



Southern Leopard Frog

Rana utricularia

This attractive frog takes its name from its spots, reminiscent of those of the big cat. The taxonomic status of leopard frogs has been widely debated. At one time, all were regarded as a single species, *Rana pipiens*. Today this group is recognized as a large species complex made up of several distinct species, at least one of which occurs in each of the lower 48 states. All North Carolina populations are regarded as *Rana utricularia*. More taxonomic studies are still needed in some areas—particularly in south Florida—to determine the specific status of these frogs.

The southern leopard frog is sometimes confused with the similar and closely related pickerel frog (*Rana palustris*), which may be distinguished by its more squarish spots and bright orange or yellow coloration on the concealed surfaces of its thighs.

History and Status

The southern leopard frog is common to abundant throughout most of its range in North Carolina; in some parts of the Coastal Plain it is probably the most common frog. Urbanization, destruction of wetlands and water pollution have reduced or eliminated some local populations, but the species is adaptable and continues to thrive in most places where relatively clean water exists. It is not listed under any category of special protection.

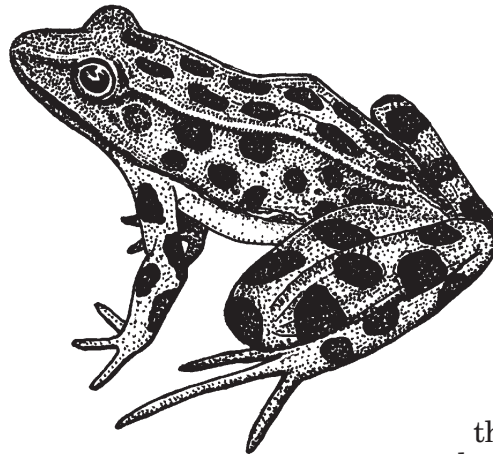
Description

An adult leopard frog's dorsal

coloration is normally brown, green or a combination thereof, with scattered dark brown, roundish spots and prominent yellow or gold dorsolateral folds extending the full length of the body on either side. There is a small white spot in the center of the tympanum, or eardrum. The belly is usually plain white. Leopard frogs have long, powerful hind legs and webbed hind feet. The head is relatively long and pointed, and the skin is smooth and moist. Males have paired vocal sacs, which resemble small, round balloons on either side of the throat when the frog is calling. The call is usually a series of guttural croaks followed by a clucking or chuckling trill, which has been compared to the sound produced by rubbing an inflated balloon.

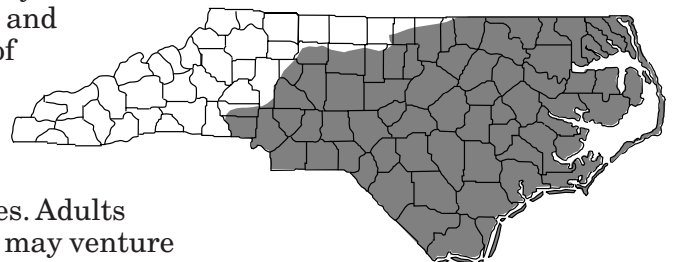
Habitat and Habits

Leopard frogs inhabit a variety of aquatic and wetland habitats, including ponds, lakes, swamps, marshes, ditches and slower streams. They breed in both permanent and temporary bodies of water. One of our most salt-tolerant amphibians, they sometimes occur in brackish marshes. Adults forage on land and may venture far from water, especially in wet meadows and similar habitats.



Rather wary, they are active and powerful leapers, and they may be difficult to catch. When pursued, a leopard frog often takes refuge in water but may also leap away from water and hide in vegetation. As it leaps for safety, an alarmed individual often emits an abrupt, shrill cry, which may serve to startle some predators.

Leopard frogs feed mostly on live insects, which they locate visually and catch with the aid of their large, sticky tongue. Like most other frogs, they appear not to notice stationary objects and will feed only on moving prey. Juvenile and adult leopard frogs are preyed upon by many creatures, including various mammals, birds, snakes, turtles, larger frogs and fishes. Eggs and tadpoles are also eaten by fishes, aquatic insects, salamanders, fishing spiders and other predators. They are very important components in many food chains.



Range Map:

Occupied range 

Range and Distribution

The southern leopard frog occurs in the eastern United States from Long Island to the Florida Keys; westward to eastern Texas, Oklahoma, and Kansas; and northward in the Mississippi Valley to northern Missouri and central Illinois and Indiana. In North Carolina it occurs throughout the Coastal Plain and most of the Piedmont but is absent from most of the Mountains.

People Interactions

Throughout their range, leopard frogs are frequently encountered (usually very briefly) by people engaged in outdoor activities near water. They are among the frogs sometimes collected by biological supply companies for dissection in science classrooms, but larger species such as the northern leopard frog and bullfrog are more often used. Occasionally they may be collected as fish bait or as food for captive snakes and may also be taken as human food, but most specimens do not grow large enough to attract much attention from serious frog giggers. Children may enjoy catching these frogs and their tadpoles, but they are not particularly easy to maintain in captivity and do not make very good pets. Huge numbers are killed by motor vehicles on rainy nights.

The boisterous chuckling of a large breeding chorus of leopard frogs is an experience that no nature-loving person would want to miss. They add life and vigor to wetlands—an aesthetic value that cannot easily be calculated.

References

Behler, John L., and F. Wayne King. *The Audubon Society Field Guide to North American Reptiles and Amphibians* (Alfred A. Knopf, 1985).

Conant, Roger, and Joseph T. Collins. *A Field Guide to Reptiles and Amphibians of Eastern and Central North America* (Houghton Mifflin Co., 1991).



Southern Leopard Frog (2-3½ in.)



Little Grass Frog (½-¾ in.)



Bullfrog (3½-8 in.)

Martof, Bernard S., William M. Palmer, Joseph R. Bailey and Julian R. Harrison III. *Amphibians and Reptiles of the Carolinas and Virginia* (University of North Carolina Press, 1980).

Credits

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WILD Facts

SOUTHERN LEOPARD FROG

Classification

Class: Amphibia

Order: Anura

Family: Ranidae

Average Size

2 to 3½ in. from snout to vent. Females are larger than males, on average.

Food

Primarily live insects and other invertebrates, occasionally small vertebrates.

Breeding

Most breeding takes place in winter and early spring, but leopard frogs may breed at almost any time of year. As with all our other frogs, the male calls to attract a female. When he finds her, he grasps her waist with his forearms and fertilizes her eggs as they are laid. The female lays several hundred eggs in a firm, gelatinous mass, often attached to a stem or other object just below the water's surface. Breeding frogs often congregate and lay many egg masses in a small area.

Young

Eggs hatch in a week or two. Tadpoles feed on algae and other organic material and may grow to about 3 in. long before transforming, after about 3 months.

Life Expectancy

Unknown. In the wild, the vast majority of leopard frogs do not survive their first year.