

* Eric Roscoe

American Bullfrog (Rana/Lithobates catesbeianus)

Bullish, Native Brutes

The American bullfrog is a large, familiar and well known aquatic to semi aquatic ranid frog species that ranges in color from brown, green, to greenish brown sometimes with darker reddish brown dorsal mottling, and a pair of large tympanic membranes and tympanic folds behind each eye. Unlike smaller related species, this species lacks dorsolateral ridges along the body as well. Albino American bullfrogs are also frequently maintained in captivity. American bullfrogs have voracious appetites and can be quite prolific breeders, making them invasive in many areas where they escape or are introduced. Always be a responsible pet owner and never release any unwanted species into the wild. American bullfrogs are a controlled, regulated, or prohibited species in some states. Always check any applicable federal, state, and local laws and ordinances that may pertain to the specific possession of this species.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota **Kingdom:** Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Amphibia Order: Anura

Suborder: Neobatrachia

Family: Ranidae

Genus: Lithobates/Rana

Species: *Lithobates/Rana catesbeianus****Taxonomy subject to change and revision.*

Lifespan and Longevity

If provided the proper care, American bullfrogs can attain longevity of 5 to 10 years or more in captivity.

Distribution and Habitat

American bullfrogs are a widely ranging species from southeastern Canada, including Ontario and Quebec, through much of the eastern and central United States, where they occur in permanent wetlands and bodies of water including marshes, ponds, lakes, slow moving rivers and streams, swamps, river backwaters, and ditches. This species is also widely introduced and established in the western United States (and many areas within its natural range as well) due to escapes from commercial farming and breeding operations and other accidental releases or

introductions.

Origin/History

Lithobates catesbeianus (Shaw, 1802).

American bullfrogs have long been used for many decades for several different human uses, most notably as a food source in the southern and Midwestern United States. Bullfrogs would be commercially farmed, as well as harvested from the wild, and the U.S. would become a net importer of frog legs, most of which are of this species. While American bullfrogs have also long been kept as pets for many decades, they would not be a species which would be as commonly or widely bred or produced specifically for the pet trade, as these frogs would require very large semi-aquatic enclosures and would be nervous in captivity, thereby generally not making as great of a pet frog species as many others. However, albino American bullfrogs and a few other genetic color mutations would occasionally be bred for the pet trade.

Bullfrogs would also become a well-known and established invasive species in many U.S. states, particularly in the western United States, due to releases or escapes through the commercial fishing bait, pet, and human food market industries, which would lead many states to regulate their possession, harvest, and collection, whether as a native indigenous species and/or as an introduced invader.

Experience Level Required

Intermediate/Moderate to Advanced.

Size

Adult American bullfrogs can reach 5 ½ to 8 inches in size, with tadpoles being very large, between 2 and 5 ½ inches. With their overall legspan, however, large individuals may exceed 12 inches or more!

Housing and Enclosure

Enclosure System: Semi-Aquatic. Housing must absolutely be sealed and escape proof with a secured top or aquarium hood. There are challenges to maintain American bullfrogs in captivity, as they require significant amounts of space, and are very powerful jumpers, as they can jump lengths of up to 6 to 7 feet in distance. Tadpoles and young frogs of very similar size can be housed together, housing frogs of disparate sizes together is not advisable. American bullfrogs can be highly cannibalistic, and may even attempt to eat each other if adequate food and other resources are not provided. At minimum, a 55 gallon enclosure should be used to maintain a single adult bullfrog, although larger quarters are preferred. Glass aquariums or terrariums overall are poor choices to maintain these large, active frogs in, as they are prone to leaping into the glass and potentially damaging or injuring themselves in the process. If maintained in captivity, visual barricades or opaque walls and sides should be used. A large, sufficiently sized plastic trough or commercially available turtle tub of appropriate size can be used to substitute for aquariums for housing American bullfrogs. American bullfrogs are semi aquatic frogs, and require an area or portion of dry land. This can be used by creating a suitable substrate dam in the enclosure consisting of appropriately sized aquarium gravel and/or sand as substrate and Plexiglas using aquarium silicone that cannot be easily ingested by the frogs. A powerful filtration system and canister is also recommended to help maintain water clarity and quality. Without a filtration system, the enclosure must be cleaned and changed at least 50% twice weekly. Clean water and a strong filtration system are musts for these large frogs, as American bullfrogs are extremely susceptible to improper husbandry and are very high maintenance.

Other furnishings to provide can include live or artificial aquatic plants and vegetation for added

aesthetics and to assist in maintaining enclosure quality, and hides such as upturned plastic or ceramic plant pots, log or rock hides, driftwood, or similar hides and furnishings. Spot clean daily and clean the enclosure at minimum every 2 to 4 weeks.

Temperature, Lighting, and Humidity

Ambient temperatures in an enclosure for these frogs should be within 77 to 85 degrees F, and water temperatures at around 70 to 75 degrees F. American bullfrogs have fairly simple and undemanding heating and lighting requirements in captivity, and do not require additional UVA/UVB lighting, although providing it in moderated amounts can be greatly beneficial for their health, immune system, and overall wellness. For any supplemental heating that may be needed, use a low wattage incandescent or UVA/UVB bulb, radiant or ceramic heat emitter, or UTH (under tank heating element). More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well. These large and active frogs should be kept at humidity levels of at least 60 to 70%.

Feeding, Diet, and Nutrition

Insectivorous to Carnivorous; American bullfrogs are voracious predators in the wild, and will consume a variety of insects, worms, small mollusks and crustaceans, and other invertebrates. They will also catch and consume nearly any smaller vertebrates as well including even smaller reptiles or amphibians. These frogs in captivity should be fed 2 to 3 times weekly. They are very sight oriented feeders, and will eat feeder crickets, roaches, earthworms, redworms, bloodworms, superworms, hornworms, or mealworms as well as feeder fish and occasionally pre-killed rodents of appropriate size, although these prey items should be given only sparingly. They can also be given many commercially available pelleted diets, or freeze dried foods, but these must be animated. Do not overfeed these frogs, or obesity and other health issues can become concerns. Feeder insects should be gut loaded by provided them a quality diet containing vitamins and minerals. Gutloading and dusting insects with vitamin D3 and calcium supplements 1 to 2 times weekly for added nutritional value will greatly benefit the health and well-being of these frogs. Feed them using tongs, forceps, or otherwise in the enclosure or in a dish and not by hand, as they can become acclimated enough to mistake a moving hand or finger as food during feeding. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Handling

American bullfrogs are large, active amphibians that, as with most amphibians, do not tolerate excessive handling as a general rule. As with many frogs and other amphibians, they have smooth, moist, permeable skin that can be susceptible to desiccation (drying out) or direct and indirect contact with any chemicals, oils, or lotions that may be present on human hands. If American bullfrogs are to be handled or restrained, there are a few techniques and methods to do so for semi aquatic ranid frogs including cradling (which involves holding the belly with the hand's palm with the frog's head towards the wrist and index finger between the hind legs) and the thigh hold (firmly grasping the legs about the knee joints to prevent jumping). American bullfrogs are typically not aggressive or prone to biting, but can be skittish or prone to jumping (particularly wild caught frogs).

Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens

Contact

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this animal, group of animals, or this care sheet, please email and contact: Eric.S.Roscoe@gmail.com

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