

natural question

by Greg and Lisa Miliatis

Q: What happens to amphibians - like toads, frogs, and salamanders - in the winter?

A. In the winter, ponds and streams are often covered with a thick layer of ice. Snow blankets the ground. How can salamanders, frogs, and toads survive these harsh conditions? Like most animals that live around Chicago, they have evolved amazing ways to survive winter. During summer, most amphibians stay cool under logs or along streambanks or ponds. But to survive the freezing temperatures of winter, salamanders, frogs, and toads must hibernate. During hibernation their heartbeat, breathing, and other body functions slow down a great deal. By doing this, amphibians don't need to find food or water, and can sleep until spring. Frogs, salamanders, and toads make a cozy spot to hibernate in rotting logs, a burrow of soft mud or soil, a pile of leaves, or even a pile of rocks someplace where the temperature stays above freezing (32 degrees Fahrenheit). Some amphibians even spend winter in ponds, beneath surface ice in the deeper water, where the temperature remains at about 39 degrees Fahrenheit. Incredibly, some amphibians even produce a kind of antifreeze that helps them survive extremely cold weather; in fact, some frogs appear to be frozen solid, but when warmed, will thaw and return to life. In late winter and early spring, amphibians awaken from hibernation and begin courtship, mating, and searching for food. Salamanders and their eggs and larvae can be found in ponds in March (if you don't mind wading in cold water!). Also be sure to listen for frogs calling out to each other in late winter and early spring it's a great sign that warm weather is on its way!

Winter Field Trip Activity

Pitter Patterns by Laura Selicaro


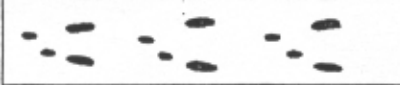

This activity works well on days with fresh, powdery snow and preferably in a wooded area.

Materials: 1 copy of track pattern card for each child (copy the graphic below). These could be laminated or put in plastic baggies with a string and worn around kids' necks.

What to Do:

1. Pass out the cards to all children. Go over each kind (straight walker, hopper, or waddler) and explain that they will be looking for these kinds of tracks. Discuss how to find tracks. Look for clues, such as food scraps, feathers, and location -- near water, close to burrows, etc.
2. Give 10-15 minutes of free exploration time to search for tracks after setting boundaries and a place to meet back.
3. When all kids are back, split them into small groups according to the type of patterns they found: hoppers, straight walkers, or waddlers. E.g. rabbits = hoppers. Discuss patterns they found, and have each group act out their type. Then have each group make up track stories including different types of tracks, and have other children guess what is happening. Where is the animal coming from; where is it going? Why? E.g. a coyote is chasing a squirrel.

Have fun and stay warm!

	STRAIGHT WALKER coyote, fox, deer
	HOPPER rabbit, squirrel, mouse
	WADDLER skunk, racoon, porcupine

