

*Photo Credit: Todd Pierson.

Colorado River Toad (Incilius alvarius)

Colorado river toads are a large species of highly fossorial toad found in the southwestern United States and northwestern Mexico. They favor dry, arid to semi-arid deserts, scrublands, grasslands, and other microclimates with loose, sandy or loamy soil for burrowing. These toads have smooth, leathery skin, which ranges from olive green or mottled brown in color. Just behind the large golden eye with horizontal pupil is a bulging kidney-shaped parotoid gland. Below this is a large circular pale green area which is the tympanum or ear drum. By the corner of the mouth there is a white wart and there are white glands on the legs. All these glands produce toxic secretions. Its call is described as, "a weak, low-pitched toot, lasting less than a second. Another distinctive feature are their hardened, keratinous spades on each of their hind feet used for burrowing backwards into loose, sandy soil, which allow them to burrow hind feet first into the soft sand or soil, and are also able to aestivate for several weeks or even months at a time during drought, or other dry and unfavorable conditions.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota **Kingdom:** Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Amphibia Order: Anura

Suborder: Mesobatrachia

Family: Bufonidae Genus: Incilius

Species: *Incilius alvarius*

*Taxonomy subject to change and revision.

Lifespan and Longevity

If provided the proper care, Colorado river toads can have the potential to attain longevity of 5 to 10 years, or more in captivity.

Distribution and Habitat

Colorado river toads occur in the southwestern United States and northwestern Mexico. It lives in both desert and semi-arid areas throughout its range. It is semiaquatic and is often found in

streams, near springs, in canals and drainage ditches, and under water troughs.[5] The Colorado River toad is known to breed in artificial water bodies (e.g., flood control impoundments, reservoirs) and as a result, the distributions and breeding habitats of these species may have been recently altered in south central Arizona. They will also use rodent and other small animal burrows.

Experience Level Required

Intermediate/Moderate.

Size

Colorado river toads are the largest native toad species in the United States, ranging from 6 to 7 ½ inches in size.

Housing and Enclosure

Enclosure System: Primarily Moist-Terrestrial to Fossorial. Housing must be sealed and escape proof with a secured top or aquarium hood. A single adult toad can be comfortably housed in a 15 to 20 gallon terrarium, enclosure, or appropriately sized plastic container with a securely fitted lid or top. These toads are also very seldom cannibalistic under most circumstances, and they can be housed communally in accordingly larger enclosures or setups. Colorado river toads are also semi-fossorial, and will burrow as well. Provide several inches of a nontoxic particulate substrate that can help establish and maintain the necessary humidity levels that stays moist but not overly wet, and burrowing opportunities that can be used include coconut husk fibers, Eco earth, cypress mulch, live/sphagnum moss, play sand, and pesticide/fertilizer free potting soil or mixtures of any of these substrates. Paper towels can also be used for a less attractive, yet utilitarian substrate for these toads. These toads will also benefit from daily misting as well. Other furnishings to provide can include live or artificial plants for added aesthetics, and hides such as upturned plastic or ceramic plant pots, log or rock hides, cork bark, or similar hides. Also provide a large, shallow water dish in the enclosure and change at least 2 to 3 times weekly. Spot clean daily and clean the enclosure at minimum every 2 to 4 weeks.

Temperature, Lighting, and Humidity

Colorado river toads have 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). Colorado river toads require moderate to higher humidity at around 60 to 80%. Be sure to mist the enclosure at least once daily as well. Maintain these species of toads at around 70 to 85 degrees F and provide a 12 to 14 hour light cycle if overhead lights are used. 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.

Feeding, Diet, and Nutrition

Insectivorous; In the wild, Colorado river toads are insectivorous, and will eat insects, arachnids, and other invertebrates they can catch. They will occasionally catch and consume other smaller vertebrates as well. Some of these species of toads will even scavenge leftover dog or cat food if left outdoors. In captivity, these toads can be fed a variety of appropriately sized feeder insects such as crickets, roaches, mealworms, superworms, and waxworms. They can also be fed microfauna such as isopods, springtails, and fruit fly cultures as well if small enough. Feeder insects should be gut-loaded in order to increase their optimal nutritional value. These toads also require additional calcium and vitamin D3 supplementation 1 to 2 times weekly or as otherwise

directed for optimal health and development. This is in order to prevent Metabolic Bone Disease (MBD) and other growth and nutritional deficiencies. They can also sometimes be large enough to be given small, pre-killed rodents, but sparingly, if at all. Their feeding frequency will depend on the age, size, and overall health of your animal. Use care as to not overfeed them, as obesity and other health related issues can become an issue. 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

Colorado river toads can be handled carefully for short period of time, and are not aggressive or prone to biting, but in general are not tolerant of frequent and/or prolonged handling. All amphibians breathe and respire through their skin, as well as absorb water through this means. It is therefore important to avoid wearing any chemicals or lotions on your hands, which can be potentially harmful or even fatal to amphibians. It is also important to wash or rinse hands thoroughly, and ensure they are adequately moistened before and after handling any amphibians in order to prevent them from drying out. These toads can also produce toxins which can act as fairly strong psychedelics as well, so some level of caution should be given to handling this species.

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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