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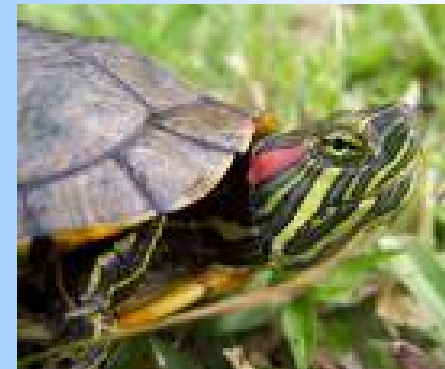
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Pocket Field Guide - Landscaping for Wildlife: Reptiles & Amphibians



Red-eared Slider Turtle

Frogs, Toads, and Other Creepy Critters

Amphibians and reptiles, though not everyone's favorite creatures, are important contributors to the good health of the environment and your garden. Both play crucial roles in the ecosystem, and the health of their populations is a good indicator of the health of the environment.

Amphibians and reptiles are important to your garden for the role they play in keeping pest populations under control. The majority of reptiles and amphibians are carnivorous, preying on rodents or insects, though some, such as turtles, also eat vegetable matter.

Amphibians and reptiles are important in controlling populations of slugs, rodents, and insects. Garter snakes are one of the major predators on slugs. One toad can eat well over 1,000 earwigs in a summer.







Frogs often eat crickets.

Amphibians and reptiles are cold-blooded. This means that unlike humans, who produce heat internally, amphibians and reptiles derive heat from outside their body. To control their body temperature they must move to a cooler or warmer location. If they wanted to warm up, they might move to a stone or log in the sun, which is why you often see turtles basking on logs. To cool down on a very hot day, they would move to a shady location, which is why you can find salamanders hiding under logs, where it is cool and damp.

You can tell the difference between amphibians and reptiles by their skin and the presence or absence of claws. Reptiles, such as snakes, turtles, lizards and crocodiles, have scaly skin and their toes have claws on them. Amphibians, on the other hand, have moist, glandular skin and their toes lack claws. Salamanders, toads, and frogs are all amphibians.

To distinguish a toad from a frog you need to check their skin and how they live. Frogs have smooth skin and live in water or in wet places. Toads have tough, lumpy skin and live mainly on land.

	
Tiger Salamander	American Toad
	
Eastern Narrow-mouthed Toad	Fowler's Toad



To order a copy on disk of our "Homeowner's Guidebook of Native Plants, Integrated Pest Management, and Pollution Prevention", please contact:

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Black Mountain Salamander	Long-tailed Salamander
	
Mudpuppy Salamander	Northern Dusky Salamander
	
Red Salamander	Slimy Salamander
	
Smallmouth Salamander	Spotted Dusky Salamander

Amphibians and reptiles are disappearing from many areas where they were once abundant due to threats, such as pollution, an increase in ultraviolet (UV) levels from thinning of the ozone layer, introduced species, the pet trade, and habitat loss.

Amphibians are particularly sensitive to chemical pollutants for several reasons. Because of their permeable skin, which they use to help them breathe, amphibians are vulnerable to pollutants in the water.



Some frog deformities are linked to over-use of pesticides.

Their skin acts like a sponge, soaking up all the pollutants. Handling amphibians with sunscreen, insect repellent, or other chemicals on your hands can also be hazardous to their health. The eggs of certain amphibians, due to their lack of protective shells, are also affected by increases in UV levels. This may help explain why amphibians are disappearing even in some remote areas.









Introduced species can cause havoc to native reptile and amphibian populations. When certain game and bait fish are added to previously fishless lakes and wetlands, they can have devastating effects, as can the introduction of bullfrogs to previously unpopulated areas. Introduced species affect native species directly, through predation (the introduced species eats them up), and also indirectly, by competing for limited food or altering the habitat.

The major threat to amphibians and reptiles, however, is habitat loss. With rapidly expanding urbanization, their habitat is quickly disappearing. More than 80 percent of Canada's urban wetlands have been destroyed. Although the focus of recovery efforts tends to be on restoring large wetlands, by creating amphibian- and reptile-friendly habitat in your backyard, including small ponds and temporary wetlands important to many amphibians, you can help to alleviate this problem.

- ◆ Amphibians require moisture, so building a pond is the best way to invite them to make your backyard home.

- ◆ Ensure that your pond does not have steep edges so amphibians and reptiles can get out, or provide logs to allow them to do so.
 - ◆ Remember that some frogs overwinter under water and so require a permanent pond with a depth of at least 2 yards.
 - ◆ Toads overwinter on land and only require shallow, temporary ponds (or the shallow areas of larger ponds) for breeding.
 - ◆ Plant some emergent vegetation, native to your area, around the edges of your pond to provide cover for frogs and toads. Check out local wetlands for ideas on what types of vegetation you should plant.
 - ◆ If you live on a shoreline, remember that aquatic and shoreline plants are important to reptiles and amphibians for nesting, food, and shelter. Plants also support the insects that are important in their diet. Logs, rocks, and other natural shoreline features are used for shelter and nesting and as basking sites. So maintain or restore natural shoreline areas.
 - ◆ Reptiles like a warm, sunny environment, with lots of places to hide. Provide some rock piles and logs around the pond and garden to offer them shelter and protection from predators. Put some of the rock piles in sunny areas to provide a place for basking in the sun.
 - ◆ Allow some areas of your garden to go a bit wild, providing damp and shady areas for reptiles to cool off in the hot summer months.
 - ◆ Create a toad abode to shelter toads and place it in a cool, shady part of your garden.
- Build a snake den** for hibernating snakes so they can overwinter in comfort. Snakes often return to the same hibernation site year after year. Protect existing hibernation sites. Rocky outcrops, talus slopes, or rock crevices that allow snakes access to shelter below the frost line are all great sites.
- ◆ Do not purchase or move frogs or toads to your backyard, as they will often die. When you have provided all that a frog or toad could want, be patient and they will come to you.


	
Northern Spring Peeper	Pickeral Frog
	
Southern Leopard Frog	Upland Chorus Frog
	
Wood Frog	Eastern Newt
	
Three-toed Amphiuma	Lesser Siren

	
Eastern Spadefoot	Gray Tree Frog
	
Green Frog	Green Tree Frog
	
Mountain Chorus Frog	Northern Crawfish Frog
	
Northern Cricket Frog	Northern Leopard Frog

- ◆ Dense foliage close to the ground provides cover for amphibians and reptiles.
- ◆ Piles of leaves provide winter cover for some frogs and salamanders.
- ◆ Prevent the death of amphibians and reptiles in window wells by placing a log that allows them escape.
- ◆ Avoid the use of pesticides.

[Pocket Field Guide to Kentucky's Backyard Wildlife](#)
[General Reptiles](#)

	
Eastern Slender Glass Lizard	Northern Fence Lizard
	
Six-lined Racerunner Lizard	Broadhead Skink
	
Coal Skink	Five-lined Skink

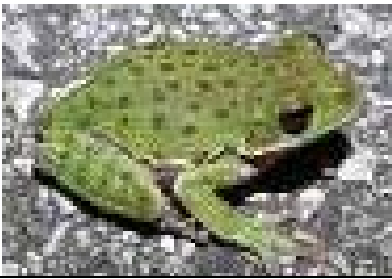



	
Ground Skink	Southeastern Five-lined Skink
	
Alligator Snapping Turtle	Common Map Turtle
	
Common Musk Turtle	Common Snapping Turtle
	
Eastern Box Turtle	Eastern Mud Turtle

Before deciding to kill a snake in your yard or garden, consider the many benefits of snakes. Snakes are one of nature's most efficient mousetraps, killing and eating a variety of rodent pests. Although snakes will not eliminate pests, they do help keep their numbers in check. Some harmless snakes (king snakes, milk snakes, and black racers) eat other snakes, including poisonous ones.

Amphibians

Why are amphibians important to a wildlife habitat? Amphibians are very sensitive to environmental conditions. They lay their eggs in water, but the adults spend their lives on land, breathing with lungs. A backyard habitat that has a good amphibian population is a well-balanced ecology.

Pocket Field Guide to Kentucky's Backyard Wildlife Amphibians

	
Barking Tree Frog	Bird-voiced Tree Frog
	
Bullfrog	Cope's Gray Tree Frog

	
Scarlet Kingsnake	Smooth Earth Snake
	
Southeastern Crowned Snake	Timber Rattlesnake
	
Western Cottonmouth	Western Mud Snake
	
Western Pygmy Rattlesnake	Western Ribbon Snake

	
Eastern Spring Soft-shelled Turtle	False Map Turtle
	
Midland Smooth Soft-shelled Turtle	Mississippi Map Turtle
	
Ouachita Map Turtle	Painted Turtle, (bottom side)
	
Red-eared Slider Turtle	River Cooter Turtle



Southern Painted Turtle



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Snakes

Snakes are perhaps the most feared and hated animals in Kentucky. These irrational feelings toward snakes are caused by a lack of understanding and the superstitions handed down from one generation to another. Most people shudder at the very thought of a snake because they do not understand the unknown. Snakes are not mysterious at all, and their colorful, fascinating life histories don't justify the anxiety many people feel about them.

Of the snake species found in Kentucky, only four are poisonous. These are the Copperhead, Western Cottonmouth (water moccasin), Timber Rattlesnake, and Pygmy Rattlesnake. While venomous snakes should be respected and approached with caution, most snakes a homeowner encounters in an urban environment are harmless and beneficial because they eat mice and other rodents. Poisonous snakes are highlighted in pink, while snakes common to backyards in Kentucky are highlighted in yellow.

A snake regulates its body temperature by taking heat from or giving off heat to the environment. Because their body temperature is affected by environmental temperatures and varies with surrounding conditions, snakes become inactive during very hot seasons (aestivation) and very cold seasons (hibernation).

Snakes may go for several weeks without eating because of frequent periods of inactivity. Because they are cold-blooded, snakes must rely on behavior to regulate their body temperature. During the hot part of the day, snakes move to shaded areas, and on cool days they sun themselves on rocks or in warm open areas.

<p>Northern Scarlet Snake</p>	<p>Northern Water Snake</p>
<p>Plainbelly Water Snake</p>	<p>Prairie Kingsnake</p>
<p>Queen Snake</p>	<p>Racer Snake</p>
<p>Ring-necked Snake</p>	<p>Rough Green Snake</p>

	
Eastern Corn Snake	Eastern Garter Snake
	
Eastern Hognose Snake	Eastern Ribbon Snake
	
Kirtland's Snake	Milk Snake
	
Northern Pine Snake	Northern Redbelly Snake

Snakes often seek out paved roads where they are attracted by the heat from the road surface.

Snakes are very specialized animals. Contrary to popular belief, snakes are not slimy. In fact, they feel dry to the touch. The snake's scales and skin help keep it from losing moisture from its body.



Snakeskin

Snakes shed their skin and eye covering together. When threatened, many snakes produce a unique scent from musk glands located near the anus. Water snakes smell like skunks, while rat snakes and copperheads smell like cucumbers.

Soon after the temperatures rise during spring, snakes come out of hibernation and mate. Some snakes lay eggs in a damp, protected area where they will hatch in about two months. Other snakes hatch eggs inside the body. Copperheads, rattlesnakes, cottonmouths, garter snakes, and water snakes give birth to live young. If you find snake eggs around your home or garden, there is no cause for concern because they were laid by a harmless snake.

All snakes are predators, and many are very fussy eaters. Rat Snakes (common in Kentucky) eat rats, mice, and chipmunks. Water snakes feed primarily on dead, diseased, or injured fish. King snakes feed on other snakes, mice, young birds, and bird eggs. Some small snakes, like the rough green snake, eat insects, while others (earth snakes and worm snakes) eat earthworms, slugs, and salamanders. Toads are the favorite food of hognose snakes.

Snakes like to live in damp, dark, cool places where food is abundant. Likely places around homes to find snakes include:

- Firewood stacked directly on the ground.
- Old lumber or junk piles.
- Gardens and flower beds with heavy mulch.
- Untrimmed shrubs and shrubs growing next to a foundation.

- Unmowed and unkempt lawns, abandoned lots, and fields with tall vegetation.
- Pond and stream banks where there is abundant debris or trash.
- Cluttered basements and attics with a rodent, bird, or bat problem.
- Feed storage areas in barn hay lofts where rodents may be abundant.









The poisonous snakes in Kentucky have more specialized habitat requirements. Cottonmouths are confined to a few choice wetlands and swamps in western Kentucky. Cottonmouths may be common in swamps, but the number of swamps where they can be found is declining because these wetlands are being converted into agricultural fields.

Pygmy rattlesnakes are rare in Kentucky. These small snakes are sometimes encountered when they cross gravel roads in the evening. Their range is restricted almost entirely to the Land Between the Lakes region.

Timber rattlesnakes prefer sparsely populated forested areas where there are numerous rock outcroppings, rocky slopes, and boulders. At one time, timber rattlesnakes were common throughout Kentucky. Because humans have disturbed much of this snake's habitat, timber rattlesnakes are becoming uncommon throughout Kentucky and do not occur in the inner Bluegrass region. Killing a rattlesnake is now an unusual occurrence and is considered front-page news in local newspapers.

Copperheads are the most abundant venomous snakes found in Kentucky. They can be found throughout the commonwealth but are rare to absent in the inner Bluegrass Region. Copperheads prefer to live in hilly forested areas with rocky bluffs and ravines. They can also be found along wooded stream borders, old fields, and meadows where they search for rodents. Copperheads cause the majority of poisonous snake bites in Kentucky. Their bites are almost never fatal, and fewer than 10 percent of rattlesnake bites are lethal.

Pocket Field Guide to Kentucky's Backyard Wildlife Snakes

	
Black Kingsnake	Black Rat Snake
	
Broad-banded Water Snake	Brown Snake
	
Copperbelly Water Snake	Copperhead Snake
	
Diamondback Water Snake	Eastern Coachwhip Snake