

WHY should you care?

Why are Jefferson Salamanders important?

I know, I'm small but you need me! I help the ecosystem survive! I'll explain; imagine a recipe with several ingredients. If you remove one of the ingredients you will change the recipe. Jefferson Salamanders are part of an ecosystem and a food web, just like an ingredient is part of a recipe. If you take us out of the ecosystem, the ecosystem will change. For example, who will eat worms and small insects if I'm not around? As well, I could be food for predators such as hawks, frogs, fish, birds and mammals. When you take something away from the cycle it affects many levels.

Salamanders are valuable not only because they can benefit people but because they have been a valuable part of our ecosystem for millions of years.

FUN FACT:

Jefferson Salamanders are an "indicator species", which means that the health of our population provides clues about the quality of the environment. The disappearance of Jefferson Salamanders from an area may serve as an early warning of pollution!

Help make it easier for us to survive!!!

- Stay on the trails and paths while hiking
- Obey park rules and regulations
- Help keep natural areas and parks clean by picking up litter
- Volunteer to help maintain parks and forest in your community!

For more information or to report a sighting contact the Town's Natural Heritage Section at:

naturalheritage@richmondhill.ca

Or 905 - 771 - 8870

This brochure has been produced by the Town of Richmond Hill with the support of the HSP Partnership Program and the Jefferson Salamander Recovery Team.

The Habitat Stewardship Program for Species at Risk, a Government of Canada program managed cooperatively by Environment Canada, the Department of Fisheries and Oceans, and Parks Canada.



Canada

The Jefferson Salamander



ABOUT ME!

Hi, I'm a Jefferson Salamander but all my friends call me Jeffy. I'm a member of the mole salamander family. Jefferson Salamanders are long salamanders with slender bodies. We can grow to be up to 18 centimeters in length. We vary in colour, from dark to brownish grey with pale-blue flecks located on our lower sides and limbs. At times the flecks on our body make it hard to distinguish us from the blue-spotted salamander, our distant relatives. People sometimes mistake Jefferson Salamanders for lizards but it's important to know that we are amphibians, just like frogs. Unlike lizards, we have moist skin and we don't have scales, ears, or claws.



PHOTO BY RON GOULD

Where I live

Deciduous forests with suitable breeding ponds are my home! I prefer to live in the damp environment of the forest floor because it keeps my skin moist. During our breeding season, Jefferson Salamanders migrate to



nearby vernal ponds. Vernal ponds are unique; they are temporary bodies of water that fill in the spring when the snow melts and there is plenty of rain.

FUN FACT:

Jefferson Salamanders are burrowers; we spend most of our life underground where there are loads of insects, worms, and small mice that we can eat – yummy!

Reproduction

I live underground most of the year and I'm nocturnal (which means that I'm most active at night.) In Canada, my breeding season begins in late March when I migrate from my winter home on the forest floor to a nearby vernal pond. When female Jefferson Salamanders reach the ponds they lay approximately 30 eggs on submerged vegetation. Once our eggs are laid they rapidly develop, and hatch after 15 to 19 days. Our little ones (called larvae) stay in the pond for 61 to 110 days during which time they grow 3 to 8 times their hatching size. The larvae go through a metamorphosis process and lose their gills and fins. Their tails, skin, and limbs

become thicker and their eyes develop lids. Young salamanders then gradually develop lungs, which allow them to leave the pond and spend the rest of the summer in the forested areas surrounding the pond.

Distribution and Population

We Jefferson Salamanders live in parts of Ontario where human populations are getting very dense and, as a result we are worried about our survival. In fact, in Canada, endangered species legislation has designated my species as "threatened" to protect us over the long term. It is illegal for anyone to kill, harass, capture or collect a Jefferson Salamander. It would even be considered an offence to damage or destroy the habitat we live in.

THREATS!

Jefferson Salamander populations may be impacted by:

- Destruction of woodlands and wetlands;
- Roads which obstruct our migrating paths;
- Runoff from roads containing pesticides/fertilizers, chemicals, and contaminants from vehicles; and,
- Exotic species that compete with us for food and habitat.