





Northern Leopard Frog & Western Toad Classroom Kit

Teacher's Guide

Dear Educator:

Ecology North developed this resource as a part of the Northwest Territories Species at Risk Stewardship Program. It contains fun and interactive ways to educate students about amphibians at risk and the factors affecting them in the NWT.

Amphibians in the NWT

For a long time, there was less known about amphibians in the NWT than any other region in Canada. Amphibians are few in numbers, stay dormant for the colder parts of the year, and have a small territory that they stick to for their entire lives. The discovery of new breeding grounds and populations is extremely rare.

Most of what we know about NWT amphibians is traditional knowledge and is backed up by research done elsewhere. Traditional knowledge holders state that the number of frogs and toads is decreasing. Globally 42% of amphibian species populations are declining, and 1/3 of all species were considered to be threatened or extinct as of 2011.

Did You Know?

A lot of knowledge has been collected about amphibians in the NWT in the past 20 years. Before that there was only one unconfirmed record of the Western Toad from over 100 years ago!



Name Latin Name	Northern Leopard Frog (Lithobates pipiens)	Western Toad (Anaxyrus boreas)
Adult Size	11cm	5-12cm
Lifespan	4 years	11 years
Colours	Tadpoles are slender and black. Adults are usually green, and sometimes slightly brown.	Tadpoles and toadlets are black. Adults range anywhere from olive green to reddish brown.
Adult Markings	Unmarked milky-white underside. Two light stripes down the back. Smooth skin with dark spots surrounded by light borders. Long slender bodies perfect for jumping.	A large light stripe down the back. Upper body covered in little round bumps. Short stumpy legs and body, prefer to crawl rather than hop.
Call	A long drawn out rattling snore which ends with several rapid short grunts.	Those found in the NWT have no vocal sacks, making them a non-calling population.
Summer Habitat	Meadows and grasslands. Prefer to be in the water.	Wetlands, forests, shrublands, meadows. Prefer to spend their time on land.
Hibernation	In the fall the frogs seek rivers and lakes with bottoms covered in sand or mud, often returning to the same ones year after year. They hibernate at the bottom where the water does not freeze. Dissolved oxygen is needed for them to breathe through their skin.	These toads return to the same locations year after year to overwinter below the frost line. They go underground or to natural cavities such as old beaver lodges, and get insulated by snow. They need to stay near water so that they do not dry out.
Eggs	Females lay one clutch with between 600-7000 eggs per year, depending on their size and age.	Females will not breed until they are 4-6 years old and can only lay one clutch (about 3,000 eggs,) in their lifetime.
Breeding	Over a few days in mid to late May, the frogs gather to breed and lay eggs, even though there is sometimes still ice on the wetlands. They prefer open shallow water with new vegetation and no fish.	In May, the Western Toad must cross the Liard Highway to get to their only known breeding ground at the mouth of the Muskeg River. Their colouration makes them almost impossible to see when driving, and many do not make the crossing.
Adult Population Size	2,500-10,000 adults, perhaps less.	200-8,000

Here's how you can help



Engage with elders and knowledge holders in your community and help share their information about amphibians.



Report frog and toad sightings to wildlifeobs@gov.nt.ca and track them on naturewatch.ca/frogwatch. Include photos if you can.



If you see a toad or frog, don't try to catch it! They breathe through their skin and hands can harm them.



Make sure to keep the water and land around you clean so that the amphibians can breathe safely through their skin underwater.



Get a water testing kit (available at Ecology North) and report your findings to naturewatch.ca.



Be aware of when amphibians may be on the move and keep an eye out not to harm them - especially if you're driving on the Liard Highway in May!



Create a species identification sheet for an animal at risk. Share it with your community and Ecology North, to help spot these animals and raise awareness.

Activities

Act It Out

To help remember the stages of amphibian life cycles; act this out together. Try doing separate life cycles for frogs and toads. Afterward, you can have frog races or play Tadpole Tadpole Toad (Duck Duck goose but as toads.)

Toads and Frogs start as eggs.

Curl up in a ball frogs bunched all together, toads in a line Then they hatch! Tadpoles don't have arms or legs yet, so they swim around with their tails.

Wiggle around with your feet together and hands by your side. They even breathe with gills like fish!

Make gill motion with hands.

They start growing their lungs while they grow their legs. Now they can swim better.

Hop around low with arms at sides.

When their front legs grow, they can finally hop onto land! Frogs jump, toads crawl.

Frogs have teeth in their upper jaw.

Show off your top teeth.

Toads have no teeth.

Put lips over teeth.

Now that they've absorbed their tail it's time to start eating. Frogs throw your hand out like a long tongue to grab imaginary flies. Toads same but with shorter tongue. Northern Leopard Frogs make a long call ending in several short grunts.

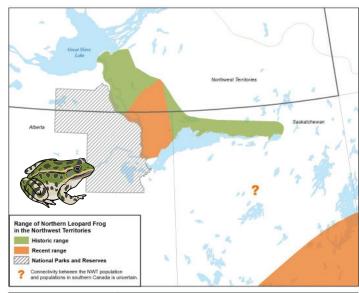
Colouring

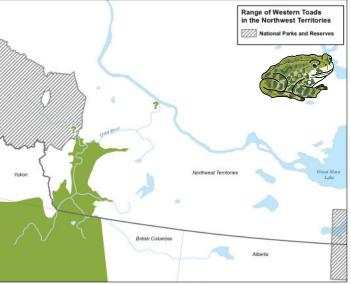
Use the provided colouring sheets to learn their markings. Remember to keep a master copy.

Sona

Little Tadpole (tune: Frère Jacques) Little tadpole, Little tadpole Lost its tail, lost its tail. Now it has two feet Now it has four feet Look a frog! Look a frog!







Resources

nwtspeciesatrisk.ca Information about species at risk in the NWT and their management plans. Includes photos and maps.

nwtsciencefocus.ca Ecology North's educator resource hub for lesson plans and activities including more related to Species at Risk.

naturewatch.ca/frogwatch Interactive map of frog and toad sightings accross Canada; a part of Nature Watch which collects data from citizens to help monitor and understand our environment.

NWT Public Libraries Have many books and DVDs containing information and stories about NWT amphibians.

amphibianark.org Includes information about global efforts to help amphibians, games, lesson plans and more.

californiaherps.com/frogs/pages/l.pipiens.html Includes photos of the stages of the frog's life, videos, sound bites and other information about the Northern Leopard Frog.

Other Words for Frog

Chipewyan	ts' áile
Cree	ayikis
Kátł'odehche Dialect	ts' ahle
Tłįchę	tsöali, tsöari

These languages are spoken near where you can find Northern Leopard Frogs and Western Toads. Try finding other words related to amphibians that would be used in the NWT.





