

What's good about spiders?

There are at least 30,000 known species of spiders in the world. Despite their many differences, the single thing they have in common is that they are all predators. More specifically, they kill insects.

Garden spiders, the kind you are most likely to see in my rose garden, are grouped together because of the kind of webs they make. Typically, garden spiders make the circular or orb type of web. Other types of spiders produce webs shaped like sheets, funnels, or bowls. A few spiders don't make webs at all.

The common garden spider, uses its silk to make a web with strong radiating threads and sticky cross threads for trapping insects. A spider's silk is produced by silk glands located in its abdomen. The silk thread comes out from the rear of the abdomen through tubes known as spinnerets.

By trapping and feeding on insects, especially the kind that damage garden plants, they have earned a place, if not in my heart, in my garden.

What else do I find interesting about garden spiders?

To begin, the web of the orb-spider is marvelously intricate in construction and design. The most elaborate webs are made in a mere 60 minutes. Many of these orb-web weavers make new webs every night. When an insect flies into the web, the threads vibrate or become taut, telling the spider that a victim is at hand. Some orb-weavers wait at the center of their web. Others sit at the edge of the web with their legs touching a signal thread. Vibrations of a signal thread give the spider information. The jerky movement of an insect causes a different vibration than the steady rhythm made by the jaws of a male spider, plucking threads with his claws. This is the males way of letting the female know that a potential mate is nearby. Sometimes the female ignores the message and eats him anyway.

Maybe, that is her way of returning a message.

Spiders cannot chew or swallow their food. They eat only liquids, and are able to turn the victims they catch into a kind of soup. They do this by crushing the prey's body and then pouring on digestive juices that turn the soft parts of its body into liquid. When its all done, all that is left is a crushed mass of hard body parts.

Spiders are, in fact, the most important predator of insects in our world. Every year, billions of spiders do away with a large number of disease-carrying and crop-destroying insects. If every spider ate just one a day for a year, those insects, piled in one spot, would weigh as much as 50 million people.

Garden spiders need our help to increase their acceptance in the world, especially since not all of their habits win adoring admiration. Over-all, spiders are not bad!

Unfortunately, having eight legs, fangs and a face that isn't attractive, along with having bizarre eating conduct, will not win them any favors.

Admittedly, when I think about what they do and read how they spill digestive enzymes on the victims to make them more palatable, I feel nauseous. Yet, this unappeasable curiosity of mine drives me forward.

Naturalist Richard Conniff, author of *Spineless Wonders* gives this condition a name.

He calls it formication, the implied sense of horror and fascination. He says it is something many people actually crave.

Oh yes, I thought. That explains it!

Control of Spiders

Many birds feed on garden spiders, as do some parasitic wasps and ants. No control on the part of humans is necessary, unless the spiders find their way into greenhouses, sheds or houses. The most effective control is cleaning up debris that would shelter the cocoons. If a chemical treatment is necessary, pyrethrins are effective for quick knock-down, with little residual effect. If a longer residual effect is desired, diazinon, or carbaryl can be used.

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