

# Eastern Newt



**Species:** *viridescens*  
**Genus:** *Notophthalmus*  
**Family:** Salamandridae  
**Order:** Caudata  
**Class:** Amphibia  
**Subphylum:** Vertebrata  
**Phylum:** Chordata  
**Kingdom:** Animalia

## **Conditions for Customer Ownership**

We hold permits allowing us to transport these organisms. To access permit conditions, [click here](#).

**Never purchase living specimens without having a disposition strategy in place.**

A USDA permit is needed to send eastern newts to Ohio because they are a vertebrate animal. Do not release into the environment.

## **Primary Hazard Considerations**

Newts contain the neurotoxin tetrodotoxin in their skin to ward off predators. At the terrestrial juvenile stage the concentration is about ten times higher than as adults. The toxin is not very harmful to humans, although you should always wash your hands thoroughly before and after you handle your newts, its food, or anything it has touched. Never handle a newt if you have broken skin.

## **Availability**

Eastern newts are collected and are usually available year round. Adult newts will arrive in a waxed paper container packed with sphagnum moss. Upon arrival you should place your newts into a new home; however, they can survive for two days in the shipping container.

## **Captive Care**

### **Habitat:**

- Use a [Glass Aquarium 21 W 5240](#) or Amphibian Habitat 21 W 6531 filled halfway with water.
- Make sure the water added is de-chlorinated. This can be accomplished by adding a de-chlorinating chemical (such as [Stress Coat 21 W 2338](#)) or by aerating the water for 24 to 48 hours before you add the newts to the aquarium.
- The temperature of the tank should be maintained at a consistent level between 18–23°C (60–74°F). Avoid any drastic changes in the water temperature, which will add stress to the newt, making them more prone to illness.
- It is optional to equip the aquarium with an air-operated filter and an air stone attached to an air pump. Newts like still water so it is important to buy a filter that is not too turbulent. A piece of driftwood can be placed in front of the filter to help dissipate the force of the water if needed.
- Newts prefer a planted aquarium with a landmass for them to climb up on. A small landmass can consist of [Sphagnum Moss 21 W 2250](#), driftwood, rocks, plants, and/or an artificial island made of styrofoam or plastic. It gives them the choice to swim or move around on a dry surface.
- A 25% water change should be performed each week to help maintain appropriate chemical levels in the tank. Replace 30–50% of the water if it appears foggy or there are leftover food remains either floating or at the bottom of the tank.
- It is important to not overcrowd the newts in the aquarium; we recommend one newt per gallon of water.
- As aquatic adults they will hunt for mosquito larva, [Daphnia 87 W 5200](#), [Brine Shrimp 87 W 5105](#), [Earthworms 87 W 4660](#), [Black Worms 87 W 4680](#), and [Red Worms 87 W 4630](#). You may need to chop up the food accordingly based on the size of your newt. Feed your newts once a day, be careful not to overfeed. We recommend that you feed no more than can be consumed over a five minute span. Any excess food should be removed from the newts' habitat.

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## Information

**Method of Reproduction:** The eastern newts breeding season lasts from late winter to early spring, during which the males develop enlarged hind legs, broadly keeled tails, black horny structures on their toes and inner thighs, and swollen vents. These changes are beneficial for attracting and mating with the females. The females lay 200–400 jelly-coated eggs attached to submerged vegetation and swim off to let them hatch on their own.

## Life Cycle

- Egg: 200–400 laid by female in spring, eggs take 3–8 weeks to hatch.
- Aquatic Larvae: Remains in this stage for 3–4 months, brown-green in color.
- Terrestrial Juvenile (a.k.a. eft): Orangish-red in color with spots, about 1" long. The newt stays in this stage until they become sexually mature, which occurs between 2–3 years of age.
- Adult Newt: Breeds in the water, about 2–4" long, olive-green or yellowish brown in color. Newt's average life span in the wild is 12 to 15 years.
- Sexing: Male: Broad, wavy tail, swollen cloacal area, enlarged hind legs, black horny structures on toes and inner thighs. Female: flattened tail, moderate cloacal area, average hind legs, no black horny structures.

## Wild Habitat

- The eastern newt is found all over the northern and eastern United States and Canada. Immature larvae and the adult newts live in small bodies of freshwater ranging in size from lakes to narrow ditches.
- The juvenile "eft" stage lives along lakeshore and woodland habitats. The newt remains in the "eft" stage for two to three years until they reach sexual maturity.
- When a newt reaches sexual maturity it will return to the water and remain there for the rest of its life.
- Under special conditions when the body of water the adult lives in dries up or the water chemistry becomes too extreme they have the ability to return to land until conditions become more favorable.
- Predators of the eastern newt include birds, mammals, fish, and other amphibians. The newts' best line of defense is its toxic skin secretions that wards off many predators.
- Leeches are a major source of adult mortality. Adults will even flee the water and begin biting or scratching themselves in an attempt to rid their bodies of the leech.

## Disposition

- We do not recommend releasing any laboratory animal into the wild. As a laboratory animal, it has not encountered or learned wild survival skills and is therefore likely to come to an inhumane end.
- Adoption is the preferred disposition of a vertebrate.
- If the animal cannot be adopted as a pet by a capable owner, it may be surrendered to your local humane society.
- If the animal is to be euthanized, we recommend consulting the AVMA guidelines on euthanasia (American Veterinary Medical Association) [http://www.avma.org/issues/animal\\_welfare/euthanasia.pdf](http://www.avma.org/issues/animal_welfare/euthanasia.pdf).
- According to these guidelines, acceptable methods of euthanasia for an amphibian includes exposure to CO<sub>2</sub> at >60% or treatment with tricaine methane sulfonate (also known as TMS, MS-222 and [Biocalm 947-2100](#)). TMS is an anesthetizing agent that will cause fish and amphibian death due to central nervous system depression and hypoxia with overexposure. Wear personal protective equipment (gloves, safety glasses, labcoat) when handling TMS. The fish or amphibian is placed in a solution of 5 g of TMS per 5 gallons of water for 30 minutes or until all motion has ceased. To make sure the animal is dead, check for reflexive movement when the eye is touched. If movement occurs, replace the animal in the TMS solution for another 30 minutes.
- A dead animal should be disposed of as soon as possible. Consult your school's recommendations for disposal. In general, a small dead vertebrate should be handled with gloves, wrapped in something absorbent (like newspaper) then wrapped again in an opaque plastic bag that is sealed (tied tightly) and placed in a general garbage container away from students.