

factsheet

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Wood Frog *Rana sylvatica*

LENGTH: 2 TO 6 CM

YELLOW-LISTED SPECIES MANAGED THROUGH ECOSYSTEM MANAGEMENT ARE SPECIES THAT ARE SECURE, WELL DISTRIBUTED IN APPROPRIATE HABITAT AND WILL SURVIVE IN HABITATS THAT ARE MANAGED FOR REPRESENTATIVENESS AND CONNECTIVITY.

At a Glance

Wood Frogs are small to medium-sized frogs, with an average body length from 2 to 6 centimetres. They have a characteristic black “mask”, a broad dark band passing through the eye from snout to shoulder, bordered below by a white lip line that looks like a moustache. Wood Frogs come in many colours. They may be light tan, grey, deep brown, blue-green, or distinctly red, often with dark spots or mottling on the back and sides. Some individuals have a single prominent white stripe down the middle of the back. Two broad light-coloured stripes may also be present on the back. Wood Frogs have white bellies with some dark mottling at the sides and on the throat, and they have prominent dorsolateral folds/ridges that run from the back of the head down the frog’s back. Males and females look similar, except that males have a dark, swollen thumb during the breeding season and two throat pouches that inflate when they call. Females are a few millimetres longer than males.



WALLACE EDWARDS

Tadpoles have a very short, round body and an arched tail fin that begins high on the back. They are uniformly dark with gold flecks in lines around the mouth. The belly may be dark with a silver sheen, or cream coloured with a pinkish iridescence. They may grow to 5 cm long.

You may often hear male Wood Frogs calling early in the spring, sounding very much like the quacking of ducks. Don’t be fooled! If you hear “quacking” but can’t see any birds, you are probably listening to a Wood Frog chorus.

Home Sweet Home

Wood Frogs are largely terrestrial, but are not usually found far from water. They inhabit marshes, riparian areas, wet meadows, moist brush, and open grassy areas adjacent to such habitats. Wood Frogs hibernate in the soil, using root channels and burrows made by other animals. The soil and snow pack provide insulation and protection to the frogs, which can survive temperatures as low as -6°C. The frogs actually freeze solid at these low temperatures, but protect their cells from damage by producing their own “antifreeze”— really a cryoprotectant. Naturally, scientists are very interested in this talent!

Wood Frogs breed in seasonal pools, shallow ponds, marshy lake edges, flooded meadows, and quiet stretches of streams. Wood Frogs lay their eggs in ponds and marshes that don’t contain fish, and the breeding adults can actually tell if fish are in the water, apparently by “smelling” them. Tadpoles usually live in the warmest, most shallow parts of the wetland.

This is the Life

Wood Frogs emerge early from hibernation, moving to breeding sites as the snow and ice begin to melt. Males congregate in shallow clear ponds and will call day and night as long as the temperature remains above freezing. Their distinctive, throaty, duck-like quacks alert females to their presence. Mating pairs join together to deposit and fertilize the eggs, which are densely packed into a soft mass of jelly the size of a plum or orange. Masses from several females are usually laid together, attached to submerged sticks and plants or lying freely in the water. Each mass may have as many as 2000 to 3000 eggs.



**Present range of the
Wood Frog in
British Columbia**



no kidding!

Adults and metamorphosing tadpoles produce repulsive skin secretions that deter predators such as aquatic insects and shrews. Most adults give a defensive call, or "mercy scream", when attacked by shrews.

Wood Frogs are supercool! They are the only North American amphibian that occurs north of the Arctic Circle. They have an incredible ability to survive freezing winter temperatures, and in spring, warm up and hop away!

It's a "frog-eat-frog" world. Wood Frogs have been known to eat smaller frogs in the fall to help them store up energy for a long winter!

Wood Frogs are so small that they could sit in a coffee cup without scraping their noses!



Outside the breeding season adult Wood Frogs are fairly solitary. They are most active during the day, foraging far and wide. Egg and tadpole development are rapid. Even at comparatively low temperatures; the tadpoles are able to transform into froglets by mid-summer. Juvenile and adult frogs hibernate terrestrially to survive cold winter temperatures. Males mature one year after metamorphosis, while females reach maturity in 2 years. Wood Frogs seldom live more than three or four years.

What's on the Menu

Wood Frogs share the usual frog preference for insects, worms, snails, millipedes, molluscs, and other small invertebrates. Tadpoles are herbivores, and feed on algae and other plant material.

Where and When

Wood Frogs are widespread in B.C.'s central and northern interior, and extend south along the Rocky Mountains to the East Kootenays. They may be present at elevations of up to 3050 m. They are found across Canada, and north past the Arctic Circle.

Depending upon weather conditions in local areas, breeding may occur between early March and June. Wood Frogs are explosive breeders; while breeding may take a few weeks in more southerly parts of their distribution, it may occur over only a few days in the north. Egg laying begins 4 to 6 days after the first frogs appear, and most egg laying is completed within 7 to 10 days. Eggs can hatch in as few as 4 to 7.5 days depending on temperature. Metamorphosis generally occurs 45 to 80 days after the eggs are laid.

How They're Doing

Wood Frogs are widely distributed and are not considered to be at risk. This species is on the provincial Yellow List of species managed at the ecosystem level.

How We're Helping

Reported incidental sightings and amphibian inventory projects have helped to map the distribution of Wood Frogs in B.C. We're hoping to learn more about this species' ecology and life history.

The Wood Frog is protected under the British Columbia *Wildlife Act*.

How You Can Help

Learn about Wood Frogs and share your knowledge with others. Contribute your reports of Wood Frog sightings and breeding calls to BC Frogwatch.

You can find out more about BC Frogwatch, the Biodiversity Branch and the Conservation Data Centre at

<http://wlapwww.gov.bc.ca/wld>

BC Frogwatch

Ministry of Water, Land and Air Protection
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Conservation Data Centre

Ministry of Sustainable Resource Management
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Biodiversity Branch

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