

An Introduction to the Spiders of Chicago Wilderness, USA

Common Spiders of the Chicago Region

The Field Museum – Division of Environment, Culture, and Conservation

Produced by: Jane and John Balaban, North Branch Restoration Project; Rebecca Schillo, Conservation Ecologist, The Field Museum; Lynette Schimming, BugGuide.net.

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ARANEIDAE ORB WEAVERS

Orb Weavers and Long-Jawed Orb Weavers make classic orb webs made famous by the book Charlotte's Web. You can sometimes tell a spider by its eyes, most have eight. This chart shows the orb weaver eye arrangement (see pg 6 for more info)



1 **ARANEIDAE**
Orb Weaver Spider Web



2 *Argiope aurantia*
♀♂ Black and Yellow Argiope



3 *Argiope trifasciata*
♀ Banded Argiope



4 *Araneus marmoreus*
♀ Marbled Orbweaver

ORB WEAVERS are classic spiders of gardens, grasslands, and woodlands. The *Argiope* shown here are the large grassland spiders of late summer and fall.

Most Orb Weavers mature in late summer and look slightly different as juveniles. Pattern and coloring can vary in some species such as *Araneus marmoreus*. See the link for photos of its color patterns: <http://bugguide.net/node/view/2016>



5 *Araneus thaddeus*
♀ Lattice Orbweaver



6 *Araneus cingulatus*
♀



7 *Araneus diadematus*
♀ **Red Cross Orbweaver**



8 *Araneus trifolium*
♀ Shamrock Orbweaver



9 *Metepira labyrinthea*
♀ Labyrinth Orbweaver



10 *Neoscona arabesca*
♀ Arabesque Orbweaver



11 *Larinioides cornutus*
♀ Furrow Orbweaver



12 *Araniella displicata*
♀ Sixspotted Orbweaver



13 *Verrucosa arenata*
♀ Arrowhead Spider



14 *Micrathena gracilis*
♀ Spined Micrathena



15 *Micrathena gracilis*
♂ Spined Micrathena

TETRAGNATHIDAE LONG-JAWED ORB WEAVERS

Leucauge is a common colorful spider of our gardens and woodlands, often found hanging under its almost horizontal web.

Tetragnatha are often found along wetlands and watercourses. They are the spiders that fill your canoe when you brush the bank.



16 *Leucauge venusta*
♀ Orchard Orbweaver



17 *Tetragnatha straminea*
♀

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LINYPHIIDAE SHEETWEB & DWARF SPIDERS

Sheetweb spiders have somewhat messy webs that usually have flat, domed, or bowl shapes. Some species, such as *Neriene*, can be found in great numbers hanging upside down under webs.

20% of the spider species in Illinois are in this family.



18 LINYPHIIDAE
Bowl and Doily Web



19 *Frontinella communis*
♀ Bowl and Doily Weaver



20 *Neriene radiata*
♀ Filmy Dome Spider



21 *Pityohyphantes costatus*
♂ Hammock Spider

THERIDIIDAE COBWEB SPIDERS

The cobweb spiders have irregular/messy webs and usually hang upside down in them. Their webs are found on the undersides of the leaves of low vegetation in old fields and forests, in leaf litter, and in buildings.

Steatoda and *Parasteatoda* *tepidariorum* are common around and in buildings.



22 *Parasteatoda tepidariorum*
♀ Common House Spider



23 *Steatoda triangulosa*
♂ False Widow



24 *Enoplognatha ovata*
♀



25 *Theridion* sp.
♀

AGELENIDAE FUNNEL-WEB SPIDERS

Funnel-web spiders have flat sheet webs that end in a funnel-shaped retreat where the spider sits.

Agelenopsis are very common garden spiders.

Tegenaria domestica is more commonly found in and around structures.



26 AGELENIDAE
♀ Funnel-Web Spider Web



27 *Agelenopsis pennsylvanica*
♀ Grass Spider



28 *Tegenaria domestica*
♀ Barn Funnel Weaver



29 AGELENIDAE
Funnel Web Spider Web

DICTYNIDAE MESH WEB WEAVERS

Small spiders that make messy webs at the top of tall grasses or small shrubs.

They can often be identified to family by their small size and the white lines on their carapace.



30 DICTYNIDAE
Mesh Web Spider Web



31 *Dictyna* or *Emblyna*
♀ Mesh Web Weaver

PHOLCIDAE CELLAR SPIDERS

Found in messy webs in basements or garages, these spiders make good house guests because they eat house pests. Easy to identify by their exceptionally long thin legs. This sometimes earns them the name daddy-long-legs, causing confusion with a non-spider arachnid, the Harvestmen (Opiliones), of the same common name.



32 *Pholcus phalangioides*
♀ Longbodied Cellar Spider

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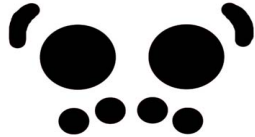
WANDERING SPIDERS

Wandering spiders do not make webs to catch prey. They hunt down and capture food. They use silk to protect their eggs and make retreats.

Some families like the wolf spiders are very common and can vary greatly in size from small *Pardosa* species to the large *Hogna* species.

LYCOSIDAE WOLF SPIDERS

Easily identified by unique eye arrangement, they are the only spiders that attach their egg sacs to their spinnerets and carry young on their backs.



33 *Hogna* sp.
♀ with babies on board



34 *Pardosa* sp.
♀ Wolf Spider



35 *Schizocosa crassipes*
♂ Wolf Spider

PISAURIDAE NURSERY WEB SPIDERS

Nursery Web spiders are wandering spiders and some of the largest spiders in the US.

They resemble wolf spiders, but a female carries her egg sac in her jaws and makes a nursery out of leaves to guard her spiderlings.



36 PISAURIDAE
Spider Nursery



37 *Pisaurina mira*
♀ Nursery Web Spider

PISAURIDAE FISHING SPIDERS

Members of the genus *Dolomedes* are called fishing spiders because they can dive into water and catch prey including small fish. They often rest on aquatic vegetation or at the water's edge. They can also be found on vertical surfaces away from water (e.g. tree trunks).



38 *Dolomedes scriptus*
♀ Fishing Spider

THOMISIDAE CRAB SPIDERS

Named for their crab-like appearance and style of movement, flower crab spiders, mainly white or yellow, can be found on flowers waiting with arms extended to ambush prey.

Ground and bark crab spiders, mainly brown or black, are found on plants, structures or the ground.



39 *Misumena vatia*
♀ Goldenrod Crab Spider



40 *Misumenoides formosipes*
♀ Whitebanded Crab Spider



41 *Mecaphesa* sp.
♀ Flower Crab Spiders



42 *Xysticus* sp.
♀ Ground Crab Spiders



43 *Bassaniana versicolor*
♂ Bark Crab Spiders

PHILODROMIDAE RUNNING CRAB SPIDERS

Running crab spiders have a crab-like appearance, with their second set of legs longer than their first. This family includes spiders that can 'run' quickly after prey.



44 *Philodromus* sp.
♂



45 *Philodromus marxi*
♂ Metallic Crab Spider



46 *Tibellus* sp.
♀ Slender Crab Spiders

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SALTICIDAE JUMPING SPIDERS

Found in a variety of habitats, jumping spiders are active, daytime hunters with great vision. They jump to seize their prey and are easily identified by their eye arrangement.



47 *Phidippus audax*
♂ Bold Jumper



48 *Platycryptus undatus*



49 *Phidippus clarus*
♀



50 *Phidippus clarus*
♂

JUMPING SPIDERS are a large family of various colors, sizes and shapes. Some species like *Synemosyna formica* mimic an ant to help protect them from predators. Males often look quite different from females as seen in photos 49, 50, 51, 52.

Jumpers are aware of people and if you move closer for a better look they may respond in kind. They are one of few spiders referred to as “cute”.



51 *Maevia inclemens*
♀ Dimorphic Jumper



52 *Maevia inclemens*
♂ Dimorphic Jumper



53 *Tutelina elegans*
♀



54 *Synemosyna formica*
♀



55 *Hentzia mitrata*
juv



56 *Salticus scenicus*
♀ Zebra Jumper

OXYOPIIDAE LYNX SPIDERS

Often found on foliage searching for prey, this family is easy to identify by the eye pattern and hairy/spiny legs.



57 *Oxyopes salticus*
♀ Striped Lynx



58 *Oxyopes salticus*
♂ Striped Lynx

← ANYPHAENIDAE GHOST SPIDERS

Ghost spiders are light in color, actively hunt for their prey, and usually have rows of dashes that run vertically down the abdomen.



59 *Anyphaena celer*
♀ Ghost Spider

MITURGIDAE → PROWLING SPIDERS

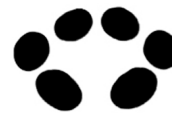
Prowling spiders are found during the day in rolled grass or leaves or in a corner in the house. They hunt at night.



60 *Cheiracanthium mildei*
♀ Yellow Sac Spider

DYSDERIDAE DYSDERIDS

Dysderids have six eyes and large jaws, which separates them from the similar-looking Ground Sac Spider *Trachelas* in the family Corinnidae.



61 *Dysdera crocata*
♀ Woodlouse Hunter

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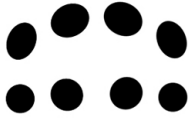
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GNAPHOSIDAE GROUND SPIDERS

Cylindrical spinnerets are a key field marking for this large nocturnal family of mostly black or brown spiders.



62 *Herpyllus ecclesiasticus*
♀ Eastern Parson Spider



63 *Sergiolus capulatus*
♀ Ground Spider

ATYPIDAE PURSEWEB SPIDERS

Purseweb spiders are rarely seen because they often live in burrows, but males of species like *S. niger* can be found in early summer when they go searching for their mates.

Easily recognized by their eyes and shape, they make tubular webs, wait inside for prey, and reach through with huge jaws to pull it inside.



64 *Sphodros niger*
♂ Black purseweb spider

POTENTIALLY HARMFUL SPIDERS

Spiders of the Chicago Region are beneficial arthropods, helping to keep populations of various insect pests under control. Essentially all are harmless to humans, except for people with rare allergies. The insecticides used to control spiders are more dangerous to human health than the spiders themselves. Most medical cases of “spider bite” are actually mis-identifications.

This guide includes two spiders known to affect humans. The Northern Black Widow (Theridiidae, pg2) lives in the Chicago Region but is seldom encountered. The Brown Recluse (Sicariidae) does not live here, though that may change with ongoing climate disruption.



65 *Latrodectus variolus*
Northern Black Widow

SICARIIDAE *Loxosceles reclusa* Brown Recluse

The six-eyed recluse spiders are easily recognized by their unique eye arrangement. They are also known for the violin pattern seen on the spider’s carapace. They live in central Illinois and south.



66 *Loxosceles reclusa*
Brown Recluse

SPIDER WEBS

The shape and structure of the webs made by some spiders can serve as a quick guide to the spider’s family.

Some characteristic webs are found here and presented throughout this guide (1, 18, 26, 29, 30).



67 Orb Weaver Web



68 Sheet Web



69 Funnel Web



70 Filmy Dome Web

OTHER SILK USES

Not all spiders use webs to capture their prey (e.g. wandering spiders). But all spiders have silk glands and will use silk to build themselves protective retreats in a leaf or in a corner of a room, as draglines, or to construct their egg sacs. The female wraps her eggs in silk for protection. See images 22, 25, 27, 36, 42, 72, 73.



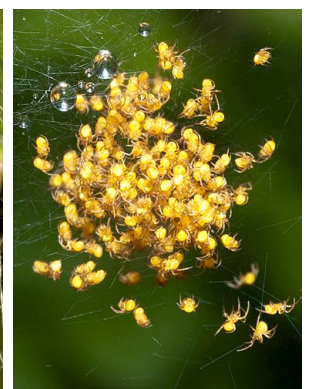
71 Spider Retreat



72 Spider Egg Sac



73 Spider Egg Sac



74 Spiderlings

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SEXUAL DIMORPHISM

The size and color patterns of mature male and female spiders can be quite different. This photo shows a male (brown spider) that is significantly smaller than the female (white spider). Females are typically larger as they need more food and energy to produce large numbers of eggs.



75 *Misumena vatia*
♀♂

MALE SPIDERS

Male spiders have special secondary sexual organs located on the palps near their mouth to assist with the transfer of semen to the female. This makes the male look as though he is wearing “boxing gloves”. Scientists use the differences in shape and structure of these palps (and female genitalia) to separate spiders into family, genus, and species.



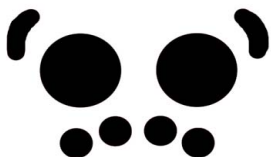
76 *Mangora placida*
♂ Tuftlegged Orbweaver



77 *Enoplognatha ovata*
♀

SPIDER EYE ARRANGEMENT

Eye arrangement is helpful to spider identification. Several eye charts are scattered through this guide. Most spiders have eight eyes in two rows of four.



Wolf Spider
Eye Arrangement



78 Wolf Spider Eyes

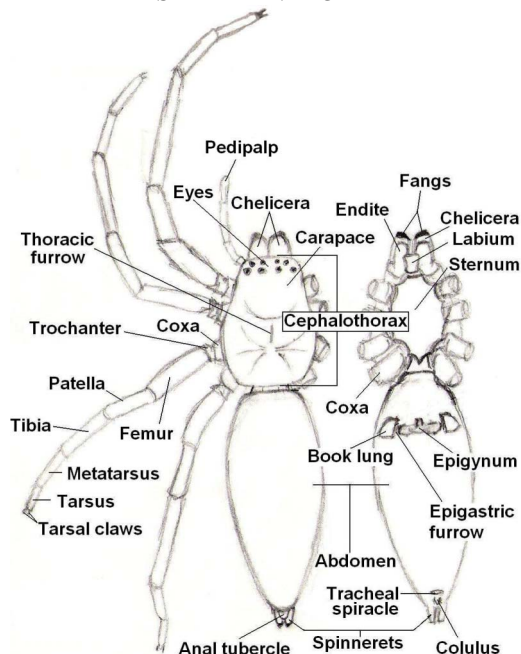


Jumping Spider
Eye Arrangement

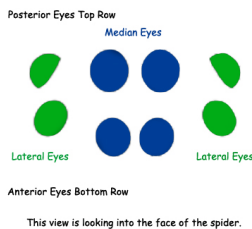


79 Jumping Spider Eyes

SPIDER ANATOMY



Spider Eye Arrangement Terminology



SPIDER TAXONOMY

- Phylum – Arthropoda
- Class – Arachnida
- Infraorder – Araneomorphae
- Order – Araneae
- Family – Thomisidae
- Genus – Misumena
- Species – vatia
- Goldenrod Crab Spider

SPIDER DIVERSITY

Nearly 900 species of spiders have been recorded in the Great Lakes Region. This guide includes some of the most common species. For more information, explore the resources listed below.

SPIDER RESOURCES

- Weber, Larry. 2002. *Spiders of the Northwoods*. Duluth: Kollath+Stensaas Publishing.
- Howell, W. Mike and Ronald L. Jenkins. 2004. *Spiders of the Eastern United States*. Boston: Prentice Education.
- Levi, Herbert W. and Lorna R. Levi. 2002. *Spiders and Their Kin*. Ed. Herbert S. Zim. New York: St. Martin's Press.
- Ubick, D., P. Paquin, P.E. Cushing, and V. Roth (eds). 2005. *Spiders of North America: An Identification Manual*. American Arachnological Society.
- BugGuide.net: <http://bugguide.net/node/view/1954>
- Eye Charts: <http://bugguide.net/node/view/84423>
- Webs, Egg Sacs: <http://bugguide.net/node/view/452749>
- General: <http://bugguide.net/node/view/322051>

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The names of non-native species (to the Chicago Region) are listed in red.