

CHAPTER 6134
DEPARTMENT OF NATURAL RESOURCES
SPECIES THAT ARE ENDANGERED, THREATENED,
OR OF SPECIAL CONCERN

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6134.0100 STATUTORY AUTHORITY.

Pursuant to Minnesota Statutes, section 84.0895, the species of wild animals and plants listed in parts 6134.0200 to 6134.0400 are designated as endangered, threatened, or of special concern, as indicated in those parts.

Statutory Authority: *MS s 84.0895*

History: *8 SR 1921; L 1986 c 386 art 4 s 9*

6134.0150 PURPOSE AND SCOPE.

Minnesota Statutes, section 84.0895, subdivision 3, requires the commissioner of natural resources to adopt rules designating species meeting the statutory definitions of endangered, threatened, or species of special concern. Minnesota Statutes, section 84.0895, subdivision 5, authorizes the commissioner to adopt rules that regulate treatment of species designated as endangered or threatened. Thus, two different sets of rules have been adopted: parts 6134.0100 to 6134.0400 designate species in the three statutory categories; and parts 6212.1800 to 6212.2300 create regulations for species designated as endangered or threatened.

Species designated as species of special concern are not protected by Minnesota Statutes, section 84.0895 or rules adopted under that section. Parts 6212.1800 to 6212.2300 and Minnesota Statutes, section 84.0895, impose a variety of restrictions, a permit program, and several exemptions pertaining to species designated as endangered or threatened. Among these are that acts otherwise prohibited may be allowed by permit issued by the commissioner; plants on certain agricultural lands and plants destroyed in consequence of certain agricultural practices are exempt; and the accidental, unknowing destruction of designated plants is exempt. Parts 6134.0100 to 6134.0400 do not address protection of habitat for species designated as endangered, threatened, or species of special concern, nor do they obligate anyone to survey lands for the presence of designated species.

Persons are advised to read the full text of parts 6134.0100 to 6134.0400 and 6212.1800 to 6212.2300 and Minnesota Statutes, section 84.0895, in order to understand all Department of Natural Resources regulations pertaining to species that are designated as endangered, threatened, or species of special concern.

Statutory Authority: *MS s 84.0895*

History: *20 SR 2782*

6134.0200 ANIMAL SPECIES.

Subpart 1. Mammals. The scientific names and the common names in this subpart are according to the Revised Checklist of North American Mammals North of Mexico, J. K. Jones, et al., 1992. The following species of mammals are designated as:

- A. Endangered: none.
- B. Threatened: *Spilogale putorius*, eastern spotted skunk.
- C. Of special concern:
 - (1) *Canis lupus*, gray wolf;
 - (2) *Cervus elaphus*, elk;
 - (3) *Cryptotis parva*, least shrew;
 - (4) *Felis concolor*, mountain lion;
 - (5) *Microtus ochrogaster*, prairie vole;

- (6) *Microtus pinetorum*, woodland vole;
- (7) *Mustela nivalis*, least weasel;
- (8) *Myotis septentrionalis*, northern myotis;
- (9) *Perognathus flavescens*, plains pocket mouse;
- (10) *Phenacomys intermedius*, heather vole;
- (11) *Pipistrellus subflavus*, eastern pipistrelle;
- (12) *Sorex fumeus*, smokey shrew;
- (13) *Synaptomys borealis*, northern bog lemming; and
- (14) *Thomomys talpoides*, northern pocket gopher.

Subp. 2. **Birds.** The scientific names and the common names in this subpart are according to the American Ornithologists Union Checklist, 1983, and Supplements (1985, 1987, 1989, 1991, 1993, and 1995). The following species of birds are designated as:

A. Endangered:

- (1) *Ammodramus bairdii*, Baird's sparrow;
- (2) *Ammodramus henslowii*, Henslow's sparrow;
- (3) *Anthus spragueii*, Sprague's pipit;
- (4) *Speotyto cunicularia*, burrowing owl;
- (5) *Calcarius ornatus*, chestnut-collared longspur;
- (6) *Charadrius melodus*, piping plover; and
- (7) *Rallus elegans*, king rail.

B. Threatened:

- (1) *Cygnus buccinator*, trumpeter swan;
- (2) *Falco peregrinus*, peregrine falcon;
- (3) *Lanius ludovicianus*, loggerhead shrike;
- (4) *Phalaropus tricolor*, Wilson's phalarope;
- (5) *Podiceps auritus*, horned grebe; and
- (6) *Sterna hirundo*, common tern.

C. Of special concern:

- (1) *Ammodramus nelsoni*, Nelson's sharp-tailed sparrow;
- (2) *Asio flammeus*, short-eared owl;
- (3) *Buteo lineatus*, red-shouldered hawk;
- (4) *Coturnicops noveboracensis*, yellow rail;
- (5) *Dendroica cerulea*, cerulean warbler;
- (6) *Empidonax vireescens*, acadian flycatcher;
- (7) *Gallinula chloropus*, common moorhen;
- (8) *Haliaeetus leucocephalus*, bald eagle;
- (9) *Larus pipixcan*, Franklin's gull;
- (10) *Limosa fedoa*, marbled godwit;
- (11) *Pelecanus erythrorhynchos*, American white pelican;
- (12) *Seiurus motacilla*, Louisiana water thrush;
- (13) *Sterna forsteri*, Forster's tern;
- (14) *Tympanuchus cupido*, greater prairie-chicken; and
- (15) *Wilsonia citrina*, hooded warbler.

Subp. 3. **Amphibians and reptiles.** The scientific names and the common names in this subpart are according to Standard Common and Current Scientific Names for North American Amphibians and Reptiles, third edition, J.T. Collins, et al., 1990. The following species of amphibians and reptiles are designated as:

A. Endangered:

- (1) *Acris crepitans*, northern cricket frog; and
- (2) *Sistrurus catenatus*, massasauga.

B. Threatened:

- (1) *Clemmys insculpta*, wood turtle;
- (2) *Crotalus horridus*, timber rattlesnake; and
- (3) *Emydoidea blandingii*, Blanding's turtle.

C. Of special concern:

- (1) *Apalone mutica*, smooth softshell;
- (2) *Chelydra serpentina*, snapping turtle;
- (3) *Coluber constrictor*, racer;
- (4) *Elaphe obsoleta*, rat snake;
- (5) *Eumeces fasciatus*, five-lined skink;
- (6) *Hemidactylium scutatum*, four-toed salamander;
- (7) *Heterodon nasicus*, western hognose snake;
- (8) *Pituophis catenifer*, gopher snake; and
- (9) *Tropidoclonion lineatum*, lined snake.

Subp. 4. **Fish.** The common names in this subpart are according to A List of Common and Scientific Names of Fishes from the United States and Canada, fifth edition, American Fisheries Society, 1991. The following species of fish are designated as:

A. Endangered: none.

B. Threatened: *Polyodon spathula* (Walbaum), paddlefish.

C. Of special concern:

- (1) *Acipenser fulvescens* Rafinesque, lake sturgeon;
- (2) *Alosa chrysochloris* (Rafinesque), skipjack herring;
- (3) *Ammocrypta asprella* (Jordan), crystal darter;
- (4) *Aphredoderus sayanus* (Gilliams), pirate perch;
- (5) *Coregonus kiyi* (Koelz), kiyi;
- (6) *Coregonus zenithicus* (Jordan & Evermann), shortjaw cisco;
- (7) *Cycleptus elongatus* (Lesueur), blue sucker;
- (8) *Erimystax x-punctata* (Hubbs & Crowe), gravel chub;
- (9) *Etheostoma microperca* Jordan & Gilbert, least darter;
- (10) *Fundulus sciadicus* Cope, plains topminnow;
- (11) *Ichthyomyzon fossor* Reighard & Cummins, northern brook lamprey;
- (12) *Ichthyomyzon gagei* Hubbs & Trautman, southern brook lamprey;
- (13) *Ictiobus niger* (Rafinesque), black buffalo;
- (14) *Morone mississippiensis* Jordan and Eigenmann, yellow bass;
- (15) *Notropis amnis* Hubbs and Greene, pallid shiner;
- (16) *Notropis anogenus* Forbes, pugnose shiner;
- (17) *Notropis nubilus* (Forbes), Ozark minnow;
- (18) *Notropis topeka* (Gilbert), Topeka shiner;
- (19) *Noturus exilis* Nelson, slender madtom; and
- (20) *Percina evides* (Jordan & Copeland), gilt darter.

Subp. 5. [Repealed, 20 SR 2782]

Subp. 6. **Mollusks.** The common and scientific names in this subpart are according to Common and Scientific Names of Aquatic Invertebrates from the United States and Canada: Mollusks, American Fisheries Society, 1988 and Summary Status Reports on Eight Species of Candidate Land Snails from the Driftless Area (Paleozoic Plateau), Upper Midwest (Report to USFWS), T.J. Frest, 1991. The following species of mollusks are designated as:

A. Endangered:

- (1) *Arcidens confragosus* (Say), rock pocketbook;
- (2) *Elliptio crassidens* (Lamarck), elephant-ear;
- (3) *Fusconaia ebena* (I. Lea), ebonyshell;

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- (4) *Lampsilis higginsi* (I. Lea), Higgins eye;
(5) *Lampsilis teres* (Rafinesque), yellow sandshell;
(6) *Novasuccinea* n. sp. Minnesota B Hoagland & Davis, Iowa pleistocene
ambersnail;
(7) *Plethobasus cyphus* (Rafinesque), sheepnose;
(8) *Quadrula fragosa* (Conrad), winged mapleleaf;
(9) *Quadrula nodulata* (Rafinesque), wartyback; and
(10) *Vertigo hubrichti hubrichti* (Pilsbry), midwest pleistocene vertigo.

B. Threatened:

- (1) *Actinonaias ligamentina* (Lamarck), mucket;
(2) *Alasmidonta marginata* Say, elktoe;
(3) *Cumberlandia monodonta* (Say), spectaclecase;
(4) *Cyclonaias tuberculata* (Rafinesque), purple wartyback;
(5) *Ellipsaria lineolata* (Rafinesque), butterfly;
(6) *Epioblasma triquetra* (Rafinesque), snuffbox;
(7) *Megalonaias nervosa* (Rafinesque), washboard;
(8) *Novasuccinea* n. sp. Minnesota A Hoagland & Davis, Minnesota pleisto-
cene ambersnail;
(9) *Pleurobema coccineum* (Conrad), round pigtoe;
(10) *Quadrula metanevra* (Rafinesque), monkeyface;
(11) *Simpsonaias ambigua* (Say), salamander mussel;
(12) *Tritogonia verrucosa* (Rafinesque), pistolgrip;
(13) *Venustaconcha ellipsiformis* (Conrad), ellipse;
(14) *Vertigo hubrichti variabilis* n. subsp., variable pleistocene vertigo; and
(15) *Vertigo meramecensis* Van Devender, bluff vertigo.

C. Of special concern:

- (1) *Elliptio dilatata* (Rafinesque), spike;
(2) *Lasmigona compressa* (I. Lea), creek heelsplitter;
(3) *Lasmigona costata* (Rafinesque), fluted-shell;
(4) *Ligumia recta* (Lamarck), black sandshell; and
(5) *Obovaria olivaria* (Rafinesque), hickory nut.

Subp. 7. Jumping spiders. The following species of jumping spiders are designated as:

A. Endangered: none.

B. Threatened: none.

C. Of special concern:

- (1) *Habronattus texanus* Griswold;
(2) *Marpissa grata* (Gertsch);
(3) *Metaphidippus arizonensis* (Peckham & Peckham);
(4) *Paradamoetas fontana* (Levi);
(5) *Phidippus apacheanus* Chamberlin & Gertsch;
(6) *Phidippus pius* Scheffer;
(7) *Sassacus papenhoei* Peckham & Peckham; and
(8) *Tutelina formicaria* (Emerton).

Subp. 8. Butterflies and moths. The following species of butterflies and moths are designated as:

A. Endangered:

- (1) *Erynnis persius* (Scudder), persius dusky wing;
(2) *Hesperia comma assiniboia* (Lyman), assiniboia skipper;
(3) *Hesperia uncas* W.H. Edwards, uncas skipper;
(4) *Lycaeides melissa samuelis* Nabokov, Karner blue; and

(5) *Oeneis uhleri varuna*, (W.H. Edwards), Uhler's arctic.

B. Threatened:

- (1) *Hesperia dacotae* (Skinner), Dakota skipper;
- (2) *Hesperia ottoe* W.H. Edwards, ottoe skipper; and
- (3) *Oarisma garita* (Reakirt), garita skipper.

C. Of special concern:

- (1) *Atrytone arogos* (Boisduval & Leconte), arogos skipper;
- (2) *Erebia disa mancinus* Doubleday & Hewitson, disa alpine;
- (3) *Hesperia leonardus* Harris, leonardus skipper;
- (4) *Lycæides idas nabokovi* Masters, Nabokov's blue;
- (5) *Oarisma powesheik* (Parker), powesheik skipper;
- (6) *Pyrgus centaureae freija* (Warren), grizzled skipper;
- (7) *Schinia indiana* (J.B. Smith), phlox moth; and
- (8) *Speyeria idalia* (Drury), regal fritillary.

Subp. 9. **Caddis flies.** The following species of caddis flies are designated as:

A. Endangered: *Chilostigma itasca* Wiggins.

B. Threatened: none.

C. Of special concern:

- (1) *Agapetus tomus* Ross;
- (2) *Asynarchus rossi* Leonard & Leonard;
- (3) *Ceraclea brevis* (Etnier);
- (4) *Ceraclea vertreesi* (Denning);
- (5) *Hydroptila metoea* Blickle & Morse;
- (6) *Hydroptila novicola* Blickle & Morse;
- (7) *Hydroptila tortosa* Ross;
- (8) *Oxyethira ecornuta* Morton;
- (9) *Oxyethira itasca* Monson & Holzenthal;
- (10) *Polycentropus milaca* Etnier;
- (11) *Protophila talola* Denning; and
- (12) *Setodes guttatus* (Banks).

Subp. 10. **Tiger beetles.** The following species of tiger beetles are designated as:

A. Endangered:

- (1) *Cicindela fulgida fulgida* Say; and
- (2) *Cicindela limbata nympha* Casey.

B. Threatened:

- (1) *Cicindela denikei* W.J. Brown;
- (2) *Cicindela fulgida westbournei* Calder; and
- (3) *Cicindela lepida* Dejean.

C. Of special concern:

- (1) *Cicindela hirticollis rhodensis* Calder;
- (2) *Cicindela macra macra* Leconte;
- (3) *Cicindela patruela patruela* Dejean; and
- (4) *Cicindela splendida cyanocephalata* Eckhoff.

Subp. 11. **Leafhoppers.** The following species of leafhoppers are designated as:

A. Endangered: none.

B. Threatened: none.

C. Of special concern: *Aflexia rubranura* (DeLong).

Subp. 12. **Dragonflies.** The following species of dragonflies are designated as:

A. Endangered: none.

B. Threatened: none.

C. Of special concern:

- (1) *Ophiogomphus anomalis* Harvey; and
- (2) *Ophiogomphus susbehcha* Vogt & Smith.

Statutory Authority: *MS s 84.0895*

History: 8 SR 1921; 20 SR 2782

6134.0300 VASCULAR PLANTS.

The following species of vascular plants are designated as:

A. Endangered:

- (1) *Agalinis auriculata* (Michx.) Blake, Scrophulariaceae;
- (2) *Agalinis gattereri* (Sm.) Sm. ex Britt., Scrophulariaceae;
- (3) *Asclepias stenophylla* Gray, Asclepiadaceae;
- (4) *Astragalus alpinus* L., Fabaceae;
- (5) *Bartonia virginica* (L.) B.S.P., Gentianaceae;
- (6) *Botrychium gallicomontanum* Farrar & Johnson-Groh, Ophioglossaceae;
- (7) *Botrychium oneidense* (Gilbert) House, Ophioglossaceae;
- (8) *Botrychium pallidum* W.H. Wagner, Ophioglossaceae;
- (9) *Cacalia suaveolens* L., Asteraceae;
- (10) *Caltha natans* Pallas ex Georgi, Ranunculaceae;
- (11) *Carex formosa* Dewey, Cyperaceae;
- (12) *Carex pallescens* L., Cyperaceae;
- (13) *Carex plantaginea* Lam., Cyperaceae;
- (14) *Castilleja septentrionalis* Lindl., Scrophulariaceae;
- (15) *Cheilanthes lanosa* (Michaux) D.C. Eaton, Pteridaceae;
- (16) *Chrysosplenium iowense* Rydb., Saxifragaceae;
- (17) *Cristatella jamesii* T. & G., Capparidaceae;
- (18) *Dodecatheon meadia* L., Primulaceae;
- (19) *Draba norvegica* Gunn., Brassicaceae;
- (20) *Eleocharis wolfii* Gray, Cyperaceae;
- (21) *Empetrum eamesii* Fern. & Wieg., Empetraceae;
- (22) *Empetrum nigrum* L., Empetraceae;
- (23) *Erythronium propullans* Gray, Liliaceae;
- (24) *Escobaria vivipara* (Nutt.) Buxbaum, Cactaceae;
- (25) *Fimbristylis puberula* (Michx.) Vahl var. *interior* (Britt.) Kral, Cyperaceae;
- (26) *Glaux maritima* L., Primulaceae;
- (27) *Hydrastis canadensis* L., Ranunculaceae;
- (28) *Iodanthus pinnatifidus* (Michx.) Steud., Brassicaceae;
- (29) *Isoetes melanopoda* Gay & Dur., Isoetaceae;
- (30) *Lechea tenuifolia* Michx., Cistaceae;
- (31) *Lesquerella ludoviciana* (Nutt.) S. Wats., Brassicaceae;
- (32) *Listera auriculata* Wieg., Orchidaceae;
- (33) *Malaxis paludosa* (L.) Sw., Orchidaceae;
- (34) *Marsilea vestita*, Hooker & Greville, Marsileaceae;
- (35) *Montia chamissoi* (Ledeb. ex Spreng.) Greene, Portulacaceae;
- (36) *Oryzopsis hymenoides* (R. & S.) Ricker ex Piper, Poaceae;
- (37) *Osmorhiza berteroi* H. & A., Apiaceae;
- (38) *Oxytropis viscida* Nutt., Fabaceae;

- (39) *Paronychia fastigiata* (Raf.) Fern., Caryophyllaceae;
 (40) *Parthenium integrifolium* L., Asteraceae;
 (41) *Platanthera flava* (L.) Lindl. var. *herbiola* (R. Br.) Ames & Correll, Orchidaceae;
 (42) *Platanthera praeclara* Sheviak & Bowles, Orchidaceae;
 (43) *Polemonium occidentale* Greene ssp. *lacustre* Wherry, Polemoniaceae;
 (44) *Polygala cruciata* L., Polygalaceae;
 (45) *Polystichum braunii* (Spenner) Fee, Dryopteridaceae;
 (46) *Potamogeton bicipulatus* Fern., Potamogetonaceae;
 (47) *Potamogeton diversifolius* Raf., Potamogetonaceae;
 (48) *Psoralegium tenuiflora* (Pursch) Rydb., Fabaceae;
 (49) *Sagina nodosa* (L.) fenzl ssp. *borealis* Crow, Caryophyllaceae;
 (50) *Saxifraga cernua* L., Saxifragaceae;
 (51) *Scleria triglomerata* Michx., Cyperaceae;
 (52) *Sedum integrifolium* (Raf.) A. Nels. ssp. *leedyi* (Rosend. & Moore) Clausen, Crassulaceae;
 (53) *Selaginella selaginoides* (L.) Link, Selaginellaceae;
 (54) *Senecio canus* Hook., Asteraceae;
 (55) *Talinum rugospermum* Holzinger, Portulacaceae;
 (56) *Tofieldia pusilla* (Michx.) Pers., Liliaceae; and
 (57) *Xyris torta* Sm., Xyridaceae.

B. Threatened:

- (1) *Achillea sibirica* Ledeb., Asteraceae;
 (2) *Allium cernuum* Roth, Liliaceae;
 (3) *Allium schoenoprasum* L. var. *sibiricum* (L.) Hartm., Liliaceae;
 (4) *Ammophila breviligulata* Fern., Poaceae;
 (5) *Arabis holboellii* Hornem. var. *retrofracta* (Graham) Rydb., Brassicaceae;
 (6) *Arnica lonchophylla* Greene, Asteraceae;
 (7) *Arnoglossum plantagineum* Raf., Asteraceae;
 (8) *Asclepias hirtella* (Pennell) Woodson, Asclepiadaceae;
 (9) *Asclepias sullivantii* Engelm., Asclepiadaceae;
 (10) *Asplenium trichomanes* L., Aspleniaceae;
 (11) *Aster shortii* Lindl., Asteraceae;
 (12) *Aureolaria pedicularia* (L.) Raf., Scrophulariaceae;
 (13) *Besseyia bullii* (Eaton) Rydb., Scrophulariaceae;
 (14) *Botrychium lanceolatum* (S.G. Gmelin) Angstr., Ophioglossaceae;
 (15) *Botrychium lunaria* (L.) Sw., Ophioglossaceae;
 (16) *Botrychium rugulosum* W.H. Wagner, Ophioglossaceae;
 (17) *Carex careyana* Torr. ex Dewey, Cyperaceae;
 (18) *Carex conjuncta* Boott, Cyperaceae;
 (19) *Carex davisii* Schwein. & Torr., Cyperaceae;
 (20) *Carex festucacea* Schkuhr ex Willd., Cyperaceae;
 (21) *Carex garberi* Fern., Cyperaceae;
 (22) *Carex jamesii* Schwein., Cyperaceae;
 (23) *Carex katahdinensis* Fern., Cyperaceae;
 (24) *Carex laevivaginata* (Kukenth.) Mackenzie, Cyperaceae;
 (25) *Carex laxiculmis* Schwein., Cyperaceae;
 (26) *Carex sterilis* Willd., Cyperaceae;
 (27) *Crassula aquatica* (L.) Schoenl., Crassulaceae;

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- (28) *Crataegus douglasii* Lindl., Rosaceae;
- (29) *Cyperus acuminatus* Torr. & Hook., Cyperaceae;
- (30) *Cypripedium arietinum* R. Br., Orchidaceae;
- (31) *Diplazium pycnocarpon* (Spreng.) M. Broun, Dryopteridaceae;
- (32) *Dryopteris marginalis* (L.) Gray, Dryopteridaceae;
- (33) *Eleocharis nitida* Fern., Cyperaceae;
- (34) *Eleocharis olivacea* Torr., Cyperaceae;
- (35) *Eleocharis rostellata* Torr., Cyperaceae;
- (36) *Eupatorium sessilifolium* L., Asteraceae;
- (37) *Floerkea proserpinacoides* Willd., Limnanthaceae;
- (38) *Heteranthera limosa* (Sw.) Willd., Pontederiaceae;
- (39) *Huperzia porophila* (Lloyd & Underwood) Holub, Lycopodiaceae;
- (40) *Lespedeza leptostachya* Engelm., Fabaceae;
- (41) *Melica nitens* (Scribn.) Nutt. ex Piper, Poaceae;
- (42) *Moehringia macrophylla* (Hook.) Fenzl, Caryophyllaceae;
- (43) *Napaea dioica* L., Malvaceae;
- (44) *Nymphaea leibergii* (Morong) Boivin, Nymphaeaceae;
- (45) *Paronychia canadensis* (L.) Wood, Caryophyllaceae;
- (46) *Phegopteris hexagonoptera* (Michx.) Fee, Thelypteridaceae;
- (47) *Plantago elongata* Pursh, Plantaginaceae;
- (48) *Poa paludigena* Fern. & Wieg., Poaceae;
- (49) *Polystichum acrostichoides* (Michx.) Schott, Dryopteridaceae;
- (50) *Rhynchospora capillacea* Torr., Cyperaceae;
- (51) *Rotala ramosior* (L.) Koehne, Lythraceae;
- (52) *Rubus chamaemorus* L., Rosaceae;
- (53) *Salicornia rubra* Nelson, Chenopodiaceae;
- (54) *Saxifraga paniculata* P. Mill., Saxifragaceae;
- (55) *Scleria verticillata* Muhl., Cyperaceae;
- (56) *Scutellaria ovata* Hill, Lamiaceae;
- (57) *Shinnersoseris rostrata* (Gray) S. Tomb, Asteraceae;
- (58) *Silene nivea* (Nutt.) Muhl. ex Oth., Caryophyllaceae;
- (59) *Subularia aquatica* L., Brassicaceae;
- (60) *Sullivantia sullivantii* (Torr. & Gray) Britt., Saxifragaceae;
- (61) *Vaccinium uliginosum* L., Ericaceae;
- (62) *Valeriana edulis* Nutt. var. *ciliata* (T. & G.) Cronq., Valerianaceae;
- (63) *Viola lanceolata* L., Violaceae;
- (64) *Viola nuttallii* Pursh, Violaceae;
- (65) *Woodsia glabella* R. Br., Dryopteridaceae; and
- (66) *Woodsia scopulina* D.C. Eat., Dryopteridaceae.

C. Of special concern:

- (1) *Adoxa moschatellina* L., Adoxaceae;
- (2) *Agrostis geminata* Trin., Poaceae;
- (3) *Androsace septentrionalis* L. ssp. *puberulenta* (Rydb.) G.T. Robbins, Primulaceae;
- (4) *Antennaria parvifolia* Nutt., Asteraceae;
- (5) *Aristida purpurea* Nutt. var. *longiseta* (Steud.) Vasey, Poaceae;
- (6) *Aristida tuberculosa* Nutt., Poaceae;
- (7) *Asclepias amplexicaulis* Sm., Asclepiadaceae;
- (8) *Asplenium platyneuron* (L.) Britt., Aspleniaceae;

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- (9) *Astragalus flexuosus* (Hook.) Dougl., Fabaceae;
- (10) *Astragalus missouriensis* Nutt., Fabaceae;
- (11) *Bacopa rotundifolia* (Michx.) Wettst., Scrophulariaceae;
- (12) *Baptisia alba* (L.) Bent., Fabaceae;
- (13) *Baptisia bracteata* Muhl. ex Ell. var. *leucophaea* (Nutt.) Kartesz & Gandhi, Fabaceae;
- (14) *Botrychium campestre* W.H. Wagner & Farrar, Ophioglossaceae;
- (15) *Botrychium minganense* Victorin, Ophioglossaceae;
- (16) *Botrychium mormo* W.H. Wagner, Ophioglossaceae;
- (17) *Botrychium simplex* E. Hitchc., Ophioglossaceae;
- (18) *Buchloe dactyloides* (Nutt.) Engelm., Poaceae;
- (19) *Calamagrostis lacustris* (Kearney) Nash, Poaceae;
- (20) *Calamagrostis montanensis* Scribn. ex Vasey, Poaceae;
- (21) *Calamagrostis purpurascens* R. Br., Poaceae;
- (22) *Callitriche heterophylla* Pursh, Callitrichaceae;
- (23) *Carex annectens* Bickn., Cyperaceae;
- (24) *Carex crus-corvi* Shuttlw. ex Kunze, Cyperaceae;
- (25) *Carex exilis* Dew., Cyperaceae;
- (26) *Carex flava* L., Cyperaceae;
- (27) *Carex hallii* Olney, Cyperaceae;
- (28) *Carex michauxiana*, Boeckl., Cyperaceae;
- (29) *Carex obtusata* Lilj., Cyperaceae;
- (30) *Carex praticola* Rydb., Cyperaceae;
- (31) *Carex scirpoidea* Michx., Cyperaceae;
- (32) *Carex supina* Willd. ex Wahlenb. var. *spaniocarpa* (Steud.) Boivin, Cyperaceae;
- (33) *Carex typhina* Michx., Cyperaceae;
- (34) *Carex woodii* Dew., Cyperaceae;
- (35) *Carex xerantica* Bailey, Cyperaceae;
- (36) *Chamaesyce missurica* (Raf.) Shinnery, Euphorbiaceae;
- (37) *Cirsium hillii* (Canby) Fern., Asteraceae;
- (38) *Cladium mariscoides* (Muhl.) Torr., Cyperaceae;
- (39) *Claytonia caroliniana* Michx., Portulacaceae;
- (40) *Cymopterus acaulis* (Pursh) Raf., Apiaceae;
- (41) *Cypripedium candidum* Muhl., Orchidaceae;
- (42) *Dalea candida* Willd., var. *oligophylla* (Torr.) Shinnery, Fabaceae;
- (43) *Decodon verticillatus* (L.) Ell., Lythraceae;
- (44) *Deschampsia flexuosa* (L.) Trin., Poaceae;
- (45) *Desmanthus illinoensis* (Michx.) MacM., Fabaceae;
- (46) *Desmodium cuspidatum* (Muhl. ex Willd.) DC. ex Loud. var. *longifolium* (Torr. & Gray) Schub., Fabaceae;
- (47) *Desmodium nudiflorum* (L.) DC., Fabaceae;
- (48) *Diarrhena obovata* (Gleason) Brandenburg, Poaceae;
- (49) *Dicentra canadensis* (Goldie) Walp., Fumariaceae;
- (50) *Draba arabisans* Michx., Brassicaceae;
- (51) *Drosera anglica* Huds., Droseraceae;
- (52) *Drosera linearis* Goldie, Droseraceae;
- (53) *Dryopteris goldiana* (Hook.) Gray, Dryopteridaceae;
- (54) *Eleocharis parvula* (Roemer & J.A. Schultes) Link ex Bluff, Nees & Schauer, Cyperaceae;

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- (55) *Eleocharis quinqueflora* (F.X. Hartmann) Schwarz, Cyperaceae;
 (56) *Eryngium yuccifolium* Michx., Apiaceae;
 (57) *Euphrasia hudsoniana* Fern. & Wieg., Scrophulariaceae;
 (58) *Fimbristylis autumnalis* (L.) Roemer & J.A. Schultes, Cyperaceae;
 (59) *Gaillardia aristata* Pursh, Asteraceae;
 (60) *Gentiana affinis* Griseb., Gentianaceae;
 (61) *Gentianella amarella* (L.) Borner ssp. *acuta* (Michx.) Gillett, Gentiana-
 ceae;
 (62) *Hamamelis virginiana* L., Hamamelidaceae;
 (63) *Helianthus nuttallii* T. & G. ssp. *rydbergii* (Br.) Long, Asteraceae;
 (64) *Helictotrichon hookeri* (Scribn.) Henr., Poaceae;
 (65) *Hudsonia tomentosa* Nutt., Cistaceae;
 (66) *Hydrocotyle americana* L., Apiaceae;
 (67) *Jeffersonia diphylla* (L.) Pers., Berberidaceae;
 (68) *Juglans cinerea* L., Juglandaceae;
 (69) *Juncus marginatus* Rostk., Juncaceae;
 (70) *Juncus stygius* L. var. *americanus* (Buch.) Hulten, Juncaceae;
 (71) *Juniperus horizontalis* Moench, Cupressaceae;
 (72) *Leersia lenticularis* Michx., Poaceae;
 (73) *Limosella aquatica* L., Scrophulariaceae;
 (74) *Listera convallarioides* (Sw.) Nutt. ex Ell., Orchidaceae;
 (75) *Littorella uniflora* (L.) Aschers., Plantaginaceae;
 (76) *Luzula parviflora* (Ehrh.) Desv. ssp. *melanocarpa* (Michx.) Hamet-
 Ahti, Juncaceae;
 (77) *Lysimachia quadrifolia* L., Primulaceae;
 (78) *Machaeranthera pinnatifida* (Hook.) Shinnery, Asteraceae;
 (79) *Malaxis monophyllos* (L.) Sw. var. *brachypoda* (Gray) Morris & Eames,
 Orchidaceae;
 (80) *Minuartia dawsonensis* (Britt.) House, Caryophyllaceae;
 (81) *Muhlenbergia uniflora* (Muhl.) Fern., Poaceae;
 (82) *Najas gracillima* (A. Braun ex Engelm.) Magnus, Najadaceae;
 (83) *Najas marina* L., Najadaceae;
 (84) *Oenothera rhombipetala* Nutt. ex T. & G., Onagraceae;
 (85) *Opuntia macrorhiza* Engelm., Cactaceae;
 (86) *Orobanche fasciculata* Nutt., Orobanchaceae;
 (87) *Orobanche ludoviciana* Nutt., Orobanchaceae;
 (88) *Orobanche uniflora* L., Orobanchaceae;
 (89) *Osmorhiza depauperata* Phil., Apiaceae;
 (90) *Panax quinquefolius* L., Araliaceae;
 (91) *Pellaea atropurpurea* (L.) Link, Adiantaceae;
 (92) *Phacelia franklinii* (R.Br.) Gray, Hydrophyllaceae;
 (93) *Pinguicula vulgaris* L., Lentibulariaceae;
 (94) *Platanthera clavellata* (Michx.) Luer, Orchidaceae;
 (95) *Poa wolfii* Scribn., Poaceae;
 (96) *Polygonum careyi* (Olney), Polygonaceae;
 (97) *Polygonum viviparum* L., Polygonaceae;
 (98) *Polytaenia nuttallii* DC., Apiaceae;
 (99) *Potamogeton vaginatus* Turcz., Potamogetonaceae;
 (100) *Potamogeton vaseyi* Robbins, Potamogetonaceae;
 (101) *Prenanthes crepidinea* Michx., Asteraceae;

- (102) *Pyrola minor* L., Pyrolaceae;
- (103) *Ranunculus lapponicus* L., Ranunculaceae;
- (104) *Rhynchospora fusca* (L.) Ait. f., Cyperaceae;
- (105) *Rorippa sessiliflora* (Nutt.) A.S. Hitchc., Brassicaceae;
- (106) *Rudbeckia triloba* L., Asteraceae;
- (107) *Ruppia maritima* L., Ruppiales;
- (108) *Salix maccalliana* Rowlee, Salicaceae;
- (109) *Salix pellita* (Anderss.) Anderss. ex Schneid., Salicaceae;
- (110) *Sanicula trifoliata* Bickn., Apiaceae;
- (111) *Schedonnardus paniculatus* (Nutt.) Trel., Poaceae;
- (112) *Scirpus clintonii* Gray, Cyperaceae;
- (113) *Senecio indecorus* Greene, Asteraceae;
- (114) *Silene drummondii* Hook., Caryophyllaceae;
- (115) *Solidago mollis* Bartl., Asteraceae;
- (116) *Solidago sciaphila* Steele, Asteraceae;
- (117) *Sparganium glomeratum* Laest., Sparganiaceae;
- (118) *Stellaria longipes* Goldie, Caryophyllaceae;
- (119) *Symphoricarpos orbiculatus* Moench, Caprifoliaceae;
- (120) *Tephrosia virginiana* (L.) Pers., Fabaceae;
- (121) *Torreyochloa pallida* (Torr.) Church, Poaceae;
- (122) *Trillium nivale* Riddell, Liliaceae;
- (123) *Trimorpha acris* (L.) Nesom var. *asteroides* (Anderz. ex Bess.) Nesom,

Asteraceae;

- (124) *Trimorpha lonchophylla* (Hook.) Nesom, Asteraceae;
- (125) *Triplasis purpurea* (Walt.) Champm., Poaceae;
- (126) *Tsuga canadensis* (L.) Carr., Pinaceae;
- (127) *Utricularia purpurea* Walt., Lentibulariaceae;
- (128) *Utricularia resupinata* B.D. Greene ex Bigelow, Lentibulariaceae;
- (129) *Verbena simplex* Lehm., Verbenaceae;
- (130) *Vitis aestivalis* Michx., Vitaceae;
- (131) *Waldsteinia fragarioides* (Michx.) Tratt., Rosaceae;
- (132) *Woodsia alpina* (Bolton) Gray, Dryopteridaceae; and
- (133) *Xyris montana* Ries, Xyridaceae.

Statutory Authority: *MS s 84.0895*

History: *8 SR 1921; 20 SR 2782*

6134.0400 LICHENS; MOSESSES; FUNGI.

Subpart 1. **Lichens.** The following species of lichens are designated as:

A. Endangered:

- (1) *Buellia nigra* (Fink) Sheard;
- (2) *Caloplaca parvula* Wetm.;
- (3) *Dermatocarpon moulinsii* (Mont.) Zahlbr.;
- (4) *Leptogium apalachense* (Tuck.) Nyl.;
- (5) *Lobaria scrobiculata* (Scop.) DC;
- (6) *Parmelia stictica* (Del.) Nyl.;
- (7) *Pseudocyphellaria crocata* (L.) Vain; and
- (8) *Umbilicaria torrefacta* (Lightf.) Schrad.

B. Threatened:

- (1) *Cetraria oakesiana* Tuck.;
- (2) *Coccocarpia palmicola* (Sprengel) Arvid. & Galloway; and

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(3) *Parmelia stuppea* Tayl.

C. Of special concern:

- (1) *Anaptychia setifera* Ras;
- (2) *Cetraria aurescens* Tuck.;
- (3) *Cladonia pseudorangiformis* Asah.;
- (4) *Lobaria quercizans* Michx.;
- (5) *Peltigera venosa* (L.) Hoffm.; and
- (6) *Sticta fuliginosa* (Dicks.) Ach.

Subp. 2. **Mosses.** The scientific names in this subpart are according to A New List of Mosses of North America North of Mexico, H.A. Crum, et al., 1973. The following species of mosses are designated as:

A. Endangered: *Schistostegia pennata* (Hedw.) Web. & Mohr.

B. Threatened: none.

C. Of special concern:

- (1) *Bryoxiphium norvegicum* (Brid.) Mitt.; and
- (2) *Tomenthypnum falcifolium* (Ren ex. Nich.) Tuom.

Subp. 3. **Fungi.** The following species of fungi are designated as:

A. Endangered:

- (1) *Fuscoboletinus weaverae* A.H. Smith & Shaffer;
- (2) *Psathyrella cystidiosa* (Peck) A.H. Smith; and
- (3) *Psathyrella rhodospora* Weaver & A.H. Smith.

B. Threatened: none.

C. Of special concern:

- (1) *Laccaria trullisata* (Ellis) Peck;
- (2) *Lactarius fuliginellus* A.H. Smith & Hesler; and
- (3) *Lysurus cruciatus* (Lepr. & Mont.) Lloyd.

Statutory Authority: *MS s 84.0895*

History: *8 SR 1921; 20 SR 2782*