



U.S. Fish and Wildlife Service

Pollinator Gardens in Alaska

Most flowering plants depend on bees, butterflies, hummingbirds, and other animals for pollination. Pollination is an essential part of plant reproduction, producing fertile seeds and, in some species, fruit.

In Alaska our pollinators include at least 95 bee species and 75 butterfly species!

Pollinator Gardens

To help native pollinators you can establish a pollinator garden. Pollinator food includes nectar, pollen, and vegetation for butterfly larvae. Set a goal of encouraging pollinator species diversity for your garden by planning a garden that includes a variety of nectar and pollen sources. The following guidelines can benefit a variety of native pollinators.

Pollinators have evolved with native plants. It is important to select a variety of native plants as modern hybrids often produce less pollen and nectar and may dominate your garden. Many highly selected cultivars have lost the floral cues that attract pollinators to their flowers. Native plants will attract more native pollinators and can serve as egg-laying and larval host plants for some pollinator species. Some plants that are used for both nectar and larval food are Nootka

lupine, camas, viburnum, aster, and clover.

Additional pollinator-friendly Alaskan wildflowers include arnica, valerian, northern geranium, monkshood, yarrow, violets, Indian paintbrush, and western columbine. These colorful native species can provide nectar and pollen, are adapted to our climate, and require less care than garden exotics.

Plant groups of native plants versus single plants to better attract pollinators. Large patches of each plant species help pollinators forage more efficiently.

Choose plants that will bloom sequentially from spring through late summer to provide nectar and pollen sources throughout the growing season.

Plant a variety of flower shapes and colors to attract different pollinators.

Leave a natural area for ground-nesting pollinators such as bumble bees. Ground nesters and cavity nesters require bare soil areas, dead wood either as standing dead trees, stumps, leaf and brush piles, or soft logs. These sites may also serve as overwintering areas for a number of species, as some bee species overwinter in underground burrows or in decaying wood.



*Rufous hummingbirds are Alaska's most common avian pollinator.
Photo courtesy of Bob Armstrong*

Provide water. Some butterflies will gather and sip at shallow pools, mud puddles, and bird baths. Mud puddles can also provide important minerals. Some bees and wasps will use mud as home-building material.

Flower shapes and colors

Some bees are generalists and use pollen from a wide variety of flowering plants while other pollinators feed on specific flower shapes and colors. We associate hummingbirds with long, tubular flowers while bumble bees are

generalists visiting a variety of flower shapes.

Plant yellow, blue, and purple flowers for bees and flower flies, which resemble bees. Bees cannot see red, but are attracted to some flowers that reflect ultraviolet light. Small bees have short tongues and prefer packed clusters of tiny flowers such as daisies and mint. Examples of bee-attracting flowers include monkey flowers, leopard's bane, shrubby cinquefoil, forget-me-nots, iris, and delphinium.



Photo by Deborah Rudis / USFWS

Insects such as bumblebees and sphinx moths are important Alaskan pollinators

Butterflies favor orange, yellow, pink, and blue flowers with sweet scents. They need to land before feeding so prefer flat-topped clusters or platform-shaped flowers in sunny locations. Cosmos, calendula, yarrow, and daisies are all butterfly preferred plants. Sphinx moths prefer pale or white flowers that have a strong, sweet smell but also are attracted to columbine and honeysuckle.

To attract hummingbirds to your garden, provide tubular flowers with lots of nectar in red, orange, purple and fuschia colors. Species to consider include nasturtiums,

fireweed, fuschia, honeysuckle, bee balm, and sage. Hummingbirds do not require landing areas as they hover while feeding.

Many fly species are also important pollinators and prefer green, white, and cream colors. They have short tongues so require simple flowers.

Avoid using pesticides and herbicides

Many are harmful to pollinators as well as pests. Pesticides can kill more than the target pest. Some pesticide residues can continue to kill pollinators for several days after the pesticide is applied.

Pesticides can also kill natural predators, which can lead to increased pest problems. Herbicides may wipe out key native plants that are important for pollinators' food mix.



Sphinx Moth. Photo by Steven Katovich, USDA Forest Service, Bugwood.org

Consider the following non-chemical techniques when managing pests in your garden:

- Try removing individual pests with gloved hands or by spraying with a garden hose
- Encourage native predators with a diverse garden habitat
- Expect and accept a little bit of pest activity

If you must control garden pests, one good option is to judiciously use homemade remedies such as garlic spray, or organic pesticides derived from plants or microbes.

If using pesticides and herbicides, choose one that is the least toxic to non-pest species and does not persist on vegetation. Apply it before dawn or in the evening when most pollinators are not as active. Read and follow all label directions carefully.

Avoid spraying when flowers are in bloom. Choose less harmful formulations. In general, dusts and microencapsulated insecticides are the most dangerous formulations for bees. Sprayed solutions and large granules tend to be less harmful to pollinators.

For More Information

**U.S. Fish and Wildlife Service
Juneau Field Office
3000 Vintage Blvd. #201
Juneau, AK 99801
(907) 780-1160**

www.fws.gov/pollinators

May 2011