

Process for Identifying Plant Species of Conservation Concern for the Helena-Lewis and Clark National Forest Revised Forest Plan and Environmental Impact Statement

The 2012 Planning Rule (36 CFR 219) defines a species of conservation concern (SCC) as "a species, other than a federally recognized threatened, endangered, proposed or candidate species, that is known to occur in the plan area and for which the regional forester has determined that the best available scientific information indicates substantial concern about the species' capability to persist over the long-term in the plan area" (36 CFR 219.9). The Regional Forester identifies SCC as part of the planning process.

Direction for identifying SCC are in the **Forest Service handbook** (FSH) for land management planning (i.e., the planning directives) at FSH 1909.12, chapter 10, section 12.52 and chapter 20, section 21.22a.

This document outlines the Northern Region's approach in identifying plant SCC for the Helena-Lewis and Clark National Forest's Revised Forest Plan and Environmental Impact Statement (animals are documented separately). This approach is consistent with the 2012 Planning Rule and agency guidance contained in the planning directives. The best available scientific information, including external expert knowledge and information received from the general public, was considered during the development of this list.

Step 1. During the assessment phase prior to the Revised Forest Plan Proposed Action, the Helena-Lewis and Clark National Forest (HLC NF) planning team botanist and other vegetation specialists determined which plant species are documented to occur in the planning area met the categories described in items 1-8 below. This step resulted in the "potential SCC" plant list.

The HLC NF revision planning team obtained, from the [Montana Natural Heritage Program](#) (MNHP), [Consortium of Pacific Northwest Herbaria](#), and local Forest Service floristic survey data sources, spatial records of all plant species documented to occur on National Forest System (NFS) lands within the plan area, and that met at least one category in items 1-8 below. The 2016 Assessment of the HLC NF more broadly included some species that occurred near the plan area, but the final evaluation followed the criteria in the final directives and only assessed species within the plan area boundary that occur on NFS lands.

The MNHP, Consortium of Pacific Northwest Herbaria and local data sources were used because collectively they are the most comprehensive, reliable, and up-to-date sources for documented species occurrences on NFS lands in Montana. The MNHP, which is part of the international NatureServe network, manages statewide occurrence records and other information for species and habitats of conservation interest. The Consortium of Pacific Northwest Herbaria maintains a database through the University of Washington that compiles all herbarium records for 38 herbaria in the Pacific Northwest, including Montana. The consortium makes this data available online with the intent to inform the scientific community, land management agencies, conservation organizations, and the interested public with a single online access point to the wealth of existing and emerging information about the Pacific Northwest flora. Local Forest Service floristic survey data and botany records are in digital formats and accessed spatially through the agency NRM applications, and are periodically submitted to the MNHP statewide data repository. The definitions of "occurrence" and "observation," as used in the plant lists, are from the Montana Natural Heritage Program. An occurrence is a documented location of a specimen

collection or observed plant population, and an observation is a visual, specimen, genetic, or other documentation of a species at an occurrence with an assigned spatial precision during a given time period.

The categories of plant species to consider as potential SCC, as indicated in FSH 1909.12, chapter 10, sec. 12.52 (link above), are:

1. Species with global ranks of G1-2 and infraspecific taxa with ranks of T1-2 on the NatureServe ranking system.¹
2. Species that were removed within the past 5 years from the Federal list of threatened or endangered species, and other delisted species that the regulatory agency still monitors.^{2 3}
3. Species with status ranks of G/T3 or S1 or S2 on the NatureServe ranking system.
4. Species listed as threatened or endangered by relevant states or federally recognized Tribes.
5. Species identified by federal agencies, states, or federally recognized Tribes as a high priority for conservation.
6. Species identified as species of conservation concern in adjoining National Forest System plan areas.
7. Species that have been petitioned for Federal listing and for which a positive “90-day finding” has been made.^{2 3}
8. Species for which the best available scientific information indicates there is local conservation concern about the species' capability to persist over the long-term in the plan area.

In addition, plant species in the following categories were also considered:

1. Montana Species of Concern.¹ Species in this category generally include all vascular plant taxa with MNHP state (S) ranks of S1, S2, S3 or SH. Nonvascular taxa (bryophytes and lichens), which are not as well documented or studied as vascular plant taxa in the state, are listed as Montana SOC using similar criteria as vascular taxa but are more strictly limited to those taxa which are believed to be the rarest or most vulnerable to extirpation based on current information. Some plants that are state Potential Species of Concern were also considered.
2. Regional Forester's sensitive species for the Helena-Lewis & Clark NF.⁴

Step 2: During the planning phase, Regional Office and HLC NF botanists identified which of the plant species that emerged from Step 1 met the criteria in Step 2, items 1-3 below. This step resulted in the plant SCC list for the Helena-Lewis and Clark National Forest's Proposed Action, which was then modified for the Draft Environmental Impact Statement (DEIS).

This step was completed by using the best available scientific information, including expertise from internal and external individuals, and the final planning directives at FSH 1909.12, chapter 10, section 12.52 and chapter 20, section 21.22a. The differences between the initial plant SCC list released with the

¹ Status obtained from Montana NHP. See <http://mtnhp.org/SpeciesOfConcern/?AorP=p> for definitions and more information.

² Status obtained from US Fish and Wildlife Service.

³ No plant species currently meeting this category occur in the plan area.

⁴ See <http://www.fs.usda.gov/detail/r1/plants-animals/?cid=stelprdb5130525>

Proposed Action and the SCC list for the DEIS were minor, but there were a few adjustments based on additional information. Additional species-specific information became available following the release of the Proposed Action and the adjustments included adding three species and excluding one species.

The criteria for identifying SCC were:

1. The species must be native to, and known to occur in, the plan area. A species is known to occur in the plan area if, at the time of plan development, the best available scientific information indicates that a species is established or is becoming established in the plan area. A species with occurrences in the plan area that were merely accidental or transient, or were well outside the species' existing range at the time of plan development, were not considered to be established. NatureServe data from the Montana Natural Heritage Program were used as the best available scientific information to determine whether a record of occurrence was historic or current. For plant species, observations 40 years or older were considered historic per NatureServe and Montana NHP ranking guidelines⁵. A NatureServe rank of historical means that recent field information verifying the continued existence of the occurrence is lacking.
2. The best available scientific information must indicate substantial concern about the species' capability to persist over the long term in the plan area.
 - a. In general, substantial concern was best demonstrated by a decreasing population (abundance or distribution), decreasing habitat, or significant threats to the species in the plan area. Other factors considered during this evaluation included abundance, geographic distribution, reproductive potential, dispersal capabilities, responses to management, and other demographic and life history characteristics of the species. This approach was based on best available science in conjunction with professional expertise of the Regional Office botanist.
 - b. Rarity alone typically was not considered a substantial concern unless accompanied by one of the three general conditions listed in 2.a above or having other prominent circumstances leading to concern for long-term persistence.
3. If there is insufficient scientific information available to conclude that there is a substantial concern about a species' capability to persist in the plan area over the long- term, or if the species is secure in the plan area, that species was not identified as an SCC. Rationale for not identifying species as SCC included:
 - a. If the species is secure and its continued long-term persistence in the plan area is not at risk based on knowledge of its abundance, distribution, lack of threats to persistence, trends in habitat, or responses to management.
 - b. Insufficient scientific information available about the species' status in the plan area. Lack of sufficient scientific information included having limited inventory data

⁵ NatureServe defines their guidelines for ranking species as historical at <http://explorer.natureserve.org/erankguide.htm>. Montana Natural Heritage Program defines their historic ranking information at: <http://fieldguide.mt.gov/statusCodes.aspx#msrc:rank>.

resulting from low survey effort, lack of effective detection methods, or, in the case of purported population declines, lack of reasonably consistent monitoring methods among trend monitoring periods.

Step 3: In response to public comments and new information, Regional Office staff reviewed the species selection process and criteria requirements, available information, and the rationale for identifying the SCC. As a result, this process document has been updated to provide additional clarification of terms and selection criteria considered in Step 2. In addition, the species evaluation documentation has been updated. This review, clarification, and update resulted in the plant SCC list for the HLC's Draft Revised Forest Plan and Draft EIS.

Process clarifications and changes to the plant selection process resulting from this step:

- A. We clarify that, for the purposes of the planning process, the individuals of a species of conservation concern that exist in the plan area will be considered to be members of one population of that species. Further, to be considered viable (persistent) in the long term, a population must have sufficient distribution to be resilient and adaptable to stressors and likely future environments (preamble to the 2012 Planning Rule, 77 FR at 21217, April 9, 2012). A population need not be present or secure throughout the entire plan area in order to be viable.
- B. We clarify that lack of sufficient scientific information (i.e., insufficient information) as originally described in Step 2(3)(b) above can include having:
 - a. Limited inventory data resulting from low survey effort, lack of targeted surveys, or lack of effective detection methods.
 - b. Lack of reasonably consistent monitoring methods needed to accurately determine population trend.
 - c. Lack of published information or status reports regarding the species in the plan area.
 - d. No known threats or risks to populations in the plan area, or threats are speculative in nature.
 - e. Too little known about the species, its habitat preferences, or relative life history characteristics.

Even when some types of information are limited, the weight of evidence may still indicate substantial concern when we consider what we do know about habitat, threats, abundance, geographic distribution, reproductive potential, dispersal capabilities, and other relevant factors.

Most changes between the SCC list generated for the proposed action and the SCC list generated in Step 3 for the revised forest plan and final EIS resulted from the continued national learning and public engagement as the Forest Service implemented the 2012 planning rule. This allowed more thorough understanding of the final directives and more thorough evaluations of the best available scientific information regarding the species' statuses and threats to persistence within the plan area.

Additionally, we followed clarification in a June 6, 2016 Memorandum by the Deputy Chief of the National Forest System to regional foresters, which states that if a species is determined to be at risk across its range, but is determined to be secure within the plan area, it cannot be an SCC.

As a result of the steps above, the following 31 plant SCC were identified for the Helena-Lewis and Clark National Forest's final Environmental Impact Statement. The list remains unchanged from what was identified in the Regional Forester's letter dated April 4, 2018. No objections were received related to plan SCC.

Scientific Name	Common Name
<i>Adoxa moschatellina</i>	musk-root
<i>Amerorchis rotundifolia</i>	round-leaved orchis
<i>Aquilegia brevistyla</i>	short-styled columbine
<i>Astragalus convallarius</i>	lesser rushy milkvetch
<i>Astragalus lackschewitzii</i>	Lackschewitz's milkvetch
<i>Botrychium crenulatum</i>	wavy-leaved moonwort
<i>Botrychium paradoxum</i>	peculiar moonwort
<i>Braya humilis</i>	low northern rockcress
<i>Castilleja kerryana</i>	Kerry's paintbrush
<i>Cypripedium parviflorum</i> (<i>Cypripedium calceolus</i> var. <i>pubescens</i>)	small yellow lady's-slipper
<i>Cypripedium passerinum</i>	sparrow's-egg lady's-slipper
<i>Delphinium bicolor</i> ssp. <i>calcicola</i>	limestone larkspur
<i>Draba densifolia</i>	denseleaf draba
<i>Drosera anglica</i>	English sundew
<i>Drosera linearis</i>	slenderleaf sundew
<i>Eleocharis rostellata</i>	beaked spikerush
<i>Elymus innovatus</i>	northern wildrye
<i>Epipactis gigantea</i>	giant helleborine

Scientific Name	Common Name
<i>Erigeron flabellifolius</i>	fan-leaved fleabane
<i>Gentianopsis macounii</i>	Macoun's gentian
<i>Goodyera repens</i>	northern rattlesnake plantain
<i>Grindelia howellii</i>	Howell's gumweed
<i>Lycopodium dendroideum</i>	tree-like clubmoss
<i>Phlox kelseyi</i> var. <i>missoulensis</i>	Missoula phlox
<i>Polygonum austinae</i>	Austin's knotweed
<i>Potamogeton obtusifolius</i>	blunt-leaved pondweed
<i>Ranunculus pedatifidus</i>	northern buttercup
<i>Schoenoplectus subterminalis</i>	water bulrush
<i>Scorpidium scorpioides</i>	scorpidium moss
<i>Sphagnum fimbriatum</i>	fringed bogmoss
<i>Stipa lettermanii</i>	Letterman's needlegrass

In addition to the above “at-risk” SCC species, *Pinus albicaulis* (whitebark pine), found on the Helena-Lewis and Clark National Forest, is a federal at-risk species, based on the 2012 planning rule criteria, because it is listed as threatened under the Endangered Species Act.

A supplemental botany report provides more detailed evaluations of the plant species considered for SCC in the HLC plan area. This report is part of the planning record and is available upon request.