, Wilson)   | <b>W3,W5</b> |            | <b>SU</b>  | <b>G4</b>    |
| <i>Elliptio congaraea</i><br><b>Carolina Slabshell</b><br>CSP: drainages north to the White Oak drainage (Anson, Bladen, Brunswick, Chatham, Columbus, Cumberland, Davidson, Duplin, Edgecombe, Franklin, Granville, Guilford, Halifax, Harnett, Hertford, Johnston, Lee, Lenoir, Montgomery, Moore, Nash, Onslow, Orange, Pender, Randolph, Richmond, Robeson, Sampson, Stanly, Union, Wake, Warren) | <b>W2,W5</b> |            | <b>S3</b>  | <b>G3</b>    |
| <i>Elliptio producta</i><br><b>Atlantic Spike</b><br>CSP: many Atlantic drainages; very difficult to identify (Anson, Bladen, Brunswick, Burke, Cabarrus, Caldwell, Chatham, Columbus, Duplin, Gaston, Gates, Granville, Halifax, Johnston, Jones, Lee, Mecklenburg, Montgomery, Moore, Nash, Orange, Richmond, Robeson, Stanly, Wake)  | <b>W3,W5</b> | <b>FSC</b> | <b>SU</b>  | <b>G3Q</b>   |
| <i>Elliptio raveneli</i><br><b>Carolina Spike</b><br>PC: most rivers in southern part of state; taxonomic problems  | <b>W3,W5</b> |            | <b>SU</b>  | <b>G3G4Q</b> |
| <i>Elliptio sp. 2</i><br><b>File Spike</b><br>C: lakes and rivers in the southeastern part of state (endemic to North Carolina)   | <b>W3</b>    |            | <b>SU</b>  | <b>GUQ</b>   |
| <i>Lampsilis sp. 3</i><br><b>a bivalve (Deep River system)</b><br>P: Deep River drainage (endemic to North Carolina) (Anson, Montgomery)  | <b>W3</b>    |            | <b>S1?</b> | <b>GU</b>    |
| <i>Sphaerium simile</i><br><b>Grooved Fingernailclam</b><br>C: White Oak River (Franklin, Jones, Onslow, Vance)   | <b>W3</b>    |            | <b>SU</b>  | <b>G5</b>    |

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|---|--------|------|------|--------|
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### Mollusks: Freshwater and Terrestrial Gastropods

|  |           |            |             |             |
|--|-----------|------------|-------------|-------------|
| <i>Anguispira alternata</i><br><b>Flamed Tigersnail</b><br>M: moist forested areas   | <b>W2</b> |            | <b>S2S3</b> | <b>G5</b>   |
| <i>Anguispira mordax</i><br><b>Appalachian Tigersnail</b><br>M: hardwood forests, especially around limestone outcrops (Avery, Buncombe, Burke, Graham, Henderson, Macon, McDowell, Rutherford, Swain, Yancey)                         | <b>W3</b> |            | <b>S3S4</b> | <b>G4</b>   |
| <i>Carychium exiguum</i><br><b>Obese Thorn</b><br>CM: mesic forests (Brunswick*, Duplin*, Franklin*, Gates*, Johnston*, Swain)   | <b>W3</b> |            | <b>S3?</b>  | <b>G5</b>   |
| <i>Euglandina rosea</i><br><b>Rosy Wolfsnail</b><br>C: habitats poorly known (Gates, Harnett, New Hanover, Pamlico)  | <b>W3</b> |            | <b>S3?</b>  | <b>G5</b>   |
| <i>Gastrocopta armifera</i><br><b>Armed Snaggletooth</b><br>PM: calciphilic; sunny habitats including cedar glades and along railroads (Burke, Catawba, Gaston)  | <b>W3</b> |            | <b>S2S3</b> | <b>G5</b>   |
| <i>Gastrocopta procera</i><br><b>Wing Snaggletooth</b><br>C: calciphilic -- dry ground with sparse vegetation; scattered records, but little locality data   | <b>W3</b> |            | <b>S3</b>   | <b>G5</b>   |
| <i>Glyphyalinia umbilicata</i><br><b>Texas Glyph</b><br>C: no habitat information; occurs in the southeastern part of the state  | <b>W2</b> |            | <b>S2S3</b> | <b>G5</b>   |
| <i>Glyphyalinia wheatleyi</i><br><b>Bright Glyph</b><br>M: a variety of hardwood forests (Avery, Cherokee, Graham, Haywood, Jackson, Macon, Madison, Swain, Yancey)  | <b>W2</b> |            | <b>S3</b>   | <b>G5</b>   |
| <i>Gyraulus deflectus</i><br><b>Flexed Gyro</b><br>C: eastern Coastal Plain; no habitat or locality information  | <b>W3</b> |            | <b>S2?</b>  | <b>G5</b>   |
| <i>Leptoxis virgata</i><br><b>Smooth Mudalia</b><br>M: Valley River (Cherokee)   | <b>W3</b> | <b>FSC</b> | <b>SU</b>   | <b>G2</b>   |
| <i>Lioplax subcarinata</i><br><b>Ridged Lioplax</b><br>PC: streams and rivers, well documented in Lake Waccamaw, possibly in decline there (Anson, Brunswick, Columbus, Edgecombe, Gates, Halifax, Hertford, Montgomery, Nash, Stanly) | <b>W3</b> |            | <b>S3</b>   | <b>G4G5</b> |

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|--|-----------|------|-------------|-------------|
|  | N.C.      | U.S. | N.C         | Global      |
| <i>Mesomphix andrewsae</i><br><b>Mountain Button</b><br>M: acidic upland hardwood forests (Buncombe, Burke, Caldwell, Catawba, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, Rutherford, Swain, Transylvania, Yancey)     | <b>W2</b> |      | <b>S3S4</b> | <b>G3G4</b> |
| <i>Neohelix dentifera</i><br><b>Big-tooth Whitelip</b><br>M: wooded mountainsides, often where acidic (Ashe, Avery, Caldwell, Watauga, Yancey)   | <b>W3</b> |      | <b>S3S4</b> | <b>G5</b>   |
| <i>Novisuccinea sp. 1 nr. chittenangoensis</i><br><b>an Ambersnail</b><br>M: northern hardwoods?; uncertain taxonomy and identification (Graham*)  | <b>W4</b> |      | <b>SU</b>   | <b>GNR</b>  |
| <i>Oxyloma effusum</i><br><b>Coastal-plain Ambersnail</b><br>C: wetlands with <i>Sagittaria</i> ; very little locality information (Gates*, New Hanover*)  | <b>W3</b> |      | <b>SU</b>   | <b>G3</b>   |
| <i>Paravitrea bellona</i><br><b>Club Supercoil</b><br>M: wooded river bluffs and ravines; of questionable occurrence in the state  | <b>W4</b> |      | <b>SNA</b>  | <b>G1</b>   |
| <i>Promenetus exacuus</i><br><b>Sharp Sprite</b><br>C: ponds and streams (Craven, Gates, Martin, Perquimans, Washington)   | <b>W3</b> |      | <b>S2S3</b> | <b>G5</b>   |
| <i>Stenotrema altispira</i><br><b>Highland Slitmouth</b><br>M: cove forests and northern hardwood forests (Alleghany, Ashe, Avery, Buncombe, Caldwell, Haywood, Jackson, Macon, Madison, McDowell, Swain, Transylvania, Watauga, Wilkes, Yancey) | <b>W2</b> |      | <b>S3S4</b> | <b>G3</b>   |
| <i>Stenotrema pilula</i><br><b>Pygmy Slitmouth</b><br>M: rich hardwood forests, mostly at lower elevations (Graham, Haywood, Henderson, Macon, Madison, McDowell, Polk, Swain)   | <b>W3</b> |      | <b>S3?</b>  | <b>G3G4</b> |
| <i>Striatura ferrea</i><br><b>Black Striate</b><br>M: ravines and hillsides in higher elevation hardwood forests (Ashe, Graham, Haywood, Macon, McDowell, Mitchell, Swain, Watauga)  | <b>W2</b> |      | <b>S3?</b>  | <b>G5</b>   |
| <i>Triodopsis burchi</i><br><b>Pittsylvania Threetooth</b><br>P: forested habitats in the central and western Piedmont; no locality information  | <b>W3</b> |      | <b>SU</b>   | <b>G3</b>   |
| <i>Triodopsis vulgata</i><br><b>Dished Threetooth</b><br>MP: hardwood forests, usually around high pH soil or rocks (Alexander, Ashe, Avery, Clay, Graham, Haywood, Macon, Madison, Polk, Swain, Watauga, Wilkes)                                | <b>W2</b> |      | <b>S3?</b>  | <b>G5</b>   |



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|--|-----------|------|-------------|-----------|
|  | N.C.      | U.S. | N.C         | Global    |
| <i>Vertigo gouldii</i><br><b>Variable Vertigo</b><br>M: upland woods, especially near rock outcrops (Ashe, Haywood, Swain)   | <b>W3</b> |      | <b>S2S3</b> | <b>G5</b> |
| <i>Vertigo oscariana</i><br><b>Capital Vertigo</b><br>CM: mixed woods in the Coastal Plain; ravines and talus slopes in the mountains (Columbus, Hyde, Jones, Pender, Swain, Tyrrell)                  | <b>W3</b> |      | <b>S3?</b>  | <b>G4</b> |
| <i>Vertigo rugosula</i><br><b>Striate Vertigo</b><br>C: primarily in thatch of grasses and sedges in open areas (Columbus, New Hanover, Pender)  | <b>W3</b> |      | <b>S2S3</b> | <b>G4</b> |
| <i>Vertigo teskeyae</i><br><b>Swamp Vertigo</b><br>C: margins of swamps and ponds (Beaufort, Chowan, Columbus, Craven, Gates)  | <b>W3</b> |      | <b>S3</b>   | <b>G5</b> |
| <i>Xolotrema caroliniense</i><br><b>Blunt Wedge</b><br>CP: wooded floodplains and slopes, mainly near the Fall Line (Anson, Bertie, Bladen, Halifax, Harnett, Mecklenburg, Northampton, Stanly, Union) | <b>W3</b> |      | <b>S3?</b>  | <b>G4</b> |
| <i>Xolotrema denotatum</i><br><b>Velvet Wedge</b><br>M: wooded hillsides, sometimes in floodplains (Cherokee*, Graham*, Madison*, Mitchell*, Swain, Watauga*)  | <b>W3</b> |      | <b>SU</b>   | <b>G5</b> |

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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

### Arachnids

|   |              |            |            |             |
|---|--------------|------------|------------|-------------|
| <i>Fumontana deprehendor</i><br><b>a Harvestman</b><br>M: rich cove forests (Buncombe, Cherokee, Graham, Haywood, Jackson, Macon, Swain, Transylvania, Yancey)  | <b>W3</b>    | <b>FSC</b> | <b>S3?</b> | <b>G1G2</b> |
| <i>Nesticus bishopi</i><br><b>a Cave Cobweb Spider</b><br>M: on ground in forests (endemic to North Carolina); no locality information  | <b>W3</b>    |            | <b>S3?</b> | <b>G3?</b>  |
| <i>Nesticus nasicus</i><br><b>a Cave Cobweb Spider</b><br>M: boulderfields and cove forests (apparently endemic to Jackson County)  | <b>W3</b>    |            | <b>S3?</b> | <b>G3?</b>  |
| <i>Nesticus reclusus</i><br><b>a Cave Cobweb Spider</b><br>M: on ground in forests (apparently in Buncombe, McDowell, and Swain counties, NC, and in Tennessee)   | <b>W3</b>    |            | <b>S3?</b> | <b>G3?</b>  |
| <i>Vaejovis carolinianus</i><br><b>Southern Unstriped Scorpion</b><br>MP: under shelter of rocks, leaves, and buildings, along southern border of state; the many records elsewhere in the state are likely accidental or intentional importations (Cherokee, Polk, Transylvania) | <b>W2,W3</b> |            | <b>S2?</b> | <b>G5</b>   |

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|--|--------------|------------|-------------|-------------|
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| <b>Crustaceans</b>   |              |            |             |             |
| <i>Ascetocythere cosmeta</i><br><b>Grayson Crayfish Ostracod</b><br>M: symbiotic on crayfish in sub-surface waters of burrows (Alleghany, Avery)   | <b>W3</b>    |            | <b>S2?</b>  | <b>GNR</b>  |
| <i>Cambarus aldermanorum</i><br><b>Carolina Needlenose Crayfish</b><br>P: Johns River sub-basin of the Catawba drainage (Burke, Caldwell)  | <b>W3</b>    |            | <b>S1?</b>  | <b>GNR</b>  |
| <i>Cambarus carolinus</i><br><b>Red Burrowing Crayfish</b><br>M: Little Tennessee and Hiwassee drainages (Cherokee, Clay, Graham, Jackson, Macon, Swain)   | <b>W3</b>    |            | <b>S2</b>   | <b>G4</b>   |
| <i>Cambarus hiwasseeensis</i><br><b>Hiwassee Crayfish</b><br>M: streams in Hiwassee drainage (Cherokee, Clay)  | <b>W2</b>    | <b>FSC</b> | <b>S3S4</b> | <b>G3G4</b> |
| <i>Cambarus sp. A</i><br><b>a crayfish</b><br>MP: streams and rivers, species in Hiwassee and New drainages likely distinct from Catawba, Broad, Yadkin-Pee Dee drainages (Alexander, Alleghany, Ashe, Burke, Caldwell, Catawba, Cherokee, Clay, Cleveland, McDowell, Montgomery, Rowan, Rutherford, Surry, Watauga, Wilkes) | <b>W3</b>    |            | <b>S2S4</b> | <b>G2G3</b> |
| <i>Canthocamptus vagus</i><br><b>Swamp Canthocamptus</b><br>CP: in benthos of lakes and ponds within swampy environments; no locality information  | <b>W2,W3</b> |            | <b>S3?</b>  | <b>GNR</b>  |
| <i>Cymocythere clavata</i><br><b>Oconee Crayfish Ostracod</b><br>M: symbiotic on crayfish in mountain streams and rivers (Transylvania)  | <b>W3</b>    |            | <b>S2?</b>  | <b>GNR</b>  |
| <i>Cytheridella ilosvayi</i><br><b>Backwater Ostracod</b><br>C: quiet backwaters associated with large coastal rivers (Brunswick, New Hanover)   | <b>W3</b>    |            | <b>S2?</b>  | <b>GNR</b>  |
| <i>Dactylocythere chelomata</i><br><b>Cherokee Crayfish Ostracod</b><br>M: symbiotic on crayfish in streams and rivers in southwestern mountains (Cherokee, Macon)   | <b>W2,W3</b> |            | <b>S2?</b>  | <b>GNR</b>  |
| <i>Dactylocythere isabelae</i><br><b>Catawba Crayfish Ostracod</b><br>P: symbiotic on crayfish in Lyle Creek in Catawba drainage (endemic to North Carolina) (Catawba)   | <b>W3</b>    |            | <b>S1?</b>  | <b>GNR</b>  |

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| <i>Dactylocythere peedeensis</i><br><b>Pee Dee Crayfish Ostracod</b><br>P: symbiotic on crayfish in Pee Dee drainage (endemic to North Carolina, but likely occurs in South Carolina) (Cabarrus, Randolph, Union)   | <b>W3</b>    |            | <b>S2?</b>  | <b>GNR</b>  |
| <i>Dactylocythere prinsi</i><br><b>Whitewater Crayfish Ostracod</b><br>M: cold streams of Savannah drainage (endemic to North Carolina, but possible in adjacent South Carolina and Georgia) (Jackson)  | <b>W3</b>    |            | <b>S1</b>   | <b>GNR</b>  |
| <i>Dactylocythere susanae</i><br><b>Hiwassee Crayfish Ostracod</b><br>M: symbiotic on crayfish in Hiwassee and Nolichucky drainages; no locality information  | <b>W2,W3</b> |            | <b>S2?</b>  | <b>G2G4</b> |
| <i>Harpagocythere baileyi</i><br><b>Highlands Crayfish Ostracod</b><br>M: symbiotic on crayfish in Little Tennessee and Savannah drainages (endemic to North Carolina, but likely occurs in SC and GA); no locality information   | <b>W3</b>    |            | <b>S2?</b>  | <b>GNR</b>  |
| <i>Hesperodiptomus augustaensis</i><br><b>Augusta Hesperodiptomus</b><br>P: ephemeral ponds, such as floodplain pools; near Chapel Hill (Orange*)   | <b>W3</b>    |            | <b>SH</b>   | <b>GNR</b>  |
| <i>Lordocythere petersi</i><br><b>Cumberland Crayfish Ostracod</b><br>M: symbiotic on crayfish in the Hiwassee drainage (record based on a sketch only)   | <b>W4</b>    |            | <b>SNA</b>  | <b>GNR</b>  |
| <i>Miktoniscus medcofi</i><br><b>Small Alabama Sowbug</b><br>M: Linville Caverns (McDowell)   | <b>W3</b>    |            | <b>S1?</b>  | <b>GNR</b>  |
| <i>Procambarus ancylus</i><br><b>Coastal Plain Crayfish</b><br>CS: ditches, streams, and lakes in the southeastern portion of the state (Bladen, Brunswick, Columbus, Cumberland, Duplin, Harnett, Hoke, Johnston, Montgomery, Moore, New Hanover, Onslow, Pender, Richmond, Robeson, Sampson, Scotland, Wayne) | <b>W2</b>    |            | <b>S3</b>   | <b>G4G5</b> |
| <i>Procambarus blandingii</i><br><b>Santee Crayfish</b><br>C: Lumber and Waccamaw drainages (Bladen, Brunswick, Columbus, Cumberland, Hoke, Montgomery, Moore, Richmond, Robeson, Scotland)   | <b>W3</b>    |            | <b>S3S4</b> | <b>G4</b>   |
| <i>Procambarus medialis</i><br><b>Pamlico Crayfish</b><br>CP: sluggish streams and ditches in the Tar and Neuse drainages (endemic to North Carolina) (Craven, Edgecombe, Halifax, Johnston, Lenoir)  | <b>W3</b>    | <b>FSC</b> | <b>S3</b>   | <b>G3</b>   |

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|   |           |            |             |            |
|---|-----------|------------|-------------|------------|
| <i>Procambarus pearsei</i><br><b>Carolina Sandhills Crayfish</b><br>CS: still-water habitats and burrows in the Cape Fear, Waccamaw, and Lumber drainages (Bladen, Brunswick, Columbus, Cumberland, Duplin, Harnett, Hoke, Johnston, Montgomery, Moore, New Hanover, Onslow, Pender, Richmond, Robeson, Sampson, Scotland, Wayne) | <b>W2</b> |            | <b>S3S4</b> | <b>G4</b>  |
| <i>Stygobromus sp. 4</i><br><b>Plott Balsam Sideswimmer</b><br>M: seep below Jones Knob (endemic to North Carolina) (Jackson)   | <b>W3</b> |            | <b>S1?</b>  | <b>GNR</b> |
| <i>Waltoncythere acuta</i><br><b>Transylvania Crayfish Ostracod</b><br>M: symbiotic on crayfish in high gradient rivers and streams (endemic to North Carolina, but likely occurs in SC) (Transylvania)   | <b>W3</b> | <b>FSC</b> | <b>S2?</b>  | <b>GNR</b> |

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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

### Insects: Mayflies

|  |           |  |           |             |
|--|-----------|--|-----------|-------------|
| <i>Anthopotamus myops</i><br><b>a mayfly</b><br>M: First Broad River (Cleveland)   | <b>W3</b> |  | <b>S3</b> | <b>G5</b>   |
| <i>Drunella longicornis</i><br><b>a spiny crawler mayfly</b><br>M: Watauga, French Broad, Little Tennessee, Savannah, Broad, and Catawba drainages                               | <b>W3</b> |  | <b>S3</b> | <b>G5</b>   |
| <i>Ephemerella argo</i><br><b>Argo Ephemerellan Mayfly</b><br>SC: Lower Little River (Hoke), Naked Creek (Richmond), Drowning Creek (Richmond), Lumber River (Robeson, Scotland) | <b>W3</b> |  | <b>S3</b> | <b>G4</b>   |
| <i>Eurylophella enoensis</i><br><b>a mayfly</b><br>CMP: wide-ranging but infrequently collected  | <b>W5</b> |  | <b>S3</b> | <b>G4</b>   |
| <i>Eurylophella minimella</i><br><b>a mayfly</b><br>CMP: a widespread species, but rare in North Carolina  | <b>W2</b> |  | <b>S3</b> | <b>G4</b>   |
| <i>Isonychia arida</i><br><b>a mayfly</b><br>C: Cape Fear River (Harnett), Tar River (Edgecombe)   | <b>W3</b> |  | <b>S3</b> | <b>G5</b>   |
| <i>Isonychia sayi</i><br><b>a mayfly</b><br>C: Fishing Creek (Edgecombe)   | <b>W3</b> |  | <b>S2</b> | <b>G4</b>   |
| <i>Iswaeon davidi</i><br><b>a mayfly</b><br>M: French Broad, Hiwassee, and Little Tennessee basins   | <b>W3</b> |  | <b>S2</b> | <b>G2</b>   |
| <i>Leptophlebia bradleyi</i><br><b>a mayfly</b><br>no locality data  | <b>W5</b> |  | <b>S2</b> | <b>G5</b>   |
| <i>Nixe spinosa</i><br><b>a mayfly</b><br>MP: mainly French Broad and Little Tennessee drainages; Deep Creek (Person)  | <b>W3</b> |  | <b>S3</b> | <b>G5</b>   |
| <i>Paracloeodes fleeki</i><br><b>a mayfly</b><br>P: southern Piedmont streams  | <b>W3</b> |  | <b>S3</b> | <b>G2G4</b> |

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|--|-----------|------|-------------|------------|
|  | N.C.      | U.S. | N.C         | Global     |
| <i>Pseudocentropiloides usa</i><br><b>a mayfly</b><br>PSC: large Piedmont and Coastal Plain rivers, including Lumber River                                     | <b>W3</b> |      | <b>S2</b>   | <b>G4</b>  |
| <i>Serratella spiculosa</i><br><b>Spiculose Serratellan Mayfly</b><br>M: New, Watauga, French Broad, Little Tennessee, Hiwassee, Broad, and Savannah drainages | <b>W2</b> |      | <b>S3</b>   | <b>G2Q</b> |
| <i>Siphloplecton speciosum</i><br><b>a mayfly</b><br>SC: Lumber River (Hoke, Scotland)   | <b>W5</b> |      | <b>S2</b>   | <b>G4</b>  |
| <i>Sparbarus maculatus</i><br><b>a mayfly</b><br>C: streams in the Coastal Plain   | <b>W3</b> |      | <b>S2S3</b> | <b>G5</b>  |

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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

### Insects: Stoneflies

|  |           |  |             |             |
|--|-----------|--|-------------|-------------|
| <i>Acroneuria evoluta</i><br><b>Constricted Stone</b><br>P: central slate belt streams (Chatham, Montgomery, Moore, Randolph, Stanly)  | <b>W5</b> |  | <b>S2</b>   | <b>G5</b>   |
| <i>Agnatina capitata</i><br><b>Northern Stone</b><br>M: upper Tuckasegee River (Jackson, Madison)  | <b>W5</b> |  | <b>S3</b>   | <b>G5</b>   |
| <i>Alloperla neglecta</i><br><b>Tennessee Sallfly</b><br>M: Swain and Haywood counties   | <b>W2</b> |  | <b>S2</b>   | <b>G3</b>   |
| <i>Beloneuria georgiana</i><br><b>Georgia Stone</b><br>M: high elevation rheocrenes [spring brooks]  | <b>W3</b> |  | <b>S1S3</b> | <b>G2</b>   |
| <i>Haploperla parkeri</i><br><b>Parker Sallfly</b><br>M: Right Fork Cove Creek (Haywood), Shot Pouch Creek (Macon) (endemic to North Carolina)   | <b>W3</b> |  | <b>SU</b>   | <b>G1</b>   |
| <i>Helopicus bogaloosa</i><br><b>Masked Springfly</b><br>PSC: known from eleven streams and rivers in Piedmont, Sandhills, and Inner Coastal Plain   | <b>W3</b> |  | <b>S3</b>   | <b>G3G4</b> |
| <i>Isogenoides varians</i><br><b>Rock Island Springfly</b><br>P: Yadkin River (Davie)  | <b>W2</b> |  | <b>S2</b>   | <b>G3G4</b> |
| <i>Isoperla burksi</i><br><b>Banded Stripetail</b><br>P: slate belt streams (Chatham, Durham, Orange)  | <b>W3</b> |  | <b>S2</b>   | <b>G4</b>   |
| <i>Isoperla frisoni</i><br><b>Wisconsin Stripetail</b><br>MP: known from six streams and rivers in the mountains, from the New River (Ashe) to Whiteoak Creek (Macon); also found in the Dan River | <b>W3</b> |  | <b>S3</b>   | <b>G5</b>   |
| <i>Isoperla lata</i><br><b>Dark Stripetail</b><br>M: recent state records from Fires Creek (Clay) and Big Creek (Haywood)  | <b>W3</b> |  | <b>S3</b>   | <b>G5</b>   |
| <i>Perlesta bjostadi</i><br><b>Anomalus Stone</b><br>SC: Little River near Lillington (Harnett), Lumber River (Hoke, Scotland) (endemic to North Carolina)   | <b>W3</b> |  | <b>SU</b>   | <b>G1</b>   |



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|  | N.C.      | U.S. | N.C         | Global      |
| <i>Perlesta leathermani</i><br><b>Sandhills Stone</b><br>SC: Little River (Hoke, Moore), Lumber River (Hoke, Scotland), Jordan Creek (Scotland)<br>(endemic to North Carolina)                     | <b>W3</b> |      | <b>SU</b>   | <b>G1</b>   |
| <i>Perlesta puttmanni</i><br><b>Anna Stone</b><br>CS: Raft Swamp (Robeson), Little River (Cumberland, Harnett)   | <b>W3</b> |      | <b>S2?</b>  | <b>G3G4</b> |
| <i>Perlesta roblei</i><br><b>Dragon Run Stone</b><br>C: Swift Creek (Edgecombe)  | <b>W3</b> |      | <b>S2</b>   | <b>G3</b>   |
| <i>Perlinella ephyre</i><br><b>Vernal Stone</b><br>PSC: known from eight streams and rivers in the Sandhills and Inner Coastal Plain; also occurs in Flat River (Person) and Terrible Creek (Wake) | <b>W2</b> |      | <b>S3</b>   | <b>G5</b>   |
| <i>Prostoia hallasi</i><br><b>Swamp Forestfly</b><br>C: recent state record from Great Dismal Swamp (Gates)  | <b>W3</b> |      | <b>SU</b>   | <b>G3</b>   |
| <i>Shipsa rotunda</i><br><b>Intrepid Forestfly</b><br>CPM: known from twelve streams in mountains, Piedmont, and Coastal Plain   | <b>W3</b> |      | <b>S2S3</b> | <b>G5</b>   |
| <i>Sweltsa holstonensis</i><br><b>Holston Sallfly</b><br>M: Middle Fork Reddies River (Wilkes)   | <b>W3</b> |      | <b>SU</b>   | <b>G1</b>   |
| <i>Tallaperla elisa</i><br><b>Highlands Roachfly</b><br>M: Great Smoky Mountains National Park (Swain)   | <b>W3</b> |      | <b>SU</b>   | <b>G3</b>   |
| <i>Viehopera ada</i><br><b>Pallid Roachfly</b><br>M: Panthertown Valley seeps (Jackson)  | <b>W3</b> |      | <b>S2</b>   | <b>G3</b>   |
| <i>Yugus arinus</i><br><b>Highlands Springfly</b><br>M: French Broad, Hiwassee, and Little Tennessee basins  | <b>W3</b> |      | <b>S3</b>   | <b>G3</b>   |

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| <b>Insects: Caddisflies</b>   |           |      |            |             |
| <i>Agapetus hessi</i><br><b>a glossosomatid caddisfly</b><br>P: Swift Creek (Nash)  | <b>W5</b> |      | <b>S2</b>  | <b>G4G5</b> |
| <i>Agapetus jocassee</i><br><b>a saddlecase caddisfly</b><br>M: small streams (Burke, Cherokee, Graham)   | <b>W3</b> |      | <b>SU</b>  | <b>G2G3</b> |
| <i>Agapetus minutus</i><br><b>a saddlecase caddisfly</b><br>M: Big Creek tributary (Haywood)  | <b>W3</b> |      | <b>S3</b>  | <b>G4G5</b> |
| <i>Agapetus pinatus</i><br><b>a caddisfly</b><br>M: mountain streams (Cherokee, Graham, Haywood, Transylvania)  | <b>W3</b> |      | <b>S3</b>  | <b>G5</b>   |
| <i>Agapetus tomus</i><br><b>a saddlecase caddisfly</b><br>M: mountain streams (Cherokee)  | <b>W3</b> |      | <b>SU</b>  | <b>G5</b>   |
| <i>Agraylea multipunctata</i><br><b>a caddisfly</b><br>MP: Wilson Creek (Caldwell)  | <b>W3</b> |      | <b>S3</b>  | <b>G5</b>   |
| <i>Beraea gortebe</i><br><b>a Caddisfly</b><br>reputedly collected in the state, but no data yet available  | <b>W4</b> |      | <b>SNA</b> | <b>G1G2</b> |
| <i>Ceraclea cama</i><br><b>a longhorned caddisfly</b><br>C: Lake Waccamaw vicinity (endemic to this area)   | <b>W3</b> |      | <b>SU</b>  | <b>G1G2</b> |
| <i>Ceraclea diluta</i><br><b>a caddisfly</b><br>C: several Coastal Plain rivers   | <b>W3</b> |      | <b>S2</b>  | <b>G5</b>   |
| <i>Ceraclea mentiea</i><br><b>a longhorned caddisfly</b><br>MP: Big Horse Creek (Ashe), North and South Forks of New River (Ashe, Alleghany), Mayo River (Rockingham) | <b>W3</b> |      | <b>SU</b>  | <b>G5</b>   |
| <i>Ceraclea punctata</i><br><b>a ceracleian caddisfly</b><br>C: several Coastal Plain rivers  | <b>W3</b> |      | <b>S3</b>  | <b>G5</b>   |

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| <i>Ceraclea sp. 2 nr. excisa</i><br><b>a caddisfly</b><br>C: many Coastal Plain localities                                   | <b>W2</b> |      | <b>S3</b>   | <b>GNR</b>  |
| <i>Ceraclea tarsipunctata</i><br><b>a caddisfly</b><br>P: Cane Creek, Yadkin River, Long Creek (Mecklenburg, Union)          | <b>W3</b> |      | <b>S3</b>   | <b>G5</b>   |
| <i>Cernotina calcea</i><br><b>a caddisfly</b><br>C: Lake Waccamaw (Columbus)   | <b>W3</b> |      | <b>S3</b>   | <b>G5</b>   |
| <i>Cheumatopsyche enigma</i><br><b>a caddisfly</b><br>M: streams in Great Smoky Mountains National Park (Haywood, Swain)     | <b>W3</b> |      | <b>S3</b>   | <b>G4G5</b> |
| <i>Cheumatopsyche geora</i><br><b>a caddisfly</b><br>P: Hunting Creek (Wilkes)   | <b>W3</b> |      | <b>S3</b>   | <b>G5</b>   |
| <i>Cheumatopsyche halima</i><br><b>a caddisfly</b><br>M: Deep Creek (Swain)  | <b>W3</b> |      | <b>S3</b>   | <b>G5</b>   |
| <i>Cheumatopsyche helma</i><br><b>Helma's Net-spinning Caddisfly</b><br>PM: Henrys Fork (Burke), Cataloochee Creek (Haywood) | <b>W3</b> |      | <b>S3</b>   | <b>G3</b>   |
| <i>Cheumatopsyche parentum</i><br><b>a caddisfly</b><br>P: Uwharrie River (Montgomery)                                       | <b>W3</b> |      | <b>S3</b>   | <b>G3</b>   |
| <i>Cheumatopsyche richardsoni</i><br><b>Richardson's Cheumatopsyche Caddisfly</b><br>S: Little River (Hoke, Moore)           | <b>W3</b> |      | <b>S1S2</b> | <b>G1G2</b> |
| <i>Chimarra florida</i><br><b>Floridian Finger-net Caddisfly</b><br>S: several sandhills streams                             | <b>W3</b> |      | <b>S3</b>   | <b>G4</b>   |
| <i>Frenesia difficilis</i><br><b>a caddisfly</b><br>M: seeps (Haywood, Surry, Swain)   | <b>W3</b> |      | <b>S3</b>   | <b>G5</b>   |
| <i>Goera stylata</i><br><b>a caddisfly</b><br>M: Commissioners Creek (Macon)   | <b>W3</b> |      | <b>S3</b>   | <b>G5</b>   |

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| <i>Goerita betteni</i><br><b>a caddisfly</b><br>M: cold spring runs in mountainous areas   | W3     |      | S3   | G4     |
| <i>Goerita semata</i><br><b>a caddisfly</b><br>M: cold spring runs in mountainous areas  | W3     |      | S3   | G3     |
| <i>Helicopsyche paralimnella</i><br><b>a snailcase caddisfly</b><br>M: Fires Creek (Clay?), Bearwallow Creek (Transylvania) (confined to southwestern mountains in NC) | W5     |      | SU   | G2     |
| <i>Homoplectra flinti</i><br><b>a caddisfly</b><br>M: seeps (Haywood, Macon)   | W3     |      | S2   | G2     |
| <i>Hydropsyche bassi</i><br><b>a net-spinning caddisfly</b><br>S: Little River (Hoke, Moore)   | W3     |      | SU   | G2     |
| <i>Hydropsyche fattigi</i><br><b>a caddisfly</b><br>C: Cape Fear River (Harnett)   | W3     |      | S3   | G5     |
| <i>Hydropsyche ophthalmica</i><br><b>a caddisfly</b><br>no locality data   | W3     |      | S3   | G3     |
| <i>Hydropsyche ventura</i><br><b>a caddisfly</b><br>M: northern and western mountain streams   | W5     |      | S3   | G5     |
| <i>Hydroptila armata</i><br><b>a caddisfly</b><br>P: Uwharrie River (Montgomery)   | W3     |      | S2   | G5     |
| <i>Hydroptila coweetensis</i><br><b>a micro caddisfly</b><br>M: Coweeta Creek (Macon)  | W3     |      | SU   | G1G2   |
| <i>Hydroptila englishi</i><br><b>a caddisfly</b><br>reported from NC, but without occurrence data  | W4     |      | SNA  | G2     |
| <i>Hydroptila lloganae</i><br><b>Llogan's Vari-colored Microcaddisfly</b><br>S: Lumber River (Hoke, Scotland)  | W3     |      | SU   | G3     |

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| <i>Hydroptila maculata</i><br><b>a caddisfly</b><br>C: Lake Waccamaw (Columbus)  | <b>W3</b> |      | <b>S3</b> | <b>G3G4</b> |
| <i>Matrioptila jeanae</i><br><b>a Caddisfly</b><br>MP: streams and rivers (Buncombe, Burke, Clay, Henderson, Johnston, Macon, Randolph, Transylvania, Watauga, Yancey)       | <b>W2</b> |      | <b>S3</b> | <b>G4</b>   |
| <i>Mayatruchia ayama</i><br><b>a caddisfly</b><br>MPS: mostly in mountain streams; Dan River (Stokes), Lumber River (Scotland)   | <b>W5</b> |      | <b>S2</b> | <b>G5</b>   |
| <i>Micrasema burksi</i><br><b>a caddisfly</b><br>M: known from eleven streams in the mountains, from Avery County to Clay County   | <b>W2</b> |      | <b>S3</b> | <b>G4G5</b> |
| <i>Micrasema sprulesi</i><br><b>a caddisfly</b><br>MP: known from eight streams and rivers, primarily in the mountains but also in the Mayo River                            | <b>W2</b> |      | <b>S3</b> | <b>G5</b>   |
| <i>Molanna uniophila</i><br><b>a caddisfly</b><br>C: found in larger rivers and lakes from Chowan River (Hertford) to Drowning Creek (Richmond) and Lake Waccamaw (Columbus) | <b>W3</b> |      | <b>S3</b> | <b>G5</b>   |
| <i>Neureclipsis melco</i><br><b>a caddisfly</b><br>C: Shoe Heel Creek (Robeson)  | <b>W3</b> |      | <b>S3</b> | <b>G4</b>   |
| <i>Ochrotrichia confusa</i><br><b>a caddisfly</b><br>M: Blue Ridge Parkway seeps (Watauga)   | <b>W3</b> |      | <b>S3</b> | <b>G5</b>   |
| <i>Oecetis porteri</i><br><b>Porter's Long-horn Sedge</b><br>C: White Lake and Lake Waccamaw (Bladen, Columbus)  | <b>W5</b> |      | <b>S2</b> | <b>G3G4</b> |
| <i>Oecetis sp. B</i><br><b>a caddisfly</b><br>C: Lake Mattamuskeet and Perquimans River (Hyde, Perquimans)   | <b>W5</b> |      | <b>S1</b> | <b>G1</b>   |
| <i>Oecetis sp. E</i><br><b>a caddisfly</b><br>SC: bay lakes and swamp streams of North and South Carolina  | <b>W5</b> |      | <b>S2</b> | <b>G2</b>   |

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| <i>Oxyethira glasa</i><br><b>a caddisfly</b><br>C: Lake Waccamaw (Columbus)   | <b>W1</b> |      | <b>S3</b> | <b>G5</b>   |
| <i>Oxyethira lumosa</i><br><b>a caddisfly</b><br>S: Little River (Hoke, Moore)  | <b>W3</b> |      | <b>S3</b> | <b>G4</b>   |
| <i>Oxyethira verna</i><br><b>an oxyethiran microcaddisfly</b><br>C: Lake Waccamaw (Columbus)  | <b>W3</b> |      | <b>S3</b> | <b>G5</b>   |
| <i>Phylocentropus auriceps</i><br><b>a caddisfly</b><br>M: described from Black Mountain, NC; found in mountains of GA, SC, NC, VA  | <b>W3</b> |      | <b>S3</b> | <b>G3G4</b> |
| <i>Protophila georgiana</i><br><b>a caddisfly</b><br>P: Uwharrie River (Montgomery), Cape Fear River (Harnett)  | <b>W3</b> |      | <b>S2</b> | <b>G3G4</b> |
| <i>Pseudogoera singularis</i><br><b>a caddisfly</b><br>M: Coweeta Creek and seep near upper Wilson Creek (Caldwell)   | <b>W5</b> |      | <b>S2</b> | <b>G2G3</b> |
| <i>Pseudostenophylax sparsus uniformis</i><br><b>a caddisfly</b><br>M: high elevation seeps along the Blue Ridge Parkway (Buncombe, Haywood, Jackson)   | <b>W5</b> |      | <b>S3</b> | <b>G5T5</b> |
| <i>Psilotreta amera</i><br><b>a caddisfly</b><br>M: mountain streams (Haywood, Macon, Swain)  | <b>W5</b> |      | <b>S2</b> | <b>G3G4</b> |
| <i>Psilotreta rossi</i><br><b>a caddisfly</b><br>M: seeps and springs (Macon, Transylvania)   | <b>W5</b> |      | <b>S2</b> | <b>G3</b>   |
| <i>Psilotreta rufa</i><br><b>a caddisfly</b><br>M: mountain streams (Macon, Transylvania)   | <b>W2</b> |      | <b>S3</b> | <b>G5</b>   |
| <i>Rhyacophila amicis</i><br><b>a free-living caddisfly</b><br>M: Cullasaja River (Macon), Nantahala River (Macon, Clay), Whiterock Creek (Jackson), Spainhour Creek (Caldwell), North Toe River, Deep Creek, Oconoluftee River (Swain) | <b>W5</b> |      | <b>S3</b> | <b>G2</b>   |
| <i>Rhyacophila montana</i><br><b>a free-living caddisfly</b><br>M: high elevation seeps (Jackson, Swain)  | <b>W5</b> |      | <b>SU</b> | <b>G2G3</b> |

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| <i>Rhyacophila mycta</i><br><b>a free-living caddisfly</b><br>M: only confirmed from Sweeten Creek (Buncombe)  | <b>W5</b> |      | <b>S2S3</b> | <b>G3</b>   |
| <i>Rhyacophila vibox</i><br><b>a rhyacophilan caddisfly</b><br>M: Whiteoak Creek (Macon), Mitchell River (Surry)   | <b>W2</b> |      | <b>S3</b>   | <b>G5</b>   |
| <i>Setodes arenatus</i><br><b>a caddisfly</b><br>C: Lumber River (Scotland)  | <b>W5</b> |      | <b>S2</b>   | <b>G2G3</b> |
| <i>Setodes stehri</i><br><b>a caddisfly</b><br>M: unknown locality   | <b>W5</b> |      | <b>S3</b>   | <b>G4</b>   |
| <i>Stactobiella delira</i><br><b>a caddisfly</b><br>no locality data   | <b>W3</b> |      | <b>S3</b>   | <b>G5</b>   |
| <i>Stactobiella martynovi</i><br><b>a caddisfly</b><br>no locality data  | <b>W3</b> |      | <b>S3</b>   | <b>G4</b>   |
| <i>Triaenodes helo</i><br><b>Marsh Triaenode Caddisfly</b><br>S: Little River (Hoke, Moore)  | <b>W3</b> |      | <b>S3</b>   | <b>G3</b>   |
| <i>Triaenodes marginatus</i><br><b>a longhorned caddisfly</b><br>PSC: Stewart Creek (Mecklenburg), Long Creek (Gaston), Whiteoak Creek (Polk); Lumber River (Robeson), UT Hitchcock Creek (Richmond), Mill Creek (Moore) | <b>W3</b> |      | <b>S3</b>   | <b>G5</b>   |
| <i>Triaenodes melacus</i><br><b>a caddisfly</b><br>P: small Piedmont streams (Alamance, Caswell, Wake)   | <b>W3</b> |      | <b>S3</b>   | <b>G5</b>   |
| <i>Triaenodes sp. C</i><br><b>a caddisfly</b><br>S: Carolina bays (Scotland)   | <b>W5</b> |      | <b>S1</b>   | <b>G1G2</b> |
| <i>Wormaldia thyria</i><br><b>a caddisfly</b><br>M: high elevation streams (Henderson, Yancey)   | <b>W3</b> |      | <b>S3</b>   | <b>G3</b>   |

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### Insects: Dragonflies and Damselflies

|   |           |  |             |             |
|---|-----------|--|-------------|-------------|
| <i>Arigomphus villosipes</i><br><b>Unicorn Clubtail</b><br>MPC: ponds, lakes, slow-flowing streams (Ashe, Avery, Bertie, Bladen, Buncombe, Chowan, Clay, Gates, Halifax, Haywood, Henderson, Orange, Perquimans, Rockingham, Rutherford, Transylvania, Warren, Washington, Watauga)   | <b>W3</b> |  | <b>S3</b>   | <b>G5</b>   |
| <i>Dromogomphus armatus</i><br><b>Southeastern Spinyleg</b><br>SC: pools in slow-flowing rivers (Bladen, Columbus, Cumberland, Hoke, Moore, Richmond, Robeson, Scotland)  | <b>W3</b> |  | <b>S3</b>   | <b>G4</b>   |
| <i>Enallagma minusculum</i><br><b>Little Bluet</b><br>C: lakes and ponds; known in the state only from White Lake (Bladen), but suspected of being an introduction  | <b>W6</b> |  | <b>S1</b>   | <b>G4</b>   |
| <i>Enallagma sulcatum</i><br><b>Golden Bluet</b><br>C: sand-bottomed lakes, with some shoreline vegetation; reported from Columbus County, but documentation is unknown   | <b>W4</b> |  | <b>SNA</b>  | <b>G4</b>   |
| <i>Epitheca spinosa</i><br><b>Robust Baskettail</b><br>CSP: ponds and lakes (Bertie, Bladen, Camden, Chatham, Columbus, Craven, Cumberland, Duplin, Durham, Gates, Greene, Halifax, Harnett, Hoke, Johnston, Martin, Moore, Nash, New Hanover, Northampton, Onslow, Pasquotank, Pender, Pitt, Robeson, Sampson, Scotland, Warren, Washington, Wilson) | <b>W3</b> |  | <b>S3?</b>  | <b>G4</b>   |
| <i>Gomphus apomyioides</i><br><b>Banner Clubtail</b><br>PC: spring-fed streams (Bladen, Cabarrus, Catawba, Chatham, Columbus, Cumberland, Gaston, Greene, Harnett, Lenoir, Moore, Richmond, Robeson, Sampson, Wake, Wayne, Wilson)  | <b>W3</b> |  | <b>S3?</b>  | <b>G3G4</b> |
| <i>Gomphus dilatatus</i><br><b>Blackwater Clubtail</b><br>PC: rivers (Bertie, Caswell, Chatham, Columbus, Cumberland, Durham, Edgecombe, Harnett, Johnston, Lenoir, Martin, Mecklenburg, Montgomery, Pender, Pitt, Robeson, Wilson, Yadkin)   | <b>W3</b> |  | <b>S3?</b>  | <b>G5</b>   |
| <i>Gomphus diminutus</i><br><b>Diminutive Clubtail</b><br>SC: sand-bottomed streams (Bladen, Brunswick, Cumberland, Harnett, Hoke, Montgomery, Moore, Richmond, Scotland)   | <b>W2</b> |  | <b>S3S4</b> | <b>G3G4</b> |



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| <b><i>Gomphus hybridus</i></b><br><b>Cocoa Clubtail</b><br>CSP: large or medium rivers with silty or sandy bottoms (Bladen, Columbus, Cumberland, Davidson, Duplin, Halifax, Johnston, Lenoir, Montgomery, Northampton, Pender, Scotland, Wayne)   | <b>W3</b> |      | <b>S3</b>   | <b>G4</b>   |
| <b><i>Gomphus parvidens</i></b><br><b>Piedmont Clubtail</b><br>PSCM: small woodland streams with sandy bottoms (Bladen, Buncombe, Burke, Caldwell, Cleveland, Davie, Forsyth, Hoke, Macon, Madison, Montgomery, Moore, Richmond, Rutherford, Scotland, Surry, Swain, Transylvania, Wake, Wilkes) | <b>W2</b> |      | <b>S3?</b>  | <b>G4</b>   |
| <b><i>Gomphus rogersi</i></b><br><b>Sable Clubtail</b><br>M: small spring-fed streams (Alleghany, Ashe, Avery, Buncombe, Macon, Madison, Polk, Swain, Watauga, Wilkes)   | <b>W2</b> |      | <b>S2S3</b> | <b>G4</b>   |
| <b><i>Lanthus parvulus</i></b><br><b>Northern Pygmy Clubtail</b><br>M: reported from the state (Avery), but no conclusive records  | <b>W4</b> |      | <b>SNA</b>  | <b>G4G5</b> |
| <b><i>Lestes eurinus</i></b><br><b>Amber-winged Spreadwing</b><br>MP: lakes and ponds with emergent vegetation (Alleghany, Ashe, Buncombe, Burke, Caldwell, Durham, Graham, Guilford, Henderson, Jackson, Macon, Madison, Mecklenburg, Orange, Rockingham, Watauga, Yadkin)                      | <b>W2</b> |      | <b>S3</b>   | <b>G5</b>   |
| <b><i>Lestes forcipatus</i></b><br><b>Sweetflag Spreadwing</b><br>PM: vegetated ponds (Ashe, Durham, Forsyth, Granville, Guilford, Orange, Person, Wilson)   | <b>W3</b> |      | <b>S2S3</b> | <b>G5</b>   |
| <b><i>Libellula quadrimaculata</i></b><br><b>Four-spotted Skimmer</b><br>reported from NC, but no conclusive records   | <b>W4</b> |      | <b>SNA</b>  | <b>G5</b>   |
| <b><i>Macrodiplax balteata</i></b><br><b>Marl Pennant</b><br>TC: ponds and lakes near the coast, usually brackish or near marl (Brunswick, Carteret, Dare, Hyde, New Hanover, Pamlico)   | <b>W3</b> |      | <b>S2S3</b> | <b>G5</b>   |
| <b><i>Nannothemis bella</i></b><br><b>Elfin Skimmer</b><br>SC: boggy swales (Anson, Bladen, Cumberland, Harnett, Hoke, Montgomery, Moore, Richmond, Scotland)  | <b>W3</b> |      | <b>S3S4</b> | <b>G4</b>   |

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|  | N.C.      | U.S.       | N.C        | Global    |
| <i>Neurocordulia alabamensis</i><br><b>Alabama Shadowdragon</b><br>CS: small creeks in forested regions, often where sandy and with low flow (Bladen, Brunswick, Cumberland, Duplin, Harnett, Hoke, Johnston, Jones, Lee, Montgomery, Moore, Pender, Richmond, Robeson, Sampson, Scotland, Wake)                           | <b>W3</b> |            | <b>S3?</b> | <b>G5</b> |
| <i>Neurocordulia molesta</i><br><b>Smoky Shadowdragon</b><br>C: rivers (Bladen, Cumberland, Edgecombe, Harnett, Lenoir, Moore, Richmond, Sampson, Wake, Wayne)   | <b>W3</b> |            | <b>S3?</b> | <b>G4</b> |
| <i>Neurocordulia virginensis</i><br><b>Cinnamon Shadowdragon</b><br>P: large rivers (Chatham, Durham, Halifax, Harnett, Nash, Northampton, Wake)   | <b>W3</b> |            | <b>S3?</b> | <b>G4</b> |
| <i>Ophiogomphus incurvatus</i><br><b>Appalachian Snaketail</b><br>PM: small to medium streams (Alexander, Buncombe, Burke, Cabarrus, Caldwell, Caswell, Catawba, Cleveland, Davidson, Forsyth, Gaston, Guilford, Iredell, Lincoln, McDowell, Mecklenburg, Richmond, Rockingham, Rutherford, Stokes, Union, Wilkes, Yadkin) | <b>W2</b> | <b>FSC</b> | <b>S3</b>  | <b>G3</b> |
| <i>Somatochlora provocans</i><br><b>Treetop Emerald</b><br>CS: small forested seeps and pools, perhaps very small streams (Beaufort, Bladen, Chowan, Cumberland, Edgecombe, Halifax, Harnett, Hoke, Johnston, Lee, Martin, Moore, Northampton, Pitt, Richmond, Sampson, Scotland, Wake, Washington, Wayne, Wilson)         | <b>W3</b> |            | <b>S3?</b> | <b>G4</b> |
| <i>Stylurus amnicola</i><br><b>Riverine Clubtail</b><br>MPC: rivers (Anson, Bertie, Buncombe, Caswell, Cumberland, Davie, Edgecombe, Greene, Harnett, Johnston, Lincoln, Northampton, Pitt, Rockingham, Transylvania, Wake, Wayne, Yadkin)   | <b>W3</b> |            | <b>S3</b>  | <b>G4</b> |
| <i>Stylurus notatus</i><br><b>Elusive Clubtail</b><br>reported from NC, but no conclusive records  | <b>W4</b> |            | <b>SNA</b> | <b>G3</b> |
| <i>Sympetrum internum</i><br><b>Cherry-faced Meadowhawk</b><br>M: reported from Macon County, but details not known; outside normal range  | <b>W4</b> |            | <b>SNA</b> | <b>G5</b> |

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|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

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**Insects: Flies**

|                              |           |            |             |
|------------------------------|-----------|------------|-------------|
| <i>Eulonchus marialiciae</i> | <b>W3</b> | <b>S3?</b> | <b>G1G3</b> |
|------------------------------|-----------|------------|-------------|

**Mary Alice's Small-headed Fly**

M: high elevation hardwood-hemlock forests (endemic to North Carolina) (Haywood, Jackson, Macon, Swain, Transylvania)

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### Insects: Butterflies

|  |    |  |      |      |
|--|----|--|------|------|
| <i>Amblyscirtes carolina</i><br><b>Carolina Roadside-Skipper</b><br>CSP: moist woods (mainly hardwoods) near cane; host plant -- cane ( <i>Arundinaria</i> ) (Beaufort, Bertie*, Bladen, Brunswick, Carteret, Craven, Cumberland, Dare, Franklin, Gaston*, Gates, Halifax, Hoke, Hyde, Johnston, Jones, Lincoln, Martin*, Moore, New Hanover, Onslow, Pasquotank*, Pitt, Richmond, Sampson, Scotland, Wake, Washington, Wayne) | W2 |  | S3S4 | G3G4 |
| <i>Celastrina neglectamajor</i><br><b>Appalachian Azure</b><br>M: rich deciduous forests; host plant -- black cohosh ( <i>Cimicifuga</i> ) (Alleghany, Ashe, Avery, Buncombe, Caldwell, Clay, Graham, Haywood, Macon, Madison, McDowell, Rutherford, Swain, Transylvania, Watauga, Yancey)   | W2 |  | S3S4 | G4   |
| <i>Glaucopsyche lygdamus</i><br><b>Silvery Blue</b><br>M: open upland woods, roadbanks, and borders; host plants -- primarily Carolina vetch ( <i>Vicia caroliniana</i> ), but also crown vetch ( <i>Coronilla varia</i> ) (Buncombe, Clay, Graham, Haywood, Macon, Madison, Mitchell, Swain)  | W2 |  | S2S3 | G5   |
| <i>Hermeuptychia intricata</i><br><b>Intricate Satyr</b><br>C: mesic to moist hardwood forests; host plants -- grasses; newly described species, very difficult to identify; most NC records based on old specimens (Carteret*, Duplin*, Jones)  | W3 |  | SU   | GNR  |
| <i>Hesperia leonardus</i><br><b>Leonard's Skipper</b><br>PM: wooded borders and openings, brushy fields; host plants -- grasses (Ashe, Avery*, Buncombe, Chatham, Clay*, Durham, Guilford*, Harnett, Madison, Montgomery, Moore, Randolph, Richmond*, Rowan, Stanly, Union, Wake, Watauga)   | W2 |  | S3   | G5   |
| <i>Hesperia metea</i><br><b>Cobweb Skipper</b><br>PSM: dry barren sites, such as powerline clearings and pine/oak sandhills; host plants -- mainly broomsedge ( <i>Andropogon</i> ) (Alleghany, Caswell, Chatham, Clay, Cleveland, Cumberland*, Durham, Franklin, Gaston*, Harnett, Montgomery, Moore, Orange, Polk*, Randolph, Richmond*, Rockingham, Scotland, Wake)   | W2 |  | S3   | G4   |
| <i>Hesperia sassacus</i><br><b>Indian Skipper</b><br>M: old fields, clearings, wood margins, mainly at high elevations; host plants -- grasses (Alleghany, Ashe, Avery, Burke, Clay, Haywood, Macon, Madison, Mitchell, Swain, Watauga, Wilkes, Yancey*)   | W2 |  | S3   | G5   |

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| <i>Megathymus yuccae</i><br><b>Yucca Giant-Skipper</b><br>CSPM: dunes, flatwoods, old fields, and other places near yuccas; host plants -- <i>Yucca</i> species (Alexander, Bladen, Brunswick, Carteret*, Catawba*, Craven*, Cumberland, Dare*, Hoke, Johnston*, Jones, Mecklenburg, Moore, New Hanover, Onslow, Pender, Richmond, Robeson, Rutherford, Sampson, Scotland, Transylvania*)  | <b>W2</b> |      | <b>S3S4</b> | <b>G5</b>   |
| <i>Phyciodes cocyta</i><br><b>Northern Crescent</b><br>M: high to medium elevation openings in woodlands, road banks; host plants -- asters (Alleghany, Ashe, Buncombe, Clay, Graham, Haywood, Henderson, Macon, Madison, Swain, Watauga, Yancey)  | <b>W3</b> |      | <b>S3?</b>  | <b>G5</b>   |
| <i>Phyciodes phaon</i><br><b>Phaon Crescent</b><br>T: open, often dry areas, mainly on barrier islands; host plants -- fogfruit ( <i>Lippia</i> ) (Brunswick*, Carteret, Dare, Hyde, New Hanover, Onslow, Pender)  | <b>W5</b> |      | <b>S3</b>   | <b>G5</b>   |
| <i>Pyrgus albescens</i><br><b>White Checkered-Skipper</b><br>TP: dry, open habitats, often where sandy, in the southern parts of the state; host plants -- mallows ( <i>Sida</i> ) (Brunswick, Carteret, Mecklenburg)  | <b>W3</b> |      | <b>SU</b>   | <b>G5</b>   |
| <i>Satyrium kingi</i><br><b>King's Hairstreak</b><br>SCPM: forests, often moist, usually near sweetleaf; host plant -- sweetleaf ( <i>Symplocos tinctoria</i> ) (Bladen, Brunswick, Carteret, Craven, Cumberland, Currituck, Dare*, Gaston, Hoke, Moore, Onslow*, Pender*, Pitt, Richmond, Robeson, Sampson, Scotland, Transylvania, Watauga)  | <b>W2</b> |      | <b>S3S4</b> | <b>G3G4</b> |
| <i>Speyeria diana</i><br><b>Diana Fritillary</b><br>MP: montane and foothill forest edges and openings; host plants -- violets ( <i>Viola</i> ) (Alexander*, Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Catawba, Cherokee, Clay, Cleveland, Gaston, Graham, Haywood, Henderson, Iredell, Jackson, Macon, Madison, McDowell, Mecklenburg, Mitchell, Nash*, Polk, Rutherford, Stokes*, Surry, Swain, Transylvania, Wake*, Watauga, Wilkes, Yancey) | <b>W2</b> |      | <b>S3S4</b> | <b>G3G4</b> |
| <i>Thorybes confusus</i><br><b>Confused Cloudywing</b><br>SCPM: dry woodland borders and openings, brushy fields; host plants -- legumes (Brunswick, Carteret, Caswell, Chatham, Clay, Columbus, Craven, Cumberland, Dare*, Davie, Durham, Forsyth, Gaston*, Granville, Harnett, Hoke, Montgomery, Moore, New Hanover, Onslow, Orange, Pender, Richmond, Sampson, Scotland, Wake, Warren)  | <b>W3</b> |      | <b>S3S4</b> | <b>G4</b>   |

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|   | N.C.   | U.S. | N.C  | Global |

### Insects: Moths

|  |           |  |             |             |
|--|-----------|--|-------------|-------------|
| <i>Abrostola ovalis</i><br><b>Oval Abrostola Moth</b><br>M: high elevation forests with nettles (Ashe, Haywood, Macon, Swain)  | <b>W3</b> |  | <b>SU</b>   | <b>G4</b>   |
| <i>Acrapex relictus</i><br><b>Relict Cane Moth</b><br>CS: canebrakes (Beaufort, Brunswick, Cumberland, Dare, Hoke, Martin, Montgomery, Moore, Northampton, Onslow, Richmond, Wake, Washington) | <b>W3</b> |  | <b>S3</b>   | <b>G4</b>   |
| <i>Acronicta lanceolaria</i><br><b>Narrow-winged Dagger Moth</b><br>C: flatwoods (Brunswick, Onslow, Pender)   | <b>W3</b> |  | <b>S3?</b>  | <b>G4</b>   |
| <i>Afrida ydatodes</i><br><b>Dyar's Lichen Moth</b><br>C: maritime forest and scrub? (New Hanover)   | <b>W3</b> |  | <b>S1S3</b> | <b>G5</b>   |
| <i>Anicla lubricans</i><br><b>Slippery Dart</b><br>SCP: savannas and flatwoods (Beaufort, Brunswick, Carteret, Cumberland, Granville, Harnett, Hoke, Moore, New Hanover, Onslow, Pender, Wake) | <b>W3</b> |  | <b>S3?</b>  | <b>G4G5</b> |
| <i>Anicla simplicius</i><br><b>Simplicius Dart</b><br>S: unknown habitats (Harnett, Hoke)  | <b>W3</b> |  | <b>SU</b>   | <b>G4</b>   |
| <i>Anicla sullivanii</i><br><b>Sullivan's Anicla Moth</b><br>C: riparian habitats? (Hoke)  | <b>W3</b> |  | <b>SU</b>   | <b>G3G4</b> |
| <i>Apantesis carlotta</i><br><b>Carlotta's Tiger Moth</b><br>MP: unknown habitats (Alleghany, Ashe, Haywood, Stokes, Swain, Watauga)   | <b>W3</b> |  | <b>S3</b>   | <b>G5</b>   |
| <i>Apoda rectilinea</i><br><b>Rectilinea Slug Moth</b><br>S: pine-oak sandhill woodlands (Hoke, Moore)   | <b>W3</b> |  | <b>S1S3</b> | <b>GNR</b>  |
| <i>Argillophora furcilla</i><br><b>Silver Fork Cane Moth</b><br>CPM: canebrakes (Halifax, Martin, Northampton, Stokes, Swain, Washington)  | <b>W3</b> |  | <b>S2S3</b> | <b>G3G4</b> |
| <i>Arugisa latiorella</i><br><b>Watson's Arugisa Moth</b><br>CSP: sedgy glades (Dare, Moore, Wake, Washington)   | <b>W3</b> |  | <b>S3?</b>  | <b>G4</b>   |

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| <i>Cabera quadrifasciaria</i><br><b>Four-lined Cabera Moth</b><br>C: unknown habitats (Brunswick, Carteret, New Hanover, Pender)   | <b>W3</b> |      | <b>SU</b>   | <b>GNR</b>  |
| <i>Callosamia securifera</i><br><b>Sweetbay Silkmoth</b><br>CS: pocosins and other wetlands with sweetbay (Bladen, Brunswick, Camden, Carteret, Columbus, Gates, Harnett, Hoke, Moore, Pender, Richmond, Scotland, Washington) | <b>W3</b> |      | <b>SU</b>   | <b>G4</b>   |
| <i>Caripeta aretaria</i><br><b>Southern Pine Looper</b><br>CPM: pine forests (Beaufort, Bladen, Brunswick, Carteret, Columbus, Dare, Gaston, Halifax, Macon, Moore, New Hanover, Onslow, Pender, Stokes, Washington)           | <b>W3</b> |      | <b>S3S4</b> | <b>G4</b>   |
| <i>Catocala alabamae</i><br><b>Alabama Underwing</b><br>SC: mesic sandhills (Bladen, Cumberland, Richmond)   | <b>W3</b> |      | <b>S2S3</b> | <b>G4</b>   |
| <i>Catocala amestris</i><br><b>Three-staff Underwing</b><br>CP: sand ridges and flatwoods with leadplant ( <i>Amorpha</i> ) (New Hanover, Polk)  | <b>W3</b> |      | <b>SU</b>   | <b>G4</b>   |
| <i>Catocala blandula ssp. 1</i><br><b>Southern Charming Underwing</b><br>C: riparian hawthorns (Martin)  | <b>W3</b> |      | <b>S1S3</b> | <b>G5T3</b> |
| <i>Catocala illecta</i><br><b>Magdalen Underwing</b><br>P: habitats not known (Chatham)  | <b>W3</b> |      | <b>SU</b>   | <b>G5</b>   |
| <i>Catocala miranda</i><br><b>Miranda Underwing</b><br>M: forests with hawthorns (Swain)   | <b>W3</b> |      | <b>SU</b>   | <b>G3G4</b> |
| <i>Catocala pretiosa</i><br><b>Precious Underwing</b><br>CSM: forests with shadbush or chokeberry (Cumberland, Dare, Hoke, Macon)  | <b>W3</b> |      | <b>S2S3</b> | <b>G4</b>   |
| <i>Catocala sappho</i><br><b>Sappho Underwing</b><br>MP: bottomland hardwoods with hickories (Macon, Moore, Swain)   | <b>W3</b> |      | <b>SU</b>   | <b>G4</b>   |
| <i>Cerastis fishii</i><br><b>a Dart Moth</b><br>CM: heath thickets (Macon, New Hanover)  | <b>W3</b> |      | <b>SU</b>   | <b>G4</b>   |

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| <i>Ceratonyx satanaria</i><br><b>a Geometrid Moth</b><br>CM: swamps and bottomlands (Brunswick, Macon)  | <b>W3</b> |      | <b>S2S4</b> | <b>G4</b>   |
| <i>Chytonix sensilis</i><br><b>Barrens Marvel</b><br>CSPM: sandhills and flatwoods (Brunswick, Cumberland, Harnett, Hoke, Moore, New Hanover, Onslow, Pender, Stokes, Transylvania) | <b>W3</b> |      | <b>S3?</b>  | <b>G4</b>   |
| <i>Cisthene kentuckiensis</i><br><b>Kentucky Lichen Moth</b><br>CS: mainly in wet to mesic forests (Cumberland, Martin, Pender, Richmond, Wake)                                     | <b>W3</b> |      | <b>SU</b>   | <b>G4</b>   |
| <i>Dasychira atrivenosa</i><br><b>a Tussock Moth</b><br>CSP: hardwood forests (Brunswick, Hoke, Onslow, Pender, Warren)   | <b>W3</b> |      | <b>S3?</b>  | <b>G4</b>   |
| <i>Doryodes bistrialis</i><br><b>Double-lined Doryodes</b><br>CS: marshes (Brunswick, Carteret, Harnett, Hoke, Moore, New Hanover, Onslow, Pender)                                  | <b>W3</b> |      | <b>SU</b>   | <b>G4</b>   |
| <i>Doryodes sp. 1</i><br><b>Wiregrass Doryodes</b><br>CS: savannas, flatwoods, and sandhills (Brunswick, Carteret, Hoke, Moore, New Hanover, Onslow, Pender)                        | <b>W3</b> |      | <b>S3S4</b> | <b>G3G4</b> |
| <i>Elaphria fuscimacula</i><br><b>a Noctuid Moth</b><br>C: no habitat information (Columbus)  | <b>W3</b> |      | <b>SU</b>   | <b>GNR</b>  |
| <i>Eulithis molliculata</i><br><b>Dimorphic Eulithis Moth</b><br>M: no habitat information (Ashe)   | <b>W3</b> |      | <b>SU</b>   | <b>G4</b>   |
| <i>Eupithecia absinthiata</i><br><b>a Geometrid Moth</b><br>M: unknown habitats (Ashe, Swain*, Watauga)   | <b>W3</b> |      | <b>SU</b>   | <b>GNR</b>  |
| <i>Eupithecia affinata</i><br><b>a Geometrid Moth</b><br>M: no habitat information (Watauga)  | <b>W3</b> |      | <b>SU</b>   | <b>GNR</b>  |
| <i>Eupithecia indistincta</i><br><b>a Pug Moth</b><br>M: no habitat information (Haywood, Swain)  | <b>W3</b> |      | <b>SU</b>   | <b>GNR</b>  |



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| <i>Eupithecia mutata</i><br><b>Spruce Cone Looper</b><br>M: spruce-fir forests and possibly stands of hemlock (Haywood, Swain)   | W5     |      | SU   | GNR    |
| <i>Eupithecia peckorum</i><br><b>Peck's Pug Moth</b><br>CSM: sandhills and flatwoods (Brunswick*, Macon, Montgomery, New Hanover, Onslow, Pender)  | W3     |      | S3?  | G4     |
| <i>Eupithecia satyrata</i><br><b>Satyr Pug Moth</b><br>M: no habitat information (Ashe, Watauga)   | W3     |      | SU   | GNR    |
| <i>Eupithecia strattonata</i><br><b>a Pug Moth</b><br>no habitat or locality information   | W3     |      | SU   | GNR    |
| <i>Eusarca packardaria</i><br><b>Packard's Eusarca Moth</b><br>CM: no habitat information (Cumberland, Macon, Martin)  | W3     |      | SU   | GNR    |
| <i>Euxoa violaris</i><br><b>Violet Dart</b><br>T: beach dunes (Dare)   | W3     |      | S1S2 | G4     |
| <i>Gabara pulverosalis</i><br><b>an Erebid Moth</b><br>CSP: habitats poorly known (Brunswick, Cumberland, Harnett, Hoke, Montgomery, Moore, New Hanover, Onslow, Pender, Polk, Randolph, Richmond, Scotland) | W3     |      | S3?  | G4     |
| <i>Gondysia similis</i><br><b>Gordonia Darkwing</b><br>C: pocosins and bay forests (Bladen, Brunswick, Carteret, Dare, Onslow, Pender, Washington)   | W3     |      | S2S3 | G3G4   |
| <i>Gondysia telma</i><br><b>a Noctuid Moth</b><br>C: swamp forests (Columbus, Craven, Cumberland, Robeson)   | W3     |      | SU   | GNR    |
| <i>Grammia phyllira</i><br><b>Phyllira Tiger Moth</b><br>CSP: sandhills (Bladen, Cumberland, Gaston, Moore, Onslow, Richmond, Wake)  | W2     |      | S3   | G4     |
| <i>Grammia virguncula</i><br><b>Little Virgin Tiger Moth</b><br>M: no habitat information (Watauga*)   | W3     |      | SH   | G5     |

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| <i>Heliomata infulata</i><br><b>Rare Spring Moth</b><br>MPSC: forests or woodlands with shrubby locusts (Bladen, Cumberland, Gates, Harnett, Haywood, Hoke, Moore, Stokes, Surry, Wake)    | <b>W3</b> |      | <b>S2S3</b> | <b>G3G4</b> |
| <i>Hydrelia condensata</i><br><b>a Carpet Moth</b><br>M: no habitat or locality information  | <b>W3</b> |      | <b>SU</b>   | <b>G4</b>   |
| <i>Hydriomena divisaria</i><br><b>Black-dashed Hydriomena Moth</b><br>MP: no habitat information (Haywood, Macon, Madison, Mitchell, Rutherford, Swain, Wake)                              | <b>W3</b> |      | <b>S2S3</b> | <b>GNR</b>  |
| <i>Hypena appalachiensis</i><br><b>Appalachian Bomolocha Moth</b><br>M: unknown habitats (Ashe, Swain)   | <b>W3</b> |      | <b>S2S3</b> | <b>G3G4</b> |
| <i>Hyperstrotia aetheria</i><br><b>a Graylet Moth</b><br>S: pine-oak sandhill woodlands (Moore)  | <b>W3</b> |      | <b>S3?</b>  | <b>GNR</b>  |
| <i>Hypocala andremona</i><br><b>Hypocala Moth</b><br>M: no habitat information (Swain)   | <b>W3</b> |      | <b>SU</b>   | <b>GNR</b>  |
| <i>Hypomecis longipectinaria</i><br><b>Broadly Pectinate Hypomecis Moth</b><br>CP: hardwood stands (Brunswick, Halifax, Martin, Montgomery, Northampton, Onslow, Orange, Pender, Randolph) | <b>W3</b> |      | <b>S3S4</b> | <b>G3G4</b> |
| <i>Idaea eremiata</i><br><b>Straw Wave</b><br>CSM: sandhills (Brunswick, Cumberland, Macon, Moore, Pender, Richmond)   | <b>W3</b> |      | <b>S3S4</b> | <b>G4</b>   |
| <i>Idaea hilliata</i><br><b>Hill's Wave Moth</b><br>no locality or habitat information   | <b>W3</b> |      | <b>SU</b>   | <b>GNR</b>  |
| <i>Idaea micropterata</i><br><b>a Wave</b><br>C: no habitat information (Dare, Onslow)   | <b>W3</b> |      | <b>S3?</b>  | <b>GNR</b>  |
| <i>Idaea productata</i><br><b>a Wave</b><br>CM: sandhills (Dare, New Hanover, Onslow, Pender, Swain)   | <b>W3</b> |      | <b>SU</b>   | <b>G4</b>   |

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| <i>Idaea scintillularia</i><br><b>Diminutive Wave</b><br>PC: unknown habitats (Cabarrus, Martin, Montgomery, Wake)                | W3     |      | SU   | GNR    |
| <i>Ipimorpha pleonectusa</i><br><b>Even-lined Sallow</b><br>P: no habitat information (Cabarrus, Mecklenburg)                     | W3     |      | SU   | GNR    |
| <i>Leucania incognita</i><br><b>a Wainscot Moth</b><br>CM: habitats poorly known (Alleghany, Brunswick)                           | W3     |      | S1S2 | GNR    |
| <i>Lithacodia sp. 2</i><br><b>a Bird-dropping Moth</b><br>C: unknown habitats (Cumberland, Halifax, Hoke, Northampton)            | W3     |      | S1S3 | G1G3   |
| <i>Lithophane abita</i><br><b>Cypress Pinion</b><br>C: cypress swamps (Camden, Pender)  | W3     |      | SU   | G4     |
| <i>Lithophane adipel</i><br><b>a Pinion Moth</b><br>C: unknown habitats (Moore)   | W3     |      | SU   | G4     |
| <i>Lithophane joannis</i><br><b>a Noctuid Moth</b><br>M: rich cove forests? (Macon)   | W3     |      | SU   | G4     |
| <i>Lithophane lemmeri</i><br><b>Lemmer's Pinion</b><br>CP: cedar glades and Atlantic white cedar forests (Carteret, Craven, Wake) | W3     |      | S1S3 | G3G4   |
| <i>Lithophane scottae</i><br><b>a Pinion Moth</b><br>no locality and habitat information  | W3     |      | SU   | G2G4   |
| <i>Lithophane tepida</i><br><b>White-eyed Pinion</b><br>M: northern hardwood forests? (Macon)                                     | W3     |      | SU   | GNR    |
| <i>Litoprosopus futilis</i><br><b>Palmetto Borer</b><br>C: palmettos (Carteret, New Hanover)                                      | W3     |      | SU   | G4     |
| <i>Lytrosis heitzmanorum</i><br><b>a Geometrid Moth</b><br>no locality and habitat information                                    | W3     |      | SU   | G5     |

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|--|-----------|------|-------------|-------------|
|  | N.C.      | U.S. | N.C         | Global      |
| <i>Macrochilo louisiana</i><br><b>Louisiana Owlet Moth</b><br>CSPM: sedgy wetlands (Alleghany, Brunswick, Cumberland, Hoke, Onslow, Orange, Pender, Richmond)                            | <b>W3</b> |      | <b>S3?</b>  | <b>G4</b>   |
| <i>Macrochilo santerivalis</i><br><b>an Owlet Moth</b><br>C: brackish marshes (Dare, New Hanover, Onslow)  | <b>W3</b> |      | <b>SU</b>   | <b>G3G4</b> |
| <i>Metanema determinata</i><br><b>Dark Metanema Moth</b><br>M: northern hardwoods? (Alleghany, Ashe)   | <b>W3</b> |      | <b>SU</b>   | <b>GNR</b>  |
| <i>Metarranthis lateritiaria</i><br><b>a Geometrid Moth</b><br>CS: flatwoods and pocosins (Brunswick, Cumberland, Dare, Onslow, Pender)  | <b>W3</b> |      | <b>SU</b>   | <b>G3G4</b> |
| <i>Metarranthis mollicularia</i><br><b>a Geometrid Moth</b><br>P: no habitat information (Rutherford)  | <b>W3</b> |      | <b>SU</b>   | <b>GNR</b>  |
| <i>Metarranthis sp. 1</i><br><b>Mid-Atlantic Metarranthis Moth</b><br>C: pocosins (Brunswick, Dare, Moore, New Hanover, Pender, Richmond, Scotland, Washington)                          | <b>W3</b> |      | <b>S3S4</b> | <b>G3G4</b> |
| <i>Nemoria bifilata</i><br><b>White-barred Emerald</b><br>CSPM: sandhills and sandy forests (Bladen, Brunswick, Dare, Hoke, Moore, New Hanover, Onslow, Pender, Richmond, Swain, Warren) | <b>W3</b> |      | <b>S3?</b>  | <b>G4</b>   |
| <i>Nemoria outina</i><br><b>an Emerald Moth</b><br>C: no habitat information (Carteret)  | <b>W3</b> |      | <b>SU</b>   | <b>GNR</b>  |
| <i>Neoplynes eudora</i><br><b>a Wasp Moth</b><br>C: unknown (Carteret, New Hanover)  | <b>W3</b> |      | <b>S2S3</b> | <b>G5</b>   |
| <i>Notodontidae Genus 1 species 1</i><br><b>a new Prominent Moth</b><br>CP: bottomland hardwoods (Brunswick, Cumberland, Hoke, Moore, Pender, Randolph)                                  | <b>W3</b> |      | <b>S2S3</b> | <b>G3G4</b> |
| <i>Oligia chlorostigma</i><br><b>a Brocade Moth</b><br>MP: no habitat information (Alleghany, Ashe, Cabarrus, Haywood, Swain)  | <b>W3</b> |      | <b>SU</b>   | <b>G4</b>   |

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| <i>Operophtera bruceata</i><br><b>Bruce Spanworm Moth</b><br>M: no habitat information (Watauga)   | W3     |      | SU   | G5     |
| <i>Orgyia detrita</i><br><b>a tussock moth</b><br>CSPM: hardwood forests (Beaufort, Brunswick, Carteret, Dare, Halifax, Hoke, Onslow, Pender, Richmond, Swain, Warren, Washington) | W3     |      | S2S3 | G3G4   |
| <i>Paectes nubifera</i><br><b>Clouded Paectes Moth</b><br>no location or habitat information   | W3     |      | SU   | GNR    |
| <i>Pangrapta sp. 1</i><br><b>Whitish Pangrapta</b><br>CS: pocosins? (Bladen, Columbus, Hoke)   | W3     |      | S1S3 | GU     |
| <i>Papaipema araliae</i><br><b>Aralia Shoot Borer Moth</b><br>C: forests and woodlands (Halifax, Washington)   | W3     |      | S2S4 | G3G4   |
| <i>Papaipema birdi</i><br><b>Umbellifer Borer Moth</b><br>M: no habitat information (Ashe, Watauga)  | W3     |      | SU   | G4G5   |
| <i>Papaipema duplicatus</i><br><b>Dark Stoneroot Borer Moth</b><br>M: rich woods with <i>Collinsonia canadensis</i> (Swain)  | W3     |      | SH   | G2G4   |
| <i>Papaipema furcata</i><br><b>Ash Tip Borer Moth</b><br>no locality data; forests with ash ( <i>Fraxinus</i> )  | W3     |      | SU   | GU     |
| <i>Papaipema lysimachiae</i><br><b>Loosestrife Borer Moth</b><br>M: on loosestrife (Haywood, Macon)  | W3     |      | SU   | G4G5   |
| <i>Papaipema necopina</i><br><b>Sunflower Borer Moth</b><br>MC: no habitat information (Macon, Northampton)  | W3     |      | SU   | G4?    |
| <i>Papaipema nepheloptena</i><br><b>Turtle Head Borer Moth</b><br>no locality or habitat information   | W3     |      | SU   | G4     |
| <i>Papaipema polymniae</i><br><b>Cup Plant Borer Moth</b><br>MP: rich cove forests? (Buncombe, Haywood, Randolph, Swain)   | W3     |      | SU   | G4?    |

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| <i>Papaipema sp. 3</i><br><b>Southeastern Cane Borer Moth</b><br>C: canebrakes (Beaufort, Cumberland, Dare, Hoke, Martin, Montgomery, Moore, Richmond)     | W3     |      | S3S4 | G4     |
| <i>Parahypenodes quadralis</i><br><b>Masked Parahypenodes Moth</b><br>CM: no habitat information (Dare, Macon)   | W3     |      | S1S2 | G4     |
| <i>Photedes enervata</i><br><b>a Borer Moth</b><br>C: tidal marshes (Carteret, Onslow)   | W3     |      | SU   | G4     |
| <i>Pimaphera percata</i><br><b>an Inchworm Moth</b><br>C: unknown habitats (Brunswick)   | W3     |      | S1S2 | GNR    |
| <i>Ponometia parvula</i><br><b>a Bird-dropping Moth</b><br>CS: cypress swamps? (Brunswick, Cumberland, Harnett, New Hanover, Richmond, Scotland)           | W3     |      | S2S3 | GNR    |
| <i>Ponometia tortricina</i><br><b>a Bird-dropping Moth</b><br>M: unknown (Macon)   | W3     |      | SU   | GNR    |
| <i>Properigea costa</i><br><b>Barrens Moth</b><br>no locality or habitat information   | W3     |      | SU   | G4     |
| <i>Properigea tapeta</i><br><b>a Noctuid Moth</b><br>C: bottomlands? (Martin, Pender)  | W3     |      | SU   | GNR    |
| <i>Protodeltote sp. 1</i><br><b>a Bird-dropping Moth</b><br>C: pocosins and other wetlands; no locality data   | W3     |      | S1S3 | G1G3   |
| <i>Psamatodes abydata</i><br><b>Dot-lined Angle</b><br>CMP: unknown habitats; possibly a migrant (Ashe, Bladen, Brunswick, Macon*, Onslow, Pender, Stokes) | W3     |      | SU   | GNR    |
| <i>Rivula stepheni</i><br><b>a Noctuid Moth</b><br>C: no habitat information (Camden, Cumberland, Northampton)   | W3     |      | SU   | GNR    |
| <i>Schinia obscurata</i><br><b>Erigeron Flower Moth</b><br>S: sandhills (Moore)  | W3     |      | S2S3 | G4     |

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| <i>Schinia scissoides</i><br><b>Divided Flower Moth</b><br>C: open areas (Brunswick, New Hanover)   | W3     |      | S2S3 | GNR    |
| <i>Schinia siren</i><br><b>Alluring Schinia Moth</b><br>CS: open hardwood forests (Brunswick, Carteret, Hoke, Moore, New Hanover, Pender)                       | W3     |      | SU   | GNR    |
| <i>Schinia sordidus</i><br><b>Sordid Flower Moth</b><br>CS: savannas (Bladen, Brunswick, Carteret, Moore, New Hanover, Pender)                                  | W3     |      | S2S3 | G4?    |
| <i>Scopula aemulata</i><br><b>Diminutive Wave</b><br>PC: on <i>Trillium</i> (Brunswick, New Hanover, Stokes)  | W3     |      | SU   | GNR    |
| <i>Scopula cacuminaria</i><br><b>Frosted Tan Wave Moth</b><br>CM: sandhills and other dry forests (Alleghany, Beaufort, Brunswick, Camden, Dare, Gates, Onslow) | W3     |      | S2S3 | G4     |
| <i>Scopula ordinata</i><br><b>a Wave Moth</b><br>MC: mesic hardwoods (Brunswick, Haywood, Macon, Swain, Transylvania)   | W3     |      | SU   | GU     |
| <i>Scopula purata</i><br><b>Chalky Wave</b><br>CS: acidic wetlands (Brunswick, Cumberland, Hoke, Moore, Onslow, Pender, Richmond)                               | W3     |      | S2S3 | G4     |
| <i>Selenisa sueroides</i><br><b>Pale-edged Selenisa Moth</b><br>no locality or habitat information  | W3     |      | SU   | GNR    |
| <i>Speranza subcessaria</i><br><b>Barred Angle</b><br>M: high elevation forests with gooseberries ( <i>Ribes</i> ) (Ashe, Avery, Swain, Transylvania, Watauga)  | W3     |      | S3S4 | G4     |
| <i>Sphingicampa bicolor</i><br><b>Honey Locust Moth</b><br>P: on honey locust ( <i>Gleditsia</i> ) (Chatham, Durham*, Gaston, Lee, Wake)                        | W3     |      | S3?  | G5     |
| <i>Sphinx franckii</i><br><b>Franck's Sphinx</b><br>PC: basic-mesic hardwoods and other habitats with ash ( <i>Fraxinus</i> ) (Brunswick, Cabarrus, Orange)     | W3     |      | SU   | G4G5   |

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| <i>Spilosoma dubia</i><br><b>Dubious Tiger Moth</b><br>C: acidic wetlands (Bladen, Brunswick, Carteret, Cumberland, Dare, New Hanover, Onslow, Pender, Washington) | W3     |      | S3?  | G4     |
| <i>Stiria rugifrons</i><br><b>Yellow Sunflower Moth</b><br>CM: habitat unknown, but often near sunflowers (Cumberland, Transylvania*)                              | W3     |      | SU   | G4     |
| <i>Sympistis dinalda</i><br><b>a Sallow</b><br>P: no habitat information (Warren)  | W3     |      | SU   | GNR    |
| <i>Sympistis perscripta</i><br><b>Scribbled Sallow</b><br>C: on toadflax (Bladen, Brunswick, Cumberland, New Hanover, Onslow)                                      | W3     |      | SU   | G4     |
| <i>Tacparia detersata</i><br><b>Pale Alder Moth</b><br>M: northern hardwoods (Alleghany, Ashe, Avery)  | W3     |      | SU   | GNR    |
| <i>Tornos abjectarius</i><br><b>a Tornos Moth</b><br>CP: no habitat information (Brunswick, Cumberland, Halifax, Pender, Richmond, Warren)                         | W3     |      | S2S3 | GNR    |
| <i>Tornos cinctarius</i><br><b>a Tornos Moth</b><br>CS: savannas and sandhills (Cumberland, Hoke, Onslow, Pender)  | W3     |      | SU   | GNR    |
| <i>Tripudia flavofasciata</i><br><b>a Seed Moth</b><br>C: bottomlands (Cumberland, Halifax, Martin, Northampton, Onslow)   | W3     |      | SU   | GNR    |
| <i>Ulolonche modesta</i><br><b>Modest Quaker Moth</b><br>CP: no habitat information (Bladen, Cumberland, Dare, Pender, Stokes)                                     | W3     |      | SU   | G5     |
| <i>Xestia n. sp. nr. youngii</i><br><b>Young's Dart Moth</b><br>C: peatlands (Beaufort, Bladen, Brunswick, Carteret, Dare, New Hanover, Pender, Washington)        | W3     |      | S3S4 | G3G4   |
| <i>Zale fictilis</i><br><b>an Owlet Moth</b><br>C: no habitat information; perhaps a stray from farther south (Brunswick)  | W3     |      | SU   | G5     |
| <i>Zale sp. 2 nr. squamularis</i><br><b>a new Zale</b><br>CP: no habitat information (Brunswick, Cumberland, Stokes)   | W3     |      | SU   | G4Q    |



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| <i>Zale sp. 3 nr. buchholzi</i><br><b>an Owlet Moth</b><br>CS: pine forests (Brunswick, Cumberland, Hoke, Martin, Moore, New Hanover, Pender) | <b>W3</b> |      | <b>S2S3</b> | <b>G3G4</b> |
| <i>Zanclognatha atrilineella</i><br><b>an Owlet Moth</b><br>C: no habitat information (Halifax, Martin, Onslow)                               | <b>W3</b> |      | <b>S1S3</b> | <b>GU</b>   |
| <i>Zanclognatha dentata</i><br><b>an Owlet Moth</b><br>M: dry pitch pine stands (Haywood, Macon, Swain)                                       | <b>W3</b> |      | <b>SU</b>   | <b>G3G4</b> |

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| <b>Insects: Grasshoppers and Katydid</b>  |        |      |      |        |
| <i>Amblycorypha arenicola</i><br><b>Sandhill Virtuoso Katydid</b><br>S: sandhill habitats; no locality information  | W3     |      | S2S3 | GNR    |
| <i>Amblycorypha bartrami</i><br><b>Bartram's Round-winged Katydid</b><br>S: sandhill habitats; no locality information  | W3     |      | S2S3 | GNR    |
| <i>Atlanticus gibbosus</i><br><b>Gibbous Shield-back Katydid</b><br>C: oak and pine forests; ranges north to near the North Carolina border, but uncertain if any state records | W4     |      | SNA  | GNR    |
| <i>Belocephalus subapterus</i><br><b>Half-winged Cone Head Katydid</b><br>SC: flatwoods and other shrubby areas; no locality information  | W3     |      | S2S3 | GNR    |
| <i>Dendrotettix australis</i><br><b>Scrub Pine Grasshopper</b><br>MP: dry forests and monadnocks, often in pine stands (Macon*, Rutherford, Stokes)                             | W3     |      | SU   | GU     |
| <i>Encoptolophus sordidus</i><br><b>Dusky Grasshopper</b><br>reported from the state, but no locality or habitat information available  | W4     |      | SNA  | G5     |
| <i>Hesperotettix viridis</i><br><b>Meadow Purple-striped Grasshopper</b><br>CS: sandhill seeps and wet pine savannas; no locality information                                   | W3     |      | SU   | G5     |
| <i>Hubbellia marginifera</i><br><b>Pine Katydid</b><br>CS: pinewoods; no locality information   | W3     |      | S3?  | GNR    |
| <i>Inscudderia walkeri</i><br><b>Eastern Cypress Katydid</b><br>C: cypress swamps and savannas (Brunswick, Gates)   | W3     |      | SU   | GNR    |
| <i>Melanoplus acrophilus</i><br><b>a Spur-throat Grasshopper</b><br>M: montane forests?; endemic to the southern Appalachians, but no locality information                      | W3     |      | S2S3 | G2G3   |
| <i>Melanoplus devius</i><br><b>Devious Short-wing Grasshopper</b><br>M?: dry montane forests at middle elevations; no locality information                                      | W3     |      | SU   | GU     |

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| <i>Melanoplus hubbelli</i><br><b>Hubbell's Melanoplus</b><br>M: dry woodlands, including second growth (Polk, Swain, Yancey)   | <b>W3</b> |      | <b>SU</b>   | <b>G4</b>   |
| <i>Melanoplus nigrescens</i><br><b>Black-sided Spur-throat Grasshopper</b><br>PCT: upland forests, dry pinewoods, and maritime forests (Brunswick*, Columbus*, Montgomery)               | <b>W3</b> |      | <b>S3?</b>  | <b>GU</b>   |
| <i>Melanoplus sp. 35</i><br><b>a Grasshopper</b><br>no habitat or locality data (endemic to North Carolina)  | <b>W3</b> |      | <b>S1S2</b> | <b>G1G2</b> |
| <i>Melanoplus sp. 6</i><br><b>a Grasshopper</b><br>no habitat or locality data (endemic to North Carolina)   | <b>W3</b> |      | <b>S1S2</b> | <b>G1G2</b> |
| <i>Melanoplus strumosus</i><br><b>Swollen Spur-throat Grasshopper</b><br>CS: sandhills; no locality information  | <b>W3</b> |      | <b>S2S3</b> | <b>G4G5</b> |
| <i>Melanoplus tribulus</i><br><b>Tribulus Spur-throat Grasshopper</b><br>MPC: glades and open woodlands (Ashe*, Halifax*, Montgomery)  | <b>W3</b> |      | <b>SU</b>   | <b>G4G5</b> |
| <i>Melanoplus walshii</i><br><b>Walsh's Locust</b><br>M: thickets in and near deciduous woodlands at mid- to high elevations; only recent records for Mount Mitchell (Yancey)            | <b>W3</b> |      | <b>SU</b>   | <b>G4G5</b> |
| <i>Mermiria picta</i><br><b>Lively Mermiria</b><br>CS: longleaf pine savannas and flatwoods (Brunswick, Carteret, Columbus*, Cumberland, Moore*, New Hanover*, Onslow, Pender, Scotland) | <b>W3</b> |      | <b>S3?</b>  | <b>G5</b>   |
| <i>Montezumina modesta</i><br><b>Modest Katydid</b><br>PCM: pinewoods and other habitats; no locality information  | <b>W3</b> |      | <b>SU</b>   | <b>GU</b>   |
| <i>Neoconocephalus velox</i><br><b>Swift-flying Cone Head Katydid</b><br>C: shrubby undergrowth in pinewoods; no locality information  | <b>W3</b> |      | <b>SU</b>   | <b>GNR</b>  |
| <i>Orchelimum bradleyi</i><br><b>Bradley's Meadow Katydid</b><br>CT: apparently known from the southeastern corner of the state; no locality or habitat information                      | <b>W3</b> |      | <b>SU</b>   | <b>GNR</b>  |

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| <i>Orchelimum superbum</i><br><b>Superb Meadow Katydid</b><br>CT: bogs and tidal marshes; no locality information                            | <b>W3</b> |      | <b>SU</b>   | <b>GNR</b>    |
| <i>Paratylotropidia beutenmuelleri</i><br><b>Beutenmueller's Grasshopper</b><br>no habitat or locality data                                  | <b>W3</b> |      | <b>SU</b>   | <b>G4</b>     |
| <i>Pardalophora apiculata</i><br><b>Coral-winged Grasshopper</b><br>no locality or habitat information                                       | <b>W3</b> |      | <b>SU</b>   | <b>G5</b>     |
| <i>Romalea microptera</i><br><b>Eastern Lubber Grasshopper</b><br>P: open woods and roadsides; no locality information                       | <b>W3</b> |      | <b>SU</b>   | <b>G5</b>     |
| <i>Scudderia curvicauda laticauda</i><br><b>Broad-tailed Bush Katydid</b><br>C: savannas, flatwoods, open pinewoods; no locality information | <b>W3</b> |      | <b>SU</b>   | <b>GNRTNR</b> |
| <i>Stenacris vitreipennis</i><br><b>Glassy-winged Toothpick Grasshopper</b><br>C: marshes; no locality information                           | <b>W3</b> |      | <b>S1S3</b> | <b>G5</b>     |
| <i>Trachyrhachys kiowa</i><br><b>Ash-brown Grasshopper</b><br>bare or gravelly ground in dry upland habitats; no locality information        | <b>W3</b> |      | <b>SU</b>   | <b>G5</b>     |

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| <b>Insects: Beetles</b>   |           |      |             |             |
| <i>Ellipsoptera blanda</i><br><b>Sandbar Tiger Beetle</b><br>C: sandy floodplains and white sand bars along blackwater rivers and streams (Bladen, Columbus, New Hanover) | <b>W3</b> |      | <b>S2S3</b> | <b>GNR</b>  |
| <i>Gonielmis dietrichi</i><br><b>a Water Beetle</b><br>S: in and around Fort Bragg (Hoke, Richmond, Scotland)   | <b>W3</b> |      | <b>S2</b>   | <b>GNR</b>  |
| <i>Lordithon niger</i><br><b>Black Lordithon Rove Beetle</b><br>no habitat or locality information  | <b>W4</b> |      | <b>SU</b>   | <b>GU</b>   |
| <i>Stenelmis morsei</i><br><b>a Riffle Beetle</b><br>C: Lumber River (Robeson)  | <b>W5</b> |      | <b>S2</b>   | <b>GNR</b>  |
| <i>Stenelmis sp. 1</i><br><b>Harley's Stenelmis Riffle Beetle</b><br>S: Lumber River (Hoke, Scotland)   | <b>W3</b> |      | <b>S1</b>   | <b>GNR</b>  |
| <i>Stenelmis sp. 2</i><br><b>William's Stenelmis Riffle Beetle</b><br>PS: James Creek, Upper Little River, Deep River (Harnett, Lee, Moore)                               | <b>W2</b> |      | <b>S2</b>   | <b>GNR</b>  |
| <i>Stenelmis sp. 3</i><br><b>a Riffle Beetle</b><br>PSC: Little River (Cumberland, Harnett, Moore)  | <b>W3</b> |      | <b>S2</b>   | <b>GNR</b>  |
| <i>Trechus balsamensis</i><br><b>a Ground Beetle</b><br>M: Plott Balsam mountains (endemic to North Carolina)   | <b>W3</b> |      | <b>SU</b>   | <b>GH</b>   |
| <i>Trechus carolinae</i><br><b>a Ground Beetle</b><br>M: Black Mountains (endemic to North Carolina)  | <b>W3</b> |      | <b>SU</b>   | <b>GH</b>   |
| <i>Trechus luculentus luculentus</i><br><b>a Ground Beetle</b><br>M: mountains of southwestern North Carolina   | <b>W3</b> |      | <b>SU</b>   | <b>GHTH</b> |
| <i>Trechus luculentus unicoi</i><br><b>a Ground Beetle</b><br>M: apparently the mountains of Graham County  | <b>W3</b> |      | <b>SU</b>   | <b>GHTH</b> |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence)   | Status    |      | Rank      |           |
|---|-----------|------|-----------|-----------|
|   | N.C.      | U.S. | N.C       | Global    |
| <i>Trechus mitchellensis</i><br><b>a Ground Beetle</b><br>M: Black Mountains (endemic to North Carolina)                                | <b>W3</b> |      | <b>SU</b> | <b>GH</b> |
| <i>Trechus novaculosus</i><br><b>a Ground Beetle</b><br>M: Great Smoky Mountains National Park (endemic to the park)                    | <b>W3</b> |      | <b>SU</b> | <b>GH</b> |
| <i>Trechus roanicus</i><br><b>a Ground Beetle</b><br>M: Roan Mountain (endemic to the mountain)   | <b>W3</b> |      | <b>SU</b> | <b>GH</b> |
| <i>Trechus rosenbergi</i><br><b>a Ground Beetle</b><br>M: Plott Balsam and Great Balsam mountains (endemic to North Carolina)           | <b>W3</b> |      | <b>SU</b> | <b>GH</b> |
| <i>Trechus satanicus</i><br><b>a Ground Beetle</b><br>M: vicinity of Devils Courthouse and Graveyard Fields (endemic to North Carolina) | <b>W3</b> |      | <b>SU</b> | <b>GH</b> |
| <i>Trechus subtilis</i><br><b>a Ground Beetle</b><br>M: mountains of Haywood County (endemic to North Carolina)                         | <b>W3</b> |      | <b>SU</b> | <b>GH</b> |

| Scientific Name<br>Common Name<br>Region: Habitat Comments (Counties of Occurrence) | Status |      | Rank |        |
|---|--------|------|------|--------|
|   | N.C.   | U.S. | N.C  | Global |

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## ENDEMIC ANIMALS IN NORTH CAROLINA

This is a list of all taxa (including subspecies) considered to be strictly endemic to North Carolina. The list does not include taxa whose range barely extends into another state, such as taxa endemic to the Roan Mountain area or Great Smoky Mountains National Park. The lists of most of the insect groups (other than butterflies, dragonflies, and damselflies) are incomplete, as are the lists for spiders and other arachnids. There are no endemic taxa of birds.

| SCIENTIFIC NAME                          | COMMON NAME                            |
|--|--|
| <b>MAMMALS</b>                           |  |
| <i>Peromyscus leucopus buxtoni</i>       | Buxton Woods White-footed Deermouse    |
| <i>Sorex sp. 1</i>                       | an Undescribed Shrew                   |
| <b>REPTILES</b>                          |  |
| <i>Lampropeltis getula sticticeps</i>    | Outer Banks Kingsnake                  |
| <i>Nerodia sipedon williamengelsi</i>    | Carolina Watersnake                    |
| <b>AMPHIBIANS</b>                        |  |
| <i>Necturus lewisi</i>                   | Neuse River Waterdog                   |
| <i>Plethodon amplus</i>                  | Blue Ridge Gray-cheeked Salamander     |
| <i>Plethodon cheoah</i>                  | Cheoah Bald Salamander                 |
| <i>Plethodon meridianus</i>              | South Mountain Gray-cheeked Salamander |
| <i>Plethodon yonahlossee pop. 1</i>      | Crevice Salamander                     |
| <b>FRESHWATER FISHES</b>                 |  |
| <i>Etheostoma perlongum</i>              | Waccamaw Darter                        |
| <i>Fundulus cf. diaphanus</i>            | Lake Phelps Killifish                  |
| <i>Fundulus waccamensis</i>              | Waccamaw Killifish                     |
| <i>Lythrurus matutinus</i>               | Pinewoods Shiner                       |
| <i>Menidia extensa</i>                   | Waccamaw Silverside                    |
| <i>Notropis mekistocholas</i>            | Cape Fear Shiner                       |
| <i>Noturus furiosus</i>                  | Carolina Madtom                        |
| <b>MOLLUSKS – FRESHWATER BIVALVES</b>    |  |
| <i>Alasmidonta sp. 1</i>                 | a Bivalve (Upper Yadkin River system)  |
| <i>Alasmidonta sp. 2</i>                 | a Bivalve (Uwharries region)           |
| <i>Elliptio marsupiobesa</i>             | Cape Fear Spike                        |
| <i>Elliptio steinstansana</i>            | Tar River Spinymussel                  |
| <i>Elliptio sp. 2</i>                    | File Spike                             |
| <i>Elliptio sp. 4</i>                    | a Bivalve (Deep River system)          |
| <i>Lampsilis fullerkeri</i>              | Waccamaw Fatmucket                     |
| <i>Lampsilis sp. 2</i>                   | Chameleon Lampmussel                   |
| <i>Lampsilis sp. 3</i>                   | a Bivalve (Deep River system)          |
| <b>MOLLUSKS – FRESHWATER GASTROPODS</b>  |  |
| <i>Cincinnatia sp. 1</i>                 | Waccamaw Siltsnail                     |
| <i>Helisoma eucosmium</i>                | Greenfield Rams-horn                   |
| <i>Planorbella magnifica</i>             | Magnificent Rams-horn                  |
| <b>MOLLUSKS – TERRESTRIAL GASTROPODS</b> |  |
| <i>Carychium arboreum</i>                | Tree Thorn                             |
| <i>Catinella waccamawensis</i>           | Waccamaw Ambersnail                    |
| <i>Fumonelix cherohalaensis</i>          | Rock-loving Covert                     |
| <i>Fumonelix orestes</i>                 | Engraved Covert                        |

| <b>MOLLUSKS – TERRESTRIAL GASTROPODS</b> |                                  |
|--|----------------------------------|
| <i>Glyphyalinia clingmani</i>            | Fragile Glyph                    |
| <i>Helicodiscus bonamicus</i>            | Spiral Coil                      |
| <i>Paravitrea lacteodens</i>             | Ramp Cove Supercoil              |
| <i>Patera clarki nantahala</i>           | Noonday Globe                    |
| <i>Triodopsis fulciden</i>               | Dwarf Threetooth                 |
| <i>Triodopsis soelneri</i>               | Cape Fear Threetooth             |
| <b>ARACHNIDS</b>                         |                                  |
| <i>Hypochilus coylei</i>                 | a Lampshade Weaver               |
| <i>Hypochilus sheari</i>                 | a Lampshade Weaver               |
| <i>Nesticus bishopi</i>                  | a Cave Cobweb Spider             |
| <i>Nesticus brimleyi</i>                 | a Cave Cobweb Spider             |
| <i>Nesticus carolinensis</i>             | Linville Caverns Spider          |
| <i>Nesticus cooperi</i>                  | Lost Nantahala Cave Spider       |
| <i>Nesticus crosbyi</i>                  | a Cave Cobweb Spider             |
| <i>Nesticus nasicus</i>                  | a Cave Cobweb Spider             |
| <i>Nesticus sheari</i>                   | a Cave Cobweb Spider             |
| <i>Nesticus silvanus</i>                 | a Cave Cobweb Spider             |
| <i>Nesticus sp. 2</i>                    | a Cave Cobweb Spider             |
| <b>CRUSTACEANS</b>                       |                                  |
| <i>Caecidotea carolinensis</i>           | Bennett’s Mill Cave Water Slater |
| <i>Cambarus brimleyorum</i>              | Valley River Crayfish            |
| <i>Cambarus catagius</i>                 | Greensboro Burrowing Crayfish    |
| <i>Cambarus davidi</i>                   | Carolina Ladle Crayfish          |
| <i>Cambarus eeseehensis</i>              | Grandfather Mountain Crayfish    |
| <i>Cambarus hystricosus</i>              | Sandhills Spiny Crayfish         |
| <i>Cambarus johni</i>                    | Carolina Foothills Crayfish      |
| <i>Cambarus lenati</i>                   | Broad River Stream Crayfish      |
| <i>Cambarus reburrus</i>                 | French Broad River Crayfish      |
| <i>Cambarus tuckasegee</i>               | Tuckasegee Stream Crayfish       |
| <i>Dactylocythere chelomata</i>          | Cherokee Crayfish Ostracod       |
| <i>Dactylocythere isabelae</i>           | Catawba Crayfish Ostracod        |
| <i>Dactylocythere peedeensis</i>         | Pee Dee Crayfish Ostracod        |
| <i>Dactylocythere prinsii</i>            | Whitewater Crayfish Ostracod     |
| <i>Diacyclops jeanneli putei</i>         | Carolina Well Diacyclops         |
| <i>Harpagocythere baileyi</i>            | Highlands Crayfish Ostracod      |
| <i>Procambarus medialis</i>              | Pamlico Crayfish                 |
| <i>Procambarus plumimanus</i>            | Croatan Crayfish                 |
| <i>Skistodiptomus carolinensis</i>       | Carolina Skistodiptomus          |
| <i>Stygobromus carolinensis</i>          | Yancy Sideswimmer                |
| <i>Waltonocythere acuta</i>              | Transylvania Crayfish Ostracod   |
| <b>INSECTS – MAYFLIES</b>                |                                  |
| <i>Maccaffertium wudigeum</i>            | Wilson Creek “Stenonema”         |
| <b>INSECTS - STONEFLIES</b>              |                                  |
| <i>Haploperla fleeki</i>                 | Piedmont Sallfly                 |
| <i>Haploperla parkeri</i>                | Parker Sallfly                   |
| <i>Perlesta bjostadi</i>                 | Anomalous Stone                  |
| <i>Perlesta leathermani</i>              | Sandhills Stone                  |

| <b>INSECTS – CADDISFLIES</b>               |                                   |
|--|-----------------------------------|
| <i>Ceraclea cama</i>                       | a Longhorned Caddisfly            |
| <i>Ceraclea joannae</i>                    | a Caddisfly                       |
| <i>Nectopsyche waccamawensis</i>           | Waccamaw White Miller             |
| <i>Oecetis sp. D</i>                       | a Caddisfly                       |
| <i>Rhyacophila accola</i>                  | a Caddisfly                       |
| <b>INSECTS – FLIES</b>                     |                                   |
| <i>Eulonchus marialiciae</i>               | Mary Alice's Small-headed Fly     |
| <b>INSECTS – BUTTERFLIES</b>               |                                   |
| <i>Atrytonopsis sp1</i>                    | Crystal Skipper                   |
| <i>Neonympha mitchellii francisci</i>      | Saint Francis' Satyr              |
| <b>INSECTS - MOTHS</b>                     |                                   |
| <i>Agrotis carolina</i>                    | a Dart Moth                       |
| <i>Hemipachnobia subporphyrea</i>          | Venus Flytrap Cutworm Moth        |
| <i>Meropleon diversicolor sullivanii</i>   | an Owlet Moth                     |
| <i>Schizura sp. 1</i>                      | a New Prominent Moth              |
| <b>INSECTS – GRASSHOPPERS AND KATYDIDS</b> |                                   |
| <i>Melanoplus coreyi</i>                   | a Grasshopper                     |
| <i>Melanoplus decorus</i>                  | Decorated Spur-throat Grasshopper |
| <i>Melanoplus mirus</i>                    | Weldon Short-wing Grasshopper     |
| <i>Melanoplus nubilus</i>                  | Nubile Short-wing Grasshopper     |
| <i>Melanoplus serrulatus</i>               | Nantahala Short-wing Grasshopper  |
| <i>Melanoplus sp. 6</i>                    | a Grasshopper                     |
| <i>Melanoplus sp. 35</i>                   | a Grasshopper                     |
| <i>Melanoplus sylvestris</i>               | a Spur-throat Grasshopper         |
| <b>INSECTS – BEETLES</b>                   |                                   |
| <i>Trechus balsamensis</i>                 | a Ground Beetle                   |
| <i>Trechus carolinae</i>                   | a Ground Beetle                   |
| <i>Trechus luculentus luculentus</i>       | a Ground Beetle                   |
| <i>Trechus luculentus unicoi</i>           | a Ground Beetle                   |
| <i>Trechus michellensis</i>                | a Ground Beetle                   |
| <i>Trechus novaculosis</i>                 | a Ground Beetle                   |
| <i>Trechus roanicus</i>                    | a Ground Beetle                   |
| <i>Trechus rosenbergi</i>                  | a Ground Beetle                   |
| <i>Trechus satanicus</i>                   | a Ground Beetle                   |
| <i>Trechus subtilis</i>                    | a Ground Beetle                   |
| <b>INSECTS – SPRINGTAILS</b>               |                                   |
| <i>Pseudosinella flatua</i>                | a Cave Obligate Springtail        |
| <i>Pseudosinella gisini carolina</i>       | a Cave Obligate Springtail        |
| <i>Pseudosinella vespera</i>               | a Cave Obligate Springtail        |



## EXTIRPATED ANIMALS IN NORTH CAROLINA

This is a list of all taxa considered by state biologists and NCNHP to be extirpated (N.C. Rank of SX) in North Carolina. Those species with N.C. Status of E, T, SC, or SR are also included on the Rare List. NOTE: Quite a few species that might be gone from N.C. are included in the Rare and Watch Lists with an SH (=historic) rank, generally indicating that they have not been seen for over 20 years, but because of inadequate survey or other factors they may well still exist in the state or may be absent but expected to be found again in upcoming years.

| SCIENTIFIC NAME                  | COMMON NAME               | GLOBAL RANK | NOTES   |
|----------------------------------|---------------------------|-------------|---|
| <b>MAMMALS</b>                   |                           |             |   |
| <i>Bos bison</i>                 | American Bison            | G4          | MP:open woodlands   |
| <i>Canis lupus</i>               | Gray Wolf                 | G4          | MPS?C?:<br>extensive forests, remote areas                                    |
| <i>Erethizon dorsatum</i>        | North American Porcupine  | G5          | M:high elevation hardwood forests**   |
| <i>Lepus americanus</i>          | Snowshoe Hare             | G5          | M:spruce-fir, other high elevation forests**                                  |
| <i>Martes pennanti</i>           | Fisher                    | G5          | M:spruce-fir forests**  |
| <i>Puma concolor cougar</i>      | Eastern Cougar            | G5THQ       | MPC:extensive forests,remote areas  |
| <b>BIRDS</b>                     |                           |             |   |
| <i>Campephilus principalis</i>   | Ivory-billed Woodpecker   | GH          | C:extensive swamps, bottomlands with old-growth trees (one NC record)         |
| <i>Columbina passerina</i>       | Common Ground-dove        | G5          | T:dunes,sandy fields, margins of maritime woods and thickets                  |
| <i>Conuropsis carolinensis</i>   | Carolina Parakeet         | GX          | CSPM?:forests, esp. swamps and bottomlands                                    |
| <i>Ectopistes migratorius</i>    | Passenger Pigeon          | GX          | MPSC: forests (winter only)   |
| <i>Thryomanes bewickii altus</i> | Appalachian Bewick's Wren | G5T2Q       | M:woodland borders or openings, farmlands or brushy fields at high elevations |
| <i>Vermivora bachmanii</i>       | Bachman's Warbler         | GH          | PC: bottomland forests, swamps  |

| SCIENTIFIC NAME                       | COMMON NAME              | GLOBAL RANK | NOTES  |
|---------------------------------------|--------------------------|-------------|--|
| <b>FRESHWATER FISHES</b>              |                          |             |  |
| <i>Acipenser fulvescens</i>           | Lake Sturgeon            | G3G4        | M:large rivers of Tenn. drainages (Madison*)         |
| <i>Etheostoma jessiae</i>             | Blueside Darter          | G4Q         | M:streams in Mills River system (Henderson*)         |
| <i>Lepomis megalotis</i>              | Longear Sunfish          | G5          | M:French Broad drainage (Buncombe,* Haywood*)        |
| <i>Percina williamsi</i>              | Sickle Darter            | G2          | M: French Broad River (Buncombe*)                    |
| <b>MOLLUSKS – FRESHWATER BIVALVES</b> |                          |             |  |
| <i>Alasmidonta robusta</i>            | Carolina Elktoe          | G1Q         | P:Long Creek in Mecklenburg*                         |
| <i>Epioblasma florentina walkeri</i>  | Tan Riffleshell          | G1T1        | M:French Broad, other rivers (Buncombe*)             |
| <i>Medionidus conradicus</i>          | Cumberland Moccasinshell | G3G4        | M:French Broad River (Buncombe*)                     |
| <i>Pleuronaia dolabelloides</i>       | Slabside Pearlymussel    | G2          | M:Little Tenn. River (?) (Macon,*Swain*)             |
| <i>Ptychobranthus fasciolaris</i>     | Kidneyshell              | G4G5        | M:Tenn. Drainages                                    |
| <i>Quadrula pustulosa</i>             | Pimpleback               | G5          | M:Tenn. Drainages                                    |
| <i>Quadrula verrucosa</i>             | Pistolgrip               | G4G5        | M:New River near Virginia border (Alleghany,* Ashe*) |
| <i>Toxolasma lividus</i>              | Purple Lilliput          | G2          | M:French Broad River                                 |
| <b>INSECTS – BUTTERFLIES</b>          |                          |             |  |
| <i>Speyeria idalia</i>                | Regal Fritillary         | G3          | M:wet or dry meadows, bogs, open hilltops            |

\* All recorded occurrences in the county are either extirpated, have not been found in recent surveys, or have not been surveyed recently enough to be confident they are still present. Unsurveyed occurrences are regarded as historical after 20-40 years, the number of years depending on the species and the amount of habitat alteration in the area. An asterisk should not be regarded as a definitive statement that the species is gone from the county but indicates that there is reason to doubt its continued existence.

\*\*No positively documented records.

## POTENTIAL NEW TO NORTH CAROLINA ANIMALS

The following list contains species of well-known animal groups that are not currently thought to occur in North Carolina or those animal species not currently known to breed in North Carolina but which are considered to have some possibility of being found here based on their established range, habitat preferences, or breeding behaviors. Most are species that occur in the adjacent states of South Carolina, Georgia, Tennessee, or Virginia in habitats (or drainages) at least relatively similar to habitats known to exist in North Carolina. The purpose of this list is to encourage and challenge field workers to find new state occurrences and new breeding records. This list should give field investigators an idea of some of the species that may be regular components of North Carolina's fauna. Species that might occur as single record accidentals, such as western species of birds or Gulf Coast butterflies, are generally not included. While some of these species may have relatively remote chances of being found in North Carolina, the likelihood of finding new state records is greatly increased by awareness of the possibilities and by species-directed searching. Our knowledge of many of our animal groups is still quite imperfect, especially invertebrate groups. Many natural areas are being destroyed before they can be investigated, and it can be assumed that a number of native species have been extirpated from North Carolina before they were ever documented as occurring in the state. Following each species is the North Carolina province in which the species is considered most likely to be found. Where possible, a description of the typical habitat of the species in the vicinity of North Carolina is also given. Sometimes, the nearest known occurrence(s) to North Carolina are also listed.

### MAMMALS

There are very few terrestrial mammals that could be discovered for the first time in North Carolina. Three of them, North American Porcupine, Shoeshoe Hare, and Fisher, may have occurred in the mountains many decades or centuries ago, but reports are fuzzy or second-hand; they are included on the Extirpated List.

*Sylvilagus aquaticus* – Swamp Rabbit

M: swamps, floodplain forests; SC, GA; questionable specimen from Clay County, NC

## BIRDS

The species below are all considered to be potential breeders in North Carolina; some may possibly be breeding already. All have been recorded from the state on numerous occasions; those marked by (+) are known to occur in summer in the state to an extent and probably are nesting, but conclusive evidence is lacking.

*Accipiter gentilis* – Northern Goshawk

M: extensive forests, mainly at high elevations; MD, WV, VA; a few summer records for the NC mountains

*Ammodramus caudacutus* – Saltmarsh Sparrow

T: salt or brackish marshes; VA; some references list NC in the breeding range -- this is erroneous; there have been a few summer reports, but some may be erroneous or of late migrating individuals

*Asio flammeus* – Short-eared Owl

T: extensive brackish marshes; MD, VA formerly, and might still nest there; several summer records for the NC coastal marshes, and might have nested once in 2001

*Asio otus* – Long-eared Owl

M: conifers or mixed woods at high elevations in northern mountains; VA; one or two summer reports from the NC mountains, but without visual confirmation

*Cistothorus platensis* – Sedge Wren

T: brackish marshes; VA (northern portion of Chesapeake Bay); several summer records from NC, mainly in brackish marshes, but these might be of wandering birds or migrants

*Contopus cooperi* – Olive-sided Flycatcher +

M: [breeding records for TN side of Great Smoky Mountains NP]; no active nest has been found in NC

*Empidonax flaviventris* – Yellow-bellied Flycatcher

M: high elevation spruce-fir, usually where stunted or young; VA (Mt. Rogers); two summer reports from NC mountains

*Geothlypis philadelphia* – Mourning Warbler

M: thickets, brushy places, clearings; VA; several males singing on territory have been found in the higher mountains since the mid-1980s, but no strong evidence of nesting has been found in NC

*Haemorhous purpureus* – Purple Finch

M: spruce-fir forests; VA (Mt. Rogers); one or two summer records for the NC mountains

*Melospiza georgiana* – Swamp Sparrow

M: bogs at high elevation; VA; no summer reports for NC

*Oreothlypis ruficapilla* – Nashville Warbler

M: spruce-fir forests, mainly along margins or in young or stunted trees; VA, but also a report from Mt. Rogers; one summer report for NC

*Parkesia noveboracensis* – Northern Waterthrush

M: bogs where spruce-fir is present; VA, plus two reports from Mt. Rogers; no summer reports for NC



## REPTILES

*Apalone ferox* – Florida Softshell

C: lakes, ponds, rivers; SC

*Apalone mutica* – Smooth Softshell

M: large rivers in the Tennessee drainage; TN

*Graptemys pseudogeographica* -- False Map Turtle

M: large rivers in the Tennessee drainage; TN

*Nerodia cyclopion* – Green Water Snake

C: streams, lakes, ponds, marshes; SC

*Ophisaurus compressus* – Island Glass Lizard

TC: maritime or other coastal forests, in dry habitats; SC

## AMPHIBIANS

*Ambystoma cingulatum* – Flatwoods Salamander

C: flatwoods, bottomlands, swamps; SC

*Ambystoma jeffersonianum* – Jefferson Salamander

M: low woods, bottomlands; VA

*Ambystoma texanum* – Smallmouth Salamander

M: moist forests; TN; ranges east to central TN

*Desmognathus planiceps* – Virginia Dusky Salamander

P: springs, seeps, streams; VA

*Desmognathus welteri* – Black Mountain Salamander

M: along streams in mesic forests; TN

*Eurycea bislineata* – Northern Two-lined Salamander

MP: springs, seeps, streams; VA; reported from the northern Piedmont of NC, but with no documentation yet available

*Eurycea lucifuga* – Cave Salamander

M: limestone caves and ledges; TN, VA

*Gyrinophilus palleucus* – Tennessee Cave Salamander

M: caves, in limestone areas; TN

*Lithobates grylio* – Pig Frog

C: lakes, ponds, marshes; SC

*Plethodon hoffmani* – Valley and Ridge Salamander

M: montane forests; VA

*Plethodon hubrichti* – Peaks of Otter Salamander

M: cool moist woods; VA; endemic to Peaks of Otter Mountain

*Plethodon kentucki* – Cumberland Plateau Salamander

M: moist mixed hardwoods; TN, VA

*Pseudacris kalmi* – New Jersey Chorus Frog

C: forests, with shallow water for breeding; VA

*Plethodon websteri* – Webster's Salamander

P: moist forests with steep north-facing slopes; SC

*Pseudobranchius striatus* – Dwarf Siren

C: swamps, ponds, other sluggish freshwater habitats; SC

*Urspeleperpes brucei* – Patch-nosed Salamander

M: margins of seeps or streams in rich forests; SC, GA

## FRESHWATER FISHES

Many fish species are found just beyond the border of North Carolina but have not been found within the State despite significant survey efforts. Higher stream gradients near the northern and western borders partly explain this phenomenon. Reservoirs along the borders have also eliminated riverine habitat and impede migration. Rather than list the many common species that are found in counties adjacent to North Carolina, here we are listing those which, if found, would be included in the Rare Animal List.

*Etheostoma cinereum* – Ashy Darter

M: Tennessee drainages; TN

*Etheostoma hopkinsi* – Christmas Darter

M: Savannah drainage; SC

*Hemitremia flammea* – Flame Chub

M: Tennessee drainages; TN

*Notropis ariommus* – Popeye Shiner

M: Tennessee drainages; TN

*Noturus baileyi* – Smoky Madtom

M: Tennessee drainages; TN

## INSECTS -- BUTTERFLIES

There are numerous butterfly species which presently known range extends south in the mountains only to Virginia. Some of these might occur in the northern mountain counties of North Carolina, particularly those not restricted to habitats rare or absent in the state (e.g., shale barrens or limestone outcrops).

*Amblyscirtes belli* – Bell's Roadside-Skipper

MP: wooded edges and openings, wooded creeks; host plant – wild oats (*Chasmanthium latifolium*); SC (Oconee and Pickens counties)

*Boloria selene* – Silver-bordered Fritillary

M: wet meadows, bogs, marshes; host plant – violets (*Viola*) and other species; VA

*Brephidium isophthalma* – Eastern Pygmy-Blue

T: tidal flats and marshes; host plant – glassworts (*Salicornia*), possibly saltwort (*Batis maritima*); SC

*Calephelis borealis* – Northern Metalmark

M: rocky areas near shale, serpentine, or limestone, usually near streams; host plant – round-leaved ragwort (*Senecio obovatus*), possibly fleabanes (*Erigeron*); VA

*Callophrys polios* – Hoary Elfin

M: sunny, dry slopes and other barren or rocky habitats; host plant – mainly bearberry (*Arctostaphylos uva-ursi*) [not in NC], possibly trailing-arbutus (*Epigaea repens*); VA

*Chlosyne harrisii* – Harris' Checkerspot

M: marshes, damp meadows, and other wet brushy places; host plant – flat-topped white aster (*Doellingeria umbellata*); WV.

*Colias interior* – Pink-edged Sulphur

M: high elevation areas with acidic soils, such as wood margins, openings, and heath balds; host plant – blueberries (*Vaccinium*); VA

*Erynnis lucilius* – Columbine Duskywing

M: rocky woods, ravines, and wooded edges; host plant – wild columbine (*Aquilegia canadensis*); VA; reported from NC in early 2000s, but report retracted, likely an identification error

## INSECTS -- BUTTERFLIES

*Erynnis persius* – Persius Duskywing

M: openings in cool forests, fields or bogs near woods; host plant – lupine (*Lupinus perennis*);  
VA

*Euphyes conspicuus* – Black Dash

CM: marshes, wet meadows, but rarely in bogs; host plant – sedges, mainly *Carex stricta*; VA

*Speyeria atlantis* – Atlantis Fritillary

M: cool, open woods, wooded streams, clearings; host plant – violets (*Viola*); VA



**SIGNIFICANT 2016 REVISIONS TO THE  
ANIMAL LIST**

**Animal Taxa with Upgraded Status (Increased  
Concern)**

| SCIENTIFIC NAME                            | COMMON NAME            | PREVIOUS STATUS | NEW STATUS |
|--|------------------------|-----------------|------------|
| <b>BIRDS</b>                               |                        |                 |            |
| <i>Antrostomus carolinensis</i>            | Chuck-will's-widow     | --              | W1         |
| <i>Antrostomus vociferus</i>               | Eastern Whip-poor-will | --              | W1         |
| <i>Chaetura pelagica</i>                   | Chimney Swift          | --              | W1         |
| <b>FRESHWATER FISHES</b>                   |                        |                 |            |
| <i>Notropis chalybaeus</i>                 | Ironcolor Shiner       | W1              | SR         |
| <i>Percina gymnocephala</i>                | Appalachia Darter      | W2              | SR         |
| <i>Pimephales notatus</i>                  | Bluntnose Minnow       | --              | W3         |
| <b>INSECTS - GRASSHOPPERS AND KATYDIDS</b> |                        |                 |            |
| <i>Melanopus coreyi</i>                    | a Grasshopper          | --              | SR         |

**Animal Taxa with Downgraded Status (Decreased  
Concern)**

| SCIENTIFIC NAME                          | COMMON NAME        | PREVIOUS STATUS | NEW STATUS |
|--|--------------------|-----------------|------------|
| <b>FRESHWATER FISHES</b>                 |                    |                 |            |
| <i>Hypentelium roanokense</i>            | Roanoke Hog Sucker | SR              | W2         |
| <b>MOLLUSKS – TERRESTRIAL GASTROPODS</b> |                    |                 |            |
| <i>Anguispira alternata</i>              | Flamed Tigersnail  | SR              | W2         |
| <i>Glyphyalinia umbilicata</i>           | Texas Glyph        | SR              | W2         |

**U.S. Status Changes**

There were two U.S. status changes between December 2014 and December 2016:

| SCIENTIFIC NAME               | COMMON NAME             | PREVIOUS STATUS | NEW STATUS |
|-------------------------------|-------------------------|-----------------|------------|
| <b>MAMMALS</b>                |                         |                 |            |
| <i>Myotis septentrionalis</i> | Northern Long-eared Bat | PE              | T -4(d)    |
| <b>FRESHWATER FISHES</b>      |                         |                 |            |
| <i>Moxostoma sp. 2</i>        | Sicklefin Redhorse      | Candidate       | --         |

E=Endangered; T=Threatened; T-4(d)=Threatened with a 4(d) rule; PE= Proposed Endangered;  
PT=Proposed Threatened; C=Candidate

### Scientific Name Changes

| PREVIOUS NAME                          | NEW NAME                               |
|--|--|
| <b>MAMMALS</b>                         |  |
| <i>Lasiurus intermedius</i>            | <i>Lasiurus intermedius floridanus</i> |
| <i>Sorex dispar</i>                    | <i>Sorex dispar blitchi</i>            |
| <b>BIRDS</b>                           |  |
| <i>Ammodramus henslowii sursurrans</i> | <i>Ammodramus henslowii</i>            |
| <i>Poecile atricapillus practica</i>   | <i>Poecile atricapillus</i>            |
| <i>Thyromanes bewickii altus</i>       | <i>Thyromanes bewickii</i>             |
| <i>Loxia curvirostra pop. 1</i>        | <i>Loxia curvirostra</i>               |
| <i>Aegolius acadicus pop. 1</i>        | <i>Aegolius acadicus</i>               |
| <i>Passerina ciris ciris</i>           | <i>Passerina ciris</i>                 |
| <i>Sterna dougallii</i>                | <i>Sterna dougallii dougallii</i>      |
| <b>REPTILES</b>                        |  |
| <i>Sisturus miliarius</i>              | <i>Sisturus miliarius miliarius</i>    |
| <i>Regina rigida</i>                   | <i>Liodytes rigida</i>                 |
| <i>Seminatrix pygaea</i>               | <i>Liodytes pygaea</i>                 |
| <b>AMPHIBIANS</b>                      |  |
| <i>Lithobates capito</i>               | <i>Rana capito capito</i>              |
| <i>Lithobates heckscheri</i>           | <i>Rana heckscheri</i>                 |
| <i>Lithobates sylvaticus pop. 3.</i>   | <i>Rana sylvatica pop. 3</i>           |
| <i>Eurycea longicauda</i>              | <i>Eurycea longicauda longicauda</i>   |
| <b>FRESHWATER FISHES</b>               |  |
| <i>Erimystax insignis eristigma</i>    | <i>Erimystax insignis</i>              |

### Historical Rank Changes

Only those changes involving taxa formerly or presently considered extinct, extirpated, or of historical occurrence are listed below.

| SCIENTIFIC NAME                                       | COMMON NAME                      | OLD S-RANK | NEW S-RANK |
|---|----------------------------------|------------|------------|
| <b>CRUSTACEANS</b>                                    |                                  |            |            |
| <i>Caecidotea carolinensis</i>                        | Bennett's Mill Cave Water Slater | S1         | SH         |
| <i>Skistodiaptomus carolinensis</i>                   | Carolina Skistodiaptomus         | S1         | SH         |
| <b>MOLLUSKS - FRESHWATER BIVALVE</b>                  |                                  |            |            |
| <i>Lasmigona holstonia</i>                            | Tennessee Heelsplitter           | S1         | SH         |
| <i>Villosa trabalis</i>                               | Cumberland Bean                  | S1         | SH         |
| <b>MOLLUSKS - FRESHWATER OR TERRESTRIAL GASTROPOD</b> |                                  |            |            |
| <i>Catinella waccamawensis</i>                        | Waccamaw Ambersnail              | S1         | SH         |
| <b>INSECTS - DRAGONFLY OR DAMSELFLY</b>               |                                  |            |            |
| <i>Aeshna tuberculifera</i>                           | Black-tipped Darner              | SH         | S1         |
| <b>INSECTS - GRASSHOPPERS AND KATYDIDS</b>            |                                  |            |            |
| <i>Dendrotettix zimmermanni</i>                       | Carolina Oak Grasshopper         | SH         | S1?        |
| <i>Melanoplus eurycerus</i>                           | A Spur-throat Grasshopper        | SH         | S1         |

## INDEX OF SCIENTIFIC NAMES

- Abrostola ovalis*, 126  
*Accipiter gentilis*, 91, 152  
*Accipiter striatus*, 15  
*Acipenser brevirostrum*, 30  
*Acipenser fulvescens*, 30, 150  
*Acipenser oxyrinchus*, 30  
*Acrapex relictus*, 126  
*Acroneuria evoluta*, 112  
*Acronicta albarufa*, 71  
*Acronicta dollii*, 71  
*Acronicta lanceolaria*, 126  
*Acronicta perblanda*, 71  
*Acronicta sinenscripta*, 71  
*Aegolius acadicus*, 15, 158  
*Aegolius acadicus pop. 1*, 158  
*Aeshna tuberculifera*, 62, 158  
*Aeshna verticalis*, 62  
*Afrida ydatodes*, 126  
*Agapetus hessi*, 114  
*Agapetus jocassee*, 114  
*Agapetus minutus*, 114  
*Agapetus pinatus*, 114  
*Agapetus tomus*, 114  
*Agatina capitata*, 112  
*Agraylea multipunctata*, 114  
*Agrotis carolina*, 71, 147  
*Alasmidonta heterodon*, 38  
*Alasmidonta raveneliana*, 38  
*Alasmidonta robusta*, 150  
*Alasmidonta sp. 1*, 145  
*Alasmidonta sp. 2*, 38, 145  
*Alasmidonta undulata*, 38  
*Alasmidonta varicosa*, 38  
*Alasmidonta viridis*, 38  
*Alligator mississippiensis*, 22  
*Allogona profunda*, 43  
*Alloperla lenati*, 59  
*Alloperla neglecta*, 112  
*Ambloplites cavifrons*, 30  
*Amblycorypha arenicola*, 138  
*Amblycorypha bartrami*, 138  
*Amblyscirtes alternata*, 66  
*Amblyscirtes carolina*, 124  
*Amblyscirtes reversa*, 66  
*Ambystoma mabeei*, 26  
*Ambystoma talpoideum*, 26  
*Ambystoma tigrinum*, 26  
*Ameletus tertius*, 57  
*Amercaenis cusabo*, 57  
*Ammodramus caudacutus*, 91, 152  
*Ammodramus henslowii*, 15, 158  
*Ammodramus savannarum*, 91  
*Amnicola sp. 1*, 43  
*Anas discors*, 91  
*Anaxyrus quercicus*, 26  
*Aneides aeneus*, 26  
*Anguispira alternata*, 103, 157  
*Anguispira knoxensis*, 43  
*Anguispira mordax*, 103  
*Anguispira strongylodes*, 43  
*Anhinga anhinga*, 91  
*Anicla lubricans*, 126  
*Anicla simplicius*, 126  
*Anicla sullivanii*, 126  
*Anodonta couperiana*, 38  
*Anodonta implicata*, 38  
*Anthopotamus myops*, 110  
*Antrostomus carolinensis*, 91, 157  
*Antrostomus vociferus*, 91, 157  
*Apalone spinifera aspera*, 95  
*Apalone spinifera spinifera*, 22  
*Apamea inebriata*, 71  
*Apameine new genus 2 sp. 1*, 71  
*Apameine new genus 2 sp. 3*, 71  
*Apameine new genus 2 sp. 4*, 71  
*Apantesis carlotta*, 126  
*Aplodinotus grunniens*, 30  
*Apoda rectilinea*, 126  
*Appalachina chilhoweensis*, 43  
*Appalachina sayana*, 43  
*Aquila chrysaetos*, 15  
*Aquilegia canadensis*, 154  
*Arctia caja*, 71  
*Argillophora furcilla*, 126  
*Argyrostromis quadrifilaris*, 71  
*Arigomphus pallidus*, 62  
*Arigomphus villosipes*, 120  
*Arphia granulata*, 81  
*Arugisa latiorella*, 126  
*Aruncus dioicus*, 67  
*Ascetocythere cosmata*, 107  
*Asio flammeus*, 91, 152  
*Asio otus*, 91, 152  
*Asioplax dolani*, 57  
*Atlanticus gibbosus*, 138  
*Atrytone arogos arogos*, 66  
*Atrytonopsis loammi*, 66  
*Atrytonopsis quinteri*, 66  
*Attaneuria ruralis*, 59  
*Attenella margarita*, 57  
*Autochthon cellus*, 66  
*Baetisca becki*, 57  
*Baetisca obesa*, 57  
*Baetopus trishae*, 57  
*Barbaetis benfieldi*, 57  
*Belocephalus subapterus*, 138  
*Beloneuria georgiana*, 112  
*Beraea gortebea*, 114  
*Bleptina sangamonina*, 72  
*Bolotoperla rossi*, 59  
*Bombus affinis*, 85  
*Booneacris variegata*, 81  
*Bos bison*, 149  
*Botaurus lentiginosus*, 15  
*Boyeria grafiana*, 62  
*Brachycentrus etowahensis*, 60  
*Cabera quadrifasciaria*, 127  
*Caecidotea carolinensis*, 54, 146, 158  
*Calamovilfa brevipilis*, 66, 78  
*Calephelis virginiana*, 66  
*Calidris canutus rufa*, 92  
*Callophrys hesseli*, 66  
*Callophrys irus*, 67  
*Callosamia securifera*, 127  
*Calopteryx amata*, 62  
*Cambarus acanthura*, 54  
*Cambarus aldermanorum*, 107

*Cambarus brimleyorum*, 54, 146  
*Cambarus carolinus*, 107  
*Cambarus catagius*, 54, 146  
*Cambarus chaugaensis*, 54  
*Cambarus davidi*, 54, 146  
*Cambarus eeseehensis*, 54, 146  
*Cambarus georgiae*, 54  
*Cambarus hiwasseeensis*, 107  
*Cambarus hystricosus*, 54, 146  
*Cambarus johni*, 54, 146  
*Cambarus lenati*, 55, 146  
*Cambarus nodosus*, 55  
*Cambarus parrishi*, 55  
*Cambarus reburrus*, 55, 146  
*Cambarus sp. A*, 107  
*Cambarus spicatus*, 55  
*Cambarus tuckasegee*, 55, 146  
*Campephilus principalis*, 149  
*Canis lupus*, 149  
*Canis rufus*, 11  
*Canthocamptus vagus*, 107  
*Caretta caretta*, 22  
*Carex stricta*, 155  
*Caripeta aretaria*, 127  
*Carpiodes carpio*, 30  
*Carpiodes cyprinus*, 30  
*Carpiodes sp. cf. cyprinus*, 30  
*Carpiodes sp. cf. velifer*, 30  
*Carychium arboreum*, 43, 145  
*Carychium exiguum*, 103  
*Catharus guttatus*, 15  
*Catharus ustulatus*, 15  
*Catinella pugillator*, 43  
*Catinella waccamawensis*, 43, 145, 158  
*Catocala alabamiae*, 127  
*Catocala amestris*, 127  
*Catocala blandula ssp. 1*, 127  
*Catocala consors*, 72  
*Catocala dulciola*, 72  
*Catocala grisatra*, 72  
*Catocala herodias*, 72  
*Catocala illecta*, 127  
*Catocala jair*, 72  
*Catocala lincolnana*, 72  
*Catocala louiseae*, 72  
*Catocala marmorata*, 72  
*Catocala messalina*, 72  
*Catocala mira*, 127  
*Catocala miranda*, 127  
*Catocala orba*, 72  
*Catocala pretiosa*, 127  
*Catocala sappho*, 127  
*Ceanothus americanus*, 67, 74  
*Celastrina neglecta*, 124  
*Celastrina neglectamajor*, 124  
*Celastrina nigra*, 67  
*Cemophora coccinea*, 95  
*Ceraclea cama*, 114, 147  
*Ceraclea cancellata*, 60  
*Ceraclea diluta*, 114  
*Ceraclea joannae*, 60, 147  
*Ceraclea mentiea*, 114  
*Ceraclea punctata*, 114  
*Ceraclea slossonae*, 60  
*Ceraclea sp. 2 nr. excisa*, 115  
*Ceraclea tarsipunctata*, 115  
*Cerastis fishii*, 127  
*Ceratomyx satanaria*, 128  
*Cercobrachys etowah*, 57  
*Cerma cora*, 72  
*Cernotina calcea*, 115  
*Certhia americana*, 15  
*Cervus elaphus*, 11  
*Chaetagnela fergusonii*, 73  
*Chaetura pelagica*, 92, 157  
*Chamaecyparis thyoidea*, 66  
*Charadrius melodus circumcinctus*, 15  
*Charadrius melodus melodus*, 16  
*Charadrius wilsonia*, 16  
*Chasmanthium latifolium*, 154  
*Chelonia mydas*, 22  
*Cherokeea attackullakulla*, 73  
*Cheumatopsyche enigma*, 115  
*Cheumatopsyche geora*, 115  
*Cheumatopsyche halima*, 115  
*Cheumatopsyche helma*, 115  
*Cheumatopsyche parentum*, 115  
*Cheumatopsyche richardsoni*, 115  
*Chimarra florida*, 115  
*Chlorochroa dismalia*, 85  
*Chlosyne gorgone*, 67  
*Chondestes grammacus*, 16  
*Chordeiles minor*, 92  
*Choroterpes basalis*, 57  
*Chytonix sensilis*, 128  
*Cicindela ancocisconensis*, 84  
*Cicindela nigrior*, 84  
*Cicindela patruela*, 84  
*Cincinnati sp. 1*, 43, 145  
*Circus cyaneus*, 16  
*Cisthene kentuckiensis*, 128  
*Cistothorus platensis*, 152  
*Clinostomus sp. 1*, 31  
*Coccyzus erythrophthalmus*, 16  
*Collinsonia canadensis*, 133  
*Columbina passerina*, 16, 149  
*Condylura cristata pop. 1*, 11  
*Contopus cooperi*, 92, 152  
*Conuropsis carolinensis*, 149  
*Cordulia shurtleffii*, 62  
*Coronilla varia*, 124  
*Corvus corax*, 92  
*Corynorhinus rafinesquii macrotis*, 11  
*Corynorhinus rafinesquii rafinesquii*, 11  
*Corynorhinus townsendii virginianus*, 11  
*Coryphaeschna ingens*, 62  
*Cottus caeruleomentum*, 31  
*Cottus carolinae*, 31  
*Crotalus adamanteus*, 22  
*Crotalus horridus*, 22  
*Cryptobranchus alleganiensis alleganiensis*, 26  
*Cyclonaias tuberculata*, 38  
*Cyclophora sp. 1*, 73  
*Cyenia inopinatus*, 73  
*Cymocythere clavata*, 107  
*Cyprinella labrosa*, 99  
*Cyprinella sp. 1*, 31  
*Cyprinella spiloptera*, 99  
*Cyprinella zanema*, 99



*Cytheridella ilosvayi*, 107  
*Dactylocythere chelomata*, 107, 146  
*Dactylocythere isabelae*, 107, 146  
*Dactylocythere peedeensis*, 108  
*Dactylocythere prinsii*, 108, 146  
*Dactylocythere susanae*, 108  
*Daedalochila* sp. 1 nr.  
*auriformis*, 43  
*Dargida aleada*, 73  
*Dargida rubripennis*, 73  
*Dasychira atrivenosa*, 128  
*Dasychira leucophaea*, 73  
*Dasypus novemcinctus*, 89  
*Datana ranaeiceps*, 73  
*Datana robusta*, 73  
*Deirochelys reticularia*, 22  
*Dendrotettix australis*, 138  
*Dendrotettix zimmermanni*, 81, 158  
*Dermochelys coriacea*, 23  
*Derrima stellata*, 73  
*Desmognathus aeneus*, 97  
*Desmognathus folkertsi*, 26  
*Desmognathus imitator*, 97  
*Desmognathus imitator* pop. 1, 97  
*Desmognathus organi*, 26  
*Desmognathus santeetlah*, 97  
*Desmognathus wrighti*, 27  
*Diacyclops jeanneli putei*, 55, 146  
*Dibusa angata*, 60  
*Digrammia ordinata*, 73  
*Diplectronea metaqui*, 60  
*Discus bryanti*, 44  
*Discus nigrimontanus*, 44  
*Discus whitneyi*, 44  
*Distichlis spicata*, 69  
*Doellingeria umbellata*, 154  
*Dolania americana*, 57  
*Dolichonyx oryzivorus*, 16  
*Doryodes bistrialis*, 128  
*Doryodes* sp. 1, 128  
*Drasteria graphica*, 74  
*Dromogomphus armatus*, 120  
*Dromogomphus spoliatus*, 62  
*Drunella longicornis*, 110  
*Ectopistes migratorius*, 149  
*Egretta caerulea*, 16  
*Egretta thula*, 16  
*Egretta tricolor*, 17  
*Eilema bicolor*, 74  
*Elanoides forficatus*, 17  
*Elaphria cyanympha*, 74  
*Elaphria fuscimacula*, 128  
*Elassoma boehlkei*, 31  
*Elassoma evergladei*, 99  
*Elimia christyi*, 44  
*Ellipsoptera blanda*, 141  
*Ellipsoptera lepida*, 84  
*Elliptio cistellaeformis*, 102  
*Elliptio congaraea*, 102  
*Elliptio dilatata*, 39  
*Elliptio fisheriana*, 39  
*Elliptio folliculata*, 39  
*Elliptio lanceolata*, 39  
*Elliptio marsupiobesa*, 39, 145  
*Elliptio producta*, 102  
*Elliptio raveneli*, 102  
*Elliptio roanokensis*, 39  
*Elliptio* sp. 2, 102, 145  
*Elliptio* sp. 4, 145  
*Elliptio steinstansana*, 39, 145  
*Elliptio waccamawensis*, 39  
*Empidonax alnorum*, 17  
*Empidonax flaviventris*, 152  
*Empidonax minimus*, 92  
*Empidonax traillii*, 92  
*Enallagma minusculum*, 120  
*Enallagma sulcatum*, 120  
*Encoptolophus sordidus*, 138  
*Enneacanthus chaetodon*, 31  
*Enneacanthus obesus*, 31  
*Entephria separata*, 74  
*Eotettix pusillus*, 81  
*Ephemerella argo*, 110  
*Ephemerella floripara*, 58  
*Epigaea repens*, 154  
*Epioblasma florentina walkeri*, 150  
*Epitheca spinosa*, 120  
*Erastria coloraria*, 74  
*Erethizon dorsatum*, 149  
*Erimonax monachus*, 31  
*Erimystax insignis*, 31, 158  
*Erora laeta*, 67  
*Eryngium yuccifolium*, 78  
*Erynnis martialis*, 67  
*Etheostoma acuticeps*, 32  
*Etheostoma collis*, 32  
*Etheostoma flabellare*, 99  
*Etheostoma gutselli*, 99  
*Etheostoma inscriptum*, 32  
*Etheostoma jessiae*, 32, 150  
*Etheostoma kanawhae*, 32  
*Etheostoma mariae*, 32  
*Etheostoma perlongum*, 32  
*Etheostoma podostemone*, 32  
*Etheostoma rufilineatum*, 99  
*Etheostoma simoterum*, 32  
*Etheostoma thalassinum*, 32  
*Etheostoma vitreum*, 99  
*Etheostoma vulneratum*, 32  
*Eubaphe meridiana*, 74  
*Euchemotrema fraternum*, 44  
*Euchlaena milnei*, 74  
*Euchloe olympia*, 67  
*Eucoptocnemis dapsilis*, 74  
*Eudocimus albus*, 92  
*Euglandina rosea*, 103  
*Eulithis molliculata*, 128  
*Eulithis propulsata*, 74  
*Eulonchus marialiciae*, 123, 147  
*Euphagus carolinus*, 92  
*Euphydryas phaeton*, 67  
*Euphyes berryi*, 67  
*Euphyes bimacula*, 68  
*Euphyes dukesi*, 68  
*Eupithecia absinthiata*, 128  
*Eupithecia affinata*, 128  
*Eupithecia indistincta*, 128  
*Eupithecia mutata*, 129  
*Eupithecia peckorum*, 129  
*Eupithecia satyrata*, 129  
*Eupithecia strattonata*, 129  
*Eurycea bislineata*, 97, 153  
*Eurycea junaluska*, 27  
*Eurycea longicauda longicauda*, 27, 158  
*Eurycea quadridigitata*, 27  
*Eurycea* sp. 9, 97  
*Eurylophella enoensis*, 110  
*Eurylophella minimella*, 110  
*Eusarca packardaria*, 129  
*Euxoa declarata*, 74  
*Euxoa violaris*, 129

*Exoglossum laurae*, 33  
*Exoglossum maxillingua*, 33  
*Exyra fax*, 74  
*Exyra ridingsii*, 75  
*Exyra semicrocea*, 75  
*Fagus grandifolia*, 67  
*Falco peregrinus anatum*, 17  
*Falco sparverius*, 17  
*Farancia erythrogramma*, 23  
*Feltia manifesta*, 75  
*Ferrissia hendersoni*, 44  
*Franclemontia interrogans*, 75  
*Frenesia difficilis*, 115  
*Fumonelix cherohalaensis*, 44, 145  
*Fumonelix clingmanica*, 44  
*Fumonelix jonesiana*, 44  
*Fumonelix langdoni*, 44  
*Fumonelix orestes*, 44, 145  
*Fumonelix roanensis*, 45  
*Fumontana deprehendor*, 106  
*Fundulus cf. diaphanus*, 33, 145  
*Fundulus chrysotus*, 33  
*Fundulus confluentus*, 99  
*Fundulus luciae*, 100  
*Fundulus waccamensis*, 33, 145  
*Fusconaia masoni*, 39  
*Fusconaia subrotunda*, 40  
*Gabara pulverosalis*, 129  
*Gabara sp. 1*, 75  
*Gallinula galeata*, 93  
*Gastrocopta armifera*, 103  
*Gastrocopta corticaria*, 45  
*Gastrocopta procera*, 103  
*Gazoryctra sciophanes*, 75  
*Gelochelidon nilotica*, 17  
*Geothlypis philadelphia*, 93, 152  
*Glaucomyx sabrinus coloratus*, 11  
*Glaucopsyche lygdamus*, 124  
*Glyphyalinia clingmani*, 45, 146  
*Glyphyalinia cryptomphala*, 45  
*Glyphyalinia junaluskana*, 45  
*Glyphyalinia pentadelphia*, 45  
*Glyphyalinia umbilicata*, 103, 157  
*Glyphyalinia wheatleyi*, 103  
*Glyptemys muhlenbergii*, 23  
*Goera stylata*, 115  
*Goerita betteni*, 116  
*Goerita flinti*, 60  
*Goerita semata*, 116  
*Gomphus abbreviatus*, 62  
*Gomphus adelphus*, 62  
*Gomphus apomyius*, 120  
*Gomphus australis*, 62  
*Gomphus borealis*, 63  
*Gomphus cavillaris*, 63  
*Gomphus consanguis*, 63  
*Gomphus descriptus*, 63  
*Gomphus dilatatus*, 120  
*Gomphus diminutus*, 120  
*Gomphus fraternus*, 63  
*Gomphus hybridus*, 121  
*Gomphus lineatifrons*, 63  
*Gomphus parvidens*, 121  
*Gomphus quadricolor*, 63  
*Gomphus rogersi*, 121  
*Gomphus septima*, 63  
*Gomphus ventricosus*, 63  
*Gomphus viridifrons*, 63  
*Gondysia similis*, 129  
*Gondysia telma*, 129  
*Gonielmis dietrichi*, 141  
*Grammia doris*, 75  
*Grammia phyllira*, 129  
*Grammia placentia*, 75  
*Grammia virguncula*, 129  
*Graptemys geographica*, 23  
*Gyraulus deflectus*, 103  
*Hadena ectypa*, 75  
*Haematopus palliatus*, 17  
*Haemorrhous purpureus*, 152  
*Haliaeetus leucocephalus*, 17  
*Haploperla fleeki*, 59, 146  
*Haploperla parkeri*, 112, 146  
*Haplotrema kendeighi*, 45  
*Harpagocythere baileyi*, 108, 146  
*Helicodiscus bonamicus*, 45, 146  
*Helicodiscus fimbriatus*, 45  
*Helicodiscus inermis*, 45  
*Helicodiscus multidens*, 45  
*Helicodiscus saludensis*, 46  
*Helicopsyche paralimnella*, 116  
*Heliomata infulata*, 130  
*Helisoma eucosmium*, 46, 145  
*Helmitheros vermivorum pop. 1*, 93  
*Helopicus bogaloosa*, 112  
*Hemaris gracilis*, 75  
*Hemeroplanis sp. 1 nr. obliquialis*, 75  
*Hemidactylum scutatum*, 27  
*Hemipachnobia monochromatea*, 75  
*Hemipachnobia subporphyrea*, 76, 147  
*Hendersonia occulta*, 46  
*Hermeuptychia intricata*, 124  
*Hesperia attalus*, 68  
*Hesperia leonardus*, 124  
*Hesperia meskei*, 68  
*Hesperia metea*, 124  
*Hesperia sassacus*, 124  
*Hesperodiaptomus augustaensis*, 108  
*Hesperotettix viridis*, 138  
*Heterandria formosa*, 33  
*Heterocampa varia*, 76  
*Heterodon simus*, 23  
*Himantopus mexicanus*, 18  
*Hiodon tergisus*, 33  
*Homoeoneuria cahabensis*, 58  
*Homoplectra flinti*, 116  
*Homoplectra monticola*, 60  
*Hubbellia marginifera*, 138  
*Hybopsis rubrifrons*, 33  
*Hydrelia condensata*, 130  
*Hydriomena divisaria*, 130  
*Hydriomena exculpata*, 76  
*Hydroperla phormidia*, 59  
*Hydroprogne caspia*, 18  
*Hydropsyche bassi*, 116  
*Hydropsyche carolina*, 60  
*Hydropsyche fattigi*, 116  
*Hydropsyche ophthalmica*, 116  
*Hydropsyche ventura*, 116  
*Hydropsyche walkeri*, 60  
*Hydroptila armata*, 116  
*Hydroptila coweetensis*, 116

*Hydroptila englishi*, 116  
*Hydroptila lloganae*, 116  
*Hydroptila maculata*, 117  
*Hyla andersonii*, 27  
*Hyla versicolor*, 27  
*Hypagyrtis brendae*, 76  
*Hypena appalachiensis*, 130  
*Hypentelium roanokense*,  
100, 157  
*Hyperstrotia aetheria*, 130  
*Hypocala andremona*, 130  
*Hypochilus coylei*, 52, 146  
*Hypochilus sheari*, 52, 146  
*Hypomecis buchholzaria*, 76  
*Hypomecis longipectinaria*,  
130  
*Ichthyomyzon bdellium*, 33  
*Ictiobus bubalus*, 33  
*Ictiobus niger*, 33  
*Idaea eremiata*, 130  
*Idaea hilliata*, 130  
*Idaea micropterata*, 130  
*Idaea ostentaria*, 76  
*Idaea productata*, 130  
*Idaea scintillularia*, 131  
*Idia majoralis*, 76  
*Inflectarius downieanus*, 46  
*Inflectarius ferrissi*, 46  
*Inflectarius subpalliatu*, 46  
*Inflectarius verus*, 46  
*Inscudderia walkeri*, 138  
*Ipimorpha pleonectusa*, 131  
*Iridopsis cypressaria*, 76  
*Isogenoides varians*, 112  
*Isonychia arida*, 110  
*Isonychia sayi*, 110  
*Isoperla burksi*, 112  
*Isoperla frisoni*, 112  
*Isoperla lata*, 112  
*Iswaeon davidi*, 110  
*Ixobrychus exilis*, 18  
*Kalmia buxifolia*, 73  
*Kinosternon baurii*, 95  
*Korscheltellus gracilis*, 76  
*Ladona julia*, 63  
*Lagoa pyxidifera*, 76  
*Lampetra aepyptera*, 34  
*Lampropeltis elapsoides*, 95  
*Lampropeltis getula*  
*sticticeps*, 23, 145  
*Lampropeltis triangulum*, 95  
*Lampsilis cariosa*, 40  
*Lampsilis fasciola*, 40  
*Lampsilis fullerkeri*, 40, 145  
*Lampsilis radiata*, 40  
*Lampsilis sp. 2*, 40, 145  
*Lampsilis sp. 3*, 102, 145  
*Lampsilis splendida*, 40  
*Lanius ludovicianus*, 93  
*Lanthus parvulus*, 121  
*Lasiurus cinereus*, 89  
*Lasiurus intermedius*  
*floridanus*, 11, 158  
*Lasiurus seminolus*, 89  
*Lasmigona decorata*, 40  
*Lasmigona holstonia*, 40, 158  
*Lasmigona subviridis*, 41  
*Laterallus jamaicensis*, 18  
*Lemmeria digitalis*, 76  
*Lepidochelys kempii*, 23  
*Lepomis marginatus*, 100  
*Lepomis megalotis*, 150  
*Lepomis punctatus*, 100  
*Leptodea ochracea*, 41  
*Leptophlebia bradleyi*, 110  
*Leptostales laevitaria*, 77  
*Leptoxis dilatata*, 46  
*Leptoxis virgata*, 103  
*Lepus americanus*, 149  
*Lestes congener*, 63  
*Lestes eurinus*, 121  
*Lestes forcipatus*, 121  
*Lestes vidua*, 64  
*Lethenteron appendix*, 34  
*Leucania calidior*, 77  
*Leucania incognita*, 131  
*Libellula quadrimaculata*,  
121  
*Ligumia nasuta*, 41  
*Liodytes pygaea*, 23, 158  
*Liodytes rigida*, 23, 158  
*Lioplax subcarinata*, 103  
*Lithacodia sp. 2*, 131  
*Lithophane abita*, 131  
*Lithophane adipel*, 131  
*Lithophane georgii*, 77  
*Lithophane joannis*, 131  
*Lithophane laceyi*, 77  
*Lithophane lemmeri*, 131  
*Lithophane oriunda*, 77  
*Lithophane scottae*, 131  
*Lithophane tepida*, 131  
*Litoprosopus futilis*, 131  
*Lophodytes cucullatus*, 93  
*Lordithon niger*, 141  
*Lordocythere petersi*, 108  
*Loscopia roblei*, 77  
*Loxia curvirostra*, 18, 158  
*Lupinus perennis*, 155  
*Luxilus chrysocephalus*, 34  
*Lynceus gracilicornis*, 55  
*Lythrurus matutinus*, 100,  
145  
*Lytrosis heitzmanorum*, 131  
*Lytrosis permagnaria*, 77  
*Maccaffertium wudigeum*, 58,  
146  
*Macdunnoa brunnea*, 58  
*Macrochilo louisiana*, 132  
*Macrochilo santerivalis*, 132  
*Macrochilo sp. 1 nr.*  
*absorptalis*, 77  
*Macrodiplax balteata*, 121  
*Macromia margarita*, 64  
*Malaclemys terrapin*, 24  
*Manophylax altus*, 60  
*Masticophis flagellum*, 24  
*Matrioptila jeanae*, 117  
*Mayatrichia ayama*, 117  
*Medionidus conradicus*, 150  
*Megaleuctra williamsae*, 59  
*Megathymus cofaqui*, 68  
*Megathymus yuccae*, 125  
*Melanapamea mixta*, 77  
*Melanoplus acrophilus*, 138  
*Melanoplus angustipennis*,  
81  
*Melanoplus attenuatus*, 81  
*Melanoplus carnegiei*, 81  
*Melanoplus cherokee*, 81  
*Melanoplus coreyi*, 81, 147  
*Melanoplus deceptus*, 81  
*Melanoplus decoratus*, 81  
*Melanoplus decorus*, 82, 147  
*Melanoplus devius*, 138  
*Melanoplus divergens*, 82  
*Melanoplus eurycercus*, 82,  
158  
*Melanoplus hubbelli*, 139  
*Melanoplus impudicus*, 82  
*Melanoplus mirus*, 82, 147  
*Melanoplus nigrescens*, 139  
*Melanoplus nubilus*, 82, 147

*Melanoplus pachycercus*, 82  
*Melanoplus serrulatus*, 82, 147  
*Melanoplus similis*, 82  
*Melanoplus sp.* 35, 139, 147  
*Melanoplus sp.* 6, 139, 147  
*Melanoplus strumosus*, 139  
*Melanoplus sylvestris*, 82, 147  
*Melanoplus tribulus*, 139  
*Melanoplus walshii*, 139  
*Melospiza georgiana*, 152  
*Menidia extensa*, 34, 145  
*Mermiria bivittata*, 82  
*Mermiria intertexta*, 83  
*Mermiria picta*, 139  
*Meropleon cinnamicolor*, 77  
*Meropleon diversicolor sullivanii*, 77, 147  
*Mesodon altivagus*, 46  
*Mesodon andrewsae*, 46  
*Mesomphix andrewsae*, 104  
*Mesomphix latior*, 47  
*Mesomphix pilsbryi*, 47  
*Mesomphix vulgatus*, 47  
*Metalectra albilinea*, 77  
*Metanema determinata*, 132  
*Metarranthis lateritiaria*, 132  
*Metarranthis mollicularia*, 132  
*Metarranthis sp.* 1, 132  
*Micrasema burksi*, 117  
*Micrasema sprulesi*, 117  
*Microhexura montivaga*, 52  
*Micropterus coosae*, 34  
*Microtus chrotorrhinus carolinensis*, 11  
*Micrurus fulvius*, 24  
*Miktoniscus medcofi*, 108  
*Molanna uniophila*, 117  
*Montezumina modesta*, 139  
*Moxostoma ariommum*, 34  
*Moxostoma breviceps*, 34  
*Moxostoma carinatum*, 100  
*Moxostoma robustum*, 34  
*Moxostoma sp.* 2, 34, 157  
*Moxostoma sp.* 3, 34  
*Mustela frenata*, 89  
*Mustela nivalis*, 12  
*Mycteria americana*, 18  
*Myotis austroriparius*, 12  
*Myotis grisescens*, 12  
*Myotis leibii*, 12  
*Myotis lucifugus*, 12  
*Myotis septentrionalis*, 12, 157  
*Myotis sodalis*, 12  
*Nannothemis bella*, 121  
*Nectopsyche waccamawensis*, 61, 147  
*Necturus lewisi*, i, 27, 145  
*Necturus maculosus*, 27  
*Nematocampa baggettaria*, 78  
*Nemoria bifilata*, 132  
*Nemoria outina*, 132  
*Nemoria tuscarora*, 78  
*Neoconocephalus velox*, 139  
*Neohelix dentifera*, 104  
*Neonympha areolatus*, 68  
*Neonympha helicta*, 68  
*Neonympha mitchellii francisci*, 68, 147  
*Neoplynes eudora*, 132  
*Neotoma floridana floridana*, 12  
*Neotoma floridana haematorea*, 89  
*Neotoma magister*, 13  
*Nerodia sipedon williamengelsi*, 24, 145  
*Nesticus bishopi*, 106, 146  
*Nesticus brimleyi*, 52, 146  
*Nesticus carolinensis*, 52, 146  
*Nesticus cooperi*, 52, 146  
*Nesticus crosbyi*, 52, 146  
*Nesticus gertschi*, 52  
*Nesticus mimus*, 52  
*Nesticus nasicus*, 106, 146  
*Nesticus reclusus*, 106  
*Nesticus sheari*, 52, 146  
*Nesticus silvanus*, 52, 146  
*Nesticus sp.* 1, 53  
*Nesticus sp.* 2, 53, 146  
*Neureclipsis melco*, 117  
*Neurocordulia alabamensis*, 122  
*Neurocordulia molesta*, 122  
*Neurocordulia virginicensis*, 122  
*Neurocordulia yamaskanensis*, 64  
*Nicrophorus americanus*, 84  
*Nixe spinosa*, 110  
*Nocomis platyrhynchus*, 100  
*Notodontidae Genus 1 species 1*, 132  
*Notropis bifrenatus*, 34  
*Notropis chalybaeus*, 35, 157  
*Notropis lutipinnis*, 35  
*Notropis maculatus*, 100  
*Notropis mekistocholas*, 35  
*Notropis micropteryx*, 35  
*Notropis photogenis*, 100  
*Notropis rubricroceus*, 100  
*Notropis scabriceps*, 101  
*Notropis sp.* 1, 35  
*Notropis volucellus*, 35  
*Noturus eleutherus*, 35  
*Noturus flavus*, 35  
*Noturus furiosus*, 35, 145  
*Noturus gilberti*, 35  
*Noturus sp.* 2, 36  
*Novisuccinea ovalis*, 47  
*Novisuccinea sp.* 1 nr. chittenangoensis, 104  
*Nyctanassa violacea*, 18  
*Nycticorax nycticorax*, 93  
*Ochrotrichia confusa*, 117  
*Oecetis porteri*, 117  
*Oecetis sp.* B, 117  
*Oecetis sp.* D, 61, 147  
*Oecetis sp.* E, 117  
*Oligia chlorostigma*, 132  
*Onychoprion fuscatus*, 93  
*Operophtera bruceata*, 133  
*Opheodrys vernalis*, 95  
*Ophiogomphus aspersus*, 64  
*Ophiogomphus edmundo*, 64  
*Ophiogomphus howei*, 64  
*Ophiogomphus incurvatus*, 122  
*Ophiogomphus mainensis*, 64  
*Ophiogomphus rupinsulensis*, 64  
*Ophisaurus attenuatus*, 24  
*Ophisaurus mimicus*, 24  
*Orchelimum bradleyi*, 139  
*Orchelimum superbum*, 140  
*Orconectes carolinensis*, 55  
*Orconectes virginicensis*, 55

*Oreothlypis ruficapilla*, 152  
*Orgyia antiqua*, 78  
*Orgyia detrita*, 133  
*Oropsyche howellae*, 61  
*Oxyethira glasa*, 118  
*Oxyethira lumosa*, 118  
*Oxyethira verna*, 118  
*Oxyloma effusum*, 104  
*Pachypolia atricornis*, 78  
*Paectes nubifera*, 133  
*Palaeagapetus celsus*, 61  
*Pallifera hemphilli*, 47  
*Pallifera ohioensis*, 47  
*Pangrapta sp. 1*, 133  
*Papaipema appassionata*, 78  
*Papaipema araliae*, 133  
*Papaipema astuta*, 78  
*Papaipema birdi*, 133  
*Papaipema cerina*, 78  
*Papaipema duplicatus*, 133  
*Papaipema eryngii*, 78  
*Papaipema furcata*, 133  
*Papaipema lysimachiae*, 133  
*Papaipema necopina*, 133  
*Papaipema nepheleptena*, 133  
*Papaipema polymniae*, 133  
*Papaipema sp. 3*, 134  
*Papilio cresphontes*, 69  
*Paracloeodes fleeki*, 110  
*Parahyphenodes quadralis*, 134  
*Paratylotropidia beutenmuelleri*, 140  
*Paravitrea andrewsae*, 47  
*Paravitrea bellona*, 104  
*Paravitrea clappi*, 47  
*Paravitrea lacteodens*, 47, 146  
*Paravitrea lamellidens*, 47  
*Paravitrea multidentata*, 47  
*Paravitrea petrophila*, 48  
*Paravitrea placentula*, 48  
*Paravitrea reesei*, 48  
*Paravitrea ternaria*, 48  
*Paravitrea umbilicaris*, 48  
*Paravitrea varidens*, 48  
*Pardalophora apiculata*, 140  
*Parkesia noveboracensis*, 152  
*Passerculus sandwichensis*, 18, 152  
*Passerina ciris*, 18, 158  
*Patera clarki clarki*, 48  
*Patera clarki nantahala*, 48, 146  
*Pegias fabula*, 41  
*Pelecanus occidentalis*, 18  
*Percina aurantiaca*, 101  
*Percina burtoni*, 36  
*Percina caprodes*, 36  
*Percina gymnocephala*, 36  
*Percina nigrofasciata*, 36  
*Percina oxyrhynchus*, 36  
*Percina rex*, 36  
*Percina squamata*, 36  
*Percina williamsi*, 36, 150  
*Perimyotis subflavus*, 13  
*Perlesta bjostadi*, 112, 146  
*Perlesta leathermani*, 113, 146  
*Perlesta puttmanni*, 113  
*Perlesta roblei*, 113  
*Perlinella ephyre*, 113  
*Peromyscus leucopus buxtoni*, 13, 145  
*Peromyscus leucopus easti*, 13  
*Peromyscus polionotus*, 13  
*Petrophora subaequaria*, 78  
*Peucaea aestivalis*, 6, 19  
*Phalacrocorax auritus*, 19  
*Phaseolus polystachios*, 66  
*Phenacobius crassilabrum*, 101  
*Phenacobius teretulus*, 36  
*Philomycus virginicus*, 48  
*Photedes carterae*, 78  
*Photedes enervata*, 134  
*Phyciodes batesii maconensis*, 69  
*Phyciodes cocyta*, 125  
*Phyciodes phaon*, 125  
*Phylocentropus auriceps*, 118  
*Picoides borealis*, 19  
*Pilsbryna nodopalma*, 48  
*Pilsbryna vanattai*, 48  
*Pimaphera percata*, 134  
*Pimephales notatus*, 101, 157  
*Pituophis melanoleucus melanoleucus*, 24  
*Planorbella magnifica*, 49, 145  
*Platarctia parthenos*, 78  
*Plegadis falcinellus*, 19  
*Plestiodon anthracinus*, 24  
*Plethodon amplus*, 28, 145  
*Plethodon aureolus*, 28  
*Plethodon chattahoochee*, 28  
*Plethodon cheoah*, 28, 145  
*Plethodon glutinosus*, 97  
*Plethodon jordani*, 97  
*Plethodon meridianus*, 28, 145  
*Plethodon richmondi*, 97  
*Plethodon shermani*, 97  
*Plethodon ventralis*, 28  
*Plethodon wehrlei*, 28  
*Plethodon welleri*, 28  
*Plethodon yonahlossee pop. 1*, 28, 145  
*Pleurobema collina*, 41  
*Pleurobema oviforme*, 41  
*Pleuronaia barnesiana*, 41  
*Pleuronaia dolabelloides*, 150  
*Poanes aaroni*, 69  
*Podilymbus podiceps*, 93  
*Poecile atricapillus*, 19, 158  
*Polites mystic*, 69  
*Polycentropus coleii*, 61  
*Polygonia faunus*, 69  
*Polygonia progne*, 69  
*Polyodon spathula*, 36  
*Ponometia parvula*, 134  
*Ponometia tortricina*, 134  
*Pontia protodice*, 69  
*Pooecetes gramineus*, 19  
*Porphyrio martinicus*, 19  
*Potamilus alatus*, 41  
*Praticolella lawae*, 49  
*Problema bulenta*, 69  
*Procambarus ancylus*, 108  
*Procambarus blandingii*, 108  
*Procambarus braswelli*, 55  
*Procambarus medialis*, 108, 146  
*Procambarus pearsei*, 109  
*Progomphus bellei*, 64  
*Promenetus exacuouus*, 104  
*Properigea costa*, 134  
*Properigea tapeta*, 134

*Prostoia hallasi*, 113  
*Protapamea louisae*, 79  
*Protodeltote sp. 1*, 134  
*Protoptila georgiana*, 118  
*Psamatodes abydata*, 134  
*Pseudacris brachyphona*, 28  
*Pseudacris nigrata*, 29  
*Pseudacris ornata*, 29  
*Pseudiron centralis*, 58  
*Pseudocentroptiloides usa*,  
 111  
*Pseudogoera singularis*, 118  
*Pseudosinella flatua*, 147  
*Pseudosinella gisini carolina*,  
 147  
*Pseudosinella vespera*, 147  
*Pseudostenophylax sparsus*  
*uniformis*, 118  
*Psilotreta amera*, 118  
*Psilotreta rossi*, 118  
*Psilotreta rufa*, 118  
*Pteronarcys comstocki*, 59  
*Ptichodis bistrigata*, 79  
*Ptychobranthus fasciolaris*,  
 150  
*Puma concolor cougar*, 89,  
 149  
*Pygarctia abdominalis*, 79  
*Pyreferra ceromatica*, 79  
*Pyrgus albescens*, 125  
*Pyrgus wyandot*, 69  
*Pyrrhia aurantiago*, 79  
*Quadrula pustulosa*, 150  
*Quadrula verrucosa*, 150  
*Quercus ilicifolia*, 72  
*Quercus virginiana*, 70  
*Rallus elegans*, 94  
*Rallus limicola*, 94  
*Rana capito capito*, 29, 158  
*Rana heckscheri*, 29, 158  
*Rana kauffeldi*, 98  
*Rana sylvatica pop. 3*, 29,  
 158  
*Rasvena terna*, 59  
*Regulus satrapa*, 94  
*Rhadinaea flavilata*, 95  
*Rhyacophila accola*, 61, 147  
*Rhyacophila amicus*, 118  
*Rhyacophila appalachia*, 61  
*Rhyacophila celadon*, 61  
*Rhyacophila montana*, 118  
*Rhyacophila mycta*, 119  
*Rhyacophila sp. 1*, 61  
*Rhyacophila vibox*, 119  
*Riparia riparia*, 19  
*Rivula stepheni*, 134  
*Romalea microptera*, 140  
*Rynchops niger*, 19  
*Sander canadensis*, 37  
*Satyrium caryaevorus*, 70  
*Satyrium edwardsii*, 70  
*Satyrium favonius favonius*,  
 70  
*Satyrium favonius ontario*, 70  
*Satyrium kingi*, 125  
*Schinia bina*, 79  
*Schinia carolinensis*, 79  
*Schinia jaguarina*, 79  
*Schinia obscurata*, 134  
*Schinia scissoides*, 135  
*Schinia septentrionalis*, 79  
*Schinia siren*, 135  
*Schinia sordidus*, 135  
*Schizachyrium littorale*, 66  
*Schizura apicalis*, 79  
*Schizura sp. 1*, 79, 147  
*Sciurus niger*, 89  
*Scopula aemulata*, 135  
*Scopula cacuminaria*, 135  
*Scopula ordinata*, 135  
*Scopula purata*, 135  
*Scudderia curvicauda*  
*laticauda*, 140  
*Scudderia septentrionalis*, 83  
*Selenisa sueroides*, 135  
*Semotilus lumbee*, 37  
*Serratella spiculosa*, 111  
*Setodes arenatus*, 119  
*Setodes stehri*, 119  
*Setophaga cerulea*, 20  
*Setophaga coronata*, 20  
*Setophaga magnolia*, 20, 152  
*Setophaga virens*, 20  
*Setophaga virens waynei*, 20  
*Shipsa rotunda*, 113  
*Siphloplecton speciosum*, 111  
*Siren lacertina*, 98  
*Sistrurus miliarius miliarius*,  
 25  
*Sitta canadensis*, 94  
*Skistodiaptomus carolinensis*,  
 56, 146, 158  
*Somatochlora elongata*, 64  
*Somatochlora georgiana*, 64  
*Somatochlora provocans*,  
 122  
*Somatogyrus virginicus*, 49  
*Sorex dispar blitchi*, 13, 158  
*Sorex hoyi*, 90  
*Sorex palustris punctulatus*,  
 13  
*Sorex sp. 1*, 13, 145  
*Sparbarus maculatus*, 111  
*Speranza subcessaria*, 135  
*Speyeria diana*, 125  
*Speyeria idalia*, 70, 150  
*Sphaerium simile*, 102  
*Sphingicampa bicolor*, 135  
*Sphingicampa bisecta*, 79  
*Sphinx franckii*, 135  
*Sphyrapicus varius*, 20  
*Spilogale putorius*, 13  
*Spilosoma dubia*, 136  
*Spinus pinus*, 94  
*Spiza americana*, 20  
*Stactobiella delira*, 119  
*Stactobiella martynovi*, 119  
*Stenacris vitreipennis*, 140  
*Stenelmis gammoni*, 84  
*Stenelmis morsei*, 141  
*Stenelmis sp. 1*, 141  
*Stenelmis sp. 2*, 141  
*Stenelmis sp. 3*, 141  
*Stenoporpia polygrammaria*,  
 80  
*Stenotrema altispira*, 104  
*Stenotrema depilatum*, 49  
*Stenotrema pilula*, 104  
*Stenotrema sp. 1*, 49  
*Sterna dougallii dougallii*,  
 20, 158  
*Sterna forsteri*, 94  
*Sterna hirundo*, 20  
*Sternotherus minor*, 25  
*Sternula antillarum*, 20  
*Stethophyma celatum*, 83  
*Stiria rugifrons*, 136  
*Striatura exigua*, 49  
*Striatura ferrea*, 104  
*Strophitus undulatus*, 41  
*Stygobromus carolinensis*,  
 56, 146  
*Stygobromus sp. 4*, 109

*Stylogomphus sigmastylus*, 65  
*Stylurus amnicola*, 122  
*Stylurus ivae*, 65  
*Stylurus notatus*, 122  
*Stylurus scudderi*, 65  
*Stylurus townesi*, 65  
*Succinea unicolor*, 49  
*Sweltsa holstonensis*, 113  
*Sylvilagus aquaticus*, 90, 151  
*Sylvilagus obscurus*, 14  
*Sympetrum internum*, 122  
*Sympetrum obtrusum*, 65  
*Symphytotrichum undulatum*, 69  
*Sympistis dinalda*, 136  
*Sympistis perscripta*, 136  
*Symplocos tinctoria*, 125  
*Synaptomys cooperi helaletes*, 14  
*Synaptomys cooperi stonei*, 90  
*Syngrapha alias*, 80  
*Tacparia deterrenta*, 136  
*Tallaperla elisa*, 113  
*Thoburnia hamiltoni*, 37  
*Thorybes confusus*, 125  
*Thryomanes bewickii*, 21, 149  
*Tolyte minta*, 80  
*Tornos abjectarius*, 136  
*Tornos cinctarius*, 136  
*Tortopsis puella*, 58  
*Toxolasma pullus*, 42  
*Trachemys scripta*, 25  
*Trachemys scripta troostii*, 25  
*Trachyrhachys kiowa*, 140  
*Trechus balsamensis*, 141, 147  
*Trechus carolinae*, 141, 147  
*Trechus luculentus luculentus*, 141, 147  
*Trechus luculentus unicolor*, 141, 147  
*Trechus mitchellensis*, 142  
*Trechus novaculosus*, 142  
*Trechus roanicus*, 142, 147  
*Trechus rosenbergi*, 142, 147  
*Trechus satanicus*, 142, 147  
*Trechus subtilis*, 142, 147  
*Triacanthagyna trifida*, 65  
*Triaenodes helo*, 119  
*Triaenodes marginatus*, 119  
*Triaenodes melacus*, 119  
*Triaenodes sp. C*, 119  
*Trichechus manatus*, 14  
*Trimerotropis saxatilis*, 83  
*Triodopsis burchi*, 104  
*Triodopsis fulciden*, 49, 146  
*Triodopsis soelneri*, 49, 146  
*Triodopsis tennesseeensis*, 49  
*Triodopsis vulgata*, 104  
*Tripudia flavofasciata*, 136  
*Troglodytes hiemalis*, 94  
*Tsalia bernerii*, 58  
*Tyrannus forficatus*, 94  
*Tyto alba*, 21  
*Ulolonche modesta*, 136  
*Vaejovis carolinianus*, 106  
*Vallonia pulchella*, 49  
*Ventridens coelaxis*, 50  
*Ventridens collisella*, 50  
*Ventridens decussatus*, 50  
*Ventridens lasmodon*, 50  
*Ventridens lawae*, 50  
*Ventridens suppressus*, 50  
*Vermivora bachmanii*, 149  
*Vermivora chrysoptera*, 21  
*Vermivora cyanoptera*, 21, 152  
*Vertigo alabamensis*, 50  
*Vertigo bollesiana*, 50  
*Vertigo gouldii*, 50, 105  
*Vertigo oralis*, 50  
*Vertigo oscariana*, 105  
*Vertigo parvula*, 50  
*Vertigo rugosula*, 105  
*Vertigo sp. 3*, 50  
*Vertigo teskeyae*, 105  
*Vertigo tridentata*, 51  
*Vicia caroliniana*, 124  
*Viehopera ada*, 113  
*Villosa constricta*, 42  
*Villosa delumbis*, 42  
*Villosa iris*, 42  
*Villosa trabalis*, 42, 158  
*Villosa vanuxemensis*, 42  
*Villosa vancouveriana*, 42  
*Vireo gilvus*, 21  
*Virginia valeriae*, 96  
*Viviparus intertextus*, 51  
*Waltoncythere acuta*, 109, 146  
*Wormaldia thyria*, 119  
*Xestia n. sp. nr. youngii*, 136  
*Xestia perquirata*, 80  
*Xolotrema carolinense*, 105  
*Xolotrema denotatum*, 105  
*Yucca filamentosa*, 68  
*Yugus arinus*, 113  
*Zale declarans*, 80  
*Zale fictilis*, 136  
*Zale sp. 2 nr. squamularis*, 136  
*Zale sp. 3 nr. buchholzi*, 137  
*Zanclognatha atrilineella*, 137  
*Zanclognatha dentata*, 137  
*Zapada chila*, 59  
*Zapus hudsonius*, 90  
*Zizania aquatica*, 69  
*Zonitoides patuloides*, 51





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