

A True Frog

There is a tiny masked frog in these parts called a wood frog, Lithobates sylvaticus. When they first emerge from their swimming pollywog stage, they are froglets, only half an inch long but fully ready for life in the woods. Winter will come, and they will be tucked away under bark or grasses, slowing down for hibernation. They may even freeze, and live to tell the tale. These wood frogs are our most northern amphibians and some live way up above the Arctic Circle. Even the ones around here may freeze solid in a cold winter, but like a lot of invertebrate animals, they have a sort of antifreeze which saves them from ice damage.

In the early spring, before the ice is fully off the ponds and lakes, the wood frogs emerge and head for the water where they begin their courtship calls, as early as March. We think of the spring peepers as being our earliest frog singers, but the wood frogs are there, too. They sound like ducks quacking, but if you approach the pond the sound suddenly stops and there are no ducks to be seen. Male wood frogs have vocal sacs on either side of their bodies which swell into spheres above their arms and look a little like water wings. During the mating season, they look for a female and clasp her from behind, just below her arms. She then swims around until she finds a submerged stick or branch and starts her egg laying. She may put out a thousand eggs, in a small black ball or disc, and the male fertilizes them as they are laid. This process can take a couple of hours or even two or three days, but when she is finished laying eggs, the frogs separate and leave the pond, to spend the rest of the year in their terrestrial habitat, which is the woods.

Meanwhile, the eggs, encased in a jelly glob, start developing into larvae. The jelly around the outside of the egg mass is clear at first, but it soon turns green as it becomes imbedded with a green alga. This obscures the eggs and developing larvae and protects



them from some of their many predators.

Wood frogs often head for seasonal or vernal pools, and here at least there are no fish to gobble them up. These pools dry up by late summer, but the eggs hatch in three weeks and the pollywogs turn into little frogs in another month or so. They go from eggs to froglets in about fifty days, though development can be slowed by cooler temperatures.

It takes two years for the frogs to reach their full adult size, which is about two inches long. They are members of the family Ranidae, considered to be the "true frogs," and all members of this group have long legs, narrow waists, and smooth skin. The fingers are free and the hind toes are joined by webs, like flippers. Wood frogs don't have spots or decorations other than their raccoon-like mask. This is a dark or black patch that extends backward from the eye and is highlighted by a light line along the upper jaw back to the shoulder. The overall body color can be many variations from light fawn to shades of brown to almost black, and the underparts are creamy or white.

In March when the wood frogs go back to those chilly ponds for mating, they will start up with a clacking call known as the "advertisement call." Their other call is a "release call," and this is the little chirp made by a female who is not ready to lay

eggs and wants the male to unclasp himself from her. Males make the same release call when other males make the mistake of clasping them. This is all about reproduction. All systems must be "go."

Some other Ranids, or true frogs, in these parts are the northern leopard frog, the pickerel frog, and the green frog. Green frogs put out their egg masses in June and early July. They hatch as pollywogs in less than a week and some turn into frogs that same summer. Others overwinter as pollywogs and emerge the following spring. Green frogs look for the shallows in large bodies of water. They will not be able to overwinter in the temporary vernal pools favored by the wood frogs.

The wood frog's Latin name, Lithobates sylvaticus, means a "stone that walks or hunts" and is a creature of the woods.

This is a practical and descriptive name. When I see a little masked character flying over the ground in its long leaps, I don't think of a walking stone. I am thinking Tiny Zorro, or the Little Lone Ranger, "away!" A bit of romance and excitement, to honor an excellent true frog.

— Bonner McAllester, *Monterey News*