

Spider Season

Background

More than 35,000 species of spiders are known to humans, with more than 3,500 in North America. Fall is a great time to explore spiders, since most of them are at their largest and showiest at this time of year. Spiders live in many different habitats, eating insects and other small animals. If we had no spiders, there would be so many insects in West Virginia that life would be quite different, since our food and overall quality of life would be affected.

Spiders are not insects, but arachnids, having two body segments, eight legs, and no antennae. Insects have three body segments, six legs and antennae. Female spiders of a species are usually much larger than males. Many different species of spiders live in West Virginia. Some build webs; others do not. Here we will look at six of the most common and noticeable spiders that live statewide. Many other common spiders are so tiny, they are hard to find and identify.

Objectives

Hike and enjoy looking for spiders in the yard or a local natural area. Learn to identify spiders and their habitat, and to estimate the size of spiders.

Method

Cut out and use the Spider Cards to find and identify common noticeable species. Make observations in a journal.

Materials

Spider Cards, ruler, pencil, journal (optional).

What to do

1. Cut out and read the Spider Cards. Find objects that are about the same length of each species. Note on each card (or in your journal) the object you found that matches the spider in length.
2. Go out in the yard, field, forest, or garage and look for spiders. Note where each spider species was found on the cards or in your journal. Note other interesting things you found while looking.
3. Go on a hike nearby (a walk if you live in the city) and look for more species. Note the ones that you find in your journal. Note the other things you notice while looking: temperature, weather, sounds, smells and sights.
4. For more spider fun, check out these publications:

Spiders and their Kin by Herbert W. Levi and Lorna R. Levi

The Audubon Society Field Guide to North American Insects and Spiders by Lorus and Margery Milne

About Arachnids: A Guide for Children by Cathryn Sill

Are You a Spider? by Judy Allen and Tudor Humphries

Do all Spiders Spin Webs? by Melvin and Gilda Berger

Spiders by Gail Gibbson

Spider's Lunch by Joanna Cole

Spiders Spin Webs by Yvonne Winer

Web Weavers and Other Spiders by Bobbie Kalman

www.wvagriculture.org/images/Literature/Spiders.pdf

References

Spiders and their Kin by Herbert W. Levi and Lorna R. Levi

The Audubon Society Field Guide to North American Insects and Spiders by Lorus and Margery Milne

Terry Carrington, Agricultural Survey Entomologist, WV Department of Agriculture

Wolf spiders, which stalk their prey, are often seen on the ground, instead of on webs.

Photo by Art Shomo

Arrow-shaped Microthena

Microthena sagittata



Richard Bradley

Bold Jumper

Phidippus audax



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Banded Sac Spider

Castianeira longipalpa



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Grass Spider

Agelenopsi pennsylvanica



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Black-and-Yellow Garden Spider

Argiope aurantia



Richard Bradley

Spitting Spider

Scytodes thoracica



Richard Bradley

Bold Jumper

Scientific Name: *Phidippus audax*

Size: Female – 1/2" Male – 1/4"

Habitat: Woods

Web Type: Bungee and retreat

Notes: This spider is thought to be bold because it turns to face anything that moves. The top of the abdomen is marked with three spots of white or orange. The bold jumper drags a thread of silk wherever it goes, using it to climb back to the launch pad if it misses the target on a jump. The female stays in a retreat to lay her egg sac and care for her young until they disperse. Boldness should not be confused with aggression. This spider only bites when handled roughly.

Arrow-shaped Microthema

Scientific Name: *Micrathena sagittata*

Size: Female – 3/8" Male – 1/8"

Habitat: Woods

Web Type: Orb

Notes: This cool-looking, colorful spider often builds its web between two trees or across trails. The tiny male does not have the spines seen on the female. Look for him hanging out at the edge of the web. The female pipe organ mud dauber often kills these spiders to provide food for its young

Grass Spider

Scientific Name: *Agelenopsi pennsylvanica*

Size: Female – 3/4" Male – 3/4"

Habitat: Grasses and shrubs

Web Type: Funnel

Notes: Look for dew on the flat webs in the morning. The spider hides at the narrow end of a silk funnel attached to the web. When something lands in the web, the spider runs out to the prey, bites it, and carries it back to the hideout. The web gets larger as the spider grows. Grass spiders don't see well. In fall, the female hides a disc-shaped egg sac in a crevice.

Banded Sac Spider

Scientific Name: *Castianeira longipalpa*

Size: Female – 1/4" Male – 1/4"

Habitat: Many

Web Type: Retreat

Notes: These spiders mimic ants. They can be found running out in the open like an ant. Often they move their front legs around in the air to mimic ant antennae. The banded sac spider even hangs out with carpenter ants sometimes. This behavior is thought to protect them from some predators, since ants are low in nutrients, and some ants sting.

Spitting Spider

Scientific Name: *Scytodes thoracica*

Size: Female – 1/4" Male – 1/8"

Habitat: Under leaves, stones, logs

Web Type: None

Notes: These spiders spit sticky stuff out to trap their prey. The female carries her egg sac around in her jaws. The young stay together, cared for by their mother until they disperse.

Black-and-Yellow Garden Spider

Scientific Name: *Argiope aurantia*

Size: Female – 1" Male – 1/4"

Habitat: Yards, fields, and gardens

Web Type: Orb

Notes: Old-timers called these spiders "writing spiders," and some claimed to tell the future by reading what the spiders wrote. The "writing" is called a stabilimentum by scientists. The female hangs upside-down in her web, and some tiny males might be found off to the side in their own tiny webs. The tan egg case is grape-sized, often hanging from a bush.