

# Heroes of the Garden

The “Good Guys” that  
help control garden pests.





Aphidius Wasp

Most **aphidius wasps** are about 1/8" long and dark in color with clear wings. They do NOT sting.

Their name gives you a hint about who they eat. ... it's aphids.

They are so scary to aphids that when they see the wasp, they often fall to the ground rather than be eaten.



Assassin Bug

There are hundreds of species of **assassin bugs** throughout North America. They are usually brown or black with large bristly front legs. Most measure about 1/2" long. They can bite if handled roughly.

They eat aphids, cabbage worms, beetles, cutworms, earwigs, four-lined plant bugs, Japanese beetle, lace bugs, Mexican bean beetle, tobacco budworms, tomato hornworms and many caterpillars.



Big Eyed Bug

**Big eyed bugs** are very small, measuring only 1/8" long. They have wide heads with big bulging eyes. They are usually gray, black or brown with clear wings and their bodies are flattened.

Big eyed bugs help rid the garden of aphids, cabbage loopers, caterpillars, chinch bugs, flea beetles, Mexican bean beetles, spider mites, thrips, whiteflies, and many eggs of bad bugs.



Damsel Bug

**Damsel bugs** are dull brown, tan or gray with narrow bodies and a long curved "snout" and bulging eyes. They resemble small assassin bugs.

They eat aphids, asparagus beetles, cabbage worms, tobacco budworms, cutworms, Colorado potato beetle larva, four lined plant bugs, sawfly larva, spider mites, whiteflies, thrips, leafhoppers, and many insect eggs.



Ground Beetle

**Ground beetles** have shiny hard shells. They can be between 1/8" to 1-1/2" long. Many of them are dark in color but a few are green, blue, gold or red. Most have large mouth parts called mandibles for capturing prey. They feed at night and hide under rocks and logs during the daytime.

Their larvae feed on many insect pests for several weeks before becoming adult beetles. They prey on slugs, root maggots, cutworms and other pest on the ground.



Hover or Syrphid Fly

Adult **hover flies** look like small wasps with black and yellow stripes and a white belly but on closer inspection they have only two wings as do all flies. They hover like a hummingbird. They can NOT sting. Adults range in size from 1/4" to 1/2".

They are both important pollinators and predators of bad bugs. As larvae they can eat as many as 500 pests before becoming adult flies. Their larvae eat aphids.



Green Lacewing

**Lacewings** are beautiful, light green with very large transparent wings, long threadlike antennae and golden eyes. They can be up to 1" in length.

As larvae they can eat up to 100 aphids per day, earning them the nickname "aphid lions". They also feed on scale insects.

Adult lacewings do not feed on insects. They eat nectar and pollen and "honeydew" produced by pests like aphids.



Ladybug, Ladybird or Lady Beetle

**Ladybugs** are 1/4" long with rounded bodies and black spots. Their wing covers are bright orange to red with white markings on their "shoulders". There are over 450 species of ladybugs found throughout North America and each species has a different number of black spots. Lady beetle larvae look like tiny colorful alligators.

Adult ladybugs and their larvae eat aphids, asparagus beetle, lace bugs, mealy bugs, Mexican bean beetle larvae, scale, thrips, spider mites, whiteflies, and many insect eggs.





Minute Pirate Bug

**Minute pirate bugs** are very tiny, measuring only 1/8". They are oval shaped and black color with white wing patches. They are very fast moving.

Adults and nymph pirate bugs help rid your garden of aphids, small caterpillars, lace bugs, Mexican bean beetle larvae, scale, spider mites, whiteflies and many insect eggs including tobacco budworm, cutworm, corn earworm.



Parasitic Wasp

**Parasitic wasps** do NOT sting. They usually measure between 1/32" and 1/2", though a few are larger. They look like they have a stinger but it is really an ovipositor, a part of the body that lays eggs.

Parasitic wasps rid your garden of aphids, beetle larvae, bagworms, cabbage worms, gypsy moth caterpillars, beetles including Japanese beetles, leaf miners, mealy bugs, sawfly larvae, scale, tomato hornworm, and many more.



Dragon Fly

**Dragon flies, Damselflies**, and their larvae feed on mosquitos. Harmless to humans, they do not sting.

Damselflies are small and slender bodied. They fold their wings above their abdomen when at rest. Skimmers are the largest and best known family of dragonflies. Most have patterned wings. Darners include the largest of our dragonflies, they have huge eyes and like to stand vertically.



Firefly

**Fireflies**, AKA Lightning bugs, are neither flies nor bugs. They are actually beetles. Their glow is produced in a chemical reaction caused by an enzyme. No heat energy is lost from their bodies when producing their glow.

Firefly larvae are predators of snails and slugs.



Soldier Beetle

**Soldier beetles**, AKA leatherwings, are abundant on flowers and foliage. They have soft wings and are good fliers.

Valuable as pollinators, they eat many aphids and larvae of other insects. The goldenrod soldier beetle feeds on root maggots and corn earworm.



Tachinid Fly

**Tachinid flies** are North America's largest and most important group of parasitic flies. They resemble small house flies and may be covered with bristly hairs. They can measure from  $\frac{1}{3}$ " to  $\frac{3}{4}$ " in length.

They help rid your garden of many harmful caterpillars, beetles, and worms including Japanese beetles, sawfly larvae, squash bugs, tobacco hornworms, four line plant bugs, and more.



Robber Fly

Adult **robber flies** measure up to 1-1/2". Most are gray to black. They have an elongated body that tapers to the rear with bristled legs.

They catch prey on the wing. Adults and larvae eat Colorado potato beetles, four lined plant bugs, Japanese beetles and Mexican bean beetles.



Long-legged Fly

There are about 7,000 species of **long-legged flies**. They are small in size with colors ranging from metallic green, blue, copper, and bronze.

They can be seen darting across leaves feeding on mites, aphids, and tiny larvae.



Spider

There are 38,000 species of **spiders** in the world. They are not an insect but an arachnid, as they have eight (8) legs (insects have only six). Spiders can be brown to white or yellow and can have many patterns of bright colors. Some are hairy and some are smooth. They have excellent hearing, sense of smell and touch.

Many are not discriminating eaters and will readily capture beneficial insects and pests.



Daddy Long Legs

**Harvestman, AKA Daddy Long Legs** are classified as arachnids of the order Opiliones. Contrary to urban myths, they are not venomous.

They prey on insects and other arthropods. They also scavenge dead insects and drink plant juices.



Six Spotted Tiger Beetle

There are more than 2600 species of **tiger beetles** in North America. They work during the day as opposed to ground beetles who work the night shift. They are swift hunters and beneficial predators of pest insects. Some are endangered due to habitat destruction.

One species, the six-spotted tiger beetle is abundant in spring on forest paths. He is a striking metallic green color with six white spots on his sides.



The **spined soldier bug** is a predatory stink bug in the genus Podisus. He is identified by his large spikes on his "shoulders".

Many stink bugs are damaging to plants but predatory stink bugs keep pests in check. The spindled soldier bug feeds on caterpillars, sawfly larvae and grubs.