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Nature at Risk Series

Are We Driving Out the Northern Leopard Frog?

Brodhead Watershed Association

With their big eyes, rainbow colors, and fascinating lives, frogs are one of the first wild creatures kids learn to love.

And what's not to like? They come in all sizes — from one in Papua New Guinea about as big as a housefly, to the Goliath frog whose body is one-foot long (not counting the legs). Most are harmless to humans. And the colors! Purple, emerald-and-orange, yellow, olive, spotted, smooth, bright-blue and ruby-eyed.

No one knows for sure exactly how many species exist in the world, but 5,000 or more is one educated guess.

Of the 16 species in our area, the northern leopard frog (*Lithobates pipiens*) is easy to identify. At four-and-a-half inches, it's one of our bigger true frogs, and patterned in large, dark, oval spots with light margins. (Though it takes imagination to think the spots are like a leopard's!) Pale ridges run from their eyes along both sides of their backs.

Northern leopard frogs used to be common from most of Canada through the colder parts of the U.S. Just since the 1960s, they've been almost entirely wiped out in their western ranges by invasive predators, introduced diseases and pesticides, plus humans and climate change wrecking their habitat.

Healthy populations still exist. But like other creatures, to survive and thrive, northern leopard frogs have specific needs. They are meat-eaters, chowing down on just about whatever fits in their mouth — bugs and flies, moths, beetles, worms, smaller frogs (including their own species). Sitting rock-still in the open, they snag whatever happens by. Northern leopard frogs lay their eggs in still, permanent bodies of water, usually attaching the eggs to plants just below the surface. That could be a beaver pond, the boggy headwaters of a small creek, even a backyard water garden.

To meet those basic needs for survival, northern leopard frogs must have a patchwork of wetlands, open water, vegetation like sedges and rushes, and dry upland habitats, all within about half a mile. This mosaic of habitats once was common in our area. But more warehouses, forest timbering and destruction, and contaminated water have made it rare.

Now, in winter, northern leopard frogs are hibernating under water waiting for March or April. The surface water may freeze, but where they are snuggled down under organic matter, ground water keeps a constant 55 degrees.

When they emerge from hibernation this year, will they find a world where they can survive? It's anybody's guess.

For more information

<https://www.fishandboat.com/Resource/AmphibiansandReptiles/Documents/northleopardfrog.pdf>

<https://www.nps.gov/articles/northern-leopard-frog.htm>