

When Good Insects Attack

By Ryan Tilley, *Consulting Rosarian*

It's time to give the good guys their due. I am willing to bet that most of you are familiar with the lady bug and praying mantis as good insects, but none of the other ones. So here they are.

Assassin Bug



How to recognize: This aptly-named, vicious-looking bug is about ¼ to one inch long, with a cone-shaped head and wide curving beak. They may cause a painful bite to a human if captured. Some species squeak if caught. Females lay single eggs in cracks, under rocks, or in other sheltered spots in summer, and new adults emerge around the following June. There is only one generation per year.

Benefits: Assassin bugs are voracious predators of many garden pests including flies, mosquitoes, beetles, and large caterpillars.

Fun fact: Adult and nymph assassin bugs stab their prey with long, pointed "beaks" that are held folded under their bodies while not feeding

Bumble Bee

How to recognize: Large and lumbering, black and yellow bumble bees measure up to one inch in length. These fuzzy insects make a loud droning buzz as they fly somewhat awkwardly from flower to flower. Bumble bees nest in soil or leaf litter where a single queen lays 8 to 12 eggs in spring and continues to lay eggs through the summer.

Benefits: Emerging workers are able to fly in very cool weather, making them a very valuable pollinator of a variety of plants.

How to attract: As these bees nest in soil and leaf litter, try to leave a section of your yard undisturbed. A little "wild" place in your yard can offer a haven for many other beneficial insects that would otherwise be killed by tilling and mowing. Provide native flowers, as they are a primary food source.



Dragonfly



How to recognize: There are more than 100 species in Georgia. They can be identified by their long narrow body, their large compound eyes and the four transparent wings. There is variation in color. Sizes range from one to two inches. The larvae are found in water.

Benefits: They eat mosquitoes, aphids, and other pest bugs.

For more info: www.giffbeaton.com/dragonflies.

Green Lacewing

How to recognize: Adult green lacewings have delicate, light green bodies; large clear wings; and bright golden or copper-colored eyes. They are ½ to ¾ inch long. The larvae are small, grayish brown, and narrow, and they have pincer-like mandibles. Eggs are found on plant stems and foliage; they are laid singly or in small groups on top of fine, silken stalks.

Benefits: Lacewing larvae and adults feed voraciously upon aphids and other small insects, insect eggs, and spider mites. They also eat leafhopper nymphs, whiteflies, and small caterpillars.

How to attract: Plant flowers that produce pollen and nectar. Adults are mobile, but lay eggs where they stop to eat.





Ground Beetle

How to recognize: While shapes and colors may vary widely, they are usually shiny. Some are very ferocious-looking, but they are not known to bite people. Black is a common color, sometimes with a metallic sheen of another color on their wing covers. Most ground beetles feed at night and hide in the soil or under debris during the day. Adult beetles range from 1/8 to one inch long.

Benefits: These very common garden insects feed on many soil-inhabiting pests such as cutworms and root maggots. Some types eat slugs and snails.

Honey Bee

How to recognize: Adults measure 2/3 inch long and are fuzzy, with gold-and-black striped bodies and transparent wings. Honey bees can often be identified by the balls of yellow pollen they carry on the backs of their legs.

Benefits: Honeybees are important pollinators of many plants.

How to attract: Grow flowering plants. Encourage wild honey bees.

Because the spread of mites has seriously reduced honey bee populations, the wild honey bees that are left are even more important.



Lady Bug



How to recognize: Most people know the adult lady beetle (lady bug), but the larvae are more valuable. The larva is soft-bodied and alligator-shaped with black and orange markings. Each species has a distinct pattern.

Benefits: Both larvae and adults feed on soft-bodied insects such as aphids, mealy bugs, scale insects, and spider mites, as well as insect eggs.

How to attract: Plant flowers that produce pollen and nectar (dill, angelica). Allowing weeds (dandelion, wild carrot, yarrow) can help too. You could also spray a combination of whey and yeast on plants as a food source.

Parasitic Wasp

How to recognize: Too small to be noticeable, these miniwasps don't sting people or pets. They range in size from the smallest insect known (about 1/50 inch) to about one inch, although most are on the small side. These parasites reproduce by laying their eggs in a pest host (adult or egg). The immature wasp feeds inside and kills its host. A round hole can often be seen where the adult parasite has chewed its way out.

Benefits: Different species may attack aphids, whiteflies, and butterflies or moths, such as cabbage loopers and hornworms.



Soldier Beetle



How to recognize: Approximately 1/2 inch in length, the adult soldier beetle has a narrow, black abdomen and bright red head or thorax. The soldier beetle larva is various shades of orange with black markings.

Benefits: Soldier beetles prey upon aphids, caterpillars, grasshopper eggs, and beetle larvae, among other insects around the garden.

How to attract: Since some soldier beetles feed on nectar, you may be able to attract them with flowering plants.

Fun fact: Soldier beetles are nicknamed leatherwings because of their soft, cloth-like wing covers

Predatory Mite

How to recognize: Adult mites are tiny, about half a millimeter in length, and are beige to reddish tan. They resemble pest mites but are faster moving and have fewer hairs.



Benefits: Predatory mites are valuable predators of pest mites such as spider mites.

Yellow Jacket



How to recognize: Adult wasps are $\frac{1}{2}$ to $\frac{3}{4}$ inch long, with characteristic yellow and black stripes and transparent wings.

Benefits: Yellow jackets and other wasps are predators of caterpillars, flies, and beetle grubs.

Concerns: Yellow jackets are often feared for their sting, which is a hazard to people who are allergic. Some yellow jacket species are more likely to sting and scavenge at picnics than others. The scent of pears is a sting signal for yellow jackets.

Tachinid Fly

How to recognize: Resembling house flies, tachinid flies are $\frac{1}{3}$ to $\frac{1}{2}$ inch in length, and may be brown, gray or black in color. Some species are very hairy.

Benefits: There are many species of tachinid flies; many are parasites of pest caterpillars including cutworms, codling moths, tent caterpillars, cabbage loopers, and gypsy moth larvae.

How to attract: Adults feed on nectar, so plant flowers as well as herbs in the Umbelliferae family such as dill, parsley, and Queen Anne's lace.



Spider



How to recognize: Spiders aren't insects at all. They can be identified by their eight legs and two-part body. Spiders are far more beneficial than they are dangerous. Most spiders are shy and harmless to humans.

Benefits: Spiders are the most important predators on insects, killing more than all other predators combined. They feed on a broad variety of pest insects year-round.

Some of the pictures in this article were taken from bugguide.net and rosecare.com.

This article originally appeared in the June 2010 issue of The Phoenix, the newsletter of the Greater Atlanta Rose Society, Bobbie Reed, Editor. It received an ARS Award of Merit for 2010.