

# EKOKIDS: SCHOOLYARD NATURE GUIDES

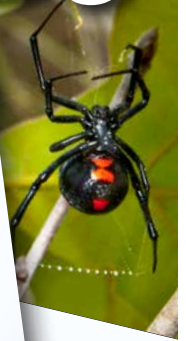


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# Invertebrates



The majority of living creatures on Earth are invertebrates—animals that lack a backbone or vertebrae. Many invertebrates—for example, insects, crayfish, corals, and spiders—have a hard exoskeleton or outer covering that provides structure and protection to their bodies.

Other invertebrates, such as jellyfish and earthworms, are soft and rely on water or soil for support and to help them move. Because they lack internal support provided by a bony skeleton, most invertebrates are small. This large group of animals is very diverse and can be found in most habitats across the globe. In this booklet, you'll learn about just a few of the thousands of invertebrates that can be found living around us every day. See how many you can find near you!



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## Carolina Wolf Spider

(*Hogna carolinensis*)

### DESCRIPTION

- Rather large member of the Arachnid group (arachnids have eight legs and two body parts)
- Males:  $\frac{3}{4}$  inch long; females: 1 inch long
- Light gray-brown body with scattered darker markings and a distinctive long, dark mark known as a “cardiac mark” on the upper surface

### HABITAT

The **Carolina wolf spider** is native to the U.S. and can most frequently be observed in deserts, prairies, glades, and open fields and pastures.

### FUN FACT

The female **Carolina wolf spider** will carry her egg sac with her to protect it. Once the eggs hatch and emerge from the sac, the many baby spiders—called spiderlings—will ride on her back until they are big enough to molt and live on their own.



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## Southern Black Widow

(*Latrodectus mactans*)

### DESCRIPTION

- Venomous Arachnid
- Females:  $\frac{1}{2}$ – $1\frac{1}{2}$  inch long; males:  $\frac{1}{4}$ – $\frac{3}{4}$  inch
- Females: shiny, black body with a bright red hourglass shape on the underside of the abdomen; males: no red hourglass mark

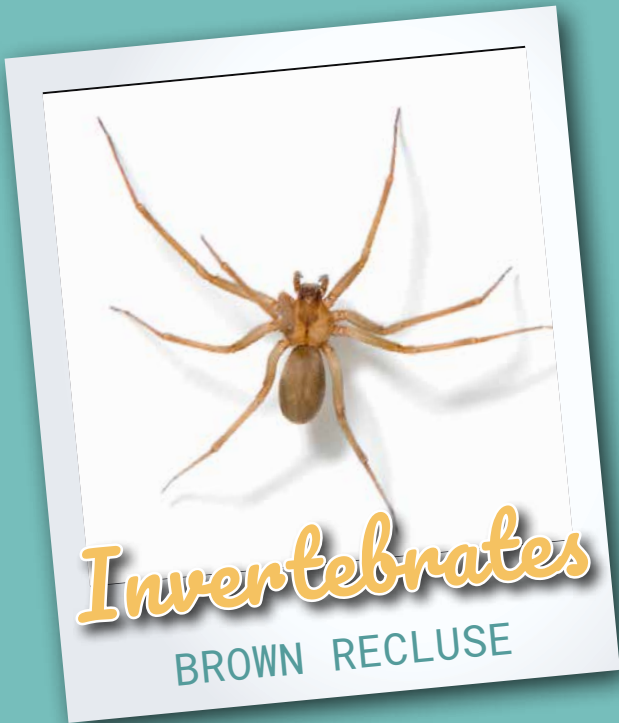
### HABITAT

The southern black widow is native to the southeastern U.S. and is most frequently seen in low-lying areas such as tree stumps and rodent burrows, wood piles, gardening piles, and other undisturbed locations.

### FUN FACTS

- The symptoms of a **southern black widow** bite can be severe, but death is very rare.
- **Southern black widow** spiderlings are white when they hatch from the egg sac.





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## Brown Recluse

(*Loxosceles reclusa*)

### DESCRIPTION

- Other names: fiddleback spider, brown fiddler
- Venomous Arachnid
- Body length:  $\frac{1}{4}$ –1 inch
- Fiddle-shaped marking on the head/thorax (cephalothorax) region
- Waxy color ranging from beige to dark brown

### HABITAT

The **brown recluse** prefers dry, undisturbed habitats found under loose tree bark, in stacks of wood and brush-piles, and inside garages, cellars, and boxes.

### FUN FACT

The venom from a **brown recluse** bite can cause tissue death, organ damage, and even death in very rare cases—usually in the very young or the very old.



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## Eastern Harvestman

(*Leiobunum vittatum*)

### DESCRIPTION

- Other names: daddy longlegs, granddaddy longlegs
- Member of the Arachnid class but not a true spider
- Body length:  $\frac{1}{2}$ – $\frac{1}{3}$  inch
- Light brown body and eight long, thin legs

### HABITAT

Native to the U.S., the **eastern harvestman** can frequently be seen in dry, dark places around houses, such as corners, cellars, and roof overhangs.

### FUN FACTS

- To escape from a predator, an **eastern harvestman** can detach a leg, but a new one will not grow back to replace it. The detached leg will twitch for as long as an hour.
- The second pair of legs on the **eastern harvestman** serve as antennae used to sense its surroundings.



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## Yellow Garden Spider

(*Argiope aurantia*)

### DESCRIPTION

- Other names: black and yellow garden spider, golden garden spider
- Member of the orb-weaver group
- Females:  $\frac{3}{4}$ -1 inch body length; males:  $\frac{1}{8}$ - $\frac{1}{3}$  inch body length
- Females: black to brown with yellow stripes and spots on the abdomen; males: mostly brown with faded black bands
- Distinctive zigzag in the center of the web

### HABITAT

**Yellow garden spiders**, native to Mississippi, are most often seen in gardens, orchards, forest edges, old fields, and farms.

### FUN FACT

A **yellow garden spider** will rapidly shake and vibrate its web to scare off predators.



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## Southern Devil Scorpion

(*Vaejovis carolinianus*)

### DESCRIPTION

- Length: 2 inches
- Chocolate brown body with tan legs
- Distinctive pincers and curved tail

### HABITAT

The **southern devil scorpion** is native to the U.S. It lives near and under rocks and vegetation in forest habitats.

### FUN FACTS

- During mating, a male and female **southern devil scorpion** will clasp each other's pincers and "dance."
- **Southern devil scorpions** produce a venom that causes extreme pain, but it is rarely fatal except in the case of allergic shock.



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## North American Millipede

(*Narceus americanus*)

### DESCRIPTION

- Other names: American giant millipede, iron worm
- Length: 2–3 inches
- Segmented body with two pairs of legs attached to each segment
- Black body with segments edged in pink, yellow, or purple

### HABITAT

**North American millipedes** prefer moist habitats associated with decaying leaves or dead trees found in forests, agricultural lands, and residential areas.

### FUN FACT

The name “millipede” means “1,000 feet,” but **North American millipedes** only have about 50 pairs of legs. When it molts, more body segments and legs are added.



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## American Dog Tick

(*Dermacentor variabilis*)

### DESCRIPTION

- Other name: wood tick
- Parasitic member of the Arachnid class
- Males and females are flat and reddish-brown with white or yellow markings; they have eight legs
- Females larger than males

### HABITAT

The **American dog tick** is found across the eastern U.S. It lives in weedy habitats such as overgrown fields, shrubby areas, and forests where it can find animals upon which to feed.

### FUN FACTS

- The **American dog tick** is an external parasite that bites through skin to feed on blood from its host animal, often a dog.
- Males die after mating.





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## Louisiana Red Crayfish

(*Procambarus clarkia*)

### DESCRIPTION

- Other names: red swamp crawfish, Louisiana crawfish, Louisiana mudbug, crawdad
- Member of the Crustacea group
- Length: 2-4½ inches
- Dull to bright red with claws brighter than the body
- Long, narrow claws and head

### HABITAT

The **Louisiana red crayfish** is found in the Mississippi River drainage basin in habitats with warm, fresh water.

### FUN FACT

The **Louisiana red crayfish** is one of the top species of crayfish farmed for human consumption.



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## Brown Garden Snail

(*Cornu aspersum*)

### DESCRIPTION

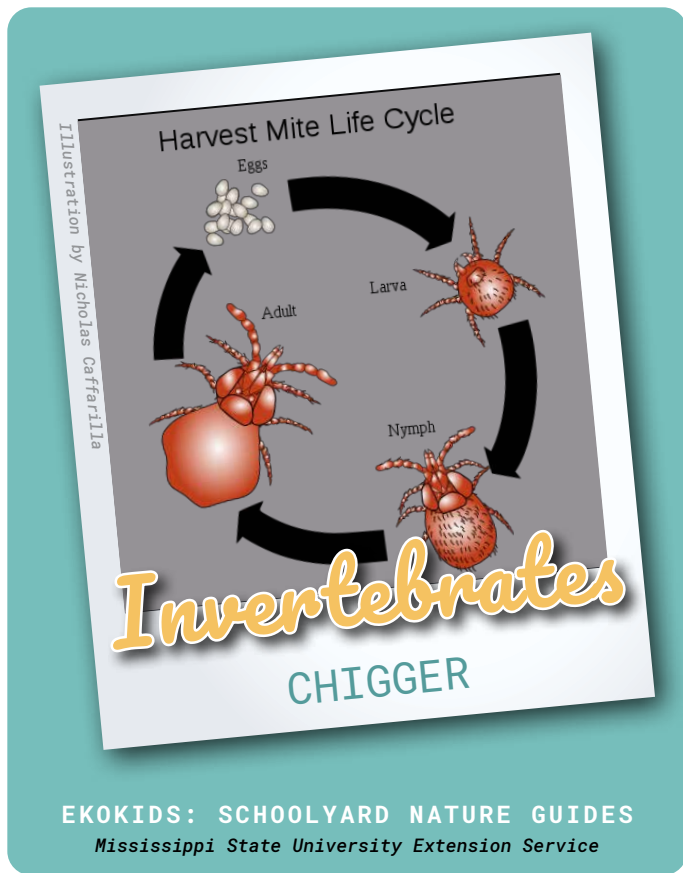
- Other name: garden snail
- Member of Gastropod group
- Shell diameter: 1-1½ inch; height: 1-1¼ inch
- Brown shell with yellow stripes or blotches; soft, slimy, brownish-gray body
- Two pairs of tentacles on the head

### HABITAT

The **brown garden snail** is an introduced or exotic species originally from the Mediterranean. It is now found across the southeastern U.S. in gardens, fruit groves, and landscaping plants.

### FUN FACTS

- The upper tentacles on the **brown garden snail** have light sensors which function as "eyes;" lower tentacles are used for touch and smell.
- The **brown garden snail** was introduced in the 1850s for the food industry, but it is now a pest species on commercial and ornamental plants.



## Chigger

(*Trombicula* sp.)

### DESCRIPTION

- Other names: red bugs
- Tiny member of the Arachnid class
- Larvae length: 0.2 mm; adult length: 1 mm
- Overall coloring is bright red
- Eight legs in the adult form; six legs in the microscopic larval form

### HABITAT

**Trombiculid mites**, native to the southeastern and midwestern U.S., prefer warm, humid conditions on plants and soil. The larval (immature) form is called a chigger and is parasitic. Adults avoid dry, sunny spots.

### FUN FACT

**Chiggers** infect humans and animals, but they do not burrow into skin. They bite and inject a solution that dissolves skin cells, which they then eat. After feeding undetected, they drop off their host and molt. A red, itchy spot arises at the bite site.

For more information on common wildlife and plants or incorporating nature into the classroom, please contact [Leslie.Burger@msstate.edu](mailto:Leslie.Burger@msstate.edu) or (662) 325-6686.

EkoKids is produced by the Mississippi State University Department of Wildlife, Fisheries, and Aquaculture and the MSU Extension Service for use by educators and youth leaders.

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GARY B. JACKSON, Director

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