

BEST PRACTICES



Pacific Salmon: A Keystone Species Shaping Our Ecosystem

In the Pacific Northwest and at Stream Team, we talk about salmon a lot!

We share information with the community about the amazing life cycles of Pacific salmon. We recruit docents to volunteer their time stewarding at our local streams when salmon return to spawn. You may be one of our dedicated Salmon Stewards with a wealth of knowledge about salmon species, migration, spawning and the cultural and economic importance of salmon in our region. You may be less familiar and wonder why we talk about these magnificent fish so much. One reason is that salmon are a keystone species.



What is a keystone species?

A keystone species is any plant or animal in an ecosystem that holds that system together. That means losing a keystone species can be tragic for many other species in that ecosystem.

There are typically three kinds of keystone species in any ecosystem:

- 1. Predators:** These keep species populations in check. This balances how resources like food and shelter are distributed and used within an ecosystem. Examples include wolves, Orcas, grizzly bears, and sea otters.
- 2. Engineers:** These move or manipulate habitat, affecting the flow of resources through a system. Think of our local neighborhood beavers.
- 3. Mutualists:** These are two or more species interacting for each other's benefit. For example, bees pollinating flowers benefits both the bee and the plant.

Did you know? Salmon fall into all three of these categories of keystone species.

- As juveniles at the bottom of the food chain, they are predators. Fry in streams or lakes consume large volumes of aquatic insects as they grow before migrating to the ocean.

- As adults, salmon are ecosystem engineers when they return to dig out redds to spawn in their natal waters.
- As mature salmon, they are mutualists. This trait is very important because they bring loads of nutrients from the ocean back to their home streams, where they die after spawning. Dead salmon provide food to many animals and enrich plant communities with the nutrients from their decomposing bodies.

It is one of many reasons Pacific salmon are incredibly unique and influential in our waters of Washington and why we all need to work to keep the water they live in clean!

How can you help?

- Volunteer to help with local habitat restoration projects.
- Take your car to a commercial car wash instead of washing it in your driveway.
- Check your vehicle for leaks regularly and get them fixed promptly. Use absorbent cloths or drip pans if you find a leak or are doing engine work. Clean up spills immediately.
- Keep tires properly inflated and check alignment so that they will wear down more slowly. Check your tire pressure once per month.
- Pick up pet waste and put it in the trash.

Visit streamteam.info/actionsforcleanwater to learn more!

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