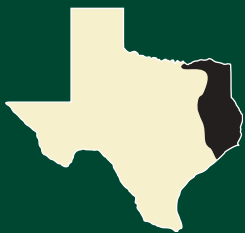


Marbled Salamander

Ambystoma opacum



PHOTO BY PAUL FREED



The marbled salamander is a lizard-like amphibian that is seldom seen by people. One reason is that they are *nocturnal* (active at night), and hide by day under vegetation and rotten logs. Like all amphibians, they require water to complete their life cycle, surviving dry times by burrowing deep into the soil.

Northern Pineywoods

Marbled Salamander

Ambystoma opacum



APPEARANCE

Length: 4 to 5 inches (10 to 12.7 cm) head and body

Distinguishing Characteristics

- Dark gray to black or even deep purple above with a gray belly
- Light silver to white markings on back
- Stocky body with short, broad head
- Relatively short tail for a salamander – tail 40% total length
- Short legs with four toes on forelegs and five toes on hind legs

LIFE HISTORY

Range: Eastern half of the United States and throughout East Texas from Red River south to the Gulf of Mexico

Diet: Earthworms and small insects; during the larval stages they feed on zooplankton, but as they grow, they gradually begin to feed on small insects (including mosquitoes), tadpoles and other larvae.

Predators: Snakes, raccoons, ducks and wading birds

Mating season: Throughout fall

Nests: Shallow, dry depressions in pond or stream banks

Eggs: 50 to 200 eggs

Incubation: Eggs hatch as soon as they are covered with water, but may delay until spring if rainfall is insufficient to cover them.

Young: Larvae are about 0.75 inch (2 cm) long when hatched and *metamorphose* (change from larvae to adult) in four to six months.

Life span: Four years

HABITAT

Marbled salamanders prefer *riparian areas* (land adjacent to water) or swampy areas with slow moving water. They can usually be found under rotting logs and other vegetation.

BEHAVIOR

Male marbled salamanders breed near water. They emerge during winter rains and enter shallow pools to deposit sperm packets. The females arrive later, pick up the packets and fertilize their eggs internally, storing them until it is time to lay their *clutch* (group of eggs). The females select a point between the shallowest and deepest area of the ponds. Then they lay their eggs one at a time in a shallow depression under vegetation, encircling the eggs until the depression fills with water from spring rains. This behavior is called *brooding* the eggs.

NOW YOU KNOW!

- Young are generally brown to black with light spots or mottling *dorsally* (on top) and *laterally* (on sides). Marbled salamanders darken as they mature.
- There are 24 salamander species in Texas.
- Salamanders are often mistaken for lizards, but they have smooth or warty skin instead of scales and have no claws on their feet.

MARBLED SALAMANDERS AND PEOPLE

Worldwide, many amphibian populations are declining or have disappeared completely. There are many possible causes for this decline—acid rain, herbicides, insecticides, fertilizers, industrial waste, habitat destruction, introduced species, bacteria, ozone depletion, and global warming. Although the exact cause or combination of causes for decline is still a mystery, scientists are working to discover how to save the marbled salamander and other amphibians. People can help by recognizing and conserving salamander habitat where possible and by supporting the study of local and global environmental change.