Top 10 Beneficial Insects in the Garden









Braconid Wasp Pupae



Minute Pirate Bug













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Yellow Garden Spider Scientific Name: Argiope aurantia Large black and yellow spider. Females bodies are up to 1 1/8" with a leg span of 2 ½" and males are much smaller, ¼" to ½". They make a new web daily with a large zig-zag marking in the center, up to 2 feet in diameter. Prey is a wide range of flying insects trapped in their web. Small young garden spiders build small webs close to the ground amid vegetation. These spiders go largely unnoticed until late in the season, when fully grown spiders create webs that are quite large. Garden spiders prefer sunny areas with little or no wind and plenty of prey species. Photo by Heather Lash.

Praying Mantis Scientific Name: *Tenodera aridifolia* (Chinese Mantis), *Mantis religiosa* (European Mantis) Chinese Mantis grows up to 5 inches long; brown with green and yellow striping. European Mantis grows up to 3 inches long; brown to bright green. Either species of female is typically larger than males. Mantises are aggressive predators, eating any and all types of insects and spiders. These camouflaged predators occur wherever prey and hunting areas exist. They sit motionless waiting for prey to come within reach, using their front legs to grasp prey. Female praying mantises lay eggs in hard-drying foamy masses on twigs and tall grasses. Eggs overwinter and hundreds of offspring hatch the following spring. Photo by Phil Nixon.

Damsel Bug Scientific Name: *Nabidae* Light brown, dainty and almost unnoticeable, damsel bug adults are found feeding on small insects using their pronounced snout to stab and suck out their body contents of prey. The females lay flattened eggs in plant tissues. Nymphs resemble the adults but do not have wings. Insects controlled by larvae and adults include aphids, spider mites, leafhoppers, small caterpillars and insect eggs. When scouting, investigate flowers and high aphid populations. Photo by Phil Nixon.

Minute Pirate Bug Scientific Name: *Anthocoridae* Minute pirate bug adults are small, oval, flattened bugs with black and white markings. Larvae are small, orange and teardrop-shaped. Both larvae and adults feed on small insects and eggs by sucking juices from prey using needle-like mouthparts. When prey are absent they feed on pollen and plant juices. Females lay eggs in plant tissue. They occasionally bite people when agricultural fields are harvested in autumn. Photo by Alex Wild.

Eastern Cicada Killer Scientific Name: *Sphecius speciosus* This menacing solitary digger wasp is very large—up to 2 inches in length. Hairy, black to reddish brown with yellow markings, they are commonly confused with yellowjackets and hornets. The female cicada killer uses her sting to paralyze cicadas, and buries them in underground burrows as food for her eggs. Adults eat nectar and pollen. Cicada killers tend to congregate in areas with well-drained, sandy lightweight soil near trees that harbor cicadas. Cicada killers are not attracted to specific plants as much as they are attracted to cicada populations and good soil in which to build burrows. Wet soils and groundcovers discourage cicada killer nests. Photo by Deanna Frautschi.

Braconid Wasp Scientific Name: *Cotesia congegatus* These small dark wasps are abundant in warm humid summers, feeding on nectar and pollen. Adult females use tobacco and tomato hornworms as larval hosts. Females lay eggs in living worms which hatch and feast on the hornworm's insides causing it to cease feeding, eventually killing it. As many as 200 white, oval pupae appear on the hornworm's body and are commonly confused with eggs. Photo by Alex Wild.

Ground Beetle Scientific Name: *Carabidae* Most ground beetles are either shiny black or metallic in color with relatively long bodies and legs, flattened heads and thread-like antennae. Many produce noxious secretions as a deterrent to predators. Although they have wings, they rarely fly and are mostly active at night. They are fast runners, preying upon numerous insects and eggs in the soil. The larvae also prey on insects in the soil. Ground beetles prefer gardens with dark, moist hiding places. Mulch, groundcovers, fallen branches or logs, and rocks are all potential ground beetle habitat. Ground beetles rarely venture into the plant canopy. Photo by Alex Wild.

Green Lacewing Scientific Name: *Chrysoperila* Commonly found feeding on aphids, nectar, pollen or honeydew. Adults are small, pale and green with delicately veined wings. Females lay eggs distinctively stalked to avoid predator insects. Larvae, also known as aphid lions, look like miniature alligators that use their hooked jaws to drain fluids out of prey like caterpillars, beetles, and aphids. When scouting, turn over leaves to find larvae scurrying to find food. Larvae can eat hundreds of prey in their seven to ten day life cycle. Photos by Heather Lash and Phil Nixon.

Syrphid Fly Scientific Name: *Syrphidae* Hover flies are yellow and black bee-mimics that feed on pollen, nectar and honeydew. Females lay eggs on leaves and stems infested with prey. Dull green legless worm-like larvae can be found on the undersides of leaves eating aphids, thrips, scale, caterpillars and mealybugs. Photo by Margaret Hollowell and Phil Nixon.

Lady Beetle Scientific Name: Coccinellidae Lady beetles feed on aphids, other insects, pollen, nectar and honeydew. Females lay orange-yellow egg masses on leaves. The dark colored larvae are active hunters that consume many aphids, mealy bugs, scale, spider mites and insect eggs. Adults overwinter in Illinois in large colonies under leaves or bark. Popularly sold to release in gardens, adult beetles rarely stay where they are released due to natural tendencies to disperse. Photo by Kelly Allsup and Alex Wild.

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