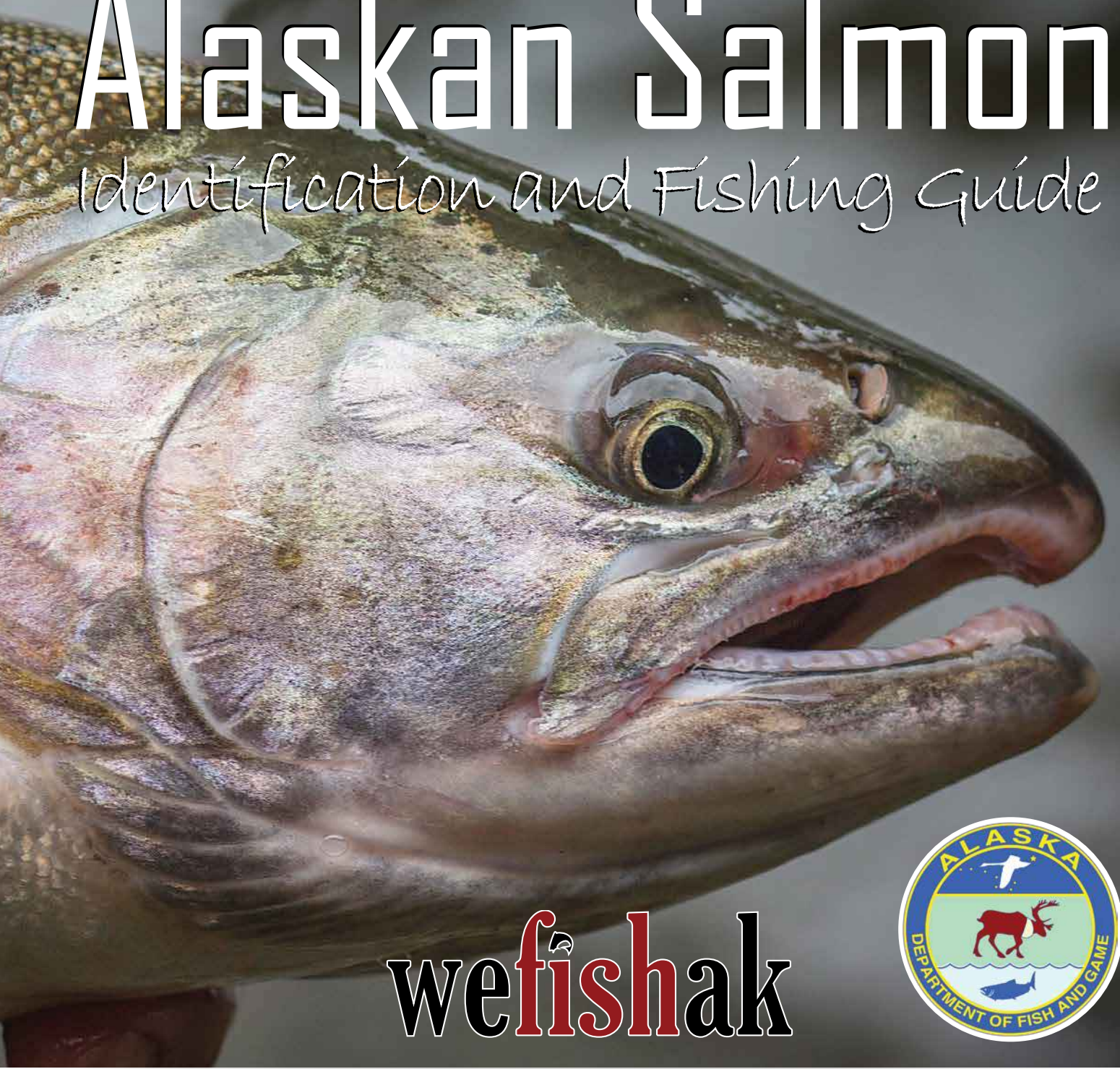


Alaska Department of Fish and Game  
Division of Sport Fish

# Alaskan Salmon

Identification and Fishing Guide



wefishak



*Salmon Life Cycle ■ Salmon Identification ■ Caring For Your Catch ■ And More*

.....

Your Guide to Salmon Identification and Fishing in Alaska

— Take the —

# Five Salmon

.....

## Family Challenge



The Alaska Department of Fish and Game Five Salmon Family Challenge certificate program provides recognition to angling families who catch and document the five species of Pacific salmon commonly found in Alaska.

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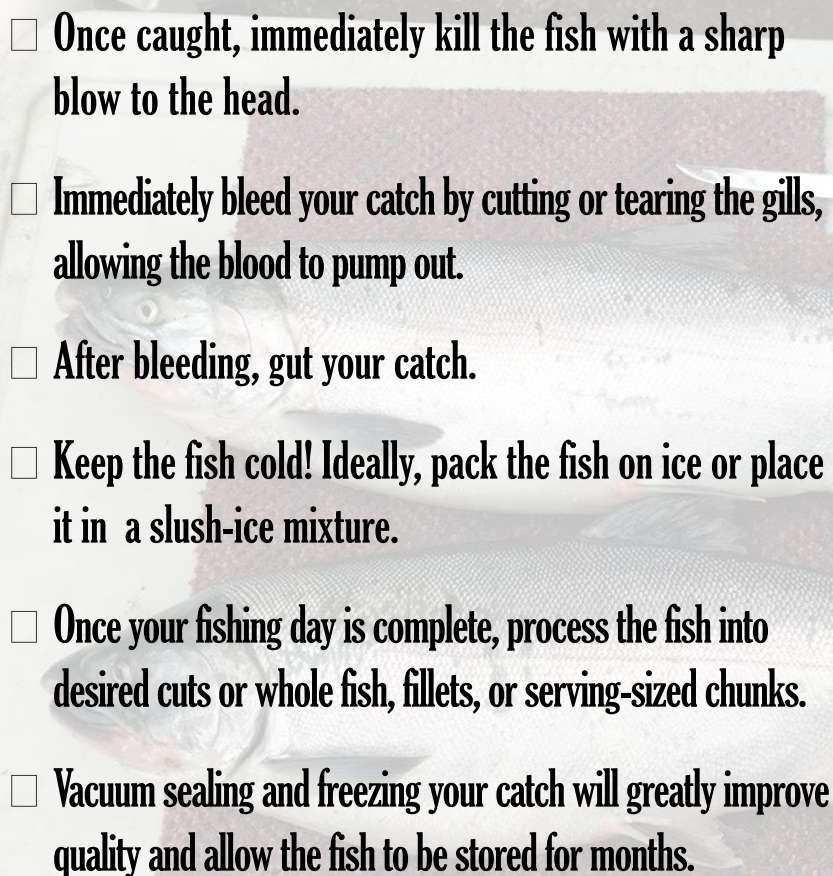
*Certification in the program requires all salmon must be legally caught in Alaskan waters (fresh or salt water) open to the public and in compliance with current ADF&G sport fishing regulations.*

Learn more at [www.wefishak.alaska.gov](http://www.wefishak.alaska.gov)



# Caring for Your Catch

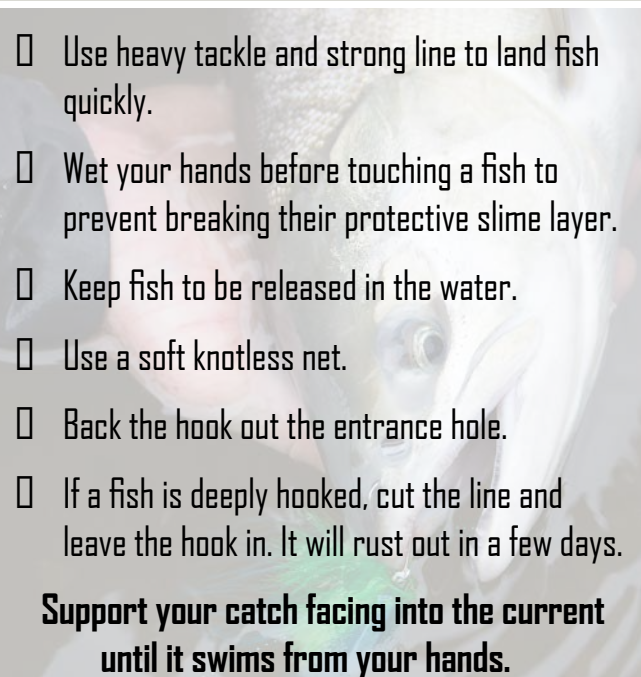
Alaska salmon are nutritious and delicious, when eaten fresh, or months later. How you care for your catch immediately after catching can have a dramatic impact on the quality and flavor of the fish when served for dinner.

- 
- Once caught, immediately kill the fish with a sharp blow to the head.
  - Immediately bleed your catch by cutting or tearing the gills, allowing the blood to pump out.
  - After bleeding, gut your catch.
  - Keep the fish cold! Ideally, pack the fish on ice or place it in a slush-ice mixture.
  - Once your fishing day is complete, process the fish into desired cuts or whole fish, fillets, or serving-sized chunks.
  - Vacuum sealing and freezing your catch will greatly improve quality and allow the fish to be stored for months.

## Releasing Fish

*Not intended to be harvested*

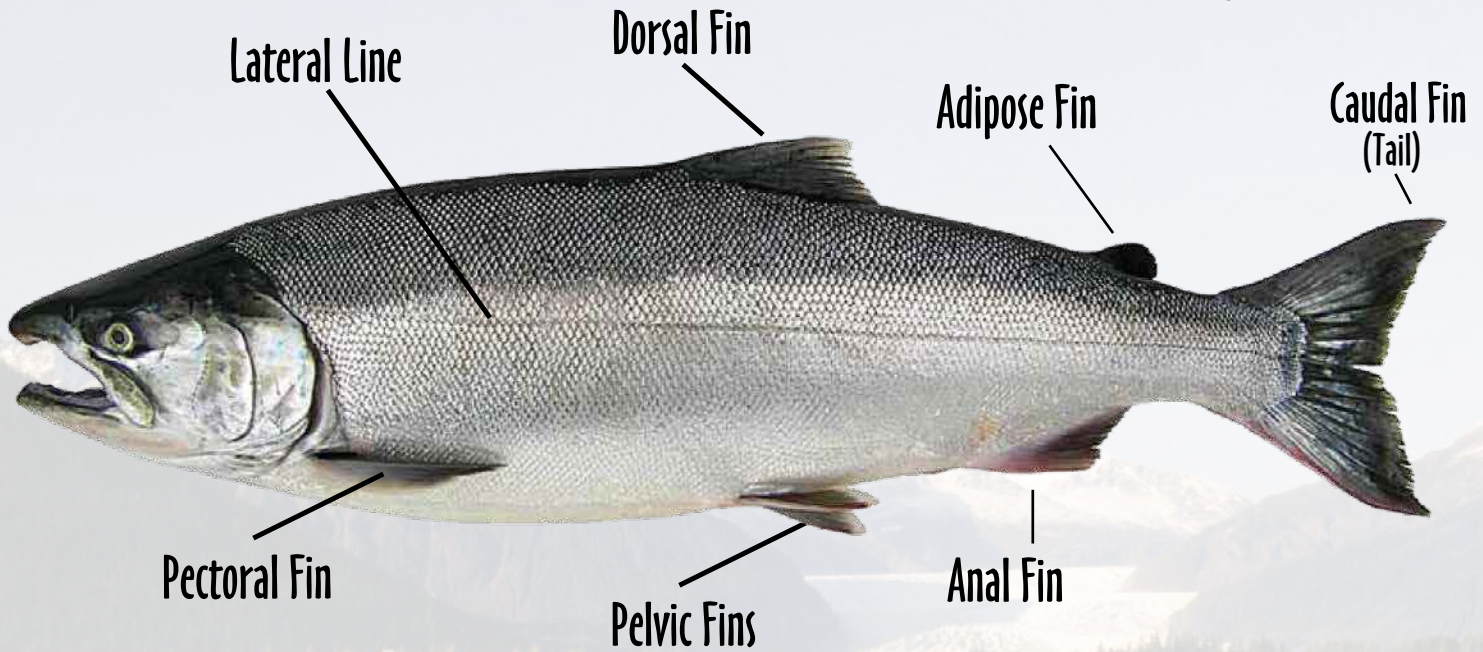


- If you don't plan to keep the fish you catch as food, you must use good catch-and-release techniques.
  - In many areas in Alaska, regulations prohibit fish from being taken out of water if they are to be released. Check your local regulations.
  - Being careful with your catch greatly increases the chances that the fish will survive. Taking care with undersized or unwanted fish also helps ensure there will be fish for all of us in the future.
- 
- Use heavy tackle and strong line to land fish quickly.
  - Wet your hands before touching a fish to prevent breaking their protective slime layer.
  - Keep fish to be released in the water.
  - Use a soft knotless net.
  - Back the hook out the entrance hole.
  - If a fish is deeply hooked, cut the line and leave the hook in. It will rust out in a few days.
- Support your catch facing into the current until it swims from your hands.**

Subscribe to our monthly newsletter "Reel Times" and receive monthly fishing tips, videos and recipes.

More information at [www.wefishak.alaska.gov](http://www.wefishak.alaska.gov)

# Salmon External Anatomy



## The Salmon Life Cycle

### Alevin

Alevin are about an inch long and have yolk sacs attached to them, which provide nutrients for their growth. Alevin remain in redds until their yolk sacs are fully consumed.

### Eyed Egg

These 2-3 month old embryos have visible eyes, receive food from their yolk sacs, and obtain oxygen through their egg shell walls.

### Egg

Female salmon lay their eggs in creek beds in gravel nests called redds. Newly fertilized eggs have no visible signs of development.

### Fry

Fry swim up out of their redds in search for food. They develop vertical bars (parr marks), which act as camouflage, hiding them from predators in streams and rivers.

### Smolt

Smolt migrate out to the ocean. They develop dark silvery backs and white bellies to camouflage them at sea.

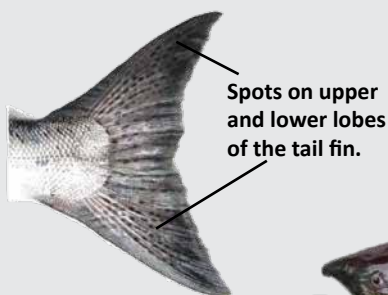
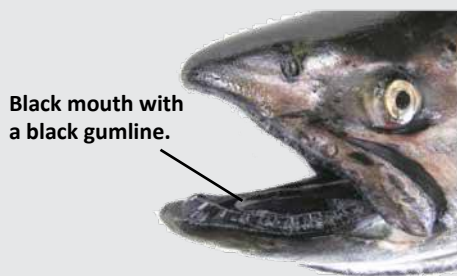
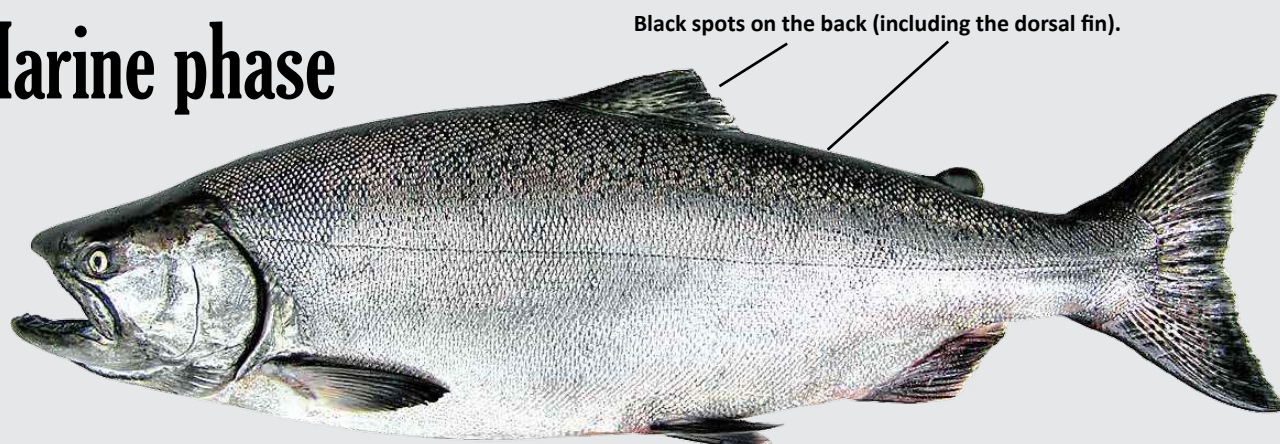
### Adult

Adult salmon spend 1-5 years feeding in the ocean until they return to freshwater to spawn. They stop eating and change shape and color as they return to their home streams. All adult Pacific salmon die after spawning.

*All Pacific salmon die after spawning.*

# Chinook (king) salmon (*Oncorhynchus tshawytscha*)

## Marine phase



## Spawning phase



Chinook salmon do not lose their black spots when entering the spawning phase. However, they do turn a deep maroon or dark olive color. The salmon pictured above is an adult Chinook during the spawning phase.



**A**laska's state fish. Excellent table fare because of their high oil content and rich, moist meat. Flesh color can vary between red or white.

Chinook salmon can be found from Southeast Alaska to the Yukon River and some rivers farther north.

The largest of the five Pacific salmon species, adult Chinook typically range between 15 and 40 pounds and between 34 to 50 inches in length. The world-record sport caught Chinook salmon, weighing over 97 pounds, was caught in the Kenai River in 1985.

Once mature, Chinook salmon migrate from the ocean to reach their home or natal streams where they will spawn. Depending on size, female Chinook salmon produce approximately 5,000 to 14,000 eggs. The eggs are deposited in a gravel nest called a redd and can be fertilized by one or more males.

## Common fishing techniques:

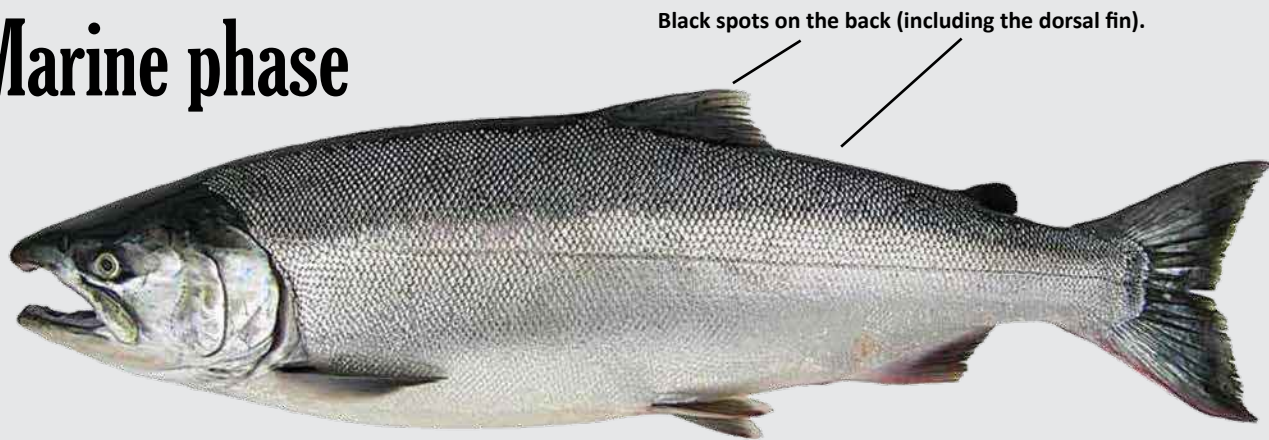
**Marine:** Trolling bait (herring) and lures using downriggers and flashers. Casting spinners or spoons.

**Freshwater:** Back-trolling or casting bait (herring or cured salmon eggs) Spin-N-Glo set-ups, lures or flies; slip-bobber set up using cured salmon roe.

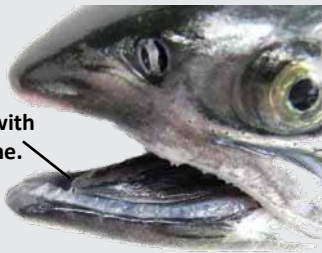
*Watch our video on how to set up a Spin-N-Glo rig at [www.wefishak.alaska.gov](http://www.wefishak.alaska.gov)*

# Coho (silver) salmon (*Oncorhynchus kisutch*)

## Marine phase



Black spots on the back (including the dorsal fin).



Black tongue with a white gumline.



Spots only on upper lobe of the tail fin.

## Spawning phase



Coho salmon do not lose their black spots when entering the spawning phase. However, they do turn a deep maroon color. Males develop a pronounced kype, or hooked jaw. The salmon pictured above is an adult coho during the spawning phase.

**P**ricized for their fight, coho salmon can be very acrobatic when hooked. Coho are fun to catch on fly fishing gear and traditional rod-and-reel.

Coho salmon can be found throughout the coastal waters of Alaska, and throughout fresh waters that flow to the Pacific Ocean and Bering Sea.

Adult coho salmon usually weigh between 8 and 12 pounds and are between 24 to 30 inches long. In some areas, larger coho can be caught. The state record, caught in 2011, weighed over 26 pounds.

Coho salmon enter spawning streams from July to November – usually during periods of high runoff. Coho salmon occur throughout stream networks but are known for favoring the headwaters of streams. Adults fight their way into small creeks and streams following fall rains before spawning, where the female lays between 2,400 and 4,500 eggs in a gravel nest or redd.



## Common fishing techniques:

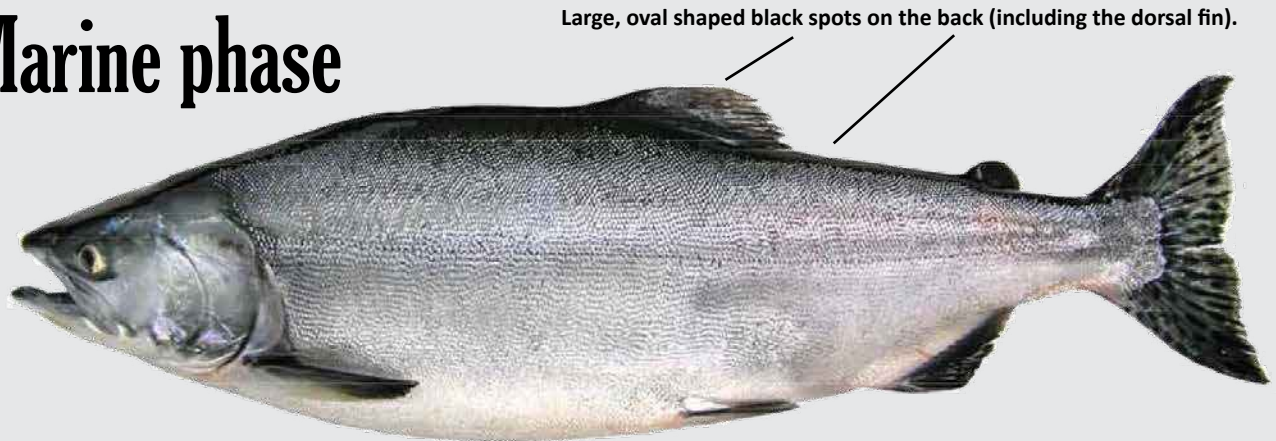
**Marine:** Trolling bait (herring) and lures using downriggers and flashers.

**Freshwater:** Back-trolling using cured salmon eggs; flies and lures, or bank-casting using cured salmon eggs, lures, or Spin-N-Glo set-ups.

*Watch our video on using a slip-bobber set up to fish for coho salmon at [www.wefishak.alaska.gov](http://www.wefishak.alaska.gov)*

# Pink (humpy) salmon (*Oncorhynchus gorbuscha*)

## Marine phase



Large, oval shaped black spots on the back (including the dorsal fin).



Oval shaped spots on upper and lower lobes of the tail fin.

**P**ink salmon are probably the most abundant Pacific salmon species in Alaska.

Pink salmon are easy to identify by the large black oval spots on their backs and on both lobes of their tail fin. In addition, they have small scales. During spawning, males develop a very large, and distinctive, “hump” on their backs, which gives them the name “humpy.” Pink salmon are bright silver when in the ocean, and then change to a dull gray back and white belly once they return to their home or natal freshwater stream.

The smallest of the five Pacific salmon species, adult pink salmon average between 3 and 4 pounds and are typically between 15 to 24 inches long.

Mature pink salmon head up their home or natal rivers to spawn like other salmon, but many spawn in inter-tidal areas. The female pink salmon produces between 1,500 and 2,000 eggs. Frequently their trip to sea starts immediately upon emerging from their gravel nest or redd.

## Spawning phase



Pink salmon do not lose their black spots when entering the spawning phase. However, males develop a pronounced hump on their back. The salmon pictured above is an adult pink during the spawning phase.



## Common fishing techniques:

**Marine:** Trolling bait (herring) and lures using downriggers and flashers.

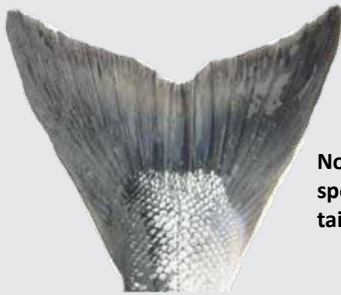
**Freshwater:** Back-trolling or casting bait (herring or cured salmon eggs), lures or flies.

Watch our video on how to tie a streamer pattern for pink salmon at [www.wefishak.alaska.gov](http://www.wefishak.alaska.gov)

# Sockeye (red) salmon (*Oncorhynchus nerka*)

## Marine phase

No distinct spots on the back or tail fin.



No distinct spots on the tail fin.

## Spawning phase



Sockeye salmon turn a deep maroon color. Males develop a pronounced kype, or hooked jaw. The salmon pictured above is an adult sockeye during the spawning phase.

**S**ockeye salmon are abundant, and their dark red meat is a dinner favorite, making it the fish that fill the freezers of most Alaskans.

Adult sockeye salmon can be identified by a lack of black spots on their body or tail. When in saltwater they are bright silver, but once in fresh water, their bodies turn bright red, with a green head. Males develop a humped back, with hooked jaw (kype) and exposed sharp teeth.

Found throughout the North Pacific and Arctic oceans, sockeye salmon can be found in abundance in many of Alaska's freshwater systems that drain into these oceans.

Sockeye salmon range in size from 4 and 12 pounds and are typically between 18 to 24 inches long. Beginning in May, and continuing until late fall, mature sockeye salmon flood back into their home or natal streams to spawn and die. A female sockeye salmon lays between 2,000 and 4,500 eggs.



## Common fishing techniques:

**Freshwater:** Most anglers fish for sockeye using a fly with a short-distance cast upriver and drifted downstream by the river current. Small shrimp style flies work well for sockeye.

Watch our video on how to tie a sockeye fly at [www.wefishak.alaska.gov](http://www.wefishak.alaska.gov)



# Chum (keta/dog) salmon (*Oncorhynchus keta*)

## Marine phase

No distinct spots on the back or tail fin.



No distinct spots on the tail fin. Notice silver striations.

## Spawning phase



Chum salmon develop calico markings on their sides during the spawning phase. Males develop a pronounced kype, or hooked jaw. The salmon pictured above is an adult chum during the spawning phase.

**C**hum salmon are a lot of fun to catch using a traditional rod and reel or a fly rod. They are excellent fighters and make strong runs when hooked.

Chum salmon are easily identified in their spawning colors when green and red vertical bars appear on their sides. Males also develop the classic hooked jaw, or kype, accompanied by large visible teeth.

Found throughout marine waters of coastal Alaska, chum salmon can also be found in most major river systems when returning to spawn.

Chum salmon typically weigh between 7 and 18 pounds, and are between 24 to 34 inches long.

Mature chum salmon return to their home or natal streams in July and August, and their migration can range from the mouths of rivers to thousands of miles upstream. Female chum salmon can lay between 2,400 and 3,100 eggs.



## Common fishing techniques:

**Marine and freshwater:** Chum salmon will bite on flies, and often bait or lures. Once hooked, they are a hard fighter.

*Watch our video on how to tie a streamer pattern for chum salmon at [www.wefishak.alaska.gov](http://www.wefishak.alaska.gov)*

# No matter where you are in Alaska Stay Bear Aware

Bears and salmon go hand-in-hand. You are responsible for your own safety while fishing in bear country. Whether fishing, traveling to and from your favorite fishing spot, or camping, be aware of bears.

- 🐾 **NEVER** let bears associate people with food.
- 🐾 **Keep** fish stringers and coolers closely attended when fishing.
- 🐾 **Always** wear your day pack when fishing, especially if it contains food.
- 🐾 **Give up** your fishing spot to an approaching bear.
- 🐾 **When** reeling in a fish, if the splashing attracts a bear, either let line out, or cut your line.
- 🐾 **If possible,** fillet salmon at an established fillet station or fillet at home.
- 🐾 **If you do fillet on the river,** don't let fish carcasses collect on the riverbank. Chop them up and throw them into deep, fast moving water.
- 🐾 **Always** put fish carcasses or waste in secured dumpsters or garbage cans or the landfill.



Learn more about bears at [www.alaskabears.alaska.gov](http://www.alaskabears.alaska.gov)

# STOP THE SPREAD OF AQUATIC INVASIVE SPECIES:

Think ahead and save a watershed.

Aquatic invasive species can easily be spread from one waterbody to another. Anglers, boaters and their equipment can play a key role in transporting these pests. It only takes one mistake to infect a new area.

**CLEAN** ? Rinse and remove any mud, sediment, and plants from all gear, boats and trailers, floatplane rudders and floats, or anything that contacts the water.

**DRAIN** ? Drain all water from coolers, bilge pumps, buckets, and wring-out gear before leaving the boat launch or fishing areas.

**DRY** ? To the best of your ability, completely dry gear between water-bodies or trips.

**DECONTAMINATE** ? Freeze or wash gear in 140°F hot water scrubbing with a stiff bristle brush.

Felt-soled waders and wading boots are illegal to wear when sport fishing in Alaska  fresh water.

**PLEASE REPORT ANY SUSPECTED INVASIVE SPECIES BY  
CALLING THE INVASIVE SPECIES HOTLINE:**

1-877-INVASIV (1-877-468-2748)

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Get Out and Fish. Together.

Share your story online using #wefishak



# [www.wefishak.alaska.gov](http://www.wefishak.alaska.gov)

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