# 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





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

#### **Contact Us**

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The Foundation for the Conservation of Salamanders

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# Salamanders

# of Idako

Idaho is home to five 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.

Photos by: Robert S. Arkle (USGS), Justin Elden, Ryan Killackey (ID Fish & Game), Marcus Rehrman (USGS), Teal Waterstrat (USFWS)



Idaho Giant Salamander (Dicamptodon aterrimus)



Tiger Salamander (Ambystoma tigrinum)



Long-Toed Salamander (Ambystoma macrodactylum)



Couer d'Alene Salamander (Plethodon idahoensis)



Rough-skinned Newt (Taricha granulosa)

## Non-Native

### Did you know?

- The Idaho giant salamander is the state amphibian of Idaho
- 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.