A Pocket Guide to Common Kansas Spiders



By Hank Guarisco Photos by Hank Guarisco

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Black-banded Crab Spider

Introduction

This is a guide to the most common spiders found in Kansas. Spiders are one of the most successful groups on earth. Worldwide, there are over 42,000 species, and more than 3,800 of these live in the U.S. and Canada. Because of its central location and diversity of habitats, there are approximately 500 species in Kansas. Spiders attract attention by their unique silk webs and their proximity to houses and gardens. A few local spiders have venomous bites; the Brown Recluse and black widows.

This guide also includes common representatives of other arachnids (close relatives of spiders) found in Kansas. These include ticks, mites, daddy-longlegs, scorpions, pseudoscorpions, and solpugids. Like spiders, they also have eight legs, except for larval ticks, which have six. Of this group, only scorpions are venomous. Daddy-long-legs are not venomous. They do not even possess venom glands. This is an urban legend that is most likely based on the different uses of the common name, "daddy-long-legs." In the U.S., it refers to members of the order Opiliones, also known as harvestmen. In other countries, this name refers to cellar spiders, or even craneflies in Great Britain. Another example of a potentially misleading common name is the funnel web spider. In Australia this refers to the very dangerous Australian funnel web, Atrax robustus, a relative of tarantulas. In the U.S., this name refers to an entirely different family of spiders (Agelenidae) that are harmless. Referring to spiders and other animals by their scientific name is the best way to avoid confusion.

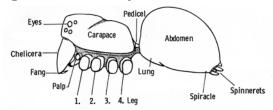
Arachnophobia



"Arachnophobia" created by Roger Holden of Magic Visions.

Some people have an extreme fear of spiders and other arachnids. They can't even look at a picture of one without cringing. Of course, a few spiders can be harmful, but this fear is usually based on other factors: "It's all those legs" or "It's just gross." Often it's a "love-hate" relationship. People are scared but also fascinated by them. By learning more about these reviled creatures, we can eventually distinguish harmful from harmless spiders, and become more familiar with their interesting lives. Then instead of instantly squashing one in our homes, we may realize it has an important role in nature, place a glass jar over it, slide a piece of paper under the jar, and release it outside.

Spider Anatomy



Spider Body (adapted from "Biology of Spiders" by R.F. Foelix 1982)

Spiders have two major body parts: the cephalothorax and the abdomen, which are linked by a narrow tubular structure called a pedicel. The upper part of the cephalothorax is called the carapace. The carapace usually has six or eight eyes in two rows near the front end, as well as two jaws, each consisting of a base (chelicera) and a fang. The legs and small leg-like appendages near the mouth (pedipalps) are attached to the carapace. The abdomen contains most of the internal organs, such as the heart, book lungs, trachea, and reproductive organs. The trachea ends in a slit-like opening (spiracle) on the underside of the abdomen.

In females and juveniles, the pedipalp remains a small leg-like appendage, but in males the end transforms into a sexual organ that may resemble a tiny boxing glove. Upon reaching maturity, the male spins a small silk web, deposits a drop of sperm onto the web, and sucks it up into the bulbs of his pedipalps. Now he is ready to find a female spider and will use the pedipalps to mate with her. In those cases where more obvious anatomical distinctions are lacking, careful examination of the structures of the male pedipalp is needed to determine the species of a spider.

House Spiders

Some spiders are frequently found in and around homes. It is useful to divide them into two groups: true house spiders (synanthropes), and seasonally abundant spiders. True house spiders establish breeding populations in houses, can be found throughout the year, and have broad ranges since they are often accidently transported to new areas of the globe. Seasonally common spiders are common in houses and the surrounding environment, especially at certain times of the year. They do not establish breeding populations in houses. This guide will note this distinction where appropriate.

Hunting Spiders

Hunting spiders detect and overcome their prey without the use of webs. However, they still construct silk resting sacs and silk egg sacs. Resting sacs are used for resting, molting, hibernating and, by the female, often as a nest to guard the egg sac.

Some hunting spiders are sit-and-wait predators, while others actively search their environment for prey. Some of these active spiders will supplement their diet by drinking nectar for a quick energy boost. Common hunting spiders include: jumping spiders, crab spiders, wolf spiders, fishing spiders, lynx spiders, ground spiders, and pirate spiders.

Jumping spiders have excellent vision and can see color. The brightly colored males perform elaborate courtship dances to attract the attention of females. Crab spiders are the ultimate sit-and-wait predators. Some yellow or white species sit in flowers and pounce upon visiting insects, perhaps even larger than themselves. Over a period of several days, they can change color to match the color of the flower.

Venomous Spiders

Nearly all spiders have venom glands, but a few families of spiders have none, relying instead on their webbing and physical prowess to overcome and capture their prey. Although some people can have an allergic reaction to the bite of any spider possessing venom glands, there are only four Kansas spiders whose bites are considered dangerous enough to require medical attention. These are the Brown Recluse and three species of black widow spiders. The Brown Widow, a tropical species found across the globe, was discovered in the Wichita area several years ago. It is also venomous. It is a common house spider that is easily transported, and has established populations in Florida, southern Texas, and southern California, but not in Kansas as of 2016.

The bite of the Brown Recluse can cause mild to severe symptoms, which include tissue breakdown and the development of a necrotic lesion at the site of the bite that takes weeks or months to heal. Surgery is sometime required to remove dead tissue. In rare cases, death has resulted from kidney failure. Luckily, the recluse's behavior matches its name, and will bite only if pressed against the skin. This usually occurs in bed or when putting on clothing that harbors the spider. Placing sticky traps in corners and closets is an effective way to both detect and decrease recluse populations. If bitten, the victim should preserve the spider in rubbing alcohol so that its identity can be verified by an expert. Home remedies that have been used by Kansans bitten by the Brown Recluse include: immediately applying a poultice made of crushed plantain (Plantago sp.) leaves, or a paste of water and ascorbic or citric acid (a crushed vitamin C tablet) to the bitten area. However, this statement is not to be construed as medical advice, and appropriate medical treatment should be sought if envenomated.



Brown Recluse

The venom of black and brown widows interferes with nerve transmission, and these spider bites produce serious symptoms involving the entire body. The bite is very painful and increases in severity during the first 12 to 24 hours. Severe backaches and a board-like abdomen due to intense muscle contractions are coupled with restlessness and agitation. Some victims that didn't know they had been bitten have been misdiagnosed by emergency room physicians who believed they had appendicitis due to the board-like abdomen. There is an effective antivenin that can stop the venom's action and reverse the symptoms quite rapidly. A pregnant women bitten by a black widow in California was afraid of losing her unborn child. Her contractions ceased within 30 minutes after administering the antivenin. Supportive treatment includes administering calcium, magnesium, and pain medication.

Spider Webs

A unique characteristic of spiders is their ability to produce elaborate silk webs of various designs. It is often possible to identify a spider to the family, genus, or even species level by examining the web. Besides providing a secure home for the spider, the web also functions as a prey-trapping device. Some major web types include: orbwebs, funnelwebs,



Castleback Spider Orbweb



Funnelweb (Agelenopsis sp.)

cobwebs, and sheetwebs. Two sheetweb weavers, the Bowl and Doily Spider and the Filmy Dome Spider,

can be recognized by their unique webs (see page 65).

Silk is produced by the spinnerets, which are located at the back of the abdomen.



Cobweb (Tidarren sp.)



Web of Family Dictynidae

Silk is also used to wrap prey and create sacs for hiding, molting or overwintering. Young spiders of many species disperse into new habitats by climbing to a high point and releasing a long line of silk, which catches the breeze and carries the spiderlings away. This is called ballooning.

Other Arachnids

Besides spiders, Kansas is the home of other types of Arachnids, including one species of scorpion, about a dozen species of daddy-long-legs (some of which actually have short legs), ticks, mites, pseudoscorpions, and a solpugid.

Scorpions

Our scorpion species is found under rocks throughout Kansas. It eats a variety of insects and spiders. Its venomous sting produces mild to somewhat severe local reactions, including redness and swelling that subside in several days. Maximum length is 2.4" (60 mm).



Striped Bark Scorpion (Centruroides vittatus)

Ticks

About a dozen species of ticks occur in Kansas. They are external parasites of reptiles, birds and mammals. They can transmit a variety of diseases, such as Lyme Disease and Rocky Mountain Spotted Fever. The larger species of ticks reach 0.2" (4 mm) long before feeding, but can get much bigger after a large blood meal.



Dog Tick (Dermacentor variabilis)

Mites

There are countless numbers of mites in the state. Some are predators, others are pests of crops and domestic animals. Facial mites (Demodex) live in the pores of our skin and keep us healthy by eating extra oils and dead skin cells. Chiggers are a type of mite which produce very irritating bites. Most mites are very small, less than 1 mm in length.

Solpugids

Solpugids are desert-adapted arachnids that lack venom, but have two, large jaws. They are very active and run very rapidly. They are voracious predators of spiders and insects.

Maximum length is 1" (26 mm).



Eremobates sp.

Pseudoscorpions

Pseudoscorpions are harmless predators that feed on small insects and mites. Most are found in leaf litter and under rocks, but one species, Chelifera cancroides, is often found around houses. Maximum length is 0.2" (4 mm).



Chelifera cancroides

Daddy-long-legs

Daddy-long-legs feed on pollen, small insects and mites, and even scavenge dead insects. Body length is around 0.2" (4 mm). The legs on some species are long enough to span the palm of your hand.



Daddy-long-legs (Eumesosoma roeweri)



Daddy-long-legs (Venones sayi)

Species Accounts

Name: The common name is followed by the scientific name in italics. There may be one or more symbols after the name: the hollow house symbol indicates the spider is a seasonal house spider, while a solid house symbol shows it is a true house spider. A skull indicates a species with a dangerously venomous bite.







Description and Size: Size is variable in spiders, depending on age and gender. The size given is considered typical for larger females. Color, pattern, shape, body size, leg length and thickness are common features used to distinguish one spider from another. Pay particular attention to these characteristics in the color images. Most spiders in this guide can be identified on sight. However, in some cases it is not possible to identify a spider to the species level using these characters alone. Minute differences in the genitalia must be examined with a dissecting microscope to distinguish visually similar species. These details are beyond the scope of this pocket guide.

Range: The known distribution of each species within Kansas and throughout its range is provided. Because of its central location, many spiders reach their range limits in Kansas.

Habits and Habitat: Habitat information is also provided, along with life history information such as longevity, number of eggs produced, prey and web construction.

Remarks: *Information on predators, parasites, etc.*



Texas Brown Tarantula (male)

Texas Brown Tarantula

Aphonopelma hentzi

Description: Body length 2.3" (58 mm). The largest Kansas spider. It has a buff-colored carapace and abdomen and legs that are dark brown and hairy. Base of jaws are parallel and extend forward from the front of the carapace. Individuals who have not shed their skin recently may have a bald spot near the rear of the abdomen due to the unique defensive behavior noted below.

Range: Southern Kansas, north to Trego, Russell, and Gove Counties; in south central U.S. east of the Rockies in Missouri, Kansas, Arkansas, Louisiana, Oklahoma, Texas, Colorado, New Mexico, and Arizona.

Habits & Habitat: Under rocks in silk-lined burrows in rocky pastures and grasslands. Eats beetles, crickets, and grasshoppers. Mating occurs in September when the males leave their burrows in search of females, and are seen crossing highways from sunset to after sunrise. Males die in late autumn, females can live 25 years. Females produce egg sacs in July containing 500 to 1,000 eggs.

Remarks: The Great Plains Narrowmouth Toad (*Gastrophryne olivacea*) gains protection by sharing occupied tarantula burrows. Enemies include the Tarantula Hawk Wasp (*Pepsis formosa*), which stings the spider, drags its paralyzed prey to a burrow, then lays an egg. The wasp larva feeds on the helpless spider. This mild-mannered spider is easily handled. When disturbed, it turns around and flicks barbed hairs from its abdomen at the intruder. A spider investigator had eleven of these barbed hairs surgically removed from her eyeball.





Brown Recluse

Eyes & fiddle mark

Brown Recluse (Fiddleback)

Loxosceles reclusa





true house spider - venomous

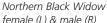
Description: Body length 0.5" (13 mm). A medium-size, thin-legged spider with six eyes in three pairs, and dark brown, violin-shaped mark on the carapace. Carapace and legs are brown or reddish brown; the abdomen is pale, sometimes with a green or reddish hue due to the color of recently eaten prey.

Range: Statewide; found in south central U.S. from Ohio, Kentucky, Tennessee, and Georgia, west to Iowa, SE Nebraska, Kansas, Oklahoma, Texas and E. New Mexico.

Habits & Habitat: In houses, buildings, often falls into sinks and tubs in summer. Under rocks in pastures, bark and fallen logs in woods, in dead yucca litter, under boards and tin in yards. Feeds on a variety of insects, including dead ones. Adults and young found year-round. Females make shallow, bowl-shaped silk nests, where they produce and guard up to 5 egg sacs, each with 25 to 74 eggs. Life span 2-3 years, one female lived almost 5 years.

Remarks: Often become prey of other house spiders such as the Checkered Cobweb Weaver, Common Cellar Spider, and Elongated Cellar Spider. Populations in houses can number into the hundreds. The venomous bite is mild to severe (See section on venomous spiders).







Female underside

Northern Black Widow

Latrodectus variolus





seasonal house spider - venomous

Description: Body length 0.5" (13 mm). Large, round, shiny, black abdomen with two red or orange triangles underneath. Male almost same size as female, and both have a series of red spots down the back, sometimes with white, diagonal stripes on the sides.

Range: Eastern 1/3 of Kansas; eastern 1/2 of U.S.

Habits & Habitat: This woodland spider constructs a large, elaborate cobweb (3' wide and 3' high) consisting of a convex sheet and a large, tangled web above, in understory vegetation. The spider sits in a silken retreat at the edge of the sheet in the leaf litter or a hole in a rotten stump. Also found at woodland edges and on houses near woods. Eats many insects, including beetles and wasps. Mating occurs in May, female produces several egg sacs during the summer. containing 118 to 395 eggs,

Remarks: Enemies include several small spiders (Argyrodes pluto, Neospintharus trigonum, and Faiditus cancellatus) that steal the wrapped prey, feed on spiderlings, or even attack and consume the web owner. The bite can produce serious symptoms that require medical attention (see section on venomous spiders). The webs resemble those of the Eastern Funnelweb Spider, but the widow's web sheet is convex and the silk strands are much stronger.



Southern Black Widow (female & egg sac)



Brown Widow (female & egg sac)

Southern and Western Black Widows

Latrodectus mactans and L. hesperus





seasonal house spiders - Venomous

Description: Body length 0.5" (13 mm). The females of the Southern and Western Black Widows look alike. The large, black abdomen is round, smooth, shiny and possesses a red "hour-glass" mark underneath. Juveniles may have a series of red dots or dashes along the mid-line of their abdomens, and white, diagonal markings on the sides. Adults possess only a single red spot above the spinnerets. Males and young western widows are light olive with extensive white stripes containing smaller black and red stripes. Males of the Southern Black Widow are black with smaller red and white markings.

Range: Southern Black Widow: east and central 1/2 of Kansas; eastern 1/2 of U.S. Western Black Widow: Western 1/3 of the state; western 1/2 of U.S.

continued on next page





Western Black Widow (male)

Western Black Widow (female)

Habits & Habitat: The Southern and Western Black Widow occur in more open locations, under railroad ties, logs, rocks, debris, bridges, and buildings. Juvenile Western Black Widows are often taken in sweep samples of shortgrass prairie. Widow females live up to three years, and produce multiple egg sacs containing 100-400 eggs each. They prey on a wide variety of insects.

Remarks: Egg sacs are sometimes attacked by small, parasitic wasps. The bite of these widows can cause severe symptoms that require medical attention (see section on venomous spiders). Brown Widows (*L.geometricus*) are brown with several thin, light bands on the abdomen, and an orange hour-glass marking on the underside of the abdomen. The distinctive egg sacs possess prominent, raised knobs.



Woodlouse Spider (female)

Woodlouse Spider

Dysdera crocata



true house spider

Description: Body length 0.6" (15 mm). A six-eyed spider with protruding jaws, red-orange carapace and legs, and a pale abdomen. Young are paler with a white spot at end of abdomen. Range: Statewide in Kansas; cosmopolitan, occurs in North and South America, Hawaii, Europe, North Africa, Australia, and Japan.

Habits & Habitat: Occurs in damp locations in and around houses, under debris, rocks, and boards near marshes, lake margins, and railroad tracks. During the summer, females produce several egg sacs in elliptical silk nests and guard them. Each sac contains about 50 eggs. This hunting spider preys mostly on pillbugs, which are grasped by the jaws in a scissor-like grip. Only one fang is inserted in the soft underbelly of the prey.

Remarks: Enemies include spiders and scorpions. The woodlouse spider can survive flooding for ten days when inside its silk nest. Its bite produces only local swelling and redness, and is not considered dangerous.



Truncated Cellar Spider (juvenile)

Truncated Cellar Spider

Crossopriza Iyoni



true house spider

Description: Body length 0.3" (7 mm). Very long, thin legs that are pale with black bands. The abdomen is brown with many small white blotches. It can be recognized by its truncated abdomen when viewed from the side.

Range: In towns scattered across Kansas: Lawrence, Manhattan, Salina, Hays, and Wichita. In south and central US, and tropical areas from southeast Asia to India.

Habits & Habitat: This house spider builds large, tangled webs in cellars, houses, buildings, hallways, and garages. Often occurs in colonies consisting of spiders of all ages. Prey includes small flies, leaf hoppers, and moths. A captive specimen wrapped 5 to 10 flies at once, then hung the bundle in the web. Adults and juveniles occur most of the year. Three egg sacs from Florida contained 53, 54, and 58 eggs each.

Remarks: This spider is a welcomed guest in SE Asia since it consumes large numbers of mosquitoes, including *Aedes agypti*. It may help control the spread of mosquito-borne diseases, such as dengue fever.



Elongated Cellar Spider (male)

Elongated Cellar Spider

Pholcus phalangioides



true house spider

Description: Body length 0.5" (13 mm). Long, thin, pale legs and an elongate abdomen that is pale with brown markings on the back. Carapace is translucent white with a brown blotch in the center. Resembles two other cellar spiders: Manuel's Cellar Spider (*Pholcus manueli*) and the Cave Cellar Spider (*Pholcus muralicola*). In addition to being smaller, body length 0.1" (3 mm), details of the genitalia distinguish the species.

Range: Statewide; entire U.S.; European immigrant found worldwide.

Habits & Habitat: Makes tangled webs under eaves, in basements,
and stone houses. It hangs upside-down in its web and feeds on
a wide variety of insects and spiders. Females carry their thinly
covered egg sacs in their jaws. Each sac contains about 20 eggs.
They will temporarily put down the egg sac to feed, then resume
carrying it. Adults and juveniles found all year.

Remarks: The long legs gives this spider a great advantage in subduing prey, including other spiders.



Common Cellar Spider (female & eggs)



Female

Common Cellar Spider

Parasteatoda tepidariorum



true house spider

Description: Body length 0.3" (7 mm). Round abdomen. Color and pattern of females vary from bold, dark brown markings on a light background to pale individuals with pale markings. Males slightly smaller, with reddish-brown legs.

Range: Statewide; cosmopolitan, found on most continents.

Habits & Habitat: builds tangled cob webs in houses, in corners, culverts, water meters, under eaves and bridges; also in cave entrances and on rock walls. Feeds on a wide variety of invertebrates, such as brown recluses, ticks, scorpions, daddylong-legs, and occasionally small mice. Males and females often occupy the same web. During the warm months, females produce multiple egg sacs containing 300 to 650 eggs each.

Remarks: This common household spider is beneficial since it will consume ticks and brown recluses. Enemies include other spiders. Certain flies and wasps sometimes parasitize their egg sacs.



Checkered Cobweb Weaver (female)

Checkered Cobweb Weaver

Steatoda triangulosa



true house spider

Description: Body length 0.25" (6 mm). Dark maroon ground color, with a series of light triangles on the round abdomen.

Range: Probably statewide; cosmopolitan, found across most of the U.S. Habits & Habitat: Builds cobwebs near ground level in houses,

basements, culverts, under furniture, debris, and rocks. Diet includes pillbugs, ticks, ants, and spiders, including the brown recluse. Adults occurs year-round. Females produce multiple, small, round, white egg sacs from April to September, each containing 39 to 155 eggs.

Remarks: The presence of this beneficial house spider can be detected by the empty egg sacs that persist under furniture.



Quasi-social Cobweb Spider (female)

Quasi-social Cobweb Spider

Anelosimus studiosus

Description: Body length 0.3" (7 mm). Amber carapace and brownish abdomen with a darker brown, wavy central stripe bordered by thin white stripes. Legs amber with several dark bands.



Winter web

Range: Southeastern 12 counties in KS; eastern 1/2 of U.S.

Habits & Habitat: builds cobwebs, consisting of a shallow bowl and a dense tangle above, on terminal branches of trees, shrubs, and understory vegetation, at the woodland edges near water. The webs typically contain many dead leaves. Females produce several egg sacs during the summer, averaging 53 eggs per sac. The young remain with the female, and cooperatively repair the web and tackle prey, such as midges and mayflies. Some webs contain over 100 spiders. They spend winter in the web.

Remarks: The web resembles that of the Bowl and Doily Spider, and the web of webworms. Other spiders frequent the web, including the Puritan Pirate Spider.







Female ventral

Carolina Wolf Spider

Hogna carolinensis

Description: Body length 1.1" (29mm). This large spider is gray or brownish-gray with distinct orange hairs on jaws; underside of body totally black with alternating white and black bands on underside of legs.

Range: Statewide in Kansas; throughout the U.S.

Habits and Habitat: This nocturnal hunting spider constructs silk-lined burrows in short grass and occurs in lawns, prairies, pastures, meadows, and deserts; and, sometimes wanders into homes and swimming pools. It sits near the burrow entrance preying on insects. Females live several years, and produce egg sacs with 150 to 600 eggs.

Remarks: Bites cause local reactions that clear up in 12 to 24 hours.



Striped Wolf Spider (male)



Female & eggs

Striped Wolf Spider

Rabidosa rabida

Description: Body length 0.75" (19 mm). Large pale brown spider with two dark brown stripes on carapace. The abdomen has a large, central brown stripe with several pairs of small, pale, diagonal dashes within it. Underside pale in adults, but juveniles have small, black spots. The first pair of legs of the male is black.

Range: Common in eastern and central Kansas; throughout eastern U.S. Habits & Habitat: This hunting spider is found on low vegetation and on the ground in prairies, old fields, and at the woodland edges, where it feeds on insects and spiders. Mating occurs in late summer; females produce one egg sac between August and October containing 100 to 700 eggs. Like all wolf spiders, the young emerge from the egg sac, then ride on the mother for about two weeks before they disperse.

Remarks: Egg sacs are sometimes parasitized by small, wingless wasps that resemble ants







Female ventral

Dotted Wolf Spider

Rabidosa punctulata

Description: Body length 0.67" (17 mm). Pale brown spider with two brown-black stripes on carapace and one down the center of the abdomen. Unlike the Striped Wolf Spider, the stripe is darker and lacks the pale diagonal dashes. The underside of adult abdomens have randomly-placed black spots. Juveniles do not have these marks.

Range: Common in eastern 1/3 of Kansas; found throughout eastern U.S.

Habits & Habitat: Common on the ground in open fields and prairies, where it hunts small insects. Adults found in autumn, winter and spring; females produce egg sacs containing 117 to 237 eggs in shallow, silk-lined burrows under rocks and logs in spring. Life span is 12 to 18 months.

Remarks: Like other wolf spiders, it may be located at night by looking with a flashlight held close to one's head and noting the tiny sparkles in the grass coming from the bright blue-green reflection from the spider's eyes.





Western Lance Spider Male ventral (male dorsal)

Western Lance Spider

Schizocosa mccooki

Description: Body length 0.5" (13 mm). Brown; carapace with wide, central light stripe and two narrow light stripes along edge. The abdomen has a light to dark brown lance-shaped mark over the heart bordered by a narrow, unbroken, light stripe. The underside is black, with a vellow central mark on the abdomen. Looks very similar to the Eastern Lance Spider (Schizocosa avida) in which the dark heart stripe ends in two curved marks that bisect the surrounding light stripe.

Range: Western 2/3 of Kansas; across Canada, and western 2/3 of U.S. Habits & Habitat: Shortgrass prairie, pastures, prairie dog towns, under rocks in chalk beds. Adults found in June and July, females carry egg sacs in July containing 225 to 325 eggs.

Remarks: The lance spiders are common and difficult to distinguish, especially when comparing preserved specimens.





Common Nurseryweb Spider (female)

Female & eggs

Common Nurseryweb Spider

Pisaurina mira



seasonal house spider

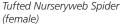
Description: Body length 0.75" (19 mm). Dimorphic. One morph has body and legs gray or orange-brown, with a slightly darker, wide stripe in the middle of the carapace, and two rows of several small, white spots on the abdomen. In the other morph, the body and legs are brown with a dark, chocolate brown median stripe on carapace and abdomen. The abdominal stripe has wavy margins.

Range: Eastern 1/2 of Kansas; eastern 1/2 of U.S.

Habits & Habitat: On understory vegetation in woods and woodland edges, in leaf litter, and sometimes on houses. This sit-and-wait hunting spider eats insects such as moths and flies. Adults occur in spring and summer. During June and July, the female lays an egg sac containing 199 to 496 eggs. Before the young emerge, she places the egg sac under a leaf in understory vegetation, then constructs a dome-shaped nursery web surrounding it. She guards the emerging young, which remain in the nursery web for a week or two before dispersing.

Remarks: Juveniles of this common woodland spider are active on warm winter nights.







Close-up view of carapace

Tufted Nurseryweb Spider

Pisaurina dubia



seasonal house spider

Description: Body length 0.4" (10 mm). Narrow-bodied pale spider with a white, central stripe on carapace and front half of abdomen, bordered by a wide, brown stripe, which extends to the end of the abdomen. The white stripe extends in front of the carapace as a prominent tuft of white hairs.

Range: Eastern 1/2 of KS; eastern 1/2 of U.S.

Habits & Habitat: This hunting spider lives in woods, woodland edges, marshes, backyards, and sometimes on houses, porches, and stables. On understory vegetation, may be active on snow on warm winter days. Feeds on a variety of insects. One was found by a porch light at night feeding on a caddisfly. Females produce egg sacs in summer with 13 to 100 eggs each. A female will carry the egg sac under her body, then place it in vegetation, usually near water. Builds a dome-shaped nursery web around it, and guards it until the young hatch and disperse.

Remarks: Wandering males have fallen prey to the Elongated Cellar Spider and the Common House Spider.



Giant Fishing Spider (female)

Giant Fishing Spider

Dolomedes tenebrosus



seasonal house spider

Description: Body length 1.25" (32 mm). Large, hairy spider that resembles a wolf spider. Body and legs are light gray to reddish brown, with darker brown chevrons.

Range: Statewide; throughout eastern U.S.

Habits & Habitat: In woods under loose bark, on tree trunks, stone walls, culverts, creek banks, and fallen logs but not on adjacent leaf litter; beneath bridges, in houses, saunas, wood and rock piles. Life span is several years. Remarkable mating behavior involves spontaneous death of the male while still united with the female. Females lay egg sacs containing about 1,800 eggs in June and July. They are carried in the jaws until they are ready to emerge. The female makes a nursery web around the egg sac in vegetation and guards it until after the young hatch. A variety of insects and arachnids are eaten, including moths, katydids, crickets, daddy-long-legs, and wolf spiders. This hunting spider will also attack minnows.

Remarks: Occasionally killed by the Common House Spider and spider wasps (Family Pompilidae).



Six-spotted Fishing Spider

Six-spotted Fishing Spider

Dolomedes triton

Description: Body length 0.75" (19 mm). Large brown to dark brown spider with a yellowish-white stripe around the edge of body, and three to five pairs of small white spots on the abdomen.

Range: Statewide; eastern and central U.S. and some western states.
Habits & Habitat: Restricted to ponds, lakes, and pools of water; on floating docks and emergent vegetation. It typically rests the first and second pairs of legs on the water's surface to detect prey, which includes insects, Small-mouthed Salamander larvae (Ambystoma texanum), and small fish. From July to September, females produce egg sacs containing 413 to 1,187 eggs.

Remarks: Can readily move across the water, and will even dive beneath the surface and hold on to aquatic vegetation to avoid capture.

Eastern Funnelweb Spider

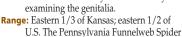
Agelenopsis naevia



seasonal house spider

Description: Body length 1" (25 mm).

Large brown spider with two broad, dark brown stripes on the carapace and a central reddish brown stripe on the abdomen. Members of the genus have two long spinnerets projecting from the rear, and make a distinctive funnel-shaped web. The eight species in Kansas closely resemble one another and can only be identified by



(A. pennsylvanica) is also common in the same habitat.



Eastern Funnelweb Spider (male)



Funnel entrance

Habits & Habitat: On the ground and in understory vegetation in woods, woodland edges, shaded yards and grassy areas; in and around houses in late summer and fall. Builds large funnel webs (2-3 feet in diameter) consisting of a concave sheet with a funnel at one end, and a tangle of silk threads extending 3 feet or more above the sheet. The spider waits at the entrance of the funnel for prey to drop on the sheet. Prey includes flies, butterflies, wasps, beetles, bugs, small toads. After mating during August, the female produces several egg sacs, each containing 10 to 355 eggs, places them in secluded locations, and surrounds the eggs with a thick outer layer of debris enclosed in silk. Eggs are guarded by females until their death in December.

Remarks: Egg sacs parasitized by an undescribed species of wasp (*Idris* sp.). The elaborate webs often harbor small cobweb spiders (*Neospintharus trigonum* and *Faiditus cancellatus*). Wandering males sometimes become prey of the Common House Spider.



Eastern Parson Spider (female)

Eastern and Western Parson Spiders

Herpyllus ecclesiasticus and H. propinguus



seasonal house spiders

Description: Body length 0.3" (7 mm). Body dark brown or black with white hairs on the carapace, and a broad, central, white stripe on the abdomen resembling a parson's cravat. There is often a white spot following the stripe. The two parson spiders can only be distinguished by differences in the genitalia.

Range: Eastern Parson Spider in eastern 2/3 of Kansas and eastern 1/2 of U.S; Western Parson Spider in western 1/3 of Kansas and western 1/2 of U.S.

Habits & Habitat: These fast-moving hunting spiders occur under loose bark and rocks in woods, and open areas; in houses; in dead yucca litter. They hunt small insects such as moths. The winter months are spent in thin, silk sacs under bark and rocks. Severe winters sometimes kill up to 70% of the Eastern Parson Spider population. A female was found guarding an egg sac with 75 eggs in June.

Remarks: The bite produces only local redness and swelling that subsides in a 12 to 24 hours.



Garden Ghost Spider

Garden Ghost Spider

Hibana gracilis



seasonal house spider

Description: Body length 0.25" (6 mm). Pale with brown speckles. It has a row of hairs around the tracheal slit on the front underside of the abdomen. This distinguishes *Hibana* from ghost spiders in the genus *Anyphaena*.

Range: Statewide in Kansas, eastern 1/2 of U.S.

Habits & Habitat: On trees, shrubs, milkweed, dogbane, houses; in woods, woodland edges, old fields, grassland, and prairies. It roams over foliage at night in search of small insects such as moths. Adults found April through October. In Connecticut, females produced egg sacs in June containing 134 and 196 eggs.

Remarks: Enemies include muddauber wasps and other spiders. Bites produce local redness and swelling that goes away in a day.







Female guarding eggs

Bark Crab Spider

Philodromus vulgaris



seasonal house spider

Description: Body length 0.3" (7 mm). Mottled gray to brownish-gray with long legs and a flattened body. Similar to some other members of the genus, and can only be identified by differences in genitalia.

Range: Statewide in Kansas; eastern 1/2 of U.S.

Habits & Habitat: This hunting spider is commonly found in homes in fall and winter where it frequents ceilings and walls. Outside, it may be found under loose tree bark in woods and woodland edges. Matures in early spring. Females guard egg sacs with 27 to 156 eggs during May, June, and early July. Eats midges, moths and flies.

Remarks: Enemies include muddauber wasps, the Bark Jumping Spider and the Common House Spider. Its flattened body allows this spider to squeeze under loose bark.



Prairie Crab Spider

Prairie Crab Spider

Philodromus pratariae

Description: Body length 0.25" (6 mm). Gray with a pair of faint brown stripes on the carapace and abdomen. Abdomen is elongate with a faint brown heart mark, and the lateral stripes converge at the rear end. The pale legs have thin black bands at the joints. The shape of the abdomen is distinctive.

Range: Across Kansas; in central U.S.

Habits & Habitat: This hunting spider is found in old fields, restored and native prairies, in cattail marshes, on grass. Feeds on small insects, including leafhoppers. It matures in August. Females produce flat, white egg sacs containing 17 to 26 eggs during September.

Remarks: Easily overlooked since they lay motionless with legs outstretched along plant stalks. This spider was first described from specimens collected near Manhattan, Kansas.



Texas Crab Spider

Texas Crab Spider

Xysticus texanus



seasonal house spider

Description: Body length 0.25" (6 mm). Legs pale except for black distal segments on first and second pairs; carapace pale with wide black stripes on side and front and a thin black central line; abdomen brown with thin pale stripes and bands. These unique markings visually distinguish it from other closely related species.

Range: Statewide in Kansas; southeastern 1/4 of U.S.

Habits & Habitat: In old fields, shortgrass prairie, under debris and bark, in dead yucca litter, in and around houses and swimming pools. Adults occur in summer. Feeds on small insects.

Remarks: Enemies include muddauber wasps, and the Long-bodied Cellar Spider.



Black-banded Crab Spider

Black-banded Crab Spider

Synema parvulum

Description: Body length 0.2" (5 mm). A smooth, shiny crab spider with a broad black band at the end of the abdomen. Carapace is dark brown with a reddish eye region, legs are dark brown, and abdomen is amber with a light border on the front and sides.

Range: Eastern 1/3 of Kansas; eastern 1/2 of U.S.

Habits & Habitat: This sit-and-wait hunter inhabits woodlands, and often rests inverted on small twigs and stalks of understory vegetation, such as coralberry, where it readily consumes small ants and other insects. Passes the winter in leaf litter. A female guarding an egg sac with fifteen young was found in early July in a nest created by folding over the end of a leaf.

Remarks: A paralyzed female was found in a muddauber nest.



Ridge-faced Flower Spider (male)

Ridge-faced Flower Spider

Misumenoides formosipes

Description: Body length 0.3" (7 mm). Yellow or white, with a distinct narrow white ridge across the face. Carapace pale green with two dark brown, lateral stripes; abdomen sometimes with pairs of reddish-brown spots. Male much smaller, first 2 pairs of legs larger and dark



Female



Close-up view of facial ridge

brown. Distinguished from other flower crab spiders (*Misumessus*, *Mecaphesa*, and *Misumena*) by the raised, white ridge on the face.

Range: Statewide in Kansas; across most of the U.S.

Habits & Habitat: Occurs in old fields and pastures, common on goldenrod, sunflower, ironweed, and asters. This sit-andwait predator captures insects that visit flowers, such as flies, butterflies, and bees. Mating occurs in late August and September. Two females laid egg sacs containing 196 and 303 eggs in September. Tolerant of high temperatures.

Remarks: This spider can change color from white to yellow and back again over several days, enabling it to better match the background.







Female

Striped Lynx Spider

Oxyopes salticus

Description: Body length 0.25" (6 mm). Pointed abdomen and very spiny legs. Pale ground color with four dusky stripes on the carapace; abdomen has a dark stripe over the heart, followed by two smaller stripes behind. Face has a pair of thin, black lines extending from the eyes to the jaws. Six of the eyes are arranged in a hexagonal pattern. Legs pale yellow with a thin, black stripe underneath. Male often has a purplish iridescent abdomen. The striped face distinguishes it from the Gray Lynx Spider (O. scalaris).

Range: Statewide; most of the U.S., south to South America.

Habits & Habitat: In grasslands, prairies, backyards, on eaves of houses. This active hunting spider stalks small insects and spiders, then pounces on them. Adults found in spring, summer, and fall. Mating was observed in June.

Remarks: This common spider falls victim to jumping spiders.



Common Zebra Spider (female)



Convict Zebra Spider (female)

Common and Convict Zebra Spiders

Salticus scenicus and S. austinensis



seasonal house spider

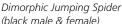
Description: Body length 0.25" (6 mm). Common Zebra Spider has two white triangular patches on the carapace behind the eyes, and three white bands on a brown background on the abdomen. The last two bands barely touch at the midline. Convict Zebra Spider has two white bands followed by an off-white mark on the carapace; and four thick, white bands on the abdomen. The last band encircles the spinnerets.

Range: The Common Zebra Spider occurs in northern 1/2 of Kansas; northern 1/2 of North America, also in Europe and North Africa. The Convict Zebra Spider, occurs west of the Flint Hills in Kansas; also in Oklahoma and Texas.

Habits and Habitat: Both species use their good vision to hunt small, flying insects during the day. They occur in sunny locations on tree trunks and the vertical surfaces of bridges, houses and buildings. The Convict Zebra Spider spends the winter in silk nests under the bark of cottonwood, black locust, and Osage orange trees.

Remarks: The Common Zebra Spider is more common in the eastern U.S., and was probably transported accidentally from Europe to North America.







Yellow male

Dimorphic Jumping Spider

Maevia inclemens



seasonal house spider

Description: Body length 0.3" (7 mm). Body and legs of females and juveniles are straw-colored with two distinct reddish stripes on the abdomen, small black spots on carapace and legs, and a thin, black stripe in the middle of the carapace behind the eyes. There are two male morphs: black body and pale legs and three black tufts on the carapace; and white with brown markings on body and legs, and yellow palps.

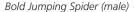
Range: Eastern 1/2 of Kansas; eastern 1/2 of U.S.

Habits & Habitat: On understory vegetation and shrubs in open woods and woodland edges, on houses, and old fields near woods. Eats small insects and spiders. Adults found late May through August. Females lay egg sacs containing 21 to 83 eggs during the summer.

Remarks: The dimorphic males were once considered different species.

Females appear to have no special preference for either type of male.







Gray morph female

Bold Jumping Spider

Phidippus audax



seasonal house spider



White and orange morph

Description: Body length 0.67" females

(17 mm). Black, hairy

with three white or orange spots on the abdomen, and iridescent green jaws. Males have white hairs on carapace and legs. Two uncommon variations found in western Kansas: a gray form and one with orange stripes along the edge of body.

Range: Statewide; Canada, most of U.S. and Mexico.

Habits & Habitat: On vegetation and shrubs in open woods, woodland edges, fields, prairies; under rocks and loose bark; in houses, barns, and culverts. A wide array of insects and spiders are consumed. Females produce 3 to 6 egg sacs containing 62 to 212 eggs each during the summer.

Remarks: Very common spider in houses. Enemies include: muddauber wasps, five-lined skinks and collared lizards. Mantisflies (Family Mantispidae) sometimes parasitize the egg sacs.



Apache Jumping Spider female (L) and male (R)

Apache Jumping Spider

Phidippus apacheanus

Description: Body length 0.5" (13 mm). Orange-red and black with legs and body ground color black. Most of carapace and abdomen orange-red. Jaws iridescent bluish purple. Female has black midline stripe toward the rear of abdomen. Male is brighter and lacks black abdominal stripe. Several other species in this genus are mostly red, especially the males.

Range: Statewide; occurs throughout most of the U.S.

Habits & Habitat: In prairies and pastures, open areas in woods, under rocks, on shrubs, salt cedar, old yucca and milkweed pods. Feeds on a variety of insects and spiders. Mating occurs in September. The males die and pregnant females overwinter in silk sacs, then lay eggs in early spring. Egg sacs contain 59 to 155 eggs.

Remarks: Its bright coloration and pattern resembles that of a mutillid wasp (*Dasymutilla mutata*), which has a formidable sting. Experiments with lizards suggest it is a successful mimic of the wasp, since it was not attacked.







Male

Prairie Jumping Spider

Phidippus clarus

Description: Body length 0.4" (10 mm). Coloration variable. Males have black body and legs with a white band around front end of the narrow abdomen, white pedipalps and tufts of white hairs on the legs. The abdomen has a pair of jagged, orange-red stripes bordering the black central region. Females variably colored brownish-gray, orange, pale tan, or dark reddish-brown. However, there is a consistent abdominal pattern: a white band around the front end and four pairs of short, white dashes or spots, along two, thin, darker stripes. Sometimes there is a pair of oblique, white stripes radiating from the second pair of spots.

Range: Statewide; across the U.S., more common in E 1/2.
Habits & Habitat: Grasslands, old fields, prairies, woodland edges; on shrubs and herbaceous vegetation. Eats a variety of insects and spiders, such as caterpillars, moths, bugs, and flies. Females found guarding multiple egg sacs containing 72 to 167 eggs in September and October.

Remarks: This common prairie spider is attacked by muddauber wasps and a scelionid wasp (*Idris saitidis*) parasitizes the egg sacs.



Emerald Jumping Spider female (L) and male (R)

Emerald Jumping Spider

Paraphidippus aurantius

Description: Body length 0.4" (10 mm). Carapace dark brown with a pair of pale, wide stripes on the sides. Abdomen brown with a narrow pale stripe around the front end and several pairs of white spots further back. A brilliant green iridescence covers the brown areas. Legs are brown with alternating darker brown bands. Adult male black with green iridescence and narrow, white stripes on the sides of the carapace. Abdomen has a narrow, white stripe around the edge, and several pairs of white spots near the middle. Legs are dark brown with alternating lighter bands. Juveniles resemble females.

Range: Eastern 2/3 of Kansas; eastern, central, and southern U.S.

Habits & Habitat: A hunting spider found on shrubs and understory vegetation in woods and woodland edges, often by creeks and wetlands; collected from stinging nettles, redbud trees, roughleafed dogwood, and the web of the Sub-social Cobweb Spider Anelosimus studiosus. Adults occur in the summer, females into October. Two females were found in July guarding egg sacs with 114 and 129 eggs each.

Remarks: This beautifully marked woodland hunting spider resembles species of *Phidippus*.



Bark Jumping Spider (female)

Bark Jumping Spider

Platycryptus undatus



seasonal house spider

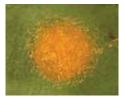
Description: Body length 0.3" (7 mm). Gray with flattened body and light gray median stripe on the abdomen.

Range: Statewide; eastern 1/2 of U.S.

Habits & Habitat: In woods on tree trunks, under loose bark, under rocks, in and around houses, horse stables, and picnic shelters. It blends well with the background, and feeds on small insects and spiders. Adults and juveniles found all year. Females guarding egg sacs containing 30 to 83 eggs occur May through August.

Remarks: Enemies include other spiders and muddauber wasps. One exceptionally cold winter killed 6 out of 7 spiders that were hibernating in silk sacs under loose bark.





Puritan Pirate Spider (male)

Egg sac

Puritan Pirate Spider

Mimetus puritanus



seasonal house spider

Description: Body length 0.3" (7 mm). Roughly triangular abdomen and a series of long spines on the first and second legs. Between these spines is a graduated series of smaller spines. Besides red and black markings, the Puritan Pirate Spider has a pair of white patches on the abdomen.

Range: Across Kansas and eastern 1/2 of U.S. with a few Arizona and New Mexico records.

Habits & Habitat: All four species of pirate spiders specialize in hunting web-building spiders. They invade a spider's web, pluck it to mimic prey or a mate, then bite the owner when she rushes to investigate. Found in woods, old fields, culverts, on buildings, in or near cobweb and orbweb spiders. Females produce multiple, orange egg sacs containing 15 to 146 eggs during the summer.

Remarks: Sometimes these spider hunters become victims of their prey.

Other enemies include muddauber wasps in the genus *Sceliphron*.







Four-lined Pirate Spider (female)

Eastern and Four-lined Pirate Spiders

Mimetus notius and M. epeiroides



seasonal house spiders

Description: Similar size (0.3" (7 mm)) and shape as M. puritanus; M. notius has abdomen with black central mark tapering toward the rear, sometimes with small, red spots; and smaller black stripe toward the front. M. epeiroides has a paler abdomen and four, thin, stripes on the carapace.

Range: Eastern Pirate Spider in eastern 2/3 KS and eastern 1/2 U.S. with a few western records; Four-lined Pirate Spider across KS and eastern 1/2 U.S.

Habits & Habitat: Both species occur under eaves of houses, under bridges, old fields, and on woodland vegetation. Pirate spiders specialize in eating other spiders. From May to July, M. notius females produce multiple egg sacs containing 12 to 47 eggs each. The pale, fluffy egg sac is suspended in a thin, elliptical, silk net. An M. epeiroides female taken on July 4 produced an orange egg sac with 30 eggs a day later.

Remarks: Some M. notius egg sacs are parasitized by the phorid fly, Phalacrotophora epeirae. Tiny parasitic wasps (Baeus sp., Scelionidae) emerged from an M. epeiroides egg sac. The Western Pirate Spider, M. hesperus, found in western 1/4 of KS, closely resembles M. epeiroides, except the outer pair of black lines are not complete.



Orchard Spider (female)

Orchard Spider

Leucauge venusta

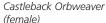
Description: Body length 0.3" (7 mm). Carapace and legs green with thin, dark bands at leg joints, and a thin dark stripe along midline of carapace. Abdomen silver, with long, yellow patches and a series of thin, black stripes. Underside of abdomen dark green with a striking yellow to red marking.

Range: Eastern 1/2 of Kansas; eastern U.S. with scattered western records; found S to Panama.

Habits & Habitat: Makes horizontal orb webs, about 12" in diameter, in understory vegetation in woods and woodland edges, often by creeks. It preys on small, low-flying insects, especially leafhoppers. Adults found May to October, females lay white, fluffy egg sacs containing 45 to 314 eggs.

Remarks: This beautiful orbweaver is fairly common in Kansas.







Female, side view

Castleback Orbweaver

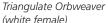
Micrathena gracilis

Description: Body length 0.5" (13 mm). Uniquely-shaped, spiny abdomen that is broad on top and tapers to the spinnerets. The spines surrounding the top edge resemble castle turrets, hence the name. Carapace and legs are blackish; abdomen has varying amounts of white, with the spines usually black. Easily distinguished from the Mitred Orbweaver (*M. mitrata*), which has a rectangular abdomen and lacks distinct spines.

Range: Eastern 2/3 of Kansas; eastern U.S., south to Panama.
Habits & Habitat: This common woodland orbweaver sits at hub of web constructed in understory vegetation, in trees, and over ravines. Food includes small, flying insects such as leafhoppers and flies. Adults occur in summer. During July, a female produced a white fuzzy, hemispherical egg sac containing 185 eggs.

Remarks: Enemies include muddauber wasps.







Yellow female & eggs

Triangulate Orbweaver

Verrucosa arenata

Description: Body length 0.3" (7 mm). White or yellow triangle covers top of abdomen, which has small protuberances along the sides and rear. The triangle sometimes has a network of thin, red lines. Legs have dark bands. Males have large spines on first pair of legs.

Range: Eastern 1/4 of the state; eastern 1/2 of U.S., south to Panama and West Indies.

Habits & Habitat: Builds large orbwebs in open woods, sits at the hub facing upwards. Captures a variety of flying insects. Adults found August to October; females with egg sacs containing 45 to 122 eggs from August to October.

Remarks: Enemies include muddauber wasps.



Common Star-bellied Orbweaver (female)



Cherokee Star-bellied Orbweaver (female)

Common and Cherokee Star-bellied Orbweavers

Acanthepeira stellata and A. cherokee

Description: Body length 0.5" (13 mm). Distinctively marked with over a dozen blunt spines around the edge of the abdomen, which is gray-brown or pale reddish-brown, sometimes with a wide, light band interrupting two dark brown stripes. Cherokee Star-bellied Orbweaver is less common, has very blunt projections around the abdomen instead of spines.

Range: Probably statewide; eastern U.S. and Mexico.

Habits & Habitat: Builds orbwebs at sunset between grass stems and other plants in prairies, fields, and woodland openings. Feeds on insects such as grasshoppers and beetles. Adults and juveniles found in spring, summer, and fall. One female produced an egg sac in April containing 218 eggs.

Remarks: Enemies include muddauber wasps.







Torn egg sac

Black and Yellow Garden Spider Argiope aurantia

Description: Body length 1" (25 mm). Females large with silver hairs on the carapace, and extensive irregular yellow markings toward the sides of the dark abdomen that also has three pairs of yellow spots, the last pair actually small dashes, near the mid-line. Legs are light brown near the body and black distally. Male is much smaller, body length 0.25" (6 mm), but marked similarly.

Range: Throughout most of Kansas; most of the U.S., except the Rocky Mountains.

Habits & Habitat: Found on grasses, herbs and shrubs in old fields, crops, native prairie, and backyards. Sits at the center of large orb webs that have a prominent, white zig-zag of silk below the center. Prey includes grasshoppers and other insects and spiders. Females produce large spherical egg sacs containing about 1,100 eggs each in late summer and early autumn. Eggs hatch in fall, and spiderlings overwinter inside the egg sac. The adults die in late autumn.

Remarks: Egg sacs are often parasitized by small flies and wasps, and during the winter may be torn apart by birds that feed on the spiderlings.





Banded Garden Spider (female)

Male

Banded Garden Spider

Argiope trifasciata

Description: Body length 1" (25 mm). Females large with a silver carapace and dark brown or black legs with yellow and white bands. The pointed abdomen is silver with thin black bands and yellow markings; underside is black with two light yellow stripes and several pairs of light spots in the middle. Males much smaller, body length 0.2" (5 mm), with silver hairs covering carapace; and brownish legs and abdomen.

Range: Common across Kansas; throughout North, Central, and South America, also in Europe, Africa, and the South Pacific.

Habits & Habitat: Constructs large orb webs in fields, prairies, gardens, and sunny openings in woods. Feeds on a wide range of insects and a few spiders. Mating occurs in late summer; the female produces a hemispherical egg sac containing several hundred eggs in October. Adults die with the onset of cold weather.

Remarks: Enemies include muddauber wasps and birds.



Marbled Orbweaver (female)

Marbled Orbweaver

Araneus marmoreus

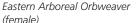
Description: Body length 0.5" (13 mm). Orange carapace; legs orange with black and white bands. Abdomen dark brown or black with intricate yellow pattern. Males slightly smaller than females.

Range: Eastern 1/3 Kansas; most of U.S., except southwestern states; Alaska, and Canada.

Habits & Habitat: Makes large orb webs in forests and woodland edges; usually found at edge of web in a silk-lined retreat made in a rolled leaf. Diet includes large flying insects: cicadas, moths, katydids, and beetles. Adults found in September and October. A captive female produced an egg sac with 114 eggs.

Remarks: This is one of the most beautiful spiders in Kansas. Enemies include muddauber wasps.







Darker morph (female)

Eastern Arboreal Orbweaver

Neoscona crucifera



seasonal house spider

Description: Body length 0.67" (17 mm). Variable abdominal pattern: pale brown with an indistinct, central lighter stripe and several pairs of small black lines, or darker brown with distinct white stripe and thicker black lines. Legs are either reddish-brown, with faint or very distinct black and white bands. Carapace brown with white hairs. Underside has two distinct white markings shaped like the number "7" on a dark brown background. Males slightly smaller than females.

Range: Statewide, more common in eastern 1/2; eastern U.S., Texas, New Mexico, and Arizona.

Habits & Habitat: Builds large orbwebs in woods, woodland edges, on porches and windows in late summer and fall. Webs constructed at sunset are often suspended between trees that are 10 to 15 feet apart. Waits at center of web for large insect prey that includes moths, cicadas, and katydids. Females produce fuzzy, round egg sacs containing several hundred eggs during autumn. Some females can survive into early December; spiderlings emerge in the spring.

Remarks: This seasonally common spider falls victim to muddauber wasps.



Western Arboreal Orbweaver (female)



Alternate morph (female)

Western Arboreal Orbweaver

Neoscona oaxacensis



seasonal house spider

Description: Body length 0.67" (17 mm). Markings variable: body and legs charcoal gray, white hairs on carapace, legs with black and pale bands, abdomen with white markings; body either light tan or pale green, carapace covered with white hairs, legs with dark bands, and abdomen with white blotches. Both color variations have small, black dashes on the abdomen. The oval abdomen is elongated. Males are slightly smaller than females.

Range: Western 1/2 of KS; western U.S., Utah and California south to Central America

Habits & Habitat: Builds large orbwebs in woods and woodland edges, on trees, bushes and other vegetation; on eaves of outhouses and buildings. Feeds on a variety of insects. Adults found in summer.

Remarks: Darker forms usually found in dark locations, lighter colored forms in more open situations. The elongated, oval abdomen with a series of white markings and small, black dashes distinguish this species from close relatives.







Larinioides patagiatus

Furrow Orbweaver

Larinioides cornutus



seasonal house spider

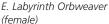
Description: Body length 0.5" (13 mm). Oval, somewhat flattened abdomen that has a dark leaf-like pattern with lighter markings. Overall coloration pinkish-tan to dark brown. Carapace has a thin, white line around the edge; legs have dark bands. Resembles *L. patagiatus*, which is usually darker, and has a wider leaf-like pattern outlined with a black line bordered by a continuous white line.

Range: Statewide in KS; entire U.S., Alaska and Canada to Central America; Europe and Asia.

Habits & Habitat: This common orbweaver builds webs in trees; found in woods, woodland edges, and open areas usually near water; on bridges and buildings. The webs are large, but do not span great distances. This nocturnal spider sits at the center of its web at night, and rests in a silk retreat in a nearby crevice by day, and during the winter. Large numbers occur on bridge railings and feed on mayflies and midges. Adults and juveniles found yearround. Females produce egg sacs containing 50 to 400 eggs during the warm season.

Remarks: In Kansas, this spider is much more common than its close relative, *L. patagiatus*, which occurs in similar situations.



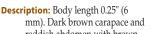




Male

Eastern Labyrinth Orbweaver

Metepeira labyrinthea





Female & egg sacs

reddish abdomen with brown surrounding the light, central stripe. This stripe has two pairs of curved white lines extending laterally. The underside of the body is dark brown with a light stripe on both the carapace and the abdomen.

Range: Scattered across Kansas; eastern 1/2 of U.S.

Habits & Habitat: Builds an orbweb with a tangled web nearby that functions as a retreat. The spider rests beneath a dry leaf in the retreat and is alerted to prey striking the orbweb by a signal thread extending from the hub to the retreat. Web are located in woods, woodland edges, and eaves of houses, often in lower, leafless tree branches. In the fall, females produce a string of tan, papery, pyramid-shaped egg sacs near the retreat holding 18 to 58 eggs.

Remarks: This common spider is easily recognized by the web. Enemies include muddauber wasps. Similar to the Arizona Labyrinth Orbweaver (M. arizonica) found only in SW corner of Kansas, and identified by microscopic differences in the genitalia.



Giant Long-jawed Orbweaver

Giant Long-jawed Orbweaver

Tetragnatha elongata

Description: Body length 0.5" (13 mm). Very elongate abdomen, long, thin legs, and long jaws. Brownish with a dark, leaf-like pattern on the abdomen. Legs and carapace greenish amber and somewhat shiny. Abdomen widens toward the front. Male is thinner and slightly smaller than female. Similar to other species of *Tetragnatha*, but can be distinguished by its larger size and shape of abdomen.

Range: Probably statewide; eastern 1/2 U.S., with scattered western records.

Habits & Habitat: Occurs along the edges of lakes and ponds, on dead trees in ponds, near creeks in woods, and in marshes. It builds orbwebs on vegetation near water, and rests in the middle of the web or flattened against a nearby plant stalk. Prey includes mosquitoes, midges, and other small insects. Adults occur in summer. An almost hemispherical egg sac, produced in July, had fluffy, yellowish silk, with dark green tufts, and contained 143 eggs.

Remarks: Enemies include frogs and muddauber wasps.



Silver Long-jawed Orbweaver

Silver Long-jawed Orbweaver

Tetragnatha laboriosa

Description: Body length 0.4" (10 mm). Amber or golden carapace and legs, with a silver abdomen. Shaped like other long-jawed orbweavers. The silvery abdominal markings consist of small patches with thin, dark lines between them.

Range: Statewide; Alaska, Canada, entire U.S., south to Panama.

Habits & Habitat: Common in grasslands, prairie, brome fields; also on cedar trees, marsh grass, and by lake margins. Makes small orbwebs among grasses and clings to adjacent grass stalks, extending its legs along the stalk, making it difficult to see. Prey includes leaf hoppers, small katydids and grasshoppers. Adults found April to October; courtship and mating observed in April and May. In early June, a female produced a white, fluffy egg sac with 78 eggs.

Remarks: This common grassland spider is not restricted to wet situations.



Bowl & Doily Spider (female)

Bowl and Doily Spider

Frontinella communis

Description: Body length 0.17" (4 mm). Dark brown to black, with two white, wavy stripes along the dorsal edge of the abdomen. Sides of abdomen have more white stripes. It can be identified by its web in the field.

Range: Statewide; widespread in North America, most common in eastern 1/2 U.S.

Habits & Habitat: Builds a unique web resembling a bowl with a doily below it. (see photo on opposite page). The spider hangs on the underside of the bowl and is protected from predation by the doily below. Found in understory vegetation and trees, in woods and woodland edges, and marshes. Feeds on small insects that become entangled in the barrier thread above the bowl. Adults occur in spring and summer. Unlike most spiders, males and females often peacefully share a web for extended periods. In July, one female produced a white, fuzzy egg sac containing 53 eggs.

Remarks: Juveniles travel great distances by ballooning, and have been captured at 1,000 feet altitude. The web resembles that of the Quasi-social Cobweb Spider. However, the latter lacks the doily, usually incorporates leaves in the web, and often contains many spiders.



Bowl and Doily Web



Filmy Dome Web





Filmy Dome Spider (male)

Female

Filmy Dome Spider

Neriene radiata

Description: Body length 0.17" (4 mm). Long, thin, dark greenish-brown legs; brownish carapace with a white stripe around the edge. Abdomen white with brown patches around a brown central stripe. Male has reddish carapace and darker abdomen. It can be identified by its web in the field.

Range: E 1/2 Kansas; eastern 1/2 U.S. and Canada, with scattered western records.

Habits & Habitat: Sits under the dome of its unique web that resembles an inverted parabola attached to a silk sheet above it. (see photo page 65). Common in woods and woodland edges in understory vegetation year-round. Male and female often live together in same web. Prey consists of leafhoppers and small flies. Adults found from April to September. Two females produced egg sacs containing 36 and 57 eggs in September.

Remarks: A cobweb spider, *Neospintharus trigonum*, was discovered in a filmy dome web feeding on its occupant.

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About the Author:

Hank Guarisco is a free-lance field biologist who has investigated the Kansas spider fauna during the past several decades and has published over 50 journal and magazine articles on spiders.

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Pocket Guides

Jim Mason, Editor



























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The Chickadee Checkoff program is a voluntary donation program for nongame projects sponsored by the Kansas Department of Wildlife, Parks and Tourism. Kansas taxpayers are able to contribute on their individual state income tax form. Donations can also be made by sending a check to Chickadee Checkoff Program, 512 SE 25th Ave., Pratt, KS 67124. Since 1980, the Chickadee Checkoff program has distributed over \$4 million to projects that help endangered species, assist in reintroduction efforts of sensitive species, supports wildlife education projects at schools and nature centers, and supports hundreds of other nongame conservation projects.

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