



Pollinator Plant List

- yarrow
- rubber rabbitbrush
- common sunflower
- blue flax
- alfalfa
- Wyeth's buckwheat
- blanket flower
- small burnet
- Missouri goldenrod
- western mountain aster
- fearnleaf biscuitroot
- Snake River wheatgrass
- Sandberg bluegrass
- bluebunch wheatgrass
- big bluegrass
- Idaho fescue
- basalt milkvetch
- Carey's balsamroot
- arrowleaf balsamroot
- Douglas' dustymaidens
- yellow bee plant
- slender hawksbeard
- western prairie clover
- threadleaf fleabane
- linearleaf daisy
- shaggy daisy
- Oregon sunshine
- little sunflower
- Lewis flax
- nineleaf biscuitroot
- hoary tansyaster
- evening primrose
- sainfoin
- showy penstemon
- whiteleaf phacelia
- serviceberry
- Siberian peashrub
- yellow rabbitbrush
- sulphur buckwheat

Pollinating with Bees

Pollinators include bees, moths, flies, beetles, wasps, desert bats, hummingbirds, and butterflies that transfer pollen from one plant to another while they are collecting pollen or nectar for food. Pollinators are critical to the function of terrestrial ecosystems because they enhance plant reproduction.



Many of the world's crop species benefit from insect pollination, which is mostly provided by bees. In North America, bees pollinate many billions of dollars' worth of crops annually. Up to one quarter of our diet comes from crops whose production benefits from pollinating bees.

Pollinators are threatened world-wide by habitat loss, habitat fragmentation, pesticides, disease and parasites. The loss of pollinators has serious economic implications for humans and for maintaining ecosystem diversity and stability.



Well-chosen forbs, legumes, shrubs and trees planted along farm and ranch borders and within fields attract pollinators and other beneficial insects. The correct mixes of plants that bloom throughout the growing season provide a continuous source of nectar and pollen needed by insects. An ideal plant mix is one that consists of at least nine species: three that bloom early in the season, three in mid-season and three in late season. In areas with less than 16 inches of mean annual precipitation, nine adapted and commercially produced species may not always be available.



Source: https://xerces.org/wp-content/uploads/2016/01/nrcstechnote_plantsinlandnw1.pdf

Current Honey Bee Population in the U.S.

Honey bee colonies for operations with five or more colonies in the United States on January 1, 2018 totaled 2.63 million colonies, down slightly from January 1, 2017. The number of colonies in the United States on April 1, 2018 was 2.69 million colonies. During 2017, honey bee colonies on January 1, April 1, July 1, and October 1 were 2.64 million, 2.69 million, 2.99 million, and 2.85 million colonies, respectively.



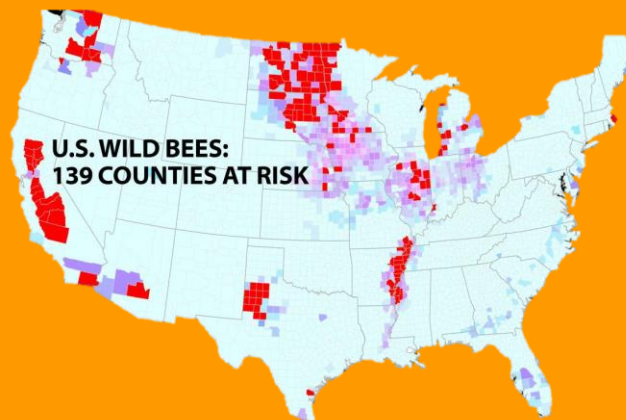
Source: <https://downloads.usda.library.cornell.edu/usda-esmis/files/m301137d/iq085n95f/mc87pt22m/BeeColonies-08-01-2018.pdf>

Pollinator Plant List Cont.

- chokecherry
- antelope bitterbrush
- smooth sumac
- Woods rose
- purple sage
- sticky purple geranium
- Lewis flax
- Oregon sunshine
- black hawthorn
- Oregon grape
- golden currant
- wax currant
- Nootka rose
- blue elderberry
- tall cinquefoil
- slender cinquefoil
- oceanspray
- Lewis' mock orange
- snowberry
- ninebark
- red-stem ceanothus
- shrubby cinquefoil
- yellow blossom alfalfa
- Canada goldenrod
- threadleaf fleabane
- showy daisy
- fireweed
- antelope bitterbrush
- pink honeysuckle
- sitka spruce
- vine maple
- western hemlock
- evergreen huckleberry
- red huckleberry
- pearly everlasting
- Douglas aster
- coyote bush
- camas
- mountain avens
- seaside daisy
- pacific bleeding heart
- coastal strawberry

Bee decline threatens U.S. crop production

- Crops pollinated by bees make up 35% of global food production.
- The global crop production pollinated by bees is valued at \$577 billion. Pollinators contribute \$24 billion to the U.S. agriculture industry, making up a third of the food consumed by Americans.
- 139 counties in key agricultural regions of California, the Pacific Northwest, the upper Midwest and Great Plains, west Texas, and Mississippi River valley, which appear to have most worrisome mismatch between falling wild bee supply and rising crop pollination demand. These counties tend to be places that grow specialty crops like almonds, blueberries and apples—that are highly dependent on pollinators. Or they are counties that grow less dependent crops like soybeans, canola and cotton—in very large quantities.
- Of particular concern, some crops most dependent on pollinators including pumpkins, watermelons, pears, peaches, plums, apples and blueberries appeared to have the strongest pollination mismatch, growing in areas with dropping wild bee supply and increasing in pollination demand.



Source: <https://phys.org/news/2017-02-bee-decline-threatens-crop-production.html>



GET TO KNOW THE BUMBLE BEE



Bumble bees are some of the most important pollinators. They are active from early spring, when queens first emerge and search for food to start their colony, until late fall. Bumble bees have the ability to buzz pollinate or vibrate a flower at a frequency that causes pollen otherwise locked within a flower to explode onto the bee. Bees that can't buzz pollinate are ineffective pollinators of plants that require it, such as tomatoes. Bumble bees are also generalists, meaning that they visit a number of different plant species instead of focusing on one or a few. They also have large ranges, enabling them to pollinate plants over great distances. Bumble bees are keystone species in many ecosystems—meaning that a lot of other species in these systems depend on them.



Bumble bees are easy to identify, with their large, fuzzy bodies and iconic black and yellow banding. Some species of bumble bee have white or orange markings as well. Like honey bees, bumble bees carry moistened balls of pollen on their hind legs.

Source: <https://www.arboretumfoundation.org/about-us/publications/bulletin/bulletin-archive/pacific-northwest-bees/>