What is a pollinator?

Pollinators are animals that fertilize plants by carrying pollen from one plant to another. Insects (bees, butterflies, flies, hoverflies, moths, wasps) as well as some birds and bats are pollinators.

Pollinators and other insects are crucial to the interdependent food web. We—and so many other species—literally cannot live without them.

Beyond providing food for larger animals, pollinators are integral in agriculture. One out of every three bites you eat is thanks to the efforts of pollinators. However, our native pollinators are in grave danger.

Source: Donna Thomas and Cindy Heath, Master Gardeners, “Prestigious Pollinators.”
Cat Buxton, Master Composter and Margaret D Solon and Susan Still, Master Gardeners, “Growing a Pollinator Garden”
Meet your native Vermont pollinators

Hoverflies, butterflies and moths—meet some native Vermont pollinators.

The majority of pollinators in Vermont are bees. Did you know that the honeybee is not native to the United States? While honeybees are indeed struggling, they’re not in danger of extinction. But many of our native bees are. Let’s pay some attention to our native pollinators.

Want more bees? Check out this guide.

Sources: Cat Buxton, Master Composter and Margaret D Solon and Susan Still, Master Gardeners, “Growing a Pollinator Garden”
Vermont Center for Ecological Studies, Vermont Wild Bee Guide
University of Minnesota Bee Lab, “Managed Bees Impact on Native Populations”
What is causing pollinator decline?

There are many factors.

**Climate change:** Bees are emerging from hibernation earlier, but the flowers they need haven’t caught up.

**Pesticides in agriculture and home gardening:** Many pesticides kill everything, including pollinators.

**Invasive plants:** The spread of invasive plants chokes out native plants which have coevolved with pollinators.

**Landscape fragmentation:** Pollinator habitat is shrinking.

**Light Pollution:** Artificial lights can disorient moths and hinder pollination.

**Parasites:** On top of all of this, parasites are threatening native bees.

But you can help!

Source: Donna Thomas and Cindy Heath, Master Gardeners, “Prestigious Pollinators.”
Cat Buxton, Master Composter and Margaret D Solon and Susan Still, Master Gardeners, “Growing a Pollinator Garden”
Pollinator decline feels so overwhelming, but there are some solutions that are within your control.

The best thing you can do is encourage beneficial insects and garden for pollinators!

Gardening for pollinators is an easy win for:
   Your garden
   The food web
   Anyone who eats!
What is a beneficial insect?

Beneficial insects are insects that prey upon several garden pests such as thrips, aphids and small caterpillars.

Skip the bottle. Go for natural pest control!

Meet the Insects

The Lady Beetle
You may know this as a ladybug

The Soldier Beetle
Attract them with yellow flowers

The Syrphid Fly
The larvae consumes pests and the adult pollinates flowers

Source: Cheryl Frank Sullivan, Ph.D. and Margaret Skinner, Ph.D. “Bringing in Un-BEE-lievable Beneficials”
Bring in the right plants

Support a wide variety of pollinators!

❖ Choose a minimum of 10 native plants and plant them in clumps. This way pollinators won’t have to travel far for their favorites.

❖ Plant for a range of bloom times—early, mid and late season. Aim for at least three types of plant per growing season.

❖ Have a wide variety of flower colors and shapes. Pollinators have their favorite colors, too!

❖ Don’t forget native bunching grasses. Insects love the habitat they provide.

❖ Check out this pollinator palette. It’s great for helping you pick your plants!

Source: Jane Sorensen, Instructor, “Homestead Pollinator Habitat Enhancement Planning”
Why choose native plants?

Go native!

Pollinators need more than nectar (food) to flourish. Host plants that provide nesting sites and protection are also key for each stage of the insect's life.

Since native plants have coevolved with native pollinators, they provide the best support and are the most attractive throughout the life cycle of pollinators.

For example, the endangered Karner Blue Butterfly caterpillar can only eat native wild lupines. And the much beloved butterfly bush? It only provides nutrition for adult butterflies— and nothing for caterpillars.

Plus, native plants are suited to our environment. Once established, they often need little care.

Source: Madeline Chamberlain, Master Gardener intern, “Native Plants for Native Pollinators”
Make your garden inviting

Now that you’ve chosen some good, nectar-rich plants, you’ll need some other features to create a comfortable spot for pollinators.

 ör Pithy or hollow-stemmed plants such as raspberry, sumac or elderberries make good nesting sites.

 ör Some pollinators are ground nesters. If you have sandy areas, leave them clear.

 ör Make sure there’s a nearby water source; insects get thirsty. Consider making a mini wildlife pond out of a stylish container.

 ör Don’t be too tidy! Keep natural cover for insects. Let your grass grow longer, leave piles of leaves, twigs and dead stalks out to shelter pollinating insects over the winter.

 ör Remember— insect damage is a good thing!

Source: Jane Sorensen, Instructor, “Homestead Pollinator Habitat Enhancement Planning”
Working with what you have

You don’t need a large pollinator garden to be a good host for insects!

✿ Watch bee boxes & bug hotels for predators
Check bee boxes & bug hotels frequently to see if the box is still doing its job. Add hardware cloth to prevent invasion by birds.

✿ Plant tall grasses
These provide excellent cover for insects.

✿ Tuck in native plants where you can
Every native plant helps.

✿ Avoid pesticides
Many kill good bugs, too.

✿ Plant a pollinator strip in your vegetable beds
Interplant vegetables with plants to support pollinators. [Chicago Botanical Garden: Pollinator Strips](#)

✿ Plant a bee lawn
Overseed your grass with nectar-rich clover. Plus, clover is actually great for your lawn’s health! And those dandelions? Bees love them.
Where to buy native Vermont plants

**Miller Hill Farm**
Sudbury
Trees, shrubs and perennials.
[Miller Hill Farm](#)

**The Farm Between**
Sterling College, Jeffersonville
Native offerings are mostly trees and shrubs
[The Farm Between](#)

**Northeast Pollinator Plants**
Buy [online here](#) (NEPP only ships to New England and New York)
Or buy in person at [River Berry Farm](#) in Fairfax

**Native Plant Trust**
Nasami Farm, Whately, Mass
(Also in Framingham, Mass)
[Native Plant Trust](#)

**Turtle Hill Native Plants**
Montpelier
Native perennial flowers and grasses.
[Turtle Hill Native Plants](#)

**Vermont Wildflower Farm**
Native seeds and plants, shipping from Vermont. They offer regional seed mixes.
[Vermont Wildflower Farm](#)

**Prairie Moon Nursery**
Extensive, open pollinated offerings, shipping from Minnesota
[Prairie Moon](#)
Helpful Resources

Information on native Vermont plants
- Pollinator Plant Palette Chart
- Lady Bird Johnson Wildflower Center Native Plant Database
- Native Plant Trust Plant Finder

Information on pollinator friendly garden planning
- Homestead Pollinator Habitat Guidelines
- Growing a Pollinator Garden, a presentation by UVM Master Gardeners
- Mt. Cuba Trial Garden
- Encouraging Pollinators in Vegetable Gardens
- Improving Pollinator Habitat in HOAs
- How to Build a Mini Pond to Support Insects
- Pollinator Syndrome Chart (i.e. which types of plants attract which pollinators)

Information on pollinators and beneficial insects
- Vermont Wild Bee Survey
- How to Attract and Identify Pollinators
- Attracting Beneficial Insects to Reduce Pests Naturally
- Xerces Society
- Pollinator Partnership
- Pollinator Pathway

Courses on supporting pollinators
- UVM Community Horticulture courses, including the self-paced course called “Creating Pollinator Friendly Landscapes in Vermont” by Jane Sorensen

Certify your backyard as a Wildlife Habitat
- Vermont Natural Resources Council
About the UVM Extension Master Gardener Program
The UVM Extension Master Gardener Program trains volunteers and uses research-based gardening information to help all Vermonters improve their gardening, leadership, and environmental stewardship skills.

Our vision is to cultivate resilient and healthy communities and be the most trusted resource for home gardeners.

Click here for more information

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