

GARDEN INSECT HEROES

Lesson developed by: Karen Thomas, Summit County Master Gardener Volunteer

Overview: A nature appreciation activity, to use as a 1:1 cart activity or with small or large groups, which encourages participants to share garden memories, increase understanding of insects; and, inspire outdoor enjoyment.

Introduction: Do you like insects? Which of these insects have you seen? Which are your favorites? How are insects our garden heroes? Insects pollinate about 80% of our food, flowers and trees. What is pollination? It is the transfer of pollen from male flower parts to female flower parts to make seeds. Insects provide food for birds and many animals; they create soil and help keep our yards and gardens healthy. Let's look at some of these insect garden heroes.

Materials: For 1:1s and small groups: one 20" x 30" foam board for photo display; one foam board as an easel backing; duct tape to hinge together the foam boards; scotch tape for photos; and a small utility cart to hold display easel for 1:1 visit or small group viewing. For large groups: transfer the photos to PowerPoint or other media.

Insect Appreciation Discussion

Ant: What do you know about ants? Why are they garden heroes? Ants are clever, social creatures who work together to find food and determine whether to eat it there or carry it home. They clean up debris and aerate our soil. *Did you know?* Ants communicate with and teach each other in order to gather food and move it to their colony.

Bee: What do you know about bees? Why are they garden heroes? Native bees are pollinators of flowers and food crops. Why? They seek nectar for fuel and seek pollen for protein to feed their babies. With their fuzzy bodies, they collect and carry pollen among flowers. *Did you know?* Bees have a



positive charge and the flower has a negative charge. Honeybees produce delicious honey.

Butterfly: What do you know about butterflies? Why are they garden heroes? Throughout their life cycle from caterpillar to butterfly, they are garden heroes. As caterpillars, they eat leaves and help control weeds. As butterflies, they pollinate plants. Caterpillars are high in protein and fat, the ideal food for baby birds and other animals. *Did you know?* One pair of nesting birds must find 300-500 caterpillars per day to feed their babies.

Dung Beetle: What do you know about dung beetles? Why are they garden heroes? Dung beetles clean up the poop that other animals leave behind. They roll it into balls and take it away, because they eat poop and line their nests with poop. *Did you know?* The dung beetle is one of the world's strongest insects. It can collect and carry rolls of poop up to 50 times its own body weight. Imagine a 150 lb. person carrying a pick-up truck.



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

Ladybug: What do you know about ladybugs? Why are they garden heroes? Ladybugs are good hunters of garden insect pests. They eat aphids, mites and other sap-feeding insects. Their larvae feed on them too. *Did you know?* One ladybug can eat up to 5,000 aphids in its lifetime

Lightning Bug: What do you know about lightning bugs? Why are they garden heroes? Lightning bugs are beneficial insects because their larvae eat snails and slugs. *Did you know?* The summer light shows produced by lightning bugs are performed by male lightning bugs. They flash a pattern of lights to attract females for mating. Their light is produced by a rare chemical called luciferase which is used in research on human cancers, MS, cystic fibrosis and heart disease.

Praying Mantis: What do you know about praying mantis? Why is it a garden hero? The praying mantis is the best hunter among all insects. It eats any and all insects, and even small animals, but prefers to eat grasshoppers, beetles and other small insects. *Did you know?* The praying mantis has great eyesight with two huge compound eyes and three single eyes; and, can turn its head almost 360 degrees.

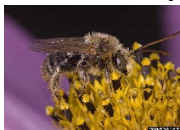
Closing Discussion: Living things are interconnected. How can we nurture insects? We can grow native plants for food, shelter and host sites. We can provide sources of clean water and avoid harmful insecticides and weedkillers.

Resources: ohioline.osu.edu factsheet ent-47 “Attracting Pollinators to the Garden”; and, ent-85 “Identify & Enhance Ohio’s Wild Bees in your Landscape”; [Attracting Native Pollinators](#), The Xerces Society Guide; and, [Extraordinary Insects](#), Anne Sverdrup-Thygeson

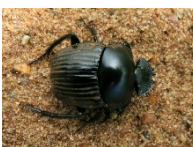
Photos:



Ant Joseph Berger, Bugwood.org

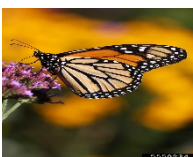


Bee David Cappaert, Bugwood.org



Dung Beetle

“File:Scatpansberg Dung Beetle (Scatbaeus schultzei).jpg” by [DuanYanHavostem](#) is licensed under [CC-BY-SA4.0](#)



Butterfly Steven Katovich, Bugwood.org



Lady Beetle Frank Peairs, Colorado State University, Bugwood.org



Praying Mantis Karen Levey, Bugwood.org

Contact information:

If you have any questions about this activity, please email mgsummitcounty@gmail.com.

We hope you benefitted from this activity. Please let us know if you utilized this with a quick email to the above address. Please send your name, facility name, number of participants involved in this activity, and your feedback for improvement so we can measure our impact and improve this product. Thank you!