



planting for pollinators

Bees, birds, bats, bees, butterflies and other small animals and insects that pollinate plants are responsible for bringing us one out of every three bites of food. They also sustain our ecosystems and produce our natural resources by helping plants reproduce. Despite their importance, pollinators are in decline, especially bees, the most important of all pollinators. Habitat loss, diseases, and residuals from the use of pesticides have caused a severe impact on pollinator health. Through learning and educational outreach to the community, Grace Farms seeks to preserve and create gardens and landscapes that help revive the health of pollinators within our local community.

What can you do to help?

Provide a Food Source for Pollinators

1. Choose a variety of plants that will provide a long season of bloom - from early spring to late fall
2. Choose plants of various heights, colors, shapes and sizes to attract different types of pollinators

Bees

- Attracted to shades of blue, white, purple, and yellow
- Flat or shallow blossoms - avoid double flowered cultivars as pollinators have difficulty accessing stamens

Butterflies

- Especially drawn to red, yellow, pink, orange and purple
- Flat or shallow blossoms - avoid double flowered cultivars as pollinators have difficulty accessing stamens

Hummingbirds

- Attracted to shades of red and orange
- Trumpet-shaped or tubular blossoms

Help Pollinators Thrive

1. **Provide a water source** | Pollinators will gather and sip at shallow pools, mud puddles, and birdbaths
2. **Include plants that feed caterpillars** | Although pollinators in their adult stages generally thrive on flower nectar and/or pollen, larval stages generally have a penchant for plant leaves (Monarch caterpillars, for example, feed solely on milkweed, whereas black swallowtails develop on parsley and dill plants)
3. **Try to prioritize native plants** | While nonnative species can provide complementary benefits, native plants typically offer the best adaptation to their environment, as they have co-evolved

with many bees, butterflies, and other wildlife within their respective regions.

4. **Create a natural living environment** | Pollinators prefer locations that include wind breaking plants or structures and at least six hours of sunlight a day. If your growing space is limited, consider growing pollinator plants in containers filled with a rich, well-drained soil mix.

5. **Facilitate sites for nesting and overwintering** | Leave cut plant stems exposed, place flower-pots with drainage holes bottom-up on the ground, leave twigs and brush in small piles, etc.

Don't Poison Pollinator Environments

1. **Limit or eliminate your use of pesticides and chemicals** in your yard.
2. **If you must apply pesticides, apply them only to the affected plants**, and preferably when the plants aren't in bloom. Apply them late in the evening when bees aren't active. Spray pesticides during dry conditions, if possible, since dew can retain the toxins.
3. **Finally, just because a product is labeled "organic," doesn't mean it won't harm bees.** Below is a list of common organic pesticides, fungicides, and herbicides, and their levels of toxicity to pollinators

| Non-Toxic | Moderately Toxic | Highly Toxic |
|------------------------|------------------------|---------------------------|
| Bacillus thuringiensis | Boric acid | Diatomaceous earth |
| Garlic | Neem | Insecticidal soap and oil |
| Kaolin clay | Copper | Copper sulfate |
| Corn gluten | Horticultural vinegar | Pyrethrins |
| Gibberellic acid | Lime sulfur and sulfur | Rotenone |