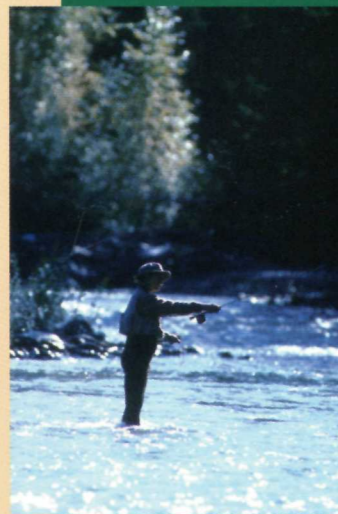


## ANGLER INFORMATION

**O**lympic National Park fishing regulations, including seasons, limits and gear restrictions, are updated yearly. Rules vary around the park, so be sure to pick up the most recent version at a ranger station or the Olympic National Park Visitor Center in Port Angeles (360) 565-3130.

Fishing regulations and other information are also available on the park web site:  
[www.nps.gov/olymp/current.htm](http://www.nps.gov/olymp/current.htm).



### ART CREDITS

Designed by Linda Humphrey  
Fish illustrations by Carole Kahler  
Photos courtesy of Olympic National Park, except the following:

*Fly fisher, tagging, leaping coho* © Debbie Preston  
*Old-growth forest, forest stream* © Dennis Hamm  
*Fish in ocean*: Leo Shaw, The Seattle Aquarium  
*Sockeye*: Katmai National Park



This brochure printed on recycled paper by Olympic National Park, 2001.



## MOUNTAIN LAKES



**M**ountain lakes in Olympic National Park apparently had no native resident fish. The Eastern brook, rainbow and cutthroat trout now in the park's high lakes are likely non-native descendants from stocking that ended by the early 1970s. Because introduced fish eat native amphibians and their eggs, as well as compete with them for food, there are generous limits (none on Eastern brook trout, an East Coast transplant).

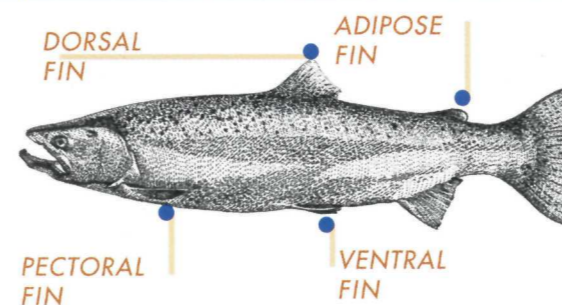
At high lakes, help limit new trailering by walking on rocky shorelines not vegetation. To avoid attracting wildlife, bury fish entrails in a small hole away from campsites, or puncture the air bladder and throw entrails far into the lake.

## HATCHERY OR WILD FISH?

**F**or decades salmon hatcheries released millions of young fish to support commercial and sport harvest. These fish interbreed with wild runs, diluting the native gene pool that makes wild fish so resilient and well-adapted to their specific river.



Hatchery fish also compete for habitat and food, prey on wild fish, introduce diseases, and promote higher harvests which may threaten small wild runs mixed with larger hatchery runs. By encouraging anglers to keep hatchery fish and restricting harvest of wild fish, the park is working to preserve wild fish and their genetic legacy. To identify a hatchery fish, look for the healed scar where adipose or ventral fins have been clipped.



## CATCH AND RELEASE

**P**reserving healthy ecosystems, education and providing recreation are primary roles of national parks. Most of the rivers and lakes in Olympic National Park have catch and release fishing in an effort to balance recreation with the essential natural role of fish. Catch and release also helps preserve declining fish stocks.



If handled properly, fish have an excellent chance of survival after release. Please follow these guidelines to help:

- ▶ Land fish as quickly as possible to minimize tiring them.
- ▶ Leave fish in water while removing hooks (with pliers or forceps if possible).
- ▶ Wet your hands and do not squeeze or hold fish by the eyes or gills.
- ▶ If hooked deeply, cut the line and leave the hook in the fish.
- ▶ Before releasing a fish, move it gently back and forth in the water until it tries to swim away.



The pristine watersheds of Olympic National Park nurture an abundance of salmon, trout and char seldom seen in the U.S. outside of Alaska. Fish—from tiny fry in a rainforest stream to adult salmon as large as a toddler—are essential links in healthy ecosystems.

*fish of Olympic National Park*

Look inside to learn more about these aquatic treasures



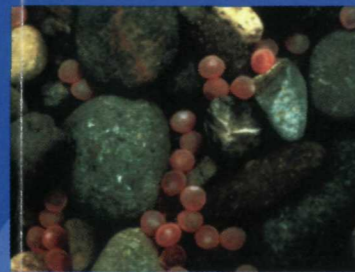


## A SALMON'S LIFE

Pacific salmon are the most abundant variety of fish in park waters. During their life cycle, these anadromous fish use much of the park, from rushing mountain tributaries to coastal estuaries, benefiting their neighbors all along the way.

### EGGS TO . . .

Each female lays thousands of eggs that need silt-free gravel and clean, cool water. Less than one percent may survive to become adult salmon.



### ALEVINS TO . . .

Nutrients from their bulging egg sacs fuel early growth of newly hatched fish. This early stage is spent safely hidden in or near streambed gravel.

### DEAD FISH TO . . .

For salmon, life does not end with death since carcasses are recycled back into the ecosystem. The nutrients boost stream productivity and nourish young fry, wildlife and even the surrounding forests.



### SPAWNERS RETURNING TO . . .

Using smell, magnetism and even the sun, adults navigate back to their natal streams. With bodies that may turn bright red or develop fiercely hooked jaws and humped backs, salmon breed, then die. However, steelhead, cutthroat, bull trout and Dolly Varden can survive to spawn another year.



### OCEAN WANDERERS TO . . .

Adult salmon can reach impressive weights feeding on ocean riches from tiny invertebrates to herring and other small fish. Many species spend years migrating thousands of miles through the North Pacific.

### SMALL FRY TO SMOLTS TO . . .

Once they emerge from the gravel, fry spend a few weeks to a year or two in fresh water growing bigger on a diet of salmon carcasses and eggs, invertebrates and even smaller fry. As they move downstream to estuaries they become smolts, with bodies adapted to saltwater.



## A SALMON'S GIFT



*"A whole natural economy is built on their bodies . . ."*

— conservationist Roderick Haig-Brown

Salmon are an icon of the Pacific Northwest for good reason. Biologists have identified over 100 animals—not just humans—that benefit from salmon.

Throughout their life salmon and other fish feed a diversity of species. Salamanders and birds like dippers eat their eggs; herons, kingfishers and fish feed on fry; marine mammals like orcas and sea lions depend on salmon; and forest residents from tiny shrews to black bears gorge on the carcasses. But it doesn't stop there. Stream life, the next generation of salmon and adjacent forests benefit from nutrients like nitrogen, carbon and phosphorus which dying



salmon provide. Researchers have even discovered increased growth rates of trees in forests containing salmon-bearing streams. Restoring this natural gift of salmon nutrients is one of the major reasons the park and others are working to remove fish-blocking dams from the Elwha River. Salmon are indeed an integral part of healthy ecosystems.



*" . . . great salmon threshed in the water all night long . . . At every few yards was to be seen the remains of a fish where cougar, coon, otter, or eagle had made a meal. "*

— Private Harry Fisher along the Queets River  
1890 O'Neil Expedition



*A·nad·ro·mous (adj., c. 1750, fr. Greek anadromos, running upward) ascending rivers from the sea for breeding.*

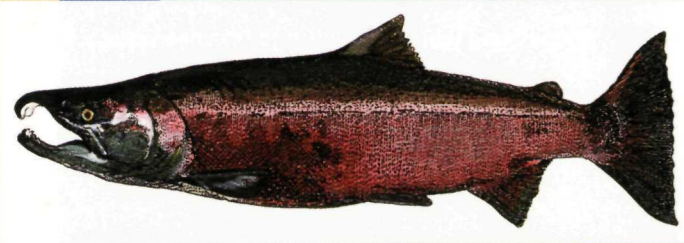
Open to learn more about Olympic fish





**COHO SALMON**  
(*Oncorhynchus kisutch*)

**ECOLOGY**  
Look for coho fry in park streams in the summer. This widespread species benefits wildlife from coastal streams to the headwaters of mountain tributaries. Quiet side channels and



wetlands provide a safe place for the young to overwinter before heading to sea. In autumn on the Sol Duc River, look for coho spawning above the resort, or stop at Salmon Cascades to watch adults leaping.

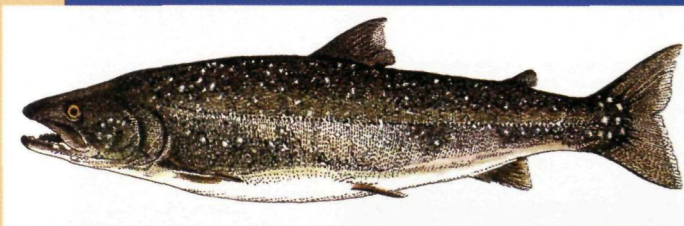
**STATUS**  
Relatively stable in park streams; declining further south and in Puget Sound.

**IDENTIFICATION**  
Spots on the back and upper lobe of tail, and a white gum line distinctive. Bright silver in the ocean; red flanks, dark back, head and fins at spawning. Males nicknamed "hooknose" for their hooked upper jaw. Adults generally 5-15 pounds.



**BULL TROUT/DOLLY VARDEN CHAR**  
(*Salvelinus confluentus/S. malma*)

**ECOLOGY**  
These species are indistinguishable in the field. In the same river system there may be residents in tributaries, others that migrate to lakes, and others that are anadromous. They occur in the Queets, Quinault, Hoh,



Elwha, Dungeness, and North Fork Skokomish Rivers, and Sol Duc River above the falls. From October to December, you might spot schools of bull trout in the North Fork Skokomish River in the Staircase area. These species require very cold water for spawning and egg survival, so they migrate further up rivers than other species, thus bringing eggs and young high into river systems.

**STATUS**  
Bull trout listed as Threatened. Olympic National Park likely contains the largest unaltered tract of bull trout habitat left in the U.S.

**IDENTIFICATION**  
Bull trout/Dolly Varden have white, red, orange or yellow spots on a gray, green, or brown background (unlike the dark spots on light background of salmon and trout). White leading edge on lower fins. Adults are 10-30 inches; the larger bull trout can weigh over 10 pounds.

**CHINOOK SALMON**  
(*Oncorhynchus tshawytscha*)

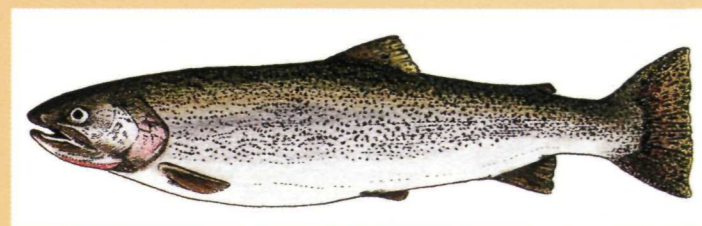
**ECOLOGY**  
Chinook return to major rivers and tributaries from April to November. They can spend up to seven years in the ocean growing to incredible sizes. Historic chinook runs on the Elwha River included 100-pound fish! Late summer through fall, look for spawning chinook in the upper sections of large westside rivers like the Hoh, Quinault and Queets. Watch for bears and other wildlife gorging themselves on these large carcasses.

**STATUS**  
Relatively healthy on the west side of the Olympic Peninsula; Puget Sound chinook (Elwha River through Hood



Canal and Puget Sound) listed as Threatened. Chinook above Lake Cushman Dam may be a remnant of the Puget Sound population.

**IDENTIFICATION**  
Heavy spotting on back and entire tail (heavier than coho) and black gum line distinctive. Bright silver in the ocean; dark brown, black or olive at spawning. This largest Pacific salmon, also called "king" salmon, averages about 22 pounds, but ranges from 15-50 pounds.

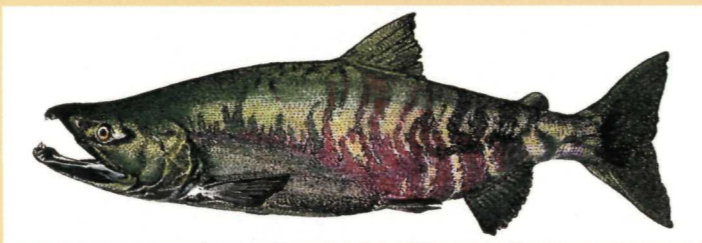


**STATUS**  
Little information is available, but they are thought to be relatively stable on the Olympic Peninsula, though they have declined to low levels in southwest Washington. The Crescent trout population is small due to isolation.

**IDENTIFICATION**  
Heavy spotting on flanks, back and tail (like rainbow), but often has red slash marks on throat. Lower jaw bone extends past the eye (unlike rainbow trout, whose lower jaw stops below the eye). Residents 4-12 inches and under a pound; anadromous forms 14-20 inches (up to 2-3 pounds).

**CHUM SALMON**  
(*Oncorhynchus keta*)

**ECOLOGY**  
Chum can return in huge numbers to lower sections of major rivers in summer or late fall. Their carcasses provide a wealth of nutrients in winter, when other food is scarce. The Quillayute and Queets Rivers have runs, and historically the Elwha River



had large runs. Chum fry do not linger in fresh water, but rear in estuaries instead. As part of the Elwha River restoration, chum may one day return to spawn below Rica Canyon.

**STATUS**  
Currently uncommon in park rivers. Hood Canal summer run (Dungeness River south through Hood Canal) listed as Threatened.

**IDENTIFICATION**  
No spots. Bright silver in the ocean; at spawning flanks are often mottled with darker vertical blotches. Males develop hooked jaws with large canine teeth. Adults weigh 5-15 pounds.



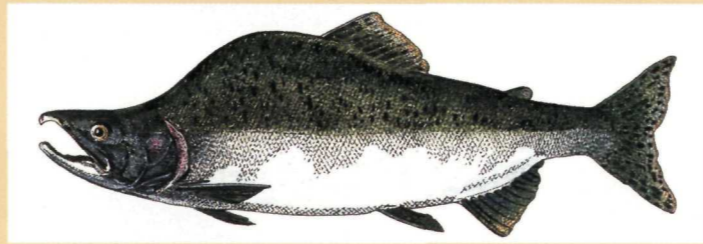
or tributaries. Eastern brook trout impact native lake ecosystems by competing with native amphibians like frogs, toads and salamanders for food. They also consume amphibians and their eggs.

**STATUS**  
Abundant and widespread. Because of their impacts, there are no limits on Eastern brook trout.

**IDENTIFICATION**  
Light yellow, orange or red spots, often with blue halos, on a background darker than other char. Spots on the back are crowded into wavy lines. White leading edges on their lower fins. Mature adults can develop reddish fins and belly when spawning. Range from 6-18 inches and up to several pounds.

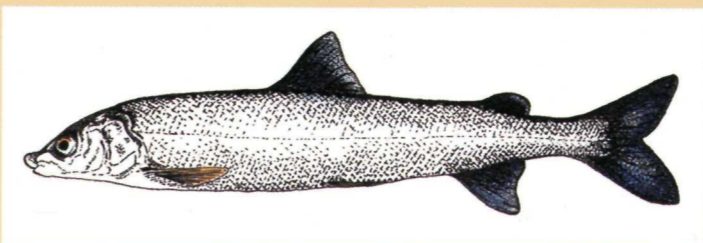
**PINK SALMON**  
(*Oncorhynchus gorbuscha*)

**ECOLOGY**  
Pinks return to lower rivers in odd-numbered years from August to October. Historic runs in the Elwha likely surpassed 100,000 fish and provided a huge influx of nutrients to the ecosystem. Elwha area homesteaders recall the crowded thrashing salmon spooking horses at river fords! With Elwha River restoration, pink salmon could once again nourish the river below Rica Canyon. Look for pink salmon along the Gray Wolf River (a tributary of the Dungeness River), especially around the bridge at the Gray Wolf trailhead.



**STATUS**  
Runs have declined throughout the Olympic Peninsula, particularly in the Dungeness watershed. They are essentially gone from the Elwha River.

**IDENTIFICATION**  
Oblong spots on the back and both lobes of the tail. Bright silver in the ocean; dark backs and mottled flanks at spawning. Called "humpies" because males develop huge humped backs. Return as 2-year olds weighing 2-9 pounds.

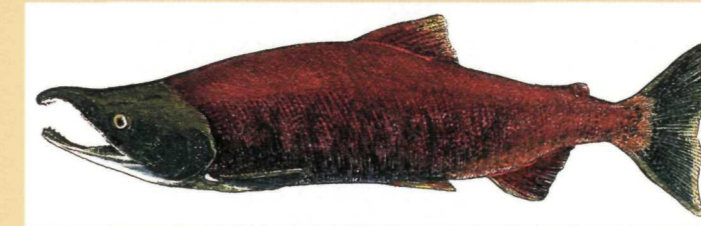


**STATUS**  
Abundant in larger rivers, but there is no information on population trends.

**IDENTIFICATION**  
Whitefish have a very small mouth, placed well below the snout; an adipose fin like their distant salmon relatives; large silvery scales and can reach 12 inches and nearly one pound.

**SOCKEYE SALMON**  
(*Oncorhynchus nerka*)

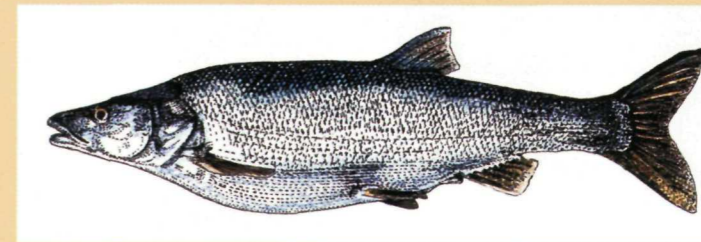
**ECOLOGY**  
Sockeye occur on rivers with lakes where young fry stay for about a year before going to sea. Look for them in Quinault and Ozette Lakes, or spawning October through December



in the Quinault valley at Big Creek, along the North Shore Road, and other tributaries. Runs of nearly one million fish returned to Quinault Lake in the early 1900s! In the past sockeye used the Elwha River as well. Lake Ozette and Lake Crescent have kokanee, a smaller "landlocked" form of sockeye.

**STATUS**  
Quinault sockeye are stable; Lake Ozette sockeye listed as Threatened.

**IDENTIFICATION**  
No spots. Bright silver in the ocean; striking red bodies with green heads when spawning. Males develop a humped back and toothed, hooked jaw. Most adults weigh 4-8 pounds. Kokanee average 8-15 inches long and 1-2 pounds.



Ozette River and the Dickey River near Mora. Pike minnows prey on threatened Lake Ozette sockeye. Park biologists are concerned since habitat changes in Lake Ozette have impacted salmon but not affected pike minnows, leading to added stress on the dwindling salmon. Lake Ozette's introduced non-native bass and yellow perch also eat young sockeye and are food for pike minnows as well.

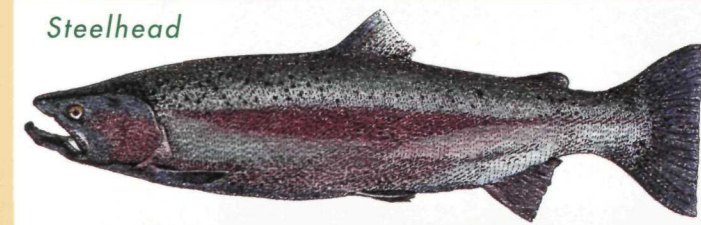
**STATUS**  
Very abundant in Lake Ozette and the Ozette River.

**IDENTIFICATION**  
Vertically flattened head, long snout, forked tail, and no adipose fin. Color ranges from silver to mixed brown/yellow. They can be 15-20 inches long and 3-4 pounds.

**STEELHEAD/RAINBOW TROUT**  
(*Oncorhynchus mykiss*)

**ECOLOGY**  
Steelhead are rainbow trout that go to sea. Winter runs are widespread in main stem rivers, side channels and tributaries. Summer runs can penetrate higher than most other species, returning deep into the park up the Hoh, Quinault, Queets and historically, the Elwha Rivers. Adults can survive spawning, but they still contribute nutrients in eggs, fry, and some carcasses. In May and June, look for spawning fish and the clean gravel depressions of new nests (redds) near the Hoh, Sol Duc, and Queets campgrounds.

Resident rainbow trout are found primarily above barriers to upstream



migration, like in the Elwha River. Beardslee trout, a rainbow unique to Lake Crescent, can grow to 20 pounds. These fish have been isolated in Lake



Crescent for thousands of years and are highly adapted to the lake environment. Genetic work reveals clear differences between Beardslee and other rainbow trout. Some mountain lakes have non-native rainbow trout populations.

**STATUS**  
Winter runs relatively healthy on the Olympic Peninsula; status of summer runs unknown. Wild steelhead are threatened by extensive habitat degradation and hatchery programs. The Beardslee trout population is small, with very limited spawning habitat.

**IDENTIFICATION**  
Heavy spotting on back, square tail and flanks, even below the lateral line. Bright silver in the ocean; darker with some dark green or red on flanks at spawning. Lower jaw ends below the eye (not extending beyond like in cutthroat). Steelhead weigh 5-30 pounds. Rainbow are smaller (6-20 inches, 1-3 pounds in this area), brighter, and sometimes develop a reddish side stripe.

