

DRAFT AMENDMENTS TO MINNESOTA'S LIST OF
ENDANGERED, THREATENED,
AND SPECIAL CONCERN SPECIES

(VASCULAR PLANTS)

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Minnesota Department of Natural Resources

Division of Ecological Services

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This document contains the Minnesota Department of Natural Resources' ("DNR") draft amendments to Minnesota's List of Endangered, Threatened, and Special Concern Species ("List"). The DNR maintains the List under the authority of Minnesota's Endangered and Threatened Species Statute (Minnesota Statutes, Section 84.0895; "MESA"). The List is codified as Minnesota Rules, Chapter 6134. Amendments to the List will be made in accordance with the provisions of the Minnesota Administrative Procedures Act (Minnesota Statutes, Chapter 14).

The DNR wishes to provide you with an opportunity to comment on these draft amendments early in the administrative rulemaking process. Later in administrative rulemaking, you will have additional opportunities to review and comment on amendments to the List.

Copies of this document and related materials are available at <http://www.dnr.state.mn.us/ets/rulesrevision.html>, or by contacting the DNR (above).

NUMERICAL SUMMARY OF DRAFT AMENDMENTS

| | CURRENT LIST | | | | TOTAL CHANGES | DRAFT AMENDMENTS | | | | | |
|-------------------------|--------------|------------|------------|------------|------------------|--|--|--------------------------|-----------------------------------|------------|----------------------------------|
| | | | | | | CHANGES IN PROTECTED (E/T) STATUS | | | CHANGES IN LISTED (E/T/SC) STATUS | | |
| | E | T | SC | TOTAL | | PROTECTION REMOVED (E/T to SC/N) | PROTECTIO N ADDED (SC/N to E/T) | PROTECTION UNAFFECTED | DELISTED | LISTED | NO EFFECT IN LISTED STATUS |
| ALL SPECIES | 96 | 101 | 242 | 439 | 273 | 16 | 93 | 164 | 25 | 170 | 78 |
| VASCULAR PLANTS | 57 | 66 | 133 | 256 | 130 | 9 | 64 | 57 | 9 | 65 | 56 |
| LICHENS | 8 | 3 | 6 | 17 | 24 | 1 | 2 | 21 | 1 | 22 | 1 |
| MOSSES AND LIVERWORTS | 1 | 0 | 2 | 3 | 27 | 0 | 3 | 24 | 0 | 26 | 1 |
| FUNGI | 3 | 0 | 3 | 6 | 2 | 0 | 0 | 2 | 0 | 2 | 0 |
| MAMMALS | 0 | 1 | 14 | 15 | 7 | 0 | 1 | 6 | 1 | 5 | 1 |
| BIRDS | 7 | 6 | 15 | 28 | 12 | 2 | 1 | 9 | 3 | 6 | 3 |
| REPTILES AND AMPHIBIANS | 2 | 3 | 9 | 14 | 3 | 0 | 1 | 2 | 1 | 1 | 1 |
| FISH | 0 | 1 | 20 | 21 | 5 | 0 | 0 | 5 | 0 | 5 | 0 |
| MUSSELS | 8 | 12 | 5 | 25 | 12 | 0 | 2 | 10 | 2 | 4 | 6 |
| SNAILS | 2 | 3 | 0 | 5 | 6 | 3 | 1 | 2 | 3 | 3 | 0 |
| JUMPING SPIDERS | 0 | 0 | 8 | 8 | 4 | 0 | 1 | 3 | 1 | 2 | 1 |
| LEAFHOPPERS | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 0 | 2 | 0 |
| DRAGONFLIES | 0 | 0 | 2 | 2 | 8 | 0 | 0 | 8 | 0 | 8 | 0 |
| BUTTERFLIES AND MOTHS | 5 | 3 | 8 | 16 | 6 | 0 | 1 | 5 | 0 | 3 | 3 |
| CADDISFLIES | 1 | 0 | 12 | 13 | 23 | 0 | 15 | 8 | 4 | 16 | 3 |
| TIGER BEETLES | 2 | 3 | 4 | 9 | 2 | 1 | 1 | 0 | 0 | 0 | 2 |

EXPLANATION OF FORMAT

Scientific Name: All scientific names used in this document reflect current scientific knowledge regarding the relationships between species. Where the scientific name of a listed species has changed since the last revision of the List, a parenthetical notation in the form of “(Δ to *Xxx xxx*)” indicates that a change in the scientific name used in Minnesota Rules, Chapter 6134 accompanies its draft change in status. Page 34 lists cases in which a species’ scientific name will be changed without a change in its status. Page 35 identifies the references that provide the source of scientific names used in the List.

Common Name: Although common names are not standardized in general use, they are provided in this document for convenience. However, the DNR intends to remove common names from Minnesota Rules, Chapter 6134. Common names may continue to appear in documents designed for use by the general public.

Current Status/Draft Status: The following abbreviations are used in the Current Status and the Draft Status columns. For legal definitions, see MESA.

- E** Endangered (threatened with extinction throughout all or a significant portion of its range within Minnesota; protected under MESA; location records maintained by DNR)
- T** Threatened (likely to become endangered within the foreseeable future throughout all or a significant portion of its range within Minnesota; protected under MESA; location records maintained by DNR)
- SC** Special Concern (extremely uncommon in Minnesota, or with unique or highly specific habitat requirements and deserving careful monitoring of its status, or on the periphery of its range, or once threatened or endangered but now have increasing or protected, stable populations; *not* protected under MESA; location records maintained by DNR)
- N** No Legal Status (location records maintained by DNR, in most cases)
- N (X)** No Legal Status, and probably extirpated from Minnesota (location records maintained by DNR, in most cases)
- No Legal Status (location records *not* yet maintained by DNR)

Explanation: The explanation column contains up to three lines of information supporting each draft change in status. The explanation for each species will be expanded upon in a Statement of Need and Reasonableness that will be available later in the administrative rulemaking process.

The first two lines of each species’ explanation may include a description of the species’ distribution in the state, its habitat, and the completeness of the survey effort for the species. For any species about which information is maintained by the Minnesota DNR’s Natural Heritage Information System (NHIS), these two lines usually end with “(# EOs),” the number of Element Occurrences (i.e., areas in which a local population of the species has been documented to occur in the past or at present) for which the NHIS has records. Note that some EOs may no longer support the species. If the DNR does not currently maintain records on the species, the explanation will, in most cases, either describe the known location/s or include “# sites represented by collections.” This is an estimate of the number of local populations for which museums or other biological collections are known to have specimens in their holdings.

The final line of each explanation (“Adjacent SRank/Status:”) summarizes the conservation status of the species in the states and provinces that are adjacent to Minnesota (WI = Wisconsin; IA = Iowa; SD = South Dakota; ND = North Dakota; MB = Manitoba; ON = Ontario). A dash (“-”) indicates that the species is not known to occur in that state or province. “US” indicates that the species has the indicated status under the federal Endangered Species Act.

“**SRank**” (Subnational Status Rank) is assigned by each state or province, using standardized assessment methodology developed by NatureServe, the international network of Natural Heritage Programs. SRank is expressed with the following numerical rankings:

- S1 = critically imperiled
- S2 = imperiled
- S3 = vulnerable to extirpation or extinction
- S4 = apparently secure
- S5 = demonstrably widespread, abundant, and secure

Combined codes (e.g., “S3S4”) indicate that the numerical ranking falls between the two ranks. Additional codes used in this field may include:

- S#? = SRank is inexact
- SNR = present in the state or province, but no SRank is available
- SNA = not applicable because species is not a suitable candidate for conservation action
- SU = unranked due to lack of information or conflicting information
- SH = possibly extirpated (“historical”)

In Minnesota, SRank reflects Current Status. Thus, E = S1, T = S2, and SC = S3.

“**Status**” indicates the legal status (if any) of the species within the state or province, using the same codes as those used in the Current Status and Draft Status fields. Note that SD and ND do not maintain state lists, and no legal status is available for those states. MB and ON rarely assign a provincial status to a species. A “C” after “US:” indicates that the species is a candidate for federal status. A comment at the end of the final line reading “(1996: X to X)” indicates that the species’ status in Minnesota was changed in 1996 (the most recent revision of the List) as noted.

VASCULAR PLANTS

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Current Status</u> | <u>Draft Status</u> | <u>Explanation</u> |
|---|------------------------------|-----------------------|---------------------|--|
| <i>Adlumia fungosa</i> | climbing fumatory | -- | SC | Recent surveys have discovered 3 locations of this vine in northeastern MN; habitat is open, disturbed rock outcrops and sandy soils; extensive plant surveys conducted within range. Adjacent SRank/Status: WI:S2/SC; IA:SNR/-; SD:-; ND:-; MB:SU; ON:S4 |
| <i>Adoxa moschatellina</i> | moschatel | SC | N | Many recently confirmed populations in southeast and northeast MN. (138 EOs) Adjacent SRank/Status: WI:S2/T; IA:S3/SC; SD:S3; ND:-; MB:S1?; ON:S1 |
| <i>Agrostis geminata</i> | twin bentgrass | SC | N | No longer a recognized taxon. (12 EOs) |
| <i>Agrostis hyemalis</i> | ticklegass | N | E | Originally known from a single 1902 collection in Winona County; rediscovered at a single Fillmore County sand prairie/savanna in 1996; most of the suitable habitat surveyed. (2 EOs) Adjacent SRank/Status: WI:SNR; IA:S4; SD:-; ND:-; MB:-; ON:S1 |
| <i>Alisma gramineum</i> | narrow-leaved water plantain | N | SC | Rare aquatic; of over 1,200 lakes surveyed, found on only 6 lakes in Otter Tail, Aitkin, Crow Wing, and Douglas counties; most of the known suitable habitat has been surveyed. (6 EOs) Adjacent SRank/Status: WI:SNR; IA:SU/SC; SD:SNR; ND:SNR; MB:S1; ON:S3S4 |
| <i>Allium cernuum</i> | nodding wild onion | T | SC | Some large southeastern MN populations, but still vulnerable to habitat degradation or loss; forest habitat in MN somewhat more secure than prairie habitat in rest of range. (73 EOs) Adjacent SRank/Status: WI:SNR; IA:S3/T; SD:SNR; ND:-; MB:-; ON:S2 |
| <i>Allium schoenoprasum</i> var. <i>sibiricum</i> (Δ to <i>Allium schoenoprasum</i>) | wild chives | T | E | Known only from small pop'ns on moist shoreline bedrock habitat at Jay Cook SP and along L. Superior; fragile habitat is easily threatened; extensive surveys have been conducted. (10 EOs) Adjacent SRank/Status: WI:SNR; IA:-; SD:-; ND:-; MB: S4?; ON: S4 (1996: SC to T) |
| <i>Arabis laevigata</i> | smooth rock-cress | N | SC | Occurs in small populations mostly restricted to rich, rocky, bluffland slopes in 5 southeastern counties; surveys have been conducted in most of the known suitable habitat. (24 EOs) Adjacent SRank/Status: WI:SNR; IA:S3; SD:SNR; ND:-; MB:-; ON:S5 |
| <i>Arisaema dracontium</i> | green dragon | N | T | Restricted to southeastern floodplain forests; vulnerable to habitat degradation or loss; surveys have been conducted in most of the known suitable habitat. (32 EOs) Adjacent SRank/Status: WI:SNR; IA:S4; SD:-; ND:-; MB:-; ON:S3 |
| <i>Aristida longespica</i> var. <i>geniculata</i> | spiked needlegrass | N | E | Recently discovered in 3-mile-dia. area of Anoka Sand Plain; species is not easily missed; early-successional, sandy habitat has been well-surveyed, and is rapidly being lost. (4 EOs) Adjacent SRank/Status: WI:SNR; IA:SNR; SD:SU; ND:-; MB:-; ON:S2 |
| <i>Aristida tuberculosa</i> | sea-beach needlegrass | SC | T | Found only in east-central and southeast MN unstable sand, sand prairie, and savanna habitat, which is vulnerable to disturbance and destruction; range has been well-surveyed. (33 EOs) Adjacent SRank/Status: WI:SNR; IA:S3; SD:-; ND:-; MB:-; ON:- |
| <i>Asclepias amplexicaulis</i> | clasping milkweed | SC | T | Southeast MN sand prairie/savanna habitat rare and vulnerable to degradation and loss; populations always small; most of the known suitable habitat has been surveyed. (31EOs) Adjacent SRank/Status: WI:SNR; IA:S4; SD:-; ND:-; MB:-; ON:- |
| <i>Aster shortii</i> (Δ to <i>Symphotrichum shortii</i>) | Short's aster | T | SC | Found on wooded slopes in 3 southeastern MN counties; number of known locations doubled shortly after the 1996 status change; easily overlooked due to late flowering date. (25 EOs) Adjacent SRank/Status: WI:SNR; IA:S4; SD:-; ND:-; MB:-; ON:S4 (1996: -- to T) |

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Current Status</u> | <u>Draft Status</u> | <u>Explanation</u> |
|---|------------------------|-----------------------|---------------------|--|
| <i>Azolla mexicana</i> | Mexican mosquito-fern | -- | SC | Floating fern ally restricted to Miss. River backwaters; vulnerable to water quality impairment; approx. 10 sites represented by collections; surveys incomplete. Adjacent SRank/Status: WI:SNR; IA:S3; SD:-; ND:-; MB:-; ON: - |
| <i>Bacopa rotundifolia</i> | water-hyssop | SC | T | Restricted to rainwater pools in bedrock outcrops of southwest MN, a habitat that is scarce and threatened by conflicting uses; extensive surveys have been conducted. (21 EOs) Adjacent SRank/Status: WI:-; IA:S3; SD:SNR; ND:SNR; MB:-; ON: - |
| <i>Berula erecta</i> | wild parsnip | -- | SC | Sparsely distributed in rare and vulnerable seepage and fen habitat across southern MN; surveys incomplete; approximately 19 sites represented by collections. Adjacent SRank/Status: WI:SNR; IA:S2/T; SD:SNR; ND:SNR; MB:-; ON:SNR |
| <i>Bidens discoidea</i> | bur-marigold | N | SC | Collections scattered across central and northeastern MN in emergent marsh, rich fen, river beach and lakeshore habitats; surveys extensive; only 4 sites documented since 1953. (16 EOs) Adjacent SRank/Status: WI:SNR; IA:S3; SD:-; ND:-; MB:-; ON:S4 |
| <i>Botrychium acuminatum</i> | pointed moonwort | N | T | Known from only 4 widely distributed sites with sandy or gravelly soil within 100-mi-dia area of St. Louis, Lake, and Cook Cos.; surveys for moonworts relatively extensive. (5 EOs) Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:-; ON:S1 |
| <i>Botrychium ascendens</i> | upward-lobed moonwort | N | E | Discovered in 1998 at the edge of two tailings ponds near Trommald, Crow Wing Co.; disjunct from western pop'n; threatened by loss of early successional habitat; survey extensive. (2 EOs) Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:-; ON:SH |
| <i>Botrychium lanceolatum</i> (Δ to <i>B. lanceolatum</i> subsp. <i>angustisegmentum</i>) | triangle moonwort | T | SC | Never abundant, but consistent at many recently documented locations widely distributed in northern hardwood forests of east-central and northeast MN. (117 EOs) Adjacent SRank/Status: WI:S3; IA:-; SD:-; ND:-; MB:-; ON:S3 (1996: -- to T) |
| <i>Botrychium lineare</i> | narrowleaf grapefern | -- | E | Discovered at a single location at edge of tailings pond near Trommald, Crow Wing County, in 2005; disjunct from western pop'n; threatened by habitat loss; surveys extensive. (1 EO) Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:-; ON:-; US:C |
| <i>Botrychium mormo</i> | goblin fern | SC | T | Known from mesic forest sites in north-central MN; all sites threatened, and many sites already extirpated due to earthworm infestation, which destroys required habitat conditions. (167 EOs) Adjacent SRank/Status: WI:S3/E; IA:-; SD:-; ND:-; MB:-; ON:- |
| <i>Botrychium oneidense</i> | blunt-lobed grapefern | E | T | Recent, well-documented distribution at margin of small, forested wetlands in east-central MN, although few plants at any site; MN at edge of range; extensive surveys conducted. (32 EOs) Adjacent SRank/Status: WI:S2/SC; IA:-; SD:-; ND:-; MB:-; ON:S3 (1996: -- to E) |
| <i>Botrychium pallidum</i> | pale moonwort | E | SC | Recent, well-documented distribution in woodland edges of central and northeast MN, although very few plants at most sites; surveys are likely to find more locations. (42 EOs) Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:S1; ON:S1 (1996: -- to E) |
| <i>Botrychium rugulosum</i> | St. Lawrence grapefern | T | SC | Recent, well-documented broad distribution in coniferous and deciduous forests of central and northeast MN; MN at range margin. (60 EOs) Adjacent SRank/Status: WI:S2/SC; IA:-; SD:-; ND:-; MB:-; ON:S2 (1996: -- to T) |

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Current Status</u> | <u>Draft Status</u> | <u>Explanation</u> |
|---|-----------------------|-----------------------|---------------------|--|
| <i>Botrychium spathulatum</i> | spathulate moonwort | N | E | Discovered at a single location at edge of tailings pond near Trommald, Crow Wing County, in 1998; disjunct from western pop'n; threatened by habitat loss; surveys extensive. (1 EO) Adjacent SRank/Status: WI:S1/SC; IA:-; SD:-; ND:-; MB:-; ON:S1 |
| <i>Cacalia muehlenbergii</i> (Δ to <i>Arnoglossum muehlenbergii</i>) | great Indian plantain | N | T | Extensive surveys have been conducted for this conspicuous species; limited to floodplain meadows and open forests in 3 southeastern MN counties; vulnerable to habitat loss. (14 EOs) Adjacent SRank/Status: WI:S2S3/SC; IA:S4; SD:-; ND:-; MB:-; ON:- |
| <i>Calamagrostis purpurascens</i> | purple reedgrass | SC | E | Documented at only two cliff locations since 1938; both are above border lakes in BWCA; threatened by disturbance of fragile habitat; surveys of habitat have been extensive. (4 EOs) Adjacent SRank/Status: WI:-; IA:-; SD:SNR; ND:-; MB: S2; ON:S1 (1996: -- to SC) |
| <i>Callitriche heterophylla</i> | larger water-starwort | SC | T | Three locations since 1956; grows in southwest MN bedrock pools and small northeast MN lakes; southwest sites threatened by habitat loss; surveys have been extensive. (7 EOs) Adj. SRank/Status: WI:S1/T; IA:S2/SC; SD:SNR; ND:-; MB:S2; ON:S2? (1996: -- to SC) |
| <i>Cardamine pratensis</i> var. <i>palustris</i> (Δ to <i>Cardamine pratensis</i> var. <i>pratensis</i>) | cuckoo-flower | N | T | Known from widely scattered lake, marsh, fen, and streamside sites in north and north-central MN; only two locations since 1963; survey effort extensive. (5 EOs) Adjacent SRank/Status: WI:S3/SC; IA:-; SD:-; ND:-; MB:S4S5; ON:S5 |
| <i>Carex careyana</i> | Carey's sedge | T | E | Restricted to high-quality wet/mesic maple-basswood forests in southeastern MN; threatened by habitat loss and degradation; methodical surveys have been conducted. (7 EOs) Adjacent SRank/Status: WI:S1/T; IA:S2/SC; SD:-; ND:-; MB:-; ON:S2 (1996: -- to T) |
| <i>Carex crus-corvi</i> | raven's foot sedge | SC | N (X) | Not collected in state since 1926; most of the known suitable habitat (wet areas along Mississippi River in southeastern MN) has been recently surveyed. (2 EOs) Adjacent SRank/Status: WI:S1/E; IA:S4; SD:-; ND:-; MB:-; ON:S1 (1996: -- to SC) |
| <i>Carex grayi</i> | Gray's sedge | N | SC | Scattered in southeast and central MN; floodplain forest habitat threatened by degradation and loss; extensive surveys have been conducted. (26 EOs) Adjacent SRank/Status: WI:SNR; IA:S4; SD:-; ND:-; MB:-; ON:S4 |
| <i>Carex hookeriana</i> | Hooker's sedge | -- | SC | First discovered in MN in 2005; known from a single site of oak woodland edge habitat in Becker County; surveys are incomplete. Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:SNR; MB:S1; ON:SNA |
| <i>Carex media</i> (Δ to <i>Carex norvegica</i> subsp. <i>inferalpina</i>) | intermediate sedge | N | SC | Restricted to small populations on mossy cliffs and streambanks of northeast MN; many sites vulnerable to disturbance; most known suitable habitat has been recently surveyed. (46 EOs) Adjacent SRank/Status: WI:S2/E; IA:S1/SC; SD:SNR; ND:-; MB:S5; ON:S4 |
| <i>Carex muskingumensis</i> | Muskingum sedge | N | SC | Scattered populations in Mississippi River floodplain forest of 3 southeast MN counties; threatened by habitat damage and conversion; surveys mostly complete. (23 EOs) Adjacent SRank/Status: WI:SNR; IA:S4; SD:-; ND:-; MB:-; ON:S2 |
| <i>Carex novae-angliae</i> | New England sedge | N | SC | 2002 discovery in moist, deciduous forest habitats in southern Lake county is western range extension; surveys are incomplete. (11 EOs) Adjacent SRank/Status: WI:SH/SC; IA:-; SD:-; ND:-; MB:-; ON:S3 |
| <i>Carex ormostachya</i> | necklace spike sedge | N | SC | Sparsely distributed small populations in dry-mesic hardwood forests of northeastern MN; vulnerable to habitat modification; surveys are incomplete. (16 EOs) Adjacent SRank/Status: WI:SNR; IA:-; SD:-; ND:-; MB:-; ON:S4 |

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Current Status</u> | <u>Draft Status</u> | <u>Explanation</u> |
|---|------------------------|-----------------------|---------------------|---|
| <i>Carex rossii</i> | Ross' sedge | N | T | Known from 5 small populations on dry cliff top or rock outcrop habitats in northeastern MN; vulnerable to habitat disturbance; western disjunct; surveys are nearly complete. (6 EOs) Adjacent SRank/Status: WI:SNR; IA:-; SD:S4; ND:SNR; MB:S5; ON:S2 |
| <i>Carex supina</i> var. <i>spaniocarpa</i> (Δ to <i>Carex supina</i> subsp. <i>spaniocarpa</i>) | weak arctic sedge | SC | E | Only record is 1936 collection from foot of cliff by Clearwater Lake, BWCA; rare but present nearby in Ontario and Manitoba; surveys are incomplete. (1 EO) Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:S2?; ON:S1 (1996: -- to SC) |
| <i>Carex woodii</i> | Wood's sedge | SC | N | Regularly found in southeastern and parts of central MN, often in large populations. (99 EOs) Adjacent SRank/Status: WI:SNR; IA:S3; SD:-; ND:-; MB:SU; ON:S4 |
| <i>Claytonia caroliniana</i> | Carolina spring-beauty | SC | N | Common in hardwood forests in northeastern MN in large numbers. (155 EOs) Adjacent SRank/Status: WI:SNR; IA:SNR; SD:-; ND:-; MB:-; ON:S5 |
| <i>Commelina erecta</i> (Δ to <i>Commelina erecta</i> var. <i>deamiana</i>) | slender dayflower | -- | E | Known in MN from single site on private land at Kellogg-Weaver Dunes, Wabasha County; sand savanna habitat is very fragile; careful surveys of known habitat have been completed. Adjacent SRank/Status: WI:-; IA:S1/T; SD:SNR; ND:-; MB:-; ON:- |
| <i>Crataegus calpodendron</i> | pear hawthorn | -- | SC | Only collections documented since 1927 are from 3 sites in Rice and Wabasha Cos.; habitat at many historic metro area sites have been converted to other uses; extensive surveys conducted. Adjacent SRank/Status: WI:SNR; IA:SU; SD:-; ND:-; MB:-; ON:S4S5 |
| <i>Crataegus douglasii</i> | black hawthorn | T | SC | Found on gravelly stream banks and rocky summits near Lake Superior; most suitable habitat has been surveyed, but other locations likely to be found with additional work. (39 EOs) Adj. SRank/Status: WI:SNR; IA:-; SD:SNR; ND:SNR; MB:SNR; ON:S4 (1996: -- to T) |
| <i>Crotalaria sagittalis</i> | rattlebox | -- | SC | Natural sandy habitat in east-central MN is disappearing; some are in marginal, edge habitats; 3 sites represented by collections; 2 may have been introduced; surveys incomplete. Adjacent SRank/Status: WI:S1/SC; IA:S5; SD:SNR; ND:-; MB:-; ON:- |
| <i>Deparia acrostichoides</i> | silvery spleenwort | -- | SC | Restricted to moist deciduous bluffland forest in southeastern MN; most of the known suitable habitat has been surveyed; not likely overlooked; approx. 30 sites represented by collections. Adjacent SRank/Status: WI:SNR; IA:S3; SD:-; ND:-; MB:-; ON:S4 |
| <i>Deschampsia flexuosa</i> | slender hairgrass | SC | T | Only 2 locations documented since 1975; both populations are on fragile sandy soil near lakeshore; no additional locations found during extensive north shore surveys. (7 EOs) Adjacent SRank/Status: WI:S3/SC; IA:-; SD:-; ND:-; MB:-; ON:S5 |
| <i>Desmodium cuspidatum</i> var. <i>longifolium</i> | big tick-trefoil | SC | T | Only 9 southeast MN locations documented since 1946; populations mostly small; moist, oak forest habitat threatened by disturbance and loss; extensive surveys conducted. (16 EOs) Adjacent SRank/Status: WI:SNR; IA:SNR; SD:-; ND:-; MB:-; ON:SNR (1996: -- to SC) |
| <i>Desmodium nudiflorum</i> | stemless tick-trefoil | SC | T | Occurs in small populations in mesic oak forests of southeast and east-central MN; threatened by habitat disturbance and loss; extensive surveys have been conducted. (22 EOs) Adjacent SRank/Status: WI:SNR; IA:S3; SD:-; ND:-; MB:-; ON: S4 (1996: -- to SC) |
| <i>Diarrhena obovata</i> (Δ to <i>Diarrhena americana</i>) | American beakgrain | SC | E | Only MN location is fairly robust population under mature hardwood forest in Fillmore Co., but is threatened by disturbance; most of the known suitable habitat has been surveyed. (1 EO) Adjacent SRank/Status: WI:S2/E; IA:S3; SD:SH; ND:-; MB:-; ON:S1 (1996: -- to SC) |
| <i>Disporum trachycarpum</i> (Δ to <i>Prosartes trachycarpa</i>) | wartyfruit fairy bells | N | E | Discovered in 1999 on forested, north-facing slope above northern Cook County lake; vulnerable to disturbance of habitat; further surveys unlikely to find more locations. (1 EO) Adjacent SRank/Status: WI:-; IA:-; SD:SNR; ND:SNR; MB:S4; ON:SH |

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Current Status</u> | <u>Draft Status</u> | <u>Explanation</u> |
|---------------------------------|--------------------------|-----------------------|---------------------|--|
| <i>Draba cana</i> | hoary draba | N | E | Arctic disjunct recently discovered on small Lake Superior island; second population in BWCA; both populations small and localized; cool cliff habitat well surveyed. (2 EOs) Adjacent SRank/Status: WI:SNR; IA:-; SD:SNR; ND:-; MB:SU; ON:S4 |
| <i>Dryopteris marginalis</i> | marginal shield-fern | T | E | Known from only 2 southeastern MN locations on sandy soils in oak forest habitat. Despite extensive surveys in region, no new locations have been found. (2 EOs) Adjacent SRank/Status: WI:SNR; IA:S1/T; SD:-; ND:-; MB:-; ON:S5 |
| <i>Elatine triandra</i> | three stamened waterwort | N | T | Since 1979, confirmed at 13 locations in northeast MN and Minnesota River valley; surveys extensive, but not found in many apparently suitable sandy, shallow wetland habitats. (21 EOs) Adjacent SRank/Status: WI:S1/SC; IA:S1/SC; SD:SNR; ND:S1S2; MB:-; ON:S3 |
| <i>Eleocharis nitida</i> | neat spike-rush | T | SC | Many new locations in northeastern MN documented since 1995; habitat is meadows and other moist soils, often in human-disturbed habitats. (41 EOs) Adjacent SRank/Status: WI:S2/E; IA:-; SD:-; ND:-; MB:-; ON:S2 (1996: -- to T) |
| <i>Eleocharis robbinsii</i> | Robbins' spike-rush | N | T | Known from the shallow bays of boggy-shored lakes in northeast MN; not found in many seemingly suitable sites; habitat vulnerable to disturbance; surveys nearly complete. (14 EOs) Adjacent SRank/Status: WI:S3/SC; IA:-; SD:-; ND:-; MB:-; ON:S4 |
| <i>Gaylussacia baccata</i> | black huckleberry | -- | T | Extensive surveys of dry prairie/savanna habitat have been conducted; 6 recent sites represented by collections; all but one are from north metro area, where habitat is threatened. Adjacent SRank/Status: WI:SNR; IA:S1/T; SD:-; ND:-; MB:SNR; ON:S4 |
| <i>Geum laciniatum</i> | rough avens | N | SC | Restricted to small, sensitive sites on riverbanks, wet prairie, and wet meadows in 2 southeastern counties; most of the known suitable habitat has been surveyed. (11 EOs) Adjacent SRank/Status: WI:SNR; IA:S4; SD:-; ND:-; MB:-; ON:S4 |
| <i>Gymnocarpium robertianum</i> | limestone oak fern | -- | SC | Distinctive species found in MN on small populations on southeast algific slopes and northern conifer swamps; surveys incomplete; approx. 13 sites represented by collections. Adjacent SRank/Status: WI:S2/SC; IA:S2/SC; SD:-; ND:-; MB:S1; ON:S2 |
| <i>Gymnocladus dioica</i> | Kentucky coffee-tree | N | SC | Populations are small and localized, but well known; restricted to mesic forest habitat in south and southeast MN; threatened by habitat loss; little evidence of reproduction. (22 EOs) Adjacent SRank/Status: WI:S2/SC; IA:S4; SD:S2; ND:SNR; MB:-; ON:S2/T |
| <i>Hamamelis virginiana</i> | witch-hazel | SC | T | Scattered in oak-dominated bluff and ravine woodlands of southeast MN; some pop'ns small and/or localized; vulnerable to habitat modification; surveys have been thorough. (12 EOs) Adjacent SRank/Status: WI:SNR; IA:S3; SD:-; ND:-; MB:-; ON:S5 |
| <i>Helianthemum canadense</i> | Canada frostweed | N | SC | Restricted to east and southeast MN sand prairies and savannas that are vulnerable to degradation or loss; most of the known suitable habitat has been surveyed. (23 EOs) Adjacent SRank/Status: WI:SNR; IA:S4; SD:-; ND:-; MB:-; ON:S4 |
| <i>Hudsonia tomentosa</i> | beach-heather | SC | T | Restricted to a few sand dunes in southeast, central, northeast, and northwest MN; habitat is vulnerable to loss and/or destruction; most suitable habitat has been surveyed. (37 EOs) Adjacent SRank/Status: WI:SNR; IA:S1/E; SD:-; ND:S1; MB:S3; ON:S2S3 (1996: -- to SC) |
| <i>Huperzia appalachiana</i> | Appalachian fir-clubmoss | N | SC | Known from damp rocks, cliffs, and talus slopes in northeastern MN; found in a few small, localized populations; extensive surveys have been conducted. (23 EOs) Adjacent SRank/Status: WI:S1/SC; IA:-; SD:-; ND:-; MB:-; ON:S3? |

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Current Status</u> | <u>Draft Status</u> | <u>Explanation</u> |
|---|--|-----------------------|---------------------|--|
| <i>Hybanthus concolor</i> | green violet | N | E | Discovered in Winona County in 1999; 1 small, localized population in hardwood forest in narrow valley; vulnerable to habitat degradation; most suitable habitat surveyed. (1 EO) Adjacent SRank/Status: WI:SH/SC; IA:S2/T; SD:-; ND:-; MB:-; ON:S2 |
| <i>Juglans cinerea</i> | butternut | SC | E | Found with oak in scattered central and southeastern MN deciduous forests; disease threatens all adults; few healthy trees remain; surveys largely complete. (31 EOs) Adj. SRank/Status: WI:S3?; IA:SU; SD:-; ND:SNR; MB:SNA; ON:S3? (1996: -- to SC) |
| <i>Juncus marginatus</i> | marginated rush | SC | E | All MN populations are in acidic wet meadows in an intensively surveyed, rapidly-developing, one mile-dia. area of Anoka and Ramsey Cos.; rediscovered in MN in 1999. (13 EOs) Adjacent SRank/Status: WI:S2/SC; IA:S1/SC; SD:S2; ND:-; MB:-; ON:S2 (1996: -- to SC) |
| <i>Juncus subtilis</i> | creeping rush | N | E | Discovered in MN in 1998 in shallow, sandy bayshore area of a Cook Co. boundary waters lake; uncommon nearby in Ontario; vulnerable to disturbance; surveys extensive. (1 EO) Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:-; ON:S3 |
| <i>Leersia lenticularis</i> | catchfly grass | SC | T | Known only from Miss. River floodplain meadows and forests in far southeastern MN; few plants at any location; vulnerable to hydrologic changes; surveys largely complete. (11 EOs) Adjacent SRank/Status: WI:SNR; IA:S3; SD:-; ND:-; MB:-; ON:- |
| <i>Lespedeza leptostachya</i> | prairie bush clover | T | SC | Occurs on prairie slopes and bluffs in south-central and south-eastern MN; many sites protected and managed; at least 6 populations in the thousands; surveys largely complete. (56 EOs) Adjacent SRank/Status: WI:S2/E; IA:S3/T; SD:-; ND:-; MB:-; ON:-; US:T (1996: E to T) |
| <i>Linaria canadensis</i> | old field toadflax | N | SC | Found in rare sand prairie landscapes of east-central and southeast MN; habitat threatened by modification; extensive surveys have been completed. (26 EOs) Adjacent SRank/Status: WI:-; IA:S3; SD:-; ND:-; MB:-; ON:SNR |
| <i>Luzula parviflora</i> ssp. <i>melanocarpa</i> (Δ to <i>Luzula parviflora</i>) | small-flowered woodrush | SC | T | Known from limited distribution in Lake and Cook Counties; occurs as mostly small pop'ns in moist forested edges; many sites prone to disturbance; surveys extensive. (17 EOs) Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:S5; ON:S5 (1996: -- to SC) |
| <i>Minuartia dawsonensis</i> | rock sandwort | SC | T | Small, localized populations on scattered rocky ledges, outcrops, and hills in northwestern and southeastern MN; habitat vulnerable to disturbance or loss; surveys extensive. (25 EOs) Adjacent SRank/Status: WI:S1/SC; IA:-; SD:-; ND:S1; MB:S5; ON:S5 |
| <i>Myriophyllum heterophyllum</i> | broadleaf water-milfoil | N | SC | Only known MN location is Low Lake, Superior NF, where it is vulnerable to disturbance; at edge of continental range; surveys of over 1,200 lakes have been completed. (1 EO) Adjacent SRank/Status: WI:SNR; IA:S1/SC; SD:SNR; ND:SU; MB:-; ON:S4? |
| <i>Najas guadalupensis</i> subsp. <i>olivacea</i> | olive-seeded Guadalupe Island naiad | -- | SC | Since 1960, this Great Lakes endemic collected from the lakeshore of 4 Crow Wing Co. lakes; vulnerable to declines in water quality due to narrow pH requirements; surveys extensive. Adjacent SRank/Status: WI:SNR; IA:SNR; SD:-; ND:-; MB:SNR; ON:SU |
| <i>Orobanche fasciculata</i> | clustered broomrape | SC | T | Small populations found in scattered sand prairies in southeast, central, and northwest MN; habitat very local, threatened by conversion; surveys largely complete. (19 EOs) Adjacent SRank/Status: WI:S1/T; IA:S1/E; SD:SNR; ND:SNR; MB:S3S4; ON:S1 |
| <i>Orobanche ludoviciana</i> | Louisiana broomrape | SC | T | Most populations are small and restricted to sand prairie in western MN; habitat is rare and threatened by disturbance and loss; extensive surveys have been completed. (15 EOs) Adjacent SRank/Status: WI:S1/E; IA:SH/SC; SD:SNR; ND:SNR; MB:S2; ON:- |

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Current Status</u> | <u>Draft Status</u> | <u>Explanation</u> |
|---|---------------------------|-----------------------|---------------------|---|
| <i>Orobanche uniflora</i> | one-flowered broomrape | SC | T | Very small pop'ns in hardwood forests near foot of southeastern MN bluffs; confirmed at only 6 sites since 1967; threatened by habitat damage and loss; surveys largely complete. (13 EOs) Adjacent SRank/Status: WI:S3/SC; IA:S3; SD:SNR; ND:SH; MB:-; ON:S4 |
| <i>Oryzopsis canadensis</i> (Δ to <i>Piptatherum canadense</i>) | Canada mountain-ricegrass | N | T | Discovered in MN in 2003; in forest openings or along old trails in 3-mile-dia. area of southern Lake Co. and at 1 site in St. Louis Co.; threatened by succession; surveys extensive. (7 EOs) Adjacent SRank/Status: WI:S1/SC; IA:-; SD:-; ND:-; MB:S1; ON:S4 |
| <i>Panax quinquefolius</i> (Δ to <i>Panax quinquefolium</i>) | American ginseng | SC | T | Mesic hardwood forests species; well surveyed; collected for commercial and medicinal uses; recent studies indicate harvest is not sustainable; impacted by deer overpop'n. (274 EOs) Adjacent SRank/Status: WI:S4; IA:S3; SD:S1; ND:-; MB:-; ON:S2 |
| <i>Paronychia canadensis</i> | Canadian forked chickweed | T | E | All populations in 8-mile-dia. area of sandy soils in oak savanna along Root R.; threatened by habitat conversion and loss; extensive surveys have been completed. (9 EOs) Adjacent SRank/Status: WI:SNR; IA:S5; SD:-; ND:-; MB:-; ON:S1 (1996: -- to T) |
| <i>Phacelia franklinii</i> | Franklin's phacelia | SC | T | Western disjunct known from 115-mi-dia area of Lake/Cook Cos; in small populations associated with tip-ups and talus; threatened by habitat loss; surveys extensive. (9 EOs) Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:S5; ON:S2 (1996: -- to SC) |
| <i>Phegopteris hexagonoptera</i> | broad beech-fern | T | E | Restricted to small pop'ns in mesic hardwood forests in cool ravines of southeastern MN; only 1 new location since 1980; threatened by habitat disturbance; surveys largely complete. (6 EOs) Adjacent SRank/Status: WI:S2/SC; IA:S3; SD:-; ND:-; MB:-; ON:S3 |
| <i>Phlox maculata</i> | wild sweet William | -- | SC | Found in fens, wet meadows, and wet prairie remnants in southeastern MN; habitat threatened by disturbance; surveys incomplete; approximately 10 sites represented by collections. Adjacent SRank/Status: WI:-; IA:S4; SD:-; ND:-; MB:-; ON:SNA |
| <i>Plagiobothrys scouleri</i> | popcorn flower | -- | SC | Restricted to rock pools in quartzite outcrops in southwestern Minnesota; threatened by habitat loss; approximately 5 sites represented by collections; surveys incomplete. Adjacent SRank/Status: WI:-; IA:-; SD:SNR; ND:SNR; MB:S1; ON:SNA |
| <i>Platanthera flava</i> var. <i>herbiola</i> | tuberclad rein-orchid | E | T | Well distributed in north-central, central, and southeastern MN; 12 new locations since 2000; some large populations, some on protected lands; habitat loss remains a major threat. (41 EOs) Adjacent SRank/Status: WI:S2/T; IA:S2/E; SD:-; ND:-; MB:-; ON:S3 |
| <i>Poa alpina</i> | alpine bluegrass | N | E | Arctic disjunct known in MN from single Lake Superior population; rocky shore habitat vulnerable to disturbance; survey mostly complete. (1EO) Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:S5; ON:S4 |

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|---|--------------------------|-----------------------|---------------------|--|
| <i>Polygonum viviparum</i> (Δ to <i>Bistorta vivipara</i>) | alpine bistort | SC | T | Arctic disjunct found along moist shoreline rocks and shrubland of Lake Superior; vulnerable to habitat damage and loss; most of the known habitat has been surveyed. (14 EOs) Adjacent SRank/Status: WI:-; IA:-; SD:SNR; ND:-; MB:S4; ON:S5 |
| <i>Polystichum acrostichoides</i> | Christmas fern | T | E | Found on mesic forested slopes in southeastern MN; vulnerable to habitat degradation and destruction; surveys largely complete. (2 EOs) Adjacent SRank/Status: WI:S2/SC; IA:S4; SD:-; ND:-; MB:-; ON:S5 (1996: SC to T) |
| <i>Polystichum braunii</i> | Braun's holly fern | E | T | Occurs on rocky, forested cliffs and slopes in a 75-mile area of northeastern MN; most pop'ns small; vulnerable to disturbance and habitat destruction; extensive surveys completed. (11 EOs) Adjacent SRank/Status: WI:S3/T; IA:-; SD:-; ND:-; MB:-; ON:S3 |
| <i>Potamogeton bicupulatus</i> | snailseed pondweed | E | T | Known from 15 lakes widely distributed in east-central MN; 9 locations discovered since 1996; species has very specific water quality requirements. (14 EOs) Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:-; ON:S3S4 (1996: -- to E) |
| <i>Potamogeton oakesianus</i> | Oakes' pondweed | N | E | Discovered in MN in 1995; very small populations in 3 lakes within 50-mile-dia. area of St. Louis and Aitkin Counties; vulnerable to habitat degradation; surveys nearly complete. (3 EOs) Adjacent SRank/Status: WI:SNR; IA:-; SD:-; ND:-; MB:-; ON:S4 |
| <i>Potamogeton pulcher</i> | spotted pondweed | N | E | Known only from Colby Lake, Chisago County despite recent surveys of 1,200+ lakes; threatened by disturbance and habitat modification; surveys nearly complete. (1 EO) Adjacent SRank/Status: WI:S1/E; IA:-; SD:-; ND:-; MB:-; ON:SH |
| <i>Potamogeton vaginatus</i> (Δ to <i>Stuckenia vaginata</i>) | sheathed pondweed | SC | E | Since 1957, found in only 3 lakes in Itasca, Otter Tail, and Becker Counties; in all cases, threatened by disturbance and habitat degradation; surveys nearly complete. (5 EOs) Adjacent SRank/Status: WI:SH/T; IA:-; SD:S2; ND:S3; MB:S5; ON:S5 (1996: -- to SC) |
| <i>Potamogeton vaseyi</i> (= <i>P. lateralis</i>) | Vasey's pondweed | SC | N | Widely distributed in boggy/sandy shorelines in lakes throughout central, north-central, and northeastern MN; additional locations likely as surveys continue. (116 EOs) Adjacent SRank/Status: WI:S2/SC; IA:S1/SC; SD:-; ND:-; MB:-; ON:S4 |
| <i>Prenanthes crepidinea</i> | nodding rattlesnake-root | SC | N (X) | Single Houston County location has not been relocated since 1900; extensive surveys have been completed. (1 EO) Adjacent SRank/Status: WI:S1/E; IA:-; SD:-; ND:-; MB:-; ON:- (1996: -- to SC) |
| <i>Quercus bicolor</i> | swamp white oak | N | T | Restricted to two 4-5 mile dia. areas of Miss. R. floodplain forest; most pop'ns small, with poor reproduction, and vulnerable to habitat degradation; surveys largely complete. (7 EOs) Adjacent SRank/Status: WI:SNR; IA:S3; SD:-; ND:-; MB:-; ON:S4 |
| <i>Rubus fulleri</i> | Fuller's blackberry | -- | T | Collections document approximately 12 locations in 10 counties in Anoka Sandplain; wetland margin habitat vulnerable to habitat decline and loss; surveys nearly complete. Adjacent SRank/Status: WI:SNR; IA:SNR; SD:-; ND:-; MB:-; ON:- |
| <i>Rubus missouricus</i> | Missouri blackberry | -- | T | Collected from only one Anoka County location despite extensive surveys of known suitable habitat; wetland margin habitat vulnerable to habitat decline and loss. Adjacent SRank/Status: WI:SNR; IA:SNR; SD:-; ND:-; MB:-; ON:- |
| <i>Rubus multiflorus</i> | a species of blackberry | -- | SC | In small populations in bedrock or sand habitat in central and east-central MN; vulnerable to habitat loss; surveys incomplete; 2 sites represented by post-1955 collections. Adjacent SRank/Status: WI:SNR; IA:-; SD:-; ND:-; MB:-; ON:- |

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|--|-------------------------|-----------------------|---------------------|---|
| <i>Rubus quaesitus</i> | a species of blackberry | -- | SC | Known from only 2 sites in MN; first found in Kanabec County in 1958, but never relocated; discovered in fire-dependent forest habitat Carlton Co. in 1998; surveys incomplete. Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:-; ON:- |
| <i>Rubus semisetosus</i> | half bristly bramble | N | T | Only recent collections are from a Todd Co. fen and several meadows in the Anoka Sandplain; shallow wetlands habitat vulnerable to degradation and loss; surveys nearly complete. (4 EOs) Adjacent SRank/Status: WI:SNR; IA:SNR; SD:-; ND:-; MB:-; ON:- |
| <i>Rubus stipulatus</i> | stipuled blackberry | N | E | Recently confirmed in two wet meadows in Rice and Anoka Counties; globally, these locations are the only known extant populations of this species; surveys are largely complete. (1 EO) Adjacent SRank/Status: WI:SNR; IA:SNR; SD:-; ND:-; MB:-; ON:- |
| <i>Rubus vermontanus</i> | Vermont blackberry | -- | SC | Collected from approximately 7 remnant wet meadows on sandplains and sandy moraines in 5 east-central MN counties; threatened by habitat degradation and loss; surveys incomplete. Adjacent SRank/Status: WI:SNR; IA:-; SD:-; ND:-; MB:-; ON:SNR |
| <i>Rudbeckia triloba</i> | three-leaved coneflower | SC | T | Only four recently-confirmed populations; found in southeast MN streamside forest that is threatened by conversion to conflicting uses; extensive surveys completed. (10 EOs) Adjacent SRank/Status: WI:SNR; IA:S4; SD:-; ND:-; MB:-; ON:SNA |
| <i>Ruellia humilis</i> | wild petunia | N (X) | E | Rediscovered at Afton SP, Washington Co., in 2005; only known location is in oak savanna habitat that is threatened by invasive plants and succession; area intensively surveyed. (2 EOs) Adjacent SRank/Status: WI:S2/E; IA:S4; SD:-; ND:-; MB:-; ON:SNA (1996: E to N(X)) |
| <i>Sagittaria brevirostra</i> | short-beaked arrowhead | N | SC | Only three known locations, most recently from two wetland locations in Clay County from 1955 and 1956; not found in recent survey of 1,200+ lakes, but surveys incomplete. (3 EOs) Adjacent SRank/Status: WI:SNR; IA:S4; SD:SNR; ND:SNR; MB:-; ON:- |
| <i>Sagittaria graminea</i> subsp. <i>graminea</i> | grass-leaved arrowhead | N | SC | Only two locations confirmed since 1950; both are in shallow lakeshore in Anoka Sandplain; not found in recent survey of 1,200+ lakes, but surveys incomplete. (8 EOs) Adjacent SRank/Status: WI:SNR; IA:SNR; SD:SNR; ND:-; MB:-; ON:S4S5 |
| <i>Salix pellita</i> | satiny willow | SC | T | Since 1957, found at only 2 sites in Cook County and in a 5 mile-dia area of St. Louis County; streambank habitat is vulnerable to disturbance; surveys nearly complete. (11 EOs) Adjacent SRank/Status: WI:S1/E; IA:-; SD:-; ND:-; MB:S4; ON:S5 (1996: -- to SC) |
| <i>Salix pseudomonticola</i> | false mountain willow | -- | SC | Known from moist hillsides and wetlands in northwestern and northeastern MN; threatened by disturbance and habitat loss; surveys largely complete; 5 sites represented by collections. Adjacent SRank/Status: WI:-; IA:-; SD:SNR; ND:-; MB:S4S5; ON:S3 |
| <i>Saxifraga paniculata</i> (Δ to <i>Saxifraga aizoon</i>) | encrusted saxifrage | T | SC | 23 recent locations widely distributed on north and east-facing cliffs along Lake Superior and in the Boundary Waters in Lake and Cook Counties; easily identified. (28 EOs) Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:SNR; ON:SNR |

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|---|-----------------------------|-----------------------|---------------------|---|
| <i>Scirpus clintonii</i> (Δ to <i>Trichophorum clintonii</i>) | Clinton's bulrush | SC | T | Scattered populations in northwest, northeast, southeast, and central MN; in wet sand prairie and savanna habitat; threatened by habitat conversion; surveys nearly complete. (19 EOs) Adjacent SRank/Status: WI:SNR; IA:-; SD:-; ND:-; MB:-; ON:S2 (1996: -- to SC) |
| <i>Senecio indecorus</i> (Δ to <i>Packera indecora</i>) | elegant groundsel | SC | N (X) | Six old records from northeastern Cook County lakeshores; most recently seen in 1957. (6 EOs) Adjacent SRank/Status: WI:S1/T; IA:-; SD:-; ND:-; MB:SU; ON:S5 (1996: -- to SC) |
| <i>Shepherdia canadensis</i> | soapberry | -- | SC | Found in open woodlands in northeastern and northwestern MN; surveys largely complete; approx. 9 sites represented by post-1951 collections. Adjacent SRank/Status: WI:SNR; IA:-; SD:SNR; ND:SNR; MB:S5; ON:S5 |
| <i>Solidago sciaphila</i> | cliff goldenrod | SC | N | Widely distributed on cliffs and outcrops in five southeastern MN counties. (89 EOs) Adjacent SRank/Status: WI:S3/SC; IA:S3; SD:-; ND:-; MB:-; ON:- |
| <i>Spiranthes casei</i> | Case's ladies'-tresses | N | T | Discovered in MN in 2001; known only from tailings basins in 20-mile portion of Iron Range in Itasca and St. Louis Counties; threatened by habitat degradation; surveys extensive. (4 EOs) Adjacent SRank/Status: WI:SNR; IA:-; SD:-; ND:-; MB:-; ON:S4 |
| <i>Taenidia integerrima</i> | yellow pimpernel | N | SC | Broadly distributed but uncommon in southeastern MN savanna habitats, which are threatened by decline and loss; populations small and localized; surveys largely complete. (29 EOs) Adjacent SRank/Status: WI:SNR; IA:S3; SD:SH; ND:-; MB:-; ON:S4 |
| <i>Talinum rugospermum</i> (Δ to <i>Phemeranthus rugospermus</i>) | rough-seeded fameflower | E | T | Several pop'ns, including a few large, in southeastern MN sand prairie habitat, which is uncommon and threatened by degradation and loss; surveys are largely complete. (14 EOs) Adjacent SRank/Status: WI:S3/SC; IA:S1/E; SD:-; ND:-; MB:-; ON:- |
| <i>Thaspium barbinode</i> | meadow parsnip | -- | SC | Known from ungrazed, mesic, riparian forests in Otter Tail, Jackson, and Nicollet Counties; surveys incomplete; 3 sites represented by post-1934 collections. Adjacent SRank/Status: WI:S1/E; IA:S4; SD:-; ND:-; MB:SNR; ON:S1 |
| <i>Trimorpha acris</i> var. <i>asteroides</i> (Δ to <i>Erigeron acris</i> subsp. <i>kamtschaticus</i>) | bitter fleabane | SC | E | Rediscovered in 2000 on west-facing cliff in Lake County; site prone to disturbance; 3 historical locations have not been relocated, but surveys incomplete. (4 EOs) Adjacent SRank/Status: WI:-; IA:-; SD:SNR; ND:-; MB:S4; ON:S5 (1996: -- to SC) |
| <i>Trimorpha lonchophylla</i> (Δ to <i>Erigeron lonchophyllus</i>) | shortray fleabane | SC | T | All EOs recent; restricted to rare wet mesic or saline prairie in northwest MN; 4 of 9 sites are unprotected; surveys largely complete. (9 EOs) Adjacent SRank/Status: WI:-; IA:-; SD:SNR; ND:SNR; MB:S4; ON:S4? (1996: -- to SC) |
| <i>Trisetum spicatum</i> | spike trisetum | -- | SC | Arctic disjunct found in bedrock crevices on Lake Superior shore; habitat threatened by disturbance and loss; approx. 15 sites represented by post-1951 coll'ns; surveys incomplete. Adjacent SRank/Status: WI:S2/T; IA:-; SD:SNR; ND:-; MB:S4; ON:S4 |
| <i>Tsuga canadensis</i> | eastern hemlock | SC | E | Five locations found since 1974; most are single trees, with >10 trees at only 2 sites, both with little repro; scattered forest locations in east-central MN; surveys thorough. (19 EOs) Adjacent SRank/Status: WI:SNR; IA:-; SD:-; ND:-; MB:-; ON:S5 |
| <i>Utricularia purpurea</i> | purple-flowered bladderwort | SC | E | Discovered in east-central MN in 1992; found in only 7 of 1,200 lakes surveyed; most pop'ns vulnerable to disturbance and habitat degradation; surveys nearly complete. (9 EOs) Adjacent SRank/Status: WI:S3/SC; IA:-; SD:-; ND:-; MB:-; ON:S4 (1996: -- to SC) |
| <i>Utricularia resupinata</i> | lavender bladderwort | SC | E | Found in MN in 1984; all healthy pop'ns located in 2 small clusters within a 50 mile-dia. area of the BWCAW; other pop'ns vulnerable to disturbance; surveys nearly complete. (12 EOs) Adjacent SRank/Status: WI:S3/SC; IA:-; SD:-; ND:-; MB:-; ON:S4 (1996: -- to SC) |

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|---|--------------------|-----------------------|---------------------|---|
| <i>Vaccinium uliginosum</i> | alpine bilberry | T | E | Known from 10 mile portion of Lake Superior shoreline in far northeastern Cook Co.; single site of 8-10 plants found since 1937; surveys thorough except for Grand Portage Res. (3 EOs) Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:S5; ON:S5 |
| <i>Vitis aestivalis</i> (Δ to <i>Vitis aestivalis</i> var. <i>bicolor</i>) | silverleaf grape | SC | T | Collections since 1980 are restricted to a few wooded slopes in Houston and Winona Counties; threatened by habitat degradation and loss; surveys largely complete. (11 EOs) Adjacent SRank/Status: WI:SNR; IA:-/SC; SD:-; ND:-; MB:-; ON:S4 (1996: -- to SC) |
| <i>Woodsia alpina</i> | alpine woodsia | SC | T | Occurs on moist cliffs in gorges near Lake Superior and in BWCAW; all populations small and vulnerable to disturbance; surveys nearly complete. (28 EOs) Adjacent SRank/Status: WI:-; IA:-; SD:-; ND:-; MB:S1; ON:S2 (1996:N to SC) |
| <i>Woodsia oregana</i> subsp. <i>cathcartiana</i> | Oregon woodsia | N | SC | Small populations at four cliff sites in Cook and Yellow Medicine Counties; most habitat has been surveyed. (4 EOs) Adjacent SRank/Status: WI:S1/SC; IA:SNR/T; SD: SNR; ND: SNR; MB: S1; ON:S3 |

DRAFT CHANGES IN SCIENTIFIC NAME **NOT ACCOMPANIED BY A CHANGE IN STATUS**

| <u>Taxonomic Group</u> | <u>Old Scientific Name</u> | <u>New Scientific Name</u> | <u>Status</u> |
|-------------------------------|-----------------------------------|---|----------------------|
| Vascular Plants | <i>Eleocharis olivacea</i> | <i>Eleocharis flavescens</i> var. <i>olivacea</i> | T |
| | <i>Psoralidium tenuiflora</i> | <i>Psoralidium tenuiflorum</i> | E |
| | <i>Ruppia maritima</i> | <i>Ruppia cirrhosa</i> | SC |
| Fungi | <i>Fuscoboletinus weaverae</i> | <i>Suillus weaverae</i> | E |
| Mammals | <i>Cervus elaphus</i> | <i>Cervus canadensis</i> | SC |
| | <i>Phenacomys intermedius</i> | <i>Phenacomys ungava</i> | SC |
| Reptiles and Amphibians | <i>Clemmys insculpta</i> | <i>Glyptemys insculpta</i> | T |
| | <i>Emydoidea blandingii</i> | <i>Emys blandingii</i> | T |
| Fish | <i>Ammocrypta asprella</i> | <i>Crystallaria asprella</i> | SC |
| | <i>Erimystax x-punctata</i> | <i>Erimystax x-punctatus</i> | SC |
| | <i>Notropis amnis</i> | <i>Hybopsis amnis</i> | SC |
| Mussels | <i>Pleurobema coccineum</i> | <i>Pleurobema sintoxia</i> | T |
| Caddisflies | <i>Setodes gutatus</i> | <i>Setodes oligius</i> | SC |
| Butterflies and Moths | <i>Atrytone aragos</i> | <i>Atrytone aragos</i> subsp. <i>iowa</i> | SC |

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