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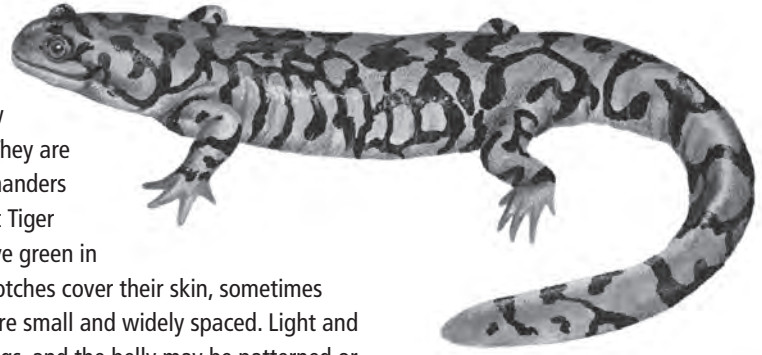
Tiger Salamander *Ambystoma tigrinum*

LENGTH: 15 TO 25 CM

RED-LISTED SPECIES ARE THOSE THAT HAVE BEEN LEGALLY DESIGNATED, OR ARE BEING CONSIDERED FOR LEGAL DESIGNATION, AS ENDANGERED OR THREATENED.

At a Glance

Tiger Salamanders are large, powerful salamanders which can grow up to 15 to 25 centimetres in length. They are one of the largest land-dwelling salamanders in the world. In British Columbia, most Tiger Salamanders are golden yellow, or olive green in colour. Black or dark grey stripes or blotches cover their skin, sometimes making a tiger-like pattern. The eyes are small and widely spaced. Light and dark patches cover the long tail and legs, and the belly may be patterned or grey. Thirteen costal grooves (vertical furrows that look like ribs) appear as folds down each side of the body. Two "tubercles" on the bottom of each hind foot help in digging burrows.



WALLACE EDWARDS

Newly hatched salamanders (hatchlings) are silvery-grey with large tail fins and long, feathery gills. Unlike frog tadpoles with gills tucked inside, hatchlings wear their gills outside their bodies, attached to the sides of their heads.

In ponds deep enough not to freeze to the bottom during winter, some of the salamanders may become *neotenic* — they do not transform into terrestrial adults, but reach reproductive status while retaining larval characteristics and remaining aquatic. Only a few ponds in B.C. have neotenic populations. Neotenes can grow much larger than terrestrial adults (over 30 cm!)

Home Sweet Home

Tiger Salamanders are amphibians (like frogs) that breathe and drink through their thin, wet skin. This sensitive coat must be carefully protected from drying out, so it might seem strange that such a critter would make its home in the hot, dry grasslands of the Okanagan. Yet this is just the kind of habitat these salamanders like best! The shallow ponds and lakes of B.C.'s southern interior provide just enough standing water for adults to breed and larvae to metamorphose into juveniles. Nearby grasslands and aspen groves make good summer homes. Adults and juveniles seek out cool hollows underground and seem to like the shade of rodent burrows the best.

This is the Life

Tiger Salamanders gather at breeding ponds in early spring. With a lift of his tail, the male lays down a little packet of sperm for the female to pick up with her cloaca. Up to 120 eggs are laid shortly after breeding, attached singly or in small clumps to stones, twigs and plants in shallow water. Hatchlings emerge two to three weeks later and quickly develop into four-legged larvae. Unlike tadpoles, Tiger Salamander larvae develop their front legs first. Larvae stay close to shore where there are lots of aquatic plants and algae to hide in. After three to four months, larvae transform into juveniles with a new set of lungs and no gills. After a few days or weeks by the pond edge, juveniles set off at night during wet weather to begin their life on land. They return to the pond to breed when they are sexually mature four to five years later. Although they have been known to live for up to 20 years in captivity, Tiger Salamanders probably rarely live more than five or six years in the wild.

What's On the Menu?

The Tiger Salamander is a sit-and-wait predator that watches for an unlucky critter to wander by, then gulps it up with its large mouth. Adults and juveniles make lunch of beetles, earthworms, snails and the occasional frog or baby mouse. Larvae and neotenic salamanders feed on small crustaceans, insect larvae, small fish — and the larvae of other salamanders!

Salamander hatchlings are an important food source for fish, aquatic invertebrates, dragonflies and diving beetles. Coyotes, garter snakes and Burrowing Owls also find Tiger Salamanders a satisfying meal.



**Present range of the
Tiger Salamander
in British Columbia**



no kidding!

When there are lots of larvae but little food in the pond, some salamander larvae can become cannibal morphs. With enlarged mouths and teeth, these morphs are skilled at catching and eating their fellow larvae. Cannibals prefer eating larvae that aren't related to them, of course — likely telling brothers and sisters apart from strangers using chemoreception ("smelling" their body chemistry!).

*The scientific name given to this salamander, *Ambystoma tigrinum*, means "blunt mouth" "like a tiger" referring both to the tiger-like stripes on its body and to the ferocious habit of eating anything that will fit in its mouth.*

Where and When?

Tiger Salamanders are found throughout the U.S., south through Mexico and north into Alberta, Saskatchewan and Manitoba. In B.C., they live in the Okanagan, Lower Similkameen and Boundary areas north to Summerland, west to Keremeos and east to near Christina Lake.

Part of the "mole salamander" family, Tiger Salamanders spend most of their time underground. Terrestrial adults are not often seen outside the breeding season, surfacing only at night or after rains. In summer, larvae and neotenes can be found in shallow lakes and ponds, trying their best to escape the hungry eyes of herons, fish and owls. During winter Tiger Salamanders escape the frost inside underground rodent burrows or rotten logs, while neotenic salamanders remain near the bottom of their ponds, below the ice.

How They're Doing

In B.C., Tiger Salamanders are found in only a small pocket of the southern interior, and much of their habitat has been disturbed. Crop irrigation drains breeding ponds before larvae are ready to live on land. Pesticides applied to crops run off into ponds and can damage sensitive eggs and larvae. Livestock trample pond edges, causing eggs and larvae to dry out, and trample the rodent burrows that salamanders use to hole up in during summer. Fish stocked in breeding ponds eat salamander eggs and larvae. The spread of towns, agriculture and roads divides Tiger Salamander habitat into small, isolated pockets, making it tough for adults to migrate between breeding and burrowing sites without being run over. They are also isolated from Washington populations to the south.

The B.C. population of Tiger Salamanders is considered nationally Endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and has been placed on the provincial Red List.

How We're Helping

Recent research has taken a look at the habitat needs of Tiger Salamanders in the interior of B.C. By attaching radio transmitters to these salamanders, biologists were able to track them as they went about their daily activities. This project helped biologists understand how large an area Tiger Salamanders need and where they go in the winter. The more we know about these fascinating amphibians, the better we can help them! The BC Conservation Data Centre maintains records of this and other species at risk in B.C.

A few Tiger Salamander ponds are included in protected areas and on properties owned by the Nature Trust of B.C. Government agencies and conservation groups are cooperating to develop management plans for threatened habitats in the South Okanagan, which will benefit many species. The Tiger Salamander is also protected under British Columbia's *Wildlife Act*.

How You Can Help

You can help by keeping an eye out for this striking salamander in your local pond or wetland and reporting your findings to BC Frogwatch, who will forward the information to the BC Conservation Data Centre. These sightings help Frogwatch identify important habitats used by this amphibian. Find out where salamander habitat can be found near you and let your voice be heard when decisions are being made that might affect these important areas. Learn more about how you can help conserve wetlands for each of B.C.'s wet and wonderful critters by contacting organisations such as Wetlandkeepers, Naturescape and Wild BC.

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

<http://www.env.gov.bc.ca/wld>



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