



## Pickerel Frog

*Rana palustris*

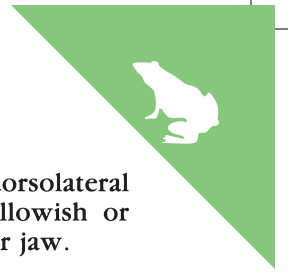
**General characteristics.** Going back to the earliest years of the 20th Century and before, this frog had been a popular bait used by anglers fishing for “pickerel”—hence its name. Today, although frogs still are used as bait, anglers should be aware that regulations affect the number of frogs they may have in possession at any one time. The pickerel frog is a medium-sized amphibian that averages from 1<sup>3</sup>/<sub>4</sub> to three inches as an adult.

It benefits from a built-in defense mechanism particularly effective against snakes and other animals that normally prey on amphibians. And once experienced, snakes seem to avoid pickerel frogs—and even their lookalikes—thereafter. The pickerel frog secretes a substance from its skin that is at least irritating, but often toxic to would-be predators. It is distasteful and emits an extremely unpleasant odor that even humans find obnoxious. The secretion is toxic to frogs other than its own species and has been known to be fatal to other frogs when placed in the same water-filled container.

The pickerel frog does not rely totally on its toxic skin secretions for protection. When frightened, it quickly leaps to find cover under shoreline mosses, or by suddenly diving beneath the water, it buries itself in mud lining the pond or stream bottom.

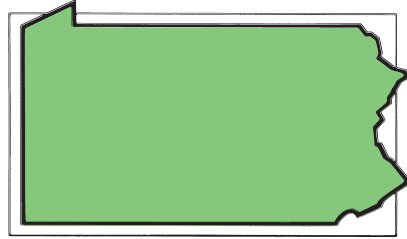
**Identification.** The pickerel frog is a spotted frog similar in appearance to the leopard frog, but with distinctly different markings. The pickerel frog has two rows of squarish spots down the back, but the leopard frog’s spots are rounded and usually not in rows as well-defined as are those on the pickerel frog. Also, the leopard frog’s wide head is more blunt than the pickerel’s somewhat pointed snout.

The skin of the pickerel frog is smooth with an almost metallic-like lustre. The background color is tan or a light grayish to light brown. The two rows of parallel spots or blotches down the back are contained between the dorsolateral folds. The spots are squarish and although irregularly shaped with uneven lines, clearly are not round. They are black to dark brownish or reddish brown. Small, square-like spots also appear on the sides of the pickerel frog. The belly is whitish up front, becoming bright yellow to orange toward the rear. Dark bars mark the upper surface of the hind legs, which are bright yellow to orange underneath. The leg markings also help distin-



guish this frog from the leopard frog. The folds of skin, the dorsolateral ridges, are prominent and extend to the groin. They are yellowish or creamy to a golden color. A light streak outlines the upper lip or jaw.

**Range.** The pickerel frog is distributed from Canada's Maritime Provinces in the north to the Carolinas in the south. Its western boundary runs from Wisconsin to eastern Texas. In Pennsylvania, each of the 67 counties has its share of pickerel frogs.



**Habitat.** This amphibian spends more time out of the water than in it. For the most part, water is used only as a breeding site and a haven from enemies. The pickerel frog prefers slow-moving water. This frog is at home in marshes, but it can also be found along streams and cool springs. During the summer it moves far into grassy fields or meadows that are moist, seeking out damp areas thick with low vegetation. Grassy areas along streams and woodland ponds also provide suitable habitat. The pickerel frog hibernates from October until March, but usually does not go into its winter retreat until pushed there by autumn's first frost.

**Reproduction.** The pickerel frog breeds during the period April until May, usually a bit later than the leopard frog. Water temperatures in the upper 50s nudge the male to begin calling its mate. The male joins the female in amplexus and fertilizes the eggs as they are released. The eggs are encased in a transparent jelly-like mass about 3½ to four inches in diameter. Breeding is accomplished in shallow water where the globular egg mass adheres to the stalks and stems of standing, sometimes emergent, vegetation. The female lays 2,000 to 3,000 brown and cream-colored eggs. They incubate for several days to perhaps a few weeks, depending on water temperature. The warmer the water, the sooner the eggs hatch.

The tadpoles are greenish and sprinkled with fine black dots. The tail fin is edged in black. They reach about three inches in length. Transformation to young pickerel frogs takes place usually in July or August or 2½ to three months after the tadpoles break free of the eggs.

**Call.** Only the male pickerel frog calls, at times singing beneath the surface of the water from where it sounds like a reverberant snore. At other times the calling is done at the breeding site with a full chorus of other pickerel frogs emitting a slow, low-pitched, steady croak, of one to two seconds duration.

This species uses two vocal sacs. When filled with air, they cause the area between the ear and foreleg to become swollen, producing a puffiness along each side of the head.

**Food.** The pickerel frog preys on caterpillars, a variety of insects including flies and gnats, crayfish and spiders. Like other frogs, it is carnivorous and feeds on just about anything it can handle.