

Spiders

By Virgene Link-New
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Spiders & witches, oh my!

As the days are growing shorter, and the nights longer and cooler, our thoughts turn to Fall and Halloween—meaning witches, ghosts, owls, bats, rats, black cats, and... spiders? What? How did spiders get on this list?

It seems that historically these creatures were thought to be evil companions of witches in the Middle Ages. Witches were generally older, solitary women who lived alone with nature, including cats and others keeping them company, they were some of the original “cat ladies”. Their animals were considered their “familiars” or assistants (sidekicks).

Certain landmarks were also associated with All Hallows Eve, like graveyards, dungeons, caves, attics, and creepy sheds in the woods. And here lies the connection between spiders and Halloween. These spooky landmarks are where spiders like to live. They place their webs in dark, low-traffic areas inhabited by the insects they like to eat, thus reinforcing the negative connotations.

Throughout history, cultures believed spiders to be endowed with supernatural abilities. Navajo lore attributes Spider Woman for having taught them weaving to create beauty. (She also took disobedient and mischievous children, wrapped them up, and ate them. Yikes!)

Web making is a unique gift and is given especially to spiders. All spiders can make silk, but not all make webs. Some use silk to line their nests and all can use silk as a dragline, or lifeline, as spiderlings do to balloon. Draglines and webs are more noticeable in the fall when dew is upon them.

Hummingbirds use spider silk to hold their nests together and decorate them with lichens and mosses. Spider webs can be used as bandages. Spider silk is five times stronger than steel, though a thousand times thinner than human hair. It is made up of thousands of nano strands (20 millionths of a millimeter in diameter). No wonder Spider Man has superpowers!

Spiders are Arthropods with a segmented body and jointed appendages like insects, but have their own Class, Arachnida. The largest spider by body mass is the Goliath Birdeater a stunning twelve inches across and weighing 6.2 ounces. It is a type of

tarantula living in rainforests and swamps of northern South America. The world's smallest spider, *Patu digua*, is .03 mm, or one-fifth the size of a head of a pin and is found in Columbia.

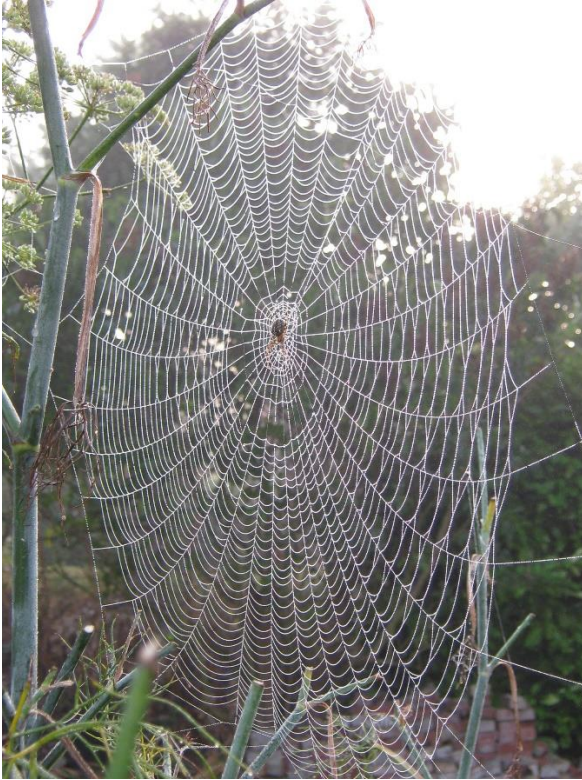


Female jumping spider *Phidippus johnsoni* in fuchsia basket cleaning up aphids. Photo by Virgene Link-New / WSU Skagit County Extension Master Gardeners.

All spiders have venom. This is how they paralyze and kill their prey. People can have different reactions to bites, just as they do to wasp or honeybee stings. Spiders are reluctant to bite and only do so when they are threatened, such as when caught in clothing and feeling squashed.

Of the two poisonous spiders living in the U.S., only the black widow lives in Washington. The good news is that no one in the U.S. has died of a spider bite in over ten years. Most bites are dry (no venom) or so little venom that the individual recovers. Children, pregnant women, and the elderly are most at risk. The brown recluse spider lives in the South-Central U.S. and is not typically found in Washington, although it can be moved here in vehicles coming from that area. The brown recluse has not established in our state.

The hobo spider, *Eratigena agrestis*, (formerly *Tegenaria agrestis*) was once thought to be of medical importance. (Agrestis comes from Latin, from the field, or agrarian.) However, a WSU doctoral student studied the venom and found there were no cytotoxins present in their venom. The patient whose original bite became suspect was found to be compromised by diabetes and the lesion was thought to be an early case of MRSA (methicillin-resistant *Staphylococcus aureus*).



Attached is a close up of the common orb weaver, *Araneus diadematus*. Titled Common Orb Weaver, *Araneus diadematus* with prey. Photo by Virgene Link-New / WSU Skagit County Extension Master Gardeners.

Scientifically speaking, with Autumn comes a drop in temperature and less sunlight. Insects begin to move into cover for the winter and along with them their predator, the spider. Spiders are the best predator in your home or garden, patrolling the attic, walls, basement, or crawl space, snacking on sow bugs, pill bugs, ants, termites, and others. They are real pest control experts. In the garden, they are munching on aphids, scale, white flies, and other pests such as flies and mosquitoes.

Another reason we see more spider activity around our homes is that they have reached maturity. The males are seeking females and the females are laying egg sacks. You occasionally see these egg sacks under your eaves or around windows. These are places other insects are probing to find a way into your home. These egg sacks are packed with their protein, making them great winter snacks for the chickadees and other winter birds needing sustenance.

There are many other superstitions surrounding spiders including them bringing good luck. Seeing one in your home could mean good fortune (the bigger the spider, the bigger the reward.) One old saying says “it is bad luck to drown a spider”, so don’t inadvertently wash one down the drain.

Fear of spiders has caused them to be used in the film industry. Since the 1950’s they’ve been mutants and giants to frighten us, playing on our arachnophobia (fear of spiders) like “Ice Spiders”, “Venom”, “Tarantula”, “Itsy Bitsy” and “Earth vs. the Spider”. Directors probably didn’t use our one herbivorous spider, *Bagheera kiplingi*, because a plant-eating spider isn’t scary enough.

Halloween can be traced back to a Celtic holiday known as Samhain. The holiday recognized the transition from summertime and its activity to wintertime and its cold, barrenness. It became known as the “season of death”, and spiders, being black, fit the description. Fortunately, Samhain gradually transformed into a fun celebration of Fall, with Trick-or-Treating and celebrations of harvest.

Oh! And black cats? It’s been suggested they are the most loving cats of all.

Resources:

- <https://www.science.org/content/article/spider-silk-five-times-stronger-steel-now-scientists-know-why>
- [Spiders: The not so spooky Halloween symbol - Metro Parks - Central Ohio Park System](#)
- [Black cats, bats and spiders get a bad rap on Halloween](#) (Go San Angelo)
- https://www.navajorug.com/blogs/news/spider-rock-center-of-the-navajo-nation?_pos=1&_sid=7450bf699&_ss=r
- <http://ipm.ucanr.edu/PMG/PESTNOTES/pn7488.html>
- <https://health.uconn.edu/poison-control/about-poisons/outdoor-items/arachnophobia/>