

1.1 **Department of Natural Resources**

1.2 **Proposed Permanent Rules Relating to Endangered, Threatened, and Special**
1.3 **Concern Species**

1.4 **6134.0170 SPECIES NAMES.**

1.5 Species designated as endangered, threatened, or of special concern in this chapter
1.6 are identified by the species' scientific (Latin) names. Common (English) names, when
1.7 available, follow the scientific names and are included for the convenience of the reader,
1.8 but do not reliably identify the species so designated.

1.9 **6134.0200 ANIMAL SPECIES.**

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

1.13 A. Endangered: none.

1.14 B. Threatened:

1.15 (1) *Spilogale putorius*, eastern spotted skunk; and

1.16 (2) *Thomomys talpoides*, northern pocket gopher.

1.17 C. Of special concern:

1.18 (1) ~~*Canis lupus*, gray wolf;~~

1.19 (1) *Alces americanus*, moose;

1.20 (2) ~~*Cervus elaphus*~~ *canadensis*, elk;

1.21 (3) *Cryptotis parva*, least shrew;

1.22 (4) ~~*Felis concolor*, mountain lion;~~

1.23 (4) *Eptesicus fuscus*, big brown bat;

- 2.1 (5) *Lynx canadensis*, Canada lynx;
- 2.2 ~~(5)~~ (6) *Microtus ochrogaster*, prairie vole;
- 2.3 ~~(6)~~ (7) *Microtus pinetorum*, woodland vole;
- 2.4 ~~(7)~~ (8) *Mustela nivalis*, least weasel;
- 2.5 (9) *Myotis lucifugus*, little brown bat;
- 2.6 ~~(8)~~ (10) *Myotis septentrionalis*, northern myotis;
- 2.7 (11) *Onychomys leucogaster*, northern grasshopper mouse;
- 2.8 ~~(9)~~ (12) *Perognathus flavescens*, plains pocket mouse;
- 2.9 (13) *Perimyotis subflavus*, eastern pipistrelle;
- 2.10 ~~(10)~~ (14) *Phenacomys intermedius ungava*, heather vole;
- 2.11 ~~(11) *Pipistrellus subflavus*, eastern pipistrelle;~~
- 2.12 (15) *Puma concolor*, mountain lion;
- 2.13 (16) *Reithrodontomys megalotis*, western harvest mouse;
- 2.14 ~~(12)~~ (17) *Sorex fumeus*, smokey shrew;
- 2.15 (18) *Spermophilus richardsonii*, Richardson's ground squirrel; and
- 2.16 ~~(13)~~ (19) *Synaptomys borealis*, northern bog lemming; and
- 2.17 ~~(14) *Thomomys talpoides*, northern pocket gopher.~~

2.18 Subp. 2. **Birds.** ~~The scientific names and the common names in this subpart are~~
2.19 ~~according to the American Ornithologists Union Checklist, 1983, and Supplements (1985,~~
2.20 ~~1987, 1989, 1991, 1993, and 1995).~~ The following species of birds are designated as:

2.21 A. Endangered:

- 2.22 (1) *Ammodramus bairdii*, Baird's sparrow;

- 3.1 (2) ~~*Ammodramus henslowii*~~, Henslow's sparrow;
- 3.2 (3) ~~*Anthus spragueii*~~, Sprague's pipit;
- 3.3 (4) (3) ~~*Speotyto*~~ *Athene cunicularia*, burrowing owl;
- 3.4 (5) (4) *Calcarius ornatus*, chestnut-collared longspur;
- 3.5 (6) (5) *Charadrius melodus*, piping plover; and
- 3.6 (6) *Lanius ludovicianus*, loggerhead shrike;
- 3.7 (7) *Podiceps auritus*, horned grebe; and
- 3.8 (7) (8) *Rallus elegans*, king rail.

3.9 B. Threatened:

- 3.10 (1) ~~*Cygnus buccinator*~~, trumpeter swan;
- 3.11 (2) ~~*Falco peregrinus*~~, peregrine falcon;
- 3.12 (3) ~~*Lanius ludovicianus*~~, loggerhead shrike;
- 3.13 (1) *Ammodramus henslowii*, Henslow's sparrow;
- 3.14 (4) (2) *Phalaropus tricolor*, Wilson's phalarope; and
- 3.15 (5) ~~*Podiceps auritus*~~, horned grebe; and
- 3.16 (6) (3) *Sterna hirundo*, common tern.

3.17 C. Of special concern:

- 3.18 (1) *Accipiter gentilis*, northern goshawk;
- 3.19 (2) *Aegolius funereus*, boreal owl;
- 3.20 (4) (3) *Ammodramus nelsoni*, Nelson's sharp-tailed sparrow;
- 3.21 (2) (4) *Asio flammeus*, short-eared owl;
- 3.22 (3) (5) *Buteo lineatus*, red-shouldered hawk;

- 4.1 (6) *Chondestes grammacus*, lark sparrow;
- 4.2 (4) (7) *Coturnicops noveboracensis*, yellow rail;
- 4.3 (8) *Cygnus buccinator*, trumpeter swan;
- 4.4 (5) *Dendroica cerulea*, cerulean warbler;
- 4.5 (6) (9) *Empidonax virescens*, acadian flycatcher;
- 4.6 (10) *Falco peregrinus*, peregrine falcon;
- 4.7 (7) (11) *Gallinula chloropus galeata*, common moorhen gallinule;
- 4.8 (8) *Haliaeetus leucocephalus*, bald eagle;
- 4.9 (9) (12) *Larus Leucophaeus pipixcan*, Franklin's gull;
- 4.10 (10) (13) *Limosa fedoa*, marbled godwit;
- 4.11 (14) *Parkesia motacilla*, Louisiana waterthrush;
- 4.12 (11) (15) *Pelecanus erythrorhynchos*, American white pelican;
- 4.13 (16) *Progne subis*, purple martin;
- 4.14 (17) *Setophaga cerulea*, cerulean warbler
- 4.15 (12) *Seiurus motacilla*, Louisiana water thrush;
- 4.16 (18) *Setophaga citrina*, hooded warbler;
- 4.17 (13) (19) *Sterna forsteri*, Forster's tern;
- 4.18 (14) (20) *Tympanuchus cupido*, greater prairie-chicken; and
- 4.19 (21) *Vireo bellii*, Bell's vireo.
- 4.20 (15) *Wilsonia citrina*, hooded warbler.

4.21 Subp. 3. **Amphibians and reptiles.** The scientific names and the common names in
 4.22 this subpart are according to Standard Common and Current Scientific Names for North

5.1 ~~American Amphibians and Reptiles, third edition, J.T. Collins, et al., 1990.~~ The following
5.2 species of amphibians and reptiles are designated as:

5.3 A. Endangered:

5.4 (1) *Acris crepitans*, northern cricket frog; and

5.5 (2) *Sistrurus catenatus*, massasauga.

5.6 B. Threatened:

5.7 (1) ~~*Clemmys insculpta*, wood turtle;~~

5.8 (2) *Crotalus horridus*, timber rattlesnake; and

5.9 (3) ~~(2)~~ *Emydoidea blandingii*, Blanding's turtle;

5.10 (3) *Glyptemys insculpta*, wood turtle; and

5.11 (4) *Pantherophis obsoletus*, ratsnake.

5.12 C. Of special concern:

5.13 (1) *Ambystoma maculatum*, spotted salamander;

5.14 (2) *Anaxyrus cognatus*, Great Plains toad;

5.15 (1) ~~(3)~~ *Apalone mutica*, smooth softshell;

5.16 (2) ~~*Chelydra serpentina*, snapping turtle;~~

5.17 (3) ~~(4)~~ *Coluber constrictor*, racer;

5.18 (4) ~~*Elaphe obsoleta*, rat snake;~~

5.19 (5) ~~*Eumeces fasciatus*, five-lined skink;~~

5.20 (6) ~~(5)~~ *Hemidactylium scutatum*, four-toed salamander;

5.21 (7) ~~(6)~~ *Heterodon nasicus*, western hognose snake;

5.22 (7) *Necturus maculosus*, mudpuppy;

- 6.1 (8) *Pituophis catenifer*, gopher snake; and
6.2 (9) *Plestiodon fasciatus*, five-lined skink; and
6.3 ~~(9)~~ (10) *Tropidoclonion lineatum*, lined snake.

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

6.7 A. Endangered: ~~none.~~

- 6.8 (1) *Alosa chrysochloris*, skipjack herring;
6.9 (2) *Crystallaria asprella*, crystal darter;
6.10 (3) *Hybopsis amnis*, pallid shiner; and
6.11 (4) *Noturus exilis*, slender madtom.

6.12 B. Threatened:

- 6.13 (1) *Erimystax x-punctatus*, gravel chub;
6.14 (2) *Fundulus sciadicus*, plains topminnow;
6.15 (3) *Ictiobus niger*, black buffalo;
6.16 (4) *Notropis anogenus*, pugnose shiner; and
6.17 (5) *Polyodon spathula* (Walbaum), paddlefish.

6.18 C. Of special concern:

- 6.19 (1) *Acipenser fulvescens* Rafinesque, lake sturgeon;
6.20 (2) ~~*Alosa chrysochloris*~~ (Rafinesque), skipjack herring;
6.21 (3) ~~*Ammonoerupta asprella*~~ (Jordan), crystal darter;
6.22 (2) *Anguilla rostrata*, American eel;

- 7.1 ~~(4)~~ (3) *Aphredoderus sayanus* (Gilliams), pirate perch;
- 7.2 ~~(4)~~ (4) *Clinostomus elongatus*, redbreasted dace;
- 7.3 ~~(5)~~ (5) *Coregonus kiyi* (Kœlzer), kiyi;
- 7.4 ~~(6)~~ (6) *Coregonus nipigon*, nipigon cisco;
- 7.5 ~~(6)~~ (7) *Coregonus zenithicus* (Jordan & Evermann), shortjaw cisco;
- 7.6 ~~(8)~~ (8) *Couesius plumbeus*, lake chub;
- 7.7 ~~(7)~~ (9) *Cycleptus elongatus* (Lesueur), blue sucker;
- 7.8 ~~(8)~~ (8) *Erimystax x-punctata* (Hubbs & Crowe), gravel chub;
- 7.9 ~~(10)~~ (10) *Etheostoma chlorosoma*, bluntnose darter;
- 7.10 ~~(9)~~ (11) *Etheostoma microperca* Jordan & Gilbert, least darter;
- 7.11 ~~(10)~~ (10) *Fundulus sciadicus* Cope, plains topminnow;
- 7.12 ~~(12)~~ (12) *Hybognathus nuchalis*, Mississippi silvery minnow;
- 7.13 ~~(11)~~ (13) *Ichthyomyzon fossor* Reighard & Cummins, northern brook lamprey;
- 7.14 ~~(12)~~ (14) *Ichthyomyzon gagei* Hubbs & Trautman, southern brook lamprey;
- 7.15 ~~(13)~~ (13) *Ictiobus niger* (Rafinesque), black buffalo;
- 7.16 ~~(15)~~ (15) *Lepomis gulosus*, warmouth;
- 7.17 ~~(16)~~ (16) *Lepomis peltastes*, northern longear sunfish;
- 7.18 ~~(17)~~ (17) *Lythrurus umbratilis*, redbreasted shiner;
- 7.19 ~~(14)~~ (18) *Morone mississippiensis* Jordan and Eigenmann, yellow bass;
- 7.20 ~~(19)~~ (19) *Moxostoma duquesnei*, black redbreasted;
- 7.21 ~~(15)~~ (15) *Notropis amnis* Hubbs and Greene, pallid shiner;
- 7.22 ~~(16)~~ (16) *Notropis anogenus* Forbes, pugnose shiner;

- 8.1 ~~(17)~~ (20) *Notropis nubilus* ~~(Forbes)~~, Ozark minnow;
- 8.2 ~~(18)~~ (21) *Notropis topeka* ~~(Gilbert)~~, Topeka shiner;
- 8.3 ~~(19)~~ *Noturus exilis* ~~Nelson~~, slender madtom; and
- 8.4 ~~(20)~~ (22) *Percina evides* ~~(Jordan & Copeland)~~, gilt darter;
- 8.5 (23) *Phenacobius mirabilis*, suckermouth minnow;
- 8.6 (24) *Platygobio gracilis*, flathead chub; and
- 8.7 (25) *Prosopium coulterii*, pygmy whitefish.

8.8 Subp. 5. [Repealed, 20 SR 2782]

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

8.14 A. Endangered:

- 8.15 (1) *Arcidens confragosus* ~~(Say)~~, rock pocketbook;
- 8.16 (2) *Cumberlandia monodonta*, spectaclecase;
- 8.17 (3) *Cyclonaias tuberculata*, purple wartyback;
- 8.18 ~~(2)~~ (4) *Elliptio crassidens* ~~(Lamarck)~~, elephant-ear;
- 8.19 (5) *Epioblasma triquetra*, snuffbox;
- 8.20 ~~(3)~~ (6) *Fusconaia ebena* ~~(H. Lea)~~, ebonyshell;
- 8.21 ~~(4)~~ (7) *Lampsilis higginsii higginsii* ~~(H. Lea)~~, Higgins eye;
- 8.22 ~~(5)~~ (8) *Lampsilis teres* ~~(Rafinesque)~~, yellow sandshell;
- 8.23 (9) *Megalonaias nervosa*, washboard;

9.1 (6) *Novasuccinea* n. sp. Minnesota B Hoagland & Davis, Iowa pleistocene
 9.2 ambersnail;

9.3 (7) (10) *Plethobasus cyphus* (Rafinesque), sheepnose;

9.4 (8) (11) *Quadrula fragosa* (Conrad), winged mapleleaf;

9.5 (9) *Quadrula nodulata* (Rafinesque), wartyback; and

9.6 (10) *Vertigo hubrichti hubrichti* (Pilsbry), midwest pleistocene vertigo;

9.7 (12) *Simpsonaias ambigua*, salamander mussel; and

9.8 (13) *Tritogonia verrucosa*, pistolgrip.

9.9 B. Threatened:

9.10 (1) *Actinonaias ligamentina* (Lamarek), mucket;

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

9.12 (3) *Cumberlandia monodonta* (Say), spectaelecasse;

9.13 (4) *Cyclonaias tuberculata* (Rafinesque), purple wartyback;

9.14 (5) (3) *Ellipsaria lineolata* (Rafinesque), butterfly;

9.15 (4) *Elliptio dilatata*, spike;

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

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

9.18 (8) *Novasuccinea* n. sp. Minnesota A Hoagland & Davis, Minnesota
 9.19 pleistocene ambersnail;

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

9.21 (5) *Lasmigona costata*, fluted-shell;

9.22 (6) *Ligumia subrostrata*, pondmussel;

- 10.1 ~~(10)~~ (7) *Quadrula metanevra* (Rafinesque), monkeyface;
- 10.2 (8) *Quadrula nodulata*, wartyback;
- 10.3 ~~(11)~~ *Simpsonaias ambigua* (Say), salamander mussel;
- 10.4 ~~(12)~~ *Fritogonia verrucosa* (Rafinesque), pistolgrip;
- 10.5 (9) *Striatura ferrea*, black striate snail;
- 10.6 (10) *Truncilla donaciformis*, fawnsfoot;
- 10.7 ~~(13)~~ (11) *Venustaconcha ellipsiformis* (Conrad), ellipse; and
- 10.8 ~~(14)~~ *Vertigo hubrichti variabilis* n. subsp., variable pleistocene vertigo; and
- 10.9 ~~(15)~~ (12) *Vertigo meramecensis* Van Devender, bluff vertigo.

10.10 C. Of special concern:

- 10.11 ~~(1)~~ *Elliptio dilatata* (Rafinesque), spike; *Anodonta suborbiculata*, flat floater;
- 10.12 (2) *Elliptio complanata*, eastern elliptio;
- 10.13 (3) *Gastrocopta rogersensis*, Rogers' snaggletooth snail;
- 10.14 ~~(2)~~ (4) *Lasmigona compressa* (L. Lea), creek heelsplitter;
- 10.15 ~~(3)~~ *Lasmigona costata* (Rafinesque), fluted-shell;
- 10.16 ~~(4)~~ (5) *Ligumia recta* (Lamarek), black sandshell; and
- 10.17 ~~(5)~~ *Obovaria olivaria* (Rafinesque), hickory nut.
- 10.18 (6) *Planogyra asteriscus*, eastern flat-whorl snail;
- 10.19 (7) *Pleurobema sintoxia*, round pigtoe;
- 10.20 (8) *Striatura ferrea*, black striate snail; and
- 10.21 (9) *Zonitoides limatulus*, dull gloss.

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

11.1 A. Endangered: none.

11.2 B. Threatened: ~~none~~ *Tutelina formicaria*.

11.3 C. Of special concern:

11.4 (1) *Habronattus calcaratus maddisoni*;

11.5 ~~(1)~~ (2) *Habronattus texanus* Griswold;

11.6 ~~(2)~~ *Marpissa grata* (Gertsch);

11.7 (3) *Habronattus viridipes*;

11.8 ~~(4)~~ *Marpissa formosa*;

11.9 ~~(3)~~ *Metaphidippus arizonensis* (Peckham & Peckham);

11.10 ~~(4)~~ (5) *Paradamoetas fontana* (Levi);

11.11 (6) *Pelegrina arizonensis*;

11.12 ~~(5)~~ (7) *Phidippus apacheanus* Chamberlin & Gertsch;

11.13 ~~(6)~~ (8) *Phidippus pius* Scheffer; and

11.14 ~~(7)~~ (9) *Sassacus papenhoei* Peckham & Peckham; and

11.15 ~~(8)~~ *Tutelina formicaria* (Emerton).

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

11.18 A. Endangered:

11.19 (1) *Erynnis persius persius* (Seudder), persius dusky wing;

11.20 (2) *Hesperia comma* ~~*emma*~~ *assiniboia* (Lyman), assiniboia skipper;

11.21 (3) *Hesperia dacotae*, Dakota skipper;

11.22 (4) *Hesperia ottoe*, ottoe skipper

- 12.1 ~~(3)~~ (5) *Hesperia uncas* ~~W.H. Edwards~~, uncas skipper;
- 12.2 ~~(4)~~ (6) *Lycaeides melissa samuelis* ~~Nabokov~~, Karner blue; and
- 12.3 (7) *Oarisma poweshiek*, poweshiek skipperling; and
- 12.4 ~~(5)~~ (8) *Oeneis uhleri varuna*, ~~(W.H. Edwards)~~, Uhler's arctic.

12.5 B. Threatened:

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

12.9 C. Of special concern:

- 12.10 ~~(1)~~ *Atrytone arogos* iowa ~~(Boisduval & Leconte)~~, arogos skipper;
- 12.11 (2) *Catocala abbreviatella*, abbreviated underwing;
- 12.12 (3) *Catocala whitneyi*, Whitney's underwing;
- 12.13 ~~(2)~~ (4) *Erebia disa mancinus* ~~Doubleday & Hewitson~~, disa alpine;
- 12.14 ~~(3)~~ (5) *Hesperia leonardus* ~~Harris~~, leonardus skipper;
- 12.15 ~~(4)~~ (6) *Lycaeides idas nabokovi* ~~Masters~~, Nabokov's blue;
- 12.16 ~~(5)~~ *Oarisma powesheik* ~~(Parker)~~, powesheik skipper;
- 12.17 ~~(6)~~ (7) *Pyrgus centaureae freija* ~~(Warren)~~, grizzled skipper;
- 12.18 ~~(7)~~ (8) *Schinia indiana* ~~(J.B. Smith)~~, phlox moth; and
- 12.19 (9) *Schinia lucens*, leadplant flower moth; and
- 12.20 ~~(8)~~ (10) *Speyeria idalia* ~~(Drury)~~, regal fritillary.

- 12.21 Subp. 9. ~~Caddis-flies~~ Caddisflies. The following species of ~~caddis-flies~~ caddisflies
- 12.22 are designated as:

13.1 A. Endangered:

13.2 ~~*Chilostigma itasca* Wiggins.~~13.3 (1) *Hydroptila waskesia*, a species of purse casemaker caddisfly;13.4 (2) *Limnephilus janus*, a species of northern caddisfly;13.5 (3) *Limnephilus secludens*, a species of northern caddisfly;13.6 (4) *Ochrotrichia spinosa*, a species of purse casemaker caddisfly; and13.7 (5) *Polycentropus milaca*, a species of tube casemaker caddisfly.13.8 B. Threatened: ~~none.~~13.9 (1) *Chilostigma itasca*, headwaters chilostigman caddisfly13.10 (2) *Goera stylata*;13.11 (3) *Hydroptila rono*, a species of purse casemaker caddisfly;13.12 (4) *Ironoquia punctatissima*, a species of northern caddisfly;13.13 (5) *Lepidostoma libum*;13.14 (6) *Limnephilus rossi*, a species of northern caddisfly;13.15 (7) *Oecetis ditissa*, a species of long-horned caddisfly;13.16 (8) *Oxyethira ecornuta*, a species of purse casemaker caddisfly;13.17 (9) *Parapsyche apicalis*, a species of nestspinning caddisfly;13.18 (10) *Polycentropus glacialis*, a species of tube casemaker caddisfly; and13.19 (11) *Ylodes frontalis*, a species of long-horned caddisfly.

13.20 C. Of special concern:

13.21 (1) *Agapetus tomus* Ross;13.22 (2) *Anabolia ozburni*, a species of northern caddisfly;

- 14.1 (2) ~~*Asynarchus rossi* Leonard & Leonard;~~
- 14.2 (3) ~~*Ceraclea brevis* (Etnier);~~
- 14.3 (4) ~~*Ceraclea vertreesi* (Denning);~~
- 14.4 (5) (3) *Hydroptila metoeca* Blicke & Morse, a species of purse casemaker
- 14.5 caddisfly;
- 14.6 (6) ~~*Hydroptila novicola* Blicke & Morse;~~
- 14.7 (4) *Hydroptila quinola*, a species of purse casemaker caddisfly;
- 14.8 (7) (5) *Hydroptila tortosa* Ross, a species of purse casemaker caddisfly;
- 14.9 (8) ~~*Oxyethira ecornuta* Morton;~~
- 14.10 (9) (6) *Oxyethira itasca* Monson & Holzenthal, a species of purse casemaker
- 14.11 caddisfly;
- 14.12 (10) ~~*Polycentropus milaca* Etnier;~~
- 14.13 (11) ~~*Protophila talola* Denning; and~~
- 14.14 (12) ~~*Setodes guttatus* (Banks).~~
- 14.15 (7) *Protophila erotica*, a species of saddle casemaker caddisfly; and
- 14.16 (8) *Triaenodes flavescens*, a species of long-horned caddisfly.

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

14.18 A. Endangered:

- 14.19 (1) *Cicindela fulgida fulgida* Say, crimson saltflat tiger beetle, fulgida
- 14.20 subspecies; and
- 14.21 (2) *Cicindela hirticollis rhodensis*, hairy-necked tiger beetle; and
- 14.22 (2) (3) *Cicindela limbata nympha* Casey, sandy tiger beetle.

15.1 B. Threatened:

15.2 (1) ~~*Cicindela denikei* W.J. Brown;~~15.3 (2) ~~*Cicindela fulgida westbournei* Calder~~, crimson saltflat tiger beetle,
15.4 westbournei subspecies; and15.5 (3) (2) ~~*Cicindela lepida* Dejean~~, little white tiger beetle.

15.6 C. Of special concern:

15.7 (1) ~~*Cicindela hirticollis rhodensis* Calder;~~15.8 (1) *Cicindela denikei*, Laurentian tiger beetle;15.9 (2) *Cicindela macra macra* Leconte, sandy stream tiger beetle;15.10 (3) *Cicindela patruela patruela* Dejean, northern barrens tiger beetle; and15.11 (4) *Cicindela splendida cyanocephalata* Eekhoff, splendid tiger beetle.15.12 Subp. 11. **Leafhoppers.** The following species of leafhoppers are designated as:

15.13 A. Endangered: none.

15.14 B. Threatened: none.

15.15 C. Of special concern:

15.16 (1) *Aflexia rubranura* (DeLong), red-tailed leafhopper;15.17 (2) *Attenuipyga vanduzeei*, hill prairie shovelhead leafhopper; and15.18 (3) *Macrosteles clavatus*, caped leafhopper.15.19 Subp. 12. **Dragonflies.** The following species of dragonflies are designated as:

15.20 A. Endangered: none.

15.21 B. Threatened: none *Ophiogomphus susbehcha*, St. Croix snaketail.

15.22 C. Of special concern:

- 16.1 (1) *Aeshna sitchensis*, zigzag darner;
- 16.2 (2) *Aeshna subarctica*, subarctic darner;
- 16.3 (3) *Boyeria grafiana*, ocellated darner;
- 16.4 ~~(1)~~ (4) *Ophiogomphus anomalis anomalus* Harvey, extra-striped snaketail; and
- 16.5 (2) *Ophiogomphus susbehcha* Vogt & Smith.
- 16.6 (5) *Ophiogomphus howei*, pygmy snaketail;
- 16.7 (6) *Somatochlora brevicincta*, Quebec emerald;
- 16.8 (7) *Somatochlora ensigera*, plains emerald; and
- 16.9 (8) *Somatochlora forcipata*, forcipate emerald.

16.10 **6134.0300 VASCULAR PLANTS.**

16.11 The following species of vascular plants are designated as:

16.12 A. Endangered:

- 16.13 (1) *Achnatherum hymenoides*, Indian rice grass;
- 16.14 ~~(1)~~ (2) *Agalinis auriculata* (Michx.) Blake, Scrophulariaceae, eared false foxglove;
- 16.15 ~~(2)~~ (3) *Agalinis gattingeri* (Sm.) Sm. ex Britt., Scrophulariaceae, round-stemmed
- 16.16 false foxglove;
- 16.17 (4) *Agrostis hyemalis*, winter bentgrass;
- 16.18 (5) *Allium schoenoprasum*, wild chives;
- 16.19 (6) *Aristida longespica* var. *geniculata*, slimsipike three-awn;
- 16.20 ~~(3)~~ (7) *Asclepias stenophylla* Gray, Asclepiadaceae, narrow-leaved milkweed;
- 16.21 ~~(4)~~ (8) *Astragalus alpinus* L., Fabaceae var. *alpinus*, alpine milk-vetch;
- 16.22 ~~(5)~~ (9) *Bartonia virginica* (L.) B.S.P., Gentianaceae, yellow bartonia;

- 17.1 (10) *Botrychium ascendens*, upswept moonwort;
- 17.2 ~~(6)~~ (11) *Botrychium gallicomontanum* Farrar & Johnson-Groh, Ophioglossaceae,
- 17.3 Frenchman's bluff moonwort;
- 17.4 ~~(7) *Botrychium oneidense* (Gilbert) House, Ophioglossaceae;~~
- 17.5 ~~(8) *Botrychium pallidum* W.H. Wagner, Ophioglossaceae;~~
- 17.6 ~~(9) *Cacalia suaveolens* L., Asteraceae;~~
- 17.7 (12) *Botrychium lineare*, slender moonwort;
- 17.8 (13) *Botrychium spathulatum*, spatulate moonwort;
- 17.9 (14) *Calamagrostis purpurascens*, purple reedgrass;
- 17.10 ~~(10)~~ (15) *Caltha natans* Pallas ex Georgi, Ranunculaceae, floating marsh marigold;
- 17.11 (16) *Carex careyana*, Carey's sedge;
- 17.12 ~~(11)~~ (17) *Carex formosa* Dewey, Cyperaceae, handsome sedge;
- 17.13 ~~(12)~~ (18) *Carex pallescens* L., Cyperaceae, pale sedge;
- 17.14 ~~(13)~~ (19) *Carex plantaginea* Lam., Cyperaceae, plantain-leaved sedge;
- 17.15 (20) *Carex supina* ssp. *spaniocarpa*, weak arctic sedge;
- 17.16 ~~(14)~~ (21) *Castilleja septentrionalis* Lindl., Scrophulariaceae, northern paintbrush;
- 17.17 ~~(15) *Cheilanthes lanosa* (Michaux) D.C. Eaton, Pteridaceae;~~
- 17.18 ~~(16)~~ (22) *Chrysosplenium iowense* Rydb., Saxifragaceae, Iowa golden saxifrage;
- 17.19 (23) *Commelina erecta*, slender dayflower;
- 17.20 ~~(17) *Cristatella jamesii* T. & G., Capparidaceae;~~
- 17.21 (24) *Diarrhena obovata*, obovate beakgrain;
- 17.22 ~~(18)~~ (25) *Dodecatheon meadia* L., Primulaceae var. *meadia*, prairie shooting star;

- 18.1 (26) *Draba cana*, hoary whitlow grass;
- 18.2 ~~(19)~~ (27) *Draba norvegica* ~~Gunn.~~, Brassicaceae, Norwegian whitlow grass;
- 18.3 (28) *Dryopteris marginalis*, marginal shield fern;
- 18.4 ~~(20)~~ (29) *Eleocharis wolfii* Gray, Cyperaceae, Wolf's spikerush;
- 18.5 (30) *Elodea bifoliata*, two leaf waterweed;
- 18.6 ~~(21)~~ (31) *Empetrum eamesii* Fern. & Wieg., Empetraceae *atropurpureum*, purple
 18.7 crowberry;
- 18.8 ~~(22)~~ (32) *Empetrum nigrum* L., Empetraceae, black crowberry;
- 18.9 (33) *Erigeron acris* var. *kamtschaticus*, bitter fleabane;
- 18.10 ~~(23)~~ (34) *Erythronium propullans* Gray, Liliaceae, dwarf trout lily;
- 18.11 ~~(24)~~ (35) *Escobaria vivipara* (Nutt.) Buxbaum, Cactaceae, ball cactus;
- 18.12 ~~(25)~~ (36) *Fimbristylis puberula* (Michx.) Vahl var. *interior* (Britt.) Kral,
 18.13 Cyperaceae, hairy fimbry;
- 18.14 ~~(26)~~ *Glaux maritima* L., Primulaceae;
- 18.15 (37) *Hasteola suaveolens*, sweet-smelling Indian plantain;
- 18.16 (38) *Hybanthus concolor*, eastern green-violet;
- 18.17 ~~(27)~~ (39) *Hydrastis canadensis* L., Ranunculaceae, goldenseal;
- 18.18 ~~(28)~~ (40) *Iodanthus pinnatifidus* (Michx.) Steud., Brassicaceae, purple rocket;
- 18.19 ~~(29)~~ (41) *Isoetes melanopoda* Gay & Dur., Isoetaceae, prairie quillwort;
- 18.20 (42) *Juglans cinerea*, butternut;
- 18.21 (43) *Juncus articulatus*, jointed rush;
- 18.22 (44) *Juncus marginatus*, marginated rush;

- 19.1 (45) *Juncus subtilis*, slender rush;
- 19.2 ~~(30)~~ (46) *Lechea tenuifolia* Michx., Cistaceae *var. tenuifolia*, narrow-leaved
- 19.3 pinweed;
- 19.4 ~~(31) *Lesquerella ludoviciana* (Nutt.) S. Wats., Brassicaceae;~~
- 19.5 ~~(32)~~ (47) *Listera auriculata* Wieg., Orchidaceae, *auricled twayblade*;
- 19.6 (48) *Lysimachia maritima*, sea milkwort;
- 19.7 ~~(33)~~ (49) *Malaxis paludosa* (L.) Sw., Orchidaceae, *bog adder's mouth*;
- 19.8 ~~(34)~~ (50) *Marsilea vestita*, Hooker & Greville, Marsileaceae, *hairy waterclove*;
- 19.9 ~~(35)~~ (51) *Montia chamissoi* (Ledeb. ex Spreng.) Greene, Portulacaceae, *montia*;
- 19.10 ~~(36) *Oryzopsis hymenoides* (R. & S.) Ricker ex Piper, Poaceae;~~
- 19.11 ~~(37)~~ (52) *Osmorhiza berteroi* H. & A., Apiaceae, *Chilean sweet cicely*;
- 19.12 ~~(38)~~ (53) *Oxytropis viscida* Nutt., Fabaceae, *sticky locoweed*;
- 19.13 (54) *Packera cana*, gray ragwort;
- 19.14 (55) *Packera indecora*, elegant groundsel;
- 19.15 (56) *Paronychia canadensis*, Canada forked chickweed;
- 19.16 ~~(39)~~ (57) *Paronychia fastigiata* (Raf.) Fern., Caryophyllaceae *var. fastigiata*,
- 19.17 forked chickweed;
- 19.18 ~~(40)~~ (58) *Parthenium integrifolium* L., Asteraceae, *wild quinine*;
- 19.19 (59) *Phegopteris hexagonoptera*, broad beech fern;
- 19.20 ~~(41) *Platanthera flava* (L.) Lindl. *var. herbiola* (R. Br.) Ames & Correll,~~
- 19.21 ~~Orchidaceae;~~
- 19.22 (60) *Physaria ludoviciana*, bladderpod;

- 20.1 ~~(42)~~ (61) *Platanthera praeclara* Sheviak & Bowles, Orchidaceae, western prairie
 20.2 fringed orchid;
- 20.3 (62) *Polanisia jamesii*, James' polanisia;
- 20.4 ~~(43)~~ (63) *Polemonium occidentale* Greene ssp. *lacustre* Wherry, Polemoniaceae
 20.5 western Jacob's ladder;
- 20.6 ~~(44)~~ (64) *Polygala cruciata* L., Polygalaceae, cross-leaved milkwort;
- 20.7 (65) *Polystichum acrostichoides*, Christmas fern;
- 20.8 ~~(45)~~ *Polystichum braunii* (Spencer) Fee, Dryopteridaceae;
- 20.9 ~~(46)~~ (66) *Potamogeton bicipulatus* Fern., Potamogetonaceae, snailseed pondweed;
- 20.10 (67) *Potamogeton confervoides*, algae-like pondweed;
- 20.11 ~~(47)~~ (68) *Potamogeton diversifolius* Raf., Potamogetonaceae, diverse-leaved
 20.12 pondweed;
- 20.13 (69) *Potamogeton oakesianus*, Oake's pondweed;
- 20.14 (70) *Potamogeton pulcher*, spotted pondweed;
- 20.15 ~~(48)~~ (71) *Psoralea tenuiflora* (Pursh) Rydb., Fabaceae *tenuiflorum*,
 20.16 slender-leaved scurfpea;
- 20.17 (72) *Prosartes trachycarpa*, rough-fruited fairybells;
- 20.18 (73) *Rhodiola integrifolia* ssp. *leedyi*, Leedy's roseroot;
- 20.19 (74) *Rubus missouricus*, Missouri dewberry;
- 20.20 (75) *Rubus stipulatus*, bristle-berry;
- 20.21 ~~(49)~~ (76) *Sagina nodosa* (L.) fenzl ssp. *borealis* Crow, Caryophyllaceae, knotty
 20.22 pearlwort;
- 20.23 (77) *Sagittaria brevirostra*, short-beaked arrowhead;

- 21.1 ~~(50)~~ (78) *Saxifraga cernua* L., ~~Saxifragaceae~~, nodding saxifrage;
- 21.2 ~~(51)~~ (79) *Scleria triglomerata* Michx., ~~Cyperaceae~~, tall nutrush;
- 21.3 ~~(52)~~ *Sedum integrifolium* (Raf.) A. Nels. ssp. *leedyi* (Rosend. & Moore) Clausen;
- 21.4 ~~Crassulaceae~~;
- 21.5 ~~(53)~~ (80) *Selaginella selaginoides* (L.) Link, ~~Selaginellaceae~~, northern spikemoss;
- 21.6 ~~(54)~~ *Senecio canus* Hook., ~~Asteraceae~~;
- 21.7 ~~(55)~~ *Talinum rugospermum* Holzinger, ~~Portulacaceae~~;
- 21.8 (81) *Stuckenia vaginata*, sheathed pondweed;
- 21.9 ~~(56)~~ (82) *Tofieldia pusilla* (Michx.) Pers., ~~Liliaceae~~, small false asphodel; and
- 21.10 (83) *Tsuga canadensis*, eastern hemlock;
- 21.11 (84) *Utricularia purpurea*, purple-flowered bladderwort;
- 21.12 (85) *Vaccinium uliginosum*, alpine bilberry; and
- 21.13 ~~(57)~~ (86) *Xyris torta* Sm., ~~Xyridaceae~~, twisted yellow-eyed grass.
- 21.14 B. Threatened:
- 21.15 (1) *Achillea sibirica* Ledeb., ~~Asteraceae~~ alpina, Siberian yarrow;
- 21.16 (2) *Allium cernuum* Roth, ~~Liliaceae~~;
- 21.17 (3) *Allium schoenoprasum* L. var. *sibiricum* (L.) Hartm., ~~Liliaceae~~;
- 21.18 ~~(4)~~ (2) *Ammophila breviligulata* Fern., ~~Poaceae~~ ssp. *breviligulata*, beachgrass;
- 21.19 (5) *Arabis holboellii* Hornem. var. *retrofracta* (Graham) Rydb., ~~Brassicaceae~~;
- 21.20 (3) *Aristida tuberculosa*, seaside three-awn;
- 21.21 ~~(6)~~ (4) *Arnica lonchophylla* Greene, ~~Asteraceae~~, long leaved-arnica;
- 21.22 ~~(7)~~ (5) *Arnoglossum plantagineum* Raf., ~~Asteraceae~~, tuberous Indian plantain;

- 22.1 (6) *Arnoglossum reniforme*, great Indian plaintain;
- 22.2 (7) *Asclepias amplexicaulis*, clasping milkweed;
- 22.3 (8) *Asclepias hirtella* (Pennell) Woodson, ~~Asclepiadaceae~~, prairie milkweed;
- 22.4 (9) *Asclepias sullivantii* Engelm., ~~Asclepiadaceae~~, Sullivant's milkweed;
- 22.5 (10) *Asplenium trichomanes* L., ~~Aspleniaceae~~ ssp. *trichomanes*, maidenhair
- 22.6 spleenwort;
- 22.7 (11) *Aster shortii* Lindl., ~~Asteraceae~~;
- 22.8 (12) (11) *Aureolaria pedicularia* (L.) Raf., ~~Scrophulariaceae~~, fernleaf false
- 22.9 foxglove;
- 22.10 (12) *Bacopa rotundifolia*, water hyssop;
- 22.11 (13) *Berula erecta*, stream parsnip;
- 22.12 (14) (14) *Besseyia bullii* (Eaton) Rydb., ~~Scrophulariaceae~~, kitten-tails;
- 22.13 (15) *Bistorta vivipara*, alpine bistort;
- 22.14 (16) *Boechera retrofracta*, Holboell's rock cress;
- 22.15 (17) (17) *Botrychium lanceolatum* (S.G. Gmelin) Angstr., ~~Ophioglossaceae~~ ssp.
- 22.16 *angustisegmentum*, narrow triangle moonwort;
- 22.17 (18) (18) *Botrychium lunaria* (L.) Sw., ~~Ophioglossaceae~~, common moonwort;
- 22.18 (16) *Botrychium rugulosum* W.H. Wagner, ~~Ophioglossaceae~~;
- 22.19 (17) *Carex careyana* Torr. ex Dewey, ~~Cyperaceae~~;
- 22.20 (19) *Botrychium mormo*, goblin fern;
- 22.21 (20) *Botrychium oneidense*, blunt-lobed grapefern;
- 22.22 (21) *Callitriche heterophylla*, larger water starwort;

- 23.1 (22) *Cardamine pratensis*, cuckoo flower;
- 23.2 ~~(18)~~ (23) *Carex conjuncta* Boott, Cyperaceae, jointed sedge;
- 23.3 ~~(19)~~ (24) *Carex davisii* Schwein. & Torr., Cyperaceae, Davis' sedge;
- 23.4 ~~(20)~~ (25) *Carex festucacea* Schkuhr ex Willd., Cyperaceae, fescue sedge;
- 23.5 ~~(21)~~ (26) *Carex garberi* Fern., Cyperaceae, Garber's sedge;
- 23.6 ~~(22)~~ (27) *Carex jamesii* Schwein., Cyperaceae, James' sedge;
- 23.7 ~~(23)~~ *Carex katahdinensis* Fern., Cyperaceae;
- 23.8 ~~(24)~~ (28) *Carex laevivaginata* (Kukenth.) Mackenzie, Cyperaceae,
- 23.9 smooth-sheathed sedge;
- 23.10 ~~(25)~~ (29) *Carex laxiculmis* Schwein., Cyperaceae, loose-culmed sedge;
- 23.11 (30) *Carex novae-angliae*, New England sedge;
- 23.12 (31) *Carex rossii*, Ross' sedge;
- 23.13 ~~(26)~~ (32) *Carex sterilis* Willd., Cyperaceae, sterile sedge;
- 23.14 ~~(27)~~ (33) *Crassula aquatica* (L.) Schoenl., Crassulaceae, pygmyweed;
- 23.15 ~~(28)~~ *Crataegus douglasii* Lindl., Rosaceae;
- 23.16 ~~(29)~~ (34) *Cyperus acuminatus* Torr. & Hook., Cyperaceae, short-pointed umbrella
- 23.17 sedge;
- 23.18 ~~(30)~~ (35) *Cypripedium arietinum* R. Br., Orchidaceae, ram's head orchid;
- 23.19 (36) *Deschampsia flexuosa*, slender hair grass;
- 23.20 (37) *Desmodium cuspidatum* var. *longifolium*, big tick trefoil;
- 23.21 (38) *Desmodium nudiflorum*, stemless tick trefoil;

- 24.1 ~~(31) (39) *Diplazium pycnocarpon* (Spreng.) M. Broun, Dryopteridaceae,~~
 24.2 narrow-leaved spleenwort;
- 24.3 ~~(32) *Dryopteris marginalis* (L.) Gray, Dryopteridaceae;~~
- 24.4 ~~(33) *Eleocharis nitida* Fern., Cyperaceae;~~
- 24.5 ~~(34) *Eleocharis olivacea* Torr., Cyperaceae;~~
- 24.6 ~~(40) *Eleocharis flavescens* var. *olivacea*, olivaceous spikerush;~~
- 24.7 ~~(41) *Eleocharis robbinsii*, Robbins' spikerush;~~
- 24.8 ~~(35) (42) *Eleocharis rostellata* Torr., Cyperaceae, beaked spikerush;~~
- 24.9 ~~(43) *Erigeron lonchophyllus*, short ray fleabane;~~
- 24.10 ~~(36) (44) *Eupatorium sessilifolium* L., Asteraceae, upland boneset;~~
- 24.11 ~~(37) (45) *Floerkea proserpinacoides* Willd., Limnanthaceae, false mermaid;~~
- 24.12 ~~(46) *Gaylussacia baccata*, black huckleberry~~
- 24.13 ~~(47) *Hamamelis virginiana*, witch-hazel;~~
- 24.14 ~~(38) (48) *Heteranthera limosa* (Sw.) Willd., Pontederiaceae, mud plantain;~~
- 24.15 ~~(49) *Hudsonia tomentosa*, beach heather;~~
- 24.16 ~~(39) (50) *Huperzia porophila* (Lloyd & Underwood) Holub, Lycopodiaceae,~~
 24.17 rock fir moss;
- 24.18 ~~(51) *Leersia lenticularis*, catchfly grass;~~
- 24.19 ~~(40) (52) *Lespedeza leptostachya* Engelm., Fabaceae, prairie bush clover;~~
- 24.20 ~~(53) *Luzula parviflora*, small-flowered woodrush;~~
- 24.21 ~~(41) (54) *Melica nitens* (Scribn.) Nutt. ex Piper, Poaceae, three-flowered melic;~~
- 24.22 ~~(55) *Minuartia dawsonensis*, rock sandwort;~~

- 25.1 ~~(42)~~ (56) *Moehringia macrophylla* (Hook.) Fenzl, Caryophyllaceae, large-leaved
25.2 sandwort;
- 25.3 ~~(43)~~ (57) *Napaea dioica* L., Malvaceae, glade mallow;
- 25.4 ~~(44)~~ (58) *Nymphaea leibergii* (Morong) Boivin, Nymphaeaceae, small white
25.5 waterlily;
- 25.6 ~~(45)~~ *Paronychia canadensis* (L.) Wood, Caryophyllaceae;
- 25.7 ~~(46)~~ *Phegopteris hexagonoptera* (Michx.) Fee, Thelypteridaceae;
- 25.8 ~~(47)~~ *Plantago elongata* Pursh, Plantaginaceae;
- 25.9 (59) *Orobanche fasciculata*, clustered broomrape;
- 25.10 (60) *Orobanche ludoviciana* var. *ludoviciana*, Louisiana broomrape;
- 25.11 (61) *Orobanche uniflora*, one-flowered broomrape;
- 25.12 (62) *Phacelia franklinii*, Franklin's phacelia;
- 25.13 (63) *Phemeranthus rugospermus*, rough-seeded fameflower;
- 25.14 (64) *Piptatherum canadense*, Canadian ricegrass;
- 25.15 (65) *Platanthera flava* var. *herbiola*, tubercled rein orchid;
- 25.16 ~~(48)~~ (66) *Poa paludigena* Fern. & Wieg., Poaceae, bog bluegrass;
- 25.17 ~~(49)~~ *Polystichum acrostichoides* (Michx.) Schott, Dryopteridaceae;
- 25.18 (67) *Polystichum braunii*, Braun's holly fern;
- 25.19 ~~(50)~~ (68) *Rhynchospora capillacea* Torr., Cyperaceae, hair-like beak rush;
- 25.20 ~~(51)~~ (69) *Rotala ramosior* (L.) Koehne, Lythraceae, toothcup;
- 25.21 ~~(52)~~ (70) *Rubus chamaemorus* L., Rosaceae, cloudberry;
- 25.22 (71) *Rubus fulleri*, bristle-berry;

- 26.1 (72) *Rubus semisetosus*, swamp blackberry;
- 26.2 (73) *Rudbeckia triloba* var. *triloba*, three-leaved coneflower;
- 26.3 (74) *Sagittaria calycina* var. *calycina*, hooded arrowhead;
- 26.4 (75) *Salix pellita*, satiny willow;
- 26.5 ~~(53)~~ (76) *Salicornia rubra* Nelson, Chenopodiaceae, red saltwort;
- 26.6 ~~(54) *Saxifraga paniculata* P. Mill., Saxifragaceae;~~
- 26.7 ~~(55)~~ (77) *Scleria verticillata* Muhl., Cyperaceae, whorled nutrush;
- 26.8 ~~(56)~~ (78) *Scutellaria ovata* Hill, Lamiales var. *versicolor*, ovate-leaved skullcap;
- 26.9 ~~(57)~~ (79) *Shinnersoseris rostrata* (Gray) S. Tomb, Asteraceae, annual
- 26.10 skeletonweed;
- 26.11 ~~(58)~~ (80) *Silene nivea* (Nutt.) Muhl. ex Oth., Caryophyllaceae, snowy campion;
- 26.12 (81) *Spiranthes casei* var. *casei*, Case's ladies' tresses;
- 26.13 ~~(59)~~ (82) *Subularia aquatica* L., Brassicaceae ssp. *americana*, awlwort;
- 26.14 ~~(60)~~ (83) *Sullivantia sullivantii* (Torr. & Gray) Britt., Saxifragaceae reniform
- 26.15 sullivantia;
- 26.16 ~~(61) *Vaccinium uliginosum* L., Ericaceae;~~
- 26.17 (84) *Trichophorum clintonii*, Clinton's bullrush;
- 26.18 (85) *Utricularia geminiscapa*, hidden-fruit bladderwort;
- 26.19 (86) *Utricularia resupinata*, lavender bladderwort;
- 26.20 ~~(62)~~ (87) *Valeriana edulis* Nutt. var. *ciliata* (T. & G.) Cronq., Valerianaceae,
- 26.21 edible valerian;
- 26.22 ~~(63)~~ (88) *Viola lanceolata* L., Violaceae var. *lanceolata*, lance-leaf violet;

- 27.1 ~~(64)~~ (89) *Viola nuttallii* Pursh, Violaceae, yellow prairie violet;
- 27.2 (90) *Vitis aestivalis* var. *bicolor*, silverleaf grape;
- 27.3 (91) *Woodsia alpina*, alpine woodsia;
- 27.4 ~~(65)~~ (92) *Woodsia glabella* R. Br., Dryopteridaceae, smooth woodsia; and
- 27.5 ~~(66)~~ (93) *Woodsia scopulina* D.C. Eat., Dryopteridaceae ssp. *laurentiana*, Rocky
- 27.6 Mountain woodsia.
- 27.7 C. Of special concern:
- 27.8 ~~(1)~~ *Adoxa moschatellina* L., Adoxaceae;
- 27.9 ~~(2)~~ *Agrostis geminata* Trin., Poaceae;
- 27.10 (1) *Adlumia fungosa*, Allegheny vine;
- 27.11 (2) *Alisma gramineum*, narrow-leaved water plantain;
- 27.12 (3) *Allium cernuum*, nodding wild onion;
- 27.13 ~~(3)~~ (4) *Androsace septentrionalis* L. ssp. *puberulenta* (Rydb.) G.T. Robbins,
- 27.14 Primulaceae, northern androsace;
- 27.15 ~~(4)~~ (5) *Antennaria parvifolia* Nutt., Asteraceae, small-leaved pussytoes;
- 27.16 (6) *Arabis laevigata* var. *laevigata*, smooth rock cress;
- 27.17 (7) *Arisaema dracontium*, green dragon;
- 27.18 ~~(5)~~ (8) *Aristida purpurea* Nutt. var. *longiseta* (Steud.) Vasey, Poaceae, red
- 27.19 three-awn;
- 27.20 ~~(6)~~ *Aristida tuberculosa* Nutt., Poaceae;
- 27.21 ~~(7)~~ *Aselepias amplexicaulis* Sm., Aselepiadaceae;
- 27.22 ~~(8)~~ (9) *Asplenium platyneuron* (L.) Britt., Aspleniaceae, ebony spleenwort;

- 28.1 ~~(9)~~ (10) *Astragalus flexuosus* (Hook.) Dougl., Fabaceae var. *flexuosus*, slender
 28.2 milk-vetch;
- 28.3 ~~(10)~~ (11) *Astragalus missouriensis* Nutt., Fabaceae var. *missouriensis*, Missouri
 28.4 milk-vetch;
- 28.5 ~~(11)~~ *Bacopa rotundifolia* (Michx.) Wettst., Scrophulariaceae;
- 28.6 ~~(12)~~ *Baptisia alba* (L.) Bent., Fabaceae;
- 28.7 ~~(12)~~ *Avenula hookeri*, spike oat;
- 28.8 ~~(13)~~ *Baptisia bracteata* Muhl. ex Ell. var. *leucophaea* (Nutt.) Kartesz & Gandhi,
 28.9 Fabaceae *glabrescens*, plains wild indigo;
- 28.10 ~~(14)~~ *Baptisia lactea* var. *lactea*, white wild indigo;
- 28.11 ~~(15)~~ *Bidens discoidea*, discoid beggarticks;
- 28.12 ~~(16)~~ *Botrychium acuminatum*, tailed grapefern;
- 28.13 ~~(14)~~ (17) *Botrychium campestre* W.H. Wagner & Farrar, Ophioglossaceae, prairie
 28.14 moonwort;
- 28.15 ~~(15)~~ (18) *Botrychium minganense* Victorin, Ophioglossaceae, Mingan moonwort;
- 28.16 ~~(16)~~ *Botrychium mormo* W.H. Wagner, Ophioglossaceae;
- 28.17 ~~(19)~~ *Botrychium pallidum*, pale moonwort;
- 28.18 ~~(20)~~ *Botrychium rugulosum*, St. Lawrence grapefern;
- 28.19 ~~(17)~~ (21) *Botrychium simplex* E. Hitchc., Ophioglossaceae, least moonwort;
- 28.20 ~~(18)~~ (22) *Buchloe dactyloides* (Nutt.) Engelm., Poaceae, buffalo grass;
- 28.21 ~~(19)~~ (23) *Calamagrostis lacustris* (Kearney) Nash, Poaceae, narrow reedgrass;
- 28.22 ~~(20)~~ (24) *Calamagrostis montanensis* Scribn. ex Vasey, Poaceae, Plains reedgrass;
- 28.23 ~~(21)~~ *Calamagrostis purpurascens* R. Br., Poaceae;

- 29.1 ~~(22) *Callitriche heterophylla* Pursh, Callitrichaceae;~~
- 29.2 ~~(23) (25) *Carex annectens* Bickn., Cyperaceae, yellow-fruit sedge;~~
- 29.3 ~~(24) *Carex crus-corvi* Shuttlw. ex Kunze, Cyperaceae;~~
- 29.4 ~~(25) (26) *Carex exilis* Dew., Cyperaceae, coastal sedge;~~
- 29.5 ~~(26) (27) *Carex flava* L., Cyperaceae, yellow sedge;~~
- 29.6 ~~(28) *Carex grayi*, Gray's sedge;~~
- 29.7 ~~(27) (29) *Carex hallii* Olney, Cyperaceae, Hall's sedge;~~
- 29.8 ~~(30) *Carex hookerana*, Hooker's sedge;~~
- 29.9 ~~(31) *Carex media*, intermediate sedge;~~
- 29.10 ~~(28) (32) *Carex michauxiana*, Boeckl., Cyperaceae, Michaux's sedge;~~
- 29.11 ~~(33) *Carex muskingumensis*, Muskingum sedge;~~
- 29.12 ~~(29) (34) *Carex obtusata* Lilj., Cyperaceae, blunt sedge;~~
- 29.13 ~~(35) *Carex ormostachya*, necklace sedge;~~
- 29.14 ~~(30) (36) *Carex praticola* Rydb., Cyperaceae, prairie-dweller sedge;~~
- 29.15 ~~(31) (37) *Carex scirpoidea* Michx., Cyperaceae, northern single-spike sedge;~~
- 29.16 ~~(32) *Carex supina* Willd. ex Wahlenb. var. *spaniocarpa* (Steud.) Boivin,~~
- 29.17 ~~Cyperaceae;~~
- 29.18 ~~(33) (38) *Carex typhina* Michx., Cyperaceae, cattail sedge;~~
- 29.19 ~~(34) *Carex woodii* Dew., Cyperaceae;~~
- 29.20 ~~(35) (39) *Carex xerantica* Bailey, Cyperaceae, dry sedge;~~
- 29.21 ~~(36) (40) *Chamaesyce missurica* (Raf.) Shinnery, Euphorbiaceae, Missouri spurge;~~
- 29.22 ~~(37) (41) *Cirsium pumilum* var. *hillii* (Canby) Fern., Asteraceae, Hill's thistle;~~

- 30.1 ~~(38)~~ (42) *Cladium mariscoides* (Muhl.) Torr., Cyperaceae, twig rush;
- 30.2 ~~(39)~~ *Claytonia caroliniana* Michx., Portulacaceae;
- 30.3 (43) *Crataegus calpodendron*, late hawthorn;
- 30.4 (44) *Crataegus douglasii*, black hawthorn;
- 30.5 (45) *Crotalaria sagittalis*, rattlebox;
- 30.6 ~~(40)~~ (46) *Cymopterus acaulis* (Pursh) Raf., Apiaceae glomeratus, plains spring
- 30.7 parsley;
- 30.8 ~~(41)~~ (47) *Cypripedium candidum* Muhl., Orchidaceae, small white lady's slipper;
- 30.9 ~~(42)~~ (48) *Dalea candida* Willd., var. *oligophylla* (Torr.) Shinn., Fabaceae,
- 30.10 western white prairie clover;
- 30.11 ~~(43)~~ (49) *Decodon verticillatus* (L.) Ell., Lythraceae, water willow;
- 30.12 ~~(44)~~ *Deschampsia flexuosa* (L.) Trin., Poaceae;
- 30.13 (50) *Deparia acrostichoides*, silvery spleenwort;
- 30.14 ~~(45)~~ (51) *Desmanthus illinoensis* (Michx.) MacM., Fabaceae, prairie mimosa;
- 30.15 ~~(46)~~ *Desmodium cuspidatum* (Muhl. ex Willd.) DC. ex Loud. var. *longifolium*
- 30.16 ~~(Torr. & Gray) Schub.~~, Fabaceae;
- 30.17 ~~(47)~~ *Desmodium nudiflorum* (L.) DC., Fabaceae;
- 30.18 ~~(48)~~ *Diarrhena obovata* (Gleason) Brandenburg, Poaceae;
- 30.19 ~~(49)~~ (52) *Dicentra canadensis* (Goldie) Walp., Fumariaceae, squirrel corn;
- 30.20 ~~(50)~~ (53) *Draba arabisans* Michx., Brassicaceae, Arabian whitlow grass;
- 30.21 ~~(51)~~ (54) *Drosera anglica* Huds., Droseraceae, English sundew;
- 30.22 ~~(52)~~ (55) *Drosera linearis* Goldie, Droseraceae, linear-leaved sundew;

- 31.1 ~~(53)~~ (56) *Dryopteris goldiana* (Hook.) Gray, ~~Dryopteridaceae~~, Goldie's fern;
- 31.2 (57) *Elatine triandra*, three-stamened waterwort;
- 31.3 ~~(54)~~ (58) *Eleocharis parvula* (Roemer & J.A. Schultes) Link ~~ex~~ Bluff, Nees &
- 31.4 Sehauer, Cyperaceae coloradoensis, dwarf spikerush;
- 31.5 (59) *Eleocharis nitida*, neat spikerush;
- 31.6 ~~(55)~~ (60) *Eleocharis quinqueflora* (F.X. Hartmann) Schwarz, Cyperaceae,
- 31.7 few-flowered spikerush;
- 31.8 ~~(56)~~ (61) *Eryngium yuccifolium* Michx., Apiaceae, rattlesnake master;
- 31.9 ~~(57)~~ (62) *Euphrasia hudsoniana* Fern. & Wieg., Scrophulariaceae var. ramosior,
- 31.10 Hudson Bay eyebright;
- 31.11 ~~(58)~~ (63) *Fimbristylis autumnalis* (L.) Roemer & J.A. Schultes, Cyperaceae,
- 31.12 autumn fimbry;
- 31.13 ~~(59)~~ (64) *Gaillardia aristata* Pursh, ~~Asteraceae~~, blanket flower;
- 31.14 ~~(60)~~ (65) *Gentiana affinis* Griseb., Gentianaceae, northern gentian;
- 31.15 ~~(61)~~ (66) *Gentianella amarella* (L.) Borner ssp. *acuta* (Michx.) Gillett,
- 31.16 Gentianaceae, felwort;
- 31.17 (62) *Hamamelis virginiana* L., Hamamelidaceae;
- 31.18 (67) *Gymnocarpium robertianum*, northern oak fern;
- 31.19 (68) *Gymnocladus dioica*, Kentucky coffee tree;
- 31.20 (69) *Helianthemum canadense*, Canada frostweed;
- 31.21 ~~(63)~~ (70) *Helianthus nuttallii* T. & G. ssp. *rydbergii* (Br.) Long, Asteraceae,
- 31.22 Nuttall's sunflower;
- 31.23 ~~(64)~~ *Helictotrichon hookeri* (Scribn.) Henr., Poaceae;

- 32.1 ~~(65) *Hudsonia tomentosa* Nutt., Cistaceae;~~
- 32.2 (71) *Huperzia appalachiana*, Appalachian fir moss;
- 32.3 ~~(66)~~ (72) *Hydrocotyle americana* L., Apiaceae, American water-pennywort;
- 32.4 ~~(67)~~ (73) *Jeffersonia diphylla* (L.) Pers., Berberidaceae, twinleaf;
- 32.5 ~~(68) *Juglans cinerea* L., Juglandaceae;~~
- 32.6 ~~(69) *Juncus marginatus* Rostk., Juncaceae;~~
- 32.7 ~~(70)~~ (74) *Juncus stygius* L. var. *americanus* (Buch.) Hulten, Juncaceae, bog rush;
- 32.8 ~~(71)~~ (75) *Juniperus horizontalis* Moench, Cupressaceae, creeping juniper;
- 32.9 ~~(72) *Leersia lenticularis* Michx., Poaceae;~~
- 32.10 ~~(73)~~ (76) *Limosella aquatica* L., Scrophulariaceae, mudwort;
- 32.11 ~~(74)~~ (77) *Listera convallarioides* (Sw.) Nutt. ex Ell., Orchidaceae, broad-leaved
- 32.12 twayblade;
- 32.13 ~~(75)~~ (78) *Littorella uniflora* (L.) Aschers., Plantaginaceae *americana*, American
- 32.14 shore plantain;
- 32.15 ~~(76) *Luzula parviflora* (Ehrh.) Desv. ssp. *melanocarpa* (Michx.) Hamet-Ahti,~~
- 32.16 ~~Juncaceae;~~
- 32.17 ~~(77)~~ (79) *Lysimachia quadrifolia* L., Primulaceae, whorled loosestrife;
- 32.18 ~~(78) *Machaeranthera pinnatifida* (Hook.) Shinnery, Asteraceae;~~
- 32.19 ~~(79)~~ (80) *Malaxis monophyllos* (L.) Sw. var. *brachypoda* (Gray) Morris & Eames,
- 32.20 Orchidaceae, white adder's mouth;
- 32.21 ~~(80) *Minuartia dawsonensis* (Britt.) House, Caryophyllaceae;~~
- 32.22 ~~(81) *Muhlenbergia uniflora* (Muhl.) Fern., Poaceae, one-flowered muhly;~~
- 32.23 (82) *Myriophyllum heterophyllum*, broadleaf water milfoil;

- 33.1 ~~(82) (83)~~ *Najas gracillima* (A. Braun ex Engelm.) Magnus, Najadaceae, slender
 33.2 naiad;
- 33.3 ~~(84)~~ *Najas guadalupensis* ssp. *olivacea*, southern naiad;
- 33.4 ~~(83) (85)~~ *Najas marina* L., Najadaceae, sea naiad;
- 33.5 ~~(86)~~ *Nuttallanthus canadensis*, old field toadflax;
- 33.6 ~~(84) (87)~~ *Oenothera rhombipetala* Nutt. ex T. & G., Onagraceae, rhombic evening
 33.7 primrose;
- 33.8 ~~(85) (88)~~ *Opuntia macrorhiza* Engelm., Caetaceae, devil's tongue;
- 33.9 ~~(86)~~ *Orobanche fasciculata* Nutt., Orobanchaceae;
- 33.10 ~~(87)~~ *Orobanche ludoviciana* Nutt., Orobanchaceae;
- 33.11 ~~(88)~~ *Orobanche uniflora* L., Orobanchaceae;
- 33.12 ~~(89)~~ *Osmorhiza depauperata* Phil., Apiaceae, blunt-fruited sweet cicely;
- 33.13 ~~(90)~~ *Panax quinquefolius* L., Araliaceae, American ginseng;
- 33.14 ~~(91)~~ *Pellaea atropurpurea* (L.) Link, Adiantaceae, purple cliff brake;
- 33.15 ~~(92)~~ *Phacelia franklinii* (R.Br.) Gray, Hydrophyllaceae;
- 33.16 ~~(92)~~ *Persicaria careyi*, Carey's smartweed;
- 33.17 ~~(93)~~ *Phlox maculata*, wild sweet William;
- 33.18 ~~(93) (94)~~ *Pinguicula vulgaris* L., Lentibulariaceae, butterwort;
- 33.19 ~~(95)~~ *Plagiobothrys scouleri* var. *penicillatus*, Scouler's popcornflower;
- 33.20 ~~(96)~~ *Plantago elongata*, slender plantain;
- 33.21 ~~(94) (97)~~ *Platanthera clavellata* (Michx.) Luer, Orchidaceae, small green wood
 33.22 orchid;

- 34.1 ~~(95)~~ (98) *Poa wolfii* Scribn., Poaceae, Wolf's bluegrass;
- 34.2 ~~(96)~~ *Polygonum careyi* (Olney), Polygonaceae;
- 34.3 ~~(97)~~ *Polygonum viviparum* L., Polygonaceae;
- 34.4 ~~(98)~~ (99) *Polytaenia nuttallii* DC., Apiaceae, prairie parsley;
- 34.5 ~~(99)~~ *Potamogeton vaginatus* Turcz., Potamogetonaceae;
- 34.6 ~~(100)~~ *Potamogeton vaseyi* Robbins, Potamogetonaceae;
- 34.7 ~~(101)~~ *Prenanthes crepidinea* Michx., Asteraceae;
- 34.8 ~~(102)~~ (100) *Pyrola minor* L., Pyrolaceae, small shinleaf;
- 34.9 (101) *Quercus bicolor*, swamp white oak;
- 34.10 ~~(103)~~ (102) *Ranunculus lapponicus* L., Ranunculaceae, Lapland buttercup;
- 34.11 ~~(104)~~ *Rhynchospora fusca* (L.) Ait. f., Cyperaceae;
- 34.12 ~~(105)~~ (103) *Rorippa sessiliflora* (Nutt.) A.S. Hitchc., Brassicaceae,
- 34.13 sessile-flowered yellow cress;
- 34.14 ~~(106)~~ *Rudbeckia triloba* L., Asteraceae;
- 34.15 (104) *Rubus multiflorus*, Kinnickinnick dewberry;
- 34.16 (105) *Rubus quiescens*, Prince Edward Island blackberry;
- 34.17 (106) *Rubus vermontanus*, Vermont blackberry;
- 34.18 (107) *Ruellia humilis*, wild petunia;
- 34.19 ~~(107)~~ (108) *Ruppia maritima* L., Ruppiaceae cirrhus, spiral ditchgrass;
- 34.20 ~~(108)~~ (109) *Salix maccalliana* Rowlee, Salicaceae, McCalla's willow;
- 34.21 ~~(109)~~ *Salix pellita* (Anderss.) Anderss. ex Schneid., Salicaceae;
- 34.22 (110) *Salix pseudomonticola*, false mountain willow;

- 35.1 ~~(110)~~ (111) *Sanicula trifoliata* Biekn., ~~Apiaceae~~, beaked snakeroot;
- 35.2 (112) *Saxifraga paniculata*, encrusted saxifrage;
- 35.3 ~~(111)~~ (113) *Schedonnardus paniculatus* (Nutt.) Trel., ~~Poaceae~~, tumble grass;
- 35.4 ~~(112)~~ *Scirpus clintonii* Gray, ~~Cyperaceae~~;
- 35.5 ~~(113)~~ *Senecio indecorus* Greene, ~~Asteraceae~~;
- 35.6 (114) *Shepherdia canadensis*, soapberry;
- 35.7 ~~(114)~~ (115) *Silene drummondii* Hook., ~~Caryophyllaceae~~ ssp. drummondii,
- 35.8 Drummond's campion;
- 35.9 ~~(115)~~ (116) *Solidago mollis* Bartl., ~~Asteraceae~~, soft goldenrod;
- 35.10 ~~(116)~~ *Solidago sciaphila* Steele, ~~Asteraceae~~;
- 35.11 ~~(117)~~ *Sparganium glomeratum* Laest., ~~Sparganiaceae~~;
- 35.12 ~~(118)~~ (117) *Stellaria longipes* Goldie, ~~Caryophyllaceae~~ ssp. longipes, long-stalked
- 35.13 chickweed;
- 35.14 ~~(119)~~ *Symphoricarpos orbiculatus* Moench, ~~Caprifoliaceae~~;
- 35.15 (118) *Symphyotrichum shortii*, Short's aster;
- 35.16 (119) *Taenidia integerrima*, yellow pimpernel;
- 35.17 (120) *Tephrosia virginiana* (L.) Pers., ~~Fabaceae~~, goat's rue;
- 35.18 (121) *Thaspium barbinode*, hairy-jointed meadow-parsnip;
- 35.19 ~~(121)~~ (122) *Torreyochloa pallida* (Torr.) Church, ~~Poaceae~~, Torrey's mannagrass;
- 35.20 ~~(122)~~ (123) *Trillium nivale* Riddell, ~~Liliaceae~~, snow trillium;
- 35.21 ~~(123)~~ *Trimorpha acris* (L.) Nesom var. *asteroides* (Anderz. ex Bess.) Nesom,
- 35.22 ~~Asteraceae~~;

- 36.1 ~~(124) *Trimorpha lonchophylla* (Hook.) Nesom, Asteraceae;~~
- 36.2 ~~(125) (124) *Triplasis purpurea* (Walt.) Champm., Poaceae var. *purpurea*, purple~~
- 36.3 sandgrass;
- 36.4 ~~(126) *Tsuga canadensis* (L.) Carr., Pinaceae;~~
- 36.5 ~~(127) *Utricularia purpurea* Walt., Lentibulariaceae;~~
- 36.6 ~~(128) *Utricularia resupinata* B.D. Greene ex Bigelow, Lentibulariaceae;~~
- 36.7 ~~(125) *Trisetum spicatum*, spike trisetum;~~
- 36.8 ~~(129) (126) *Verbena simplex* Lehm., Verbenaceae, narrow-leaved vervain;~~
- 36.9 ~~(130) *Vitis aestivalis* Michx., Vitaceae;~~
- 36.10 ~~(131) (127) *Waldsteinia fragarioides* (Michx.) Tratt., Rosaceae var. *fragarioides*,~~
- 36.11 barren strawberry;
- 36.12 ~~(132) *Woodsia alpina* (Bolton) Gray, Dryopteridaceae; and~~
- 36.13 ~~(128) *Woodsia oregana* ssp. *cathcartiana*, Oregon woodsia;~~
- 36.14 ~~(129) *Xanthisma spinulosum* var. *spinulosum*, cutleaf ironplant; and~~
- 36.15 ~~(133) (130) *Xyris montana* Ries, Xyridaceae, montane yellow-eyed grass.~~

36.16 **6134.0400 LICHENS; MOSSES; LIVERWORTS; FUNGI.**

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

36.18 A. Endangered:

- 36.19 (1) ~~*Buellia nigra* (Fink) Sheard;~~
- 36.20 (2) ~~*Caloplaca parvula* Wetm.;~~
- 36.21 (3) (2) ~~*Dermatocarpon moulinsii* (Mont.) Zahlbr.;~~
- 36.22 (4) (3) ~~*Leptogium apalachense* (Tuck.) Nyl.;~~

- 37.1 ~~(5)~~ (4) *Lobaria scrobiculata* (~~Scop.~~) DC;
- 37.2 ~~(6)~~ (5) *Parmelia stictica* (~~Del.~~) Nyl.;
- 37.3 ~~(7)~~ (6) *Pseudocyphellaria crocata* (~~L.~~) Vain; and
- 37.4 ~~(8)~~ (7) *Umbilicaria torrefacta* (~~Lightf.~~) Schrad.

37.5 B. Threatened:

- 37.6 (1) *Allocetraria oakesiana*;
- 37.7 (2) *Arthrorhaphis citronella*, golden-dot lichen;
- 37.8 ~~(1)~~ *Cetraria oakesiana* Tuck.;
- 37.9 ~~(2)~~ (3) *Coccocarpia palmicola* (~~Sprengel~~) Arvid. & Galloway; and
- 37.10 (4) *Lecanora epanora*, a species of rim lichen;
- 37.11 ~~(3)~~ (5) *Parmelia stuppea* Tayl.;
- 37.12 (6) *Peltula bolanderi*, Bolander's peltula lichen;
- 37.13 (7) *Protopannaria pezizoides*, brown-gray moss-shingle lichen;
- 37.14 (8) *Ramalina roesleri*, frayed ramalina lichen; and
- 37.15 (9) *Usnea mutabilis*, bloody beard lichen.

37.16 C. Of special concern:

- 37.17 (1) *Ahtiana aurescens*;
- 37.18 (2) *Amygdalaria panaeola*, powdery almond lichen;
- 37.19 ~~(1)~~ (3) *Anaptychia setifera* crinalis Ras;
- 37.20 (4) *Arctoparmelia centrifuga*, concentric ring lichen;
- 37.21 (5) *Arctoparmelia subcentrifuga*, a species of ring lichen;
- 37.22 (6) *Bryoria fuscescens*, pale-footed horsehair lichen;

- 38.1 (7) *Buellia nigra*, black disk lichen;
- 38.2 (8) *Caloplaca stellata*, a species of fire-dot lichen;
- 38.3 ~~(2) *Cetraria aurescens* Tuck.;~~
- 38.4 ~~(3)~~ (9) *Cladonia pseudorangiformis* Asah.;
- 38.5 ~~(4) *Lobaria quercizans* Michx.;~~
- 38.6 (10) *Heterodermia obscurata*, orange-tinted fringe lichen;
- 38.7 (11) *Melanelia subolivacea*, brown-eyed camouflage lichen;
- 38.8 (12) *Menegazzia terebrata*, port-hole lichen;
- 38.9 (13) *Ochrolechia androgyna*, powdery saucer lichen;
- 38.10 ~~(5)~~ (14) *Peltigera venosa* (L.) Hoffm.; and
- 38.11 (15) *Platismatia glauca*, ragbag lichen;
- 38.12 (16) *Ramalina thrausta*, Angel's hair lichen;
- 38.13 (17) *Stereocaulon pileatum*, pixie foam lichen;
- 38.14 ~~(6)~~ (18) *Sticta fuliginosa* (Dicks.) Aeh.;
- 38.15 (19) *Thelocarpon epibolum*, a species of thelocarpon lichen;
- 38.16 (20) *Usnea longissima*, Methusela's beard lichen; and
- 38.17 (21) *Usnea rubicunda*, red beard lichen.

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

38.21 A. Endangered:

- 38.22 (1) *Bryoxiphium norvegicum*, sword moss;

39.1 (2) ~~*Schistostegia*~~ *Schistostega pennata* (Hedw.) Web. & Mohr., luminous
 39.2 moss; and

39.3 (3) *Splachnum rubrum*, red parasol moss.

39.4 B. Threatened: ~~none~~:

39.5 (1) *Cirriphyllum piliferum*, hair-pointed feather moss;

39.6 (2) *Cryptocolea imbricata*, hidden perianth liverwort;

39.7 (3) *Cynodontium schisti*, mowed mosquito moss;

39.8 (4) *Lescuraea saxicola*, lustrous bow moss;

39.9 (5) *Sphagnum compactum*, cushion peat moss;

39.10 (6) *Sphagnum lescurii*, red twisted peat moss; and

39.11 (7) *Trichocolea tomentella*, down liverwort.

39.12 C. Of special concern:

39.13 (1) ~~*Bryoxiphium norvegicum* (Brid.) Mitt.; and~~

39.14 (2) ~~*Tomenthypnum falcifolium* (Ren ex. Nich.) Tuom.~~

39.15 (1) *Aphanorrhegma serratum*, lidden earth moss;

39.16 (2) *Atrichum crispum*, wave-leaved crane's-bill moss;

39.17 (3) *Atrichum tenellum*, little saw moss;

39.18 (4) *Aulacomnium androgynum*, bud-headed thread moss;

39.19 (5) *Aulacomnium heterostichum*, differential branched crease capsule moss;

39.20 (6) *Bryum cyclophyllum*, egg-leaf true moss;

39.21 (7) *Buxbaumia aphylla*, bug-on-stick moss;

39.22 (8) *Cyrto-hypnum pygmaeum*, pygmy plume moss;

- 40.1 (9) *Encalypta procera*, tall extinguisher moss;
- 40.2 (10) *Frullania selwyniana*, Selwyn's ear-leaf liverwort;
- 40.3 (11) *Heterocladium dimorphum*, spaced-out tangle moss;
- 40.4 (12) *Hyophila involuta*, rolled-leaf wet-ground moss;
- 40.5 (13) *Jaffueliobryum wrightii*, Wright's blunt-leaved true moss;
- 40.6 (14) *Meesia uliginosa*, swan moss;
- 40.7 (15) *Pogonatum urnigerum*, urn-bearing hair moss;
- 40.8 (16) *Thelia hirtella*, nipple moss; and
- 40.9 (17) *Tortella inclinata*, shortleaf chalk moss.

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

40.11 A. Endangered:

- 40.12 ~~(1) *Fuscoboletinus weaverae* A.H. Smith & Shaffer;~~
- 40.13 ~~(2) (1) *Psathyrella cystidiosa* (Peck) A.H. Smith; and~~
- 40.14 ~~(3) (2) *Psathyrella rhodospora* Weaver & A.H. Smith.; and~~
- 40.15 (3) *Suillus weaverae*.

40.16 B. Threatened: none.

40.17 C. Of special concern:

- 40.18 (1) *Boletus subcaerulescens*, a species of Porcini mushroom;
- 40.19 ~~(1) (2) *Laccaria trullisata* (Ellis) Peck;~~
- 40.20 ~~(2) (3) *Lactarius fuliginellus* A.H. Smith & Hesler; and~~
- 40.21 ~~(3) (4) *Lysurus cruciatus* (Lepr. & Mont.) Lloyd.; and~~
- 40.22 (5) *Sarcosoma globosum*, a species of cup fungus.