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 remove 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, Snowshoe 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 n brackish marshes, but those might be wandering birds or migrants

Contopus cooperi – Olive-sided Flycatcher +
M: [breeding records for TN side of Great Smoky Mts 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 mutica – Smooth Softshell
M: large rivers in the Tennessee drainage; TN

Graptemys pseudogeographica – False Map Turtle
M: large rivers in the Tennessee drainage; TN

Opheodrys vernalis – Smooth Green Snake
MP: meadows, grassy marshes and fields; VA

AMPHIBIANS

Ambystoma jeffersonianum – Jefferson Salamander
M: low woods, bottomlands; VA

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
Plethodon websteri – Webster's Salamander
P: moist forests with steep north-facing slopes; SC
Pseudobranchus striatus – Dwarf Siren
C: swamps, ponds, other sluggish freshwater habitats; SC
Urspelerpes 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 impeded migration. Rather than list the many common species that are found in counties adjacent to North Carolina, here we list 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

For numerous butterfly species the 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

Erynnis persius – Persius Duskywing

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

Euphyes conspicua– 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