



Klamath Network Featured Creature

December 2012

Chinook salmon (*Oncorhynchus tshawytscha*)



<http://www.matsuk12.us>

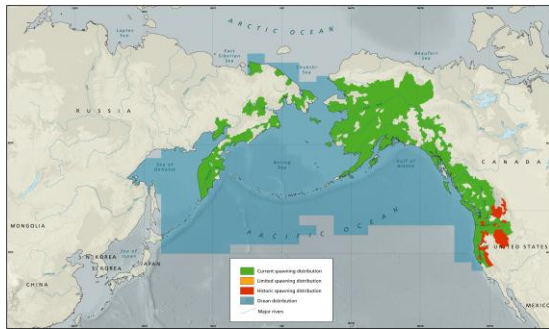
General Description:

Of the seven species of Pacific salmon, Chinook are the largest, with adults often exceeding 40 pounds. As such, they tend to spawn in larger streams (typically mainstem rivers) than other species of Pacific salmon.

The Chinook salmon is named for the Chinook people of the Columbia River, who for thousands of years depended on salmon and sea-run trout. Other common names for this salmon are: king, Tyee, black, chub, hook bill, winter and blackmouth.

Most of the Chinook populations are declining and many in the U.S. are federally listed as endangered or threatened. Almost all of the populations in Oregon and California are listed as threatened.

Distribution and Habitat:



Current (green), limited (yellow), and historic (red) spawning distribution of *O. tshawytscha*. (Augerot, 2005. Pg. 81)

The most northerly Asian Chinook population is in the Palyavaam River in Chukotka, which drains into the East Siberian Sea. In the western Pacific, Kamchatka is the only region with relatively consistent Chinook presence. In North America, the most northerly populations are found north of Kotzebue Sound in Alaska. In California, the San Joaquin and Sacramento Rivers are the southernmost part of the range. Wild Chinook populations have been severely diminished in these rivers, however.

References:

Augerot, X. 2005. *Atlas of Pacific Salmon*. Berkeley: University of California. 161pp.

Behnke, R. 2002. *Trout and Salmon of North America*. New York: Simon & Schuster.

Life cycle:

Chinook typically live from 3 to 6 years, but spend widely varying amounts of time in rivers (as juveniles) and the ocean.



<http://oregonexplorer.info>

It is possible to see Chinook spawning in freshwater rivers at any time of the year, especially in the largest river basins. The peak spawning season is between May and September, however.

Many juvenile Chinook leave their home rivers and head to the ocean within weeks of hatching. They will then spend an average of 4-5 years in marine waters and travel great distances (see dark blue area in the distribution map). However, juveniles that hatch in extreme northerly or southerly rivers, often stay in the freshwater environment for up to two winters before going out to sea.

Factoids:

- Chinook salmon are the official State Fish of both Alaska and Oregon.
- *Oncorhynchus* means "hooked nose", which refers to the shape of the jaw of a breeding male. The species name, *tshawytscha*, originated in the Kamchatka peninsula of Russia.

Predators and Prey:

Chinook feed on aquatic and terrestrial invertebrates and salmon eggs in freshwater; amphipods, insects, and fish larvae in intertidal areas; and large crustaceans, squid and other fish in the open ocean. Spawning fish do not feed.

Chinook are a vital food source for orca whales, bears, seals, and large birds of prey. Declines in salmon populations have been correlated with declines in killer whale populations along the coasts of California, Oregon, Washington and British Columbia. In fact, closely followed resident orca populations in the Puget Sound appear to live primarily on Chinook salmon, which are preferred probably because they are the largest salmon, have the highest fat content and are available year-round.

Declining Populations:

The coastal waters of the Pacific were once rich with wild salmon. The Columbia and Snake Rivers alone produced between 10 million and 16 million salmon yearly, the majority of them Chinook. Overfishing in the late 1800s and early 1900s, followed by decades of dam building, logging and other salmon-habitat destruction have reduced wild salmon to a fraction of their original abundance. Today, Columbia and Snake River wild fish runs number only in the tens of thousands.

In recent news:

On August 20, 2012 adult Chinook salmon were observed in the Elwha River. These are the first observed salmon to naturally migrate into Olympic National Park. The removal of Elwha Dam in April 2012 has opened access to over 70 miles of habitat that has been blocked since 1913.

Chinook in the Klamath Network:

Chinook salmon are present in Redwood National and State Parks and Whiskeytown National Recreation Area, spawning just below Whiskeytown Dam. Other parks in the network, Crater Lake, Lassen Volcanic, and Oregon Caves do not have Chinook, but do serve as headwaters for Chinook bearing streams.