



### A MINI FIELD GUIDE TO 10 GREAT SNAKES

# Speckled Kingsnake



When threatened, this beautifully patterned, medium-to-large constrictor will vibrate its smooth tail like a rattlesnake.

**Habitat and Food:** Common on rocky, wooded hillsides or near farm buildings statewide. Secretive, it takes shelter under rocks, logs, boards, and in small critters' burrows. It eats mice, lizards, and other snakes, including venomous copperheads, cottonmouths, and rattlesnakes.

This snake is immune to Missouri's venomous snakes. When handled, it may try to bite and smear stinky musk on its attacker.

rattles against each other. Some nonvenomous snakes will also vibrate their tails if alarmed. But don't take chances. If you see or hear the rattling tail, back away as fast as you can. Third, if you encounter a dark, coiled snake with its white mouth wide open, stay away! It's a cottonmouth.



Many snakebites occur when people try to catch or kill a snake. Only three snakebite deaths have been recorded in Missouri.

### Shy, Sensitive Types

Snakes will strike if cornered or surprised, but they will avoid humans and other predators if they can. They prefer out-of-the-way places where they can hide and stalk prey. Snakes are also sensitive to things that hurt them, like mistreatment, pollution, pesticides, disease, and busy roads. Here are two simple ways to help Missouri's snakes.

**Don't collect snakes for pets.** They take a lot of special care, and they often die in captivity. Leaving snakes in the wild ensures all Missouri kids will have cool snakes to see.

**Learn to live with snakes in your yard.** Snakes don't ask for much. A small pile of brush, a few stones, a bit of garden wall away from your house is all they need. In return, they will keep rodents, bugs, and, in some cases, other snakes from eating your garden or invading your basement or attic.

### Spot 'em, Snap 'em, and Leave 'em be

Missouri has 43 kinds of snakes. They should not be collected or hunted. That's partly

because too many people have killed them or taken them to keep or sell as pets. Mistreatment and poaching leaves very few wild snakes to keep their kind alive and thriving on Missouri's landscape. The best way to enjoy Missouri's wild snakes is to spot them and snap their photos. This way, nobody gets hurt, and the snakes stay where they belong.

The best time of day to spot snakes is morning or early evening when the temperature is between 60 and 85 degrees. Look for them around brush piles, rock piles, and along streams.

### Approach with caution!

Most of Missouri's snakes are harmless to humans, but a few have fangs and venom that can hurt you. Missouri's copperhead, cottonmouth, western pygmy rattlesnake, massasauga rattlesnake, and timber

### Snake Kyes

How do you tell the difference

rattlesnake all are venomous.

between Missouri's venomous snakes and nonvenomous snakes? Look into their eyes (but not too close!). The pupils of a venomous snake's eyes are vertical slits. The pupils of nonvenomous snakes' eyes are round. Second, check the tail. All rattlesnakes' tails end with loosely attached hollow segments called rattles. When a rattlesnake is alarmed, it will vibrate its tail, shaking the

Vestern Ratsnake



Often called the "black snake," the western ratsnake is one of our state's largest and most familiar snakes. Generally shiny black, but some will show dark-brown blotches. The skin between the scales along the sides may be red.

**Habitat and Food:** Common statewide on rocky, wooded hillsides and wooded areas along streams and rivers. They take shelter in brush piles, hollow trees, farm buildings, and old houses where mice are plenty. These constrictors eat a variety of rodents, bats, and small birds. They are excellent climbers and often climb trees to raid bird nests.



This snake can grow to be 6 feet long and live up to 25 years.

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### **How do Snakes Survive?**

A snake is basically a muscular tube with a mouth on one end and a vent on the other. No arms, legs, paws, or claws. Yet snakes have been around since dinosaurs roamed the Earth. How do they survive?

**Loco Motion** Snakes can travel across land, through water, and even up trees! Scientists have identified five different ways snakes move (and all those ways have long, twisty names). Some snakes specialize in one kind of locomotion, and most snakes can use most or all five kinds of movement if needed. Finely tuned locomotion is a successful way of finding prey and mates — and avoiding predators!



Hiding in Plain Sight and Signaling Danger Snakes come in an amazing variety of patterns and colors. Skin with a mottled pattern can help a snake hide in leaves or among rocks, making it easy to avoid detection and ambush prey. Bright colors and bold patterns can also signal danger, telling potential attackers to "back off!"

**Mighty Mouth** A snake's unique forked tongue is actually a scent collector. When a snake flicks its sticky tongue, odor particles cling to it. Then the snake inserts its tongue into a nasal cavity inside the top of its head, where it senses the odor. If something smells like food or a mate, the snake moves toward it.





Full-grown, this little snake seldom exceeds 14 inches. But, like some of its larger cousins, it uses mimicry to bluff its predators. Its belly ranges from yellow to red with black speckles. When threatened, it will flip over, curl its tail into an alarming red corkscrew, and hide its head under its coils.

**Habitat and Food:** Dry, rocky areas in prairies, woods, and pastures. There they find prey — primarily earthworms, but also slugs, softbodied insects, and small salamanders.

This snake has backward-pointing fangs that inject a venomlike substance into its small prey animals, but its mouth is too small to bite people.

## orthern Watersnake

Missouri's most common kind of watersnake is found statewide. Because it's large, dark, and lives along lakes, swamps, and streams, it is often mistaken for the venomous western cottonmouth.

Habitat and Food: In warm weather, they bask on branches, logs, or rocks along the water's edge in and near creeks, rivers, ponds, lakes, and swamps. They eat fish, frogs, tadpoles, toads, and salamanders.

This snake is nonvenomous, but it will bite viciously if captured and ooze a stinky musk from glands near the base of its tail.

Another mouth marvel that aids snakes' survival is super-flexible jaws. A snake can open its jaws wide enough to take prey much larger than its own diameter.

Snakes have three ways of subduing prey. Venomous snakes deliver a deadly bite. Some nonvenomous snakes overpower their prey and start swallowing it alive. Nonvenomous constricting snakes, like western ratsnakes, catch and hold their prey in heavy coils. Once prey is inside a snake's expandable jaws, its backward pointing teeth keep the animal headed into the serpent's stomach.

Venomous snakes conserve their ammo. About ¼ of their bites are "dry" because they'd rather scare you away than waste precious venom.

**Body Bluffing** Some of snakes' sneakiest adaptations are behaviors in which they pretend to be something they're not.

The harmless eastern hog-nosed snake can fake being a big, bad cobra, complete with a spreading neck and threatening hiss. If that bluff doesn't work, the hog-nose can fake its own death. It flips over on its back, mouth open, twisting and thrashing, and then it lies

limp. Leave it alone a few minutes, and it will raise its head and slither away.

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# **Eastern Yellow-Bellied Race**



This long, slim nonvenomous snake acts like part rattlesnake and part lightning. When approached, it shakes its pointed tail to rattle the leaves, then it streaks off through the woods before you can say, "What the heck was that?!"

Habitat and Food: Prairies, woods, and old fields where they can shelter under rocks and mammal burrows. They feed on frogs, lizards, small snakes, small rodents, birds, and insects. They use their speed and agility to overtake prey as well as to escape their own predators.

> Racers have large eyes, keen eyesight, and the ability to lift their heads and 'periscope" their surroundings.

### Eastern Gartersna



Generally 18-26 inches long, the shy eastern gartnersnake has three yellow stripes - one along its back and two on either side. The redsided gartersnake is found in the western half of the state, and it has red or orange skin that shows along its sides.

**Habitat and Food:** Found in a variety of habitats statewide. They favor areas near water and take shelter under boards, rocks, and brush piles. They eat frogs, tadpoles, salamanders, earthworms, small mice, and other kinds of small snakes.

> Like many kinds of harmless snakes, gartersnakes will bite. They will also smear foul-smelling musk on attackers.



Their copper-colored camouflage pattern helps them hide in dead leaves, and they will usually remain motionless when encountered. They're not aggressive, and they seldom strike unless provoked. Young copperheads are born live and use their yellow tail as a lure to attract small frogs or lizards.

**Habitat and Food:** Rocky hillsides and stream beds, forest edges, and abandoned farm buildings. They feed on mice, lizards, frogs, small birds, insects, and sometimes small snakes.

Missouri's most common venomous snake also has the least-toxic venom. To avoid its bite, look where you step, wear sturdy shoes, and don't stick your hands under rocks or logs.

### Rough Greensnake



This long, slender snake occurs throughout the southern two-thirds of the state, but it often goes unseen. With its bright green color, it blends perfectly with its leafy surroundings.

**Habitat and Food:** The leaves of bushes, vines, and low-hanging branches above streams and lakes. It preys on spiders and insects, especially grasshoppers, crickets, and smooth caterpillars.

This mild-mannered snake seldom bites and often freezes when approached.

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### Also known as the puff adder, this snake is

Also known as the puff adder, this snake is harmless to humans. It has a heavy body and an upturned snout. It can bluff predators like mammals and birds of prey with a display of neck-spreading and hissing or agonized thrashing and playing dead.

**Habitat and Food:** Sandy or loose soils in floodplains, old fields, open woods, and rocky hillsides statewide. They feed chiefly on toads, but will take frogs and salamanders.

The hog-nosed snake comes in a variety of colors and patterns, often resembling a venomous snake.

### **Eastern Milksnake**



Like the hog-nosed snake, milksnakes mimic venomous snakes to scare off predators. The red-marked milksnake is actually a constrictor that looks like a deadly coral snake, which doesn't occur in Missouri.

**Habitat and Food:** Milksnakes don't drink milk, but they may hang out in barns, where they hunt for mice. Secretive and seldom-seen, milksnakes live among rocks and forest edges.

Milksnakes are part of the kingsnake family, which have the ability to eat other snakes, even the occasional venomous snake.