# IDAHO NATIVE PLANT SOCIETY RARE PLANT LIST METHODOLOGY (version, 2/14/2025)

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. Since about 1985, INPS and the Idaho Natural Heritage Program (formerly Idaho Conservation Data Center) coordinated the annual (or more recently biennial) 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 benefit 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),](https://fishandgame.idaho.gov/ifwis/portal/species) which is part of the [NatureServe Network,](http://www.natureserve.org/) 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 alone 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.

In 2013, the INPS Rare Plant List Steering Committee proposed changes in the way species on the INPS Rare Plant List are categorized. The changes were approved by the INPS Board, and ratified (with modifications) by attendees of the 2014 Rare Plant Conference. The main reasons were to reduce redundancy and confusion between the INPS and NatureServe ranks assigned by IDNHP. As a result, all species comprising the former INPS Rare Plant List, including monitor and review species, are assigned the existing NatureServe Global (G), Intraspecific Taxa (T), and Subnational/State (S) ranks. The INPS Rare Plant List now lists as Rare all previously listed plants with rankings of S1, S2, or S3 (including T1, T2, and T3, and G1, G2, and G3). Plants on the list that have not been ranked for Idaho (NatureServe SNR = state not ranked) are designated as Review until information is compiled and these plants can be ranked.

INPS still retains its own Rare Plant List. The focus of the RPC remains 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. The NatureServe Rank Calculator is used to document information and generate S ranks at the RPC; IDNHP then passes updated S Ranks and associated information on to NatureServe (although updates to NatureServe databases have not been particularly timely in recent years).

The process for updating the INPS Rare Plant List is outlined below, with more detailed information in the following paragraphs:

* Within the Rare Plant Working Groups (RPWGs), a member will “adopt” and research a plant either on or to be added to the list.
* The member will compile a species account and do a preliminary run of the NatureServe rank calculator.
* She/he will post information to the Rare Plant Working Group Dropbox.
* The plant will be discussed at a RPWG meeting, and additional information incorporated into the rank calculator.
* The RPWG will decide on a recommendation for the plant’s S rank, and thus whether to include it on the list.
* At the RPC, the RPWG recommendation (along with a brief summary of supporting information) is presented.
* RPC participants discuss the plant, and make a final determination on its S rank and inclusion on the list.
* Soon after the RPC, the Rare Plant List is updated for all plants discussed at the RPC.

**Rare Plant Working Groups:** Regional Rare Plant Working Groups (RPWGs) for Northern Idaho and Southern Idaho have been developed to complement the RPC. (Eventually, additional regional groups, such as southwest, southeast, or central Idaho may be separated.) These RPWGs meet occasionally between RPCs and communicate on-line as needed throughout the year. RPWGs provide a useful platform for sharing information about Idaho’s rare plants, coordinating botanical expertise and resources, and communicating relevant conservation information. This format allows for efficient review and discussion of species by botanists attending the RPC. It retains INPS’s independence and open communication forum, and provides professional review of NatureServe ranks for the benefit of all agencies that use the ranks to help their rare plant conservation efforts.

**Adding Species as an INPS Rare Plant Species:** If a plant is ranked as G1, G2, G3, T1, T2, T3, S1, S2, S3, SH, or SX (e.g. G5 S1, G2 S2, G5T1 S1) then it would be added to the INPS Rare Plant List based on RPWG research and group discussion and evaluation process at the RPC. If anyone wants to add a species to the INPS Rare Plant List, they would work through the RPWG to gather the information for the important criteria listed in the table below and present it at the RPC. This information is compiled ***before the conference*** for a preliminary rank in the NatureServe Rank Calculator and if the species meets the criteria above, then it would 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. Idaho endemics ranked G4 S4 or G5 S5 *may be* *considered* for the Rare Plant List.

**Adding and Deleting Species as an INPS Review Plant Species:** INPS Review plants include plant species of potential conservation concern that are unranked or have questionable ranks, and need to have information gathered regarding their status or taxonomy. These plants are a priority for research and ranking by the RPWGs. Once sufficient information for ranking an INPS Review Plant is available, species in this category would either be elevated as INPS Rare Plant Species, or deleted altogether.

**Deleting INPS Rare Plant Species:** If the RPWG and RPC determine a plant is ranked S4 or S5 (or T4, T5), the species would be deleted from the INPS Rare Plant List after group discussion and consensus. 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 plant 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. If a species is deleted or reviewed and not added, it is maintained in a separate list of “Plants Previously Considered or Listed by INPS”. This list includes information from the Rare Plant List (see table below), plus previous status (if applicable), reason for not being listed or being deleted, and date of determination.

# Definitions for NatureServe Rank Categories

**Ranks are given at three levels**

G = Global

T = Infraspecific 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 Ecosystems** **(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 Excel file for complete list and all columns)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Scientific Name** | **Synonym** | **Common Name** | **INPS Status** | **IDNHP Rank (Bold S= currently ranked)** | **Rank Process/ Author** | **Date Ranked** | **Range Extent** | **Key(s)** | **Number of Occurrences** | **County(s)** | **Habitat Specificity** | **Threats** |
| Abronia elliptica |  | Dwarf Sand-verbena | RARE | G5 **S1** | 2014 RPC approved/ L. Kinter | 2/7/2013 (v3.1) | Peripheral | FNA, IMF | 1 | Bear Lake | Narrow (sandy, gravelly, shaley) | Medium to Very High |

**Explanations of each field**:

* ”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)”.
* “INPS status” is RARE or Review, as determined at a RPC since 2009. Plants on list not yet ranked at an RPC since 2009 are considered "Review" if 2009 INPS list is Review or Monitor; otherwise Rare.
* “IDNHP Rank” is the NatureServe rank designated in NatureServe Explorer (dark gray, not bolded), which is replaced by updated ranks (black, bolded) as plants are ranked at an RPC using 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.
* “Rank Process” is the RPC and date that the plant rank was approved. “Author” is the presenter/ researcher(s).
* ”Date Ranked” is the date in month/day/year format, followed in parentheses by the NatureServe Rank Calculator version that was used for ranking the species. This is often the RPWG final meeting date, unless substantive changes were made at the RPC.
* ”Range Extent” descriptor incorporates thresholds from the NatureServe Rank Calculator and from Walt Fertig’s Rare Plant Ranking System for the Utah Native Plant Society. One or more term may apply: 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); Peripheral = Distribution in Idaho is at the margin of the species’ main, contiguous portion in an adjacent state or province; Sparse = Distribution in Idaho is uncommon and scattered, but species otherwise has a wide range (e.g. occurs in multiple states); Widespread = Species occurs widely across western North America (covering more than 200,000 km²) and across Idaho.
* ”Key(s)” include taxonomic key(s) species is described in. This includes Vascular Plants of the Pacific Northwest/Flora of the Pacific Northwest (FPNW or FPNW2); Intermountain Flora (IMF); and Flora of North America (FNA). If the name in a key is different than the “Species Name”, the synonymous scientific name used in the key should be noted.
* ”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. note historical occurrence separately).
* ”Counties” correspond to the Idaho counties the species is known to occur or have occurred. Questionable or historical counties should be indicated by having a “?” at the end of the county name.
* “Habitat or Environmental 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. This field is not used in the rank calculator unless there is no information on number of occurrences or area of occupancy.
* Overall “Threat” Rank is the calculated threat level from the NatureServe calculator (Low, Medium, High, Very High, or a range). A brief list of primary threat factors may also be included.
* “Comment” may include information needs, basis for species addition/deletion from list, and specific threat information, along with the working group or rare plant conference meeting date. Put the most recent comments on top.
* “Recommendation” to federal and state agencies based on consensus and/or new information shared at the RPC, 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 will be maintained in a separate list of “Plants Previously Considered or Listed by INPS”. This list includes information in the table above, plus previous status (if applicable), reason for not being listed or being deleted, and date of determination. Put the most recent recommendation on top.
* ”2009 INPS rank” is designation from the 2009 list, or indicate “Not listed” if the plant is a new addition.
* “IDNHP Database (Y/N)” - Y(es) or N(o) indicates whether records for this plant are currently in the IFWIS database. Records are normally added after ranking at a Rare Plant Conference.
* “RPWG Region”: N - Northern Idaho Rare Plant Working Group, or S - Southern Idaho Rare Plant Working Group. If a plant occurs in both regions, the lead region will be listed first.
* “Jurisdiction” (added in 2022) is the primary land owner(s) or manager(s). BLM = Bureau of Land Management, FO= Field Office; NF= National Forest. NWR= National Wildlife Refuge. BOR=Bureau of Reclamation. BIA=Bureau of Indian Affairs. IDFG= Idaho Department of Fish and Game. THIS FIELD IS UNDER DEVELOPMENT AND NOT COMPLETE FOR MOST PLANTS.