

Eastern Newt Care Guide



Background

Eastern newts are a great addition to a life science or biology classroom. As amphibians, they have three unique life stages that include an aquatic larval, a terrestrial juvenile (called an *eft*) and an adult (newt) stage, when they return to the water. The terrestrial efts range in color from reddish-brown to orange to bright crimson with red spots and black speckles. Adult newts are greenish-brown to yellowish-brown. Depending on region, there may be a row of red spots or incomplete stripes of bright red enclosed with black borders along either side of the body. The belly is lighter in color, often yellow to orange. The entire body is covered in black speckles.

The largest, most common eastern newt in the pet trade is *Notophthalmus viridescens viridescens*, also known as the red-spotted newt. This newt will grow to 14 cm in length. The broken-striped newt, *Notophthalmus viridescens dorsalis*, is the second most common newt in the pet trade and is significantly smaller, about 10 cm in length. These adults have stripes fused with the red spots. *Notophthalmus viridescens lousiananensis*, the central newt has very small spots of orange or red along the back or no spots. These reach about 12 cm in length. Finally, *Notophthalmus viridescens piaropicola*, the peninsula newt, is the darkest colored newt with no red spots. They range from greenish-brown to almost black. They are heavily speckled with black spots.

Eastern newts are widespread throughout the eastern half of North America. They extend from southern Canada to southern Texas and Florida and as far west as Kansas and Oklahoma. Adults live in slow moving bodies of water such as ponds, floodplains, creeks, swamps and marshes. They feed on small amphibians and their eggs, small fish, insects, crustaceans, worms and other small invertebrates.

Most newts are sold in pet stores as adults. This care guide is focused on the adult life stage, with minor reference to the eft life stage. Please research the eft stage if you are considering purchasing a newt of this age.

Safety Precautions

Always treat live organisms with respect and proper care. For student and eastern newt safety, handling should be minimal. Wash hands thoroughly before and after handling. Eastern newt skin contains substances that irritate or are toxic to other animals. Do not house with other salamanders or amphibians.

Habitat

Enclosure

1. Use a glass aquarium: 10 gallons for up to 3 adults, 20 gallons for 4–8 adults and 30 gallons for 10–12 adults.
2. Use a tight-fitting screen lid to prevent escape and provide ventilation.
3. The life stage of the newt determines the environment. Terrestrial efts (juveniles) require a damp terrarium with a large water dish. Aquatic newts (adults) require a water environment with a small land area to provide refuge from the water. A turtle bank is an excellent choice.
4. Heavily planted, live aquarium plants are ideal for adults.

Moisture

1. Newts are fully aquatic and require an aquarium setting. The aquarium should be $\frac{1}{2}$ to $\frac{2}{3}$ full and filtered with an aquatic filter.
2. Change the water once every week or two using chlorine- and chloramine-free water. A general rule is the more newts in an aquarium or the smaller the aquarium, the more frequent the water changes must occur. When performing a water change, remove a third of the water using a manual siphon being sure to agitate the rocks. Replace the water with bottled spring water or allow tap water to sit for 24 hours to remove most of the chlorine. Remove chloramine with a dechlorinator that is amphibian-safe.

Substrate

1. Cover the floor of the enclosure with aquarium gravel that is 2–3 inches deep to allow live plants to root successfully.
2. The substrate is cleaned during water changes.

Temperature and Lighting

1. Maintain the enclosure temperature between 65–70 °F, about room temperature. Avoid higher temperatures—newts are able to handle temperatures as low as 40–50 °F. Over-heating is more dangerous than under-heating.
2. Heat lamps are not necessary. A fluorescent light that does not emit heat is essential for live plants. Newts do not require UV lighting.

Nutrition and Feeding

1. Eastern newts should be fed every other day. The amount varies and is determined through observation. Determine the amount of food by growth and body conditions as well as the amount of excess food left in the tank. Remove excess food immediately in order to reduce toxin buildup.
2. Offer a variety of foods including diced earthworms, appropriately-sized crickets (the length of the cricket is similar in length to the distance between the newt's eyes), blackworms, tubifex worms, brine shrimp, bloodworms (live or freeze-dried) or beef hearts.
3. Feed gut-loaded insects—insects that are fed prior to being placed in the enclosure.
4. To ensure proper nutritional needs are met, insects need to be dusted with calcium and vitamin supplements weekly or biweekly.

Handling

1. Wash hands thoroughly with soap and water before and after handling.
2. Minimize the handling of amphibians; their skin is covered with a protective, slimy coating that can rub off allowing the entrance of bacteria.
3. Use a small net or wet gloves to remove eastern newts when cleaning the enclosure.
4. If using wet gloves, support the newt's body firmly in the palm of one hand with the other hand cupped over the body to prevent jumping, escaping or falling.
5. Never pick up a newt by the legs or tail.

Disposal

Please consult your current *Flinn Scientific Catalog/Reference Manual* for proper disposal procedures. Deceased eastern newts may be disposed of according to Flinn Suggested Biological Waste Disposal Method Type IV. Never release live organisms into the local environment. They may harbor pathogens that could decimate the local population or become invasive.

Tips

- Frequent handling of amphibians is not recommended. Their skin is permeable to salt and oil and contact with human skin may cause irritation. Many newts secrete low levels of toxins through their skin. Thoroughly wash hands with soap and water before and after handling any amphibian.
- Have a damp towel available when handling. If the newt gets free, drop the towel over it to make recapturing easy.
- Never release any nonnative species into the wild.
- Do not intermix species of amphibians within the same enclosure.
- Life span is 12–20 years in captivity.

References

Caudata Culture. Nelson, N. http://www.caudata.org/cc/species/Notophthalmus/N_viridescens.shtml (Accessed February 25, 2015.)

Reptiles. Eastern newt. <http://www.reptilesmagazine.com/Frog-Amphibian-Species/Eastern-Newt/> (Accessed February 25, 2015.)

Grizzly Run. Red spotted newt. http://www.grizzlyrun.com/Pets/Amphibians/Newts/Red_Spotted_Newt/Default.htm (Accessed February 25, 2015.)

Materials for *Eastern Newt Care Guide* are available from Flinn Scientific, Inc.

Catalog No.	Description
LM1168	Eastern Newt, Pkg. of 3
FB0211	Aquarium, All-Glass, 10 gal.
FB0212	Aquarium, All-Glass, 20 gal. (high)
FB0283	Aquarium Screen Cover with Door (10 gallon)
FB0284	Aquarium Screen Cover with Door (20 gallon)
FB0686	Strip lights—Fluorescent (10 gal.)
FB0687	Strip lights—Fluorescent (20 gal. high)
FB0233	Power Filter with BIO Wheel *use only with 20 gallon aquarium
FB0234	Power Filter Cartridges, Pkg.of 3
FB0261	Aquarium Gravel, 5 lb bag
FB0240	Aquarium Siphon/Cleaner, Medium
LM1164	Crickets, 50
LM1103	Earthworms, 30
FB0247	Aquarium Net, 5 inches

Consult your *Flinn Scientific Catalog/Reference Manual* for current prices.