

NATURE LAB SUMMER CAMP: *Provide Food and Water Sustainably*

Experiential Project Concept:
Pollinators are important.

Grade Levels: 3-8

Essential Question:

- Why must we protect pollinators to protect food growth?



Introduction:

A pollinator garden provides habitat for and attracts pollen-spreading species. Pollinators make native habitats and food growth possible; therefore, pollinator gardens have an essential function to our planet.

Build a Pollinator Garden

- 1) Learn about pollinators. Watch The Nature Conservancy's "Pollinators: Putting Food on the Table" - (<https://vimeo.com/77811127>)
- 2) This video illustrates the incredible importance of pollinators to agriculture and landscapes. In the video, students build a pollinator garden and learn how little of their picnic lunch would be possible without pollinators.
- 3) Familiarize yourself with garden-building resources from Nature Lab. For information and step-by-step videos on building gardens more generally, visit: <https://www.nature.org/en-us/about-us/who-we-are/how-we-work/youth-engagement/nature-lab/school-garden-resources/>
- 4) You will need a diversity of nectar and pollen sources. Consider the following when choosing plants for your garden:

- Choose plants that flower at different times of the year to provide nectar and pollen sources throughout the growing season
- Plant in clumps, rather than single plants, to better attract pollinators
- Provide a variety of flower colors and shapes to attract different pollinators.
- [Use NAPPC's Pollinator Syndrome](#) table to find the types of flowers that different pollinator groups (bats, hummingbirds, bees, butterflies, etc.) find attractive.
- Whenever possible, choose native plants. Native plants will attract more native pollinators and can serve as larval host plants for some species of pollinators.
- Pollinator friendly plants for your area can be found in [NAPPC's Ecoregional Planting Guides](#).

5) Provide Nesting Sites. Different pollinators have different needs for nesting sites.

- Hummingbirds typically nest in trees or shrubs, and use plant materials, mosses, lichens, and spider webs to construct their nests. Many butterflies lay eggs on specific plants (host plants) that their young (caterpillars) eat. Most bees nest in the ground and in wood or dry plant stems.
 - Ground nesting sites: Simply maintaining a small, undisturbed patch of well-drained bare or sparsely vegetated ground may provide nesting habitat for ground-nesting bees. It is best if the site faces south so that it gets the most sun possible during the day, and is not inundated by a sprinkler.
 - Wood nesting sites: Carpenter bees will chew their own burrows in wood, while many other bees use holes or cavities that are already in wood or dry plant stems.
 - If it's not a safety hazard, consider leaving a dead tree or limb undisturbed to provide natural nesting habitat.
- 6) Avoid or Limit Pesticide Use. Pesticides can kill more than the target pest. Some pesticide residues can kill pollinators for several days after the pesticide is applied. Pesticides can also kill natural predators, which can lead to even worse pest problems.

Source: *U.S Fish and Wildlife Service*