

WHAT CAN YOU DO?

On a community level-

- Help protect existing wetlands, woodlands, meadows, stream corridors, shorelines and other natural areas.
- Help establish and protect buffer zones around streams, lakes and ponds, which will increase the function and value of the breeding habitat needed for amphibians.

At home-

- Use organic fertilizer.
- Plant native plants, which are hardier, less susceptible to disease and pests
- Avoid dumping any chemicals, oil or anti-freeze in household drains, or storm drains.

Creating amphibian habitat in your own backyard-

- Leave leaf litter under trees and shrubs, which provided moisture, cover and organisms that amphibians can eat.
- Retain or add stumps, root-wads, logs, rock piles and other woody debris that can provide moist habitat for amphibians
- Create a brush or rock pile, which can attract birds, small mammals and amphibians.
- Build a small, fish free ponds for amphibians.



Rock pile habitat structure for amphibians, small mammals, and birds.

Photo by Adam Sant

Mission of TCD

To conserve, sustain and protect our natural resources for the people of Thurston County through: rural and urban partnerships, volunteerism, cooperation, education, and technical and financial assistance. To create healthy, functioning ecosystems in Thurston County through advocacy, education and technical assistance efforts; thereby empowering every citizen of Thurston County to be a steward of the environment.



Photo by Duncan Parks

Additional Resources-

- Thurston Conservation District
www.thurstoncd.com
- Landscaping for Wildlife in the Pacific Northwest by Russel Link
- Amphibians of Oregon, Washington and British Columbia by Corkran and Thoms
- Northwest Herps Website- A Guide to the Reptiles and Amphibians of the PNW
www.northwestherps.com
- Washington Herp Atlas www.dnr.wa.gov/nhp/refdesk/herp/index.html
- Home Owners Guide to Protecting Frogs- Lawn and Garden Care
www.fws.gov/contaminants/Documents/Homeowners_Guide_Frogs.pdf

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AMPHIBIANS IN THE PACIFIC NORTHWEST



Photo by Glenn Mccrea

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WHY ARE AMPHIBIANS IMPORTANT?



Pacific Tree Frog

Photo by © 2006 William Flaxington

Amphibians are great indicators of ecosystem health. Their permeable skin allows air, water and pollutants to move easily into their bodies. Their bodies are much more vulnerable and sensitive to disease, pollution, toxic chemicals, and radiation than humans. If toxins are present in the environment they are absorbed by amphibians and stored in fatty tissue. The worldwide decline of amphibian populations could be a warning sign of serious ecosystem imbalances.

What is causing the decline?

Scientific evidence shows that habitat loss, climate change, UV radiation, contaminants and pollutants, disease and predation by invasive species are all possible causes.



The bullfrog is an introduced, invasive species that is partially to blame for the decline of some native amphibian populations. Photo by W.P. Leonard

IN THE PNW WE'RE LUCKY...

...to have an abundance of amphibians, meaning frogs and salamanders. Our climate is suitable for many amphibian populations, which require a cool, damp environment. What is an amphibian? The word amphibian comes from the Greek word *amphi*, which means double or circular, and *bios*, which means life; referring to the way that amphibians often start their lives in the water and metamorphose into land dwelling creatures and then return to the water to reproduce.

Although amphibians are considered terrestrial, which means they live on land, they are only slightly so. Amphibians have no protective covering on their skin, making them susceptible to drying out. For this reason most amphibians live in cool, damp places like marshes, ponds, wetlands and lakes. Amphibians breathe, in part, through their skin, making them very sensitive to anything they come in contact with. Amphibian's permeable skin makes them highly vulnerable to environmental contaminants.



Newt - © 2004 Henk Wallays

Tailed Frog- © 2000 Brad Moon

Ensatina- © 2006 William Flaxington



COMMON AMPHIBIANS IN THURSTON COUNTY

Northwest Salamander-

This salamander has a large, stout body and a short, broad, round head with small eyes and smooth skin. Northwest Salamanders are evenly brown, with the exception of their poison glands which are lighter in color than their body.



Photo by © 2004 Henk Wallays

Long toed salamander-

Long toed salamanders are medium-sized dark gray or black salamanders with an irregular yellow, olive or green dorsal stripe (along their back), a broad head and rounded snout. The dorsal stripe is irregular and broken. The sides of the body have blue or white speckling and the underside is black or gray.



Photo by W.P. Leonard

Rough skinned newt-

Adults and juveniles have a rough, grainy skin and strongly contrasting brown back and sides and a bright orange underside. Newts have pale yellow eyes with a distinct dark bar in the center. Adults remaining in ponds have a less grainy skin texture and are paler than those who live on land.



Photo by ©2004 HenkWallays

Red legged frog-

The easiest way to identify a Red legged frog is by looking at the underside of their hind leg, which is red colored. Adults have gold eyes that look to the side. The backside of the Red legged frog may be gray or brown when viewed from above and will have black markings on their backs and legs.



Photo by W.P. Leonard