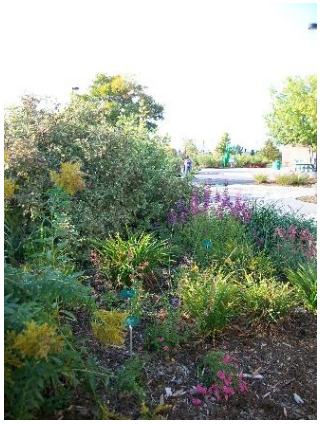
Shelter for Pollinators

Just like other animals, pollinating insects need protection from the elements and from predators. The best way to provide this protection is by including native plants in your landscape and adjusting your garden routines to prioritize shelter during the cold months.

Different pollinators will seek different types of shelter for different needs, so it's best to allow your garden to be as diverse as you can. If you have the space, include shrubs and native grasses of different heights in your garden. Having this "structural complexity" also makes the garden more interesting to look at and creates niches for other wildlife, such as birds.

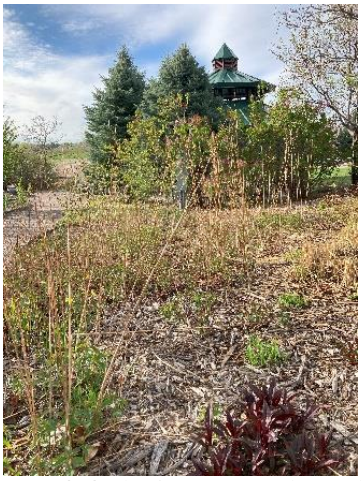


- Plant sheltering plants, such as shrubs, along the north and west to block strong winds and create a windbreak. During harsh weather, flying insects will seek refuge in mixed plantings of shrubs and grasses.

- Vines on trellises or fences can also provide a safe place for pollinators to spend the night or get out of a storm.

- Do not cut perennials back in the fall unless for safety or sanitation; leave seeds and leaves for winter interest/habitat and to protect crowns. If you must cut perennials back early, cut to 1' or higher to provide stems for nesting and overwintering bees.

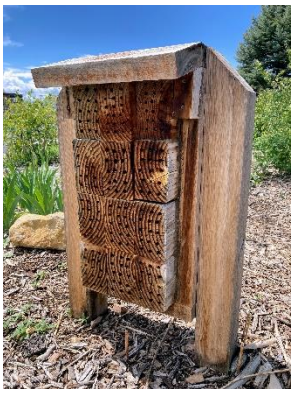
- Groundcovers and leaf litter create shelter for larva and ground-dwelling pollinators, such as beetles. Butterfly pupa will snuggle under loose bark, leaf litter and groundcovers to hide from predators.



- Allow plants to have their natural form instead of pruning into formal geometric shapes.

- Avoid pruning while plants are fruiting and flowering.

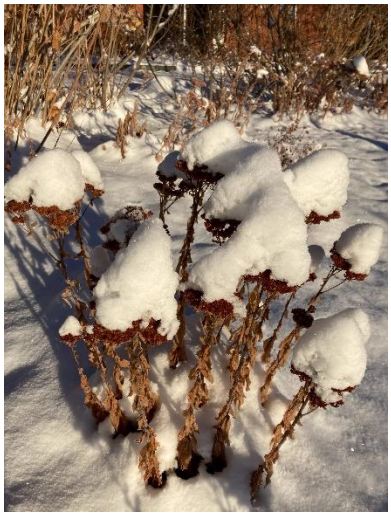
- Consider a stepwise spring cleanup, waiting for new growth to appear, and leaving some stems throughout the spring and summer during nesting season. Leave debris for overwintering pollinator pupa and other beneficials.



The role of bug houses

Built shelters can provide protection for some species, but many wild pollinators prefer to temporarily roost or hide from predators in trees, shrubs, and vines. Bee houses can provide homes for native solitary bee species, but they do require some planning and maintenance.

- Bee houses should be south facing in a dry location, have tunnels at least 6" deep, and be made of untreated wood or bamboo.
- Clean tunnels once a year, in late spring once bees have merged – look for uncapped tunnels with debris inside. A pipe cleaner or small brush works well to remove debris.
- Butterfly houses rarely provide shelter for butterflies, but they provide shelter for spiders and wasps. A few well-placed shrubs or small trees will be a better choice for butterflies.



How do insect pollinators spend the winter?

Native bees – Most overwintering wild bees stay in their nests which have been stocked by their mother over the summer. More than two-thirds of native bees live in the ground, while the remainder are wood or stem-boring. Avoid disturbing the soil or cutting down soft-stemmed plants in fall and winter.

Butterflies and moths – Some butterflies, such as the monarch (*Danaus plexippus*) migrate great distances to escape the worst of northern winters. However, many butterflies and moths overwinter as larva or pupa. Plants such as grasses, shrubs, and groundcovers provide the insulation they need to complete their life cycle.

Flies – Pollinators such as hover flies spend the winter as larvae, buried in leaf litter or in moist spots in the soil. Other pollinating flies may spend the cold season as larvae inside another insect's nest, feeding on their hosts.

Beetles – Most pollinating beetles overwinter as larvae or as pupae in the soil. Having shelter near the ground, either from stems, groundcovers, or leaf litter provides the humidity these insects need to survive the cold season.

For more information about habitat-friendly gardening, visit:
https://butterflies.org/pollinator-awareness-through-conservation-education/