

FAQs: Newts & Salamanders

Drs. Foster & Smith Educational Staff



- [What is the difference between a newt and a salamander?](#)
- [Why do some resources refer to salamanders and newts as caudates?](#)
- [What do newts and salamanders look like?](#)
- [How long do salamanders and newts live?](#)
- [Are salamanders and newts poisonous?](#)
- [Can I hold my salamander or newt?](#)
- [What do salamanders and newts eat?](#)
- [How should I feed them?](#)
- [How big of an enclosure will my salamander or newt need?](#)
- [What kind of habitat will my salamander or newt need?](#)
- [What do I need in an aquatic habitat?](#)
- [What do I need in a semi-aquatic habitat?](#)
- [What do I need in a terrestrial habitat?](#)
- [What kind of water should I use?](#)
- [How do I maintain water quality?](#)
- [What temperature is best for salamanders and newts?](#)

- [If I do need to heat the habitat, what should I use?](#)
- [Do salamanders and newts need special lighting?](#)
- [Does a screen mesh lid provide enough ventilation?](#)
- [Do salamanders and newts hibernate?](#)
- [Can I house different species of salamanders and newts together?](#)



What is the difference between a newt and a salamander?

Newts are a subgroup of salamanders, so all newts are salamanders. As for how they're referred to, that can change depending on where you are. What is called a newt in North America may be called a salamander in Europe. The main differences are:

- Newts generally spend more of their adult life in the water or are fully aquatic, though there are exceptions to this.
- Newts are classified within the following genera - Cynops, Echinotriton, Euproctus, Neurergus, Notophthalmus, Pachytriton, Paramesotriton, Pleurodeles, Taricha, Triturus, and Tylotriton.

[\[Back to Top \]](#)



Why do some resources refer to salamanders and newts as caudates?

Salamanders and newts belong to the order Caudata, which includes amphibians that have, among other characteristics, a tail, a long cylindrical body, and limbs that extend at right angles to the body.

[\[Back to Top \]](#)



What do newts and salamanders look like?

The exact size and coloration vary by species, but they are all similar in that they have long bodies with long tails and soft skin that must remain moist. These amphibians have no scales, claws, or external ear openings.

[\[Back to Top \]](#)



How long do salamanders and newts live?

The life span of salamanders and newts can exceed twenty years if they are cared for properly, so purchasing one as a pet brings with it a very long commitment.

[\[Back to Top \]](#)



Are salamanders and newts poisonous?

Some do secrete toxic substances that can irritate human mucous membranes, and they can be highly toxic to other species of amphibians.

[\[Back to Top \]](#)



Can I hold my salamander or newt?

We highly recommend that you limit handling your salamander or newt to when it is absolutely necessary, such as when you must clean the enclosure or inspect it for injury. Not only can the substances they secrete irritate our skin, but the oils on our skin are toxic to them as well. Additionally, the heat from our hands is dangerous for them. If you must handle your newt, wash your hands thoroughly before and after touching them, and handle them for as short a time as possible.

[[Back to Top](#)]



What do salamanders and newts eat?

They are carnivores, and most will require a diet of insects and small invertebrates. This includes [mealworms](#), pillbugs, earthworms, small millipedes, [crickets](#), and brine shrimp. Larger adult species may also eat frogs, fish, or other salamanders.

[[Back to Top](#)]



How should I feed them?

Salamanders and newts should be fed daily. They respond to motion, so most will prefer live prey over killed prey. They should only be fed as much as they will eat at one time, and any uneaten food should be removed immediately. Speak to your veterinarian about how much food your newt or salamander will need in one sitting.

[[Back to Top](#)]



How big of an enclosure will my salamander or newt need?

The minimum tank size you should consider is 10 gallons. This will allow you to create the proper setup and temperature gradient and will give your herp enough living space. Keep in mind that if you are housing more than one salamander or newt, you will need to provide a larger habitat.

[[Back to Top](#)]



What kind of habitat will my salamander or newt need?

There are three main kinds of habitats:

- Aquatic - for caudates that live their entire life cycle in the water
- Semi-aquatic - for caudates that live on land, hibernate during the winter, and go into the water to breed
- Terrestrial, some of which are arboreal - for caudates that live their entire life cycle on land, but live near water

To determine which type of habitat your newt or salamander will need, research the species and talk to your veterinarian.

[[Back to Top](#)]



What do I need in an aquatic habitat?

Start with [substrate](#) - use washed gravel about 2" high on one side that slopes up to about 3" high on the other. Place live or artificial [plants](#) throughout the habitat for hiding places. You can also place smooth rock formations in the habitat as well, but be sure to leave lots of room for swimming.

[[Back to Top](#)]



What do I need in a semi-aquatic habitat?

Start by splitting the habitat with a piece of glass or Plexiglass fixed to the sides of the tank with aquarium solvent. One side will be your land area, the other your water area. The size of each will depend on the species - some caudates need a 1/2 and 1/2 split, while others will only need a small land or water area, such as 1/4 of the enclosure. Put approximately 1" of aquarium gravel or coarse sand in the water area, then place water plants in it.

On the land side, your substrate should be made up of two or three layers. On the bottom, put down 1" of aquarium gravel or coarse sand, then put down sterile potting soil, [peat moss](#), or garden loam. On top of that, you may want to put clumps of moss to help retain moisture and maintain humidity. For accessories in the land area, create plenty of hiding spots from pieces of bark, smooth rocks, [artificial rock formations](#), potted plants, and pieces of terracotta pots.

Be sure to use a very tight fitting lid to prevent escape, and use substrate to slope the land area down into the water area to give your salamander or newt an easy way to get in and out of the water.

[[Back to Top](#)]



What do I need in a terrestrial habitat?

A terrestrial habitat should be set up exactly the same way as the land part of a semi-aquatic habitat. To create the high humidity that terrestrial caudates need, provide a shallow water bowl as well as lots of plants and [moss](#).

[[Back to Top](#)]



What kind of water should I use?

The water that you use must be free of chlorine and chloramine. If you are using tap water, you must treat it with a [water conditioner](#) or let it sit out for at least 24 hours to allow time for the dissolved gasses to dissipate. You can also use bottled spring water if you are concerned about the quality of your tap water.

[[Back to Top](#)]



How do I maintain water quality?

Maintaining water quality is very important for the health of your salamander or newt. We recommend testing regularly for ammonia and nitrate and using a quality filter to keep the water clean. The size of the [filter](#) will depend on how big the habitat is and what volume of water it holds. Avoid using power filters, as these leave gaps in the lid where your salamander or newt could escape. Do partial water changes regularly - 10% every week or 20% every two weeks. Never change all the water unless you absolutely must because of health issues or serious water problems.

[[Back to Top](#)]



What temperature is best for salamanders and newts?

The preferred optimum temperature range (POTR) will vary by species, but generally salamanders and newts should be kept at temperatures below 72°F. There are exceptions to this, but in most cases, you will not need to use any sort of heating products to maintain the proper temperatures. For example, Paddletail Newts require a water temperature that falls between 50° and 65°F, and Chinese Fire-belly Newts need a temperature of 60° to 70°F.

[[Back to Top](#)]



Do salamanders and newts require special heating?

Never use hot or heat rocks, as these can seriously burn your caudate. Generally only tropical or semi-tropical species will require heating products, and you can use submersible aquarium [heaters](#), [incandescent lighting](#) (daytime), nocturnal heat bulbs, [under tank heaters](#) and [heat mats](#), and [ceramic heat emitters](#). Whatever products you use should create a temperature gradient within the habitat. One side of the cage needs to be significantly cooler than the other to allow for thermoregulation.

[[Back to Top](#)]



Do salamanders and newts need special lighting?

In most cases, no special lighting is required. However, amphibians do benefit from some exposure to UV light, as it will more accurately simulate their natural environment. We recommend the use of a [UV bulb with a low output of UVB light](#) for 12 hours each day. Use a timer to maintain proper photoperiods. Newts and salamanders are usually nocturnal, so you must turn off any visible light fixtures at night so as not to interrupt their natural nighttime behaviors. If you want to view them at night, you will have to use a nocturnal bulb.

[[Back to Top](#)]



Does a screen mesh lid provide enough ventilation?

In most cases, a [screen mesh lid](#) will not be sufficient, and you will have to provide ventilation in other ways, such as drilling 1/4" holes near the top of acrylic or Plexiglas tanks or using an aerator system made from an [aquarium pump](#), [airline tubing](#), and an [airstone](#) or bubbler. Properly ventilating the habitat will prevent noxious odors from building up inside the enclosure and reduce the number of organisms growing in the soil, so it will keep your caudate's environment more sanitary.

[[Back to Top](#)]



Do salamanders and newts hibernate?

Those that are native to climates with cold winters will need to hibernate during colder months, so you will need to adjust the temperatures within their habitat to enable this behavior. Speak to your veterinarian about proper care and housing before and during hibernation.

[[Back to Top](#)]



Can I house different species of salamanders and newts together?

We do not recommend that you do this. Some species are toxic to other species or may attempt to eat them. Only similarly sized members of the same species should be housed together.

[[Back to Top](#)]