

Tadpoles

A CAROLINA™ CareSheet

Immediate Care and Handling

As soon as your tadpoles arrive, open the bag to let in fresh air. Acclimate tadpoles to holding pails or habitats immediately.

Allow 50 to 60 minutes for acclimation. Have a holding pail (glass, plastic, or stainless steel) or habitat (a shallow tray) prepared with conditioned, room-temperature tap water or room-temperature spring or pond water before proceeding.

To acclimatize your tadpoles:

1. Float the bag in the holding pail or set the bag next to the habitat.
2. After 20 to 30 minutes, remove about $\frac{1}{4}$ of the water from the bag and replace it with water from the holding pail or habitat. Wait 15 minutes and repeat.
3. After another 15 minutes, carefully remove the tadpoles with a net and place them in the holding pail or habitat. Discard the shipping bag. Your tadpoles are now acclimated to their new environment.

Habitat Setup and Maintenance

Large culture dishes, shallow trays, and aquaria of glass or plastic make satisfactory tadpole habitats. If you choose a metal habitat, it must be stainless steel.

Clean with hot water (no soap or detergent) before use. Tadpoles of native frogs generally live in shallow water, so a habitat water depth of 2 to 5 cm is sufficient. A *Xenopus* tadpole habitat should have a water depth of 10 to 20 cm.

If water cannot flow slowly through the habitat, you need to change the water when it shows signs of fouling (at least weekly). A small aquarium pump with an air stone or other bubbler helps keep the water oxygenated. Keep the habitat at room temperature and away from direct sunlight.

Clean and rinse all habitats and utensils in hot water, without soap or detergent, once a week. Use a small aquarium net to transfer the tadpoles from habitat to holding pail. Tadpoles can tolerate a wide range of temperatures but not a sudden temperature change.

Never transfer tadpoles to water that differs in temperature by more than 1 to 1.5° C (2 to 3° F).

For maximum growth, put no more than 30 small tadpoles in every 4 liters (1 gallon) of water. As the tadpoles grow, decrease the population density by setting up more habitats and dividing the tadpoles among them.

Care and Feeding

Begin feeding tadpoles as soon as they start actively swimming and searching for food. Most native tadpoles are vegetarian and live on a variety of plant materials. Some elodea (item #162101) can be added to the habitat for decoration and as a food source. Parboiled lettuce or spinach is also a good food source, although tadpoles maintained exclusively on this diet may develop tumors. If you use elodea or other living

aquatic plants for food, provide enough light for the plants to carry on photosynthesis but always avoid placing the habitat in direct sunlight.

Pelleted rabbit food, fish food, and algae supplemented with finely powdered beef liver or powdered egg yolk are also good sources of food for native tadpoles. Carolina's Tadpole Food (item #146500) is also an excellent option. Do not feed more than the tadpoles can consume in a few hours. This will require some trial and error, but 2 to 3 food pellets (or equivalent) per habitat every other day is a good starting point. After 2 weeks, double the amount of pellets and continue to increase as needed. Remove uneaten food from the habitat daily.

After the front limbs appear, tadpoles may stop eating. This is because they are literally digesting their tails and need no additional food. After the hind limbs appear and before the front legs appear, the maturing tadpole has lungs and needs some way to get out of the water to breathe. So place a flat rock or other object in the habitat for this purpose. (*Xenopus* are completely aquatic, so they don't need a way out of the water.) Frogs can climb on almost any surface, but toads need a surface that provides traction. Spring peepers are excellent climbers and will escape from any container that does not have a lid. Introduce fruit flies as live food.

Frog Habitat

Once frogs or toads are nearing maturity (crawling out of the water on 4 legs with tails mostly gone), move them to a terrarium. (*Xenopus* are completely aquatic; keep them in an aquarium as you would goldfish.) The terrarium should have a sand substrate and a source of water.

For frogs, put about 5 cm of clean sand in the bottom of the terrarium and bulldoze it to one end to create a dry end and a water end. The depth of water depends on the size of the frogs, but it should be a few centimeters at most. Toads are terrestrial and can drown if trapped in water, so cover the bottom of their terrarium with clean sand and place a shallow dish of water on top. Keep the habitat or aquarium at room temperature and away from direct sunlight.

Native frogs and toads need live insects to eat. As the frogs grow, continue offering fruit flies but also small cricket nymphs. Larger frogs and toads can be fed small redworms or chopped pieces of larger ones, waxworms, mealworms, and crickets.

FAQ's

How do I know if I have Xenopus tadpoles?

Unless you ordered Early *Xenopus* Tadpoles (item #146640), you probably have tadpoles of a native frog or toad. Native tadpoles are heavily pigmented. *Xenopus* tadpoles, especially in early stages, are nearly transparent.

What species of frog does Carolina have?

We usually ship *Rana pipiens*, but refer to any information that came with your order for the exact species.

Our tadpoles are now frogs. Can we release them into a pond?

No. A frog may be native to North America, but it may not be native to your area. **Do not release *Xenopus* into the environment because it is not native and could damage native amphibian populations.** Your state Department of Natural Resources or Department of Wildlife can advise you on relevant laws, guidelines, and regulations.

Our tadpoles are dying. What can we do?

Rushing the acclimatization procedure can kill the tadpoles. Also, tap water can be toxic; switch to spring or pond water. "Spring water" from a grocery store might contain trace contaminants, and locally collected spring or pond water might contain a pollutant. Also, soap and detergent can leave a toxic residue. Unfortunately, the death rate of native frog tadpoles is often extremely high, even if you do everything right.

How long before the tadpoles become frogs?

Spring peeper and toad tadpoles transform into small adults in 6 to 8 weeks. Other species take from 10 to 14 weeks.

Problems? We hope not, but if so contact us. We want you to have a good experience.

Orders and replacements: 1-800-334-5551 then select Customer Service

Technical Support and Questions: caresheets@carolina.com



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