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An Exploration of Ethnobotanically Significant Plants to the Native American Tribes of Montana

By: Margaret Magee

Across the state of Montana, there are seven Tribal reservations each with its own diverse landscapes, wild plants, and Tribal nations. These Tribal nations include the Assiniboine, Gros Ventre, Blackfeet, Chippewa Cree, Crow, Salish, Kootenai, Pen d' Oreille, Northern Cheyenne, and the Dakota Sioux. Additionally, the Little Shell Chippewa are based out of Central Montana but do not have a reservation. Each Tribe has a long and storied history in Montana and around the rest of the United States. A large part of this history involves plants and their uses in medicine, in ceremony, as tools and toys and construction materials, for trade, as cosmetics and conservation materials, for phenology, and as a mechanism to combat settler colonialism. This is an area of study known as ethnobotany. Ethnobotany is a diverse and extremely fulfilling area of study combining botanical and cultural knowledge and taking human influence and presence into account in the area of ecology. The commitment to and continued use of these plants in everyday life is a persistent connection to traditional lifeways and a continuation and preservation of ethnobotanical knowledge. The plants that are involved in these practices are diverse and while some are used by all or many tribes, many others are unique to certain tribes. This is a cursory exploration of some of those plants, and how they are used by the Native Tribes of Montana.

The Blackfeet Reservation on the Northwest Plains of MT is the base for the Blackfeet Tribal Nation. They have a very diverse use of native plants including over 185 species. *Erythronium grandiflorum*, commonly known as glacier lily, is utilized as a food source and as a treatment for an affliction of boils. *Berberis repens*, commonly known as Oregon grape, has many uses. The berries are eaten, while the roots are used as a dye and the root bark is used as a treatment for maladies of the stomach, kidney issues, and mountain fever. *Alnus incana*, also known as thin-

leaved alder, is boiled to create an orange dye. A tea from the bark is also drunk for its medicinal properties. *Cornus stolonifera*, or red-osier dogwood is a popular shrub and its bark is used in combination with beaver teeth to produce gambling wheels. It is also drunk as a medicinal tea and in a smoking mixture with tobacco. Lastly, *Stipa spartea*, also known as porcupine grass, is spiky like the needles of a porcupine and makes up the spines of hairbrushes.

The Rocky Boy's Reservation is the base for the Chippewa Cree Tribe descended from the Cree of Canada and the Chippewa from North Dakota and is located in North Central Montana. The Chippewa Cree diverse plant usage includes *Cicuta macculata*, commonly referred to as spotted water hemlock which is used as an antirheumatic to treat soreness and arthritis symptoms. Additionally, its seeds are smoked in a mixture with Tobacco. Particular care is taken by the Chippewa Cree when using hemlock because, like many other plants, it can be poisonous if prepared and handled improperly. *Mentha arvensis*, or wild mint, is used as a hemostat to slow and stop external bleeding. It also is an oral remedy for mouth and tooth pain. Many Tribes, including the Chippewa Cree, utilize the leaves of wild mint in a medicinal tea. The roots of *Anemone canadensis*, commonly known as meadow anemone, are used to treat skin ailments. Additionally, the leaves serve as a hemostat. Menstrual symptoms are treated with the root of *Actaea rubra*, known as Red Baneberry. *Prunella vulgaris*, or Heal all, follows its name and serves as a healer.

The Crow reservation is located in South Central Montana among plants of the forest and the plains. It is the base for the Crow Tribe who put their knowledge and location to good use in utilizing the plants around them. *Asclepias speciosa*, commonly known as showy milkweed, is a food source. Additionally, its white sap, which gives it the name Milkweed, is used to treat sore and achy joints, and also serves as a temporary material for branding livestock. This is a large

plant, that is easily distinguishable. *Yucca glauca*, or Great Plains yucca is a common plant seen in dessert and semi-dessert environments. The Crow boil yucca to create a shampoo for people and to wash animal hides in preparation for tanning. The flowers are also eaten raw. *Shepherdia canadensis*, also known as soapberry, has a bitter berry that lives up to its name. When cooked, this bitterness is lessened and makes for good jams, jellies, patties, and sauces that are rich in vitamin C. *Lomatium macrocarpum*, or big-seed biscuitroot has many uses by the Crow, including burning for purification, to ease the pain of women in labor, and lessen cold and flu symptoms. Lastly, the berries of *Sambucus nigra*, also known as elderberry, are eaten while the bark and branches are molded into flutes.

Many of the Tribes of Montana make use of plants of all different taxa and all different life forms including grasses, forbs, bryophytes, shrubs, sedges, deciduous trees, rushes, and coniferous trees. The Salish, Kootenai and Pend d'Oreille Tribes of the Flathead reservation are no exception.

Lewisia rediviva, commonly known as bitterroot, is highly cherished and utilized by the Salish people. While most known for its beautiful, big, and bright pink flower, the roots are the most useful. They are eaten and serve as a good source of vitamins A and C. It is an essential food source to sustain the Tribe through the Winter, when harvests of fresh plant foods are slim. The flowers do however serve the purpose of indicating when the plant is ready for harvest. The Salish pray to bitterroot for a good harvest and praise it for the generous gifts it offers. It also happens to be the official state flower of Montana. *Monarda fistulosa*, or beebalm, is utilized by the Kootenai, along with many other tribes, as a tea to ease ailments of the kidney. Also, it is place on the rocks in the sweat lodge to serve as a sort of perfume for those in attendance. *Camassia quamash*, also known as camas, is a valuable food source to the Upper Pend d'Oreille,

Salish, and Kootenai Tribes. This blue flower and its edible bulbs are also a trade item between the Pend d'Oreille and the Kootenai. Another plant harvested for its edible bulb is *Claytonia lanceolata*, commonly referred to as spring beauty or Indian potato. The small flowers of spring beauty also are a phenological tool that indicate the return of spring. *Fragaria virginiana*, or wild strawberry, is a common food source among many Tribal nations as it is naturally sweet and very easy to harvest.

The Fort Belknap reservation is the base for the Gros Ventre and Assiniboine Tribes, located in the plains and sagebrush ecosystems of North Central Montana. The plains and sagebrush vegetation they utilize include *Artemisia ludoviciana*, commonly referred to as white sagebrush, is used to alleviate fevers. For many other Tribes, this plant is also burned as a purification tool for ceremony. The seeds of *Helianthus annuus*, also known as the common sunflower, are a high energy food source. They are so high energy in fact that they are often eaten during and prior to battle to fend off fatigue. They also produce an oil that is used for body and face paints. *Prunus virginiana*, also known as chokecherry, is used to treat stomach maladies. The berry is also eaten and is an ingredient in pemmican. Various species of *Thalictrum*, referred to as meadow rue, are infused as a perfume.

The Fort Peck Reservation is located adjacent to the Missouri River in the wide plains of NorthEast Montana and is the base for the Assiniboine and Dakota Sioux Tribes. *Dalea purpurea*, commonly known as purple prairie clover, is used to treat stomach maladies as well as measles and heart afflictions. The leaves can also be applied to external wounds. *Echinacea angustifolia*, known as Moench purple coneflower, is utilized in the treatment of gunshot wounds, snakebites and rabies and applied to reduce inflammation. *Acer negundo*, also known as boxelder, is burned in the formation of charcoal for painting and tattooing for ceremony. The

leaves of *Dasiphora fruticosa*, also known as shrubby cinquefoil, are drunk as a tea while the wood of *Juniperus horizontalis*, or creeping juniper is burned, and the rest of the plant used for medicine.

The Little Shell Chippewa Tribe do not live on a reservation but are based out of Central Montana, with a headquarters in Great Falls. For many years, the Little Shell Chippewa have been recognized by the state of Montana and they gained federal recognition in 2019. They use a wide variety of plant resources. *Allium cernuum*, also known as nodding onion, is a popular food source, but also is drunk as a tea to aid in stomach ailments and is an ingredient in a salve for skin ailments. *Heuchera cylindrica*, known as alumroot, functions as a coagulant and also is ingested to heal stomach issues. It also serves as an antiseptic. The berries of *Ribes aureum*, or golden currant, are used alongside meat and wild mint in the production of pemmican and are planted as a conservation metric. *Bouteloua gracilis*, commonly known as blue gramma grass, is used as a phenological tool in predicting the severity of the coming season, as a treatment for cuts, and as a material in basket weaving.

Lastly, the Northern Cheyenne reservation is located in the plains and semi-desert ecosystems of South central, Montana and is the base for the Northern Cheyenne Tribe. *Abies lasiocarpa*, known as subalpine fir, is burned as an incense to ward off spirits causing illness and rejuvenate a spirit so overcome with sickness that it is near death. Additionally, the smoke from burning subalpine fir needles works to purify bodies prior to ceremony and can alleviate the fear of thunder. *Hierochloe odorata*, commonly known as sweetgrass, is used as a purification in both the Sacred Arrow and Sundance ceremonies. Additionally, the smoke from burning sweetgrass purifies weapons prior to battle and wards off evil. *Glycyrrhiza lepidota*, also known as American licorice, is eaten raw. When eaten in the Sweatlodge, it has a cooling effect. The roots

and leaves are also ingested as a tea to treat stomach maladies. *Agastache foeniculum*, also known as lavender hyssop, is infused into a tea and drunk to treat cold symptoms and cardiac fatigue. *Juncus balticus*, commonly referred to as wiregrass, is a basket weaving material.

The plants listed here offer only a small sample of the vast ethnobotanical plant uses by the Native Tribes of Montana. Below are images of those plants highlighted here and mention of a few other significant plants for each tribe. This area of study is vast and extremely diverse, and I encourage everyone to take note of the plants around you and take the time to learn about their uses and significance to the Native Tribes of Montana through exploration and communication with Native scholars, scientists, ethnobotanists, and Elders, who are the holders of this knowledge.

Plants of the Blackfeet Tribal Nation



Left to right: Glacier lily, Oregon grape (top), Thin Leaved alder, Red-osier dogwood, porcupine grass.

Other Notable Plants

Golden Pea (*Thermopsis montana*)

Sweet Grass (*Hierochloa odorata*)

Willow (*Salix sp.*)

Common Juniper (*Juniperus communis*)

Blue Grama Grass (*Bouteloua gracilis*)

Plants of the Chippewa Cree



From left to right: wild mint, heal all, red baneberry, meadow anemone, spotted water hemlock

Other Notable Plants

Hardstem Bulrush (*Schoenoplectus acutus*)

Beebalm (*Monarda fistulosa*)

Pussytoes (*Antennaria microphylla*)

Canby's Wild Lovage (*Ligusticum canbyi*)

Plants of the Crow Tribe



From left to right: showy milkweed, great plains yucca, soapberry, elderberry, big-seed biscuitroot

Other Notable Plants

Subalpine Fir (*Abies lasiocarpa*)

Yarrow (*Achillea millefolium*)

Serviceberry (*Amelanchier alnifolia*)

Paper Birch (*Betula papyrifera*)

Narrow-leaved purple coneflower (*Echinacea angustifolia*)

Plants of the Salish, Kootenai, and Pend d'Oreille Tribes



From left to right: bitterroot, camas, spring beauty, beebalm, wild strawberry

Other Notable Plants

Kinnickinnick (*Arctostaphylos uva-ursi*)

Arrowleaf Balsamroot (*Balsamorhiza sagittata*)

Wild Rose (*Rosa woodsii*)

Silverberry (*Elaeagnus commutata*)

Chokecherry (*Prunus virginiana*)

Plants of the Gros Ventre and Assiniboine Tribes



From left to right: white sagebrush, common sunflower, chokecherry, meadow rue

Other Notable Plants

Rose (*Rosa sp.*)

Sweetgrass (*Hierochloa odorata*)

Wild Mint (*Mentha arvensis*)

Plants of the Assiniboine and Dakota Sioux Tribes



From left to right: purple prairie clover, Moench purple coneflower, boxelder, creeping juniper, shrubby cinquefoil

Other Notable Plants

Yarrow (*Achillea millefolium*)

White sagebrush (*Artemisia ludoviciana*)

Chokecherry (*Prunus virginiana*)

Plants of the Little Shell Chippewa



From left to right: nodding onion, alumroot, golden currant, blue gramma grass

Other Notable Plants

Maximilian sunflower (*Helianthus maximiliani*)

Bitterroot (*Lewisia rediviva*)

Prairie Smoke (*Geum triflorum*)

Snowberry (*Symphoricarpos albus*)

Plants of the Northern Cheyenne Tribe



From left to right: subalpine fir, sweetgrass, American licorice, wiregrass (top), lavender hyssop

Other Notable Plants

Giant Blazing Star (*Mentzelia laevicaulis*)

Beebalm (*Monarda fistulosa*)

Red Raspberry (*Rubus idaeus*)

Rocky Mountain Juniper (*Juniperus scopulorum*)

Great Plains Yucca (*Yucca glauca*)

References

- Black Elk, L.S. (1998). Culturally Important of the Lakota. Sitting Bull College. <https://puc.sd.gov/commission/dockets/HydrocarbonPipeline/2014/HP14-001/testimony/betest.pdf>
- Dexter, D. F., Martin, K., & Travis, L. (2014). Prehistoric Plant Use at Beaver Creek Rock Shelter, Southwestern Montana, U.S.A. *Ethnobotany Research and Applications*, 12, 355–384. <http://www.ethnobotanyjournal.org/index.php/era/article/view/1016>
- Hart, J., & Moore, J. (1992). *Montana Native Plants and Early Peoples*. Amsterdam University Press.
- Hart, J. A.. (1974). *Plant taxonomy of the Salish and Kootenai Indians of western Montana*. (Thesis) University of Montana. Graduate Student Theses, Dissertations, & Professional Papers. 6833. <https://scholarworks.umt.edu/etd/6833>
- Hart, J. A. (1981). The ethnobotany of the Northern Cheyenne Indians of Montana. *Journal of Ethnopharmacology*, 4(1), 1–55. [https://doi.org/10.1016/0378-8741\(81\)90019-2](https://doi.org/10.1016/0378-8741(81)90019-2)
- Johnston, A. (1970). Blackfoot Indian utilization of the flora of the northwestern great plains. *Economic Botany*, 24(3), 301–324. <https://doi.org/10.1007/bf02860666>
- Kolster, M.K. (1998) *Impacts of the global Echinacea market on the people and land of the Fort Peck Assiniboine and Sioux Reservation* (Thesis). University of Montana. Graduate Student Theses, Dissertations, & Professional Papers. 5807. <https://scholarworks.umt.edu/cgi/viewcontent.cgi?article=6842&context=etd>
- Little Shell Chippewa Tribe. (n.d.). Montana Little Shell Chippewa Tribes. <https://www.montanalittleshelltribe.org/>
- Mitchell Rose Bear Don't Walk. (2019). *Recovering our Roots: The Importance of Salish Ethnobotanical Knowledge and Traditional Food Systems to Community Wellbeing on the Flathead Indian Reservation in Montana* (Thesis). University of Montana. Graduate Student Theses, Dissertations, & Professional Papers. 11494. <https://scholarworks.umt.edu/etd/11494>
- Moerman, D. (2003). BRIT - Native American Ethnobotany Database. Native American Ethnobotany Database. <http://naeb.brit.org/uses/tribes/>
- Payne Family Native American Center Garden. (n.d.). UM Natural Areas. <https://hs.umt.edu/nativegarden/>
- Wolff, J. (2013). *The Crow Tribe's Knowledge of Local Plants*. (Thesis). University of Montana. Graduate Student Theses, Dissertations % Professional Papers. 4178. <https://scholarworks.umt.edu/etd/4178>

