

IDAHO NATIVE PLANT SOCIETY RARE PLANT LIST METHODOLOGY (version, 05/01/2013)

The Idaho Native Plant Society (INPS) Rare Plant List represents the list of plant species that INPS considers to be rare or of conservation concern in Idaho. For more than 20 years, INPS sponsored the annual Rare Plant Conference (RPC) to review the INPS Rare Plant List. Participants added or removed species from the list, or modified their conservation rank based on information exchanged in a group consensus process that included professional botanists and other plant enthusiasts from across Idaho and adjoining states. The process and associated results benefits greatly from the shared knowledge and perspective among many people. Results of the RPC are viewed as a valuable source of information on Idaho's rare plant species by federal and state agencies responsible for their management and conservation.

The [Idaho Natural Heritage Program \(IDNHP\)](#), which is part of the [NatureServe Network](#), uses information exchanged at the RPC for assigning and updating NatureServe ranks. In 2009, NatureServe published the [NatureServe Rank Calculator](#), which the IDNHP now uses for ranking species, while also incorporating information from the RPC. Due to limited resources, the IDNHP is only able to assign or update conservation ranks to a few of Idaho's high priority plant species using the NatureServe Rank Calculator. The NatureServe Rank system is supported by many federal agencies as a primary source of rare plant conservation ranks.

The INPS Rare Plant List Steering Committee proposes to change the way species on the INPS Rare Plant List are categorized, which has been approved by the INPS Board pending ratification by attendees of the 2013 Rare Plant Conference (proposed date: October 23-24, 2013). The main reasons are to reduce redundancy and confusion between the INPS and NatureServe ranks assigned by IDNHP. The Committee proposes that all species comprising the former INPS Rare Plant List, including monitor and review species, be assigned the existing NatureServe Global (G), Intraspecific Taxa (T), and Subnational/State (S) ranks, and whether the species is an INPS Rare or Review species.

INPS still retains its own Rare Plant List. The focus of the RPC will remain unchanged, including: 1) Adding/deleting species to/from the INPS rare plant list based on group discussions and consensus; 2) Reviewing and updating the information known about species on the list; and 3) Making recommendations to state and federal agencies. Any new/updated information can be used by the IDNHP in their NatureServe Rank Calculator applications at their discretion. "Range Extent" and "Number of Occurrences" in the table template shown below together correspond to the former INPS ranking system and provide some continuity.

Adding Species as an INPS Rare Plant Species: If IDNHP ranks a species as G1, G2, G3, T1, T2, T3, S1, S2, or S3 (e.g. G5 S1, G2 S2, G5T1 S1) then that species may added to the INPS Rare Plant List based on the group discussion and evaluation process at the RPC. Typically, G1, G2, T1, T2, S1, or S2 would be automatically added after group discussion and evaluation, but G3, T3, or S3 species would be added on a case-by-case basis (**Needs more discussion; may consider including all G3, T3, or S3 species as Rare**). If anyone wants to add a species to the INPS Rare Plant List, they would gather the information for the important criteria listed in the table below and present it at the RPC. They can input this information before the conference for a preliminary rank in the NatureServe Rank Calculator and if the species meets the criteria above, then it may be added to the INPS Rare Plant List after group discussion and consensus. Species that may benefit from consideration for possible addition include, but are not limited to: 1) Newly described or documented species in Idaho; 2) All Idaho endemics not already on the INPS Rare Plant List; and 3) Species with elevated threat levels.

Adding and Deleting Species as an INPS Review Plant Species: INPS Review Plants include plant species of potential conservation concern that are unrankable (e.g. insufficient data) and need to have information gathered regarding their status or taxonomy. Once sufficient information for ranking an INPS Review Plant Species is available, species in this category would either be elevated as INPS Rare Plant Species, or deleted altogether (**Needs more discussion; TBD at 2013 Rare Plant Conference**).

Deleting INPS Rare Plant Species: If IDNHP ranks a species that does not include a G1, G2, G3, T1, T2, S1, S2, or S3, the species may be deleted from the INPS Rare Plant List after group discussion and consensus. Some G3, T3, or S3 species may also be deleted if the group decides there are not sufficient circumstances to retain the species on the INPS Rare Plants List (**Needs more discussion; may consider including all G3, T3, or S3 species as Rare**). If anyone

wants to delete a species from the INPS Rare Plant List, they would follow the methods used above for adding species. If the preliminary rank does not meet the criteria described under “Adding Species to the INPS Rare Plant List”, then the species may be deleted from the INPS Rare Plant List after group discussion and consensus. Data for each species deleted from the INPS Rare Plant List would be archived.

Regional Working Groups: Regional Working Groups (RWGs) for Northern Idaho, Southwest Idaho, and Southeast Idaho are in the process of being developed to complement the RPC. These RWGs would be used for communicating via listserv as needed throughout the year, and at meetings determined by the RWG. RWGs would provide a forum for sharing information about Idaho's rare plants, coordinating botanical expertise and resources, and communicating relevant conservation information. The IDNHP can tap into the RWGs for soliciting more detailed information for ranking Idaho's rare plants. This format would allow for efficient review and discussion of species by botanists attending the RPC. It would retain INPS's independence and open communication forum, and provide professional review of NatureServe ranks for the benefit of all agencies that use the ranks to help their rare plant conservation efforts.

Definitions for NatureServe Rank Categories

Ranks are given at three levels

G = Global

T = Intraspecific Taxa: Refers to subspecies, varieties and other designations below the level of the species.

S = Subnational: Typically called the “state” rank in the U.S., but it also can indicate rank within a province.

Ranks have one of these values. Full definitions for G, T, and S Ranks, and other situations are in Appendix A of [NatureServe Conservation Status Assessments: Factors for Evaluating Species and Ecosystem Risk](#) (NatureServe, April 2012)

X = Presumed Extinct/Extirpated

H = Possibly Extinct/Extirpated

NR = Unranked

1 = Critically Imperiled

2 = Imperiled

3 = Vulnerable

4 = Apparently Secure

5 = Secure

INPS Rare Plant List (EXAMPLE ONLY – See associated Excel file for complete list)

[illegible]

¹“Scientific Name” and “Common Name” primarily refer to the scientific and common names used in [NatureServe Explorer](#), respectively. Names not used by NatureServe may be used under some circumstances (i.e., species not yet described, FNA accepted name not updated to NatureServe yet). Synonymous scientific names should be added to the “Synonym” column if applicable. In case when the “Scientific Name” is not the NatureServe name, where applicable, the NatureServe name will be provided under “Synonym” followed by “(NatureServe name)”.

²“INPS Status” is whether INPS has designated the species as “Rare” or “Review”.

³“IDNHP Rank” is the NatureServe rank designated in [NatureServe Explorer](#) (dark gray, not bolded), which is replaced by updated ranks (**black, bolded**) as IDNHP and INPS apply the [NatureServe Rank Calculator](#). A “+” follows the G and/or T rank if the species is an Idaho endemic and has the sole rank global and/or trinomial rank authority.

⁴“Rank Process/ Author” documents whether a species is in the process of being ranked (In Process), has already been ranked but still needs RPC approval (Ready for RPC Approval), or has already been ranked and has RPC approval (20XX [year] RPC Approved); and the author for the species ranking in the format of first initial followed by last name.

⁵“Date Ranked” is the date in month/year format, followed in parentheses by the NatureServe Rank Calculator version that was used for ranking the species.

⁶“Range Extent” incorporates thresholds from the NatureServe Rank Calculator and from Walt Fertig’s Rare Plant Ranking System for the Utah Native Plant Society:

Local Endemic = <5,000 km² (ca 2,000 mi² or 2% of Idaho)

Subregional Endemic = 5,000 to 20,000 km² (ca 2,000-8,000 mi² or 2-10% of Idaho)

Regional Endemic = 20,000 to 200,000 km² (ca 8,000-80,000 mi² or 10-92% of Idaho)

Local, Subregional, and Regional Endemics are also designated as Core (≥50% of global range) or Edge (<50% of global range) for the part of the species’ distribution in Idaho.

Disjunct = Distribution in Idaho is isolated from the main, contiguous portion of a species’ range by a gap of more than 322 km (200 mi).

Sparse = Distribution in Idaho is uncommon and scattered, but species otherwise has a wide range (e.g. occurs in multiple states).

Peripheral = Distribution in Idaho is at the margin of the species’ main, contiguous portion in an adjacent state or province.

Widespread = Species occurs widely across western North America (covering more than 200,000 km²) and across Idaho.

Values used for estimating Range Extent, Area of Occupancy, and Number of Occurrence should at minimum be based on review of IDNHP’s Plant Conservation Database, [Consortium of Pacific Northwest Herbaria](#), and the [Vascular Plant Catalog of the Intermountain Region of Western U.S.](#), and personal knowledge of documented occurrences.

⁷“Key(s)” include taxonomic key(s) species is described in. This includes Vascular Plants of the Pacific Northwest/Flora of the Pacific Northwest (PNW); Intermountain Flora (IMF); and [Flora of North America \(FNA\)](#). The geographic area of PNW includes all of Idaho except south of the Snake River. IMF includes the southern half of Idaho, to approximately Clark, Custer, Elmore, Gem, and Washington counties. If the name in a key is different than the “Species Name”, the synonymous scientific name used in the key should be added below the Species Name.

⁸“Number of Occurrences” are defined as the number of occurrences >1 km apart, and generally only include those for which there is reasonable certainty that still occur (e.g. excluding historical). If needed, the number of occurrences can be calculated by counting the number of species locations greater than 1 km edge-to-edge.

⁹“Counties” correspond to the Idaho counties the species is known to occur or have occurred. A list of county names, land area, and percent contribution is provided below. Questionable or historical counties should be indicated by having a “?” at the end of the county name.

¹⁰“Habitat specificity” corresponds to the Very Narrow, Narrow, Moderate, and Broad categories from the NatureServe Rank Calculator, and may include some key habitat descriptors in parentheses afterwards.

¹¹“Threats” is where one the calculated threat level from the NatureServe calculator is inputted here.

¹²“Comments” is where comments from the RPC are documented, followed after the month and year comment was made (e.g. Oct2011). This may include information needs, basis for species addition/deletion from list, and specific threat information.

¹³“Recommendation” is the recommendation to federal and state agencies based on consensus and/or new information shared at the RPC, followed after the month and year comment was made (e.g. Oct2011). Recommendations should be specific and tangible enough so they can be reasonably accomplished. If species is deleted or reviewed and not added, it should

be maintained in a separate list of “Plants Previously Considered or Listed by INPS” (TBD). This list should include information in the table above, plus previous status (if applicable), reason for not being listed or being deleted, and date of determination.

LAND AREA AND PERCENT CONTRIBUTION OF IDAHO’S COUNTIES:

County	Area (mi²)	Area (%)	County	Area (mi²)	Area (%)	County	Area (mi²)	Area (%)	County	Area (mi²)	Area (%)
Ada	1060	1.21	Butte	2234	2.55	Gem	566	0.65	Minidoka	763	0.87
Adams	1370	1.57	Camas	1079	1.23	Gooding	734	0.84	Nez Perce	856	0.98
Bannock	1147	1.31	Canyon	604	0.69	Idaho	8502	9.71	Oneida	1202	1.37
Bear Lake	1049	1.20	Caribou	1799	2.06	Jefferson	1106	1.26	Owyhee	7697	8.79
Benewah	784	0.90	Cassia	2580	2.95	Jerome	602	0.69	Payette	410	0.47
Bingham	2120	2.42	Clark	1765	2.02	Kootenai	1316	1.50	Power	1443	1.65
Blaine	2661	3.04	Clearwater	2488	2.84	Latah	1077	1.23	Shoshone	2636	3.01
Boise	1907	2.18	Custer	4937	5.64	Lemhi	4570	5.22	Teton	451	0.52
Bonner	1920	2.19	Elmore	3101	3.54	Lewis	480	0.55	Twin Falls	1928	2.20
Bonneville	1901	2.17	Franklin	668	0.76	Lincoln	1206	1.38	Valley	3734	4.27
Boundary	1278	1.46	Fremont	1896	2.17	Madison	473	0.54	Washington	1474	1.68