

# EKOKIDS: SCHOOLYARD NATURE GUIDES



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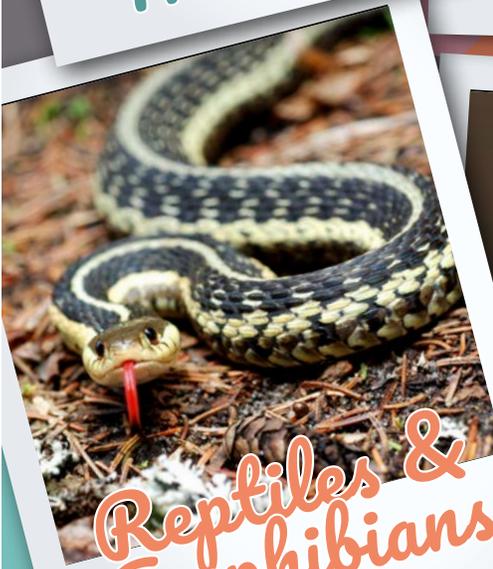
Mammals



Trees



Invertebrates



Reptiles &  
Amphibians



Birds



Fish

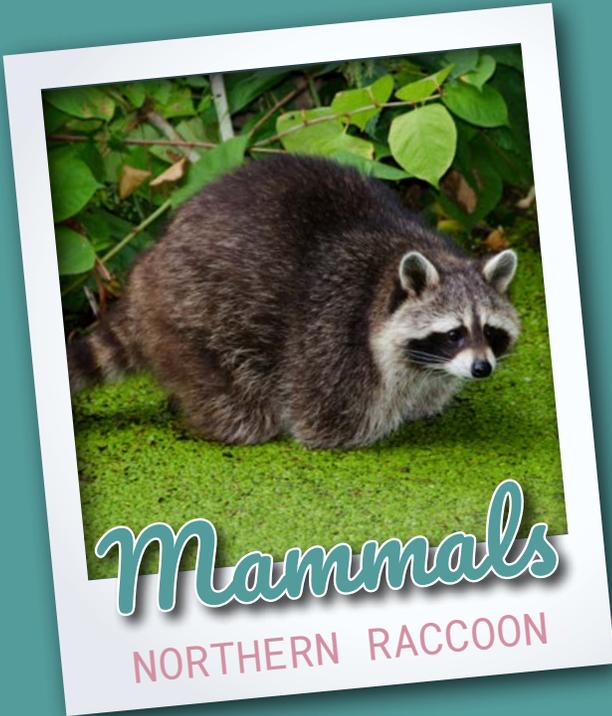
# Mammals



Mammals are a diverse group of warm-blooded creatures that have fur or hair, give birth to live young, and have mammary glands (females) for feeding their young.

Many mammals in the U.S. are nocturnal (active at night) or crepuscular (most active at dawn or dusk). Fewer are active during the day (diurnal). Because mammals can be difficult to spot, scientists often use signs, such as tracks, scrapings, rubbings, or other clues, to learn what species live in an area.

This guide describes a few of the more common mammals found in neighborhoods and on farmland. How many do you think live near you?



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## Northern Raccoon

(*Procyon lotor*)

### DESCRIPTION

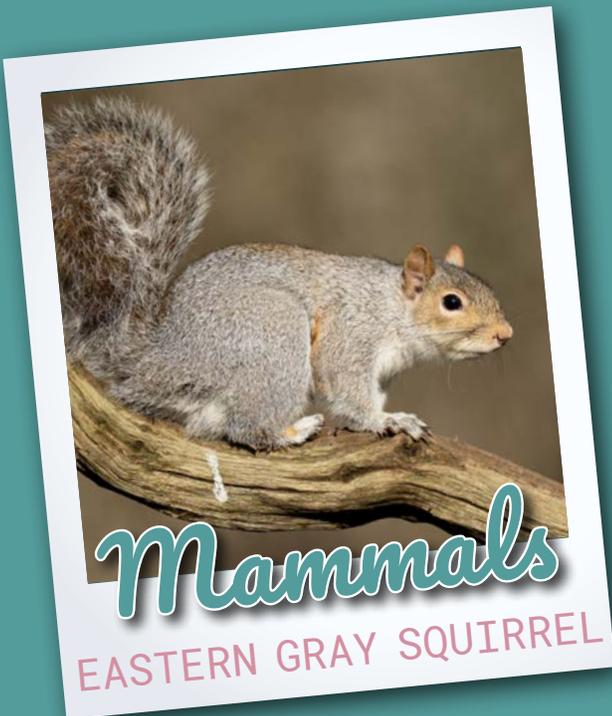
- Other names: coon
- Body length: 16–28 inches
- Tail length: 8–16 inches
- Overall gray-brown body
- Characteristic black fur or “mask” around the eyes
- Ringed tail

### HABITAT

The **northern raccoon** is native to the eastern and midwestern U.S. It prefers sparsely wooded areas, lowland forests, and marshes, but it is also a common resident of suburban areas.

### FUN FACT

**Northern raccoons** are thought to be able to make more than 40 different sounds, ranging from hisses and growls to purrs and screams.



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## Eastern Gray Squirrel

(*Sciurus carolinensis*)

### DESCRIPTION

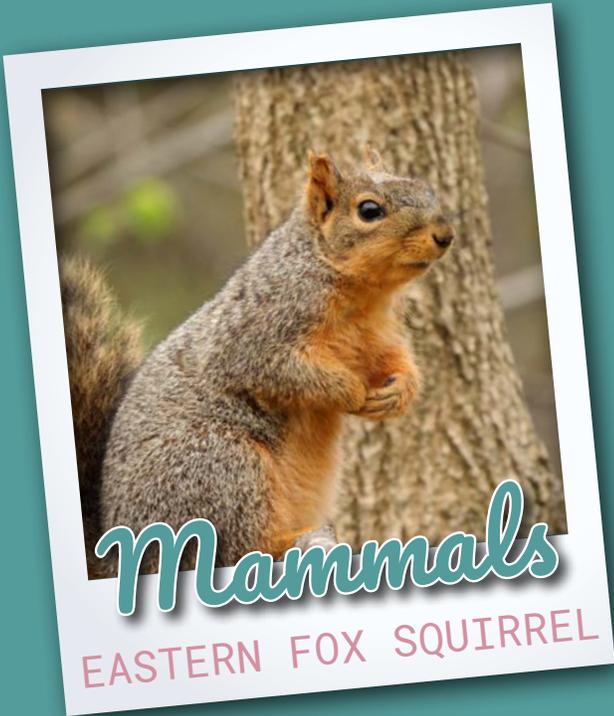
- Smaller member of the tree squirrel group
- Body length: 9–12 inches; tail length: 8–10 inches
- Gray upper parts
- Large, bushy tail that is gray above and white below

### HABITAT

The **eastern gray squirrel** is one of the most widely distributed species of native squirrel in North America. **Eastern gray squirrels** prefer dense hardwood forests or forested parks and neighborhoods in suburban and urban areas.

### FUN FACTS

- The **eastern gray squirrel** builds a nest, or “drey,” made of dry leaves and twigs in the forks of branches.
- Unlike most mammals, **eastern gray squirrels** can descend a tree head-first.



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## Eastern Fox Squirrel

(*Sciurus niger*)

### DESCRIPTION

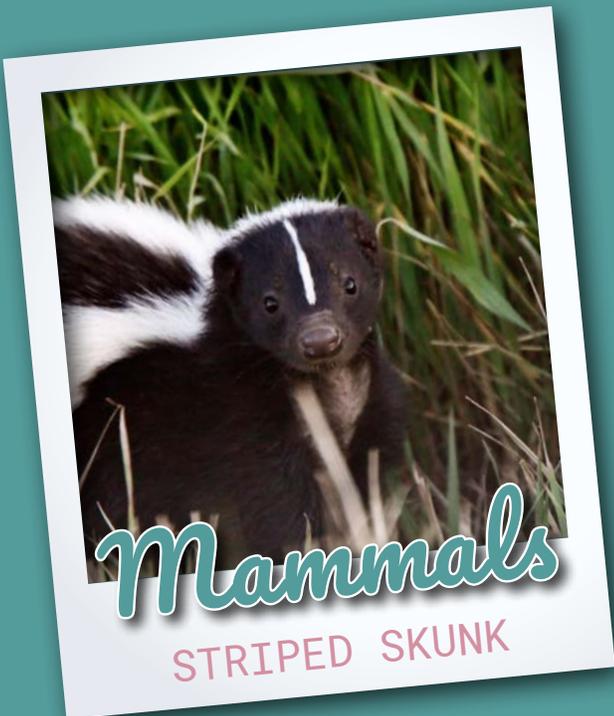
- Large member of the tree squirrel group
- Body length: 17–28 inches; tail length: 8–13 inches
- Brown-gray upper body with burnt orange under body
- Strong claws for climbing

### HABITAT

The **eastern fox squirrel** is native to the U.S. and can most commonly be found in open pine and oak forests lacking dense undergrowth.

### FUN FACT

**Eastern fox squirrels** often make their nests in tree holes created by woodpeckers.



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## Striped Skunk

(*Mephitis mephitis*)

### DESCRIPTION

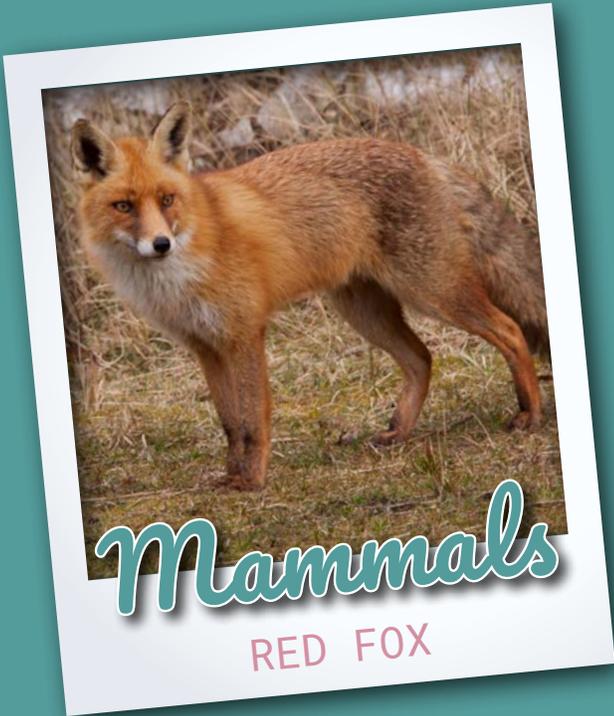
- Male body length: 20–30 inches; females are 10 percent smaller
- Body dominated by long, black fur with parallel white stripes running lengthwise from neck to tail. In some regions, white fur is confined to the head area.
- Long, curved claws on forefeet for digging up prey
- Emits a foul smell to deter potential predators

### HABITAT

The **striped skunk** is a native species that prefers mixed woodlands, brushy areas, and open fields, although it is also a common resident of suburban areas.

### FUN FACT

**Striped skunks** stamp their front feet as a warning before spraying.



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## Red Fox

(*Vulpes vulpes*)

### DESCRIPTION

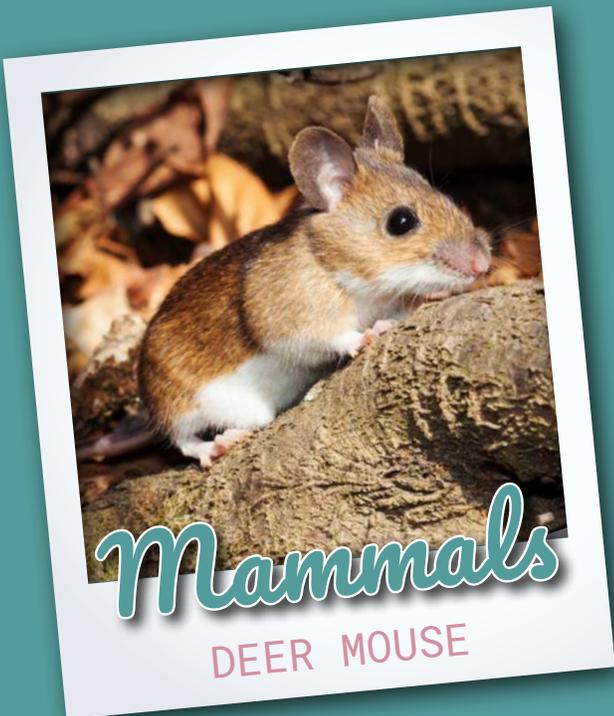
- Member of the Canid (dog) family and largest of all fox species
- Height: 14–20 inches; body length: 18–35 inches; tail length: 12–22 inches
- Long, rusty-red fur over most of the upper body with white chin and chest; silver and black variations can occur
- White fur on tip of the tail is common

### HABITAT

The **red fox** is a native species in the U.S. and can be found in open forests, farmlands, and suburban and urban areas.

### FUN FACT

**Red foxes** can be found almost everywhere in the Northern Hemisphere, except in extreme habitats such as the Arctic and deserts.



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## Deer Mouse

(*Peromyscus* sp.)

### DESCRIPTION

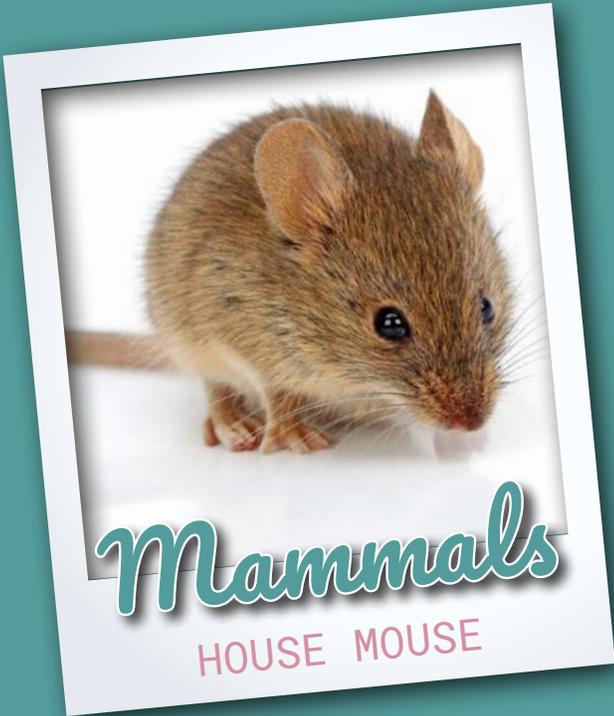
- Rodent in a genus of New World mice
- Body length: 4½–6 inches; tail length: 2–4 inches
- Large, round ears; large, black eyes; long whiskers
- Rich brown to reddish-brown fur on upper parts; white fur on the belly and underside of tail

### HABITAT

Native to the U.S., **deer mice** can most often be found in woodland areas, although they can also be found in suburban settings.

### FUN FACT

In the wild, a **deer mouse** has a life expectancy of only a year, but, in captivity, they can live up to 8 years.



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## House Mouse

(*Mus musculus*)

### DESCRIPTION

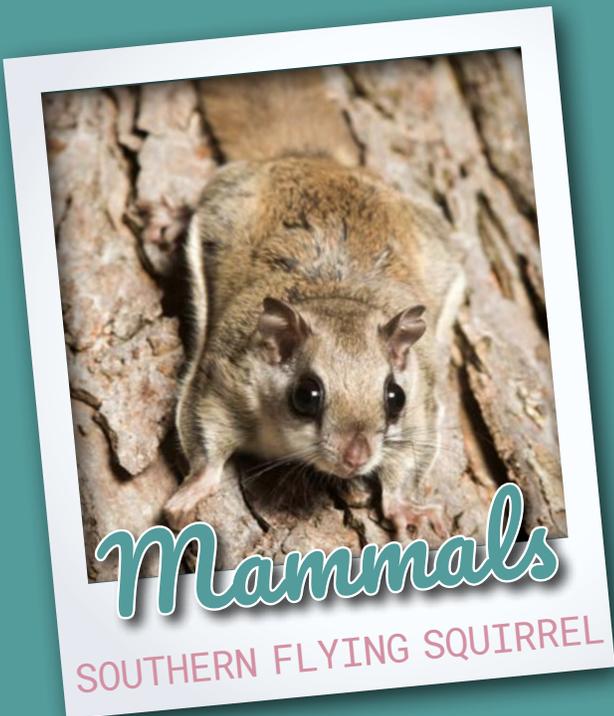
- Rodent in a genus of Old World mice
- Body length: 3–4 inches; tail length: 2–4 inches
- Relatively uniform gray-brown body, including belly; some with lighter-colored underbelly
- Ears and tail have sparse coverings of fur

### HABITAT

As their name implies, **house mice** are commonly found in human-dominated environments, including houses, outbuildings, and surrounding cover.

### FUN FACT

The hind legs of **house mice** are so strong that they can jump vertically up to 18 inches.



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## Southern Flying Squirrel

(*Glaucomys volans*)

### DESCRIPTION

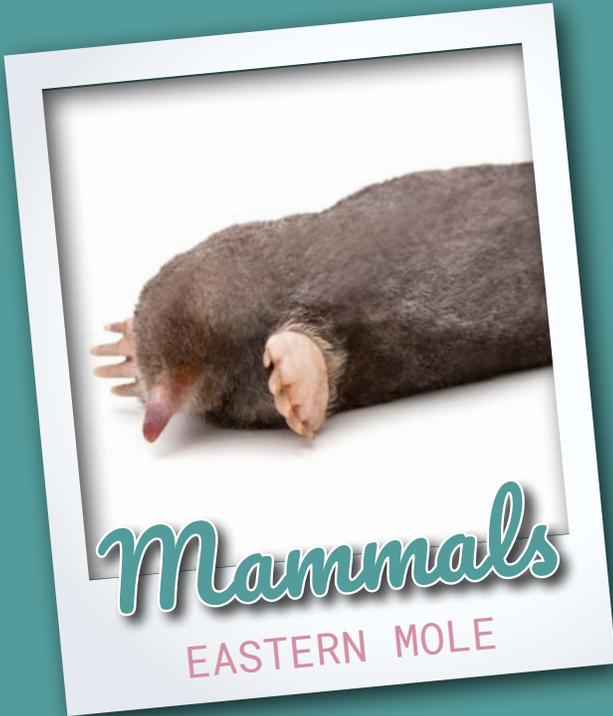
- Body length: 8–10 inches; tail length: 3–5 inches
- Gliding membrane extending from wrist to ankle on both sides of the body
- Gray fur; large eyes for nocturnal vision

### HABITAT

The **southern flying squirrel** is native to the U.S. It prefers hardwood forests with seed-producing trees for food and cavities for shelter.

### FUN FACT

Despite their name, **southern flying squirrels** don't fly. Instead, they glide through the air from high perches to lower locations.



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## Eastern Mole

(*Scalopus aquaticus*)

### DESCRIPTION

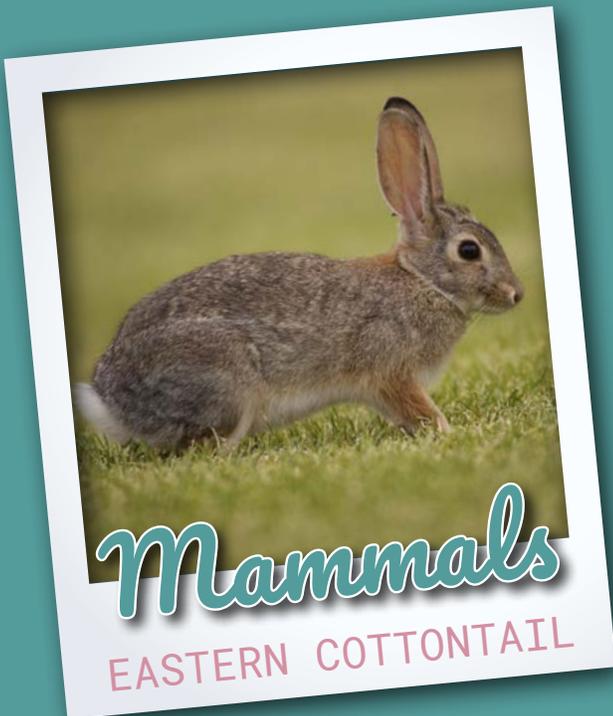
- Body length: 4–6.7 inches; tail length: 0.5–1.5 inch
- Thick, velvety fur ranging in color from silver to black
- Large feet with webbed toes to aid in digging
- No external eyes or ears

### HABITAT

This native species is found in the eastern U.S. and can most frequently be found in fields, meadows, and other grassy locations, including neighborhood yards.

### FUN FACTS

- **Eastern moles** are expert diggers and can dig up to 14 feet in 1 hour in their search for grubs, worms, and other prey.
- With no ears or eyes, the **eastern mole** relies on smell, touch, and vibration to find its way around.



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## Eastern Cottontail

(*Sylvilagus floridanus*)

### DESCRIPTION

- Common member of the rabbit group
- Body length: 15–19 inches
- Upper body is mixed shades of brown, gray, and black; the belly is white
- Characteristic round, white, fluffy tail

### HABITAT

The **eastern cottontail** is native to the eastern and midwestern U.S. It prefers brushy habitats with good groundcover. It can be found in orchards, farmlands, hedgerows, and suburban neighborhoods.

### FUN FACT

The female **eastern cottontail** builds a ground nest of dried grass lined with fur from its belly to raise its offspring.



# White-tailed Deer

(*Odocoileus virginianus*)

## DESCRIPTION

- Males (bucks) are larger than females (does); average male weight: 150 pounds
- Males and females look similar: reddish-brown summer coat; gray-brown winter coat
- White belly, throat, and underside of tail
- Males annually grow antlers starting in early spring, shedding them in winter after the breeding season

## HABITAT

White-tailed deer are native to the eastern and midwestern U.S. They prefer forests with dense understory or brushy habitats along fields, pastures, and neighborhoods.

## FUN FACT

White-tailed deer use their tails to signal danger, flashing the bright white underside to signal other deer in the area.

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.

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# Mammals

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# Trees



One of the largest groups of living organisms is the Plant Kingdom, and trees are perhaps the most visible members. With the exception of extreme habitats like polar regions and deserts, trees can be found in terrestrial ecosystems around the planet.

Trees are either evergreen or deciduous. Evergreens such as pines and magnolias have needles or leaves throughout the year. In contrast, deciduous trees lose their leaves or needles over winter and grow new ones in spring. Biologists use the shape, size, color, and arrangement of leaves to identify tree species. Trees also can be identified by their fruit, seeds, bark, tree shape, and habitat. How many of the trees in this booklet can you find in your neighborhood?



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## Loblolly Pine

(*Pinus taeda*)

### DESCRIPTION

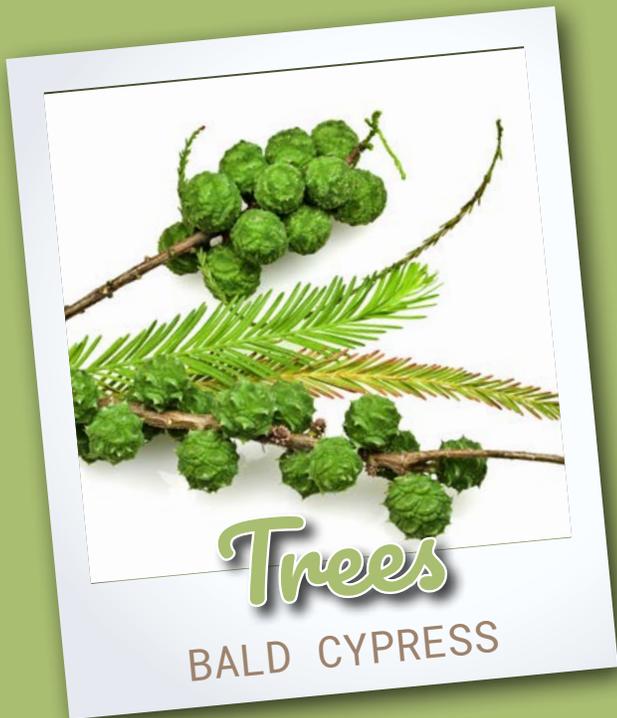
- Other names: Arkansas pine, oldfield pine
- Evergreen conifer
- Leaves: three dark-green needles per group (fascicle); needles are 6–9 inches long
- Bark: varies with tree age from reddish-brown to nearly black; plates are large, flat, and rectangular
- Seeds: reddish-brown cones are 3–6 inches long

### HABITAT

The **loblolly pine**, native to the southeastern U.S., is very adaptable and can grow in a variety of soil and forest types.

### FUN FACT

The **loblolly pine** can grow more than 3 feet each year. This is an important tree that is grown and used for lumber and paper.



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## Bald Cypress

(*Taxodium distichum*)

### DESCRIPTION

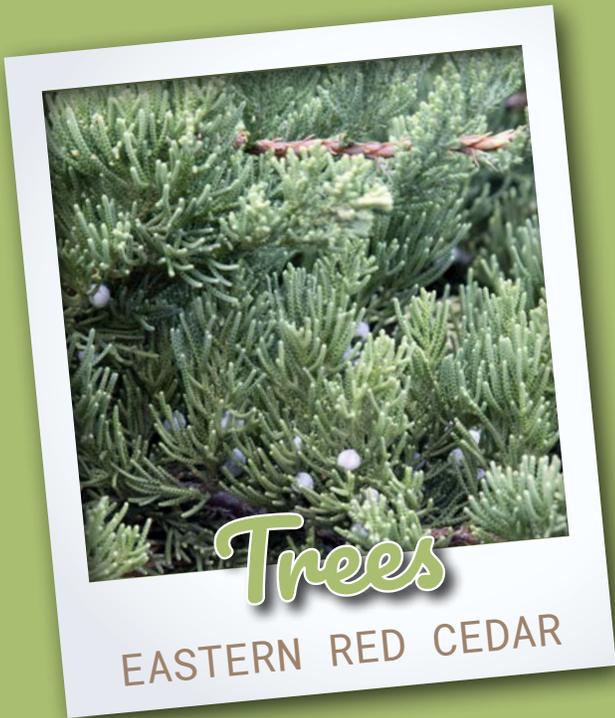
- Other names: southern cypress, swamp cypress
- Deciduous conifer
- Leaves: flat, feathery, yellow-green needles
- Bark: ashy to reddish-brown with thin, scaly plates
- Seeds: green, spherical cones about 1 inch in diameter

### HABITAT

The **bald cypress** is native to wetlands and bottomlands along the Atlantic and Gulf Coasts and the Mississippi River drainage basin. It is also used in landscaping.

### FUN FACT

Unlike other trees with needles, the **bald cypress** is deciduous; it loses its needles in winter. The wood of the **bald cypress** is highly valued in construction because it is resistant to decay.



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## Eastern Red Cedar

(*Juniperus virginiana*)

### DESCRIPTION

- Other names: juniper, cedar apple, savin
- Evergreen conifer
- Leaves: dark green, tightly pressed, scale-like needles
- Bark: long, thin, reddish-brown strips
- Seeds: round, purplish-blue cones resembling berries are also known as “juniper berries”

### HABITAT

The **eastern red cedar** is widespread throughout the eastern U.S. and southern Ontario, often on shallow, rocky, or limestone-based soils.

### FUN FACT

The wood, bark, leaves, and “berries” of the **eastern red cedar** were used by Native American people to make medicine, teas, flutes, incense, and furniture.



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## Red Maple

(*Acer rubrum*)

### DESCRIPTION

- Other names: soft maple, water maple
- Deciduous tree
- Leaves: light green, three-lobed leaves with serrated edges
- Bark: smooth, gray, and thin when young; shallow fissures between long, scaly plates when older
- Seeds: winged seeds called samaras that “helicopter” to the ground

### HABITAT

The **red maple**, native to the eastern U.S., prefers moist soils found in swamps and similar damp habitats but is adaptable to most landscaping situations.

### FUN FACT

**Red maples** are so named because of the fiery red color of their leaves in fall.



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## Ginkgo

(*Ginkgo biloba*)

### DESCRIPTION

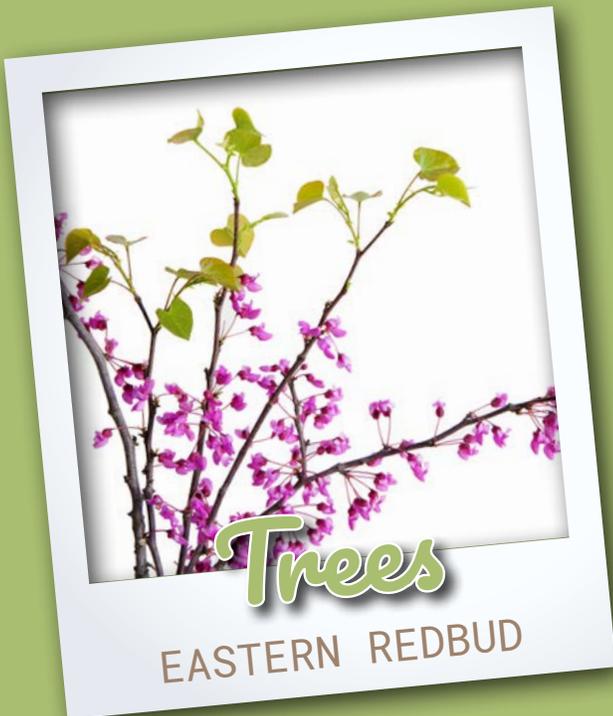
- Other name: maidenhair tree, ginkgo
- Deciduous tree
- Leaves: 2–4 inches in diameter; bright green and fan-shaped; yellow in the fall
- Bark: brown and deeply fissured; may look cork-like on old trees
- Seeds: small, pale yellow, foul-smelling spheres

### HABITAT

The **ginkgo** was imported to North America from China about 200 years ago. It is a common ornamental tree in urban and suburban environments.

### FUN FACT

Extracts from **ginkgo** leaves are used in many vitamins and medicines.



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## Eastern Redbud

(*Cercis canadensis*)

### DESCRIPTION

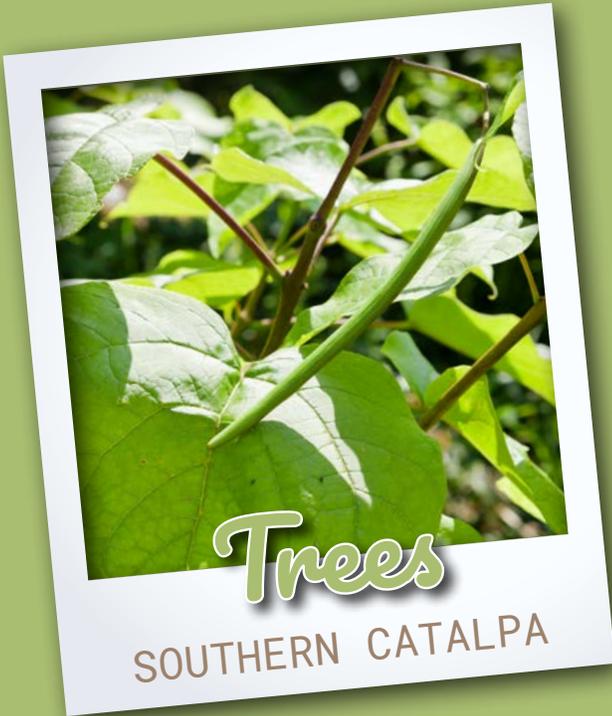
- Deciduous tree
- Leaves: bright green, 3–4 inches in diameter, and heart-shaped
- Bark: smooth and medium-brown when young; darker with long, narrow plates when older
- Flowers: clusters of reddish-purple flowers for which the tree is named
- Seeds: flat, dark brown, sickle-shaped pods

### HABITAT

A native understory tree, the **eastern redbud** is commonly found growing in parks and gardens as an ornamental tree.

### FUN FACT

Native Americans and early European settlers treated whooping cough (diphtheria) with a tea brewed from the bark of the **eastern redbud**.



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## Southern Catalpa

(*Catalpa bignonioides*)

### DESCRIPTION

- Other names: Indianbean, caterpillar tree
- Deciduous tree
- Leaves: light green, heart-shaped, and 4–5 inches wide
- Bark: reddish-gray with long, thin, irregular scales
- Flowers: white with purple-spotted throats
- Seeds: long (6–20 inches), pale green capsules

### HABITAT

The **southern catalpa** is a native species found along riverbanks in the southeastern U.S. It is also commonly grown as an ornamental tree.

### FUN FACT

**Southern catalpa** trees are habitat for large worms called catalpa worms, which are a popular fishing bait.



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## Southern Magnolia

(*Magnolia grandiflora*)

### DESCRIPTION

- Other names: evergreen magnolia, bull bay, big laurel
- Evergreen tree
- Leaves: dark, leathery green, rusty beneath; 5–8 inches long
- Bark: light-brown to gray-brown with flat, scaly plates
- Flowers: showy white petals are fragrant and 6–8 inches wide
- Seeds: hairy, open, grenade-shaped pods

### HABITAT

The **southern magnolia**, native to the southeastern U.S., prefers rich, bottomland soils or gentle slopes. It is commonly grown in residential and urban settings as an ornamental tree.

### FUN FACT

The **southern magnolia** is the state tree of Mississippi.



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## Yellow Poplar

(*Liriodendron tulipifera*)

### DESCRIPTION

- Other names: tulip tree, tulip poplar
- Deciduous tree
- Leaves: dark green, tulip-shaped, and 4-6 inches wide
- Bark: tight, brownish-gray, and furrowed
- Flowers: greenish-yellow with an orange band
- Seeds: cone-like cluster of winged seeds

### HABITAT

The **yellow poplar** is native to the eastern half of the U.S., where it can be found in well-drained forest soils, particularly in the Appalachian Mountains, and suburban settings.

### FUN FACT

The wood of the **yellow poplar** is thought to be resistant to termites and was used by early settlers and Native Americans for making dugout canoes.



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## Sycamore

(*Platanus occidentalis*)

### DESCRIPTION

- Other names: planetree, buttonball tree
- Deciduous tree
- Leaves: bright green with 3-5 lobes per leaf and jagged edges; 4-7 inches wide
- Bark: mottled red-brown in younger trees; green-gray to nearly white in older trees
- Seeds: olive green, round, and 1 inch in diameter

### HABITAT

Native to the eastern U.S., the **sycamore** prefers rich, bottomland soils near water, but it is widely grown as a shade tree in residential settings.

### FUN FACT

The bark, leaves, and fruit of the **sycamore** were used by Native Americans to make medicines to treat colds, coughs, skin conditions, and other ailments.



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## Pin Oak

(*Quercus palustris*)

### DESCRIPTION

- Other names: swamp oak, Spanish oak
- Deciduous tree
- Leaves: glossy green and deeply scalloped or lobed, with 5-7 lobes per leaf
- Bark: smooth gray-brown when young; scaly and ridged when older
- Seeds: light brown acorns with thin cups

### HABITAT

The **pin oak** is a native tree commonly used in landscaping. Its shallow roots make for easier transplanting, and it tolerates poorly drained soils.

### FUN FACT

The acorns of the **pin oak** are an important source of food for wildlife such as deer, blue jays, squirrels, woodpeckers, and ducks.

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Trees

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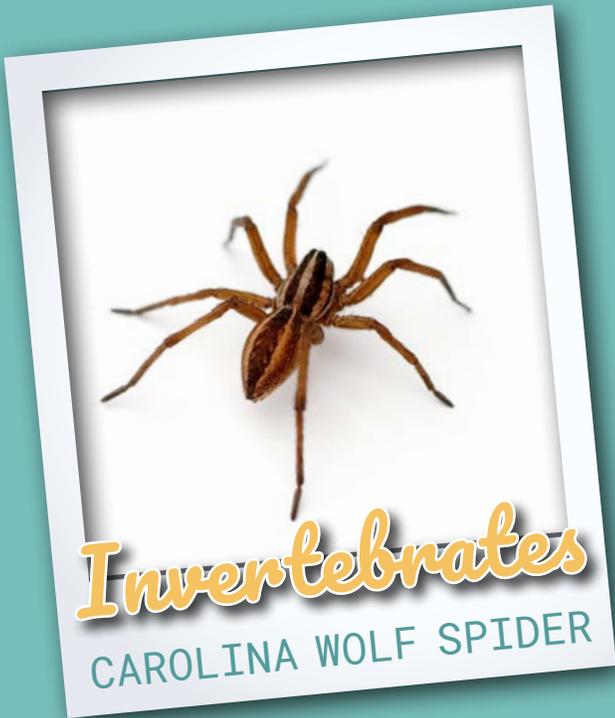
  
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# Invertebrates



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

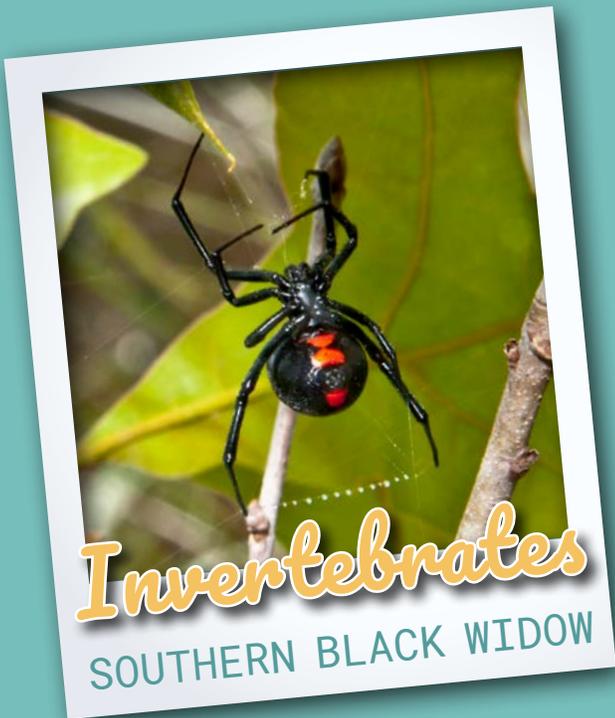
- Rather large member of the Arachnid group (arachnids have eight legs and two body parts)
- Males:  $\frac{3}{4}$  inch long; females: 1 inch long
- Light gray-brown body with scattered darker markings and a distinctive long, dark mark known as a “cardiac mark” on the upper surface

### 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

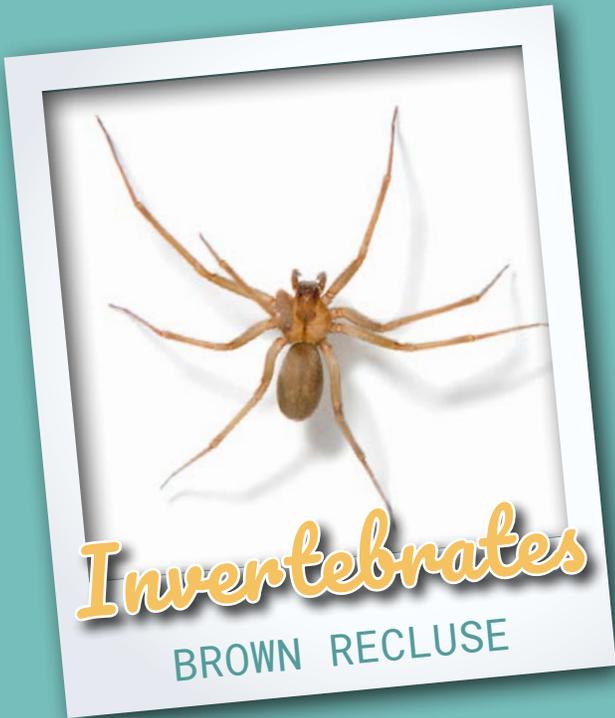
- Venomous Arachnid
- Females:  $\frac{1}{2}$ – $1\frac{1}{2}$  inch long; males:  $\frac{1}{4}$ – $\frac{3}{4}$  inch
- Females: shiny, black body with a bright red hourglass shape on the underside of the abdomen; males: no red hourglass mark

### 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

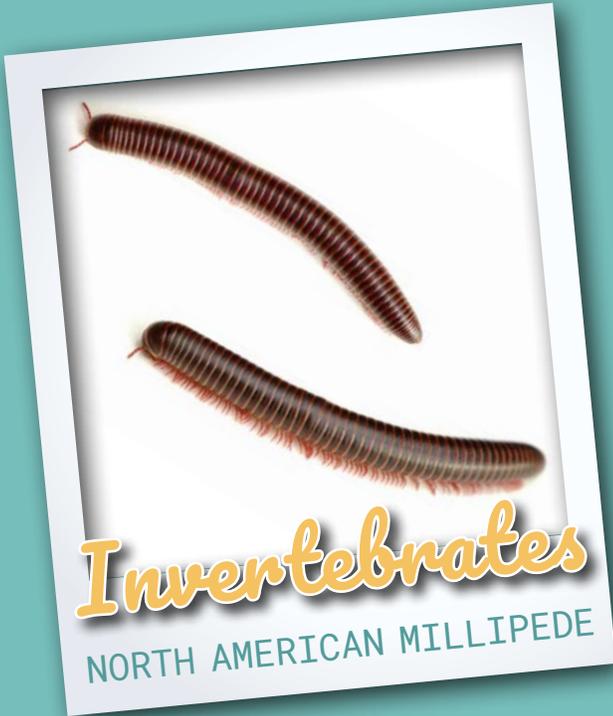
- Length: 2 inches
- Chocolate brown body with tan legs
- Distinctive pincers and curved tail

### 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

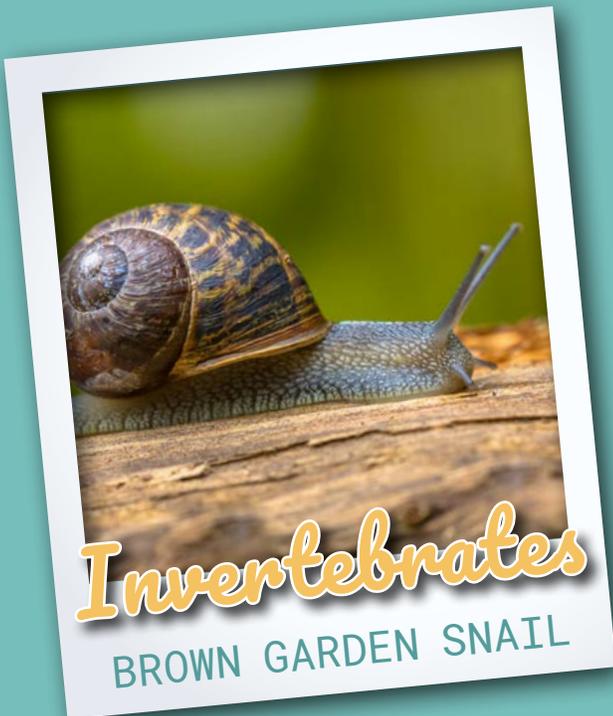
- Other names: red swamp crawfish, Louisiana crawfish, Louisiana mudbug, crawdad
- Member of the Crustacea group
- Length: 2–4½ inches
- Dull to bright red with claws brighter than the body
- Long, narrow claws and head

### 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

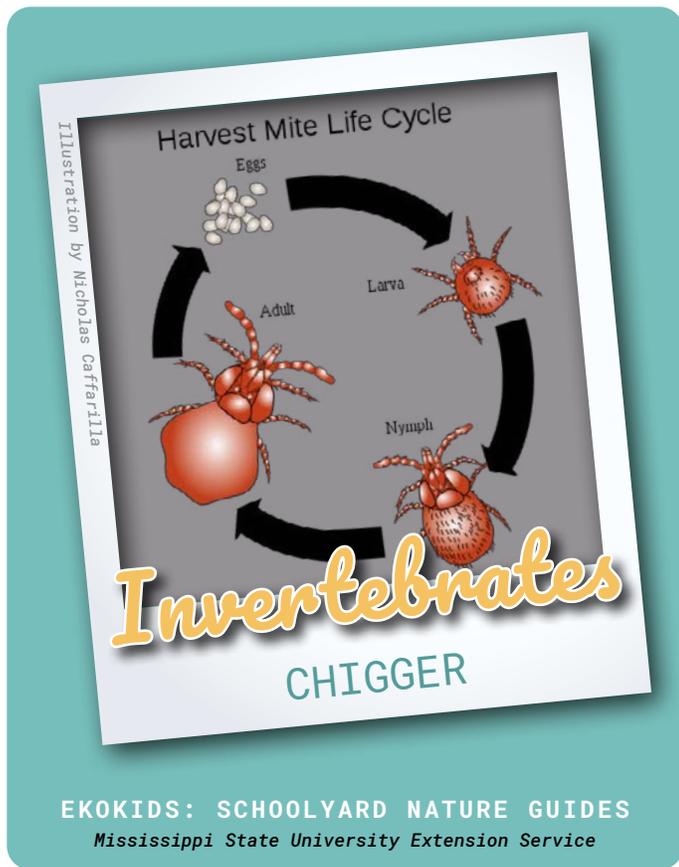
- Other name: garden snail
- Member of Gastropod group
- Shell diameter: 1–1½ inch; height: 1–1¼ inch
- Brown shell with yellow stripes or blotches; soft, slimy, brownish-gray body
- Two pairs of tentacles on the head

### 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.

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# Invertebrates

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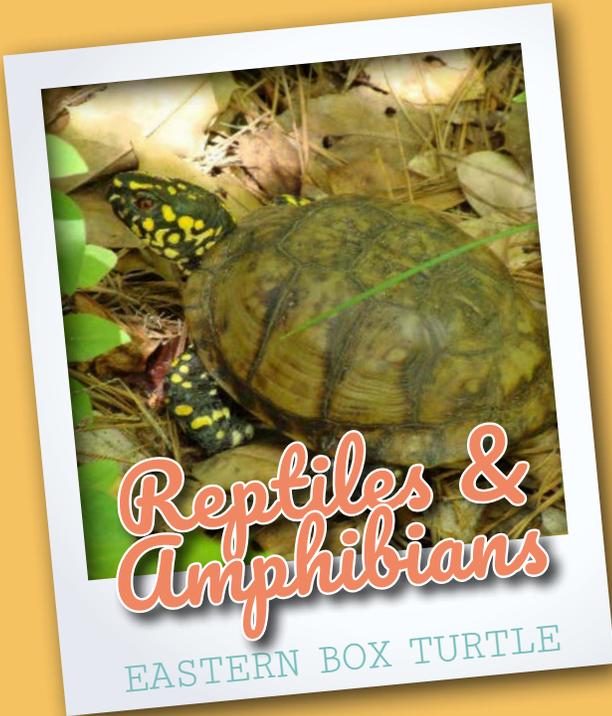
# Reptiles & Amphibians



Reptiles and amphibians are often-unappreciated members of nature and local biodiversity. Many people do not know these animals have important roles in pest management and as indicators of environmental health.

Reptiles are cold-blooded vertebrates with rough, dry, scaly skin. Although some species, such as alligators and smooth-shelled turtles, live in water, all reptiles lay hard-shelled eggs on land. Reptiles include snakes, turtles, lizards, skinks, and alligators.

In contrast, amphibians generally have smooth, moist skin. All amphibians lay their eggs in the water, even though they may spend their adult life on land. Frogs, toads, salamanders, and newts are examples of amphibians.



## Reptiles & Amphibians

### EASTERN BOX TURTLE

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## Eastern Box Turtle

(*Terrapene carolina*)

### DESCRIPTION

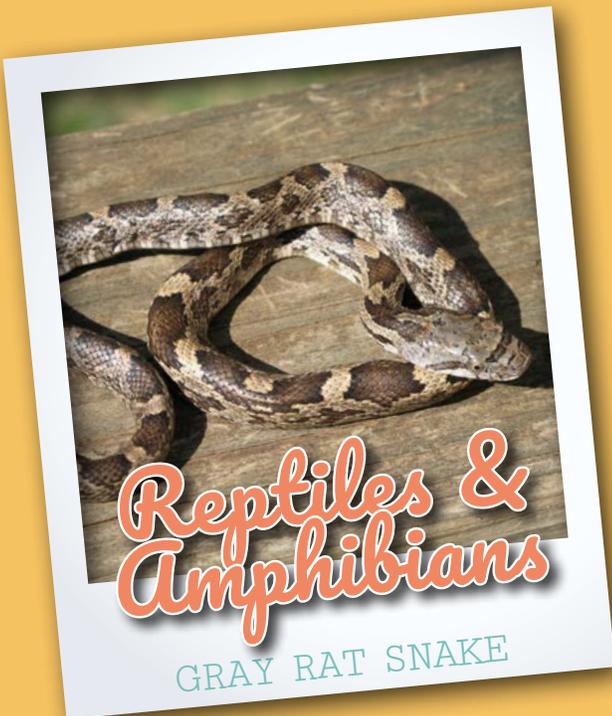
- Reptile with a hinged bottom shell plate that allows for complete closure of the shell, similar to a box
- Brown upper shell patterned with yellow or orange spots
- Red eyes on males; yellowish-brown eyes on females

### HABITAT

The **eastern box turtle** is native to the U.S. and can most frequently be seen in hardwood forests, brushy grasslands, and wet meadows.

### FUN FACTS

- **Eastern box turtles** are long-lived vertebrates capable of living 100 years or more.
- Urban development and habitat loss have caused serious population declines of this species.



## Reptiles & Amphibians

### GRAY RAT SNAKE

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## Gray Rat Snake

(*Pantherophis spiloides*)

### DESCRIPTION

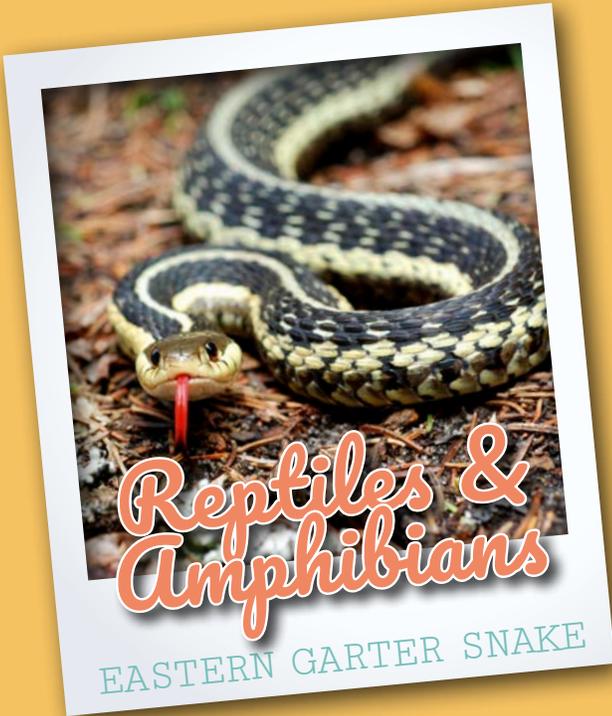
- Other name: chicken snake
- Larger species of nonvenomous constrictor
- Average length: 39–72 inches
- Dark gray, oval-shaped blotches mark a lighter gray background

### HABITAT

The **gray rat snake** is native to the U.S. It prefers forests and forest-edge habitats and is frequently seen in barns and sheds, where it feeds on mice and other rodents.

### FUN FACTS

- **Gray rat snakes** will release a foul-smelling scent to deter a potential predator.
- **Gray rat snakes** are excellent climbers, capable of using rough bark to scale trees to find food and shelter.



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## Eastern Garter Snake

(*Thamnophis sirtalis*)

### DESCRIPTION

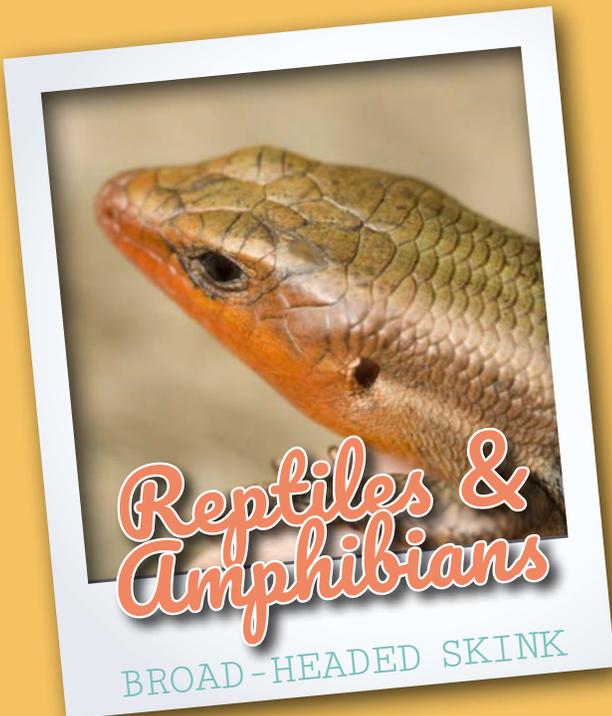
- Medium-sized, nonvenomous reptile
- Females usually larger than males; average length for both: 18–26 inches
- Base color ranges from green to brown to black
- Characteristic white-yellow stripes run the length of the body

### HABITAT

Native to the U.S., **eastern garter snakes** use moist habitats such as shrubby fields, pond edges, drainage ditches, and marshes where they can find salamanders, frogs, earthworms, and other small prey.

### FUN FACT

The **eastern garter snake** is so named because the stripes reminded early biologists of the stripes on garter straps.



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## Broad-Headed Skink

(*Plestiodon laticeps*)

### DESCRIPTION

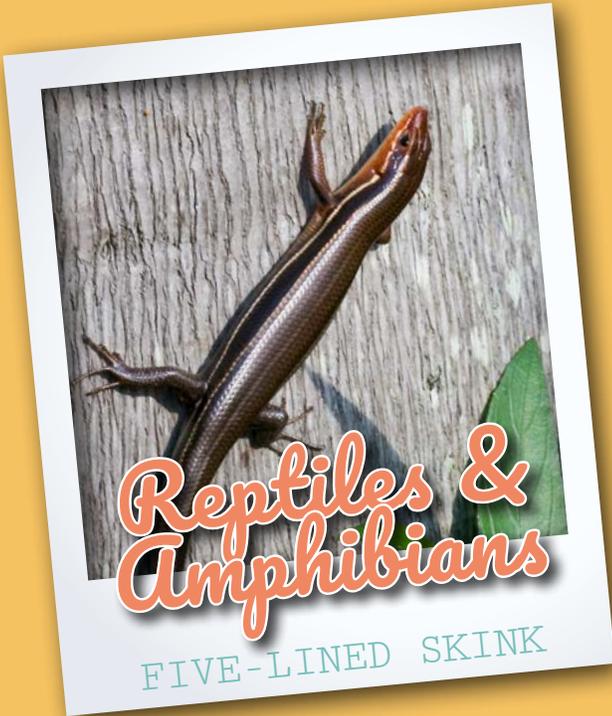
- Other name: broadhead skink
- Largest skink in the southeastern U.S.; length: 6–13 inches
- A set of wide jaws gives this reptile's head a broad, triangular appearance
- Males: dark olive-brown with orange head during the breeding season (see photo); females: uniformly brown with five stripes running from head to tail

### HABITAT

The **broad-headed skink** is a native, tree-dwelling (arboreal) reptile found across the southeastern and south-central U.S., most frequently in humid hardwood forests or woodland edges.

### FUN FACT

Male **broad-headed skinks** use their tongues to detect scents (pheromones) given off by females during breeding season.



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## Five-lined Skink

(*Plestiodon fasciatus*)

### DESCRIPTION

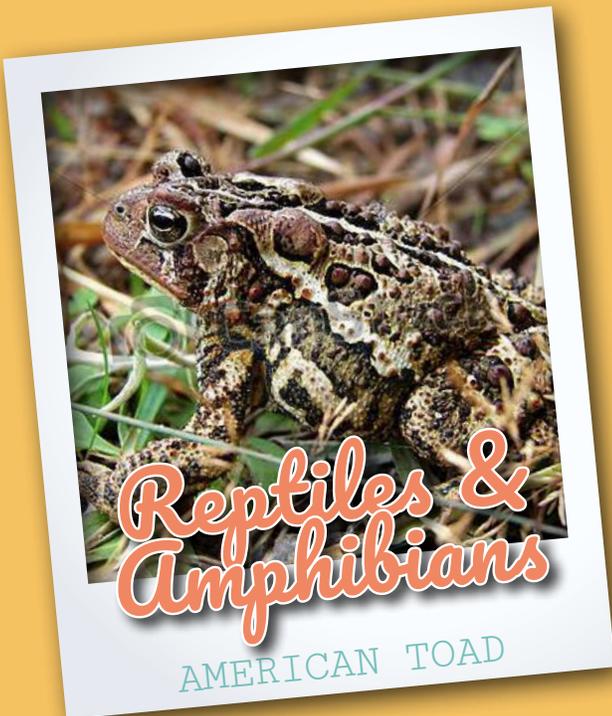
- Medium-sized reptile; length: 5–8 inches
- Juveniles: dark brown-black base color with five white-yellow stripes along the length of the body; bright blue tail
- Adults: uniformly tan-brown with dark band running lengthwise along the sides; no blue tail (see photo)

### HABITAT

This native lizard is one of the most common in North America. It prefers partially wooded habitats, but it is often seen near buildings in neighborhoods and on farms.

### FUN FACT

**Five-lined skinks**, like many other lizards, can disconnect their tails to distract potential predators and make their escape.



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## American Toad

(*Anaxyrus americanus*)

### DESCRIPTION

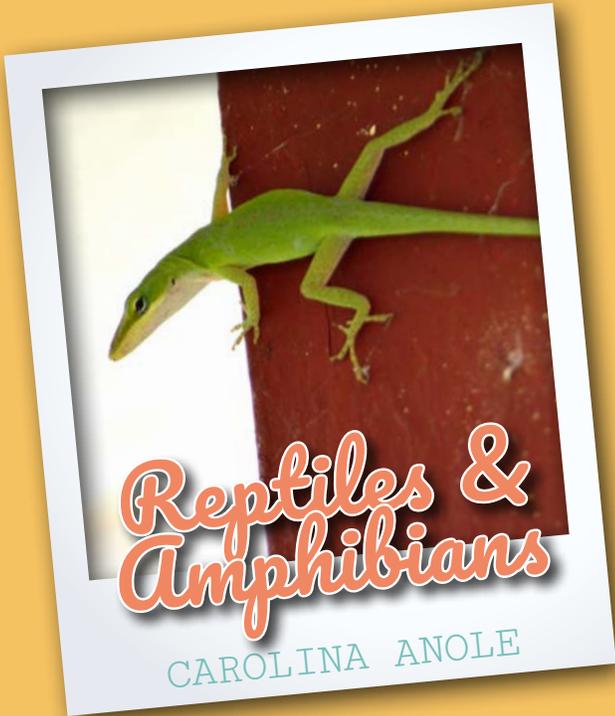
- Medium-sized amphibian; average length: 2–3½ inches
- Skin color ranges from yellowish-brown to gray
- Many have spots or large speckling on their backs
- Wart-like bumps cover the skin

### HABITAT

The American toad is native to Mississippi and can most frequently be observed near areas of standing fresh water, such as ponds or even swimming pools.

### FUN FACTS

- **American toads** are most active during times of gentle to moderate rain because they eat worms and other ground insects that come to the top of damp soil.
- Contrary to the myth, **American toads** cannot cause warts in people.



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## Carolina Anole

(*Anolis carolinensis*)

### DESCRIPTION

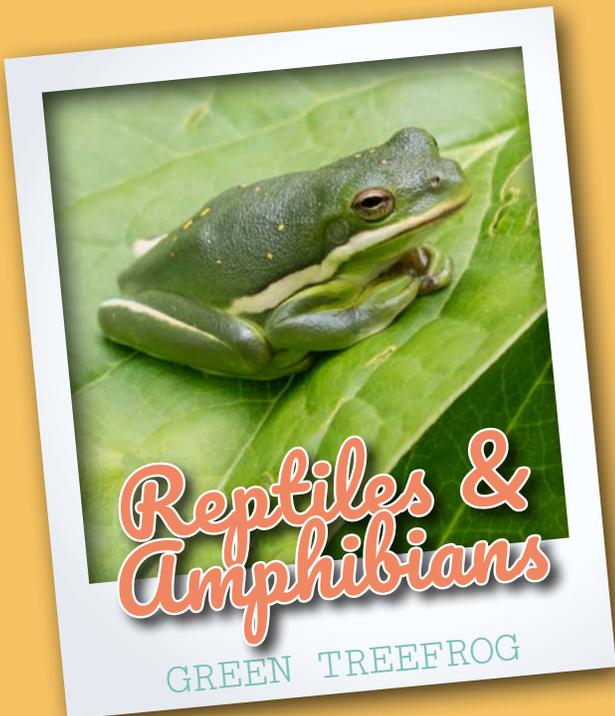
- Other names: green anole; American chameleon
- Male length: 5–8 inches; females 15 percent smaller
- Most (60–70 percent) of this reptile's length is tail
- Upper body from green to medium brown; white belly
- Males extend their red throats in display to other males

### HABITAT

The **Carolina anole** is a native southeastern reptile frequently seen on the warm sides of buildings. They prefer trees, shrubs, and forested habitats.

### FUN FACT

Although the **Carolina anole** can change color, it is not a true chameleon and is more closely related to iguanas.



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## Green Treefrog

(*Hyla cinerea*)

### DESCRIPTION

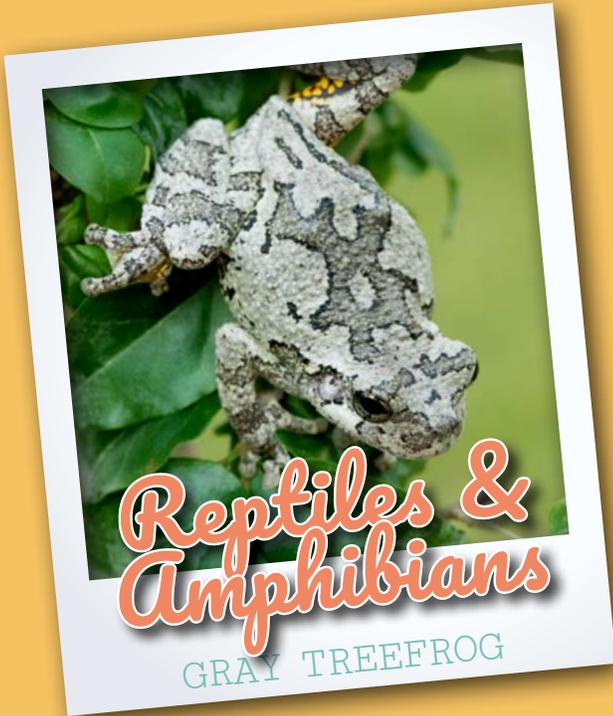
- Strikingly colored, slim-bodied amphibian
- Length: 1½–2½ inches; females slightly larger than males
- Bright green (sometimes gray) upper body with gold-white markings near jaws, sides, and legs; pale bellies
- Smooth skin
- Sticky pads on the ends of long toes

### HABITAT

Like most amphibians native to the southeastern U.S., **green treefrogs** are found in wet habitats such as ponds, lakes, and marshes. They prefer areas with floating or rooted plants where they can find insects to eat and cover from predators.

### FUN FACTS

**Green treefrogs** prefer to climb rather than jump away from threats.



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## Gray Treefrog

(*Hyla versicolor*)

### DESCRIPTION

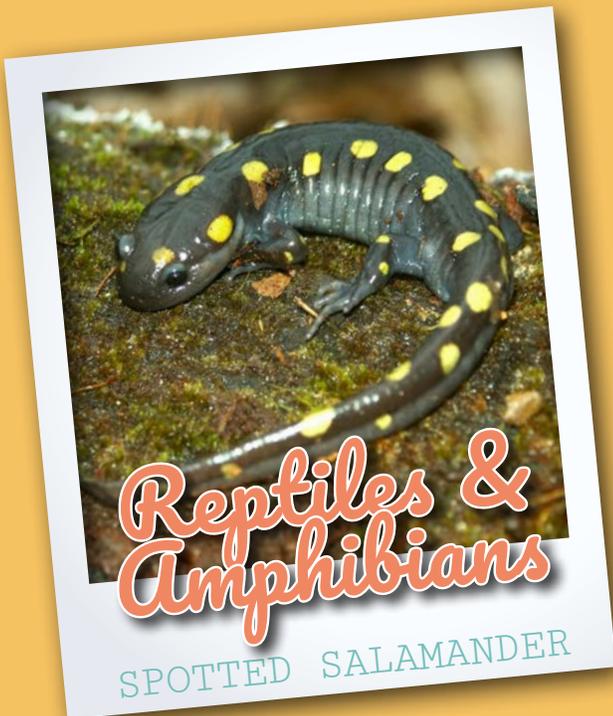
- Small amphibian
- Length: 1¼–2 inches; females slightly larger than males
- Warty, mottled light gray on upper body; pale belly; orange-yellow markings under the thighs
- Can change skin color for camouflage
- Sticky pads on the ends of long toes

### HABITAT

This native eastern U.S. treefrog species lives in moist, deciduous forests and swamps where it can find moths, flies, beetles, grasshoppers, and other food in the tree branches.

### FUN FACT

**Gray treefrogs** spend nearly their entire lives in trees, coming down to the ground to breed in ponds and other quiet waters during the spring-to-summer breeding season.



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## Spotted Salamander

(*Ambystoma maculatum*)

### DESCRIPTION

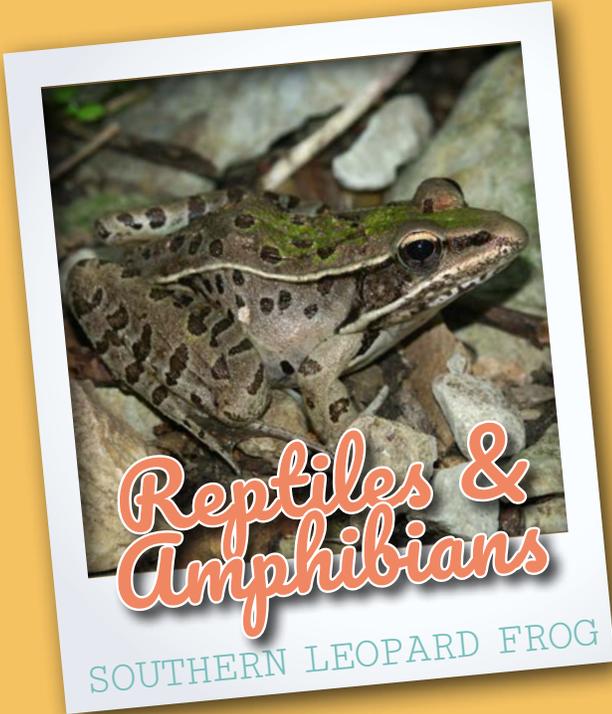
- Other name: yellow-spotted salamander
- Larger amphibian; length: 6–9 inches
- Dark black, brown, gray, or green base color; light pink-gray belly
- Named for two uneven rows of yellow spots running from head to tail

### HABITAT

The spotted salamander is native to Mississippi and can most frequently be observed in hardwood forest areas with shallow pools.

### FUN FACTS

- **Spotted salamanders** can grow (regenerate) a new copy of a damaged body part.
- **Spotted salamanders** can release a toxic liquid from poison glands on their backs and necks if they feel threatened.



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## Southern Leopard Frog (*Lithobates sphenoccephalus*)

### DESCRIPTION

- Larger amphibian; length: 2–3½ inches
- Green-tan upper body and light belly
- Named for dark brown spots on the head, back, and legs
- Webbed hind feet and toes lacking sticky pads

### HABITAT

**Southern leopard frogs**, native to the eastern U.S., live in shallow, freshwater wetlands such as swamps, lakes, ponds, and ditches where they breed and feed on insects.

### FUN FACT

**Southern leopard frogs**, like other frogs and toads, have backbones but no ribs.

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Reptiles &  
Amphibians

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# Birds



Birds are common visitors to schools, neighborhoods, parks, and other public places. Their diversity, bright colors, cheerful songs, and daytime habits make them great for engaging children and adults in nature study.

Birds are unique among animals. All birds have feathers, wings, and beaks. They are found around the world, from ice-covered Antarctica to steamy jungles, from dry deserts to windy mountaintops, and from freshwater rivers to salty oceans.

This booklet shares some information on just a few of the nearly 10,000 bird species that can be found worldwide. How many of these birds can you find in your part of the planet?



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## Northern Cardinal

(*Cardinalis cardinalis*)

### DESCRIPTION

- Other names: redbird, common cardinal
- Medium-sized songbird in the cardinal family
- Males: bright red feathers, black face masks
- Females: light brown feathers, gray face masks
- Males and females: reddish-orange bills
- Length: 8¾ inches; wingspan: 12 inches

### HABITAT

The **northern cardinal** can be found throughout the eastern U.S. This native species favors open areas with brushy habitat, including neighborhoods and suburban areas.

### FUN FACT

**Northern cardinals** mate for life. When courting, the male feeds the female beak-to-beak.



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## House Finch

(*Haemorhous mexicanus*)

### DESCRIPTION

- Other name: rosefinch
- Length: 6 inches; wingspan: 9½ inches
- Males: bright, orange-red face and breast; streaky, gray-brown wings and tail
- Females: overall gray-brown; no bright red color

### HABITAT

The **house finch** is not native to the southeastern U.S. Because it can live in many habitats, it has quickly expanded its range. This bird is now found most commonly in urban and suburban areas.

### FUN FACT

New York City vendors were selling "Hollywood finches" (house finches) in the 1940s. Facing prosecution for violating a law that prohibits the sale of wild birds, the vendors released the birds. Their descendants now live across the U.S.



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## Blue Jay

(*Cyanocitta cristata*)

### DESCRIPTION

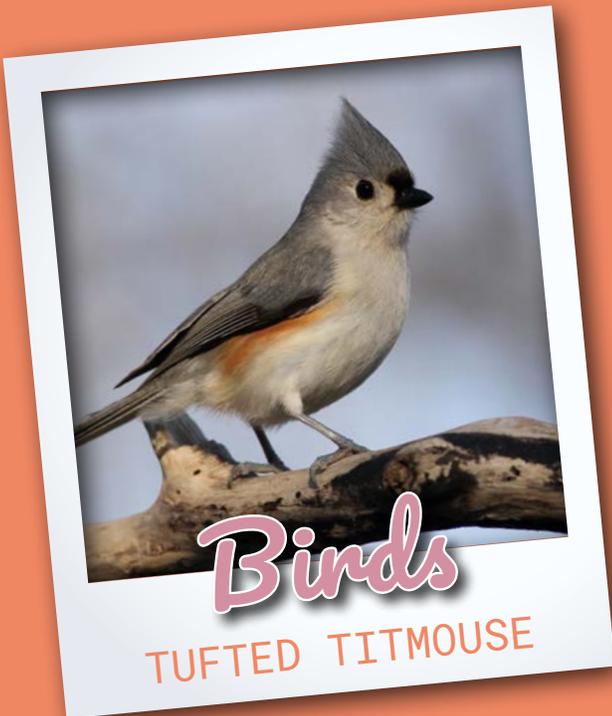
- Other names: jaybird, jay
- Member of the crow family
- Length: 11 inches; wingspan: 16 inches
- Males and females: blue head crest; pale blue back with white markings; striped tail; white breast feathers
- Distinctive dark “scarf” around the head

### HABITAT

The **blue jay** is native to the U.S. and can be found in many habitat types, including pastureland, woodlands, and suburban areas. It is social and often found in groups.

### FUN FACT

The **blue jay** will sound its loud call—“Jay! Jay!”—to alert other birds if there is a predator such as an owl or hawk in the area.



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## Tufted Titmouse

(*Baeolophus bicolor*)

### DESCRIPTION

- Larger member of the chickadee family
- Length: 6½ inches; wingspan: 9¾ inches
- Males and females: gray crest; gray upper feathers and white underparts; pale orange flanks; black bills, foreheads, and eyes

### HABITAT

A common visitor to residential bird feeders, the **tufted titmouse** is native to the eastern U.S. It prefers forests of broadleaf trees, such as oaks, hickories, and maples.

### FUN FACT

The **tufted titmouse** makes its nest in a hole in a tree, which it lines with soft materials such as dog hair or shed snake skin.



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## House Sparrow

(*Passer domesticus*)

### DESCRIPTION

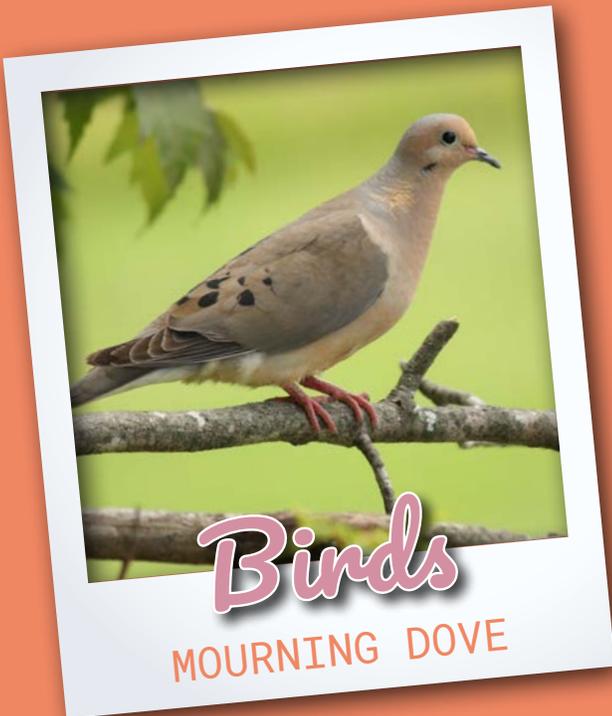
- Length: 6–7 inches; wingspan: 7–9 inches
- Males: brown head and back; gray breast with a black breast patch
- Females: dull-brown upper feathers with gray breast; no black breast patch

### HABITAT

The **house sparrow** was brought to North America from England in 1851. It prefers to live in urban habitats.

### FUN FACT

**House sparrows** are commonly seen nesting in building signs, flying through stores, and feeding on insects stuck to parked cars.



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## Mourning Dove

(*Zenaida macroura*)

### DESCRIPTION

- Other names: turtledove
- Length: 12 inches; wingspan: 18 inches
- Males and females: gray-brown upper plumage with scattered black spots and whitish-gray lower plumage
- Males: rosy cast; blue-tinted nape during the breeding season

### HABITAT

A frequent visitor to bird feeders, the **mourning dove** is native to open habitats with brushy cover, including agricultural and suburban landscapes.

### FUN FACT

The **mourning dove** gets its common name from its call—because it is pitched in a minor key, it sounded sad to early scientists.



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## Eurasian Collared Dove

(*Streptopelia decaocto*)

### DESCRIPTION

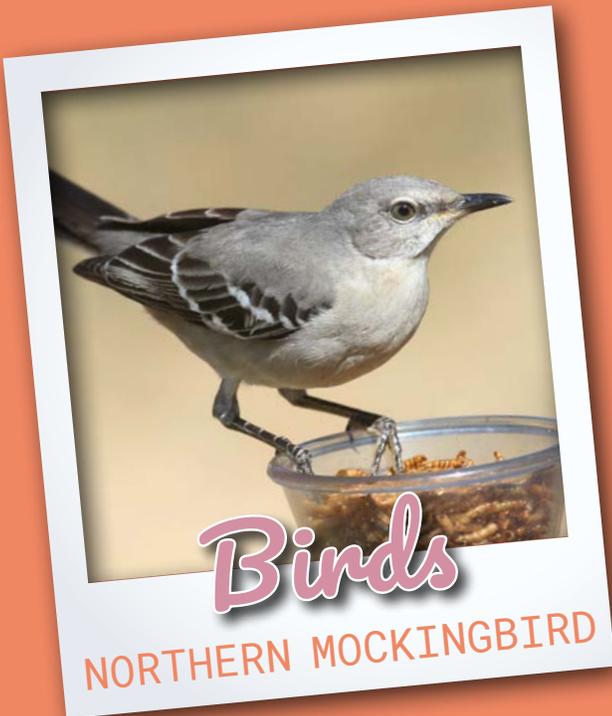
- Larger member of the dove family
- Length: 13 inches; wingspan: 22 inches
- Males and females: overall gray-buff to pinkish-gray; black nape collar; black bill; short red legs

### HABITAT

The **Eurasian collared dove** is not native to the U.S. It was first introduced to the Bahamas in the 1970s, and it spread to Florida and later inward. It can be found in open habitats, particularly suburban areas.

### FUN FACTS

- Scientists are concerned this larger, exotic species will displace the smaller, native mourning dove.
- Male and female **Eurasian collared doves** take turns incubating their eggs.



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## Northern Mockingbird

(*Mimus polyglottos*)

### DESCRIPTION

- Medium-sized member of the Mimidae family
- Length: 10 inches; wingspan: 14 inches
- Males and females: dark gray upper feathers; whitish gray on belly; two bright white bars across dark gray wings

### HABITAT

The **northern mockingbird**, a species native to the southeastern U.S., prefers open areas interspersed with dense brush for nesting. It is common in suburban areas.

### FUN FACT

The **northern mockingbird's** Latin name, *Mimus polyglottos*, means "many-tongued mimic" because this species mimics the songs of other birds.



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## Carolina Chickadee

(*Poecile carolinensis*)

### DESCRIPTION

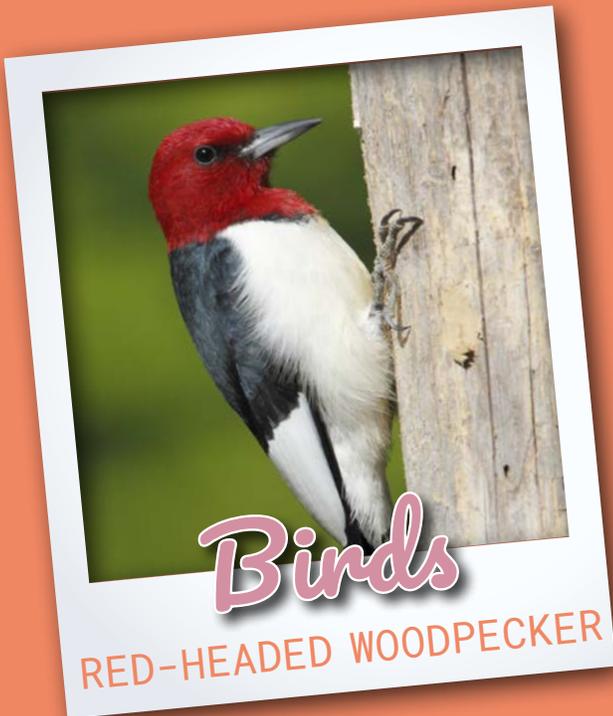
- Small member of the chickadee family
- Length: 4¾ inches; wingspan: 7½ inches
- Males and females: gray upper feathers with white lower plumage; distinctive black cap and bib with white cheeks

### HABITAT

The **Carolina chickadee** is native to wooded habitats in the southeastern U.S.

### FUN FACTS

- During extremely cold winters, the **Carolina chickadee** can lower its body temperature until it reaches a state of hypothermia called torpor. Like hibernation, this is a strategy for conserving energy.
- The **Carolina chickadee** gets its name from its distinctive call—"chick-a-dee-dee-dee."



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## Red-Headed Woodpecker

(*Melanerpes erythrocephalus*)

### DESCRIPTION

- Other names: flag bird, jellycoat
- Length: 9¼ inches; wingspan: 17 inches
- Males and females: black back and tail; white wing feathers; white belly; bright red head and neck; males have more pronounced head coloring

### HABITAT

The **red-headed woodpecker**, native to the eastern U.S., prefers open forests and can be found in orchards and suburban areas.

### FUN FACT

The **red-headed woodpecker** can catch flying insects midair, as well as hammer them out of decaying wood.



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## American Robin

(*Turdus migratorius*)

### DESCRIPTION

- Other names: robin redbreast, robin
- Widely distributed member of the thrush family
- Length: 10 inches; wingspan: 17 inches
- Males and females: brown backs and heads; reddish-orange breast (see photo)
- Females: coloration is more muted

### HABITAT

The **American robin** is native to the U.S. While most frequently seen on grassy, suburban lawns, it uses diverse habitats across North America from Alaska to Mexico to Maine.

### FUN FACT

“Robin’s egg blue” is a color named for the blue color of the **American robin’s** eggs.

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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.

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Birds

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# Fish



Fish are a very large and diverse group of aquatic (live in water) animals found all around the world. They are cold-blooded, meaning they do not maintain a constant internal body temperature like mammals and birds do. Most have fins for movement, gills for breathing, and scales covering their bodies, but there are exceptions.

The variety among fish is spectacular. The smallest fish in the world are less than 1 inch long and the biggest (whale sharks) can reach 33 feet in length. Not all are shaped like fish. Some are shaped like tiny horses (seahorse), pancakes (flounder), snakes (eels), and cubes (boxfish). They can be any color of the rainbow, and some can even change their colors. This guide describes a few of the fish found in freshwater ponds, streams, and lakes in Mississippi. Have you seen any of these cool critters?



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## Largemouth Bass

(*Micropterus salmoides*)

### DESCRIPTION

- Average length: 12-16 inches
- Average weight: 1-3 pounds
- Olive-green to gray-green
- May have dark blotches along each side that form a dark, jagged line
- Large mouth with a jaw that extends beyond the eye
- Dorsal fin has two separate or nearly separate fins

### HABITAT

**Largemouth bass** live in many different habitats that range from farm ponds to rivers. They gather around cover such as submerged rocks, aquatic vegetation, and woody debris.

### FUN FACT

While the **largemouth bass** is native to the eastern United States, this species has been stocked successfully across the U.S. and in other countries such as Japan.



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## Bluegill

(*Lepomis macrochirus*)

### DESCRIPTION

- Other names: bream, brim
- Average length: 6-8 inches
- Average weight: 8-10 ounces
- Dark blue-black to blue-green
- Oval body shape with dark vertical bars running down each side
- Distinctive dark spot at the base of the soft dorsal fin

### HABITAT

**Bluegill** live in freshwater ecosystems such as farm ponds, lakes, slow-moving streams, and even brackish (slightly salty) waters. These fish prefer to be around cover such as woody debris, submerged rocks, and vegetation.

### FUN FACT

**Bluegill** can live as long as 10 years in the wild.



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## Green Sunfish

(*Lepomis cyanellus*)

### DESCRIPTION

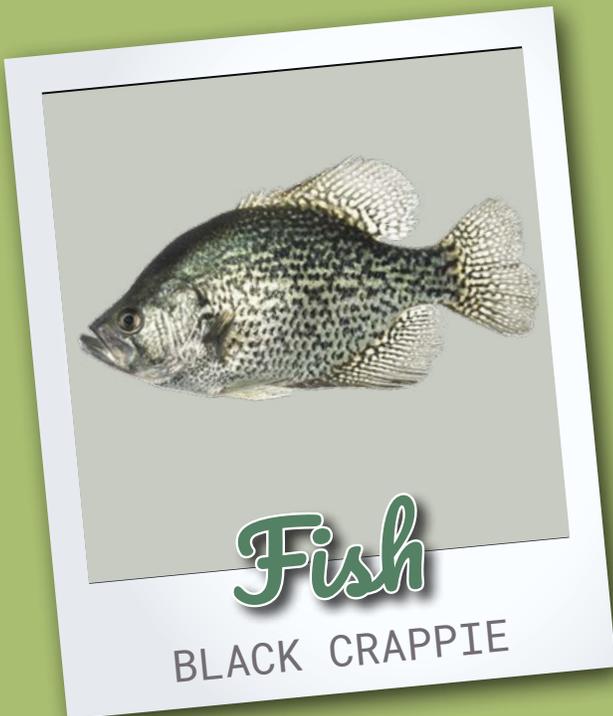
- Other names: bream, brim
- Average length: 4-8 inches
- Average weight: 4-8 ounces
- Overall green-toned body
- Large mouth for sunfish
- Yellow color on the edge of each fin

### HABITAT

**Green sunfish** live in farm ponds and lakes as well as streams, rivers, and creeks. This species can tolerate poor water conditions, which allows them to live in many places. These fish like to hang around submerged logs and plants but will also spend time near gravel or sand.

### FUN FACT

**Green sunfish** can lay up to 50,000 eggs in one spawning (breeding) season.



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## Black Crappie

(*Pomoxis nigromaculatus*)

### DESCRIPTION

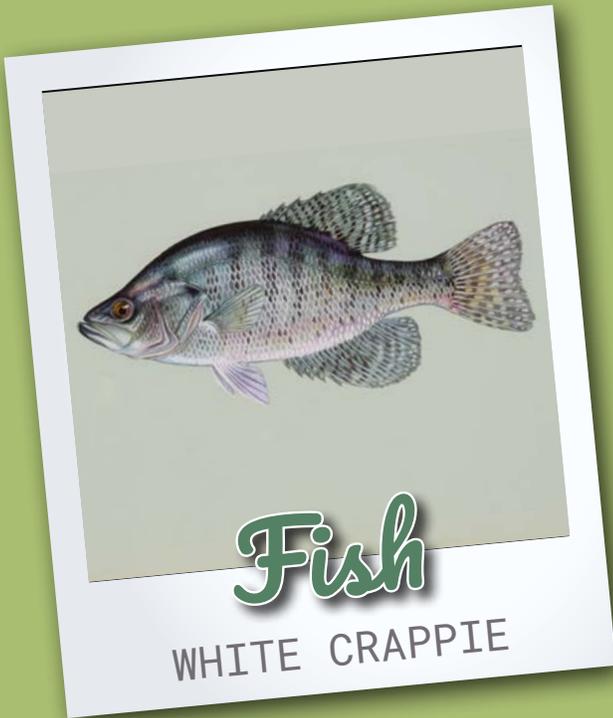
- Other names: calico bass, speck, slab
- Average length: 8-12 inches
- Average weight: 8 ounces-1 pound
- Silver or dark gray
- Deeper body than the white crappie
- 7-8 dorsal spines

### HABITAT

**Black crappie** like to inhabit shallow-water lakes and sloughs. They tend to spend time where there is clear water. Aquatic vegetation in these waters provides ambush opportunities for black crappie to catch minnows, insects, and insect larvae.

### FUN FACT

Mississippi has a strain called the **black-nose crappie**, which has a distinct black line running between its eyes.



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## White Crappie

(*Pomoxis annularis*)

### DESCRIPTION

- Other names: crappie, white perch, papermouth
- Average length: 8–12 inches
- Average weight: 8 ounces–1 pound
- White to silver color
- Gray-black vertical stripes along each side of the body
- The dorsal (top) and anal (bottom) fins each have 5–6 spines

### HABITAT

**White crappie** like to live in rivers and reservoirs but will enter small streams. In the springtime, **white crappie** will gather into schools, or groups, of fish around aquatic vegetation, woody debris, and other submerged cover.

### FUN FACT

Crappie's scientific name, *Pomoxis*, is Greek and means "sharp cover." This refers to its spiny gill covers.



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## Channel Catfish

(*Ictalurus punctatus*)

### DESCRIPTION

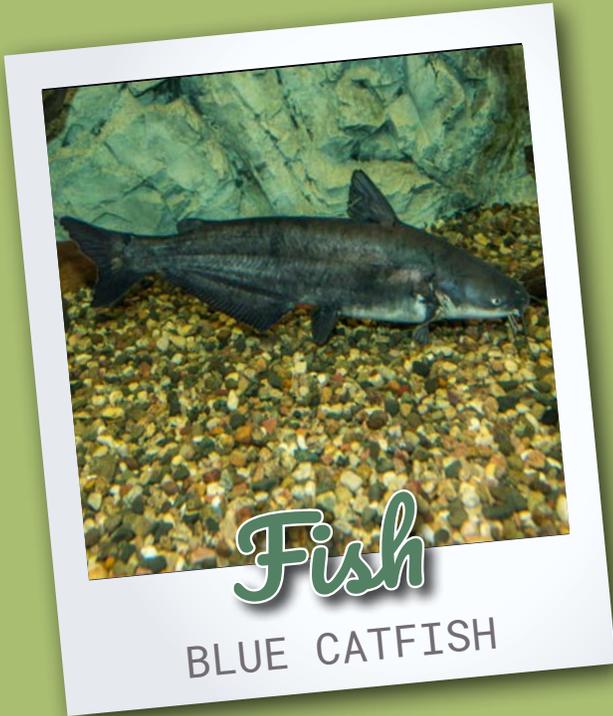
- Other names: fiddler, spotted catfish
- Average length: 12–24 inches
- Average weight: 1–5 pounds
- Gray to silver body; young have black spots along their sides
- Long whiskers around the mouth
- Anal fin with a rounded edge

### HABITAT

**Channel catfish** inhabit farm ponds, reservoirs, streams, and large rivers across the eastern United States.

### FUN FACT

Catfish are cavity-nesting species. They like to find crevices, hollows, or other debris where they can build their nests. This behavior in the catfish family has led to the sport of noodling or hand-grabbing.



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## Blue Catfish

(*Ictalurus furcatus*)

### DESCRIPTION

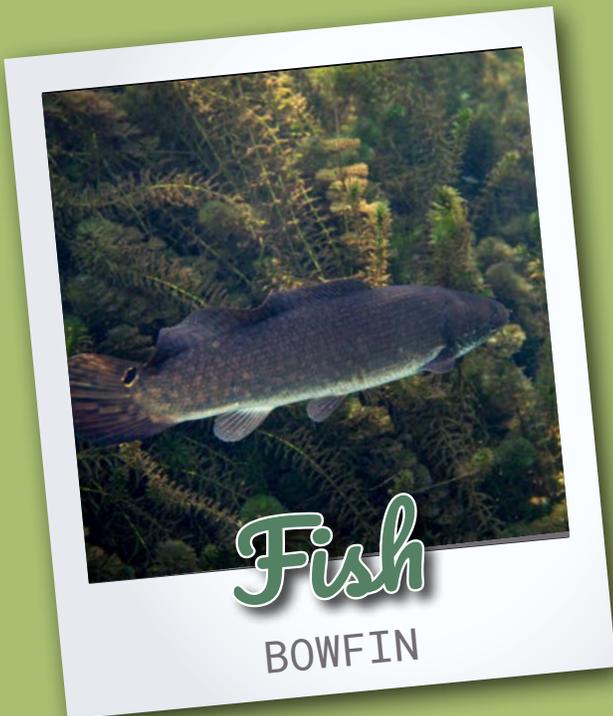
- Average length: 12–30 inches
- Average weight: 1–10 pounds
- Silver-gray to blue; light-colored underbelly
- Long whiskers around the mouth
- Anal fin with a straight edge (like a comb)

### HABITAT

**Blue catfish** can survive in many habitats, but they prefer open waters such as large reservoirs, backwaters, main channels of rivers, and floodplain lakes.

### FUN FACT

Like many other members of the catfish family, **blue catfish** have whiskers, or special structures around their mouths, that help them find food along the bottom.



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## Bowfin

(*Amia calva*)

### DESCRIPTION

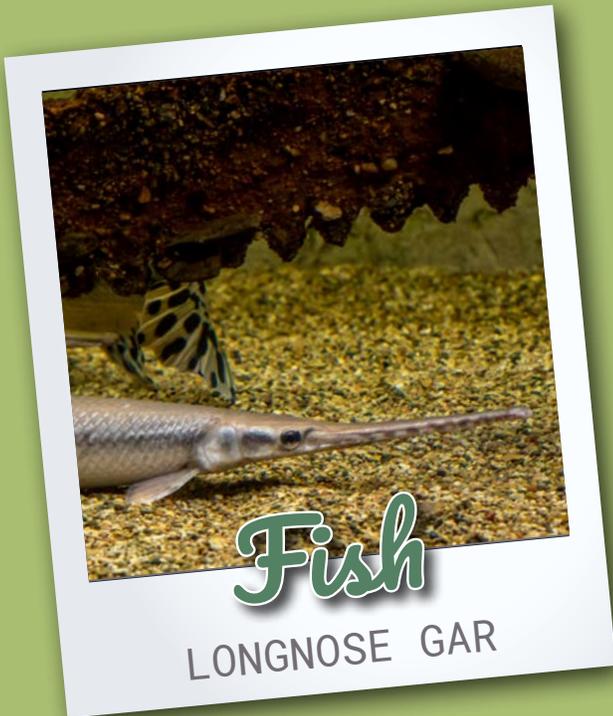
- Other name: dogfish, mudfish
- Body size: 10–25 inches
- Weight: 1–5 pounds
- Olive, dark green, or brown
- Bony head with very sharp teeth
- Eyespot on the tails of adults

### HABITAT

**Bowfin** live in habitats that range from backwater creeks to farm ponds. This species hangs around underwater cover including logs, grass, and rocks where they can ambush prey.

### FUN FACT

The **bowfin** is an obligate air breather. This means they get their oxygen from the atmosphere rather than the water. This allows them to survive in water that has low oxygen.



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## Longnose Gar

(*Lepisosteus osseus*)

### DESCRIPTION

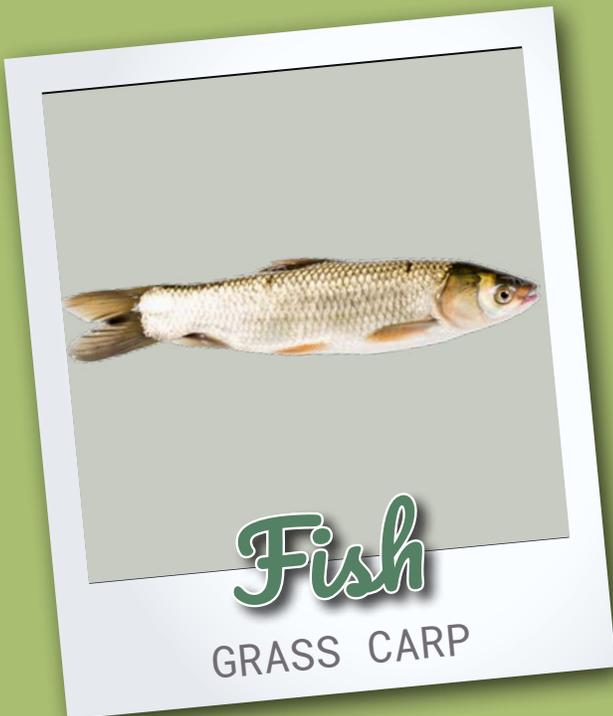
- Other names: longnose garpike, bonypike, needle-nosed gar
- Average length: 2–3 feet
- Average weight: 1–10 pounds
- Olive-brown to green with a light underbelly
- Spots on the dorsal, anal, and tail fins
- Long, thin snout

### HABITAT

The **longnose gar** lives in areas such as rivers, streams, reservoirs, bayous, and estuaries. This species likes slow-moving water and will come up to the surface to breathe air.

### FUN FACT

The **longnose gar** and its relatives (spotted gar, shortnose gar, alligator gar) have extremely tough scales that act like a suit of armor.



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## Grass Carp

(*Ctenopharyngodon idella*)

### DESCRIPTION

- Other names: white amur, carp
- Average length: 2–3 feet
- Average weight: 5–20 pounds
- Gold to olive-brown body
- Large fins with rounded head

### HABITAT

The **grass carp** is an introduced species that inhabits rivers, ponds, and other murky bodies of water. Since this fish feeds on vegetation, it is common to see it in very shallow water where plants can grow.

### FUN FACT

Although this can be an invasive species, the ability of **grass carp** to eat aquatic vegetation can be useful. In these cases, a type of **grass carp** that cannot reproduce is released.



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# Mosquitofish

(*Gambusia affinis*)

## DESCRIPTION

- Other names: Gambusia
- Average size: 1-2 inches
- Average weight: 1 ounce
- Gray to brown body
- Flattened head with a rounded tail
- Upward-facing mouth

## HABITAT

**Mosquitofish** like shallow waters and can live in places other fish will not. In larger bodies of water, they will congregate in areas that are sheltered from predators.

## FUN FACT

This species is named after the food it eats.

**Mosquitofish** have been introduced in many places to eat larval (baby) mosquitos and help combat mosquito problems.

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# Fish

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