

Fire-Bellied Toad Care Guide



Background

Amphibians are a great addition to a life science or biology classroom. Brilliantly colored, diurnal and hardy, fire-bellied toads, *Bombina orientalis*, are an exceptional pet. Amphibian literally means “double life,” as they spend part of their lives in water and part on land. Fire-bellied toads can live up to 12 years in captivity with proper care and maintenance. They are native to northeast China, Korea, southern Japan and Russia, enjoying coniferous forests with broad leaves and slow moving streams or ponds. As omnivores, they feed on plant substances as tadpoles and invertebrates as adults.

Safety Precautions

Always treat live organisms with respect and proper care. For student and fire-bellied toad safety, handling should be minimal. Wash hands thoroughly before and after handling. Fire-bellied toad skin contains substances that irritate or are toxic to other animals. Do not house fire-bellied toads with other frogs, amphibians or animals other than fire-bellied toads.

Habitat

Enclosure

1. Use a 5-gallon glass aquarium for one fire-bellied toad and a 10-gallon for two or three toads. As a general rule, 4 gallons of space are needed per fire-bellied toad.
2. A tight-fitting screen lid is necessary as fire-bellied toads are good jumpers and capable of escaping through small openings yet need plenty of ventilation.
3. A 50/50 land-to-water environment is recommended.
4. Provide plenty of hiding spots. Possibilities include: plant pot turned on its side, logs, cork bark or rocks.
5. Place live or artificial plants securely inside the enclosure. Be sure to include the plants in the water pool so they break the surface. This aids the fire-bellied toad when exiting the water.
6. Live plants help maintain humidity levels. Safe plants include bromeliads, ferns, wandering jew, devil's ivy, java moss, orchids and *Draeceana*.
7. Do not use disinfectants when cleaning the enclosure or décor; amphibians are susceptible to trace amounts through their skin. The use of hot water to clean the enclosure is sufficient.

Moisture

1. Use a shallow bowl or pool for water. Fire-bellied toads are not exceptional swimmers, so keep the water shallow, but deep enough for them to be submerged.
2. Water must be changed daily using chlorine and chloramine-free water. Use bottled spring water or remove most chlorine by allowing water to sit for 24 hours; chloramine needs to be removed with a dechlorinator that is safe for amphibians.
3. Maintain humidity levels between 75–80% by misting the enclosure daily and adding live plants.
4. Measure humidity with a hygrometer.

Substrate

1. Cover the floor of the enclosure with equal parts gravel, peat moss and sphagnum moss.
2. The depth of the substrate should be 2–4 inches as fire-bellied toads enjoy burrowing.
3. The substrate must be fully changed monthly, or bi-monthly if the fire-bellied toads defecate in the water.

Temperature

1. Maintain the enclosure temperature between 66–75 °F, which is about room temperature. Avoid temperatures above 80 °F. Heat is extremely dangerous to amphibians, causing dehydration or even death.

2. If the enclosure is kept in a cooler room, a reptile heating pad may be placed under a small portion of the **land** environment.

Lighting

1. Heat lamps are not necessary. Overheating the enclosure leads to dehydration or even death.
2. UV lighting is not necessary for fire-bellied toads. However, fluorescent lights that do not emit heat are necessary for live plants.

Nutrition/Feeding

1. Feed fire-bellied toads two to three times per week. The amount fed is typically as much as the fire-bellied toad will consume in 15 minutes—about three to four insects.
2. Offer a variety of food including chopped up earthworms, appropriately sized crickets (the length of the cricket is not to exceed the distance between the fire-bellied toad's eyes), fruit flies and locusts.
3. Treats, offered sparingly, include wax worms and small guppies (feeder fish).
4. Avoid mealworms, beetles and other insects with thick exoskeletons that are difficult to digest.
5. Feed gut-loaded insects—insects that are fed prior to being placed in the enclosure.
6. To ensure proper nutritional needs are being met, dust insects 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 by touching with dry hands, allowing the entrance of bacteria.
3. Use a small net or wet gloves to remove fire-bellied toads when cleaning the enclosure. Gloves are not necessary but will help to prevent the toad from slipping out of your hands.
4. If handling, support the fire-bellied toad'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 fire-bellied toad by its legs.

Behaviors

1. The Unken reflex is when the fire-bellied toad arches its back or flips onto its back and displays its brightly colored stomach when threatened.
2. Fire-bellied toads enjoy burrowing under the water pool, deep within the substrate.
3. During feeding, fire-bellied toads capture their prey with their mouths and shove the animal into their mouths with their forelegs.

Disposal

Deceased fire-bellied toads may be disposed of according to Flinn Suggested Biological Waste Disposal Method Type IV. Please consult your current *Flinn Scientific Catalog/Reference Manual* for proper disposal procedures. 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 toads 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 fire-bellied toad gets free, drop the towel over it, to make catching it easy.
- Do not intermix species of amphibians within the same enclosure.
- Fire-bellied toads average a 12-year life span in captivity.

References

The AMPHIBIAN.co.uk. http://www.theamphibian.co.uk/Fire-Bellied_toad_caresheet.htm (Accessed February 20, 2015).

National Geographic. <http://animals.nationalgeographic.com/animals/> (Accessed February 20, 2015).

Materials for the *Fire-Bellied Toad Care Guide* are available from Flinn Scientific, Inc.

Catalog No.	Description
LM1263	Fire-Bellied Toad
FB0210	Aquarium, All-Glass, 5 ½ gal.
FB0211	Aquarium, All-Glass, 10 gal.
FB0212	Aquarium, All-Glass, 20 gal. (high)
FB0686	Strip Light-Fluorescent, 16"
FB0687	Strip Light-Fluorescent, 20"
FB0688	Strip Light-Fluorescent, 24"
FB0282	Aquarium Screen Cover (5½ gal.)
FB0283	Aquarium Screen Cover with Door (10 gal.)
FB0284	Aquarium Screen Cover with Door (20 gal.)
FB0400	Reptile Heating Pad
FB1352	Nature Bed, Compressed Bedding
FB0102	Sphagnum Moss
FB0585	Peat Moss
FB0261	Aquarium Gravel
LM1164	Crickets, 50
LM1103	Earthworms, 30
FB0246	Aquarium Net, 3 inches

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