

Discussion Questions

Exploring the link between salmon and river ecosystems

Salmon Lifecycle

1. Find the animals that eat salmon while they are in the river.
2. Find the animals that eat salmon while they are in the ocean.
3. What animals do salmon eat when they are fry in the river?
4. What animals do salmon eat when they are smolts in the estuary?
5. What animals do salmon eat when they are adults in the ocean?
6. Find some good hiding places for the salmon. How do they help protect salmon?
7. Where do the salmon spawn?
8. What happens to the dead salmon carcasses? How are they important to the ecosystem?

Stewardship

1. Find what humans are doing on or along the river?
2. Could humans cause harm to the river and salmon?
3. How else do humans use rivers and streams?
4. Is fishing for salmon ever wrong? Describe why or why not.
5. What can you do to help salmon?

Stream Ecosystems

1. Why do animals need healthy streams and watersheds?
2. Why do people need healthy streams and watersheds?
3. Why are trees important to salmon?
4. Why would a dead tree be important to salmon?
5. Why is the riparian zone important to salmon?
6. Can you find these animals? Bald Eagle Kingfisher Bear Orca Whale Blue Heron
Caddisfly larvae Mayfly nymph Stonefly nymph Dragonfly River Otter Deer Beaver
Salamander Harlequin duck
7. Why are salmon important? Why do we care about salmon?

Questions courtesy of National Fish and Wildlife Foundation, Puget Sound Energy, Seattle City Light, and the USDA Forest Service

Salmon Migration

Waves hit the beach
And whitecaps surround me,
As I shoot through the spring sea
I ride tidal waves,
I migrate through a marsh
And up the river,
I leap up six foot long waterfalls.
I feel other sockeye salmon
Swim and swagger around me,
I feel the pebbles
Touch my belly
As the stream gets smaller
I feel the hot sun

Burning on my back.
I taste the salt
Slowly fade away
As I go up stream,
I taste the fresh water
Flow around me
As I get weaker.
With my last strength
I struggle to lay my eggs,
I will leave a house
Of white bones
For my children

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courtesy of National Fish and Wildlife Foundation, Puget Sound Energy, Seattle City Light, and the USDA Forest Service

Salmon are intimately linked to the rest of the inhabitants of the river system. Bears, deer, bald eagles, kingfishers, river otters, harlequin and bufflehead ducks, beaver, insects, salamanders and sculpin are all part of the river ecosystem.

Plants are also part of the river ecosystem and include salmonberry, sword fern, alder, douglas fir, cedar, mushrooms, devil's club, shelf fungi, mosses and lichens. Trees help keep rivers cool by providing shade and their roots help prevent stream bank erosion. In return, salmon carcasses provide nutrients that help fertilize the trees. Fallen trees provide hiding places for salmon and are also habitat for macro invertebrates, (small insects and organisms which are food for salmon).

We are also an important link in the ecosystem. We use the river in many ways, from rafting to bird watching, from farming to fishing. Sometimes we create problems for the salmon and the river system. How can you help? If you are a fisher make sure you have a license, know the fishing regulations and are careful when you are wading in the river. If you are a boater it is important to stay away from spawning grounds when fish are present. Leaving logs and driftwood in and around the river and bringing your own wood for campfires is an easy way to keep salmon habitat healthy. You never know when salmon eggs are in the river so when you are wading step on large stones instead of gravel, keep pets out of the water, and ride ATV's and bikes on trails rather than through streams. You can also volunteer to help on a stream restoration project, garbage removal or mark storm drains with a yellow fish to inform your neighbours that storm drains carry water directly into local streams. These are easy and important ways to help your salmon and the river ecosystem!

Glossary

Anadromous – fish that move from freshwater, to saltwater, and back to freshwater to spawn

Ecosystem – all of the living and dead organisms in an area that are interrelated in the transfer of energy and material

Estuary – body of water where freshwater and saltwater mix

Macro invertebrates (aquatic) – insects and other small organisms with no backbone that live their larval or nymph stage in the water, invertebrates large enough to see with the naked eye

Riparian zone – land along a stream or river that includes trees, shrubs and plants

Watershed – the area drained by a distinct stream or river and separated from other watersheds by topographic boundaries such as ridge tops