*The following were taken from the ADFG website at:
http://www.adfg.alaska.gov/index.cfm?adfg=animals.listfish

Chinook

General Description

The Chinook salmon is the largest of all Pacific salmon, typically measuring 36 inches in length, often exceeding 30 pounds. Adults are distinguished by the black irregular spotting on the back and dorsal fins and on both lobes of the caudal or tail fin. Chinook salmon also have a black pigment along the gum line, thus the name "blackmouth" in some areas.

In the ocean, the Chinook salmon is a robust, deep-bodied fish with bluish-green coloration on the back which fades to a silvery color on the sides and white on the belly. Colors of spawning Chinook salmon in fresh water range from red to copper to deep gray, depending on location and degree of maturation. Males typically have more red coloration than females, which are typically gray. Older adult males (4-7 years) are distinguished by their "ridgeback" condition and by their hooked nose or upper jaw. Females are distinguished by a torpedo-shaped body, robust mid-section, and blunt noses. Juveniles in fresh water (fry) are recognized by well-developed parr marks which are bisected by the lateral line. Chinook salmon heading to the ocean (smolt) have bright, silver sides, and parr marks recede to mostly above the lateral line.

Life History

Like all species of Pacific salmon, Chinook salmon are anadromous. They hatch in fresh water and rear in main-channel river areas for one year. The following spring, Chinook salmon turn into smolt and migrate to the salt water estuary. They then spend anywhere from 1-5 years feeding in the ocean, and return to spawn in fresh water. All Chinook salmon die after spawning. Chinook salmon may become sexually mature from their second through seventh year, and as a result, fish in any spawning run may vary greatly in size. For example, a mature 3-year-old will probably weigh less than 4 pounds, while a mature 7-year-old may exceed 50 pounds. Females tend to be older than males at maturity. In many spawning runs, males outnumber females in all but the 6- and 7-year age groups. Small Chinook salmon that mature after spending only one winter in the ocean are commonly referred to as "jacks," and are typically male. Alaska streams normally receive a single run of Chinook salmon in the period from May through July.

Chinook salmon often make extensive freshwater spawning migrations to reach their home streams on some of the larger river systems. Yukon River spawners bound for the extreme headwaters in Yukon Territory, Canada, will travel more than 2,000 river miles during a 60-day period. Chinook salmon do not feed during the freshwater spawning migration, so their condition

deteriorates gradually during the spawning run as they use stored body materials for energy and gonad development.

Each female deposits between 3,000 and 14,000 eggs in several gravel nests, or redds, which she excavates in relatively deep, fast moving water. In Alaska, the eggs usually hatch in late winter or early spring, depending on time of spawning and water temperature. The newly hatched fish, called alevins, live in the gravel for several weeks until they gradually absorb the food in the attached yolk sac. These juveniles, called fry, wiggle up through the gravel by early spring. Chinook juveniles divide into two types: *ocean type* and *stream type*. Ocean type Chinook migrate to saltwater in their first year. Stream type spend one full year in fresh water before migrating to the ocean. In Alaska, most juvenile Chinook salmon remain in fresh water until the following spring when they migrate to the ocean as smolt in their second year of life.

Juvenile Chinook salmon in fresh water initially feed on plankton and later feed on insects. In the ocean, they eat a variety of organisms including herring, pilchard, sandlance, squid, and crustaceans. Salmon grow rapidly in the ocean and often double their weight during a single summer season.

Range and Habitat

Fresh water streams and estuaries provide important habitat for spawning chinook, and they also serve as nursery grounds for developing eggs, fry, and juveniles. In North America, Chinook salmon range from the Monterey Bay area of California to the Chukchi Sea area of Alaska. On the Asian coast, Chinook salmon occur from the Anadyr River area of Siberia southward to Hokkaido, Japan. In Alaska, they are abundant from the southeastern panhandle to the Yukon River. Major populations return to the Yukon, Kuskokwim, Nushagak, Susitna, Kenai, Copper, Alsek, Taku, and Stikine rivers. Important runs also occur in many smaller streams.

Status, Trends, and Threats

National Status: N4 (Apparently Secure)

State Status: S4 (Apparently Secure – relatively uncommon but not rare. Some cause for long-term concern due to declines and other factors.

Implied Status under the U.S. Endangered Species Act: PS (Partial Status - status in only a portion of the species' range

Trends and Threats: There are numerous stocks of Chinook throughout the state and their population trends are just as diverse: Some stocks are in decline while others are at equilibrium or increasing. Threats include overfishing, dams, habitat loss, habitat degradation, and climate change.

Fast Facts

- **Size**
  Length = 36 inches (Record: 58 inches); Weight = 30 lbs (Record: 126 lbs).
- **Lifespan**
  3 to 7 years
- **Distribution/Range**
  North America "– Monterey Bay, CA' to the Chukchi Sea. Asia – Hokkaido, Japan to Anadyr River, Siberia
- **Diet / Feeding Type**
  Plankton, insects, amphipods, and fish
- **Predators**
  Birds and fish eat juveniles; marine mammals eat adults
- **Reproduction**
  Anadromous and semelparous
- **Remarks**
  On March 25th 1963, the Chinook salmon became the official state fish of Alaska
- **Other Names**
  Chinook, chins, king. quinnat, tyee, tule, blackmouth, and spring salmon.

Coho

General Description

Adults usually weigh 8 to 12 pounds and are 24 to 30 inches long, but individuals weighing 31 pounds have been landed. Adults in salt water or newly returning to fresh water are bright silver with small black spots on the back and on the upper lobe of the tail fin. They can be distinguished from Chinook salmon by the lack of black spots on the lower lobe of the tail and by their white gums; Chinook have small black spots on both tail fin lobes and they have black gums. Spawning adults of both sexes have dark backs and heads with maroon to reddish sides.

Life History

Growth and Reproduction

Coho salmon enter spawning streams from July to November, usually during periods of high runoff. The female digs a nest, called a redd, and deposits 2,400 to 4,500 eggs. As the eggs are deposited, they are fertilized with sperm, known as milt, from the male. The eggs develop during the winter, hatch in early spring, and the embryos remain in the gravel utilizing their egg yolk until they emerge in May or June. During the fall, juvenile coho may travel miles before locating off-channel habitat where they pass the winter free of floods. Some fish leave fresh water in the spring and rear in brackish estuarine ponds and then migrate back into fresh water in the fall. They spend one to three winters in streams and may spend up to five winters in lakes before migrating to the sea as smolt. Time spent at sea varies. Some males (called jacks) mature and return after only 6 months at sea at a length of about 12 inches, while most fish stay 18 months before returning as full size adults.

Feeding Ecology

In freshwater, coho fry feed voraciously on a wide range of aquatic insects and plankton. They also consume eggs deposited by adult spawning salmon. Their diet at sea consists mainly of fish and squid.

Migration

Little is known about the ocean migrations of coho salmon. High seas tagging shows that maturing Southeast Alaska coho move northward throughout the spring and appear to

concentrate in the central Gulf of Alaska in June. They later disperse towards shore and migrate along the shoreline until they reach their stream of origin.

Range and Habitat

The emergent fry occupy shallow stream margins, and, as they grow, establish territories which they defend from other salmonids. Coho fry live in ponds, lakes, and pools within streams and rivers, usually among submerged, woody debris- in quiet areas free of current.

Coho are found in coastal waters of Alaska from Southeast to Point Hope on the Chukchi Sea and in the Yukon River to the Alaska-Yukon border. Coho are extremely adaptable and occur in nearly all accessible bodies of fresh water, from large trans-boundary watersheds to small tributaries.

Status, Trends, and Threats

Status

The status of coho populations in the California and the Pacific Northwest varies; some are healthy and robust while one is listed as endangered and three are considered threatened under the Endangered Species Act. Coho salmon populations in Alaska are healthy.

Trends

Over the longer term, the natural production of this species, particularly in the southern portions of its range, will continue to be challenged by freshwater environmental change brought about by increasing human development and climate change. Populations at lower latitudes will likely continue to experi¬ence greater variability in both smolt production and marine survival compared with Alaska's populations. Re¬cent declines in hatchery production combined with environ¬mental and management changes make it unlikely that the Pacific-wide commercial catch will rebound to levels in the mid-1960s to mid-1990s that routinely exceeded 10 million fish annually. Alaska's coho population is expected to remain healthy.

Threats

Coho salmon on the west coast of the United States have experienced dramatic declines in abundance during the past several decades as a result of human-induced and natural factors. Water storage, withdrawal, conveyance, and diversions for agriculture, flood control, domestic, and hydropower purposes have greatly reduced or eliminated historically accessible habitat. Physical features of dams, such as turbines and sluiceways, have resulted in increased mortality of both adults and juvenile salmonids.

Natural resource use and extraction leading to habitat modification can have significant direct and indirect impacts to salmon populations. Land use activities associated with logging, road construction, urban development, mining, agriculture, and recreation have significantly altered

fish habitat quantity and quality. Studies indicate that in most western states, about 80 to 90 percent of the historic riparian habitat has been eliminated. Further, it has been estimated that during the last 200 years, the lower 48 United States have lost approximately 53 percent of all wetlands. Washington and Oregon's wetlands have been estimated to have been diminished by one third, while it is estimated that California has experienced a 91 percent loss of its wetland habitat.

Salmon have been, and continue to be, an important target species for recreational fisheries throughout their range. During periods of decreased habitat availability, the impacts of recreational fishing on native anadromous stocks may be heightened. Commercial fishing on unlisted, healthier stocks has caused adverse impacts to weaker stocks of salmon, and illegal high seas driftnet fishing in past years may have also been partially responsible for declines in salmon abundance. Introduction of non-native species and modification of habitat have resulted in increased predator populations and salmonid predation in numerous river and estuarine systems.

Fast Facts

- **Size**
  24-30 inches long, 8-12 pounds
- **Range/Distribution**
  The traditional range of the coho salmon runs from both sides of the North Pacific Ocean, from Japan and eastern Russian, around the Bering Sea to mainland Alaska, and south all the way to Monterey Bay, California. Coho salmon have also been introduced in all the Great Lakes, as well as many other landlocked reservoirs throughout the United States.
- **Diet**
  Aquatic insects, fish, squid
- **Predators**
  Whales, sharks, marine mammals, birds, mammals, humans
- **Reproduction**
  Deposit 2,400-4,500 eggs in freshwater from September-February
- **Other Names**
  silver salmon

Sockeye

General Description

Sockeye salmon are one of the smaller species of Pacific salmon, measuring 18 to 31inches in length and weighing 4-15 pounds. Sea-going sockeye salmon have iridescent silver flanks, a white belly, and a metallic green-blue top, giving them their "blueback" name. Some fine black speckling may occur on the back, but large spots are absent. Sockeye salmon are prized for their firm, bright-orange flesh.

As sockeye salmon return upriver to their spawning grounds, their bodies turn brilliant red and their heads take on a greenish color, hence their other common name, “red” salmon. Breeding-age males develop a humped back and hooked jaws filled with tiny, visible teeth. Juveniles, while in fresh water, have dark, oval parr marks on their sides. These parr marks are short-less than the diameter of the eye-and rarely extend below the lateral line.

Life History

Like all species of Pacific salmon, sockeye salmon are anadromous, living in the ocean but entering fresh water to spawn. Sockeye salmon spend one to four years in fresh water and one to three years in the ocean.

In Alaska, most sockeye salmon return to spawn in June and July in freshwater drainages that contain one or more lakes. Spawning itself usually occurs in rivers, streams, and upwelling areas along lake beaches. During this time 2,000 – 5,000 eggs are deposited in one or more “redds”, which the female digs with her tail over several days time. Males and females both die within a few weeks after spawning.

Eggs hatch during the winter, and the young “alevins” remain in the gravel, living off their yolk sacs. In the spring. they emerge from the gravel as “fry” and move to rearing areas. In systems with lakes, juveniles usually spend one to three years in fresh water, feeding on zooplankton and small crustaceans, before migrating to the ocean in the spring as “smolts”. However, in systems without lakes, many juveniles migrate to the ocean soon after emerging from the gravel.

Smolts weigh only a few ounces upon entering salt water, but they grow quickly during their 1-3 years in the ocean, feeding on plankton, insects, small crustaceans, and occasionally squid and small fish. Alaska sockeye salmon travel thousands of miles during this time, drifting in the counter-clockwise current of the Alaska Gyre in the Gulf of Alaska. Eventually they return to spawn in the same freshwater system where they were hatched.

Range and Habitat

Fresh water lakes, streams and estuaries provide important habitat for spawning and rearing sockeye salmon. On the west coast of North America, sockeye salmon range from the Klamath River in Oregon to Point Hope in northwestern Alaska. On the east coast of Asia, Chinook salmon occur from the Anadyr River area of Siberia southward to Hokkaido, Japan.

The largest sockeye salmon populations are in the Kvichak, Naknek, Ugashik, Egegik, and Nushagak Rivers that flow into Alaska's Bristol Bay, plus the Fraser River system in Canada. In good years, these runs can number in the tens of millions of fish.

Status, Trends, and Threats

Pacific salmon species on the west coast of the lower 48 United States have experienced dramatic declines in abundance during the past several decades as a result of several factors, including water diversions for agriculture and flood control; loss of habitat due to hydropower, resource extraction and development; and direct mortality from entrainment by hydropower projects. As a result, two lower-48 populations of sockeye salmon have been listed under the Endangered Species Act.

For the time being, salmon habitat in Alaska remains mostly pristine. There are hundreds of stocks of sockeye salmon throughout the state of Alaska and their population trends are diverse: Some stocks are in decline while others are at equilibrium or increasing. Potential future threats include habitat loss, habitat degradation, climate change, and over fishing.

Fast Facts

- **Size**
  Length = 24 inches (Record: 31 inches); Weight = 6 lbs (Record: 16 lbs).
- **Lifespan**
  3 to 7 years
- **Distribution/Range**
  North America "– Klamath River, OR to the Chukchi Sea. Asia – Hokkaido, Japan to Anadyr River, Siberia
- **Diet**
  Zooplankton,small crustaceans, small fish
- **Predators**
  Marine mammals, bears
- **Remarks**
  The most economically important species of salmon in Alaska
- **Other Names**
  Red and blueback salmon, kokanee (landlocked form in lower 48 states and Canada)
- **Stock Status**
  3rd most abundant species of Pacific salmon. Populations currently healthy in Alaska. Human induced habitat loss and direct mortality has depressed populations in the lower 48 states.

Pinks

General Description

Pink salmon are the smallest of the Pacific salmon found in North America weighing on average between 3.5 and 5 pounds, with an average length of 20-25 inches. As with all members of the salmon family, pink salmon are coldwater fish. They are also the most numerous Pacific salmon and have been harvested and canned commercially in Alaska since the late 1800's. Young pink salmon are completely silver without any dark vertical bars or spots. In the ocean, adults are bright greenish-blue on top and silvery on its sides. They have very small scales and pink flesh. As adults get closer to returning to fresh water, they develop a lot of large black spots on their back and all over their tail. When pinks approach their spawning streams, males turn brown to black on their back with a bright white belly. Females have a bright white belly but turn an olive green with dusky bars or patches that can be lavender or a dark gold. By the time males enter the stream where they will spawn, they have developed a very large hump, and hooked jaws called a kype.

Life History

Pink salmon have the shortest lifespan of all the Pacific salmon found in North America. They mature and complete their entire life cycle in two years. This predictable two-year life cycle has created genetically distinct odd-year and even-year populations of pink salmon. Fish coming in odd years are unrelated to the individuals returning in even years. Odd-year and even-year populations do not interbreed with each other even when they return to the same spawning grounds. Many times individual streams will tend to have one of the populations (odd-year or even-year) producing more fish. However, in some streams both odd and even years produce about the same number of pink salmon. Occasionally this will shift, and the previously weak year will become the most abundant.

Growth and Reproduction

As soon as pink salmon fry emerge from the gravel on the bottom of the river, they swim to the ocean. Once there, they begin feeding plankton, larval fishes, and occasional aquatic insects. After 18 months of feeding and growing in saltwater, they reach maturity and return to the river they were born to spawn between late June and mid-October. Males develop the enormous hump on their back, and an enlarged head with big teeth which they will use in fights with other males. The female picks a suitable nesting place and constructs a nest in the river bed by turning on her side and vigorously flexing her body and tail, digging a shallow hole. As she settles into the hole to deposit her eggs, a male joins her to fertilize them. A female may dig and lay eggs in up to four nests, covering her previous nests as she digs new ones. A group of nests is known as a redd. A female stays and defends her redd until she dies, usually within two weeks. Males leave to try and fertilize other eggs. The eggs incubate over winter and hatch in late winter or early

spring. The young salmon fry, or alevin, live under the gravel feeding off the yolk sac attached to their belly and continue to grow until they are large enough to emerge and travel to the ocean.

Feeding Ecology

Since young pink salmon migrate immediately to the ocean, they generally do not eat as they leave freshwater. For the few populations that spawn much further up large rivers, young pink salmon may eat aquatic insects as they travel to saltwater. In the ocean, pink salmon feed on plankton, other smaller fish, squid, and the occasional aquatic insect. The tiny marine crustaceans pink salmon eat are what give their flesh its pink color. As with all members of the salmon family, when they return to freshwater to spawn, they stop eating.

Migration

Pink salmon generally spawn in small rivers near the coast, and in estuaries near the mouths of rivers. Most pink salmon do not travel farther than 40 miles up a river to spawn. However, in Alaska they have been known to go greater distances in larger river systems, such as the Yukon, Kuskokwim and Nushagak. In Southcentral Alaska, pink salmon have been documented going as far as 130 miles up the Susitna River. On the Mulchatna River, pink salmon have gone as far as 250 miles upstream before spawning.

After young pink salmon emerge from the gravel and migrate to saltwater, they gather in schools and remain in estuaries and along the beaches. Eventually, they begin spending more time feeding in the deeper offshore waters, such as the Gulf of Alaska and Aleutian Islands.

Range and Habitat

Pink salmon are found along the Pacific rim of Asia and in North America. There are naturally occurring pink salmon populations throughout the coastal waters of the North Pacific Ocean, Arctic Ocean and nearby seas. While pink salmon in North America have been found as far south as north-central California, they do not reproduce in significant numbers below the Puget Sound in Washington State. They occur to the west from the Lena River in Siberia and as far south as Korea and Kyushu, Japan.

From the 1900’s through the 1970’s, attempts were made to transplant pink salmon across northern North America, the waters of northern Europe, and as far south as Chile. Most of these efforts have not been successful. An accidental introduction to Lake Superior in 1956 survived and became an established population, spread throughout the Great Lakes, and remains today. This population is the first known population to complete its entire life cycle in fresh water has the only known occurrence of three year old pink salmon.

In Alaska, pink salmon are widely distributed along the coast, with only a few in the Copper River delta and none in the upper Copper River drainage.

Status, Trends, and Threats

Status

The global population of pink salmon are not currently in danger. However, local populations have decreased in some areas such as California and Washington. There are no pink salmon populations protected by the Endangered Species Act. Pink salmon populations in Alaska are well-managed and stable.

Threats

One threat to pink salmon is overfishing. Commercial canning and salting of pink salmon in Alaska began in the 1800s and expanded steadily until about 1920. During territorial days, commercial fishermen used fixed and floating fish traps to extensively harvest pink salmon. A push to ban such traps helped propel Alaska to statehood in 1959. Runs declined markedly during the 1940s and 1950s; however, intensive efforts were successful in rebuilding those runs, and enhancing them through hatcheries to take pressure off of wild stocks. Now most pink salmon are taken with purse seines and drift or set gillnets. Lesser numbers are taken with troll gear or beach seines.

Other threats to pink salmon include habitat loss or degradation, particularly to their spawning grounds as they prefer shallow areas with moderate to fast water current and clean gravel with little silt or mud. Climate change may also reduce the availability of their prey in the ocean

Fast Facts

- **Size**
  18”- 25” long and between 3- 5.5 lbs
- **Diet in freshwater**
  Adults returning to spawn do not eat. Young salmon migrating to the ocean may eat aquatic insects and zooplankton.
- **Diet in saltwater**
  Plankton, marine shrimp and krill, other smaller fish, squid, and the occasional aquatic insect.
- **Predators**
  Anything larger than them including killer whales, bears, birds, and humans just to name a few.
- **Reproduction**
  A female lays between 1,200 and 1,900 eggs during spawning June through late October. Eggs incubate over winter for 5-8 months and hatch in late winter or early spring. Fry migrate to saltwater as soon as they emerge from the gravel. They feed for 18 months in the ocean, and return to spawn and die at two years of age.
- **Ocean-Phase Identifying Characteristics**
  Mouth is white with a black gum line
  Very small or almost no teeth, and no “teeth” on the tongue
  Large oval spots on both lobes of tail
  Large black spots on back
  Pointed lower jaw

No silver on tail
Very small scales compared to other salmon that are of similar size

- **Remarks**
  The Alaska Department of Fish and Game manages pink salmon in fresh waters of the state and in saltwater up to 3 miles from shore.
- **Other names**
  Humpback salmon, humpy

Chums

General Description

Chum salmon, also known as dog salmon, are the most widely distributed of all the Pacific salmon and generally occur throughout Alaska. Like most other Pacific salmon species, chum salmon spend most of their life feeding in saltwater, then return to freshwater when mature to spawn once in the fall then die. Most chum salmon populations do not travel far upstream to spawn; however, some travel up to 2,000 miles upstream to the headwaters of the Yukon River. Although generally regarded as one of the less desirable species of salmon, in Arctic, Northwestern, and Interior Alaska, chum salmon are highly prized as a traditional source of dried winter food. Since the 1980s, commercial chum salmon harvests in Alaska have more than doubled as a result of the Alaska hatchery program and increased foreign sales.

Juveniles

During their brief freshwater residency, chum salmon fry have 8–12 vertical, uniformly-shaped and -spaced dark bars (parr marks) typically not extending below the lateral line. Overall color is dark greenish-brown along the back and pale iridescent green below the lateral line. Since they commonly migrate to sea soon after hatching, juvenile chum salmon are usually only 1–2 inches long by the time they leave freshwater.

Adults

Ocean-stage chum salmon are metallic bluish-green along the back and above the lateral line with profuse tiny speckles often present, though not resembling the larger spots of Chinook, coho, or pink salmon. The tail is highly forked, more so than other species of Pacific salmon, and is not spotted. The tail also has silver streaks along (but not between) the fin rays. As adult chum salmon enter fresh water to spawn, both sexes' color and appearance change dramatically. Males lose their silvery appearance and take on a dark olive to brown coloration with red to purple wavy vertical stripes. They develop a hooked snout (kype) lined with large canine-like teeth. Females become brown to grey colored with a broad dark horizontal bar running along the lateral line. Females also develop kypes and canine-like teeth, though less noticeably than males.

Life History

Growth and Reproduction

Like other Pacific salmon species, chum salmon usually spawn in the fall. They can be found in two distinct races based on spawning-run timing: the earlier-running race is referred to as summer chum salmon, and the later-running race is called fall chum salmon. Small to medium, slow-flowing, spring-fed side channels are often their preferred spawning habitat, but they spawn

in a wide variety of habitats including large muddy rivers, cold, clear headwater streams, and in the mouths of rivers below the high-tide line. As with other Pacific salmon, a female chum salmon excavates depressions (redds) in the gravel and deposits her eggs as one or more males simultaneously releases its sperm resulting in fertilization. The female then covers the fertilized eggs with gravel and guards the redd until she eventually becomes too weak to hold position in the stream.

Chum salmon embryos hatch from eggs after 3–4 months, depending on water temperature. Hatchlings (alevin) remain in the gravel while continuing to absorb nutrients from the egg yolk for an additional 60–90 days before emerging. They begin their migration to the sea within days or weeks.

At sea, juvenile chum salmon spend several months near shore then disperse into the open ocean. They grow rapidly in the ocean, reaching 12 or more pounds over the next 3–4 years, with the most rapid growth taking place during their final year at sea.

Feeding Ecology

Juvenile chum salmon that hatch far upriver begin feeding on insect larvae while still moving toward the sea. Upon reaching the sea, they remain near shore for up to several months feeding on crustaceans, terrestrial insects and young herring before dispersing to the open ocean. While at sea, chum salmon feed on copepods, tunicates, mollusks and a variety of fishes. When the adults return to fresh water on the spawning run, they cease feeding and their digestive tract degrades. Energy stored in body tissues (fat and muscle) is used to fuel the spawning run.

Migration

Like most Pacific salmon, chum salmon are anadromous (adults move from salt to fresh water to spawn). As adults, they almost always return from feeding areas in the ocean to spawn in the very same stream and site where they were spawned. The distance traveled to spawning sites upriver varies greatly between populations and regions, with some individuals spawning in the mouth of their home stream, and others spawning up to 2,000 miles upriver. No freshwater-resident or landlocked populations have been found.

Newly hatched chum salmon migrate, sometimes great distances, down their natal (home) rivers toward their feeding grounds in the sea.

Range and Habitat

Chum salmon have the widest distribution of any of the Pacific salmon. They range throughout Alaska, but are scarce north of Kotzebue Sound. Elsewhere they are found along the east and west coasts of the North Pacific Ocean north of northern California (Sacramento River) and Kyushu, Japan, and along the Arctic Ocean coast east to the Mackenzie and Anderson rivers in Canada and west to the Lena River in Russia. While at sea, most of Alaska’s chum salmon remain in the eastern Chukchi and Bering seas and the Gulf of Alaska.

Chum salmon usually spawn at the mouth, or in the lower sections, of rivers, although in Alaska's largest river systems, some travel great distances (up to 2,000 miles to the upper Yukon River in Canada) upriver to spawn. After hatching, juvenile chum salmon spend a short time (days to weeks) in fresh water before migrating to the ocean. Once in the ocean, juvenile chum salmon remain near shore, particularly in shallow eelgrass beds, for the first several months before dispersing into the open ocean.

Status, Trends, and Threats

Although Pacific salmon species on the West Coast of the Lower-48 States have experienced dramatic declines in abundance during the past several decades, salmon populations in Alaska are generally faring better. Freshwater habitat in Alaska remains mostly pristine. There are hundreds of stocks of chum salmon throughout the state of Alaska and their population trends are diverse: Some stocks are in decline while others are at equilibrium or increasing. Chum salmon stocks from some Western Alaska rivers are at very low levels; however, causes for this decline are largely unknown. In Southeast Alaska and Prince William Sound, wild chum salmon populations and harvests steadily declined through the early 1900's and hit an all-time low in the 1960's and 1970's. Following the start of Alaska's hatchery program in 1971, the numbers of chum salmon returning to Southeast Alaska and Prince William Sound have returned to high levels. Now hatchery fish make up more than half of the total commercial chum salmon harvest in Southeast Alaska and Prince William Sound. In Southeast Alaska, wild chum salmon production has also increased during the growth of hatchery production and is generally stable. Potential future threats to chum salmon in Alaska include habitat loss, climate change, over fishing, and competition from hatchery fish.

Fast Facts

- **Size**
  Average 24-28 inches and 10-13lb; males usually larger than females
- **Range/Distribution**
  Chum salmon range throughout Alaska, but are scarce north of Kotzebue Sound. While at sea, most of Alaska's chum salmon remain in the eastern Chukchi and Bering seas and the Gulf of Alaska.
- **Diet**
  Insect larvae, copepods, tunicates, mollusks and a variety of fishes
- **Predators**
  Marine mammals, birds, bears, wolves, humans
- **Reproduction**
  Spawn only once before dying
- **Other Names**
  dog salmon, calico salmon