

# **Types of Boats**

### **Purse Seiner**

Purse seiners catch primarily pink salmon and herring by encircling them with a long net and drawing (pursing) the bottom closed to capture the fish. The net is first stacked on the stern of the boat and then played into the water while the boat travels in a large circle around the fish. The far end of the net is attached to a power skiff, which holds the net while the seiner completes the circle. The top of the net stays on the surface of the water because of its float linethousands of colorful floats—and the bottom of the net falls vertically because of its weighted lead line. As a result, the net hangs like a curtain around the school of fish. The vessel crew then purses its bottom with a purse line. The lines, and thus the net, are retrieved through a hydraulic power block (winch). Once most of the net has been retrieved, with the remainder of it lying in a bag alongside the vessel, the fish are dipped from the bag and into the vessel's hold. For large catches of herring, a buying vessel or tender comes alongside the fishing vessel and lowers the end of a fish pump into the bagged purse seine. The herring are then brought aboard the tender and into its hold without ever going aboard the seiner. Sometimes referred to as limit seiners, purse seiners are sleek, cabinforward vessels

its power block, the net stacked on the back, and the power skiff that is often seen riding piggyback aboard the vessel's stern while it is traveling. When fishing, of course, the circle of floats on the surface of the water, and the power skiff assisting with the operation, are sure giveaways. Seine-caught salmon are delivered in-the-round (whole) to buying stations and canneries where they end up as canned and frozen products. Herring are delivered to processing plants where they are either stripped of their roe (eggs), or packaged as bait for other commercial fisheries; e.g., the longline fisheries and the crab fisheries. Salted herring roe, called kazunoko, is shipped to Japan where it is a high-priced delicacy.

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Left: Gillnetter.
Photo courtesy of ASMI.

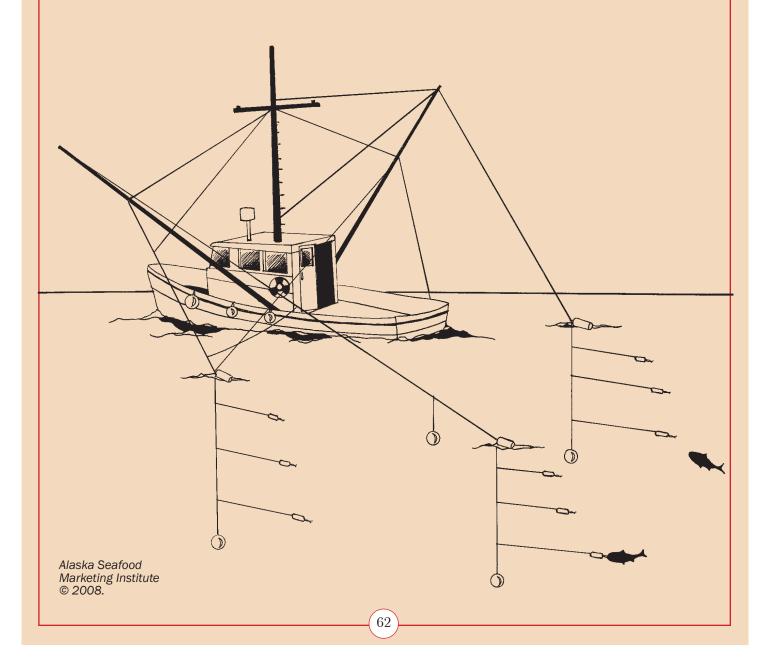
clean decks, the boom with

that are limited by Alaska law to 58 feet in order to more precisely manage their fishing effort. They are recognized by their long,

## **Troller**

Troll vessels catch salmon, principally Chinook, coho, and pink salmon, by "trolling" bait or lures through feeding concentrations of fish. The word troll comes from a medieval German word, trollen, and refers to the revolving motion of the bait or lures used in this type of fishing. Typically, four to six main wire lines are fished, each of which may have up to a 50 pound lead or cast iron sinker or cannon ball on its terminal end, and 8 to 12 nylon leaders spaced out along its length, each of which ends in either a lure or baited hook. To retrieve hooked fish, the main lines are wound about small, onboard spools via hand crank (hand trollers) or with

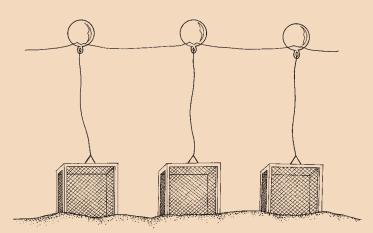
hydraulic power (power trollers), and the fish are gaffed when alongside the vessel. The leaders are then rebaited and let back down to the desired depth(s). Troll vessels come in a variety of sizes and configurations, ranging from small, hand troll skiffs to large, ocean-going power troll vessels of 50 feet or more in length. Troll salmon fishermen operate throughout Southeast Alaska in both state and federal waters. The troll salmon fishery produces a low-volume, high-quality product. Troll-caught salmon are dressed at sea and sold either as a fresh or frozen product. High-end grocery stores and fine restaurants are the final destination.



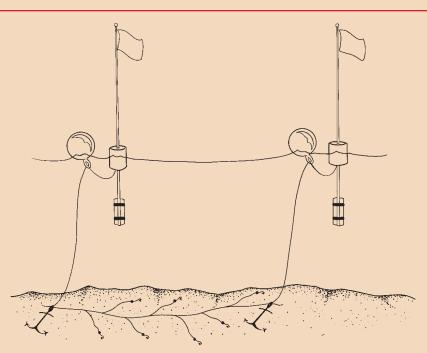
#### Crabber

Crabbers target Dungeness, king, and snow crab using twine or wire-meshed steel pots (traps). Baited with herring or other fresh bait, the pots are left to soak for several days. A line extends from each pot to a surface buoy that marks its location. There are several configurations for the pots, though in general, the smaller round pots are fished for Dungeness in shallow bays and estuaries, and the large, heavy, rectangular pots are fished in waters deeper than 100 feet for king and Tanner crab. A power winch is used to retrieve the pots. Once aboard, a pot is opened

and the catch sorted. Females and undersized males are discarded alive over the side and legal-sized males are retained in aerated seawater tanks. Crab boats come in a variety of shapes and sizes, from aluminum skiffs with outboard motors that fish the inside waters for Dungeness, to seagoing vessels of 100 feet or more that ply the Bering Sea and the Gulf of Alaska for king crab. Unless one happens to see a crabber headed for the fishing grounds with its decks stacked with pots, identification of a vessel as a crabber might be difficult for the casual observer. Crabs are delivered live to shore stations where they are cooked and then either canned or sold as a fresh or frozen product. A small number are sold live in local markets through retail outlets that have circulating seawater holding tanks.



Crabber. Alaska Seafood Marketing Institute © 2008.



Longliner. Alaska Seafood Marketing Institute © 2008.

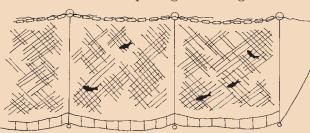
## Longliner

Longliners catch bottomfish, primarily halibut, blackcod, lingcod, and rockfish, via a long line that is laid on the bottom. Attached are leaders or gangions with baited hooks. Each longline can be up to a mile in length and have thousands of baited hooks. The lines are anchored at each end of each set. Lines at the ends run to the surface and are marked with a buoy and flag. A longline vessel typically sets several lines for a 24-hour soak. The lines are retrieved over a side roller with a power winch, and the fish caught are bled or dressed and then packed in ice in the vessel's hold. Longliners are typically large vessels, 50 to 100 feet in length, with

a weather cover on the stern to protect the crew. The longlines are coiled and stacked on deck in tubs when not in use. Most vessels in this fishery can pack 20 to 40 tons or more of iced product before returning to port. Longliners are readily identified by their weather cover and, when not fishing, by the numerous orange buoys and flags that are tied along their rails. This fishery delivers its catch whole and bled (rockfish), or whole and gutted (halibut), or headed and gutted (blackcod and lingcod) for subsequent sale to fresh and frozen markets.

#### Gillnetter

Gillnetters catch salmon—primarily sockeye, chum, and coho—by setting curtain-like nets perpendicular to the direction in which the fish are travelling as they migrate along the coast toward their natal streams. The net has a float line on the top and a weighted lead line on the bottom. The mesh openings are designed to be



just large enough to allow the male fish, which are usually larger, to get their heads stuck, or gilled, in the mesh. Much larger fish and the smaller females are not so readily gilled. Gillnets work best in silty or turbid water which makes them difficult for the fish to see. Gillnet vessels are usually 30 to 40 feet long. They are easily recognized by the drum on either the front, a bow picker, or the stern, a stern picker,

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on which the net is rolled. Net retrieval is by hydraulic power which turns the drum.

Fish are removed from the net by hand, picking them from the mesh as the net is reeled onboard. Gillnet-caught salmon are usually iced and delivered to buyers and cold storages. Historically, their ultimate destination was the canned market, though a growing market for frozen product has developed overseas.

Setnetting is a small-scale type of gillnetting done by hand from a skiff or from shore, usually by local families. There are no hydraulics. Nets are fixed and are held onshore or offshore with anchors.

Skiffs are used to set nets—one end on shore, other anchored off shore. Sometimes both ends are in the water most of the time and when a cork bobs the fish is pulled out. After salmon are picked from nets they are iced down and delivered to large collection boats, called tenders.

## **Trawler**

facilities.

Trawlers are sometimes confused with trollers due to their similar sounding names. Trawlers typically catch large quantities of midwater species such as pollock or pink shrimp, and bottomfish such as flounder, by towing a large, cone-shaped net. Most trawl nets have doors on either side of the net's opening to help hold it open, and some that are fished near the bottom have a heavy chain strung along the bottom of the opening to hold it close to the sea floor. The net is retrieved using huge winches and a power drum upon which the net is rolled as it is brought aboard. The end of the net, the bag or cod end, holds the fish and is usually pulled right up into the back of the vessel on a slanting stern ramp. Trawlers are generally large vessels; the largest in the ocean pollock fishery are factory trawlers that possess onboard processing

These can be up to 600 feet in length. Catches are often enormous, with a two-hour tow of the net yielding up to 100 tons or more depending on the fishery, the size of the vessel, and the concentration of fish in the area. The trawl fishery may process its catches into either fillets destined for the fresh and frozen market, or minced fish called *surimi*, which is manufactured



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into fish sticks and similar products such as artificial king crab. Shrimp fishermen sort their catches by size and species and sell the product as either a whole frozen product, or as a headed frozen product.

# Jig Fisher

Commercial jig fishing, also known as automated handlining, is a method of fishing using hooks with lures which are jigged up and down in the water. Jigs create a jerky, vertical motion, unlike spinnerbaits which move through the water horizontally. The jig is very versatile and can be used in both salt water as well as fresh water. Jig fishing techniques have been used for centuries by European vessels fishing Icelandic, Newfoundland and North Sea fishing grounds. Many of the techniques used then are still in use today.

In recent years however, the advent of hydraulic or electric automated jigging machines has eliminated much of the manual labor required to haul fish from great depths. Modern automated jigging machines are equipped with a computerized motor which enables the machine to automatically haul in the catch when a specified weight of fish is hooked. This improves the efficiency and accuracy of the fishing system, and also reduces bycatch and discards. You are effectively catching a quality fish straight from the sea.

Jig fishing is also extremely beneficial in the face of increased fuel costs as boats actually fish with the engine switched off.

