



Semi-Aquatic Frogs and Toads

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The most common semi-aquatic frog and toad species kept as pets are Chinese fire belly toads (*Bombina orientalis*), and Leopard frogs (*Rana pipiens* spp.) Fire belly toads bred in captivity often have yellow rather than red coloration on their bellies. This coloration can be altered to the more natural red permanently by giving them a beta-carotene supplement for 3-4 weeks. When frightened on land, fire bellies will sometimes flip over and display their brightly colored bellies to scare predators. Fire belly toads can be kept in groups. Leopard frogs can be found throughout most of the continental US.

Health Care: Frogs and toads can be very good at hiding illness. We recommend biannual exams and fecal float. Weighing your pet at home can be a good way to catch illnesses early. Please bring them in to see us if their weight changes by 10%, or more. Common problems include: nutritional deficiencies from diets lacking variety, wounds, fungal infections.

Husbandry concerns: House new amphibians by themselves until cleared by your veterinarian, often a quarantine period of six months. Do not keep different species in the same enclosure to avoid introducing diseases and because some species produce compounds through their skin that can be harmful to others. Keep handling to a minimum as the oils in human skin are harmful to amphibians. Always wash your hands before and after handling. Be sure the lid is well fitted and does not contain any holes through which the amphibian can escape as they can be very crafty and some are good climbers. Semi-aquatic species should have an aquarium that is divided in half with glass or plexi-glass secured with aquarium silicone glue. The water side should be lined with gravel or rocks too large for the frog to possibly eat, with a sloping gradient so the amphibian can easily get out onto the land side, and should have a filter. Floating platforms should also be provided in the water area. A water aeration system will help keep humidity up and the water well oxygenated. Put 2 inches of aquarium gravel on the land side, topped with sterile potting soil (available from plant nurseries), topped with a piece of turf. Provide multiple cave hides. Drilling a couple of holes in the bottom of the land side will allow for better drainage. Either a mesh top or rows of drilled quarter inch holes should provide some airflow to decrease pathogen growth in the habitat. Mist animals daily. A water change should be done twice a week. Provide climbing objects, but remember there is no good way to fully clean wooden items, and they should be periodically thrown away and replaced. Temperature requirements vary by species. Fire belly toads should be kept at 65-75F. Leopard frogs should be kept at 70-75 during the day, cooling down to 60-65F, at night. White lights should be turned off at night. Cages should be lit with a UVB light of 5% or less for 10-12hrs per day. Be careful with the use of disinfectants when cleaning and wash them off very well, as they can be toxic if absorbed through amphibian skin. Any cage furniture collected from outside should be disinfected. You can do this by baking them on low in the oven for an hour, placing them in boiling water for 15 minutes, or by soaking in a mild bleach solution for a few hours and

More on the back!

then rinsing with clean water and soaking in clean water for 24-48 hours. If you can still smell bleach on it, it needs to be rinsed and soaked more. This is to get rid of bacteria and fungus that may be harmful to your pet. In water dishes and tanks, always use dechlorinated water or bottled water, as chlorine can be harmful to amphibians.

Diet: On land, amphibians generally find their food by watching it move whereas, in the water, amphibians use odor, movement or touch. Food items should be rotated and varied to provide a balanced diet. Food should be smaller than the amphibian's head is wide, with the exception of soft worms. Earthworms, crickets, beetles, pillbugs, moths and other insects are good food items. Do not feed fireflies as they are poisonous! Provide food for any insects left in the cage so they don't chew on the amphibian! Note that crickets are relatively high in cholesterol and having them over represented in the diet may lead to cholesterol deposits in the skin or eyes. These insects should be misted in a zip-loc bag, then shake-and-baked with a calcium-only powder coating before feeding to the amphibian (we recommend using Tums crushed into a powder). Avoid lots of mealworms, feed mostly as treats. Insects should be housed separately from the amphibian, with only a few offered for feeding to avoid stress.

