

1 Department of Natural Resources

2

3 Adopted Permanent Rules Relating to Endangered and Threatened
4 Species

5

6 Rules as Adopted

7 6134.0150 PURPOSE AND SCOPE.

8 Minnesota Statutes, section 84.0895, subdivision 3,
9 requires the commissioner of natural resources to adopt rules
10 designating species meeting the statutory definitions of
11 endangered, threatened, or species of special concern.

12 Minnesota Statutes, section 84.0895, subdivision 5, authorizes
13 the commissioner to adopt rules that regulate treatment of
14 species designated as endangered or threatened. Thus, two
15 different sets of rules have been adopted: parts 6134.0100 to
16 6134.0400 designate species in the three statutory categories;
17 and parts 6212.1800 to 6212.2300 create regulations for species
18 designated as endangered or threatened.

19 Species designated as species of special concern are not
20 protected by Minnesota Statutes, section 84.0895 or rules
21 adopted under that section. Parts 6212.1800 to 6212.2300 and
22 Minnesota Statutes, section 84.0895, impose a variety of
23 restrictions, a permit program, and several exemptions
24 pertaining to species designated as endangered or threatened.
25 Among these are that acts otherwise prohibited may be allowed by
26 permit issued by the commissioner; plants on certain
27 agricultural lands and plants destroyed in consequence of
28 certain agricultural practices are exempt; and the accidental,
29 unknowing destruction of designated plants is exempt. Parts
30 6134.0100 to 6134.0400 do not address protection of habitat for
31 species designated as endangered, threatened, or species of
32 special concern, nor do they obligate anyone to survey lands for
33 the presence of designated species.

34 Persons are advised to read the full text of parts
35 6134.0100 to 6134.0400 and 6212.1800 to 6212.2300 and Minnesota

1 Statutes, section 84.0895, in order to understand all Department
 2 of Natural Resources regulations pertaining to species that are
 3 designated as endangered, threatened, or species of special
 4 concern.

5 6134.0200 ANIMAL SPECIES.

6 Subpart 1. **Mammals.** The scientific names and the common
 7 names in this subpart are according to the Revised Checklist of
 8 North American Mammals North of Mexico, J. K. Jones, et al.,
 9 1992. The following species of mammals are designated as:

- 10 A. Endangered: none.
- 11 B. Threatened: *Spilogale putorius*, eastern spotted
 12 skunk.
- 13 C. Of special concern:
- 14 (1) *Canis lupus*, gray wolf;
 15 (2) *Cervus elaphus*, elk;
 16 (3) *Cryptotis parva*, least shrew;
 17 (4) *Felis concolor*, mountain lion;
 18 (5) *Microtus ochrogaster*, prairie vole;
 19 (6) *Microtus pinetorum*, woodland vole;
 20 (7) *Mustela nivalis*, least weasel;
 21 (8) *Myotis keenii septentrionalis*, Keen's
 22 northern myotis;
 23 (9) *Perognathus flavescens*, plain plains pocket
 24 mouse;
 25 (10) *Phenacomys intermedius*, heather vole;
 26 (11) *Pipistrellus subflavus*, eastern pipistrelle;
 27 (12) *Sorex fumeus*, smokey shrew;
 28 (13) *Synaptomys borealis*, northern bog lemming;
 29 and
 30 (14) *Thomomys talpoides*, northern pocket gopher.

31 Subp. 2. **Birds.** The scientific names and the common names
 32 in this subpart are according to the American Ornithologists
 33 Union Checklist, 1983, and Supplements (1985, 1987, 1989, 1991,
 34 1993, and ~~1993~~ 1995). The following species of birds are
 35 designated as:

A. Endangered:

- (1) *Ammodramus bairdii*, Baird's sparrow;
- (2) *Ammodramus henslowii*, Henslow's sparrow;
- (3) *Anthus spragueii*, Sprague's pipit;
- (4) *Athene 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 caudaeutus 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 virescens*, 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 waterthrush;
 - (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

1 and the common names in this subpart are according to Standard
2 Common and Current Scientific Names for North American
3 Amphibians and Reptiles, third edition, J.T. Collins, et al.,
4 1990. The following species of amphibians and reptiles are
5 designated as:

6 A. Endangered:

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

9 B. Threatened:

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

13 C. Of special concern:

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

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

28 A. Endangered: none.

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

31 C. Of special concern:

- 32 (1) *Acipenser fulvescens* Rafinesque, lake
33 sturgeon;
34 (2) *Alosa chrysochloris* (Rafinesque), skipjack
35 herring;
36 (3) *Ammocrypta asprella* (Jordan), crystal darter;

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

29 Subp. 5. [See repealer.]

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

1 designated as:

2 A. Endangered:

3 (1) *Arcidens confragosus* (Say), rock pocketbook;

4 (2) *Elliptio crassidens* (Lamarck), elephant-ear;

5 (3) *Fusconaia ebena* (I. Lea), ebonyshell;

6 (4) *Lampsilis higginsi* (I. Lea), Higgins eye;

7 (5) *Lampsilis teres* (Rafinesque), yellow

8 sandshell;

9 (6) *Novasuccinea* n. sp. Minnesota B Hoagland &

10 Davis, Iowa pleistocene ambersnail;

11 (7) *Plethobasus cyphus* (Rafinesque), sheepnose;

12 (8) *Quadrula fragosa* (Conrad), winged mapleleaf;

13 (9) *Quadrula nodulata* (Rafinesque), wartyback;

14 and

15 (10) *Vertigo hubrichti hubrichti* (Pilsbry),

16 midwest pleistocene vertigo.

17 B. Threatened:

18 (1) *Actinonaias ligamentina* (Lamarck), mucket;

19 (2) *Alasmidonta marginata* Say, elktoe;

20 (3) *Cumberlandia monodonta* (Say), spectaclecase;

21 (4) *Cyclonaias tuberculata* (Rafinesque), purple

22 wartyback;

23 (5) *Ellipsaria lineolata* (Rafinesque), butterfly;

24 (6) *Epioblasma triquetra* (Rafinesque), snuffbox;

25 (7) *Megalonaias nervosa* (Rafinesque), washboard;

26 (8) *Novasuccinea* n. sp. Minnesota A Hoagland &

27 Davis, Minnesota pleistocene ambersnail;

28 (9) *Pleurobema coccineum* (Conrad), round pigtoe;

29 (10) *Quadrula metanevra* (Rafinesque), monkeyface;

30 (11) *Simpsonaias ambigua* (Say), salamander

31 mussel;

32 (12) *Fritigonia Tritogonia*

33 *verrucosa* (Rafinesque), pistolgrip;

34 (13) *Venustaconcha ellipsiformis* (Conrad),

35 ellipse;

36 (14) *Vertigo hubrichti variabilis* n. subsp.,

1 variable pleistocene vertigo; and

2 (15) *Vertigo meramecensis* Van Devender, bluff

3 vertigo.

4 C. Of special concern:

5 (1) *Elliptio dilatata* (Rafinesque), spike;

6 (2) *Lasmigona compressa* (I. Lea), creek

7 heelsplitter;

8 (3) *Lasmigona costata* (Rafinesque), fluted-shell;

9 (4) *Ligumia recta* (Lamarck), black sandshell; and

10 (5) *Obovaria olivaria* (Rafinesque), hickorynut.

11 Subp. 7. Jumping spiders. The following species of

12 jumping spiders are designated as:

13 A. Endangered: none.

14 B. Threatened: none.

15 C. Of special concern:

16 (1) *Habronattus texanus* Griswold;

17 (2) *Marpissa grata* (Gertsch);

18 (3) *Metaphidippus arizonensis* (Peckham &

19 Peckham);

20 (4) *Paradamoetas fontana* (Levi);

21 (5) *Phidippus apacheanus* Chamberlin & Gertsch;

22 (6) *Phidippus pius* Scheffer;

23 (7) *Sassacus papenhoei* Peckham & Peckham; and

24 (8) *Tutelina formicaria* (Emerton).

25 Subp. 8. Butterflies and moths. The following species of

26 butterflies and moths are designated as:

27 A. Endangered:

28 (1) *Erynnis persius* (Scudder), persius dusky

29 wing;

30 (2) *Hesperia comma assiniboia* (Lyman), assiniboia

31 skipper;

32 (3) *Hesperia uncas* W.H. Edwards, uncas skipper;

33 (4) *Lycaeides melissa samuelis* Nabokov, Karner

34 blue; and

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

36 arctic.

1 B. Threatened:

2 (1) *Hesperia dacotae* (Skinner), Dakota skipper;

3 (2) *Hesperia ottoe* W.H. Edwards, ottoe skipper;

4 and

5 (3) *Oarisma garita* (Reakirt), garita skipper.

6 C. Of special concern:

7 (1) *Atrytone arogos* (Boisduval & Leconte), arogos
8 skipper;

9 (2) *Erebia disa mancinus* Doubleday & Hewitson,
10 disa alpine;

11 (3) *Hesperia leonardus* Harris, leonardus skipper;

12 (4) ~~*Hesperia-pawnee-Dodge*, *pawnee-skipper*~~;

13 ~~(5) *Lycaeides idas nabokovi* Masters, Nabokov's~~
14 blue;

15 ~~(6) (5) *Oarisma poweshiek*~~
16 *powesheik* (Parker), ~~*poweshiek*~~ *powesheik* skipper;

17 ~~(7) (6) *Pyrgus centaureae freija* (Warren),~~
18 grizzled skipper;

19 ~~(8) (7) *Schinia indiana* (J.B. Smith), phlox moth;~~
20 and

21 ~~(9) (8) *Speyeria idalia* (Drury), regal fritillary.~~

22 Subp. 9. Caddisflies. The following species of
23 caddisflies are designated as:

24 A. Endangered: *Chilostigma itasca* Wiggins.

25 B. Threatened: none.

26 C. Of special concern:

27 (1) *Agapetus tomus* Ross;

28 (2) *Asynarchus rossi* Leonard & Leonard;

29 (3) *Ceraclea brevis* (Etnier);

30 (4) *Ceraclea vertreesi* (Denning);

31 (5) *Hydroptila metoeca* Blickle & Morse;

32 (6) *Hydroptila novicola* Blickle & Morse;

33 (7) *Hydroptila tortosa* Ross;

34 (8) *Oxyethira ecornuta* Morton;

35 (9) *Oxyethira itasca* Monson & Holzenthal;

36 ~~(10) *Polycentropus milaca* Etnier;~~

1 (11) *Protophila talola* Denning; and

2 (12) *Setodes guttatus* (Banks).

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

5 A. Endangered:

6 (1) *Cicindela fulgida fulgida* Say; and

7 (2) *Cicindela limbata nympha* Casey.

8 B. Threatened:

9 (1) *Cicindela denikei* W.J. Brown;

10 (2) *Cicindela fulgida westbournei* Calder; and

11 (3) *Cicindela lepida* Dejean.

12 C. Of special concern:

13 (1) *Cicindela hirticollis rhodensis* Calder;

14 (2) *Cicindela macra macra* Leconte;

15 (3) *Cicindela patruela patruela* Dejean; and

16 (4) *Cicindela splendida cyanocephalata* Eckhoff.

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

19 A. Endangered: none.

20 B. Threatened: none.

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

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

24 A. Endangered: none.

25 B. Threatened: none.

26 C. Of special concern:

27 (1) *Ophiogomphus anomalis* Harvey; and

28 (2) *Ophiogomphus susbehcha* Vogt & Smith.

29 6134.0300 VASCULAR PLANTS.

30 The following species of vascular plants are designated as:

31 A. Endangered:

32 (1) *Agalinis auriculata* (Michx.) Blake,

33 Scrophulariaceae;

34 (2) *Agalinis gattingeri* (Sm.) Sm. ex Britt.,

35 Scrophulariaceae;

- 1 (3) *Asclepias stenophylla* Gray, Asclepiadaceae;
 2 (4) *Astragalus alpinus* L., Fabaceae;
 3 (5) *Bartonia virginica* (L.) B.S.P., Gentianaceae;
 4 (6) *Botrychium gallicomontanum* Farrar &
 5 Johnson-Groh, Ophioglossaceae;
 6 (7) *Botrychium oneidense* (Gilbert) House,
 7 Ophioglossaceae;
 8 (8) *Botrychium pallidum* W.H. Wagner,
 9 Ophioglossaceae;
 10 (9) *Cacalia suaveolens* L., Asteraceae;
 11 (10) *Caltha natans* Pallas ex Georgi,
 12 Ranunculaceae;
 13 (11) *Carex formosa* Dewey, Cyperaceae;
 14 (12) *Carex pallescens* L., Cyperaceae;
 15 (13) *Carex plantaginea* Lam., Cyperaceae;
 16 (14) *Castilleja septentrionalis* Lindl.,
 17 Scrophulariaceae;
 18 (15) *Cheilanthes lanosa* (Michaux) D.C. Eaton,
 19 Pteridaceae;
 20 (16) *Chrysosplenium iowense* Rydb., Saxifragaceae;
 21 (17) *Cristatella jamesii* T. & G., Capparidaceae;
 22 (18) *Dodecatheon meadia* L., Primulaceae;
 23 (19) *Draba norvegica* Gunn., Brassicaceae;
 24 (20) *Eleocharis wolfii* Gray, Cyperaceae;
 25 (21) *Empetrum eamesii* Fern. & Wieg., Empetraceae;
 26 (22) *Empetrum nigrum* L., Empetraceae;
 27 (23) *Erythronium propullans* Gray, Liliaceae;
 28 (24) *Escobaria vivipara* (Nutt.) Buxbaum,
 29 Cactaceae;
 30 (25) *Fimbristylis puberula* (Michx.) Vahl var.
 31 *interior* (Britt.) Kral, Cyperaceae;
 32 (26) *Glaux maritima* L., Primulaceae;
 33 (27) *Hydrastis canadensis* L., Ranunculaceae;
 34 (28) *Iodanthus pinnatifidus* (Michx.) Steud.,
 35 Brassicaceae;
 36 (29) *Isoetes melanopoda* Gay & Dur., Isoetaceae;

- 1 (30) *Lechea tenuifolia* Michx., Cistaceae;
- 2 (31) *Lesquerella ludoviciana* (Nutt.) S. Wats.,
- 3 Brassicaceae;
- 4 (32) *Listera auriculata* Wieg., Orchidaceae;
- 5 (33) *Malaxis paludosa* (L.) Sw., Orchidaceae;
- 6 (34) *Marsilea vestita*, Hooker & Greville,
- 7 Marsileaceae;
- 8 (35) *Montia chamissoi* (Ledeb. ex Spreng.) Greene,
- 9 Portulacaceae;
- 10 (36) *Oryzopsis hymenoides* (R. & S.) Ricker ex
- 11 Piper, Poaceae;
- 12 (37) *Osmorhiza berteroi* H. & A., Apiaceae;
- 13 (38) *Oxytropis viscida* Nutt., Fabaceae;
- 14 (39) *Paronychia fastigiata* (Raf.) Fern.,
- 15 Caryophyllaceae;
- 16 (40) *Parthenium integrifolium* L., Asteraceae;
- 17 (41) *Platanthera flava* (L.) Lindl.
- 18 var. *herbiola* (R. Br.) Ames & Correll, Orchidaceae;
- 19 (42) *Platanthera praeclara* Sheviak & Bowles,
- 20 Orchidaceae;
- 21 (43) *Polemonium occidentale* Greene ssp. *lacustre*
- 22 Wherry, Polemoniaceae;
- 23 (44) *Polygala cruciata* L., Polygalaceae;
- 24 (45) *Polystichum braunii* (Spencer) Fee,
- 25 Dryopteridaceae;
- 26 (46) *Potamogeton bicupulatus* Fern.,
- 27 Potamogetonaceae;
- 28 (47) *Potamogeton diversifolius* Raf.,
- 29 Potamogetonaceae;
- 30 (48) *Psoralidium tenuiflora* (Pursch) Rydb.,
- 31 Fabaceae;
- 32 (49) *Sagina nodosa* (L.) fenzl ssp. *borealis* Crow,
- 33 Caryophyllaceae;
- 34 (50) *Saxifraga cernua* L., Saxifragaceae;
- 35 (51) *Scleria triglomerata* Michx., Cyperaceae;
- 36 (52) *Sedum integrifolium* (Raf.) A. Nels.

- 1 ssp. *leedyi* (Rosend. & Moore) Clausen, Crassulaceae;
 2 (53) *Selaginella selaginoides* (L.) Link,
 3 Selaginellaceae;
 4 (54) *Senecio canus* Hook., Asteraceae;
 5 (55) *Talinum rugospermum* Holzinger,
 6 Portulacaceae;
 7 (56) *Tofieldia pusilla* (Michx.) Pers.,
 8 Liliaceae; and
 9 (57) *Xyris torta* Sm., Xyridaceae.
- 10 B. Threatened:
- 11 (1) *Achillea sibirica* Ledeb., Asteraceae;
 12 (2) *Allium cernuum* Roth, Liliaceae;
 13 (3) *Allium schoenoprasum* L. var. *sibiricum* (L.)
 14 Hartm., Liliaceae;
 15 (4) *Ammophila breviligulata* Fern., Poaceae;
 16 (5) *Arabis holboellii* Hornem. var.
 17 *retrofracta* (Graham) Rydb., Brassicaceae;
 18 (6) *Arnica lonchophylla* Greene, Asteraceae;
 19 (7) *Arnoglossum plantagineum* Raf., Asteraceae;
 20 (8) *Asclepias hirtella* (Pennell) Woodson,
 21 Asclepiadaceae;
 22 (9) *Asclepias sullivantii* Engelm.,
 23 Asclepiadaceae;
 24 (10) *Asplenium trichomanes* L., Aspleniaceae;
 25 (11) *Aster shortii* Lindl., Asteraceae;
 26 (12) *Aureolaria pedicularia* (L.) Raf.,
 27 Scrophulariaceae;
 28 (13) *Besseya bullii* (Eaton) Rydb.,
 29 Scrophulariaceae;
 30 (14) *Botrychium lanceolatum* (S.G. Gmelin)
 31 Angstr., Ophioglossaceae;
 32 (15) *Botrychium lunaria* (L.) Sw.,
 33 Ophioglossaceae;
 34 (16) *Botrychium rugulosum* W.H. Wagner,
 35 Ophioglossaceae;
 36 (17) *Carex careyana* Torr. ex Dewey, Cyperaceae;

- 1 (18) *Carex conjuncta* Boott, Cyperaceae;
 2 (19) *Carex davisii* Schwein. & Torr., Cyperaceae;
 3 (20) *Carex festucacea* Schkuhr ex Willd.,
 4 Cyperaceae;
 5 (21) *Carex garberi* Fern., Cyperaceae;
 6 (22) *Carex jamesii* Schwein., Cyperaceae;
 7 (23) *Carex katahdinensis* Fern., Cyperaceae;
 8 (24) *Carex laevivaginata* (Kukenth.) Mackenzie,
 9 Cyperaceae;
 10 (25) *Carex laxiculmis* Schwein., Cyperaceae;
 11 (26) *Carex sterilis* Willd., Cyperaceae;
 12 (27) *Crassula aquatica* (L.) Schoenl.,
 13 Crassulaceae;
 14 (28) *Crataegus douglasii* Lindl., Rosaceae;
 15 (29) *Cyperus acuminatus* Torr. & Hook.,
 16 Cyperaceae;
 17 (30) *Cypripedium arietinum* R. Br., Orchidaceae;
 18 (31) ~~*Dryopteris marginalis* (L.) Gray,~~
 19 ~~Dryopteridaceae,~~
 20 ~~+32+ *Diplazium pycnocarpon* (Spreng.) M. Broun,~~
 21 ~~Dryopteridaceae;~~
 22 (32) *Dryopteris marginalis* (L.) Gray,
 23 Dryopteridaceae;
 24 (33) *Eleocharis nitida* Fern., Cyperaceae;
 25 (34) *Eleocharis olivaceae* *olivacea* Torr.,
 26 Cyperaceae;
 27 (35) *Eleocharis rostellata* Torr., Cyperaceae;
 28 (36) *Eupatorium sessilifolium* L., Asteraceae;
 29 (37) *Floerkea proserpinacoides* Willd.,
 30 Limnanthaceae;
 31 (38) *Heteranthera limosa* (Sw.) Willd.,
 32 Pontederiaceae;
 33 (39) *Huperzia porophila* (Lloyd & Underwood)
 34 Holub, Lycopodiaceae;
 35 (40) *Lespedeza leptostachya* Engelm., Fabaceae;
 36 (41) ~~*Melica nitens* (Scribn.) Nutt. ex Piper,~~

- 1 Poaceae;
- 2 (42) *Moehringia macrophylla* (Hook.) Fenzl,
- 3 Caryophyllaceae;
- 4 (43) *Napaea dioica* L., Malvaceae;
- 5 (44) *Nymphaea leibergii* (Morong) Boivin,
- 6 Nymphaeaceae;
- 7 (45) *Paronychia canadensis* (L.) Wood,
- 8 Caryophyllaceae;
- 9 (46) *Phegopteris hexagonoptera* (Michx.) Fee,
- 10 Thelypteridaceae;
- 11 (47) *Plantago elongata* Pursh, Plantaginaceae;
- 12 (48) *Poa paludigena* Fern. & Wieg., Poaceae;
- 13 (49) *Polystichum acrostichoides* (Michx.) Schott,
- 14 Dryopteridaceae;
- 15 (50) *Rhynchospora capillacea* Torr., Cyperaceae;
- 16 (51) *Rotala ramosior* (L.) Koehne, Lythraceae;
- 17 (52) *Rubus chamaemorus* L., Rosaceae;
- 18 (53) *Salicornia rubra* Nelson, Chenopodiaceae;
- 19 (54) *Saxifraga paniculata* P. Mill.,
- 20 Saxifragaceae;
- 21 (55) *Scleria verticillata* Muhl., Cyperaceae;
- 22 (56) *Scutellaria ovata* Hill, Lamiaceae;
- 23 (57) *Shinnersoseris rostrata* (Gray) S. Tomb,
- 24 Asteraceae;
- 25 (58) *Silene nivea* (Nutt.) Muhl. ex Otth.,
- 26 Caryophyllaceae;
- 27 (59) *Subularia aquatica* L., Brassicaceae;
- 28 (60) *Sullivantia sullivantii* (Torr. & Gray)
- 29 Britt., Saxifragaceae;
- 30 (61) *Vaccinium uliginosum* L., Ericaceae;
- 31 (62) *Valeriana edulis* Nutt. var. *ciliata* (T. &
- 32 G.) Cronq., Valerianaceae;
- 33 (63) *Viola lanceolata* L., Violaceae;
- 34 (64) *Viola nuttallii* Pursh, Violaceae;
- 35 (65) *Woodsia glabella* R. Br., Dryopteridaceae;

36 and

- 1 (66) *Woodsia scopulina* D.C. Eat., Dryopteridaceae.
- 2 C. Of special concern:
- 3 (1) *Adoxa moschatellina* L., Adoxaceae;
- 4 (2) *Agrostis geminata* Trin., Poaceae;
- 5 (3) *Androsace septentrionalis* L. ssp.
- 6 *puberulenta* (Rydb.) G.T. Robbins, Primulaceae;
- 7 (4) *Antennaria parvifolia* Nutt., Asteraceae;
- 8 (5) *Aristida purpurea* Nutt. var.
- 9 *longiseta* (Steud.) Vasey, Poaceae;
- 10 (6) *Aristida tuberculosa* Nutt., Poaceae;
- 11 (7) *Asclepias amplexicaulis* Sm., Asclepiadaceae;
- 12 (8) *Asplenium platyneuron* (L.) Britt.,
- 13 Aspleniaceae;
- 14 (9) *Astragalus flexuosus* (Hook.) Dougl.,
- 15 Fabaceae;
- 16 (10) *Astragalus missouriensis* Nutt., Fabaceae;
- 17 (11) *Bacopa rotundifolia* (Michx.) Wettst.,
- 18 Scrophulariaceae;
- 19 (12) *Baptisia alba* (L.) Bent., Fabaceae;
- 20 (13) *Baptisia bracteata* Muhl. ex Ell.
- 21 var. *leucophaea* (Nutt.) Kartesz & Gandhi, Fabaceae;
- 22 (14) *Botrychium campestre* W.H. Wagner & Farrar,
- 23 Ophioglossaceae;
- 24 (15) *Botrychium minganense* Victorin,
- 25 Ophioglossaceae;
- 26 (16) *Botrychium mormo* W.H. Wagner,
- 27 Ophioglossaceae;
- 28 (17) *Botrychium simplex* E. Hitchc.,
- 29 Ophioglossaceae;
- 30 (18) *Buchloe dactyloides* (Nutt.) Engelm.,
- 31 Poaceae;
- 32 (19) *Calamagrostis lacustris* (Kearney) Nash,
- 33 Poaceae;
- 34 (20) *Calamagrostis montanensis* Scribn. ex Vasey,
- 35 Poaceae;
- 36 (21) *Calamagrostis purpurascens* R. Br., Poaceae;

- 1 (22) *Callitriche heterophylla* Pursh,
2 Callitrichaceae;
- 3 (23) *Carex annectens* Bickn., Cyperaceae;
4 (24) *Carex crus-corvi* Shuttlw. ex Kunze,
5 Cyperaceae;
- 6 (25) *Carex exilis* Dew., Cyperaceae;
7 (26) *Carex flava* L., Cyperaceae;
8 (27) *Carex hallii* Olney, Cyperaceae;
9 (28) *Carex michauxiana*, Boeckl., Cyperaceae;
10 (29) *Carex obtusata* Lilj., Cyperaceae;
11 (30) *Carex praticola* Rydb., Cyperaceae;
12 (31) *Carex scirpoidea* Michx., Cyperaceae;
13 (32) *Carex supina* Willd. ex Wahlenb. var.
14 *spaniocarpa* (Steud.) Boivin, Cyperaceae;
- 15 (33) *Carex typhina* Michx., Cyperaceae;
16 (34) *Carex woodii* Dew., Cyperaceae;
17 (35) *Carex xerantica* Bailey, Cyperaceae;
18 (36) *Chamaesyce missurica* (Raf.) Shinners,
19 Euphorbiaceae;
- 20 (37) *Cirsium hillii* (Canby) Fern., Asteraceae;
21 (38) *Cladium mariscoides* (Muhl.) Torr.,
22 Cyperaceae;
- 23 (39) *Claytonia caroliniana* Michx., Portulacaceae;
24 (40) *Cymopterus acaulis* (Pursh) Raf., Apiaceae;
25 (41) *Cypripedium candidum* Muhl., Orchidaceae;
26 (42) *Dalea candida* Willd., var.
- 27 *oligophylla* (Torr.) Shinners, Fabaceae;
28 (43) *Decodon verticillatus* (L.) Ell., Lythraceae;
29 (44) *Deschampsia flexuosa* (L.) Trin., Poaceae;
30 (45) *Desmanthus ~~illinoense~~ illinoensis* (Michx.)
31 MacM., Fabaceae;
- 32 (46) *Desmodium cuspidatum* (Muhl. ex Willd.) DC.
33 ex Loud. var. *longifolium* (Torr. & Gray) Schub., Fabaceae;
34 (47) *Desmodium nudiflorum* (L.) DC., Fabaceae;
35 (48) *Diarrhena ~~americana~~-var- obovata* (Gleason)
36 Brandenburg, Poaceae;

- 1 (49) *Dicentra canadensis* (Goldie) Walp.,
2 Fumariaceae;
- 3 (50) *Draba arabisans* Michx., Brassicaceae;
4 (51) *Drosera anglica* Huds., Droseraceae;
5 (52) *Drosera linearis* Goldie, Droseraceae;
6 (53) *Dryopteris goldiana* (Hook.) Gray,
7 Dryopteridaceae;
- 8 (54) *Eleocharis parvula* (Roemer & J.A. Schultes)
9 Link ex Bluff, Nees & Schauer, Cyperaceae;
- 10 (55) *Eleocharis quinqueflora* (F.X. Hartmann)
11 Schwarz, Cyperaceae;
- 12 (56) *Eryngium yuccifolium* Michx., Apiaceae;
13 (57) *Euphrasia hudsoniana* Fern. & Wieg.,
14 Scrophulariaceae;
- 15 (58) *Fimbristylis autumnalis* (L.) Roemer & J.A.
16 Schultes, Cyperaceae;
- 17 (59) *Gaillardia aristata* Pursh, Asteraceae;
18 (60) *Gentiana affinis* Griseb., Gentianaceae;
19 (61) *Gentianella amarella* (L.) Borner
20 ssp. *acuta* (Michx.) Gillett, Gentianaceae;
- 21 (62) *Hamamelis virginiana* L., Hamamelidaceae;
22 (63) *Helianthus nuttallii* T. & G. ssp.
23 *rydbergii* (Br.) Long, Asteraceae;
- 24 (64) *Helictotrichon hookeri* (Scribn.) Henr.,
25 Poaceae;
- 26 (65) *Hudsonia tomentosa* Nutt., Cistaceae;
27 (66) *Hydrocotyle americana* L., Apiaceae;
28 (67) *Jeffersonia diphylla* (L.) Pers.,
29 Berberidaceae;
- 30 (68) *Juglans cinerea* L., Juglandaceae;
31 (69) *Juncus marginatus* Rostk., Juncaceae;
32 (70) *Juncus stygius* L. var. *americanus* (Buch.)
33 Hulten, Juncaceae;
- 34 (71) *Juniperus horizontalis* Moench, Cupressaceae;
35 (72) *Leersia lenticularis* Michx., Poaceae;
36 (73) *Limosella aquatica* L., Scrophulariaceae;

- 1 (74) *Listera convallarioides* (Sw.) Nutt. ex Ell.,
2 Orchidaceae;
- 3 (75) *Littorella uniflora* (L.) Aschers.,
4 Plantaginaceae;
- 5 (76) *Luzula parviflora* (Ehrh.) Desv. ssp.
6 *melanocarpa* (Michx.) Hamet-Ahti, Juncaceae;
- 7 (77) *Lysimachia quadrifolia* L., Primulaceae;
8 (78) *Machaeranthera pinnatifida* (Hook.) Shinnery,
9 Asteraceae;
- 10 (79) *Malaxis monophyllos* (L.) Sw.
11 var. *brachypoda* (Gray) Morris & Eames, Orchidaceae;
- 12 (80) *Minuartia dawsonensis* (Britt.) House,
13 Caryophyllaceae;
- 14 (81) *Muhlenbergia uniflora* (Muhl.) Fern.,
15 Poaceae;
- 16 (82) *Najas gracillima* (A. Braun ex Engelm.)
17 Magnus, Najadaceae;
- 18 (83) *Najas marina* L., Najadaceae;
19 (84) *Oenothera rhombipetala* Nutt. ex T. & G.,
20 Onagraceae;
- 21 (85) *Opuntia macrorhiza* Engelm., Cactaceae;
22 (86) *Orobanche fasciculata* Nutt., Orobanchaceae;
23 (87) *Orobanche ludoviciana* Nutt., Orobanchaceae;
24 (88) *Orobanche uniflora* L., Orobanchaceae;
25 (89) *Osmorhiza depauperata* Phil., Apiaceae;
26 (90) *Panax quinquefolius* L., Araliaceae;
27 (91) *Pellaea atropurpurea* (L.) Link, Adiantaceae;
28 (92) *Phacelia franklinii* (R.Br.) Gray,
29 Hydrophyllaceae;
- 30 (93) *Pinguicula vulgaris* L., Lentibulariaceae;
31 (94) *Platanthera clavellata* (Michx.) Luer,
32 Orchidaceae;
- 33 (95) *Poa wolfii* Scribn., Poaceae;
34 (96) *Polygonum careyi* (Olney), Polygonaceae;
35 (97) *Polygonum viviparum* L., Polygonaceae;
36 (98) *Polytaenia nuttallii* DC., Apiaceae;

- 1 (99) *Potamogeton vaginatus* Turcz.,
2 Potamogetonaceae;
- 3 (100) *Potamogeton vaseyi* Robbins,
4 Potamogetonaceae;
- 5 (101) *Prenanthes crepidinea* Michx., Asteraceae;
6 (102) *Pyrola minor* L., Pyrolaceae;
7 (103) *Ranunculus lapponicus* L., Ranunculaceae;
8 (104) *Rhynchospora fusca* (L.) Ait. f.,
9 Cyperaceae;
- 10 (105) *Rorippa sessiliflora* (Nutt.) A.S. Hitchc.,
11 Brassicaceae;
- 12 (106) *Rudbeckia triloba* L., Asteraceae;
13 (107) *Ruppia maritima* L., Ruppiaceae;
14 (108) *Salix maccalliana* Rowlee, Salicaceae;
15 (109) *Salix pellita* (Anderss.) Anderss. ex
16 Schneid., Salicaceae;
- 17 (110) *Sanicula trifoliata* Bickn., Apiaceae;
18 (111) *Schedonnardus paniculatus* (Nutt.) Trel.,
19 Poaceae;
- 20 (112) *Scirpus clintonii* Gray, Cyperaceae;
21 (113) *Senecio indecorus* Greene, Asteraceae;
22 (114) *Silene drummondii* Hook., Caryophyllaceae;
23 (115) *Solidago mollis* Bartl., Asteraceae;
24 (116) *Solidago sciaphila* Steele, Asteraceae;
25 (117) *Sparganium glomeratum* Laest.,
26 Sparganiaceae;
- 27 (118) *Stellaria longipes* Goldie, Caryophyllaceae;
28 (119) *Symphoricarpos orbiculatus* Moench,
29 Caprifoliaceae;
- 30 (120) *Tephrosia virginiana* (L.) Pers., Fabaceae;
31 (121) *Torreyochloa pallida* (Torr.) Church,
32 Poaceae;
- 33 (122) *Trillium nivale* Riddell, Liliaceae;
34 (123) *Trimorpha acris* (L.) Nesom var.
35 *asteroides* (Anderz. ex Bess.) Nesom, Asteraceae;
36 (124) *Trimorpha lonchophylla* (Hook.) Nesom,

1 Asteraceae;

2 (125) *Triplasis purpurea* (Walt.) Champm.,

3 Poaceae;

4 (126) *Tsuga canadensis* (L.) Carr., Pinaceae;5 (127) *Utricularia purpurea* Walt.,

6 Lentibulariaceae;

7 (128) *Utricularia resupinata* B.D. Greene ex

8 Bigelow, Lentibulariaceae;

9 (129) *Verbena simplex* Lehm., Verbenaceae;10 (130) *Vitis aestivalis* Michx., Vitaceae;11 (131) *Waldsteinia* Waldsteinia12 *fragarioides* (Michx.) Tratt., Rosaceae;13 (132) *Woodsia alpina* (Bolton) Gray,

14 Dryopteridaceae; and

15 (133) *Xyris montana* Ries, Xyridaceae.

16 6134.0400 LICHENS; MOSSES; FUNGI.

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

19 A. Endangered:

20 (1) *Buellia nigra* (Fink) Sheard;21 (2) *Caloplaca parvula* Wetm.;22 (3) *Dermatocarpon moulinsii* (Mont.) Zahlbr.;23 (4) *Leptogium apalachense* (Tuck.) Nyl.;24 (5) *Lobaria scrobiculata* (Scop.) DC;25 (6) *Parmelia stictica* (Del.) Nyl.;26 (7) *Pseudocyphellaria crocata* (L.) Vain; and27 (8) *Umbilicaria torrefacta* (Lightf.) Schrad.

28 B. Threatened:

29 (1) *Cetraria oakesiana* Tuck.;30 (2) *Coccocarpia palmicola* (Sprengel) Arvid. &

31 Galloway; and

32 (3) *Parmelia stuppea* Tayl.

33 C. Of special concern:

34 (1) *Anaptychia setifera* Ras;35 (2) *Cetraria aurescens* Tuck.;

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

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

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

11 B. Threatened: none.

12 C. Of special concern:

13 (1) *Bryoxiphium norvegicum* (Brid.) Mitt.; and

14 (2) *Tomenthypnum falcifolium* (Ren ex. Nich.) Tuom.

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

17 A. Endangered:

18 (1) *Fuscoboletinus weaverae* A.H. Smith & Shaffer;

19 (2) *Psathyrella cystidiosa* (Peck) A.H. Smith; and

20 (3) *Psathyrella rhodospora* Weaver & A.H. Smith.

21 B. Threatened: none.

22 C. Of special concern:

23 (1) *Laccaria trullisata* (Ellis) Peck;

24 (2) *Lactarius fuliginellus* A.H. Smith & Hesler;

25 and

26 (3) *Lysurus cruciatus* (Lepr. & Mont.) Lloyd.

27 REPEALER. Minnesota Rules, part 6134.0200, subpart 5, is
28 repealed.