

Keystone Native Plants

Northwestern Forested Mountains – Ecoregion 6

Native plants have tight relationships with wildlife, formed over many thousands of years, providing natural sources of food, cover and places to raise young. Without healthy native plant communities, wildlife cannot survive. Every ecoregion has different native plant communities.

Keystone plants are native plants critical to the food web and necessary for many wildlife species to complete their life cycle. Without keystone plants in the landscape, butterflies, native bees, and birds will not thrive. 96% of our terrestrial birds rely on insects supported by keystone plants.

There are two types of keystone plants:



Host plants that feed the young caterpillars of approximately 90% of butterflies and moths (Lepidoptera).



Plants that feed specialist bees who only eat pollen from specific plants. Keystone plants for native bees feed both specialist and generalist bees.












Entomologist Dr. Doug Tallamy, and his University of Delaware research team have identified the keystone plants that support butterfly and moth species. Native host plants of pollen specialist bees were researched by pollinator conservationist Jarrod Fowler.

Top Keystone Plant Genera in Northwestern Forested Mountains – Ecoregion 6

A genus is a taxonomic category of plants that contains one or more species of plants with similar characteristics. Species within each genus have adapted to local conditions and are the appropriate native species or varieties suited to a specific ecoregion.

To find species by zip code, check out the [Native Plant Finder](#).

Plant type	Plant genus	Sample of common species (not all encompassing)	# of caterpillar species that use this as a host plant	# of pollen specialist bee species that rely on this plant
Trees	<i>Prunus</i>	Oregon cherry (<i>prunus emarginata</i>), chokecherry (<i>prunus virginiana</i>)	206	
	<i>Populus</i>	American aspen (<i>populus tremuloides</i>), balsam poplar (<i>Populus balsamifera</i>)	197	
	<i>Betula</i>	Water birch (<i>betula occidentalis</i>), resin birch (<i>betula glandulosa</i>)	177	
	<i>Quercus</i>	Red oak (<i>quercus rubra</i>), deer oak (<i>quercus sadleriana</i>)	169	
	<i>Alnus</i>	Grey alder (<i>Alnus incana</i>), Sitka alder (<i>alnus sinuata</i>)	166	
	<i>Pinus</i>	Lodgepole pine (<i>pinus contorta</i>), ponderosa pine (<i>pinus ponderosa</i>)	165	
	<i>Malus</i>	Oregon crabapple (<i>malus fusca</i>)	139	
	<i>Acer</i>	Bigleaf maple (<i>acer macrophyllum</i>), Rocky Mountain maple (<i>acer glabrum</i>)	107	
Shrubs	<i>Salix</i>	Shining willow (<i>salix lasiandra</i>), Scouler's willow (<i>salix scouleriana</i>)	256	26
	<i>Vaccinium</i>	Dwarf bilberry (<i>vaccinium caespitosum</i>), black huckleberry (<i>vaccinium membranaceum</i>)	111	
	<i>Chrysothamnus</i>	Yellow rabbitbrush (<i>chrysothamnus viscidiflorus</i>)	21	78
	<i>Ericameria</i>	Rubber rabbitbrush (<i>ericameria nauseosa</i>)		73
Flowering perennials	<i>Solidago</i>	Western goldenrod (<i>solidago lepidota</i>), Rocky Mountain goldenrod (<i>solidago multiradiata</i>)	52	48
	<i>Helianthus</i>	Common sunflower (<i>helianthus annuus</i>), prairie sunflower (<i>helianthus petiolaris</i>)	39	81

Plant type <i>continued</i>	Plant genus	Sample of common species (not all encompassing)	# of caterpillar species that use this as a host plant	# of pollen specialist bee species that rely on this plant
Flowering Perennials <i>continued</i>	<i>Grindelia</i>	Idaho gumplant (<i>grindelia nana</i>), curlycup gumweed (<i>grindelia squarrosa</i>)	8 	75 
	<i>Gutierrezia</i>	Broom snakeweed (<i>gutierrezia sarothrae</i>)		72 
	<i>Heterotheca</i>	Hairy false goldenaster (<i>heterotheca villosa</i>)	8 	56 
	<i>Erigeron</i>	Cutleaf daisy (<i>erigeron compositus</i>), shortray fleabane (<i>erigeron lonchophyllus</i>)	14 	38 
	<i>Symphotrichum</i>	Western aster (<i>symphotrichum ascendens</i>), Eaton's aster (<i>symphotrichum eatonii</i>)	2 	31 
	<i>Senecio</i>	Drawf mountain ragwort (<i>senecio fremontii</i>), arrow leaf ragwort (<i>senecio triangularis</i>)	22 	29 



Top 30 Keystone Plant Genera for Butterfly and Moth Caterpillars



Top 30 Native Host Plants for Pollen Specialist Bees

Genus	Common plant name	# of caterpillar species that use this as a host plant
<i>Quercus</i>	Oak	445
<i>Prunus</i>	Almond, apricot, cherry, peach, plum	409
<i>Salix</i>	Willow	397
<i>Betula</i>	Birch	385
<i>Populus</i>	Aspen, cottonwood, poplar	337
<i>Malus</i>	Apple	285
<i>Acer</i>	Maple	276
<i>Vaccinium</i>	Blueberry, cranberry, deerberry	276
<i>Alnus</i>	Alder	245
<i>Pinus</i>	Pine	235
<i>Carya</i>	Hickory	206
<i>Ulmus</i>	Elm	187
<i>Picea</i>	Spruce	144
<i>Crataegus</i>	Hawthorn	156
<i>Rubus</i>	Blackberry, raspberry	153
<i>Tilia</i>	Basswood	146
<i>Fraxinus</i>	Ash	133
<i>Juglans</i>	Walnut	125
<i>Corylus</i>	Hazel	129
<i>Solidago</i>	Goldenrod	120
<i>Fagus</i>	Beech	127
<i>Castanea</i>	Chestnut	121
<i>Abies</i>	Fir	116
<i>Rosa</i>	Rose	119
<i>Cornus</i>	Dogwood	116
<i>Larix</i>	Larch	113
<i>Amelanchier</i>	Serviceberry	113
<i>Viburnum</i>	Viburnum	102
<i>Tsuga</i>	Hemlock	110
<i>Symphotrichum</i>	Aster	108

Genus	Common plant name	# of pollen specialist bee species that rely on this plant
<i>Helianthus</i>	Sunflower	22
<i>Solidago</i>	Goldenrod	22
<i>Rudbeckia</i>	Black-eyed Susan	17
<i>Grindelia</i>	Gumweed	16
<i>Symphotrichum</i>	Aster	16
<i>Salix</i>	Willow	12
<i>Coreopsis</i>	Tickseed	9
<i>Bidens</i>	Beggartick	7
<i>Cirsium</i>	Thistle	7
<i>Verbesina</i>	Wingstem	7
<i>Euthamia</i>	Goldentop	6
<i>Silphium</i>	Rosinweed	6
<i>Vaccinium</i>	Blueberry, cranberry, deerberry	6
<i>Erigeron</i>	Fleabane	5
<i>Ratibida</i>	Prairie coneflower	5
<i>Vernonia</i>	Ironweed	5
<i>Cornus</i>	Dogwood	4
<i>Heterotheca</i>	Goldenaster	4
<i>Physalis</i>	Groundcherry	4
<i>Astragalus</i>	Milkvetch	3
<i>Dalea</i>	Prairie clover	3
<i>Echinacea</i>	Coneflower	3
<i>Lotus</i>	Bird's foot trefoil, deervetch	3
<i>Lysimachia</i>	Loosestrife	3
<i>Eurybia</i>	Aster	2
<i>Gaillardia</i>	Blanketflower	2
<i>Heliopsis</i>	Heliopsis	2
<i>Hieracium</i>	Hawkweed	2
<i>Kalmia</i>	Laurel	2
<i>Lupinus</i>	Lupin	2