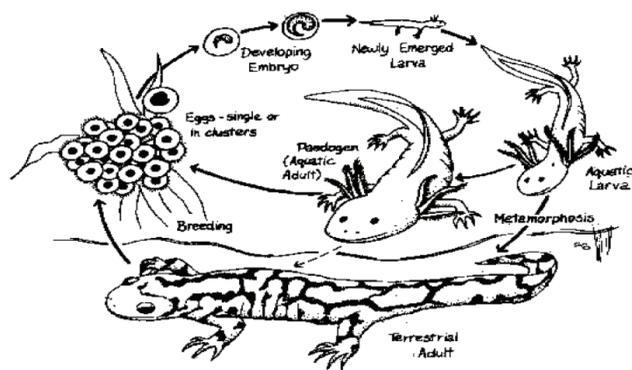


# Spotlight on Species

## Okanagan Amphibians at Risk: "It ain't easy being green"

### What is an amphibian?

Amphibians start life in ponds as eggs then hatch into tadpoles or larvae using gills to breathe. When lungs are developed, they can leave the pond and breathe through their smooth skin (no fur, feathers or scales!). The change from egg to tadpole or larvae to an adult is known as metamorphosis. Amphibians need wetlands but also good habitat on land since they are both aquatic and terrestrial.



### Tiger Salamander

Latin name: *Ambystoma* ("blunt mouth") *tigrinum* ("like a tiger")

**Conservation status:** Provincial Red list (threatened or endangered), listed as endangered in Canada.

**Description:** Just like the Spadefoot, this amphibian has adapted to a desert climate. Unlike other salamander families, tiger salamanders have stout bodies and limbs. They can be various colours and patterns ranging from patches of greenish olive, yellow or tan on a brown or black background. Adults have large round heads with a blunt mouth and very tiny eyes. They are nocturnal predators who eat insects, baby mice, snails and slugs. Tiger Salamanders look like tigers and hunt like tigers!



Wade Alcock photo

**Habitat:** The tiger salamander breeds in permanent ponds, oxbows or lakes and sometimes in seasonal ponds. Larvae live in aquatic weeds under logs or in shallow water. The adults forage in sage and antelope-brush grasslands, open forests and riparian areas. They create burrows or use the burrows of other animals. Most of their adult life is spent underground.

### Great Basin Spadefoot

Latin name: *Spea intermontana*

**Conservation status:** Provincial Blue-list (vulnerable), listed as Threatened in Canada because of population decline, small home range, and loss of habitat.

**Description:** Spadefoots are unique desert-adapted amphibians that look very much like toads. They are small and squat with stubby noses and eyes with a vertical pupil. They are nocturnal foragers who eat a variety of insects and aquatic plants. Spadefoots have to watch out for fish, birds, non-native bullfrogs and even snakes which will eat them. Adults spadefoots can be up to 6 cm in length.

**Habitat:** They need ponds or temporary pools of water for eggs and tadpoles. Spadefoot adults require deep, loose soils for burrowing and foraging. Since they move between aquatic and terrestrial habitats, crossing roads can be a hazard.



Sara Ashpole photo

### FUN FACTS

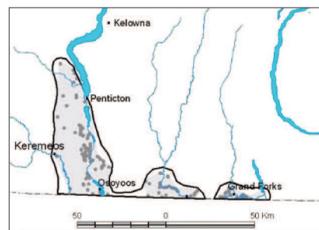
Most tiger salamanders develop from aquatic larvae to terrestrial adults but some larvae do not metamorphose. They retain their gills and stay in the water as adults. These forms are called paedomorphs, also known as "waterdogs" or "mudpuppies".

If ponds dry up or contain little food, some salamander larvae will become cannibal morphs developing enlarged mouths and large teeth and eating members of their own species!

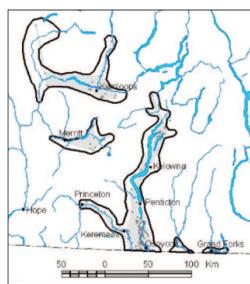
They can withstand highly alkaline (salty) water that would pickle most other animals!



Wade Alcock photo



Range of the Blotched Tiger Salamander (*Ambystoma tigrinum melanostichum*).



Range of the Great Basin Spadefoot (*Spea intermontana*).

Legend:  
 ■ Inferred Extent  
 ■ Extent of Occurrence  
 □ Estimated Range

### FUN FACTS

This critter is not quite a toad or a frog but something special called a spadefoot because of distinctive "spades" on the hind feet. These hard pads allow the Spadefoot to dig a hole and hide in seconds flat. Spadefoots spend most of their time underground to hide from the summer sun and winter frost.



Sara Ashpole photo

"Gwaaaaahh"...a snoring-croak attracts female spadefoots and sounds like an old man snoring.

## AT RISK Amphibians need your help!

In the Okanagan and Similkameen, rapid urban and agricultural expansion is taking over critical amphibian habitat. As our summers get warmer, wetlands are drying up so it is harder to find ponds to lay eggs. Introduced fish such as bass and perch eat eggs, larvae and adults, making many wetlands into death traps. Global warming has also been hard on amphibians all over the world. Increasing ultraviolet rays affects the skin of amphibians and can make them more vulnerable to disease.

Did you know...it is illegal to fill in a wetland without approval under the BC Water Act?



Michael Bezener photo



Ministry of Environment photo

### What you can do

- ✓ Maintain and restore ponds, seasonal flooded areas, and wetlands so amphibians can use them.
- ✓ Build exit structures so amphibians don't get trapped in artificial water features such as swimming pools and hot tubs.
- ✓ Keep cattle and horses away from natural ponds or restrict their access.
- ✓ Keep the natural habitat around small ponds and lakes.
- ✓ Please don't release pet frogs or live fish into natural ponds. Bullfrogs and non-native fish are major predators to local amphibians.
- ✓ Please don't ride bikes or ATVs near wet meadows or ponds. Soil compaction can destroy the habitat for amphibians.
- ✓ Use pesticides responsibly and remember that run-off chemicals can get into local water systems.

If you want to learn the various amphibian calls and join a volunteer monitoring program please refer to BC Frogwatch- [www.env.gov.bc.ca/wld/frogwatch](http://www.env.gov.bc.ca/wld/frogwatch).

### FUN QUESTIONS

Answers in next edition.

What other animal has a vertical pupil like the Spadefoot?

Can you think of three other Okanagan animals that use a burrow like the Tiger Salamander?

Do toads have warts?

What sound does a Tiger Salamander make?

The "Spotlight on Species" program promotes awareness of species at risk and local conservation initiatives.

For more information call 250-492-4422. This program is supported by Environment Canada: Habitat Stewardship Program.



OKANAGAN  
SIMILKAMEEN  
CONSERVATION  
ALLIANCE



Environment  
Canada

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Service

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Service Canadien  
de la faune

The South Okanagan-Similkameen is home to one of the greatest concentrations of species at risk in Canada. Our conservation efforts work to maintain this unique natural area that has one of the greatest concentrations of species diversity in Canada. Strong community support and involvement help create a positive balance between wildlife requirements and human needs and aspirations.



South Okanagan  
Similkameen  
CONSERVATION PROGRAM

