



United States Department of Agriculture

Maintaining and Improving Habitat for Hummingbirds in Idaho, Montana, and North Dakota



– A Land Manager's Guide –



Forest Service National Headquarters

**POLLINATOR
PARTNERSHIP**

Introduction



Hummingbirds play an important role in the food web, pollinating a variety of flowering plants, some of which are specifically adapted to pollination by hummingbirds. Some hummingbirds are at risk, like other pollinators, due to habitat loss, changes in the distribution and abundance of nectar plants (which are affected by climate change), the spread of invasive plants, and pesticide use.

This guide is intended to help you provide and improve habitat for hummingbirds, as well as other pollinators, in Idaho, Montana, and North Dakota. While hummingbirds, like all birds, have the basic habitat needs of food, water, shelter, and space, this guide is focused on providing food—the plants that provide nectar for hummingbirds. Because climate, geology, and vegetation vary widely in different areas, specific recommendations are presented for each ecoregion in Idaho, Montana, and North Dakota. (See the Ecoregions in Idaho, Montana, and North Dakota section, below.)

This guide also provides brief descriptions of the species that visit Idaho, Montana, and North Dakota, as well as some basic information about hummingbird habitat needs.

Whether you're involved in managing public or private lands, large acreages or small areas, you can make them attractive to our native hummingbirds. Even long, narrow pieces of habitat, like utility corridors, field edges, and roadsides, can provide important connections among larger habitat areas.



Rufous Hummingbird nest
Courtesy of Martin Hutten

Hummingbird Basics



Wildflowers in meadow.
Courtesy of Marguerite Meyer

The hummingbird species of Idaho, Montana, and North Dakota are migratory, leaving in August to go to the wintering grounds in Mexico and returning to the US in April and May. Black-chinned, Calliope, Rufous and Broad-tailed hummingbirds breed in Idaho and Montana, while the Ruby-throated Hummingbird breeds in Eastern North Dakota. For hummingbird species to thrive, they need to find suitable habitat all along their migration routes, as well as in their breeding, nesting, and wintering areas. Even small habitat patches along their migratory path can be critical to the birds by providing places for rest and food to fuel their journey.

Food

Hummingbirds feed by day on nectar from flowers, including annuals, perennials, trees, shrubs, and vines. Native nectar plants are listed in the table near the end of this guide. They feed while hovering or, if possible, while perched. They also eat insects, such as fruit-flies and gnats, and will consume tree sap, when it is available. They obtain tree sap from sap wells drilled in trees by sapsuckers and other hole-drilling birds and insects.



Western columbine—*Aquilegia formosa*
Courtesy of Gary A. Monroe
USDA-NRCS PLANTS Database

Water

Hummingbirds get adequate water from the nectar and insects they consume. However, they are attracted to running water, such as a fountain, sprinkler, birdbath with a mister, or waterfall. In addition, insect populations are typically higher near ponds, streams, and wetland areas, so those areas are important food sources for hummingbirds.



Mountain stream.
Courtesy of Marguerite Meyer

Hummingbird Species in Idaho, Montana, and North Dakota

Following are brief descriptions of the hummingbird species most commonly found in Idaho, Montana, and North Dakota, as well as a list of other species that are uncommon or rare visitors.

Black-chinned Hummingbird (*Archilochus alexandri*)



RANGE—Black-chinned Hummingbirds occur in two Bird Conservation Regions (BCRs) in Idaho and Montana, which are BCR's 9 and 10, and do not occur anywhere in North Dakota. (See the Bird Conservation Regions section, below.) They are relatively common summer breeding residents throughout Idaho and the western edge of Montana, though occurring only transiently through central Idaho. In winter, they reside in the lowlands of western Mexico. They are most common in areas below 6000 feet and inhabit a variety of habitats associated with water (less than 1/2 mile), including canyons and gulches, riparian corridors, oak and cottonwood, and urban settings.



Black-chinned—male
Courtesy of Scott Carpenter

NESTING—Habitat includes canyons or floodplain riparian communities, especially near sycamore or cottonwood. In urban areas, they prefer settings with tall trees and many flowering shrubs and vines. After breeding, they may move to more elevated mountain habitats to feed on nectar-producing flowers. Many will move or stay in urban areas, where flowering plants and feeders are attractive. Typically arriving in April, they migrate south in August.

APPEARANCE—Unlike other North American hummingbirds, the wingtips of the Black-chinned Hummingbird look relatively broad and curved when the bird is at rest. While hovering, they pump their tail almost constantly. The adult male is dull green to emerald green above, pale gray to whitish below, becoming dull green on the sides. It has a velvety black gorget with an iridescent purple band below; the purple band can look black in poor light. White on the breast extends around the sides of the neck, contrasting strongly with the all-dark head. The central two tail feathers are green; the others are black, often with a purplish sheen.

The adult female is dull green to golden green above and pale gray below. The sides are gray-green and often have a tawny or cinnamon-colored patch on the lower flank. The throat of the female can be unmarked or have dusky streaking or spotting in the center of the gorget. The tail is greenish or blackish, with the three outer pairs of tail feathers broadly tipped with white. Immature birds look similar to adult females; refer to a field guide for more information.



Black-chinned—female
Courtesy of Scott Carpenter

Ruby-throated Hummingbird (*Archilochus colubris*)



RANGE—Ruby-throated Hummingbirds are the only hummingbirds that breed in eastern North America, including southern Canada from Newfoundland to just west of the Alberta-British Columbia border. They occur regularly in 38 eastern states but only rarely as vagrants in the western U.S. By mid-October nearly all ruby-throats migrate to central Mexico or Central America as far south as western Panama, returning to Gulf Coast states as early as February before dispersing northward. Migration routes are not well-understood; some ruby-throats have been observed in trans-Gulf migration, but it is likely others migrate overland through Mexico. Ruby-throated Hummingbirds show remarkable site fidelity; banded individuals have been captured in the same nesting areas for as many as nine years, and recent studies have shown similar site fidelity on the species' wintering grounds in Costa Rica and Belize.

Although small numbers of ruby-throats historically overwintered in southern Florida and on the Gulf Coast, in recent winters they have become increasingly common northward to North Carolina's Outer Banks and, in some cases, even at inland locales in the southern U.S. (Most winter hummingbirds in the eastern U.S. are western species, especially Rufous Hummingbirds.) With their vast distribution across North and Central America, Ruby-throated Hummingbirds are arguably the most abundant of all 340-plus hummingbird species.



Ruby-throated Hummingbird—male
Courtesy of Hugh Vandervoort

As opportunistic non-specialists, their populations appear stable or on the increase.

NESTING—Ruby-throats are birds of the edge; the female typically builds her nest near an open area on a downward-angled branch, sometimes overhanging water. They are far more common in hardwoods than in coniferous forests, from sea level to at least 6,000 feet in the Appalachian Mountains. Because of the density of green vegetation in the eastern U.S., Ruby-throated Hummingbird nests are



Ruby-throated Hummingbird—female
Courtesy of Hugh Vandervoort

often less obvious (and more poorly studied) than those for western hummingbirds. Nests have been reported in deciduous and evergreen trees at heights from eye level to 60 feet above ground.

Habitat includes woodland and riparian communities in eastern North Dakota. In urban areas, they prefer settings with tall trees and many flowering shrubs and vines. Many will move or stay in urban areas, where flowering plants and feeders are attractive. Typically arriving in April, they migrate south in August.

APPEARANCE—The adult male Ruby-throated Hummingbird’s bright metallic red gorget gives the species its name. Adult males also have iridescent green backs, dark flanks, and forked tails with pointed dark feathers. Females of any age are green-backed and all white beneath, including the throat; tips of the outer three tail feathers are rounded and white. Immature (first year) males resemble females—including the tail; their throats may be all white, streaked in green or black, and/or with one or more red feathers. Although adult males of some other western North American species have metallic red gorgets (e.g., Broad-tailed Hummingbirds), they should not be called or confused with “ruby-throats.”

Female ruby-throats are up to 25% larger than males. Both sexes have straight black bills. Because all Ruby-throated Hummingbird colors except white and black are iridescent, even individual birds will look different as light conditions change.

Calliope Hummingbird (*Selasphorus calliope*)



The Calliope Hummingbird is the smallest breeding bird in North America and is the smallest long-distance avian migrant in the world. Calliope Hummingbirds occur in BCRs 9 and 10 in Idaho and Montana, and do not occur in North Dakota.

RANGE—They are common summer residents in mountain habitats east of the Cascades crest. They migrate through both montane and lowland habitats. Spring migration is mainly through lower elevations along the Pacific Flyway. Fall migration is through both the Pacific and Rocky Mountain Flyways, at a wider range of elevations, from mountains to desert riparian corridors. The Calliope Hummingbird can be observed in the summer throughout mountainous parts of Idaho and western Montana, especially along riparian corridors such as rivers.



Calliope Hummingbird—male
Courtesy of Scott Carpenter



Calliope Hummingbird—female
Courtesy of Scott Carpenter

NESTING—Preferred nesting habitat is montane conifer forests, primarily in shrub-sapling seral stage into second-growth following fires or logging, and usually near (within 1 mile) of riparian habitat. They breed mostly in mountain areas from British Columbia to California, Nevada, and Utah. They breed mainly at middle elevations (4,000 to 7,000 feet), but sometimes as high as timberline (above 9,000 feet) and down to lower forest margins (500 feet).

APPEARANCE—The male Calliope Hummingbird weighs about the same as a penny—about half as much as a male Anna’s Hummingbird. The adult male is bright green above and creamy white below with a green wash on the sides and flanks. The adult male’s gorget is iridescent, wine-red to magenta-red, and, unlike other North American hummingbirds, separated into distinct rays that fan across its throat. The male can elevate the rays into a starburst display against the white background of its throat. Wingtips extend to or slightly beyond the short tail. Tail feathers are dull gray, variably edged with cinnamon at the base.

The adult female is bright green to golden green above and creamy white below, with a rusty wash on the sides, flanks, and across the lower breast. The gorget is evenly spotted with dusky to brownish bronze. The tail usually falls short of the wingtips. The adult female looks much like female Rufous or Allen’s Hummingbirds, but it is smaller with a shorter bill, shorter tail, and less rust at the base of the tail. Immature birds look similar to adult females. Calliope Hummingbirds often cock their tails upward, perpendicular to the body, while hovering.

Broad-tailed Hummingbird (*Selasphorus platycercus*)



Broad-tailed Hummingbird—male
Courtesy of David Inouye

variety of mountain habitats including piñon-juniper, pine-oak, montane riparian areas and wet meadows, and areas of open mixed conifers including fir, spruce, and pine, typically at higher elevations than Black-chinned Hummingbird; these two species have only a narrow range of overlap around 6000 feet. The Broad-tailed Hummingbird occurs in BCRs 9 and 10 in Idaho and Montana, and is generally not found in North Dakota. It spends the summers breeding in southern Idaho and parts of western and southern Montana. It winters as far south as Guatemala.

RANGE—The Broad-tailed Hummingbird is a long-winged, high elevation hummingbird whose migratory breeding populations range north across the Rocky Mountains to southern Montana and west through forested regions of Nevada and just barely make it into eastern California. This species occupies a wide

FOOD—Broad-tailed Hummingbirds primarily consume nectar from flowers such as red columbine, Indian paintbrush, sage species, currants, and scarlet mint. Broad-tailed Hummingbirds also feed from flowers that are not typically used by other hummingbirds, including pussywillows, and glacier lilies. They will



Broad-tailed Hummingbird—female
Courtesy of David Inouye

also eat small insects, gleaning them from leaves and snatching them from midair.

NESTING—Nest site selection and construction is done entirely by the female and can begin as early as late April, and ends by late July. Nests are typically observed

on low horizontal branches of willows, alders, cottonwoods, pines, firs, spruces, or aspens, generally 3-13 feet above ground. Their nests are often located over water. Broad-tailed Hummingbirds mainly breed between 6,000-10,000 feet, but have been observed nesting at elevations over 10,700 feet. After breeding, they follow the path of blooming plants southward.

APPEARANCE—These mid-sized hummingbirds have longer tail and wings than any other North American *Selasphorus* species. The male is green above and white below with an iridescent, rosy-red gorget. The male may be known at once due to the loud, cricket-like wing trill sound it produces with its wings. These specialized flight feathers allow him to be heard from about a 100-yard distance, making his presence obvious.

The female is green above and white below with rusty sides and rust at the base of the tail. Females can be distinguished from other *Selasphorus* species by a white eye-ring and long rectrices, which make their tails look longer and broader when fanned.

Rufous Hummingbird (*Selasphorus rufus*)



RANGE—The Rufous Hummingbird travels farther north than any other hummingbird, wintering in Mexico and migrating to breeding sites as distant as Alaska. Although a relatively small hummingbird, it has an aggressive nature and frequently chases larger hummingbirds from nectar sources. It is an important pollinator in the cool, cloudy Pacific Northwest, where cold-blooded insect pollinators are at a disadvantage. They begin arriving in western Washington in March. East of the Cas-



Rufous Hummingbird—female
Courtesy of Jim Cruce

cades, they arrive a month or more later, depending on the weather. It typically breeds in association with moist, temperate coniferous rainforest in association with Salal (*Gaultheria shallon*) and Evergreen Huckleberry (*Vaccinium ovatum*)—although they have been cited breeding in gulches adjacent to the snake river, miles from this habitat. Fall migration begins in June and is split between the Pacific and Rocky Mountain Flyways. As with other hummingbirds,

Rufous Hummingbirds typically move to higher elevations for the fall migration, following nectar flowers.

The Rufous Hummingbird is a common and widespread hummingbird species

throughout mountainous Idaho and western Montana, occurring in BCRs 9 and 10 in those states, and is not usually found in North Dakota.

NESTING—For breeding, they prefer second-growth forest, including clearcuts, burns and gaps. They will also use mature forests, parks, and residential areas— from sea level to 6,000 feet. Spring migration is mostly along the Pacific Flyway.



Rufous Hummingbird—male
Courtesy of Jim Cruce

APPEARANCE—The back of the adult male Rufous Hummingbird is cinnamon-colored (rufous), sometimes spangled with green and rarely more than half green. The underparts are creamy white with a rufous “vest.” The crown is bright green, and the gorget is iridescent scarlet to orange, appearing golden or yellow-green from some angles. The tail extends past the wingtips. The rufous tail feathers are black-tipped and pointed.

The adult female is bright green above and white below, strongly washed with rufous on the sides, flanks, and undertail coverts. The face and sides of the gorget are also washed rufous. The gorget is off-white, spangled with green to bronze (concentrated on the sides). The throat is marked with red-orange, from just a few spangles to a large patch. The rounded tail extends past the wingtips; it is rufous at the base and banded with black. The outer three pairs of tail feathers have white tips. Immature birds look similar to the adult female, although the immature males typically show more rufous on the rump and lower back as well as heavier markings on the throat.

Others



Other hummingbird species are sometimes, though rarely, seen in Idaho, Montana, and/or North Dakota. They include:

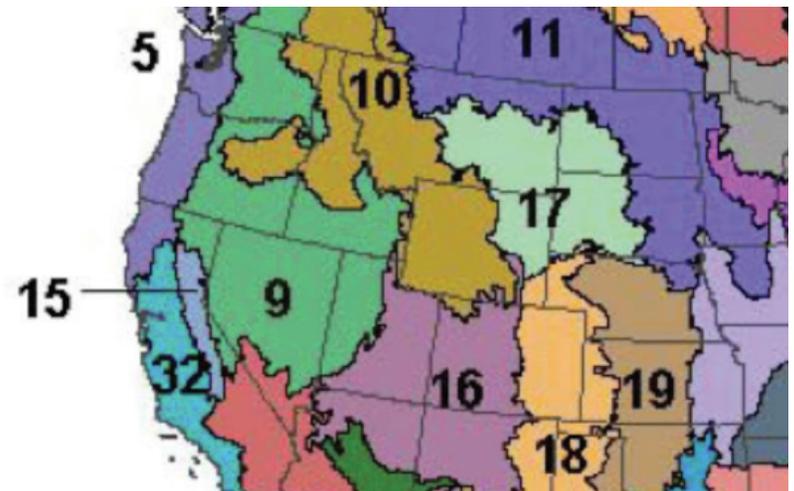
Anna’s Hummingbird (*Calypte anna*)

This species has been expanding its range east from Washington, and a few individuals have been cited in Idaho, but it is not yet known to be a regular resident or breeder.

Bird Conservation Regions in Idaho, Montana, and North Dakota

The United States North American Bird Conservation Initiative Committee is a coalition of government agencies, private organizations, and bird initiatives in the United States. The committee is working to ensure the long-term health of North America’s native bird populations. Bird conservation initiatives have produced national and international conservation plans for birds as well as regional plans for numerous BCRs, which are ecologically distinct regions in North America with similar bird communities, habitats, and resource management issues. The regional plans provide more detailed information on population objectives and habitat needs for birds in specific landscapes.

The four BCRs in Idaho, Montana, and North Dakota, the Great Basin (BCR 9), the Badlands and Prairies (BCR 17), the Prairie Potholes (BCR 11), and the Northern Rockies (BCR 10), are shown on the map (below).



Ecoregions in Idaho, Montana, and North Dakota

Land within Idaho, Montana, and North Dakota lies within seven ecoregions (see below—codes in parentheses), which are shown on the map: Ecoregions in Idaho, Montana, and North Dakota. The ecoregion boundaries differ from those of the BCRs and their relationship is as below.

(331) Great Plains-Palouse Dry Steppe (GPPDS) – lies within BCR 11 and BCR 17

(332) Great Plains Steppe Province (GPSP) – lies within BCR 11

(M332) Middle Rocky Mountains Steppe (MRMS) – lies within BCR 9, BCR 10, and BCR 17

(251) Prairie Parkland (Temperate) Province (PPTP) – lies within BCR 11

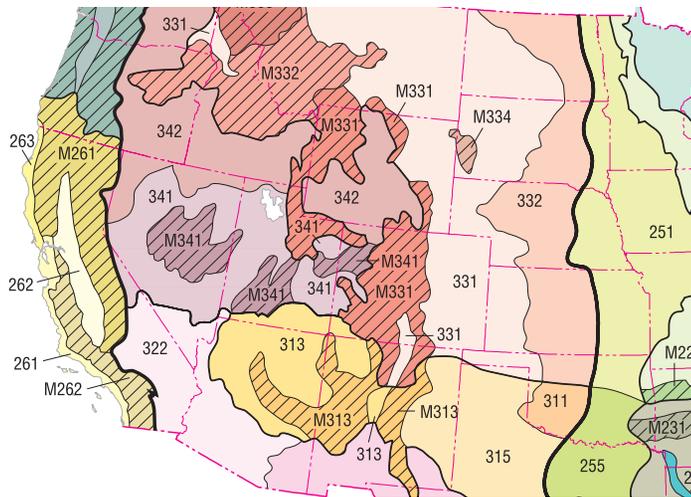
(M331) Southern Rocky Mountain Steppe (SRMS) – lies within BCR 10

(M333) Northern Rocky Mountains Forest-Steppe (NRMFS) – lies within BCR 10

(342) Intermountain Semi-Desert (ISD) – lies within BCR 9 and BCR 10

Note: Ecoregion map adapted from <http://www.fs.fed.us/rm/ecoregions/images/maps/ecoregions-united-states-sample.jpg>

The Pollinator Partnership website (www.pollinator.org) will show you which ecoregion you are in just by entering your postal zip code (under “Planting Guides” on the website). If you wish to supplement the information presented in this guide, for example, to attract other pollinators or to learn about other ecoregions, the Pollinator Partnership offers planting guides for ecoregions throughout the United States. The website provides additional tools and connections to useful resources for pollinator and plant information.



Hummingbird Nectar Plants for Ecoregions in Idaho, Montana, and North Dakota

The following table (*Hummingbird Nectar Plants for Ecoregions in Idaho, Montana, and North Dakota*) lists some plants that are nectar sources for hummingbirds. These plants are native to Idaho, Montana, and/or North Dakota, and are adapted to conditions in the ecoregions indicated in the table. The table also provides basic information on habitat and light, soil, and water needs. Finally, the tables provide seed sources for each plant valid as of July 2015. A directory of the seed sources follows the tables. Use locally-adapted genetically appropriate plants in all your restoration and pollinator enhancement work. Seed zones—areas with genetically similar plants—help determine the right plant materials to use; poorly chosen plants usually fail to thrive. See http://fs.bioe.orst.edu/web_maps/S_Zones_1Oct2013.html for provisional seed zones of Idaho, Montana, and New Mexico, and select plant materials from your zone. Planting non-natives to attract hummingbirds is against policy and destructive: these plants become invasive and disrupt ecosystems. For example, yellow toadflax (*Linaria vulgaris*, also called “butter and eggs”) is attractive to hummingbirds but is a noxious weed.



Yellow Toadflax
Courtesy of Colorado State
University Extension—Adams County

Hummingbird Nectar Plants for Ecoregions in Idaho, Montana, and North Dakota

Botanical Name	Common Name	Ecoregion ¹							Bloom Season	Sunlight	Soils, Water	General Habitat/ Elevation	Seed Source ²
		GPPDS	GPSP	MRMS	PPTP	SRMS	NRMFS	ISD					
Trees and Shrubs													
<i>Arctostaphylos uva-ursi</i>	Kinnikinnick			X		X	X	X	Mar-Jun	Sun to shade	Dry to moist, rocky or sandy, acid soils	Rocky, open woods; dry, sandy hills; mountainous regions	NSF, SMN
<i>Gaultheria shallon</i>	Salal						X		Apr-Jul	Sun to shade	Dry to wet, moist peaty soil	Coniferous forest understory	SMN
<i>Lonicera caerulea</i>	Sweetberry Honeysuckle			X		X	X		May-Jun	Sun	Moist, sand to clay	Wetlands, mountainous areas	
<i>Lonicera involucrata</i>	Twinberry Honeysuckle						X		Mar-Aug	Shade to sun	Moist, well drained	Moist or wet, open woods from sea level-10,000'	SMN
<i>Lonicera utahensis</i>	Utah Honeysuckle			X		X	X		Jun-Jul	Sun to partial shade	Moist	High-elevation shrub communities, wooded slopes, coniferous woods	
<i>Mahonia aquifolium</i>	Oregon Grape						X		Mar-May	Partial shade to shade	Moist to dry, well drained acid loam	Deep, conifer forests; open, rocky woods	NSF, SMN
<i>Mahonia nervosa</i>	Cascade Barberry						X		May-Jun	Partial shade	Dry to moist, well drained	Wooded slopes below 6000'	NSF, SMN
<i>Mahonia repens</i>	Creeping Barberry			X			X		May-Jul	Partial shade	Dry to moist, well drained	Dry, open woods & hills at high elevations	NSF, SMN, WNS
<i>Menziesia ferruginea</i>	Rusty Menziesia			X		X	X		May-Jun	Sun to shade	Moist	Shady to open coniferous woods with acid humus, moist slopes, streambanks	
<i>Ribes spp</i>	Various Currants												IGG, NSF, SMN
<i>Ribes Aureum</i>	Golden Currant			X			X		Apr-May	Sun to partial shade	Dry to moist	Moist to drier hillsides & river valleys	IGG, NSF, SMN
<i>Ribes inerme</i>	Whitestem Gooseberry			X		X		X	Apr-Jun	Sun to shade	Well drained, dry to moist	By streams, in ravines and on mountain slope	
<i>Ribes montigenum</i>	Mountain Gooseberry			X		X	X		Jun-Aug	Sun	Dry, rocky	Middle subalpine zone to timberline	WNS
<i>*Ribes sanguinum</i>	Pink-flowered Currant						X		Jan-May	Sun to shade	Dry to moist	Canyons and north slopes in the coast ranges, below 7000'	SMN
<i>Ribes viscosissimum</i>	Sticky Currant			X		X	X	X	May-June	Sun to shade	Moist to wet	Mountain forests, streambanks, and plateau sagebrush	
<i>Rosa woodsii</i>	Woods' Rose						X		late spring	Partial sun	Moist	Understory plant in dry and moist forest communities	IGG, NSF, SMN
<i>Rubus parviflorus</i>	Thimbleberry				X			X	May-Aug	Sun to shade	Rocky	Open, wooded hillsides; stream banks; canyons	PR, SMN
<i>*Rubus spectabilis</i>	Salmonberry			X					Mar-Jun	Shade to sun	Moist, acidic	Low, moist woods; stream banks; montane slopes	SMN
<i>Rubus spectabilis</i>	Salmonberry						X		Mar-Jun	Sun to shade	Moist to dry	Low, moist woods; stream banks; mt. slopes	SMN

Hummingbird Nectar Plants for Ecoregions in Idaho, Montana, and North Dakota...continued

Botanical Name	Common Name	Ecoregion ¹							Bloom Season	Sunlight	Soils, Water	General Habitat/ Elevation	Seed Source ²
		GPPDS	GPSP	MRMS	PPTP	SRMS	NRMFS	ISD					
<i>Sambucus racemosa</i>	Red Elderberry			X		X	X	X	May-Jun	Sun to partial shade	Moist	Woodland, savannah, wet meadow/prairie/field, riparian	NSF, SMN
<i>Symphoricarpos albus</i>	Common Snowberry			X		X	X		May-Jun	Sun to shade	Wet to moist	Wooded hillsides; rocky, open slopes	NSF, SMN
<i>Symphoricarpos occidentalis</i>	Western Snowberry						X		Jun-Aug	Partial shade	Moist, well drained	Dry, rocky hillsides; sand plains; prairies; open woods	
Perennial Herbs													
<i>Aconitum columbianum</i>	Colombian Monkshood			X		X	X		Jul-Aug	Shade	Moist, rich soils	Moist woods; stream banks; wet thickets	
<i>Agastache urticifolia</i>	Nettleleaf Giant Hyssop			X		X	X		Jun-Aug	Partial shade	Moist	Open slopes in woods	ASC, WNS
<i>Aquilegia caerulea</i>	Colorado Blue Columbine			X		X	X	X	late spring	Shaded	Moist	Moist woodlands	ASC, IGG, MM, WNS
<i>Aquilegia canadensis</i>	Wild Columbine				X				Apr-Jul	Partial shade, shade	Sandy, well drained	Calcareous, shaded woodlands	ASC, MM, PR
<i>Aquilegia formosa</i>	Western Columbine						X		Jun-Aug	Sun to shade	Moist, rich soils	Moist, open woods, banks & seeps; 4000-9000	
<i>Asclepias incarnata</i>	Swamp Milkweed				X				Jun-Oct	Sun to partial shade	Moist	Wet Meadow, Prairie, Field, Riparian, Swamp, Marsh	ASC, MM, PD, PR, WNS
<i>Asclepias speciosa</i>	Showy Milkweed	X	X		X				May-Sep	Sun	Dry to moist	Savannahs, prairies, road-sides, old fields, and meadows	ASC, MM, PD
<i>Asclepias tuberosa</i>	Milkweed, butterfly weed				X				May-Jul	Sun to partial shade	Dry	Grows in prairies, open woods, canyons, and hillsides	ASC, MM, PR
<i>Astragalus canadensis</i>	Canadian Milkvetch	X	X	X		X	X		May-Jul	Sun to partial shade	Moist to wet	Moist to dry prairies; stream banks; open woods	ASC, PD, PR
<i>Camassia quamash</i>	Small Camas			X		X	X	X	Apr-Jun	Sun	Heavy, spring-moist soils	Seasonally wet meadows	NI
<i>Campanula rotundifolia</i>	Bluebell Bellflower	X	X	X	X	X	X	X	Jun-Sep	Sun to shade	Dry, well drained	Moist, rocky, montane slopes; dry meadows & prairies; open woods; limey cliffs; beaches	NI, PR
<i>Castilleja applegatei</i>	Wavyleaf Indian Paintbrush							X	Apr-Jun	Sun to partial shade	Rocky, dry, well drained	Sagebrush, open conifer woods	
<i>Castilleja chromosa</i>	Desert Indian Paintbrush			X		X		X	Mar-May	Sun	Dry, well drained	Grasslands, semi-desert, foothills, canyons, grasslands	
<i>Castilleja integra</i>	Wholeleaf Indian Paintbrush					X			spring	Full sun	Moist	Arid hills, plains and mesa	
<i>Castilleja linariifolia</i>	Desert Paintbrush							X	Jun-Sep	Partial shade	Dry, rocky	Plains, sagebrush, juniper forests, at mid to high elevations	

Hummingbird Nectar Plants for Ecoregions in Idaho, Montana, and North Dakota...continued

Botanical Name	Common Name	Ecoregion ¹							Bloom Season	Sunlight	Soils, Water	General Habitat/ Elevation	Seed Source ²
		GPPDS	GPSP	MRMS	PPTP	SRMS	NRMFS	ISD					
<i>Castilleja linariifolia</i>	Wyoming Indian Paintbrush			X		X		X	May-Oct	Partial shade	Moist to dry, well drained	Open woods & brush areas from 2500-12,000	
<i>Castilleja miniata</i>	Giant Red Indian Paintbrush			X				X	May-Sept	Partial shade	Moist	Montane, subalpine meadows and woods	
<i>Castilleja rhexiifolia</i>	Splittleaf Indian Paintbrush	X		X		X			Jun-Aug	Partial shade	Dry, rocky	Moist, open, alpine to subalpine woods & slopes	
<i>Chamerion angustifolium</i>	Fireweed		X	X	X	X	X	X	Jul-Sep	Sun	Moist to dry	Disturbed soil in cool areas, burned areas	
<i>Corydalis caseana</i>	Sierra Fumewort			X		X		X	Jul-Aug	Shade	Moist	Shady moist areas in mountains	
<i>Delphinium glaucum</i>	Sierra Larkspur			X		X		X	Jul-Sep	Partial shade	Wet to moist	Wet, subalpine to alpine meadows & stream banks	
<i>Delphinium nuttallianum</i>	Nuttall's Larkspur			X		X			May-Jul	Sun	Sandy, well drained	Dry foothills, valleys & sagebrush deserts	
<i>Delphinium scaposum</i>	Desert Larkspur			X				X	Mar-May	Sun	Dry, gravelly	Semi-desert and low foothills	
<i>Epilobium alpinum</i>	Alpine Willowherb			X		X		X	Jun-Sep	Sun	Wet to moist	Sub-alpine to alpine wet meadows	
<i>Epilobium canum sub garrettii</i>	Hummingbird Trumpet			X		X		X	Jul-Oct	Sun to partial shade	Dry, well drained	Rocky outcrops, canyons, mountains, foothills	
<i>Erythronium grandiflorum</i>	Glacier Lily			X		X		X	May-Jul	Part shade	Moist	Grows in alpine or subalpine meadows, forest openings, among sagebrush	
<i>Frasera speciosa</i>	Elkweed			X		X		X	May-Aug	Sun to partial shade	Rich, moist	Woodland openings, from moderate to high elevations	
<i>Hydrophyllum capitatum</i>	Ballhead Waterleaf			X		X		X	Mar-Jul	Shade	Moist	Brushy areas and open woods	BFI
<i>Ipomopsis aggregata</i>	Scarlet Gilia			X		X		X	mid-summer	Partial sun	Moist	Desert canyons and cliffs, mon-tane meadows, and subalpine rock fields	IGG, NI
<i>Iris missouriensis</i>	Western Blue Flag Iris			X		X		X	May-Jul	Sun to partial sun	Moist to wet	Marshes; wet meadows	ASC, MM
<i>Lilium columbianum</i>	Columbian Lily							X	summer	Partial shade	Well drained soils	Ferny or brushy, redwood forest slopes; prairies; thickets	
<i>Lilium michiganense</i>	Michigan Lily				X				Jul-Aug	Partial shade	Moist	Prairies	PR
<i>Lilium philadelphicum</i>	Wood Lily				X				Jul-Aug	Sun to shade	Well-drained, humus-rich soils	Woodland openings, prairies	
<i>Lithospermum ruderale</i>	Western Stoneweed			X		X		X	Apr-Jun	Sun	Moist	Open places in sagebrush, juniper, or pine	BFI
<i>Lobelia kalmii</i>	Kalm's Lobelia		X					X	Jul-Oct	Shade	Wet areas	Streams and lake shores	

Hummingbird Nectar Plants for Ecoregions in Idaho, Montana, and North Dakota...continued

Botanical Name	Common Name	Ecoregion ¹							Bloom Season	Sunlight	Soils, Water	General Habitat/ Elevation	Seed Source ²
		GPPDS	GPSP	MRMS	PPTP	SRMS	NRMFS	ISD					
<i>Lupinus perennis</i>	Sundial Lupine				X				Apr-Jul	Sun to partial shade	Dry, sandy	Sand hills & clearings; open woods	ASC, PR
<i>Mertensia oblongifolia</i>	Oblongleaf bluebells			X		X	X		Apr-Jul	Sun to partial shade	Moist to wet	With sagebrush or on open slopes	
<i>Mertensia paniculata</i>	Tall Bluebells						X		May-Sep	Shade	Moist	Moist wooded or meadow areas	PR
<i>Mimulus guttatus</i>	Seep Monkeyflower	X	X		X	X		X	Apr-Jul	Partial to full shade	Moist to wet	Stream banks; wet places to 10,000'	WNS
<i>Mimulus lewisii</i>	Purple Monkeyflower			X		X	X		Jun-Sep	Partial shade	Moist to wet	Stream banks, moist meadows & seeps from 4000-10,000'	
<i>Mimulus ringens</i>	Allegany Monkeyflower	X	X		X				Jun-Aug	Sun	Moist	Wet meadows and streambanks	
<i>Monarda fistulosa</i>	Wild Bergamot				X				May-Sept	Sun to partial shade	Well drained, moist, sandy, loamy, clay	Dry open woods, fields, wet meadows and ditches	ASC, MM, NI, PD, PR
<i>Monardella odoratissima</i>	Coyotemint			X					Jun-Aug	Partial shade	Sandy soils	Wet or dry, rocky, forest openings from 3500-11,000'	
<i>Penstemon eatonii</i>	Firecracker Penstemon							X	Apr-May	Sun	Dry, well drained	Mesas; fields; roadsides; dry, rocky slopes at lower elevations	ASC, BFI, IGG, MM, WNS
<i>Penstemon fruticosus</i>	Shrubby Penstemon			X		X	X	X	May-Aug	Sun	Dry, rocky	Open, rocky or wooded foothill & higher elevation sites	BFI
<i>Penstemon payettensis</i>	Payette Beardtongue			X			X		Jun-Aug	Sun	Talus and rocky meadows	Talus or other open slopes from foothills to subalpine elevations	
<i>Penstemon procerus</i>	Small-flowered Penstemon			X					Jun-Jul	Sun	Dry to moist	Alpine meadows	NI
<i>Penstemon rydbergii</i>	Rydberg's Penstemon						X		May-Jul	Sun	Dry, well drained	Slopes, meadows and streambanks from valleys to sub alpine and alpine sites	WNS
<i>Phlox spp.</i>	Phlox												ASC, BFI, MM, PR
<i>Phlox longifolia</i>	Long-leaved Phlox			X		X	X	X	May-Jun	Sun	Dry, rocky	Dry slopes; open, rocky areas; dry plains	BFI
<i>Phlox multiflora</i>	Rocky Mountain Phlox			X		X		X	May-Aug	Sun	Dry, well drained	Sagebrush steppe, grasslands, open forests; montane to lower alpine	
<i>Phlox speciosa</i>	Showy Phlox	X	X	X		X	X		Apr-Jun	Sun to part shade	Dry to moist	Open rocky soils, shrub-steppe, grasslands, lightly wooded areas; low to mid elevations	
<i>Salvia dorrii</i>	Hairy Sage	X							May-Jun	Sun	Dry	Dry, open scabland & sagebrush	BFI, SMN

Botanical Name	Common Name	Ecoregion ¹							Bloom Season	Sunlight	Soils, Water	General Habitat/ Elevation	Seed Source ²
		GPPDS	GPSP	MRMS	PPTP	SRMS	NRMFS	ISD					
Vines													
<i>Campsis radicans</i>	Trumpet Vine or Creeper				X				Jul-Sep	Sun to partial shade	Moist, well drained	Trees of moist woods or along fence rows in old fields	
<i>Clematis ligusticifolia</i>	Western White Clematis	X	X	X		X		X	Apr-Aug	Sun-shade	Moist, rich, well drained	Woods along streams; moist, brushy coulees	SMN
<i>Lonicera ciliosa</i>	Orange Honeysuckle							X	May-Jul	Partial shade to shade	Moist to dry soils	Open woods and thickets	SMN
<i>Lonicera dioica</i>	Limber Honeysuckle		X		X				May-Jun	Sun to shade	Dry to moist	Open woods, woodland edges & thickets	

***Hummingbird adapted or preferred nectar sources**

1 Ecoregions:

GPPDS = Great Plains-Palouse Dry Steppe
 MRMS = Middle Rocky Mountains Steppe
 ISD = Intermountain Semi-Desert
 PPTP = Prairie Parkland (Temperate) Province
 SRMS = Southern Rocky Mountain Steppe
 NRMFS = Northern Rocky Mountains Forest-Steppe
 GPSP = Great Plains Steppe Province

2 Seed Sources:

ASC = Applewood Seed Co.
 BFI = BFI Native Seeds
 IGG = Idaho Grimm Growers Warehouse Corporation
 MM = Mountain Meadows Wildflower and Grass Seeds
 NI = Native Ideals Seed Company, LLC
 NSF = Native Seed Foundation

Hillside wildflowers.
 Courtesy of Marguerite Meyer



The Anna's Hummingbird (*Calypte anna*) is sometimes, though rarely, seen in Idaho, Montana, and/or North Dakota.
 Courtesy of Jim Cruce

Directory of Seed and Plant Sources

Applewood Seed Co.
5380 Vivian Street
Arvada, CO 80002
(303) 431-7333
sales@applewoodseed.com
www.applewoodseed.com

BFI Native Seeds
1145 Jefferson Ave
Moses Lake, WA 98837
(509) 765-6348
www.bfinativeseeds.com

Idaho Grimm Growers Warehouse Corporation
395 S Broadway
Blackfoot ID 83221
(208) 785-0830
www.idahogrimmgrowers.com

Mountain Meadows Wildflower and Grass Seeds
P.O. Box 1449
Red Lodge, Montana 59068
(406) 861-8300
shirl@mmwildflowerseeds.com

Native Ideals Seed Company, LLC.
31046 Jocko Rd
Arlee, MT 59821
(406) 726-3010
bryce@nativeideals.com
www.nativeideals.com

Native Seed Foundation
7312 Perkins Lake Road seed only
Moyie Springs, ID 83845
(208) 267-1477
info@nativeseedfoundation.com
www.nativeseedfoundation.com

Prairies Diversified
4740 Grassy Lane
Bismarck, ND 58503
(701) 258-0181
ndseeds@bis.midco.net

Prairie Restorations, Inc. (North Dakota Only)
Princeton Headquarters
31646 128th Street,
Princeton, MN 55371
(763) 389-4342
info@prairieresto.com
www.prairieresto.com

Sun Mountain Natives
1406 East F. Street
Moscow, ID 83843
(208) 883-7611
www.sunmountainnatives.com

Western Native Seed
P.O. Box 188
Coaldale, CO 81222
(719) 942-3935
info@westernnativeseed.com
www.westernnativeseed.com

This list of seed sources is not exhaustive, and is only meant to serve as a starting point for managers. Seed inventories are constantly fluctuating, and some species are offered on a seasonal basis. Please check the availability of specific species before visiting a particular seed source. Wholesale suppliers sometimes require a minimum quantity to place an order.

In addition, the Native Seed Network (www.nativeseednetwork.org) is an online resource that provides search tools and information on all aspects of native seed. You can search the network to find additional sources for native seeds.

Additional Resources



Rufous Hummingbird
Courtesy of Scott Carpenter

- The Western Hummingbird Partnership (WHP) is a developing network of partners collaborating to build an effective and sustainable hummingbird conservation program: www.westernhummingbird.org
- Native Seed Network: www.nativeseed-network.org
- North American Bird Conservation Initiative: www.nabci-us.org

- NRCS Bismarck Plant Materials Center: www.nrcs.usda.gov/wps/portal/nrcs/main/plantmaterials/pmc/central/ndpnc/
- e-bird is a real-time, online checklist program and a way for the birding community to report and access information about birds: www.ebird.org
- Partners in Flight is a coalition of partners working to combine, coordinate, and increase resources of public and private entities in order to conserve bird populations: www.partnersinflight.org
- Pollinator Partnership: www.pollinator.org

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