

Nature Coast Envirothon

Frogs & Toads

Frogs and Toads belong to the group of animals known as amphibians. They have smooth moist skin and require water to reproduce. In Florida there are many different species of frogs. Here are a few of the more common species found in the state. For more information about Florida's wildlife visit WildFlorida.com.

Treefrogs

The *treefrogs* (family Hylidae) have adhesive discs on their toes that enable them to cling to and climb among leaves and branches. These adhesive toe pads even allow them to cling to glass, and in summer you often see green tree frogs and squirrel tree frogs on the outside of windows eating insects attracted to the light.



Green Treefrog

Many tree frogs can change color like a chameleon, and green treefrogs are dark olive-brown or charcoal colored when they are stressed or cold, but become bright green at other times. They can also be dull green or gray when hidden or sleeping. They are about 5.7 cm (2.2 inches) long and can be recognized by the creamy white stripe that extends down both sides of the body.

Male green tree frogs typically call while perched on vegetation near water. Their call is a scratchy 'quonk-quonk-quonk', often heard during rainstorms.

Squirrel Treefrogs are one of Florida's most common frogs. They are found in all habitats from woodlands to hammocks, swamps, pastures and gardens.

Squirrel tree frogs are named for their rain call, which sounds like a squirrel chattering. Their breeding call – heard between March and September- sounds like a duck – 'quank-quank'. Squirrel tree frogs breed during spring and summer in shallow pools and ditches



They are highly variable in color and pattern and can change color rapidly. They are often greenish brown, with or without faint blotches on the back and legs. There is usually a light line on the upper lip, and sometimes a dark spot or bar between the eyes. The toe pads are well developed.

Barking Treefrog

Florida's largest native treefrog, the barking treefrog can grow to 2.7 inches (6.8 cm). This frog is named for its call, which sounds like distant pack of hounds barking. Males call while floating in open, shallow ponds.

The barking treefrog is found in open mixed woodlands, pinelands and farmland. It breeds in spring and summer in swamps and shallow ponds.

Coloration varies from bright green, greenish brown, to brown, and individuals can be unspotted or marked with round dark spots. Along the sides of the body and under the front legs is a light stripe bordered by a purplish brown stripe. The toes end in a large adhesive pad.



Cuban Treefrog

As its name suggests, this treefrog is not native to Florida. It was introduced accidentally, probably via ships traveling between the US and Caribbean ports. These frogs have spread as far north as southern Georgia, hitchhiking on nursery plants. Cuban treefrogs are collected in large numbers for the North American pet trade.

Cuban treefrogs are the largest treefrog found in North America. Females can grow to 14 cm (5.5 in); males are generally smaller. They are a mottled gray-green, but can change color — anywhere from white to dark brown — depending on their surroundings. Their feet have large, conspicuous sticky toe pads, which allow them to cling to almost any surface.

They are nocturnal and feed on almost anything, including insects, small lizards, other frogs and even hatchling birds. The Cuban treefrog's call sounds like a raspy human snore or a small dog barking.



Little grass frog

The little grass frog is the smallest frog in North America — adults are only about half an inch long. As their name suggests, these frogs spend their lives in and around shallow grassy ponds and marshes.

Because they are so small, these frogs are very difficult to find. They usually perch on grass stems just above the water and align their dark body stripe with the grass.

In Florida, Little Grass Frog's high-pitched chirp can be heard in most months of the year.



True Frogs

The next group of frogs are members of the family Ranidae – also known as the true frogs. Ranids are streamlined and narrow-waisted with long muscular hind legs and webbed feet. They are smooth skinned, agile jumpers and swimmers, rarely found far from water.

Pig frogs resemble bullfrogs. They are 3-6 inches long, olive to blackish brown in color with prominent, scattered dark spots. In Florida pig frogs are common around the edges of water, in lakes, ponds and ditches, or floating in shallow water. They are active mainly at night.

Breeding occurs from late May through August. Pig frogs hold massive breeding choruses on warm rainy nights. As you might expect from their name, the pig frogs call sounds like a grunting pig. Females lay large numbers of eggs (>10,000) that are often seen lying in masses on the water surface, or attached to pickerelweed stems. The eggs hatch in 2-3 days.

Pig frog eggs turn into tadpoles in summer and do not become frogs until the April of the following year. The tadpoles are large and have extremely long tails.



Leopard frog

In Florida, you will hear leopard frogs calling even in winter – they call almost year round except July and August. The sound has been aptly described as like the noise made by someone 'slowly rubbing a finger over a wet balloon.'

Leopard frogs are medium-sized frogs, light brown to dark green with several rows of distinct brown spots. The throat and belly are white. They have long pointed heads and their eyes have a gold iris. There is a distinct light spot in the center of the tympanum or eardrum.

Leopard frogs are found in most water bodies, including shallow marshes, lakes, rivers, ponds and wet grassy areas. They are very alert to danger, and if you hear a splash as you walk along the edge of a pond or lake it is most likely a leopard frog leaping into the water.



Bull frog

The largest native frog in North America, the bullfrog reaches a maximum length of 20 cm (8 in). Its body is dark olive-green, and the hindlegs may be banded with darker stripes. On each side of the back there is a prominent ridge that extends from the rear of the eye, over the top of the tympanum (eardrum), and ends above the front leg. The webbing on the hind foot does not extend to the tip of the longest toe, as it does on pig frogs.



Bullfrogs are found in lakes, ponds and ditches or floating in shallow water.

Breeding begins in April, and eggs often form huge floating rafts of up to 20,000 eggs, which hatch into highly conspicuous and long (7 cm) tadpoles. The tadpoles do not become frogs until April of the following year. This may seem like a long time, but Florida bullfrogs actually develop quite fast compared with their northern relatives. In the northern US, where waters are cooler and the growing season is shorter, bullfrog tadpoles can take 2 years to become frogs.

The bullfrog's call is a deep, two or three syllable, 'jug-o-rum' or simply 'orum.'

Bullfrogs are found in the northern two-thirds of the state, but are absent from wetlands south of Lake Okeechobee.

Gopher frogs

Gopher frogs are short and stout, rarely reaching 4 inches in body length. The head and mouth are quite large with prominent eyes. The back is marked with dark, round spots and yellowish or dark dorso-lateral ridges.

Unlike most frogs, which are usually found near water, the gopher frog lives in highpine sandhills and sandy scrub habitats. The gopher frog is a common inhabitant of gopher tortoise burrows, and its geographic range is almost identical to the range of the gopher tortoise.

Gopher frogs are explosive breeders. When heavy rains refill dry ponds and depressions, males move from the dry, upland sandhills to these ephemeral, predator-free ponds and begin their distinctive snoring choruses. Gopher frogs will breed at any time of year— whenever conditions are right.

This frog was once found over most of peninsular Florida, but it has become much less common as upland habitats have been converted to other uses.



Toads

Toads are heavy-set amphibians with short back legs and a broad rounded snout. They have warty, dry looking skin that allows them to live in relatively dry habitats. Most species also have large prominent toxin-secreting parotid glands on the shoulder area of the back, one behind each eye.

Southern Toad

Southern toads are habitat generalists, common in yards and gardens, near porches and streetlights. If you keep your dog's water and food dishes outside, you will often find that one of these toads appears in the evening for a dip and a meal.

Southern toads are medium-sized, 9.2 cm (3.6 inches), variable in color, from red, brown, gray to dark charcoal. They can be distinguished by two large ridges between the eyes that end as knobs just behind the eyes. Large kidney-shaped parotid glands behind the eyes secrete bufotoxins. Males have a dark throat.

The call is a long penetrating high-pitched trill.



Giant Toad

Giant Toads - also called Cane Toads or Marine Toads - range in size from 6 – 9 inches and may weigh more than 2 pounds. They were originally released in sugar cane fields of south Florida in an effort to control mice and rats, but they are now found in urban areas, near canals and ponds throughout southern Florida. They eat almost anything that moves, including beetles, frogs, snakes and cockroaches. They are often seen at night, sitting under street and yard lights feeding on insects, or eating from dog and cat food bowls. Giant toads will eat almost anything, including native amphibians and reptiles.

These toads are toxic at almost every stage of their lives, as eggs, tadpoles and especially as adults. When threatened, adult toads secrete a white milky substance from the large parotid glands on the back of their head. The secretion is a potent bufotoxin, a skin irritant to humans and highly toxic to dogs and cats. Similar to the heart stimulant digitalis, the bufotoxin produced by the toad can induce a heart attack in dogs and cats. Dogs weighing as much as 80 lbs have died after biting a giant toad.

