

# What can YOU do to protect local salamanders?

Use sustainable products to reduce your carbon footprint.

Protect caves & other important amphibian habitats.

Leave salamanders in their native habitats; don't take them home.

Disinfect field gear between sites to reduce the risk of transmitting deadly disease.

Replace turned logs to prevent drying & maintain salamander habitat.

Pick up litter to keep salamander habitats pristine.

Support local conservation organizations like FCSal

**More info  
at [fcsal.org](https://fcsal.org)**



**FCSal is an organization dedicated to the conservation of salamanders and their habitats.**

## Contact Us

Foundation for the Conservation of Salamanders (FCSal)



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The Foundation for the Conservation of Salamanders



[@fc\\_salamander](https://www.instagram.com/fc_salamander)

# Salamanders of Alaska

Alaska is home to three species of salamander



## AN EDUCATIONAL GUIDE



**PROVIDED BY THE  
FOUNDATION  
FOR THE  
CONSERVATION  
OF  
SALAMANDERS  
(FCSAL)**

# Threats to Salamanders

Destruction of natural habitats can lead to loss of suitable habitats for salamanders. Fragmentation of habitats can further isolate populations, making them more vulnerable to extirpation.

Diseases such as Amphibian Chytrid Fungus and Ranavirus are spreading across the world causing amphibian declines.

Climate change is affecting salamander assemblages as well as breeding ecology by altering the weather within their microhabitats.

Pollution can affect a salamander's sensitive skin, causing an array of problems for these environmental indicators, species that reflect the health of the environment.

Salamanders will often cross roads to access breeding sites making them susceptible to road mortality.

Invasive species, such as non-native fish, amphibians, and crayfish, can compete with native salamanders for food and habitat resources. Predation by invasive species can also pose a significant threat to salamander populations, especially in areas where invasive predators have been introduced.



Northwestern Salamander (*Ambystoma gracile*)



Long-toed Salamander (*Ambystoma macrodactylum*)



Rough-skinned Newt (*Taricha granulosa*)

Photos by: S. Anderson (NPS), Patrick Kleeman (USGS Western Ecological Research Center), Tom Kirk (USGS Western Ecological Research Center)

# Did you know?

- No salamander species have been documented in Alaska outside of the Southeastern part of the state
- In some populations northwestern salamanders exhibit neoteny more frequently than metamorphosis. This means that instead of transforming into terrestrial adults, these salamanders retain their larval characteristics, such as external gills and aquatic habits, throughout their lives.
- In cold areas (like Alaska!), the long-toed salamander will hibernate in groups of up to 14 individuals!
- Salamanders are among the oldest amphibians, with fossil records dating back over 160 million years. They coexisted with dinosaurs and have remained relatively unchanged in their basic body structure since that time.
- Salamanders breathe through their skin, which must be kept moist to facilitate gas exchange. Many species have specialized glands in their skin that secrete mucus to keep them moist and aid in respiration.
- Salamanders can regrow lost limbs, tails, and even parts of their heart and brain. This remarkable regenerative capacity has made them the focus of extensive research in the field of regenerative medicine.