

Frogs, Toads, and Conservation

There are 35 species of frogs and toads (38 amphibian species) recorded in Belize. Here we present some of the most common species found in and around Lamanai and the New River watershed.

Frogs and toads have played an important role in ancient Maya culture and can be seen in drawings and figurines. Most species emerge with summer rains to breed and males are often found calling in a chorus in or near water. Females deposit eggs in or above water and tadpoles develop into young frogs within a few weeks.

Because they are tied to water to complete their life cycle, amphibians are indicators of ecosystem health. They are susceptible to pesticides (including repellants and perfumes), disease, and environmental pollution because of their semi-permeable skin. There have been worldwide declines in amphibian populations as a result of habitat destruction, urbanization, and the increasing prevalence of chytrid fungus which is lethal in some species and causes deformities in others.

Belize is home to several threatened frog species and the endemic *Rana juliani*. With increased threats, their future is at risk. This fact sheet will help you identify your frogs and toads in order to better protect them.

Authors

Jenna M. Cole, Sarah K. Cooke, Venetia S. Briggs-Gonzalez, Justin R. Dalaba and Frank J. Mazzotti



Institute of Food and Agricultural Sciences
IFAS Publication WEC394
edis.ifas.ufl.edu/uw439
May 2018

Photos courtesy of Mike Rochford and Michiko Squires

Reference

Lee, J.C. 2000. A field guide to the amphibians and reptiles of the Maya world: the lowlands of Mexico, Northern Guatemala, and Belize. Cornell University Press, Ithaca, New York.



For more information, contact:

Lamanai Field Research Center

Indian Church Village
Orange Walk, Belize
Tel: (501) 678-9785
Email: info@lamanai.org

www.lamanai.org

crocdoc.ifas.ufl.edu



Like or follow @TheCrocDocs

Frogs and Toads of Northern Belize





Gulf Coast Toad (*Incilius valliceps*) 73-100 mm (3-4 in)
This medium-sized terrestrial toad is common in disturbed habitats. Coloration varies from red or gray to deep brown with warts on the dorsal surface. They have short limbs with robust forearms, and no webbing between the fingers.

Sheep Frog (*Hypopachus variolosus*)
30-45 mm (1.2-1.8 in)
A small terrestrial frog with a narrow face, small stout body and smooth red-brown skin with a speckled underside. They have a thin white stripe from eye to base of forelimb. Vocalization is a nasal, sheep-like bleat. Active at night and feeds on ants and termites.



Río Grande Leopard Frog (*Rana berlandieri*) 65-114mm (2.6-4.6 in)
Large greenish-brown frog with dark spots and a pair of light-colored folds running down its back. It has long, muscular legs and leaps into water when startled. Common in freshwater habitats and active both day and night.

Mexican Treefrog (*Smilisca baudinii*)
50-70 mm (2-2.8 in)
Medium-sized, robust frog with large eyes. One of the most abundant frogs in Belize. Variable color and pattern, commonly referred to as "camouflage treefrog," usually olive, brown, or green with irregular dark blotches. Nocturnal, terrestrial and arboreal, often seen clinging to the sides of buildings near lights and on roads after rains.



Yellow Treefrog (*Dendropsophus microcephalus*)
21-26 mm (0.6-1 in)
A small, nocturnal treefrog with large eyes and

horizontally elliptical pupils. Coloration usually yellow-tan, gray, or orange with dark 'H' or 'X' pattern on back and has bright yellow toes with toe pads. Common in disturbed areas but absent in forests.

Veined Treefrog (*Trachycephalus venulosus*)
70-102 mm (2.75-4 in)



Large-bodied treefrog that has rough, light-colored skin with darker blotches. Paired vocal sacs expand up and over the head during calling. Arboreal, terrestrial, and also found on building walls. Secretes a sticky, milky substance that is extremely irritating to eyes.

Mahogany Treefrog (*Tlalocohyla loquax*)
33-38 mm (1.3-1.5in)



A cream-colored, light brown or reddish frog, with distinct reddish thighs and toe webbing. Primarily arboreal, but this nocturnal frog can also be found near freshwater ponds in both natural and disturbed areas.



Elegant Narrowmouth Toad (*Gastrophryne elegans*)
22-38 mm (1-1.5 in)
A small, triangular shaped toad with small eyes and stocky limbs. Gray or tan in color with dark blotches, usually outlined in black. Nocturnal and terrestrial, occurs in leaf litter but is not common.

Red-eyed Treefrog (*Agalychnis callidryas*)
45-65 mm (1.8-2.6 in)



Large, but slender, bright green treefrog with red eyes, that have conspicuous vertically elliptical pupils. Vocalization is a "chac" heard on rainy summer nights. Amplectant pairs are visible on the underside of leaves where females lay egg masses overhanging water.



White-lipped Foam Frog (*Leptodactylus fragilis*)
33-37mm (1.3-1.5 in)
A small, terrestrial frog with a white stripe on its upper lip. Body primarily brown

or gray with darker spots and blotches. Occupies a variety of habitats with permanent water. Makes foam nests.

Cane Toad (*Rhinella marina*) 80-210 mm (3.2-8.4 in)



Large, squat terrestrial toad with warty skin. Found in open habitats and very abundant in urban areas, often found under lights. Poison glands on its back secrete a white, milky toxin that is harmful to humans and can be fatal to dogs and other domestic animals.