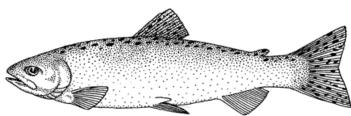


## nk Salmon

The pink salmon (Oncorhynchus gorbuscha) is also known as the "humpy" because of its very pronounced, laterally flattened hump which develops on the backs of adult males before spawning. It is called the "bread and butter" fish in many Alaskan coastal fishing communities because of its importance to commercial fisheries and local economies. Pink salmon also contribute substantially to the catch of sport anglers and subsistence users in Alaska. It is native to Pacific and Arctic coastal waters from northern California to the Mackenzie River, Canada, and to the west from the Lena River in Siberia to Korea.



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General description: The pink salmon is the smallest of the Pacific salmon found in

North America with an average weight of about 3.5 to 4 pounds and average length of 20-25 inches. An adult sea run fish in coastal waters is bright greenish-blue on top and silvery on its sides. Close to fresh water it develops many large black spots on its back and over its entire tail fin. Its scales are very small and the flesh is pink. As fish approach spawning streams the bright appearance of males is replaced by brown to black above with a white belly; females become olive green with dusky bars or patches above and a light-colored belly. By the time males enter the spawning stream it has developed the characteristic hump and hooked jaws. Juvenile pink salmon are entirely silvery, without the dark vertical bars, or parr marks, displayed on the young of other salmon species.

Life history: Adult pink salmon enter Alaska spawning streams between late June and mid-October. Various runs (or races) of pink salmon, having a range of spawning times, may share the same river or spawn in adjacent rivers. Most pink salmon spawn within a few miles of the coast and spawning within the intertidal zone or the mouth of streams is very common. Shallow riffles where flowing water breaks over coarse gravel or cobble-size rock and the downstream ends of pools are favored spawning areas. The female pink salmon carries 1,500 to 2,000 eggs depending on her size. She digs a nest, or redd, with her tail and releases the eggs into the nest. They are immediately fertilized by one or more males and then covered by further digging action of the female. The process is commonly repeated several times until all the female's eggs have been released. After spawning, both males and females soon die, usually within two weeks.

Sometime during early to mid-winter, eggs hatch. The alevins, or young fry, feed on the attached yolk sac material in order to continue to grow and develop. In late winter or spring, the fry swim up out of the gravel and migrate downstream into salt water. The emergence and outmigration of fry is heaviest during hours of darkness and usually lasts for several weeks before all the fry have emerged.

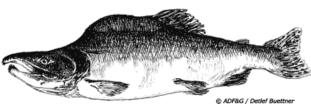
Following entry into salt water, the juvenile pink salmon move along the beaches in dense schools near the surface, feeding on plankton, larval fishes, and occasional insects. Predation is heavy on the very small, newly emerged fry, but growth is rapid. By fall, at an age of about 1year, the juvenile pink salmon are 4 to 6 inches long and are moving into the ocean feeding grounds in the Gulf of Alaska and Aleutian Islands areas. High seas tag-and-recapture experiments have revealed that pink salmon originating from specific coastal areas have characteristic distributions at sea which are overlapping, nonrandom, and nearly identical from year to year. The Alaska pink salmon's range at sea overlaps with pink salmon from Asia, British Columbia, and Washington.

Pink salmon mature in two years which means that odd-year and even-year populations are essentially unrelated. Frequently in a particular stream the other oddyear or even-year cycle will predominate, although in some streams both odd- and even-year pink salmon are about equally abundant. Occasionally cycle dominance will shift, and the previously weak cycle will become most abundant.

History: Pink salmon fisheries, both commercial and sport, are important in all coastal regions of Alaska south of Kotzebue Sound. Commercial canning and salting of pink salmon began in the late 1800s and expanded steadily until about 1920. During territorial days, commercial fishermen used fixed and floating fish traps extensively to catch pink salmon; but such traps were prohibited following statehood in 1959. Now most pink salmon are taken with purse seines and drift or set gillnets. Lesser numbers are taken with troll gear or beach seines. Runs declined markedly during the 1940s and 1950s; however, intensive efforts were successful in rebuilding and enhancing those runs through hatcheries, fish ladders, and improved fisheries management.

Hatcheries: Now a very important component of pink salmon management in Alaska, hatcheries throughout coastal Alaska releases millions of pink salmon fry annually to supplement wild pink stocks. These releases allow fishery managers to target pink salmon runs returning to terminal hatchery areas, while lowering fishing pressure on wild pink salmon stocks.

Sport Fishing: One of the easiest salmon to catch on rod and reel, pink salmon are often the first salmon species caught by children. Pink salmon are frequently targeted in saltwater off the mouth of streams, or in the inner tidal areas of fresh water streams. Favorite pink salmon lures are Pixies, Vibrax, Mepps\*\*, and a variety of flies. When these fish are ocean bright they make great table fare. From 1996 - 2006 sport fishermen in Alaska caught an average of 731,000 pink salmon each year, harvesting an annual average of 154,600 of these fish.



Commercial Fishing: Pink salmon continue to be one of the most important of the Pacific salmon in Alaska for commercial fishermen. Commercially caught pink salmon today are

canned, filleted and flash frozen, made into nuggets, and prepared into complete pre-packaged meals. The average annual Alaska harvest between 1959 and 1992 was 45.1 million pink salmon. The current ten-year average harvest (1997-2006) is more than 107 million pink salmon.

## Text: Alan Kingsbury Illustration: Ashley Dean, Detlef Buettner Revised 1994

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