

\*Photo Credit: USGS Nonindigenous Aquatic Species

# Coqui Frogs (Eleutherodactyus spp.)

## **Loud and Lascivious Travelers**

Coquis are species of relatively small, secretive tropical to sub-tropical leptodactylid frogs consisting of at least 16 or more species occurring in Puerto Rico and the Caribbean, as well as elsewhere in the neotropics from Central to South America depending on the species. The most widespread and well known species is the Coqui Frog, or E. coqui, although other species such as *E. johnstonei*, *E. barbudensis*, and *E. portoricensis* have also been widely described. They are also introduced in at least a few areas of southern Florida and elsewhere as well. Coquis spend much of their time in or under leaf axils, leaf litter, tree cavities, rocks, or other debris, and are named for their very loud, two-pitched "co-qui" calls typically made at dawn, dusk, or nighttime. These frogs are also characterized by their direct development from egg to juvenile frog, with their tadpole stage developing inside the egg. These frogs can be highly variable in coloration and appearance, ranging from grayish brown, tan, yellowish or yellowish-brown, to deeper brown, reddish, or orangish, and may either have darker irregular dorsal markings and/or a light dorsolateral stripe and enlarged toe pads present. These frogs are frequent hitchhikers on exotic plants and other imported products, and thus may end up in captivity as enjoyable and easily kept frogs should one choose to do so.

# **Taxonomy**

Life: All living, physical, and animate entities

**Domain:** Eukaryota **Kingdom:** Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Amphibia Order: Anura

Suborder: Neobatrachia
Family: Leptodactylidae
Genus: Eleutherodactylus

**Species:** *Eleutherodactylus spp.*\*

\*Taxonomy subject to change and revision.

## **Lifespan and Longevity**

If provided the proper care, Coqui frogs have the potential to attain longevity of at least 5 or more years.

## **Distribution and Habitat**

Depending on the species, coqui frogs are native to Puerto Rico, the Caribbean including Cuba, the Bahamas, the Cayman Islands, and surrounding territories. It has also been accidently

introduced as cargo, plant, and shipment hitchhikers, or through accidental or intentional pet releases and escapes widely in other areas as well including Florida, the US Virgin Islands, Puerto Rico, Hawaii, and the Lesser Antilles. Elsewhere in central and South America, these frogs may be found from It is found in Anguilla, Antigua and Barbuda, Barbados, Bermuda, Colombia, Dominica, French Guiana, Grenada, Guadeloupe, Guyana, Jamaica, Martinique, Montserrat, Netherlands Antilles, Panama, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, and Venezuela. These frogs may occupy a variety of tropical to sub-tropical environments, from moist lowland forests, montane forests, shrubland, grasslands, to agricultural or croplands, rural to suburban gardens, or other urban to suburban habitats.

# **Origin/History**

Eleutherodactylus spp. Duméril and Bibron, 1841; Eleutherodactylus coqui Thomas, 1966.

The most well-known of the coqui species, the common coqui (E. coqui), has been introduced to Colombia, the states of Florida and Hawaii in the United States, and the Virgin Islands. It has become a densely populated invasive species in the Hawaiian Islands, where it was accidentally introduced in the late 1980s, most likely as a stowaway on potted plants, and quickly established itself on all four major islands. It is now considered a pest species by the State of Hawaii, and is on a list of 100 of the world's worst invasive alien species.

Similarly, the common coqui has been present in Florida since about 1973, when they arrived as stowaways through the garden nursery and cargo trades, although escapes or releases from the pet trade may have been another introduction pathway for coqui.

## **Experience Level Required**

Novice/Beginner to Intermediate/Moderate.

#### Size

Adult coqui frogs are relatively small frogs, ranging from ¾ to about 2 ½ inches depending on the sex and species.

## **Housing and Enclosure**

Enclosure System: Primarily Moist Arboreal to Semi-Arboreal. Housing must be sealed and escape proof with a secured top or aquarium hood. A 15 to 20 gallon tall glass aquarium or terrarium is suitable for one to a group of these frogs, but adequate space should still be provided. Coqui frogs seem to be tolerant of and not cannibalistic towards other frogs, but as with any amphibians, at least some care should be taken. Provide several horizontal perches for the frog to climb and rest on. Provide additional live or artificial foliage, logs, cork bark, or other cage furnishings for added security and aesthetic appeal. Substrates that retain some moisture and humidity should be used such as paper towels, or sphagnum moss, cypress mulch, or potting soil for more naturalistic enclosures. Substrate should be pesticide free. Provide a large, shallow water dish in the enclosure and change at least 2 to 3 times weekly. Spot clean daily.

## Temperature, Lighting, and Humidity

Coqui frogs 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). Maintain these frogs at higher

humidity at around 70 to 80%, and be sure to mist the enclosure at least once daily to every other day. These frogs can be maintained at around 70 to 85 degrees F while providing a 12 to 14 hour light cycle if overhead lights are used. Avoid higher or dryer temperatures than these ranges above. 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, coqui frogs are insectivorous, and will eat insects, arachnids, and other invertebrates they can catch. In captivity, feed these frogs a variety of appropriately sized feeder insects such as crickets, roaches, mealworms, and waxworms. They can also be fed microfauna including springtails, isopods, and fruit fly cultures. Feeder insects should be gutloaded in order to increase their optimal nutritional value. These frogs 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. 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

Coqui frogs are small, flighty, and delicate frogs prone to jumping, and handling should typically be avoided unless necessary. 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.

\*\*Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after

\*\*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**

Authored by Eric Roscoe. For any additional questions, comments, and/or concerns regarding this animal, group of animals, or this care sheet, please email and contact: <a href="mailto:Eric.S.Roscoe@gmail.com">Eric.S.Roscoe@gmail.com</a>

Disclaimer: Note that the information provided in these, or any care sheets, are not intended to be all-exhaustive, and further research and care should always be sought and provided when it comes to any species one may prospectively be interested in. These care sheets are also not intended to serve as substitutes for professional veterinary medical care and husbandry should any animal require it. Always seek proper and professional veterinary care for any animal should the need arise, and be prepared ahead of time for any and all husbandry costs and expenses that may occur with any animal beyond the initial purchase. Any animal owned is ultimately a matter of personal/individual care and responsibility. We cannot make any claims or guarantees regarding any information in this care sheet therein. This care sheet may be reprinted or redistributed only in its entirety.

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