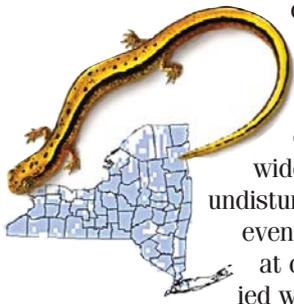




Lake, pond & stream
Salamanders
of New York State

Two-lined Salamander



Yellowish-tan in color, the two-lined salamander is easily recognized by the two, dark racing stripes along their sides and the orange shading under the tail. They occur along fast-flowing streams in a wide range of habitats, from remote, undisturbed forests to city parks. They have even been found in some cold water lakes at depths of more than 30 feet. Thin-bodied with small legs and long tails, these salamanders are sleek and speedy, capable of bursts of speed as they flip and run along the ground, diving into nearby streams to escape danger. Length: 2½ to 4½ inches.

Red-spotted Newt



One of New York's most familiar salamanders, the red-spotted newt is perhaps best recognized in its terrestrial juvenile red eft stage. However, this newt is primarily aquatic, with the olive green adults having a yellow belly and two rows of bright red spots along its back (hence, the name). The tail is prominently keeled in males, less so in females. Newts are commonly found in almost any relatively clean pond, lake, swamp, or slow-moving stream near forests. While the red dots warn predators of toxins in the skin that can cause severe sickness or death, snapping turtles, garter snakes, some birds, aquatic insects and fish will eat them. Length: 2½ to 5 inches.

Northern Dusky Salamander

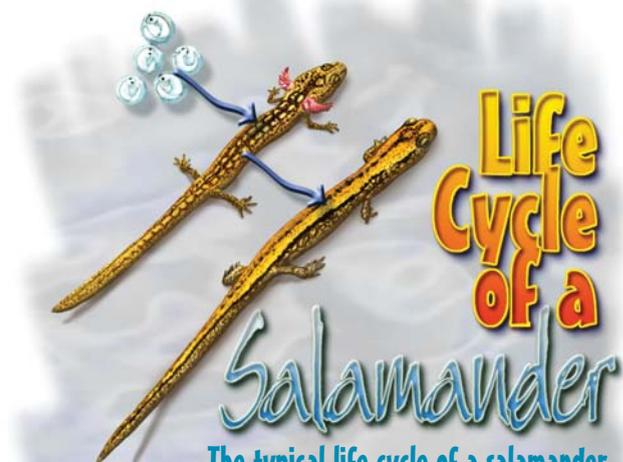


Northern dusky salamanders occur in a wide range of brown and gray color patterns. With a light-colored line from the eye to the back of the mouth and much larger hind legs than front legs, it is often confused with the mountain dusky salamander. However, the northern dusky can be distinguished from its cousin by the sharp keel found along the top of its tail. The larval stage spends two or three months in streams, and adults seldom travel far from a stream edge. Length: 2½ to 4½ inches.

Mountain Dusky Salamander



Though similar in color to the northern dusky salamander, the mountain dusky has a round tail. The larval stage metamorphoses into small juveniles that often have a red-orange stripe along the back and look similar to a small redback salamander. Adult mountain dusks are found along stream edges to well within the surrounding forest—most commonly along seeps or creeks. Although fairly tolerant of habitat disturbances by humans, the highest densities of dusky salamanders are found in larger forests with clean streams. Length: 2½ to 4 inches.



The typical life cycle of a salamander involves an aquatic stage followed by a terrestrial stage. However, some of our salamanders (such as the hellbender) never transform into a terrestrial form, and others lay eggs on land and skip the aquatic stage. For those salamander species with both stages, eggs are laid in water and hatch into gill-breathing larvae. This is similar to the tadpole stage of frogs, except that salamander hatchlings have four miniature legs, whereas tadpole hatchlings are legless. Larval salamanders eat small invertebrates, fish eggs, fish fry and even other salamander larvae. Depending on the species, the larval stage lasts from just a few weeks to six years. At that time, most species metamorphose, losing their external gills and modifying the skin for life on land.

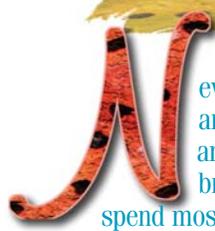
Note: Length of each salamander is given as total length measured from the end of the snout to the tip of the tail. However, since pieces of the tail are often lost to predators and the tail will regenerate, this measurement can vary greatly for otherwise similar sized animals.

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Art work by Jean Gawalt, Graphics & Layout by Frank Herec**

Maps based on New York Amphibian and Reptile Atlas data.
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Lake, & Pond, Stream

Salamanders of New York State



New York State is home to 18 species of salamanders, nine of which live in or along lakes, ponds, streams and rivers. Sometimes confused with lizards (which are reptiles and have scales), salamanders are amphibians with smooth, moist skin. Because salamanders rely on their moist skin for a portion of their breathing, most are rarely found far from water or a moist terrestrial habitat. On land, salamanders spend most of their time under a rock or log, or in a crevice or small mammal burrow. Thus, they are rarely seen.

Salamanders eat a variety of things, including small insects, spiders, worms, slugs, fish and frog eggs, and even other salamanders. In turn, salamanders are eaten by a number of larger predators, including fish, snakes, turtles, birds, and a variety of mammals such as raccoons, foxes, skunks and shrews. Many salamander species produce toxic or distasteful secretions that provide some protection from predators.

Eastern Hellbender—*Special Concern*



The eastern hellbender is the largest salamander in North America. In New York State, it only occurs in the Allegheny and Susquehanna River drainages. With a flattened body, short stout legs, and very small beady eyes, hellbenders are

well adapted to living under large flat rocks, stream banks or debris in swift flowing streams. Under the cover of darkness, they leave their shelters to prey on crayfish, worms, fish, or carrion. Although the larvae lose their external gills at about two years, hellbenders remain fully aquatic throughout their lives, never leaving the water. Adults may live 70 years, and reach sexual maturity at five to eight years old. Mistakenly thought to be venomous, hellbenders are sometimes killed by anglers that accidentally catch them. Length: 12 to 29 inches.

Common Mudpuppy



Found in cold and warm water streams, rivers and lakes, the mudpuppy is New York's only salamander to keep its external gills throughout its life. Like hellbenders, they are generally found under larger rocks and debris in shallow waters where they nest. Adults have light gray to dark brown backs with an irregular pattern of spots. Larval mudpuppies are distinctly patterned with a dark dorsal stripe bordered by yellow; a pattern that is lost at about age six. Often caught by ice anglers, mudpuppies are mistakenly believed to be venomous and a threat to game fish.

Length: 8 to 19 inches.

Red Salamander



Quite colorful, the red salamander is generally brilliant red to red-orange in color, with older adults becoming purple with dark mottling. Their smooth skin, stout legs, and sturdy keeled tail distinguish these lungless salamanders from the red eft stage of the red-spotted newt.

The aquatic larval stage of red salamanders spends over three years in streams. Adults live in forests with streams, and often spend several months a year in the water. This species is rarely found in disturbed areas. Length: 4 to 6 inches.

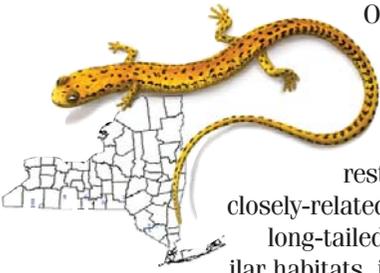
Spring Salamander



The spring salamander ranges in color from salmon pink to tan, getting darker with age. They can be distinguished from red salamanders by the light-colored line that runs from the eye to the nostril.

Living near and in springs and streams, their thick, keeled tails and short, strong legs are well suited for life in running water. They eat earthworms, insects and other salamanders. Length: 5 to 8 inches.

Long-tailed Salamander—*Special Concern*



One of New York's rarest salamanders, long-tailed salamanders are colorful and slender with a very long tail. Though more restricted in range than the closely-related two-lined salamander,

long-tailed salamanders occur in similar habitats, in and along streams and seeps with a high pH and bordered by hardwoods. Although occasionally found far from water in rich forest habitat, they must return to streams to breed. Length: 4 to 7 inches.