



REPTILES & AMPHIBIANS



Activity #1: Create a brush pile for snakes

When you walk past a garter snake in your backyard, have no fear! They are not venomous and are actually important allies – in fact, they eat many of your garden pests from slugs to mice. Garter snakes are also one of the only snakes that have live births, as opposed to laying eggs. During the winter, they hibernate in large communities (sometimes hundreds of individuals) and snuggle close together to stay warm. Sometimes they travel long distances to find the perfect hibernaculum, or place to hibernate.

One of the most important things to do for garter snakes is to create a brush pile in a corner of the yard. It's easy: all that you need are a few logs, maybe a couple stumps, a bunch of twigs, a pile of small rocks, and anything else in your backyard that snakes would like to bask on or hide beneath. Remember that snakes prefer sunnier locations, so a very shaded site might not get lots of garter snakes. Brush piles are important habitat for lots of other critters, too, from toads and threatened box turtles (more on next page) to millipedes and rabbits. And if you want to get a little more sophisticated, you can plant native ferns and groundcovers around the area to entice more wildlife. If you search your brush pile on a summer day (though I advise you not to do this often, so that the animals are not disturbed), who knows what you might find there!



The Fascinating World of Backyard Turtles

Red-eared sliders (right) are one of the most commonly encountered turtles in the Eastern U.S. They hibernate at the mucky bottoms of ponds during the winter.



Since they can't swim up to the ice-covered surface of the pond to breathe, these turtles, for the duration of the winter, take in oxygen through blood vessels in their cloaca (which is essentially their butt!)

If you have enough space, you can support the turtles in your backyard by installing a wildlife pond (more on this later).

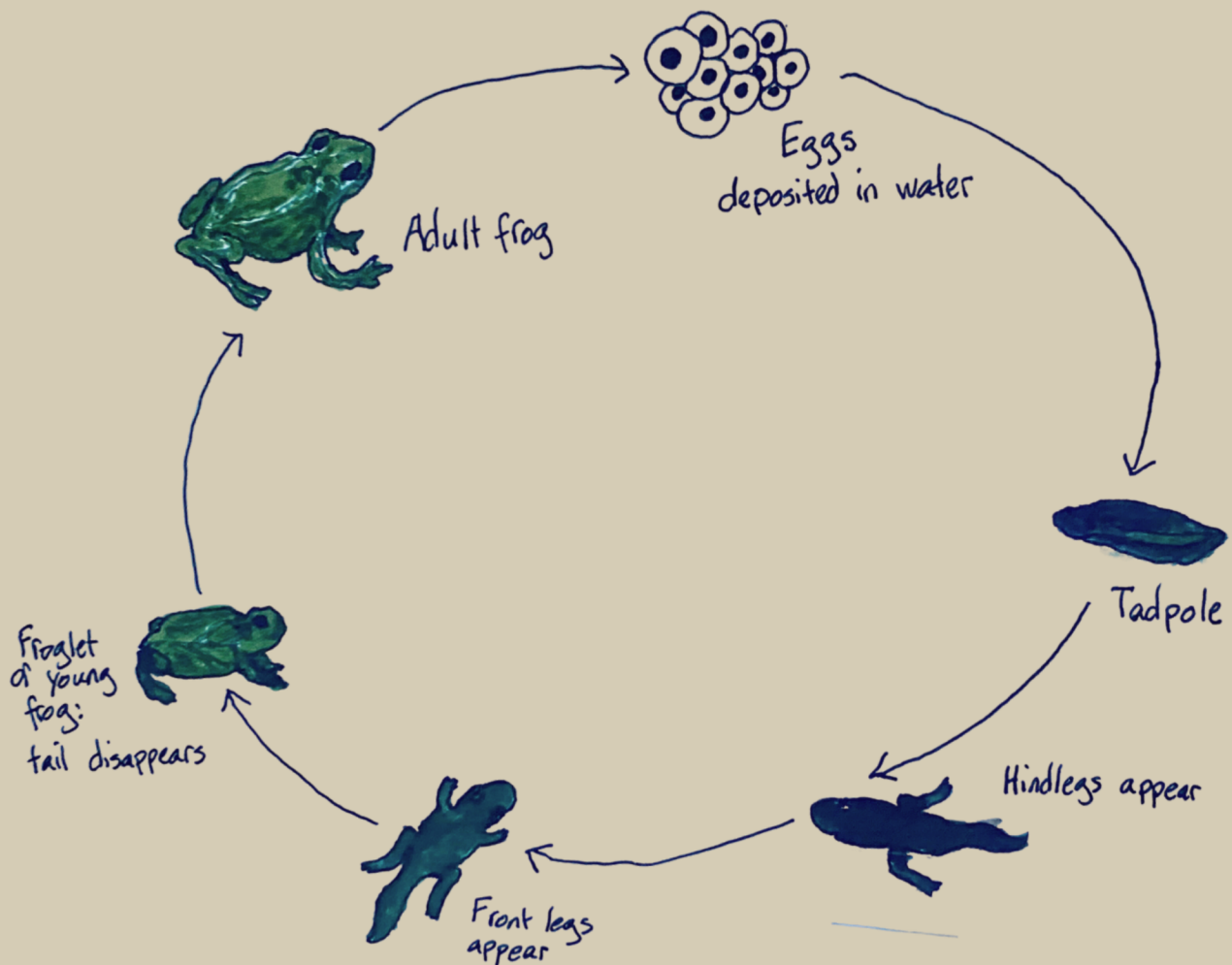
The Eastern box turtle is another important turtle species. It used to be very common but is now declining rapidly because of habitat fragmentation, road deaths, and nest predation. They are a largely terrestrial species, meaning that they don't like the water much.



Because of their unfortunate decline, it is very important to help them in your backyard. Leaving leaf litter and planting low-to-the-ground natives discussed on the last page can attract them, and so too can native shrubs with fruits they like.

It is also important to watch out for them on the road and to keep pets away if you find any nests.

The Life Cycle of a Frog

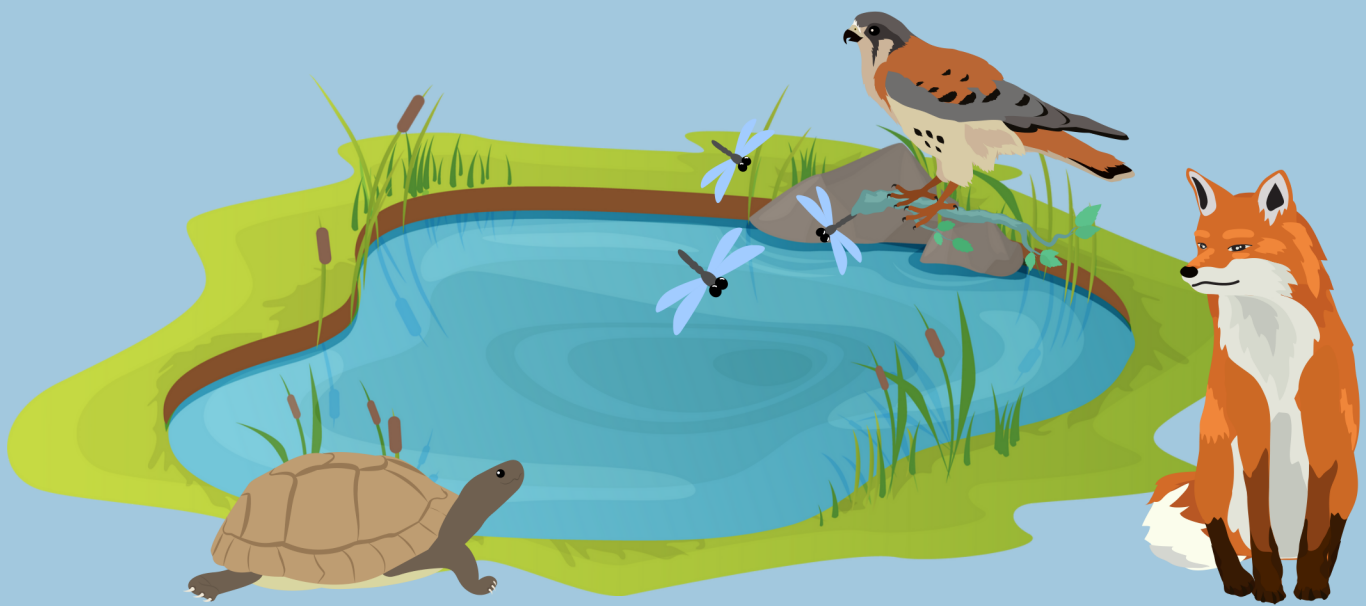


Frogs begin their lives as eggs, which are laid as a group in the water. A female frog can lay thousands of eggs at a time. Tadpoles hatch from the eggs. They are in the tadpole state for a few months, and as they grow, hind legs emerge. Soon after this, they gain front legs, and skin grows over their gills.

However, they are not quite frogs yet: they still have long tails. You might think that their tails just fall off, but they are actually absorbed into their bodies in a process known as apoptosis. Now the young frogs, or froglets, are ready to live on land. When they develop into adults, they will start eating insects instead of aquatic vegetation. You can provide a water source to attract them to your backyard (more information on this below).

Activity #2: Build a wildlife pond

Water is essential for all life on earth, and adding a water feature to your yard greatly increases biodiversity. It is best if you place your pond in a sunny area. Your pond only needs to be 6-12 inches deep. Place a pond liner at the bottom, cover in a layer of sand, and then fill it with water. About a week or two later after it is filled with water, you can introduce native plants to your pond.



If mosquitoes are taking over your pond, you can install a bubbler or mini-fountain or you can purchase and release damselfly or dragonfly nymphs, which eat mosquitoes. To prevent eutrophication, you can introduce tadpoles native to your area that eat algae. The more plants you add over time, the more likely it is for the natural cycle to flourish and for predators like dragonflies that eat harmful bugs to come back.

Turtles, toads, snakes, dragonflies, birds, bats, rabbits, foxes, and just about any animals will appreciate your water source, but it is especially helpful for amphibian and reptile visitors.

Where should I purchase...?

This is a list of places that sell the plants and other wildlife-friendly items for your backyard which have been discussed in all four guides.

Native plants:

Prairie Moon (<https://www.prairiemoon.com/>) and Prairie Nursery (<https://www.prairienursery.com/>) offer a great selection of native prairie plants, bare roots, and seeds as well as eco-friendly grass alternatives. American Meadows is a great place to get wildflower seeds. Monarch Watch Milkweed Market is one of the best online places to buy milkweed starts. If you live in Philadelphia too, or are in the area, Edge of the Woods, Bowman's Hill Wildflower Preserve, and Redbud Native Plant Nursery are great local plant nurseries.

Bird food:

Beezy World makes high quality suet feeders like this one (<https://beesyworld.com/products/suet-woodpecker-feeder>). In Philadelphia, the Schuylkill Center for Environmental Education (SCEE) offers great bird seed, suet cakes, and bird houses.

Nesting boxes and appliances:

Beezy World also makes high quality owl boxes such as this one (<https://beesyworld.com/products/professional-owl-house>). Best Nest offers many types of bat boxes (<https://www.bestnest.com/bestnest/bat-houses.asp>). Bat Conservation International (<https://www.batcon.org/bat-house-tips-tricks/>) has guidelines on how to make your own.

Pond items:

Tadpoles and damselfly larvae are available at carolina.com. There are many kinds of bubblers, including ones for bird baths or smaller ponds.