

Beginner's Field Guide

Pollinators in Chicagoland

Pollinators and Chicagoland

Bees and butterflies get most of the credit for pollination but there is a wider and more interesting array of species pollinating flowers throughout the Midwestern United States. Here we provide illustrations of three example species for each group of pollinators, but each group is much larger than the few species we choose. We hope this guide provides insight into the pollinators that might be hiding in your garden or perhaps gives you a new perspective on a species that is hard to love. If you would like to find more examples of specific pollinators you could try other guides at fieldguides.fieldmuseum.org/ or take a picture and upload it to iNaturalist. **Legend: M = Male, F = Female.**Illustrations are not to scale.

Bees

The European Honey Bee is the most recognizable bee species, but it is actually native to Europe, Africa, and the Middle East. These bees play an important role in agriculture and have become part of our pollination cycle. However,

there are hundreds of bee species native to our region that have evolved specific relationships to pollinate our native plant species including blueberries, cranberries, and blackberries.



European Honey Bee Apis mellifera



Two-Spotted Bumble Bee Bombus bimaculatus



Bicolored Striped Sweat Bee Agapostemon virescens

Butterflies

Butterflies are the pollinator group that most often evokes a sense of beauty and wonder. All butterflies and moths begin life as caterpillars and many caterpillars will only eat a specific plant, called a host plant. Monarch Butterflies have a very specialized host plant relationship with milkweed (Asclepias spp.). Other butterflies feed on a wider range of plants such as the carrot family (Black Swallowtail) and the mustard family (Cabbage White).



Monarch Butterfly
Danaus plexippus



Black Swallowtail Butterfly Papilio polyxenes



Cabbage White Butterfly
Pieris rapae

Moths

Many people are surprised to know moths are pollinators; some species are even busy pollinating flowers overnight. You may not be familiar with the highly camouflaged Carolina Sphinx Moth, but you might have seen its caterpillar, a

common garden pest called the tomato hornworm. Other moths such as the Hummingbird Clearwing are brightly colored and might be mistaken for other pollinators.



Carolina Sphinx Moth Manduca sexta



Hummingbird Clearwing
Hemaris thysbe



Celery Looper Moth Anagrapha falcifera

Wasps

Wasps are often seen as pests at picnics and when their nests conflict with our recreation spaces. We frequently encounter wasps when they are killing other insects, such as cicadas, to feed to their own young. However, adult wasps carry pollen from flower to flower and drink nectar to fuel their bodies. While they are related to bees and look similar, wasps usually have an hourglass figure with a "waist."



Eastern Cicada Killer Sphecius speciosus



Great Black Wasp Sphex pensylvanicus



Yellowjacket Vespula spp.

Flies

Sometimes flies annoy us by their sheer numbers but that is exactly what makes them important pollinators. As adults many flies consume both pollen, as a source of protein and fat, and nectar as a source of sugar. While the fly searches for food, pollen collects on its body and when the fly goes to a new flower that pollen is deposited.



Transverse-Banded Flower Fly Eristalis transversa



Common Green Bottle Fly Lucilia sericata



Tachinid Fly *Archytas apicifer*

Beetles

Beetles are often overlooked as pollinators; however, they coexisted with dinosaurs long before better-known pollinators such as bees and butterflies evolved. Beetles are a diverse group that sometimes eat holes in flower petals as they

pollinate. Flowers that have evolved specifically for beetle pollination tend to have thick petals; the best local example are magnolias.





Goldrenrod Soldier Beetle Chauliognathus pensylvanicus



Spotted Pink Lady Beetle Coleomegilla maculata

Birds

Hummingbirds are particularly adapted to feed on nectar, with long bills, tubular tongues and the ability to hover. More than 300 species found are throughout the Americas, but Ruby-throated Hummingbird is the only species in eastern

North America. Other Chicago birds that feed on nectar and act as pollinators, particularly at flowering trees in spring, include orioles, like Baltimore Oriole and some warblers, for example Tennessee Warbler.





Baltimore Oriole Icterus galbula



Tennessee Warbler Leiothlypis peregrina

Promoting Our Native Pollinators

At the Field Museum we promote planting species that are native to your region. Native plants have evolved along with their native pollinators for thousands of years. Diverse and healthy ecosystems are the foundation of landscapes that will be better able to adapt to climate change. Over time some non-native pollinators have become embedded into our local ecosystems and now perform a crucial role in providing pollination services to native plants and food crops. Some of these species have been included in this guide; however, our goal is always to support native pollinators first because they

need the most help. Your local native plant society is a great place to get started planting a garden.

Other Resources:

- 1. Holm, Heather. Pollinators of Native Plants: Attract, Observe and Identify Pollinators and Beneficial Insects With Native Plants Pollination Press LLC, 2014.
- 2. https://illinoisplants.org/
- 3. Selected Insects in Your Midwestern Native Garden Field Museum Field Guide

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The Field Museum acknowledges that it was built on the traditional homelands of the Council of the Three Fires: The Potawatomi, Odawa, and Ojibwe Nations, as well as the Ho'Chunk, Meskwaki, Sauk, and Miami Nations. The Museum recognizes that the region we now call Chicago was the traditional homeland of many Indigenous nations, and remains home to diverse Native people today. The land we walk was and remains Native land.



Learn more by checking out field guides from the library and downloading free ones at **fieldguides.fieldmuseum.org**