

Executive Summary



EXECUTIVE SUMMARY

The *Montana Native Plant Conservation Strategy: Vascular Species and Habitats of Greatest Conservation Need*, hereafter *Strategy*, represents six years of collective input from a large partnership of people and organizations that share a vested interest in Montana's flora and habitats. The *Strategy* was written by a Core Team aided by a diverse partnership of people representing federal and state agencies, Tribal nations, non-governmental organizations, academic herbaria, and individuals. Its purpose is to promote the collective and coordinated stewardship of Montana's native flora and habitats, emphasizing native Plant Species, Unique Habitats, and Plant Communities of Greatest Conservation Need (GCN).

Montana is the fourth-largest state, with high biodiversity, large intact habitats, fragmented landscapes, many Tribal nations, an economy predominantly supported by agriculture, fossil fuel and timber industries, government, and tourism, and an increasing and sprawling human population. Under Montana's big sky, there is growing concern about how to retain our state's rich native plant diversity and genetics, rare species, unique habitats, and iconic plant communities. Despite the importance of native plants to all people, this statewide *Strategy* is sorely needed because of five constraints that have hampered plant conservation in Montana:

- 1) Insufficient current data and mapping of native plant populations, habitats, and communities, especially those of conservation concern
- 2) Declining recognition for botanical expertise and appreciation for plants
- 3) Limited funding allocated to native plant conservation
- 4) Inadequacy of policy-related and regulatory mechanisms to manage native plants and habitats
- 5) Increasing threats to native plants, habitats, and communities from natural events and human activities

The *Strategy* aims to provide a statewide framework that focuses on seven elements essential to the conservation of Plant Species, Unique Habitats, and Plant Communities of GCN, and other native plants. These seven elements are foundational to retaining an educated, informed, engaged, and coordinated

botanical network across the state. Organized into sections each element of the *Strategy* explains its connection to the conservation of Plant Species, Unique Habitats, and Plant Communities of GCN and other native plants, shares developed resources, and outlines and identifies an array of conservation opportunities and actions to address the five constraints, listed above. Section 1 is the Introduction and below we summarize the seven elements and ask that readers refer to each section for the pertinent conservation objectives.

Why We Care about Native Plants!

- They are essential to Montana's biological diversity, functional ecosystems, cultural heritage, and economic sustainability.
- Humans and nearly all life rely on them for oxygen, food, medicine, shelter, wildlife habitat, and numerous products.
- They beautify Montana and the places where we live, work, and play.

Section 2: Acknowledging Tribal Sovereignty and Some Native American Perspectives on Native Plant Conservation

Montana is – and has historically been – home to Native American peoples representing numerous Tribes, including eight federally recognized Tribal nations: Confederated Salish and Kootenai Tribes of the Flathead Reservation; Blackfeet Nation; Chippewa Cree Tribe of the Rocky Boy’s Reservation; Fort Belknap Indian Community of the Fort Belknap Indian Reservation; Fort Peck Assiniboine and Sioux Tribes; Northern Cheyenne Tribe; Apsáalooke Nation on the Crow Reservation; and the Little Shell Tribe of Chippewa Indians. The Core Team acknowledges and honors Native American peoples, past and present, whose traditional homeland is the land that today we call the State of Montana.

The *Strategy*, and its authors, value the rights and sovereignty of all Tribal nations and Native American peoples across Montana. Section 2 covers basic information on Montana’s federally recognized Tribal nations, shares some Native American perspectives on native plant conservation, and suggests some general approaches or actions to promote respectful dialogue and working relationships with Native American peoples. In addition, scattered through the conservation objectives in other sections are suggestions to remedy the long-standing exclusion of Native American peoples from organized conservation efforts. Throughout, the *Strategy* advocates for inclusivity of Native American peoples, their views, and their practices in efforts to sustain native plant species, habitats, and communities, especially for those of GCN.

Section 3: Strengthening Botanical Capacity in Montana

Many native plant species, communities, and their ecological interactions are at risk. This also includes the many relationships between plant species and human communities and cultures. Botanical capacity is critical to conserving, maintaining, and managing the diversity of Montana’s native flora, and the many important ways that plants sustain people, animals,

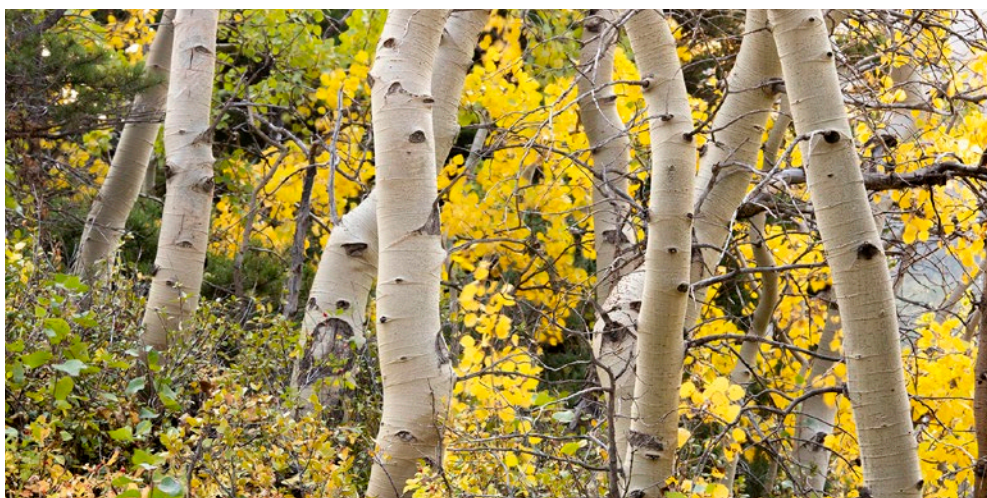


Photo ES-1. As a keystone species Quaking Aspen (Populus tremuloides) communities promote biodiversity, are culturally significant, and in many places are in need of regeneration. South Fork Teton Canyon, Montana.

¹ Global Strategy for Plant Conservation: <https://www.cbd.int/gspc>

and habitats. As a component in the *Global Strategy for Plant Conservation*¹, botanical capacity is defined as the human, scientific, technological, organizational, institutional, and resource capabilities that support plant-based education and training, basic and applied research, and environmental monitoring and management. In Montana, botanical capacity is embodied in our state’s rich plant species diversity and in the accumulation of botanical knowledge that has come from Indigenous peoples, emigrants, and a long history of botanical exploration.

In Montana, botanical capacity has accumulated and expanded, but also fractured and eroded. Indigenous peoples have for thousands of years accumulated botanical knowledge on their ancestral lands. After the signing of treaties, many US laws, policies, and practices led to the loss of access and inherent rights to lands and plants, contributing to generational losses in traditional botanical knowledge. Despite these obstacles, a resurgence in traditional plant knowledge and practices is happening. For western culture, botanical exploration, growth of a public university system, and the establishment of land management agencies expanded and diversified botanical capacity. But during the last 30-40 years, significant reductions in the number of botany degrees and botanical coursework offered at academic institutions across the nation and in Montana have reduced botanical capacity. Periods of accumulation and expansion in botanical capacity have not occurred at the same time, nor equally for all parts of the population, effectively reducing botanical capacity and hindering plant conservation in Montana. This section, *Strengthening Botanical Capacity in Montana* addresses the sources of capacity, and the many ways people have gained and lost capacity at various periods in time; the need to embrace the components and complexity of capacity; and outlines goals and conservation objectives from four areas: information needs [inventory, monitoring, and research]; protection and restoration; outreach and education; and policy and regulation.

Strengthening botanical capacity requires invigorating educational systems; recognizing that good botanical skills are needed elements of other disciplines; developing botanical certifications where degrees are no longer possible; and introducing kids at any early age to the world of plants. It also means welcoming and respecting worldviews, perspectives, and traditional knowledge gained and used by Native American peoples; restoring, remediating, and reclaiming disturbed lands with sustainable methods using state- and local-sourced native plant species; and a whole lot more!

Section 4:

Montana’s Vascular Plant Species of Greatest Conservation Need

Montana’s native plants are an integral component of our biological diversity, functional ecosystems, cultural heritage, and economic sustainability. Furthermore, Montana’s 431 rare and at-risk native plant species are a unique and irreplaceable part of the state’s and nation’s natural heritage. This Strategy identifies and prioritizes 109 Plant Species of GCN (Box ES-1). Section 4 relays general information on their status, distribution, and the activities and processes that can benefit or harm them. It outlines over-arching goals and conservation objectives from four areas: information needs [inventory, monitoring, and research]; protection and restoration; outreach and education; and policy and regulation.

The 109 Plant Species of GCN consist of 105 Montana Species of Concern (SOC) and 4 “management of concern” vascular plants. Most of these species are of GCN due to their rarity

¹ Global Strategy for Plant Conservation: <https://www.cbd.int/gspc>

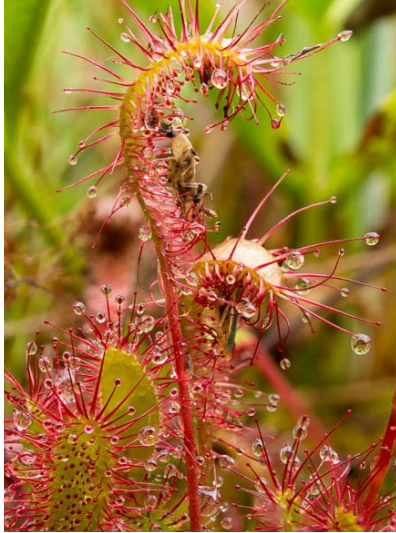


Photo credit: Dee Blank

Photo ES-2. An English Sundew (*Drosera anglica*) plant traps a spider. Swan Valley, Montana.



Photo credit: Bonnie Heidel

Photo ES-3. Northern Beechfern (*Phegopteris connectilis*) is a rare find in northwest Montana.



Photo credit: Dee Strickler

Photo ES-4. Payette Beardtongue (*Penstemon payettensis*) is known from old observation records in southwest Montana.

in Montana coupled with a direct or indirect threat as determined by the Montana State Threat Score. The 4 Plant Species of GCN that are of “management concern” are common and prominent on the landscape but observed by land managers from different agencies and/or Tribal nations as in potential decline from various threats. About 14 Plant Species of GCN are also classified as Plant Species of Greatest Inventory Need (PSGIN) because information on their populations, life history, or habitat conditions is poorly documented despite having mapped locations.

The 109 Plant Species of GCN are further divided into categories of priority. Priority 1 is assigned to 23 plant species for which there is more rigorous observation and mapping data and/or biological literature. Individualized conservation profiles with species-specific conservation objectives are developed for Priority 1 species. Conservation profiles for 5 GCN plant species have been completed and can be found in Appendix A: Sapphire Rockcress (*Boechera fecunda*), Water Howellia (*Howellia aquatilis*), Whitebark Pine (*Pinus albicaulis*), Spalding’s Catchfly (*Silene spaldingii*), and Ute Ladies’-tresses (*Spiranthes diluvialis*). Future work on the Strategy is needed to complete conservation profiles for the remaining Priority 1 plants. Priority 2 is assigned to 86 plant species for which less is known beyond accurate observation data mapping. Available information, such as reports, monitoring plans, management guidelines, and identified needs for implementing conservation are to be relayed through spreadsheets and other formats shared by the partnership and posted on the developing Strategy’s webpage, hosted by the Montana Natural Heritage Program (MTHHP).

Many Plant Species of GCN also have federal or Tribal designations. Of the 109 Plant Species of GCN, management responsibilities for 4 species are shared with the US Fish and Wildlife Service (USFWS) under the Endangered Species Act (ESA). Region 1 of the US Forest Service (USFS) designates 52 Plant Species of GCN as Sensitive or Species of Conservation Concern. The Montana/Dakotas Bureau of Land Management (MT/Dakotas BLM) designates 17 Plant Species of GCN as Sensitive. Some species also have Tribal designations and are protected by the specific Tribal nation through their own regulations, ordinances, and land management policies.

Box ES-1. 109 Plant Species of Greatest Conservation Need in Montana alphabetized by MTNHP's primary scientific name.

<i>Agastache cusickii</i>	<i>Erigeron linearis</i>	<i>Petasites frigidus</i> var. <i>frigidus</i>
<i>Allium columbianum</i>	<i>Eriogonum salsuginosum</i>	<i>Phegopteris connectilis</i>
<i>Allium parvum</i>	<i>Eriogonum soliceps</i>	<i>Phlox missoulensis</i>
<i>Alnus rubra</i>	<i>Fraxinus pennsylvanica</i>	<i>Physaria carinata</i>
<i>Ammannia robusta</i>	<i>Githopsis specularioides</i>	<i>Physaria didymocarpa</i> var. <i>lanata</i>
<i>Anthoxanthum hirtum</i>	<i>Glossopetalon spinescens</i>	<i>Physaria douglasii</i>
<i>Astragalus barrii</i>	<i>Goodyera repens</i>	<i>Physaria humilis</i>
<i>Astragalus ceramicus</i> var. <i>apus</i>	<i>Grayia spinosa</i>	<i>Physaria klausii</i>
<i>Astragalus ceramicus</i> var. <i>filifolius</i>	<i>Grindelia howellii</i>	<i>Physaria lesicii</i>
<i>Astragalus convallarius</i>	<i>Heterocodon rariflorum</i>	<i>Physaria pachyphylla</i>
<i>Astragalus oreganus</i>	<i>Howellia aquatilis</i>	<i>Pinus albicaulis</i>
<i>Athysanus pusillus</i>	<i>Idahoa scapigera</i>	<i>Pinus monticola</i>
<i>Boechea fecunda</i>	<i>Ipomopsis congesta</i> ssp. <i>crebrifolia</i>	<i>Pleiocanthus spinosus</i>
<i>Braya humilis</i>	<i>Kochia americana</i>	<i>Populus tremuloides</i> ¹
<i>Calochortus bruneaunis</i>	<i>Lagophylla ramosissima</i>	<i>Primula alcalina</i>
<i>Carex gravida</i>	<i>Lemna valdiviana</i>	<i>Primula incana</i>
<i>Carex idahoa</i>	<i>Leptodactylon caespitosum</i>	<i>Prunus pumila</i>
<i>Carex sychnocephala</i>	<i>Lewisia columbiana</i>	<i>Quercus macrocarpa</i>
<i>Castilleja covilleana</i>	<i>Lilium columbianum</i>	<i>Ranunculus orthorhynchus</i>
<i>Cirsium longistylum</i>	<i>Liparis loeselii</i>	<i>Rotala ramosior</i>
<i>Clarkia rhomboidea</i>	<i>Lobelia kalmii</i>	<i>Sandbergia perplexa</i>
<i>Cleome lutea</i>	<i>Lomatium nuttallii</i>	<i>Scheuchzeria palustris</i>
<i>Cryptantha fendleri</i>	<i>Malacothrix torreyi</i>	<i>Sidalcea oregana</i>
<i>Cyperus schweinitzii</i>	<i>Mentzelia pumila</i>	<i>Silene spaldingii</i>
<i>Cypripedium fasciculatum</i>	<i>Mimulus breviflorus</i>	<i>Spiranthes diluvialis</i>
<i>Cypripedium passerinum</i>	<i>Mimulus nanus</i>	<i>Tetradymia spinosa</i>
<i>Dichantheium acuminatum</i>	<i>Mimulus primuloides</i>	<i>Thalictrum alpinum</i>
<i>Dichantheium oligosanthes</i> var. <i>scribnerianum</i>	<i>Muhlenbergia andina</i>	<i>Tonestus aberrans</i>
<i>Draba densifolia</i>	<i>Nama densum</i>	<i>Trichophorum alpinum</i>
<i>Drosera anglica</i>	<i>Nuttallanthus texanus</i>	<i>Trichophorum cespitosum</i>
<i>Drosera linearis</i>	<i>Oenothera pallida</i> ssp. <i>pallida</i>	<i>Trifolium eriocephalum</i>
<i>Eleocharis bella</i>	<i>Ophioglossum pusillum</i>	<i>Trifolium gymnocarpon</i>
	<i>Oxytropis campestris</i> var. <i>columbiana</i>	<i>Trifolium microcephalum</i>
<i>Eleocharis rostellata</i>	<i>Pedicularis crenulata</i>	
<i>Elymus flavescens</i>	<i>Penstemon angustifolius</i>	<i>Utricularia intermedia</i>
<i>Epipactis gigantea</i>	<i>Penstemon lemhiensis</i>	<i>Vaccinium myrtilloides</i>
<i>Erigeron leiomerus</i>	<i>Penstemon payettensis</i>	<i>Viburnum lentago</i>

¹The Strategy treats *Populus tremuloides* as a GCN at the plant community level.

The 109 Plant Species of GCN are found at numerous locations (or occurrences) in Montana (Figure ES-1). Collectively, occurrences can be found in each of Montana's eight Level-1 Ecological System biological communities or land-use types. Collectively, occurrences are also found in all major landownership categories. Nearly 70% of GCN plant species have at least one occurrence on privately owned lands. Consequently, private landowners play an important role in conserving our state's rare species and native flora. Almost all of the GCN plant species have at least one occurrence on federal lands while 40% of GCN species have at least one occurrence on state lands. Tribal lands support at least one occurrence for 20% of the GCN plant species.

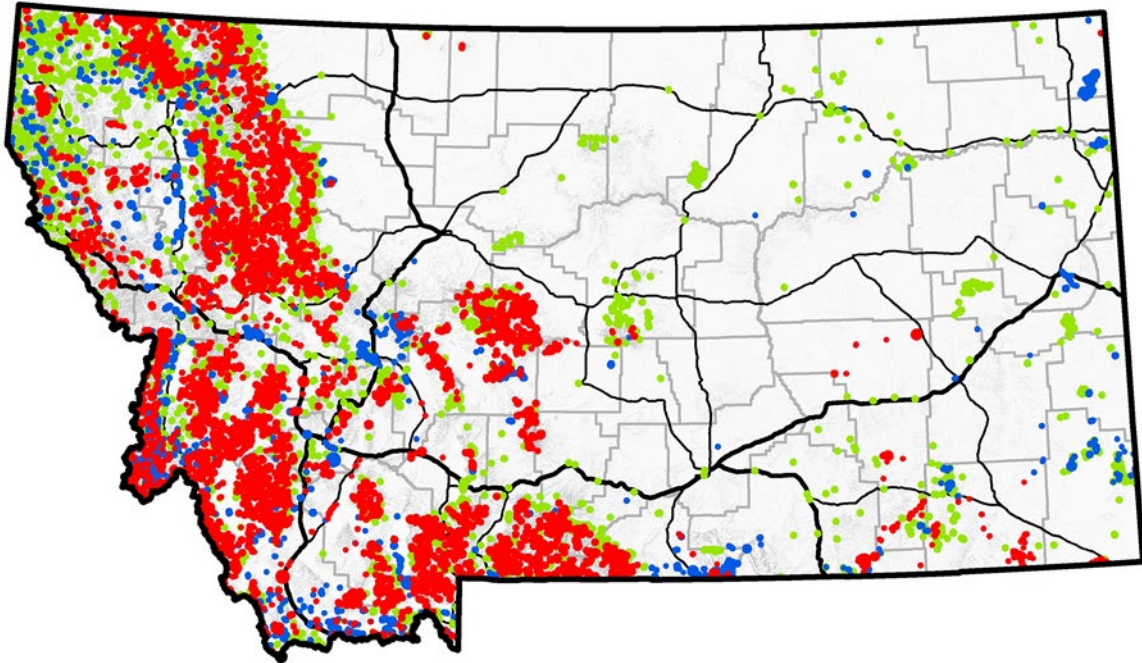


Figure ES-1. The distribution of Plant Species of GCN in Montana. Priority 1 SOC plants are in red. Priority 2 SOC plants are in blue. Priority 1 and 2 plant species of management concern are in green.

Most of the 109 Plant Species of GCN are vulnerable to loss from direct or indirect, documented or highly likely threats to their populations or habitat. The MTNHP tracks reported threats to Montana SOC and Potential Species of Concern (PSOC) plants in a database and periodically evaluates the data to assign a State Threat Score. Many factors, such as the species' biology, resiliency of the habitat, and the type, severity, and timing of the activity or process, determine whether that activity or process is or is not a threat to the plant. This section describes the most common types of natural or human activities in Montana that can hinder or benefit Plant Species of GCN and their habitats: altered hydrological regimes; invasive species and noxious weeds; mining; recreational activities (tourism, plant collecting, and motorized vehicles); residential, commercial, and transportation development; agricultural development; altered disturbance regimes (grazing, browsing, fire, and flooding); and climate change.

Conserving Plant Species of GCN requires actions to integrate them into the 2025 Montana State Wildlife Action Plan revision; garner funding; study or monitor species responses to activities and potential threats; develop incentives to preserve species and restore degraded habitats; make local native plant materials accessible to the public; develop a statewide score card to measure conservation efforts; use Important Plant Areas and the Montana Natural Area System to protect exceptional occurrences and habitat; acknowledge and support traditional protocols for handling native plant materials; and much more! Implementing suggested conservation objectives strengthens botanical capacity in Montana.

Section 5: Unique Habitats of Greatest Conservation Need



Photo ES-5. Wooded Vernal Pools are a Unique Habitat found in the Swan Valley, Montana. These pools promote biodiversity and can provide habitat for Water Howellia (*Howellia aquatilis*), a Plant Species of GCN.

In various locations throughout Montana there are unique habitats that occupy relatively small areas, have formed under unusual combinations of geology, soil chemistry, hydrology, and/or other factors, and support rare plants and uncommon plant assemblages. Unique habitats are priorities for conservation because they support rare elements (species and/or plant assemblages), along with unique physical components (uncommon combinations of geology, soils, hydrology, or other ecological characteristics); and, typically are not included in plant community classifications such as the US National Vegetation Classification.

This *Strategy* identifies and prioritizes nine Unique Habitats of GCN (Box ES-2). Section 5 relays information on their general location, associated rare species, and outlines over-arching goals and conservation objectives from four aspects areas:

information needs [inventory, monitoring, and research]; protection and restoration; outreach and education; and policy and regulation. Individualized conservation profiles with habitat-specific conservation objectives are to be developed for each unique habitat. Conservation profiles for two GCN unique habitats have been completed and can be found in Appendix B: Centennial Valley Sand Dunes and Metamorphosed Limestone. Future work on the Strategy is needed to complete conservation profiles for the remaining Unique Habitats of GCN. Information and conservations profiles are to be relayed and shared by the partnership and posted on the Strategy's web page, hosted by MTNHP.

Box ES-2. The Nine Unique Habitats of Greatest Conservation Need in Montana.

- Bedrock Glades
 - Granitic Glades
 - Argillite Bedrock Meadows
- Bentonite Deposits
- Centennial Valley Sand Dunes
- Metamorphosed Limestone
- Obsidian Sands
- Peatlands [Fens]
- Shale Barrens
- Vernally Moist Ledges
- Wooded Vernal Pools

Conserving Unique Habitats of GCN requires centralizing information; initiating field inventories to characterize, map, and assess sites; studying or monitoring ecological responses to activities and potential threats; evaluating the protective status of known locations; developing educational materials; establishing working groups to complete conservations profiles; and a whole lot more! Implementing suggested conservation objectives strengthens botanical capacity.

Section 6: Plant Communities of Greatest Conservation Need

Numerous widespread plant communities characterize the terrestrial, riparian, and aquatic systems within the Rocky Mountain and Great Plains regions of Montana. Many national, regional, and state level classification systems have been used in Montana to describe, classify, categorize, and/or map our state's vegetation. Montana's Tribes also have ways of knowing the plant communities on their ancestral lands and the reservation lands they manage. Although widespread plant communities are prominent in Montana, some are of concern to land managers across the state because of natural or anthropogenic stressors from threats or a lack of protection or regulation. Tribal members have also expressed great concern for some of their important cultural plants and physical places because of natural or anthropogenic stressors and/or lack of protection or regulation.



Photo ES-6. Sagebrush plant communities at Hell Creek on the Charles M. Russell National Wildlife Refuge, Montana.

Photo credit: Dee Blank

they manage. Although widespread plant communities are prominent in Montana, some are of concern to land managers across the state because of natural or anthropogenic stressors from threats or a lack of protection or regulation. Tribal members have also expressed great concern for some of their important cultural plants and physical places because of natural or anthropogenic stressors and/or lack of protection or regulation.

The *Strategy* identifies and prioritizes five Plant Communities of GCN (Box ES-3). Section 6 relays information on their general location and outlines over-arching goals and conservation objectives from four areas: information needs [inventory, monitoring, and research]; protection and restoration; outreach and education; and policy and regulation. Individualized conservation profiles with plant community-specific conservation objectives are to be developed for each Plant Community of GCN. A conservation profile for one GCN plant community has been completed and can be found in Appendix C: Quaking Aspen (*Populus tremuloides*) Communities. Future work on the Strategy is needed to refine the remaining Plant Communities of GCN and develop conservation profiles. Information and conservation profiles are to be relayed and shared by the partnership and posted on the Strategy's web page, hosted by MTNHP.

Box ES-3. The Five Plant Communities of Greatest Conservation Need in Montana.

- Cottonwood Riparian Forest Communities
- Prairie Pothole Communities
- Sagebrush Communities
- Quaking Aspen Plant Communities
- Western (Montane) Grasslands

Conserving Plant Communities of GCN requires centralizing information; networking to establish working groups that could refine and develop community-specific conservation profiles; continuing to update vegetation mapping and classification; studying or monitoring ecological responses to activities and potential threats; evaluating the protective status of these communities across the state; joining existing partnerships to further management and conservation efforts; and many others! Implementing suggested conservation objectives strengthens botanical capacity in Montana.

Section 7: The Roles of Herbaria in Plant Conservation

An herbarium preserves dried, pressed plant specimens that document Montana's flora, and that of our nation. With more than 200 years of plant collecting, Montana's herbaria document most of our state's botanical biodiversity and support the work of researchers, educators, land managers, conservation practitioners, consultants, and students. The preserved physical specimens and their associated labels with detailed information provide a foundation for classifying and communicating the names of plants, fungi, and algae found in natural areas, and those that are cultivated for agriculture, horticulture, and forestry. Additionally, herbarium specimens help us determine a species' distribution; evaluate environmental variables and threats that affect plant distributions; and assess the risk of extirpation or extinction for a given species. Herbaria are valuable tools for validating rarity, assessing population trends, and determining agency designations.

Herbarium curators and collection managers are leading innovative processes to digitize plant specimen data while maintaining the preservation of physical specimens.

Digitized plant specimens and their labels of information are free and publicly available through online portals. This has increased the use of plant specimen data, broadened the types of data users, and resulted in new applications for using specimens. Meanwhile, herbarium staff work to maintain the physical specimen, which makes it available for teaching, and for studies involving genetics, morphology, and taxonomy.

Despite the myriad of services and information provided by herbaria, collection managers and curators face multiple challenges to fund, operate, and maintain herbaria and their useful and irreplaceable plant specimens. Shifting academic priorities have created more competition for space and budgets, changed the nature of faculty hires, and decreased the number of formal botany degrees offered at universities and colleges - in Montana and nationally. However, the need continues to grow for plant-based skills in identification, management, restoration, and research. While visits to herbaria may be declining, online access to herbaria has significantly increased. Users of the on-line data often give credit to the portal that displays the data, but not the actual herbarium where specimens are stored, managed, imaged, and databased.



Photo ES-7. An herbarium specimen of Arrowleaf Balsamroot (*Balsamorhiza sagittata*) - a forb iconic to Montana.

Photo credit: University of Montana (MONTU) Herbarium

Section 7 identifies and prioritizes eight herbaria in Montana, and outlines a statewide strategic goal, five objectives, and many subsequent actions to help sustain them. The eight herbaria are registered on the Index Herbariorum and are located at: Montana State University (MONT), Montana State University-Billings (MSUB), University of Montana (MONTU), Glacier National Park (GLAC), Yellowstone National Park (YELLO), Beaverhead-Deerlodge National Forest (BDNF), Bitterroot National Forest (BNFH), and Tu-Hi Hong and Pum-Hi Hong Herbarium [GFC]. Information specific to each herbarium is provided in Appendix D.

Sustaining Montana’s herbaria requires strengthening working relationships between the herbarium, university decision-makers, land management agencies, non-governmental organizations, consultants, and community support groups; identifying long-term funding sources and operational needs; retaining relevant and accessible specimen collections; serving the educational community; and a whole lot more!

Section 8: The Importance of Native Plants and Communities in Sustaining Animal Pollinators

Native plants and pollinators co-evolved more than 65 million years ago. Today, animals help pollinate nearly 88% of the world’s 352,000 flowering plant species. This symbiotic relationship has shaped the diversity of both plants and animals in our region and across the globe. The coexistence of native plants and native animal pollinators hinges on the ability of these species to live in functioning plant habitats. Such plant habitats can be found in one’s backyard garden, in the wildest of places, and everywhere in between.

Native plants differ in their size, shape, habit, soil, water and nutrient requirements, and leaf chemistry, which means that where there is a diversity of plant species, there will be greater opportunities for animals to obtain their energy (food) with less competition. A greater array of native plant species also means more opportunities for native animal pollinators to find shelter, nesting, and resting sites, whether daily or seasonally, along with water, prey, and other components to carry out their life cycles.

Section 8 touches on the important services Montana’s native plants and plant communities provide to pollinators, the need to sustain and use them in landscaping and restoration, and the effect pollinators have on rare and common native plants. Further, it highlights existing resources, relevant to Montana, that private landowners and public land managers can use to promote native plants, create communities, and in turn support animal pollinators. With a little research and effort, native plant communities can be created and maintained in small places. This section provides links to useful resources to determine and find native plant species and plant materials, along with tools to help create native plant pollinator habitat.



Photo credit: Aaron Clausen

Photo ES-8. Sulphur butterfly (family Pieridae) foraging on a Dotted Blazing Star (Liatris punctata) plant near Great Falls, Montana.

THE FUTURE FOR PLANT CONSERVATION IN MONTANA

Fortunately, there are still meaningful opportunities to make a difference for native plant conservation right now - in Montana. Compared to animals, Plant Species of GCN are relatively easy to conserve because they typically occur in small numbers and/or occupy discrete geographical areas. Thus, many Plant Species of GCN can often be protected with a relatively small investment of time and resources through voluntary and cooperative actions. Conserving Unique Habitats and Plant Communities of GCN can be compatible with other habitat-based projects and planning efforts that are more typically accomplished by federal and state agencies, Tribal nations, and non-government conservation organizations.

The overall goals of the *Strategy*, and the partnership behind it, are to conserve Montana's native Plant Species, Unique Habitats, and Plant Communities of GCN and ameliorate the five constraints that have hindered plant conservation. Conserving species, unique habitats, and communities - of greatest conservation need - means that biodiversity of native species is promoted in protection and restoration efforts, populations are sustainably managed or conserved to retain genetic exchange, viability, and health, natural ecological processes are emulated, and threats are abated.

This *Strategy* is a voluntary call to action - highlighting the conservation steps that federal, state, and local agencies, Tribal nations, non-government conservation organizations, private groups, academic institutions, and individuals can take to help accomplish one or more of the many secondary goals and prioritized objectives in this document. The Core Team envisions this *Strategy* as a living document, maintained by a *Strategy* Stewards Committee - a seven-member group representing MNPS, MTNHP, USFS, MT/Dakotas BLM, Montana Department of Natural Resources and Conservation, Montana Fish, Wildlife & Parks, and Tribal nation(s). The Core Team envisions that any person in Montana's botanical network or associated with the *Strategy*'s larger partnership could participate in, lead, or complete a conservation objective for which they feel motivated and have the skills, time, ability, and/or resources to work on. Successful implementation and conservation of Montana's native Plants Species, Unique Habitats, and Plant Communities of GCN go hand-in-hand with strengthening botanical capacity across all peoples in the state to support the recommended conservation objectives and any similar efforts not mentioned in this *Strategy*.

“In some Native languages the term for plants translates to ‘those who take care of us.’”

~Robin Wall Kimmerer, author of
*Braiding Sweetgrass: Indigenous Wisdom, Scientific
Knowledge, and the Teachings of Plants* (2013)



Happy Botanizing!