



# An overview of Oregon’s marine commercial fisheries

Commercial fishing has long been an integral part of many coastal communities, providing important economic support to the coast and the state. More than \$600 million in personal income, or the equivalent of about 9,200 jobs, is contributed annually to Oregon from commercial fisheries.

Oregon’s Marine Commercial Fisheries				
	Ex-vessel <sup>†</sup> value in 2023	Average annual ex-vessel value from 2014-23 (adjusted for inflation)	Average pounds landed in Oregon from 2014-23	Participating vessels 2023
Ocean Dungeness crab <sup>††</sup>	\$84,952,978	\$74,489,674	17,982,696	312
Groundfish trawl <sup>^</sup>	\$33,176,337	\$39,571,591	211,548,588	47
Pink shrimp	\$18,721,598	\$28,069,168	40,200,592	56
Albacore tuna	\$3,525,085	\$11,263,909	5,709,399	175
Groundfish fixed gear <sup>^^</sup>	\$8,036,950	\$10,614,954	3,705,632	239
Ocean salmon	\$414,838	\$4,930,734	608,510	91
Other commercial fisheries*	\$4,429,230	\$8,197,952	11,589,115	**

<sup>†</sup> Ex-Vessel value refers to the amount paid to the fishers.

<sup>††</sup> Ocean Dungeness crab was calculated using the crab season from Dec. through Aug.

<sup>^</sup> Groundfish trawl includes shoreside whiting.

<sup>^^</sup> Groundfish fixed gear includes nearshore.

\*Other commercial fisheries include urchin, razor clams, bay Dungeness crab, bay clams, hagfish, coastal pelagic species and Pacific halibut.

\*\*Intentionally left blank.

The following provides general descriptions of Oregon’s commercial marine fisheries and the Oregon Department of Fish and Wildlife’s (ODFW) role in ensuring they are ecologically and economically sustainable. ODFW’s Marine Resources Program (MRP) develops policies and regulates harvest in accordance with state and federal laws, such as the federal Magnuson-Stevens Fishery Conservation and Management Act (2006). MRP works closely on management and research with partners, including:

- Commercial fishing industry members
- Pacific Fishery Management Council (PFMC)
- National Marine Fisheries Service (NMFS)
- Pacific States Marine Fisheries Commission (PSMFC)
- Tribes
- Neighboring states
- Universities
- Non-governmental organizations



## Ocean Dungeness crab

The Oregon Dungeness crab fishery has been Oregon's most valuable single-species fishery for many years. It accounts for up to 40 percent of the ex-vessel value for all commercial landings of Oregon commercial fisheries each year.

This fishery has been active since the early 1900s; however, during the past 25 years both landings and price per pound have increased greatly. Each vessel participating must have one of a fixed number of permits for this fishery. There are currently more than 400 permits but only about 75 percent of the permit holders actively participate in the fishery each year.

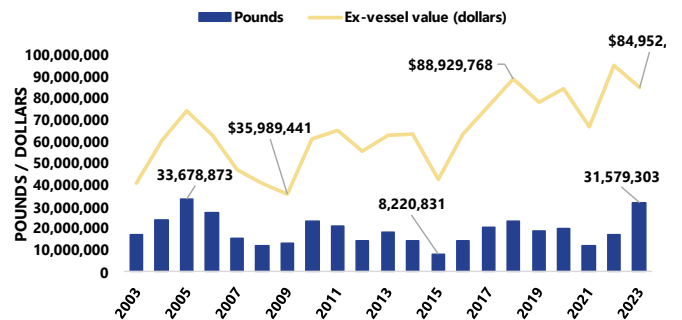


*Workers unload catch from a commercial vessel.*

Dungeness crab are caught in waters mostly from 5 to 100 fathoms with baited traps known as crab pots. The baited crab pots rest on the ocean floor, attracting crabs that enter a one-way door. Each pot is also equipped with two types of escape mechanisms. The first is an escape ring allowing under-sized (non-legal) crab to escape. The second is an escape hatch kept closed during fishing by weaving in "rotten cotton" which will deteriorate over a few months underwater if the pot is accidentally lost at sea. This escape hatch allows crab and other animals to escape lost gear. To reduce the number of pots deployed, the Oregon Fish and Wildlife Commission adopted a three-tier pot limitation program in 2006, which limits each vessel to 200, 300 or 500 pots.

The management of this fishery is based on the principle of the "three Ss":

- Size: Crabs must be at least 6 ¼ inches.
- Sex: Only males are retained, all females are returned alive.
- Season: Effort is reduced in the summer and the fishery closes in the fall during the peak time that male crabs are filling out their shells, thus creating a higher quality product.

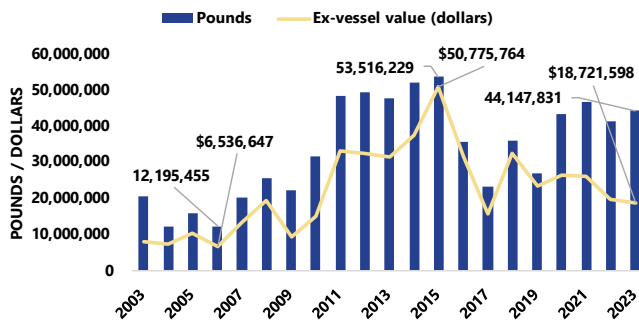


*Ocean Dungeness crab landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023. Crab season runs from Dec-Aug.*

In recent years, several management challenges related to changing ocean conditions have emerged across the entire U.S. West Coast Dungeness crab fishery. These challenges include increased entanglements of commercial crabbing gear with protected species such as humpback whales; increased frequency and duration of harmful algal blooms that produce biotoxins leading to rules to avoid human health effects; and changes in the timing of molting of crabs, which affects quality and marketability at the beginning of the season. MRP continues to work closely with the crab industry to address these issues through targeted research, monitoring efforts and regulatory changes.

## Pink shrimp

The pink shrimp fishery is the second most valuable single-species commercial fishery in Oregon, with landings averaging about \$25 million a year. It is also the U.S. West Coast's second most valuable trawl fishery. Oregon is geographically central to the species' range, helping the state to sport the largest industry with the highest landings as well as being home to the most pink shrimp research.



*Pink shrimp landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023.*



*Shrimpers and scientists look over shrimp catch at-sea.*

Oregon's pink shrimp fishery is managed sustainably and is certified by the Marine Stewardship Council. Sustainability of this fishery is achieved by monitoring stock dynamics, minimizing bycatch, and minimizing negative habitat and ecosystem effects. Bycatch is minimized by cooperative research with the industry and scientists leading to regulatory

changes. Habitat and ecosystem effects are evaluated via fishery independent research such as Remote Operated Vehicle studies of fished areas and studies of ocean acidification effects on shrimp.

Pink shrimp grow quickly, are short-lived, and populations adjust to changes in sex ratio, which makes them ideal for a persistent fishery. In addition, recruitment is principally affected not by the number of parents (spawners), but rather by environmental conditions (currents, upwelling, etc.).

Principal regulations in the pink shrimp fishery include limited entry permitting, gear restrictions, catch restrictions, and, most critically, a Fishery Management Plan (FMP) which outlines Harvest Control Rules (HCRs).

- Limited entry permits constrain the total effort possible in the fishery and are set at 138 permits, although only about 70 are used each year.
- Gear restrictions have been developed to minimize bycatch while not affecting shrimp catch rates. Trawl gear used in the fishery is required to use a rigid Bycatch Reduction Device (BRD), allowing shrimp in, but keeps fish out effectively. In 2012, BRD requirements were set at  $\frac{3}{4}$  inch spacing, optimizing them for the exclusion of the federally listed threatened eulachon smelt. In 2018, LED fishing lights mounted on trawl footropes became required after ODFW led research showed that proper use of these lights reduce catch of eulachon by as much as 90 percent. These lights illuminate the gap between the bottom of the net and the ocean floor.
- Catch restrictions, such as minimum count per pound which results in larger shrimp entering the market, ensure economic optimization of the catch.
- Oregon's pink shrimp FMP outlines the biology of pink shrimp, long term monitoring results and provides HCRs which require the closure of the fishery when outlined benchmarks are reached, protecting the stock from overfishing.

## Albacore tuna

Albacore tuna are a highly migratory species found worldwide in temperate seas. Albacore migratory movements are strongly influenced by regional oceanographic processes, and the availability of albacore to Oregon's fishing fleet may vary greatly from year to year.

The albacore that are caught off Oregon are just starting their cross-Pacific journey. They belong to the North Pacific stock and are generally juvenile or sub-adult fish (3 to 5 years old and 10 to 30 pounds) that have not yet spawned. These younger fish are higher in desirable omega-3 fish oils than the larger, leaner, older albacore caught mostly by foreign longline fishermen in the central Pacific. Also, because of their young age, the fish caught off Oregon have a reduced mercury accumulation in their meat compared to those caught in many other areas, according to the [Oregon Albacore Commission](#) (Oregon Department of Agriculture).



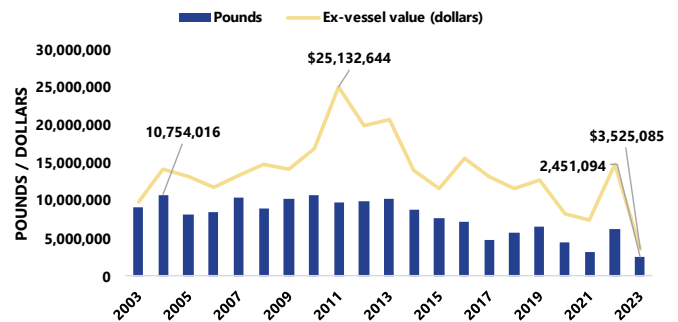
*Albacore tuna appear off the Oregon coast from July to October.*

During their trans-Pacific migrations, albacore are targeted by vessels of several nations, including the United States, Canada, Taiwan and Japan. The Oregon fishery harvests during the summer and early fall months when warm water makes its way to the waters off Oregon, bringing with it schools of albacore tuna.

Commercial harvest of albacore tuna has occurred off Oregon since 1929, when the fishery expanded north from the traditional southern

California grounds. Even though other fisheries have become increasingly restricted, the U.S. albacore fishery has remained open access.

Albacore has typically ranked high for total annual revenues generated in Oregon marine fisheries with the fleet size varying by year. The West Coast fleet consists primarily of vessels ranging from 20 to 60 feet in length, often fishing for crab, salmon, or groundfish at other times of the year.



*Albacore tuna landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023.*

Because albacore migrate throughout the Pacific Ocean, the albacore fishery is managed internationally through the Inter-American Tropical Tuna Commission and the Western Central Pacific Fisheries Commission, as well as regionally by PFMC. Management measures with regards to the albacore stock and fisheries within each group's respective areas of jurisdiction are coordinated to provide consistent implementation where possible. In addition, the U.S. – Canada Albacore Treaty addresses reciprocal fishing effort off the U.S. West Coast. Authorized ports for Canadian vessels landing albacore in Oregon are Astoria, Newport, and Coos Bay.

Troll and hook-and-line fishers targeting albacore have been recognized for their use of sustainable and selective gear types resulting in the U.S. West Coast albacore fishery being certified by the Marine Stewardship Council since 2007.

## Groundfish

“Groundfish” is a federal management category for a diverse group of more than 100 managed species that include rockfishes, flatfishes, sablefish, lingcod, Pacific whiting (hake) and more. The commercial groundfish fisheries are second only to commercial Dungeness crab in the amount of revenue produced in Oregon. They make up 80 percent or more of the total commercial fishery landings by weight; the highest volume fishery.

The main groundfish sectors and their targeted catch are:

- Bottom trawl for flatfish and sablefish
- Mid-water Pacific whiting trawl
- Mid-water rockfish trawl
- Longline/pot and rod and reel for sablefish and nearshore stocks



*Nearshore rockfish are some of the many species grouped together in the “groundfish” category.*

Groundfish fisheries are federally managed by NMFS and PFMF. The nearshore fishery within state waters is managed by the state (state permits and regulations that fall within the federal regulations). ODFW is actively involved in the management and monitoring of the groundfish fisheries.

### Trawl groundfish

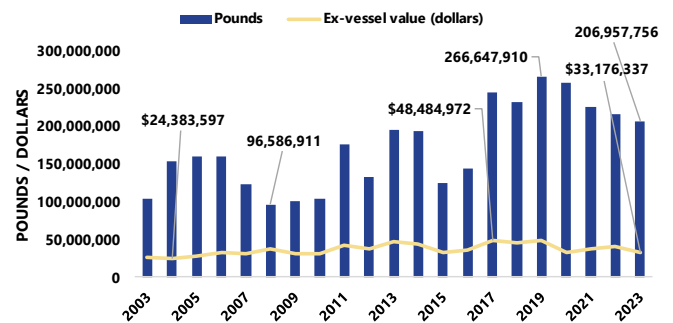
Oregon is home to the largest groundfish and shrimp trawl fisheries on the West Coast. Astoria and Newport have significant trawl activity in the bottom (sablefish and flatfish) and mid-water (whiting and rockfish) trawl fisheries. This helps

to put them in the top three ports in total commercial fishery value throughout the entire West Coast. Brookings and Coos Bay are also important ports for the Oregon bottom trawl groundfish fishery.



*Groundfish trawlers are the largest fishing vessels and can be identified by their large net reels.*

Large processing plants are needed to clean, package and distribute the substantial volumes of groundfish (and shrimp) caught in the trawl fisheries. The Newport and Astoria whiting fisheries combined typically land 100 to 200 million pounds per year. The fish are machine-processed and sold in domestic and export markets as fillets, surimi (“artificial crab”) and fish meal. Bottom trawl catches of flatfish, sablefish, lingcod and rockfish are usually hand-filleted, which requires an extensive labor force as 20 million pounds or more can be taken annually. A single boat can deliver 50,000 pounds or more for processing at a single time.

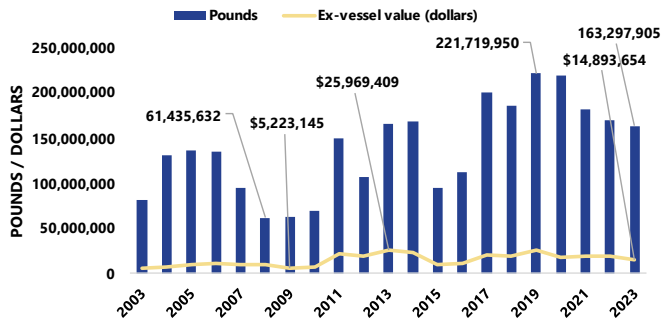


*Groundfish trawl landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023. Data source PacFIN, pulled 5/24.*



*A good catch of Pacific whiting hits the deck.*

Pacific whiting (hake) off Oregon are landed at-sea or are sold to shoreside processing plants. Fishing vessels deliver their catch at-sea to processing ships, called motherships, or deliver whiting to shoreside processing plants (reflected in the graph). In addition, there are catcher-processors that are large, Seattle-based vessels that fish and process their own catch. The at-sea whiting fishery, including Oregon boats, are also heavily engaged in the Alaskan walleye pollock fishery, one of the largest volume fisheries in the world.



*Shoreside whiting landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023. Data source PacFIN, pulled 5/24.*

The groundfish trawl fisheries are managed under an Individual Fishing Quota (IFQ) system. Individuals and/or corporations each own a certain percentage, called a Quota Share, of the overall trawl sector’s allocation for each species. This entitles them to an individual allocation of Quota Pounds each year that they can either fish or lease. Accumulation limits prevent any

individual (or corporation) from buying up a majority stake in the IFQ fishery.

The IFQ system allows vessels more flexibility in where and when they fish if all their catch, including discard, is covered by their Quota Pounds. A 100 percent observer/video monitoring requirement ensures that catches, and discards, are fully accounted for and stay within their individual quotas. Area closures are used to protect sensitive habitats, such as rocky reef and corals, and can be used to reduce bycatch of non-IFQ species such as Chinook salmon.

There is potential for the bottom trawl fishery to grow since, as of 2023, it only harvests about 25 percent of the sustainable quotas for some species. This is primarily due to a lack of market demand for Dover sole and other flatfish, which compete with global whitefish seafood products, such as farmed tilapia.

### Fixed gear groundfish

Sablefish is the most valuable single groundfish stock on the West Coast and is very important to both the multi-species bottom trawl fishery and the fixed gear or longline/pot fisheries. Sablefish is the primary groundfish species targeted with fixed gear, although other species such as lingcod, rockfish and skates are also caught.

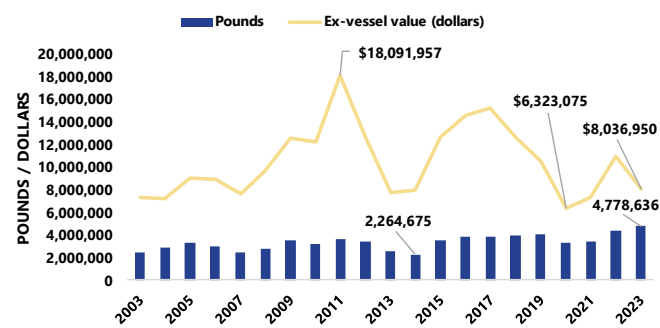


*Sablefish, aka black cod, is the primary species targeted by the fixed gear fishery.*

The fixed gear sablefish fishery was subject to one of the West Coast’s first catch share programs, in which individuals were assigned

different levels, or tiers, of tradeable annual sablefish quota based on their history in the fishery. There are also vessels with limited entry sablefish permits that fish under trip limits outside the primary tier season, as well as open access participants without a sablefish-specific permit that fish under lower trip limits.

Oregon’s fixed gear fleet consists of about one-third limited entry vessels and two-thirds open access vessels. Limited entry permitted vessels, however, make most of the landings (about 90 percent).



Fixed gear groundfish landings (includes nearshore landings) and ex-vessel values (adjusted for inflation, 2023), from 2003-2023. Data source PacFIN, pulled 5/24.

### State-managed nearshore groundfish

The commercial nearshore fishery targets various groundfish species that inhabit the waters over Oregon’s shallow rocky reefs. This has been a state limited entry fishery since 2004, for which there are two permit types: 1) black and blue rockfish permits with a nearshore endorsement, and 2) black and blue rockfish permits without the endorsement. There are currently about 110 permitted vessels, 67 of which have the nearshore endorsement.

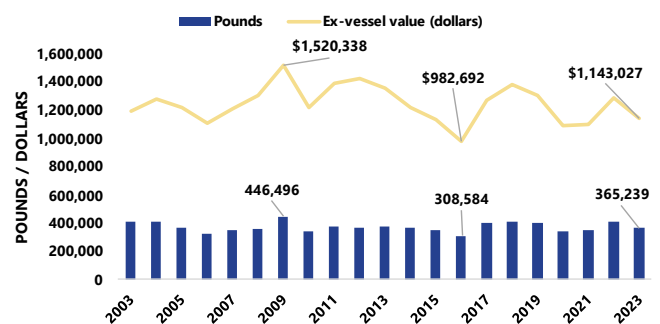
The nearshore endorsement allows permitted vessels to land 21 nearshore species, including several rockfishes, greenling, cabezon and sculpins, in addition to the black, blue and deacon rockfish harvest allowed by both permit types. These species fall under PFMC’s Groundfish Fishery Management Plan. Following

this plan, these stocks are assessed at the species-specific or group complex level as data allows, which is the basis for allowable harvest levels.



Black rockfish is a favorite catch for the nearshore fishery.

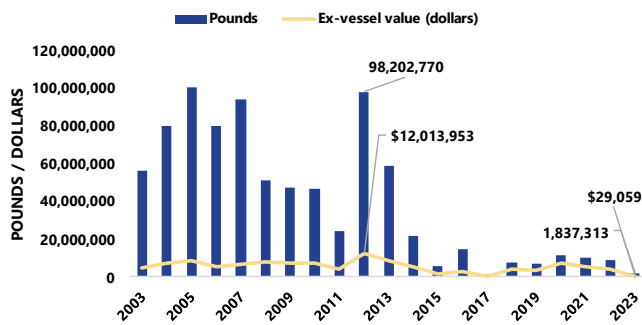
Fishery participants use a variety of hook and line gear types, including rod-and-reel jig, bottom longline, and cable gear. Permitted vessels may fish from any Oregon port, but most fish are landed on the south coast at Port Orford, which is where most permit holders are based. There are two primary markets for this fishery: one for live fish and one for fresh (dead) fish. Some species fetch as much as \$6 or \$7 per pound if landed live. Live landings are far more valuable per pound to fishers than if landed dead as nearshore fish sold fresh rarely exceed \$2 per pound. In total the ex-vessel value of this fishery is approximately \$1 million per year.



Nearshore groundfish landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023.

## Coastal pelagic species

Commercial fisheries for a variety of coastal pelagic species, such as Pacific sardine, northern anchovy, Pacific mackerel, jack mackerel, market squid and Pacific herring, have occurred in Oregon over the years. These species share several common life history traits, such as schooling behavior, consuming prey that are generally near the bottom of the food web, and having relatively short lives, though the details vary considerably by species.



*Coastal pelagic species landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023. Note: in 2015 the sardine fishery closed and in 2017 and 2023 there was no market squid fishery.*

Fisheries for all these species off Oregon, except for Pacific herring, are managed in partnership with the federal government through PFMC under its Coastal Pelagic Species Fishery Management Plan. Oregon has instituted a state limited entry system for the Pacific sardine fishery, but fisheries for all other species are open access off Oregon.

Populations of coastal pelagic species are known to change in abundance over time and those changes are thought to be related to environmental conditions, but there is much that is still unknown about what drives changes in both abundance and distribution of these species. Commercial fisheries for these species also change in their relative importance over time, reflecting both species abundance and socio-economic factors. The two most important fisheries in terms of both the number of pounds

landed and value have been Pacific sardine and market squid.



*Fishers prepare to suck sardines from a seine net into the hold.*

The Pacific sardine population is currently at low abundance and there has not been a directed commercial fishery for sardine anywhere on the U.S. West Coast since 2015.

Market squid occur in Oregon sporadically. Fisheries for market squid have occurred since the 1980s, when the squid are available, with some of the largest catches occurring in the last few years. Market squid are relatively high value for coastal pelagic fisheries with much of the catch used for human consumption. The market squid fishery in Oregon has been more active since 2016; however, there was no market squid fishery in 2017 and 2023 due to lack of squid.

Fishermen generally use seine nets to fish for these species, and then pump the fish from their nets into their holds. Most fishing occurs during the day, but some fishing for market squid occurs at night.

## Ocean salmon

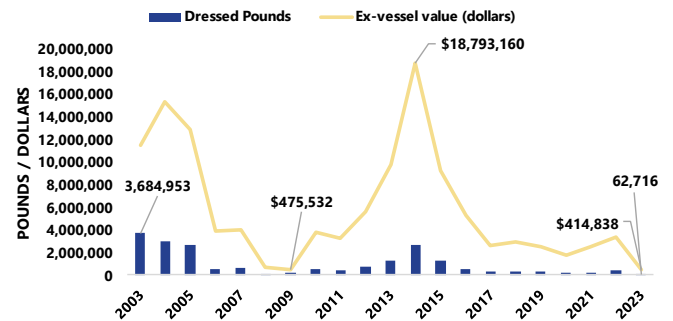
Oregon's commercial ocean salmon fishery is a hook-and-line troll fishery. The fishery almost exclusively targets Chinook salmon, with only minor coho salmon seasons occurring mainly on the very north coast for hatchery coho. This is a limited entry fishery, with 812 permits in 2023. However, less than half of permit holders have actively participated in the fishery in recent years. Since the lottery system was removed for unrenewed permits in 2012, there has been a continued decline in the number of permits since the only way to enter the fishery is to purchase an active permit from another vessel.

Salmon caught off the Oregon coast are of mixed stock, mostly originating from the Central Valley in California, northern California streams, southern Oregon and the Columbia Basin. The majority of Oregon and Columbia Basin Chinook salmon leave their native streams and head north, contributing primarily to fisheries off British Columbia and Alaska. These local stocks of Oregon coastal Chinook are only available to Oregon's ocean fisheries for a brief time as they stage at the mouths of coastal estuaries before heading upriver to spawn. Salmon seasons off Washington, Oregon and California are crafted with the input of fishery representatives and the states and tribes through PFMC and then implemented by NMFS.



Commercial salmon fishers unload a Chinook salmon at the docks.

Fishery harvest has plummeted in recent years to a tenth of its average harvest during the previous decades due to sharp declines in regional stocks, and subsequent harvest restriction through management measures. The 2023 season was the second worst harvest year ever observed for Chinook salmon by the Oregon troll fishery and ended with only 3,091 Chinook for 35,104 dressed pounds landed.



Ocean salmon landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023. Weight is dressed pounds.

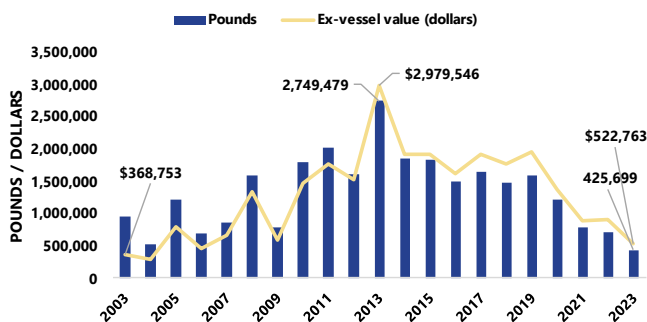
The recent collapse of the southern salmon stocks has been a result of a variety of factors which include spawning habitat loss, water quantity and quality issues, prey abundance, fishing pressure and poor ocean productivity during smolt migration.

## Hagfish

There is a relatively small but consistent fishery for hagfish, also known as slime eels due to the copious amount of protective slime they release when disturbed. Hagfish are often exported to Korea, where they are a delicacy. The fishery began in the early 1990s as an eel skin fishery, but it has been more successful in recent years for the human consumption market. Because of the higher value fetched for live hagfish, nearly all hagfish are landed and exported alive.



Most hagfish are exported to Korea.



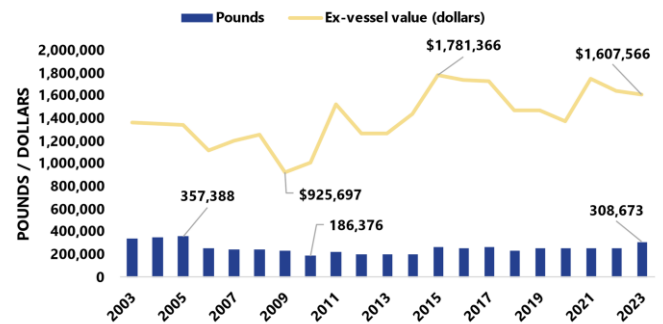
Hagfish landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023.

Currently the fishery is open access. Hagfish are harvested using baited traps, which are usually longlined plastic barrels with several funnel shaped entrances. Each boat is limited to 200 traps, and each trap is required to have an escape mechanism in case the gear is lost at sea. Most participants voluntarily use traps with permanent escape holes to allow smaller hagfish to escape. To prevent over-harvest, the fishery is re-evaluated in any year during which landings

exceed the state harvest guideline of 1.6 million pounds.

## Pacific halibut

Oregon is near the southern end of the Pacific halibut's range, which extends from the Bering Sea off Alaska into northern California. The big halibut common in Alaska and the Aleutian Islands (some as big as 650 pounds) do not occur off Oregon. The top of the range in Oregon is around 150 pounds. To help protect the stocks, Oregon commercial fishermen must release any Pacific halibut smaller than 32 inches (about 14 pounds).



Pacific halibut landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023. Data source Pacfin, pulled 5/24.

The International Pacific Halibut Commission (IPHC) assesses the Pacific halibut stock annually and sets catch limits for areas in Alaska, British Columbia, and the U.S. West Coast. NMFS and the Pacific and North Pacific (Alaska) fishery management councils regulate commercial Pacific halibut fisheries in U.S. waters. In 2019, the Washington Treaty Tribes, with the help of state representatives from Washington, Oregon, and California, brought forward a proposal to have a fixed quota over an extended timeframe to bring stability to IPHC Regulatory Area 2A fisheries, which are comprised of the three West Coast States. The proposal initially was approved by the Commissioners for a four-year period and continues to be extended.

On the West Coast, the Washington Treaty Tribes receive 35 percent of the total quota and the

remaining 65 percent is allocated to commercial and recreational fisheries in Oregon, Washington and California. Approximately 85 percent of the non-tribal commercial share goes to the directed fishery and the remaining 15 percent is allocated to incidental Pacific halibut catch in the salmon troll fishery. The directed fishery has been fishing a quota near 250,000 net weight pounds since 2019; about 95 percent attainment. (Net weight is defined as halibut with the head and guts removed.)



*A biologist measures and collects the ear bone for aging a commercially caught halibut.*

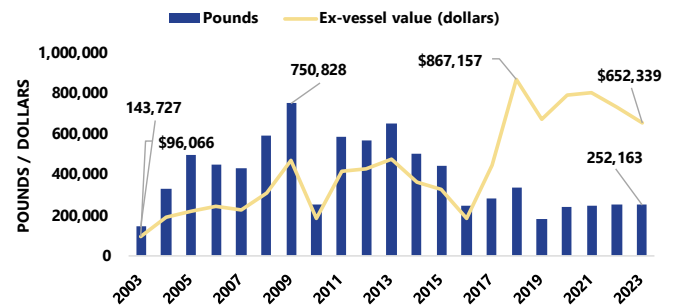
Oregon’s commercial Pacific halibut fishery is short but intense. Beginning in 2020, the directed fishery is open for 58-hour periods instead of the long-standing 10-hour openers that created a “derby” mentality in the fishery. To legally retain Pacific halibut, salmon trollers must hold a free incidental Pacific halibut license from NOAA and follow the strict limits on how many halibut they can retain per trip. The directed fishery also requires a free license from NOAA and has trip limits based on vessel size.

In the directed fishery, Pacific halibut are pursued using bottom longline gear, however, smaller vessels may fish closer to shore for halibut using hook-and-line gear. Vessels participating in the directed halibut fishery may also retain open access fixed gear limits of groundfish species if they follow certain groundfish regulations. The method of harvest makes the directed commercial Pacific halibut fishery Marine Stewardship Council certified

sustainable all along the U.S. and Canadian West Coast.

## Sea urchin

Behind Dungeness crab and pink shrimp, the red sea urchin fishery is the third most valuable invertebrate fished in Oregon and the state’s most valuable dive fishery. Commercial sea urchin fishing began in the late 1980s and peaked in 1990 with more than 9 million pounds harvested. Stocks were quickly depleted and, coupled with a declining market it resulted in a decrease in fishery participation. The fishery has still maintained a high level of value and poundage with a small, stable number of participants.



*Red sea urchin landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023.*

Red sea urchins live very long lives (greater than 100 years) and recruit episodically (i.e., not consistently). This biology complicates fishery management, which performs best when recruitment is consistent and predictable. To effectively manage this fishery, periodic relative abundance surveys are required. ODFW has performed surveys at areas key to the fishery from 1991 to the present.

Purple sea urchins are a minor component of the sea urchin fishery, accounting for around one percent of the historical landings. Purple sea urchins are smaller and considered less palatable.

The fishery product for sea urchins is called “uni”, which is the gonad of sea urchins. The market is limited to sushi restaurants and therefore small.

## Bay clam

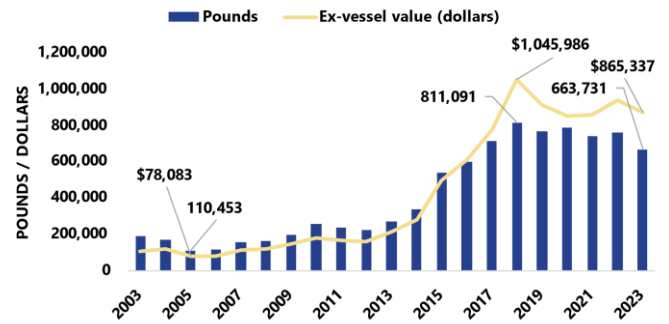
The Oregon bay clam fishery includes cockle, gaper, and butter clams. Bay clams are commercially harvested from Coos, Yaquina, and Netarts bays, but the vast majority come from Tillamook Bay. There are a limited number of permits in the dive bay clam fishery with around 25 divers participating each year. The intertidal fishery has no permit number limitation and approximately 50 individuals participate each year.



*Heart cockles are an important part of Oregon's bay clam fishery.*

Average annual harvest over the last 10 years is about 600,000 pounds, with a peak of more than 800,000 pounds in 2018. The value of these clams has increased over this time from just more than 50 cents a pound to more than a dollar a pound. Generally, the human consumption market is still being developed and only accounts for a small percentage of the commercial harvest. Bay clams are predominately used as bait for the Dungeness crab fishery and for animal feed in public aquariums.

Historically, cockles and gaper clams have dominated the commercial landings, accounting for 90 percent of catch annually; butter clams make up the remaining 10 percent. Due to recent increases in market demand and annual landing caps on these three species in Tillamook Bay, butter clams now make up as much as 30 percent of the total commercial bay clam landings.

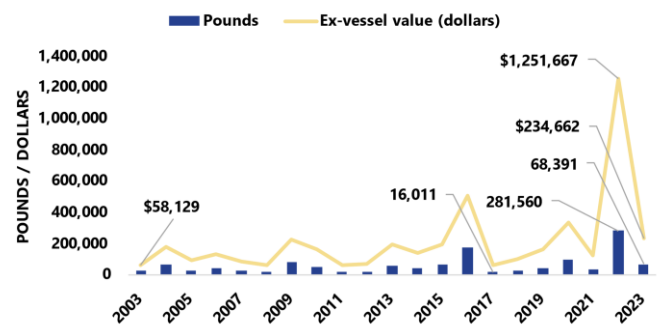


*Bay clam landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023.*

Rules were adopted in 2016, including an increase in some quotas, restrictions on harvest in Netarts Bay, and the statewide prohibition of harvesting native littleneck clams.

## Razor clam

In 1935, ODFW began monitoring the commercial harvest of razor clams and in 1947 started to record the number of licensed diggers and their catch. Nearly all the commercial harvest is from the 18-mile stretch of beach between the Columbia River's south jetty and Tillamook Head.



*Razor clam landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023.*

The commercial razor clam fishery is an open access fishery, with the number of participants roughly corresponding with the razor clam population abundance. When the clam abundance is high, the number of permits increases; and when the clam abundance is low, the number of permits decreases.

Prior to the late 1950s, commercial harvest accounted for most of the razor clams harvested with a peak of 335,000 pounds in 1950. Since then, the landings have steadily declined and the recent ten-year average is 84,000 pounds per year.



*A worker cleans a commercial catch of razor clams.*

The modern commercial razor clam fishery accounts for approximately 15 percent of the total razor clams harvested in the state, of which 75 percent is sold for human consumption and the remainder is primarily used for bait in the commercial Dungeness crab fishery. In the last 15 years the commercial landings in this fishery have been variable, ranging from 16,000 pounds to 281,000 pounds harvested per year.

## Bay Dungeness crab

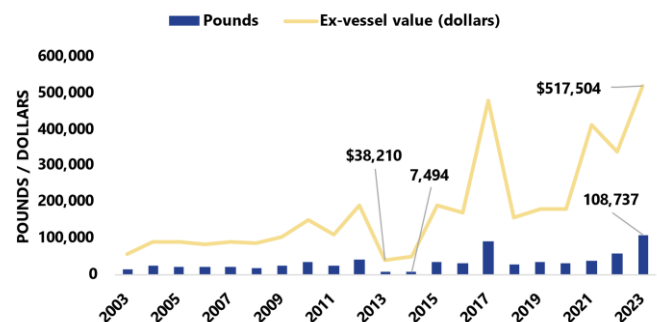
The commercial bay Dungeness crab fishery is an open access fishery and is limited to Oregon's bays and estuaries (excluding the Columbia and Chetco Rivers), providing commercially harvested Dungeness crab during a period when the ocean fishery is closed. The relatively short bay season, a maximum of four months, constitutes only 0.2 percent of Oregon's commercially caught Dungeness crab. Only male crab that meet the same size requirement as the ocean Dungeness fishery, a minimum 6 ¼ inches, may be retained. State management of the bay crab fishery began

in 1886, and size limits were set in 1933.



*Commercial fishing for Dungeness crab occurs in bays as well as the ocean.*

Landings are well documented starting in 1971, and more than 70,000 pounds were recorded in 1978. In 1981, bays were open all year and pots were allowed. Regulatory changes over the next several years prohibited pots in favor of rings, disallowed weekend and holiday crabbing, and set a vessel limit of 15 crab rings per vessel. The season is now open the Tuesday after Labor Day and goes through December (unless the adjacent ocean area is closed in December).



*Bay Dungeness crab landings and ex-vessel values (adjusted for inflation, 2023), from 2003-2023.*

Over the past decade (2014-2023), commercial bay crabbers have landed an annual average of 46,000 pounds, with a peak of 108,737 pounds in 2023. While the number of participants varies annually, about 25 different vessels typically harvest more than 500 pounds each from various ports annually.

- More about the economic impact of Oregon's marine fisheries: [https://www.dfw.state.or.us/agency/economic\\_impact.asp](https://www.dfw.state.or.us/agency/economic_impact.asp)
- More about Oregon's commercial fisheries, species, regulations and more: <http://www.dfw.odfw.oregon.gov/MRP/>