

B

Rare Animals and Plants of Southern Appalachian Wetlands

Nora A. Murdock and Patrick D. McMillan



Southern bog lemming (*Synaptomys cooperi*).

Table I
*Rare Animals of Southern Appalachian Wetlands**

| SPECIES | HABITATS | | | | |
|---|----------|--------|-----------------|--------------|-------------|
| | Bogs** | Swamps | Ephemeral Pools | Swamp Forest | Wet Meadows |
| mole salamander (<i>Ambystoma talpoideum</i>) | | | ✓ | ✓ | ✓ |
| bog turtle (<i>Clemmys muhlenbergii</i>) | ✓ | | | | ✓ |
| star-nosed mole (<i>Condylura cristata parva</i>) | ✓ | ✓ | ✓ | ✓ | ✓ |
| Baltimore butterfly (<i>Euphydryas phaeton</i>) | ✓ | | | | ✓ |
| four-toed salamander (<i>Hemidactylium scutatum</i>) | ✓ | ✓ | ✓ | ✓ | ✓ |
| Diana fritillary (<i>Speyeria diana</i>) | ✓ | | | | ✓ |
| Southern bog lemming (<i>Synaptomys cooperi</i>) | ✓ | | | | ✓ |

* Species listed may be state or federally listed, for more information consult your state agency listed in Appendix F.

** Southern Appalachian Bog. See Chapter 2.

Table II
*Rare Plants of Southern Appalachian Wetlands**

| SPECIES | HABITATS | | | | | |
|---|----------|------|----------------------|-------|--------------|-------------|
| | Bogs** | Fens | High Elevation Seeps | Seeps | Swamp Forest | Wet Meadows |
| bog rose (<i>Arethusa bulbosa</i>) | ✓ | | | | | |
| bog jack-in-the-pulpit (<i>Arisaema triphyllum</i> ssp. <i>stewardsonii</i>) | ✓ | | | ✓ | ✓ | ✓ |
| blunt-lobed grape fern (<i>Botrychium oneidense</i>) | ✓ | | | | | |
| fringed brome (<i>Bromus ciliatus</i>) | | | ✓ | ✓ | | |
| marsh marigold (<i>Caltha palustris</i>) | ✓ | | | | | ✓ |
| marsh bellflower (<i>Campanula aparinoides</i>) | ✓ | ✓ | | | | |
| Mountain bittercress (<i>Cardamine clematidis</i>) | | | | ✓ | | |
| Mountain watercress (<i>Cardamine rotundifolia</i>) | | | | ✓ | | |

Table II, continued
Rare Plants of Southern Appalachian Wetlands*

| SPECIES | HABITATS | | | | | |
|---|----------|------|----------------------------|-------|-----------------|----------------|
| | Bogs** | Fens | High Elevation Seeps | Seeps | Swamp Forest | Wet Meadows |
| hay sedge (<i>Carex argyrantha</i>) | | | | | | ✓ |
| Barratt's sedge (<i>Carex barrattii</i>) | ✓ | | | ✓? | | |
| brown bog sedge (<i>Carex buxbaumii</i>) | ✓ | ✓ | | | | ✓ |
| cone-shaped sedge (<i>Carex conoidea</i>) | ✓ | | | | | ✓ |
| small crested sedge (<i>Carex cristatella</i>) | ✓ | | | | | |
| a sedge (<i>Carex deflexa</i>) | | | ✓ | | | |
| a sedge (<i>Carex lasiocarpa</i> var. <i>amaericana</i>) | ✓ | | | | | |
| Oklahoma sedge (<i>Carex oklahomensis</i>) | | | | ✓ | | |
| few-seeded sedge (<i>Carex oligosperma</i>) | ✓ | | | ✓ | | |
| necklace sedge (<i>Carex projecta</i>) | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Schweinitz's sedge (<i>Carex schweinitzii</i>) | | | | | ✓ | |
| a sedge (<i>Carex trichocarpa</i>) | ✓ | | | | | |
| three-seeded sedge (<i>Carex trisperma</i>) | ✓ | ✓ | | | ✓ | |
| a sedge (<i>Carex utriculata</i>) | ✓ | | | | | |
| a sedge (<i>Carex vesicaria</i>) | ✓ | ✓ | | | | |
| Cuthbert's turtlehead (<i>Chelone cuthbertii</i>) | ✓ | ✓ | | ✓ | ✓ | ✓ |
| twig-rush (<i>Cladium marisoides</i>) | ✓ | ✓ | | ✓ | | |
| Long-bracted frog sedge (<i>Coeloglossum viride</i> var. <i>virescens</i>) | | | | ✓ | | |

Table II, continued
Rare Plants of Southern Appalachian Wetlands*

| SPECIES | HABITATS | | | | | |
|---|----------|------|----------------------------|-------|-----------------|----------------|
| | Bogs** | Fens | High Elevation Seeps | Seeps | Swamp Forest | Wet Meadows |
| Goldthread (<i>Coptis trifoliata</i> ssp. <i>groenlandica</i>) | ✓ | | | | | |
| robin runaway (<i>Dalibarda repens</i>) | ✓ | | | | ✓ | |
| bog oatgrass (<i>Danthonia epilis</i>) | ✓ | ✓ | | ✓ | | |
| purpleleaf willowherb (<i>Epilobium ciliatum</i>) | ✓ | ✓ | | ✓ | | |
| Texas hatpins (<i>Eriocaulon texense</i>) | | | | ✓ | | |
| queen-of-the-prairie (<i>Filipendula rubra</i>) | | ✓ | | | | ✓ |
| fringed gentian (<i>Gentianopsis crinita</i>) | | ✓ | ✓ | ✓ | | |
| yellow avens (<i>Geum aleppicum</i>) | ✓ | | | | | |
| Bent avens (<i>Geum geniculatum</i>) | | | | ✓ | | |
| rough avens (<i>Geum laciniatum</i> var. <i>trichocarpum</i>) | ✓ | | | | | |
| rattlesnake mannagrass (<i>Glyceria canadensis</i>) | ✓ | | | | | |
| lax mannagrass (<i>Glyceria laxa</i>) | ✓ | ✓ | | | | ✓ |
| Smoky Mountain mannagrass (<i>Glyceria nubigena</i>) | | | ✓ | | | |
| littleleaf sneezeweed (<i>Helenium brevifolium</i>) | | ✓ | | ✓ | | |
| plains sunrose (<i>Helianthemum bicknellii</i>) | | ✓ | | | | |
| swamp pink (<i>Helonias bullata</i>) | ✓ | | | | ✓ | |
| holy grass (<i>Hierochloa odorata</i>) | ✓ | ✓ | | | | |
| Appalachian fir-clubmoss (<i>Huperzia appalachiana</i>) | | ✓ | ✓ | ✓ | | |

Table II, continued
Rare Plants of Southern Appalachian Wetlands*

| SPECIES | HABITATS | | | | | |
|---|----------|------|----------------------------|-------|-----------------|----------------|
| | Bogs** | Fens | High Elevation Seeps | Seeps | Swamp Forest | Wet Meadows |
| long-stalked holly (<i>Ilex collina</i>) | ✓ | ✓ | | | ✓ | |
| rough rush (<i>Juncus caesariensis</i>) | | ✓ | | | | |
| rough blazing star (<i>Liatris aspera</i>) | | ✓ | | | | |
| Heller's blazing star (<i>Liatris helleri</i>) | | ✓ | | | | |
| yellow Canada lily (<i>Lilium canadense</i> ssp. <i>canadense</i>) | ✓ | ✓ | | | | ✓ |
| red Canada lily (<i>Lilium canadense</i> ssp. <i>editorum</i>) | ✓ | ✓ | | | | ✓ |
| Gray's lily (<i>Lilium grayi</i>) | ✓ | ✓ | ✓ | ✓ | | ✓ |
| Fen orchaid (<i>Liparis loeselii</i>) | | ✓ | | ✓ | | |
| American fly-honeysuckle (<i>Lonicera canadensis</i>) | ✓ | ✓ | | | | |
| bog clubmoss (<i>Lycopodiella inundata</i>) | ✓ | | | | | |
| a clubmoss (<i>Lycopodium dendroideum</i>) | ✓ | ✓ | | | | |
| Hickey's clubmoss (<i>Lycopodium hickeyi</i>) | ✓ | ✓ | | | | |
| largeflower Barbara's buttons (<i>Marshallia grandiflora</i>) | ✓ | | | | | |
| buckbean (<i>Menyanthes trifoliata</i>) | ✓ | | | | | |
| bristly muhly (<i>Muhlenbergia glomerata</i>) | | ✓ | | ✓ | | |
| sweet gale (<i>Myrica gale</i>) | ✓ | | | | | |
| bog asphodel (<i>Narthecium americanum</i>) | ✓ | | | | | |
| perennial sundrops (<i>Oenothera perennis</i>) | ✓ | | | | | |

Table II, continued
Rare Plants of Southern Appalachian Wetlands*

| SPECIES | HABITATS | | | | | |
|---|----------|------|----------------------------|-------|-----------------|----------------|
| | Bogs** | Fens | High Elevation Seeps | Seeps | Swamp Forest | Wet Meadows |
| largeleaf grass-of-Parnassus (<i>Parnassia grandifolia</i>) | | ✓ | | ✓ | | |
| swamp lousewort (<i>Pedicularis lanceolata</i>) | | ✓ | | ✓ | ✓ | |
| northern beech fern (<i>Phegopteris connectilis</i>) | | | ✓ | | | |
| northern rein orchid (<i>Platanthera flava</i> var. <i>herbiola</i>) | | ✓ | | | | |
| large purple-fringed orchid (<i>Platanthera grandiflora</i>) | ✓ | | ✓ | ✓ | | |
| white fringeless orchid (<i>Platanthera integrilabia</i>) | ✓ | | | ✓ | | |
| purple fringeless orchid (<i>Platanthera peramoena</i>) | ✓ | | | | | ✓ |
| bog bluegrass (<i>Poa paludigena</i>) | ✓ | | | | | |
| white beakrush (<i>Rhynchospora alba</i>) | ✓ | ✓ | | | | |
| bunched arrowhead (<i>Sagittaria fasciculata</i>) | ✓ | | | | ✓ | |
| Canada burnet (<i>Sanguisorba canadensis</i>) | | ✓ | ✓ | ✓ | | ✓ |
| mountain sweet pitcher plant (<i>Sarracenia rubra</i> ssp. <i>jonesii</i>) | ✓ | | | | | |
| green pitcher plant (<i>Sarracenia oreophila</i>) | ✓ | | | ✓ | | |
| swamp saxifrage (<i>Saxifraga pensylvanica</i>) | ✓ | | | ✓ | | |
| balsam ragwort (<i>Senecio pauperculus</i>) | ✓ | ✓ | | | | |
| bog goldenrod (<i>Solidago uliginosa</i>) | ✓ | ✓ | | ✓ | | |
| greenfruit bur-reed (<i>Sparganium chlorocarpum</i>) | ✓ | | | | | ✓? |
| freshwater cordgrass (<i>Spartina pectinata</i>) | | | | | | ✓ |

Table II, continued
Rare Plants of Southern Appalachian Wetlands*

| SPECIES | HABITATS | | | | | |
|--|----------|------|----------------------------|-------|-----------------|----------------|
| | Bogs** | Fens | High Elevation Seeps | Seeps | Swamp Forest | Wet Meadows |
| shining ladies'-tresses (<i>Spiranthes lucida</i>) | | ✓ | | | | |
| Epling's hedge-nettle (<i>Stachys eplingii</i>) | ✓ | | | | | |
| longstalk starwort (<i>Stellaria alsine</i>) | | | | ✓ | | |
| bog featherbells (<i>Stenanthium robustum</i>) | ✓ | ✓ | | | | ✓ |
| Canada yew (<i>Taxus canadensis</i>) | ✓ | | | | ✓ | |
| bog fern (Massachusetts fern) (<i>Thelypteris simulata</i>) | ✓ | | | | | |
| sticky bog asphodel (<i>Tofieldia glutinosa</i>) | ✓ | ✓ | | ✓ | | |
| small bladderwort (<i>Utricularia minor</i>) | ✓ | | | | | |
| cranberry (<i>Vaccinium macrocarpon</i>) | ✓ | | | ✓ | | |
| American speedwell (<i>Veronica americana</i>) | ✓ | | | ✓ | | |
| Mosses | | | | | | |
| yellow starry fen moss (<i>Campylium stellatum</i> var. <i>stellatum</i>) | | ✓ | | | | |
| liverwort (<i>Cephaloziella hampeana</i>) | | ✓ | | | | |
| bog broom-moss (<i>Dichranum undulatum</i>) | ✓ | | | ✓ | | |
| narrowleaf peatmoss (<i>Sphagnum angustifolium</i>) | ✓ | | | | | |
| northern peatmoss (<i>Sphagnum capillifolium</i>) | ✓ | | | | | |
| pretty peatmoss (<i>Sphagnum fallax</i>) | ✓ | | | | | |
| flexuous peatmoss (<i>Sphagnum flexuosum</i> var. <i>flexuosum</i>) | ✓ | | | | | |

Table II, continued
Rare Plants of Southern Appalachian Wetlands*

| SPECIES | HABITATS | | | | | |
|---|----------|------|----------------------|-------|--------------|-------------|
| | Bogs** | Fens | High Elevation Seeps | Seeps | Swamp Forest | Wet Meadows |
| brown peatmoss (<i>Sphagnum fuscum</i>) | ✓ | | | | | |
| fen peatmoss (<i>Sphagnum warnstorffii</i>) | ✓ | ✓ | | | | |
| southern dung moss (<i>Splachnum pennsylvanicum</i>) | ✓ | | | | | |
| orange peatmoss (<i>Sphagnum subsecundum</i> var. <i>subsecundum</i>) | ✓ | ✓ | | | | |

* Species listed may be state or federally listed; for more information consult your state agency listed in Appendix D. Some of these species occur in other habitats in addition to mountain wetlands.

** Southern Appalachian Bog. See Chapter 2.

✓? Highly likely but warrants further study.