

# 1st Annual Oregon Department of Fish & Wildlife Marine Resources Program Sport Bottomfish Review (2018)



Bottomfishing off the Oregon Coast has become increasingly popular in recent years, and this trend continued in 2018 when a record high 110,000 angler trips were reported. This newsletter provides a summary of Oregon's 2018 sport bottomfish fishery.

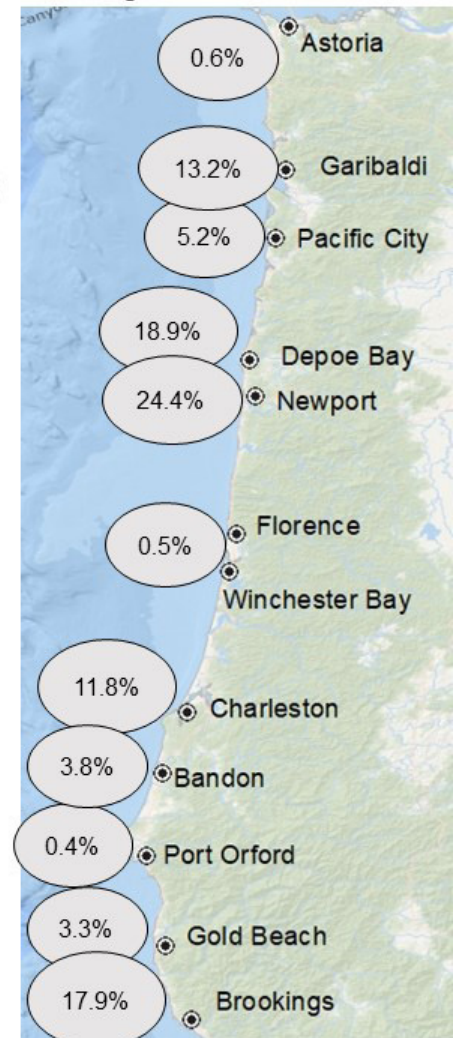
## 2018 season highlights

- 110,000 angler trips, up from the previous high of 108,500 in 2015
- Record number of trips contributed about \$19 million to the Oregon economy
- Banner year for lingcod with anglers harvesting almost 68,000 of them
- New longleader fishery offered additional opportunities for anglers

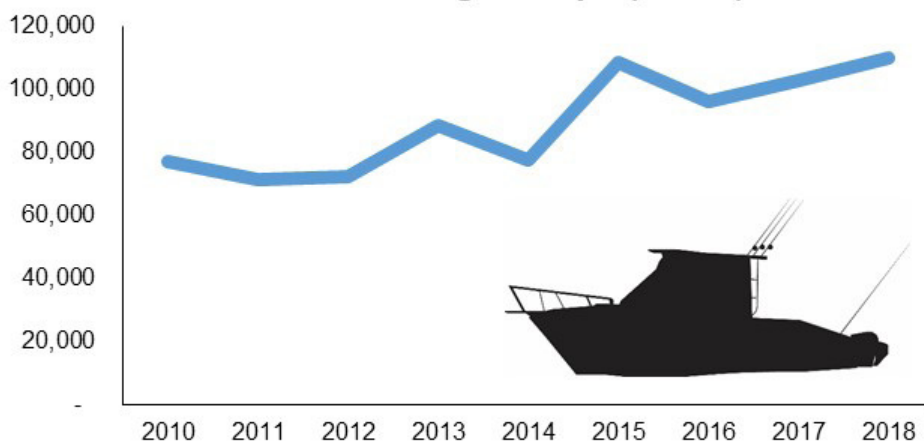
## 2018 Season Summary



Percentage of Bottomfish Effort



Bottomfish Angler Trips (Effort)



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## What are “bottomfish” ?

Groundfish, or bottomfish, are a group of fish that really don’t fit in any other category. They’re not salmon, tunas, or bait fish. Bottomfish includes several groups of fish that are generally associated with the bottom. Off of Oregon this group includes about a dozen species of rockfish, half a dozen types of flatfish, lingcod, cabezon, greenlings, sablefish, and skates and rays. Test your identification skills with the new [“Common Bottomfish” online quiz](#).



## Bottomfish Identification: How and Why

With all of those species of fish, it can be difficult, or overwhelming, to know what you have caught. The ODFW website and coastal offices have a variety of tools to help anglers with fish identification: [rockfish identification tips](#), [rockfish species information](#), a [“yelloweye rockfish or not?” online quiz](#), [flatfish species information](#), [“what can I keep and how many?”](#), and [common groundfish species](#). Correctly identifying your catch allows you to accurately report which species you’ve caught and released to the ODFW dockside sampler. It’s also important to know your fish ID so that you’ll know if the fish you’ve caught is legal to keep and/or meets minimum size restrictions.



(c) Brandon Ford

## Species Spotlight: Cabezon

Cabezon (*Scorpaenichthys marmoratus*) is a large and sought after member of the sculpin family. “Cabezon” is Spanish for big head, referencing the large head size of this fish, often more than 1/3 of the body. They occur from shallow nearshore waters to depths of over 500 feet, but are most commonly found shallower than 250 feet. Their range is from Baja Mexico to Southeast Alaska.

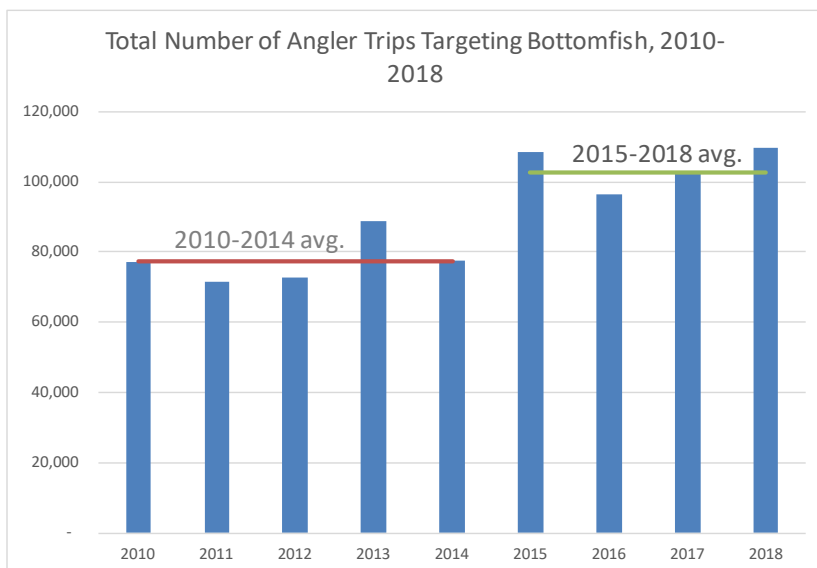
Cabezon can get up to 39 inches and 25 pounds and can live to be about 19 years old. They can spawn all year round, however most do so in winter and spring. The eggs are adhesive and laid in large masses which are then guarded by the males. Note that cabezon eggs are toxic to humans, so please no cabezon roe on the menu. The minimum legal length for cabezon is 16 inches, this is to allow the fish to get old and big enough to spawn at least once. Some cabezon, like lingcod, can have flesh that is blue-green in color which is not harmful to humans and actually turns white when cooked. The cause of the coloration is thought to have something to do with what the cabezon are eating and/or the liver enzyme biliverdin.



## Record Bottomfish Effort in 2018

2018 had record high bottomfish effort, with nearly 110,000 angler trips, defined as one angler fishing one day. The previous high was in 2015 with 108,500 trips, and since 2015, the average has been right around 100,000 trips. Bottomfish effort has been on the upswing since 2015; prior to that year the average number of trips was less than 80,000 per year.

There are likely several reasons for the increased popularity of bottomfish in recent years:



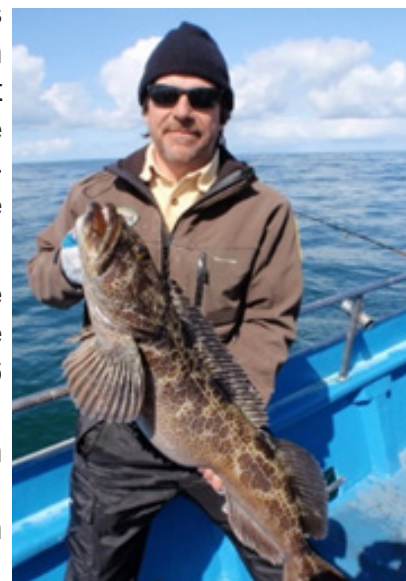
- 1) Ocean salmon seasons have been poor, which may have caused anglers to shift to bottomfish,
- 2) summer and early fall tuna seasons have also been poor, and
- 3) a stronger economy and cheaper gas made it more affordable to go.

## 2018 Total Landings of Lingcod, Rockfish, and Cabezon

Even with the daily bag limit for general marine species reduced from seven fish in 2017 to five fish in 2018, it was a good year for anglers catching a number of species. Anglers were especially successful with lingcod, landing just under 68,000 (213 mt) of them. This is the highest catch in the last 10 years. The longleader gear allowed anglers to have good success catching mid-water rockfish species with over 33,000 (35.4 mt) yellowtail rockfish, and 38,000 (42.2 mt) canary rockfish landed in the longleader gear and regular bottomfish fishery combined.

Catch of black, blue, and deacon rockfish was down in 2018, due to the reduced daily bag limit needed to stay within federal quotas. There were just over 253,000 (274.7 mt) black rockfish landed along with 18,000 (12.6 mt) blue and deacon rockfish.

The cabezon quota was reached very quickly in 2018, the quickest on record. In just six weeks anglers were able to take over 4,200 fish (13 mt). This may be partially due to a large 2013-2014 year class of cabezon, which have now reached legal-sized for retention (16 inches)



*Fun Fact: Lingcod are neither a “ling” nor a “cod”, but instead are the largest species in the greenling family.*



Ling



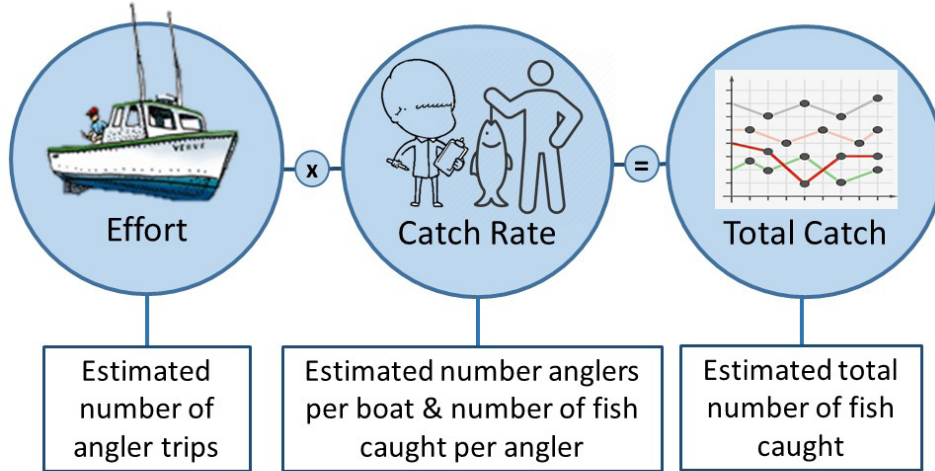
Lingcod



Pacific cod

# Calculating Catch Estimates

To calculate total catches, two pieces of information are needed: (1) effort, and (2) catch rate.



To measure effort, ODFW has video cameras in most ports that record boats leaving and returning across the bar. The total number of recreational fishing boats counted (and anglers onboard) equals total effort. ODFW samplers collect catch rate information by interviewing a portion of boats returning to the docks to get information on how many people fished, what species and how many were caught and released, as well as collecting the length/weight of the fish kept. The total catch is estimated by multiplying the number of anglers by the catch rate.

Other calculations and expansions may be needed to estimate catch for unsampled ports and times, but that is generally how total catch estimates are calculated. Additionally, these calculations are done separately for private and charter vessels.

## ODFW in Action: Dockside Sampling



When returning to port, anglers may be met by an ODFW dockside sampler for a post fishing interview. Samplers will ask questions such as: what you were fishing for, what did you catch and release, where you were fishing, at what depth you were fishing, and how long were you fishing. This is important information that helps inform the catch rate part of the total catch estimate. Samplers do not interview every returning boat, instead they try to get a random sample, with a minimum sampling goal of 25% of returning boats.

Samplers will also collect biological data on fish kept, such as length and weight.

This information is then used, along with boat counts, to make the total catch estimates that are used to manage the fishery inseason, discussed on the next page.



## Managing Fisheries with Quotas

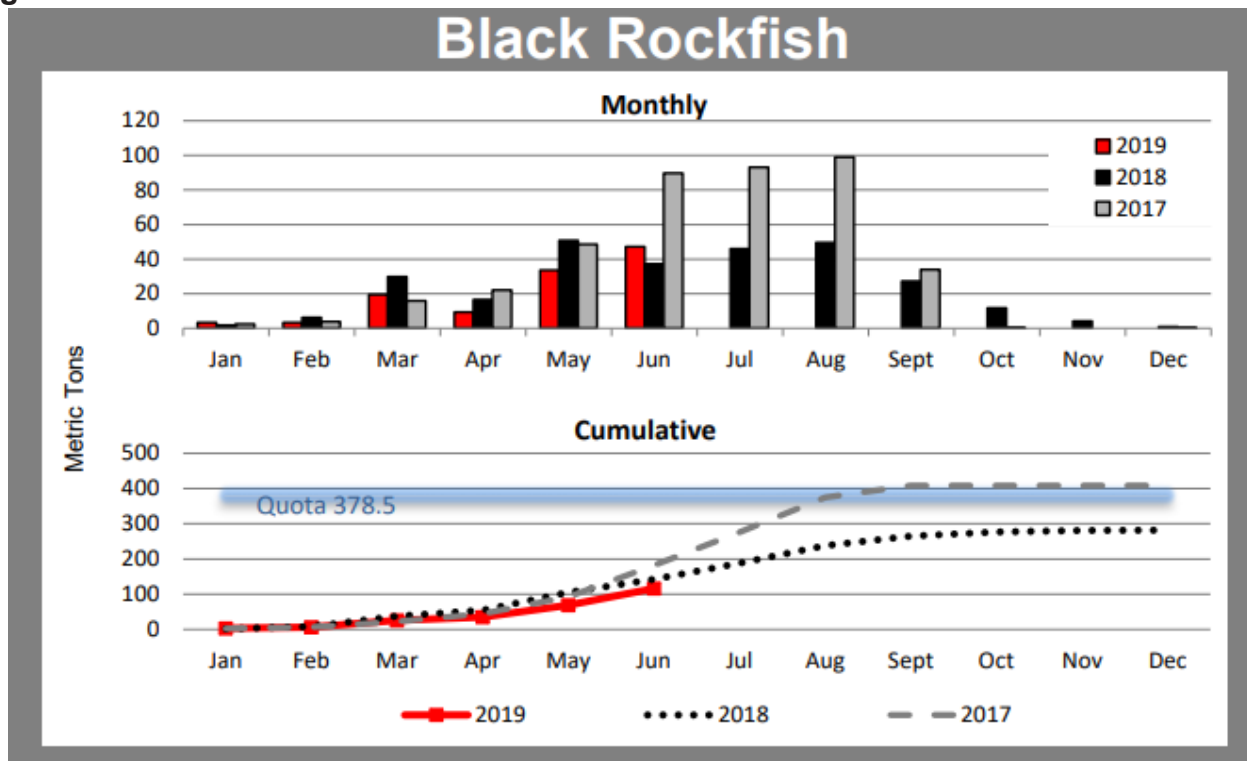
For most recreationally important species, there is a federal or state specified annual quota. This is the number of fish ODFW works with to set season structures and bag limits. Exceeding quotas could lead to overfishing or have an impact on other fisheries. Note, lingcod does not currently have a quota in Oregon's recreational fishery, because all fisheries combined (commercial, recreational, tribal) are taking far less than the total allowable amount for the west coast north of Cape Mendocino, CA, due to restrictions necessary to minimize yelloweye rockfish bycatch.

Species	2018 Quota (mt)	2019 Quota (mt)
Black Rockfish	381.5	378.5
Blue/Deacon Rockfish	a/	81.0
Cabazon	16.1	16.1
Canary Rockfish	75.0	70.9
Greenlings	28.5	23.1
Lingcod	No Quota	
Nearshore Rockfish Complex	32.8 a/	11.7
Yelloweye Rockfish	3.0	7.1

a/ blue/deacon rockfish were part of the nearshore rockfish complex prior to 2019

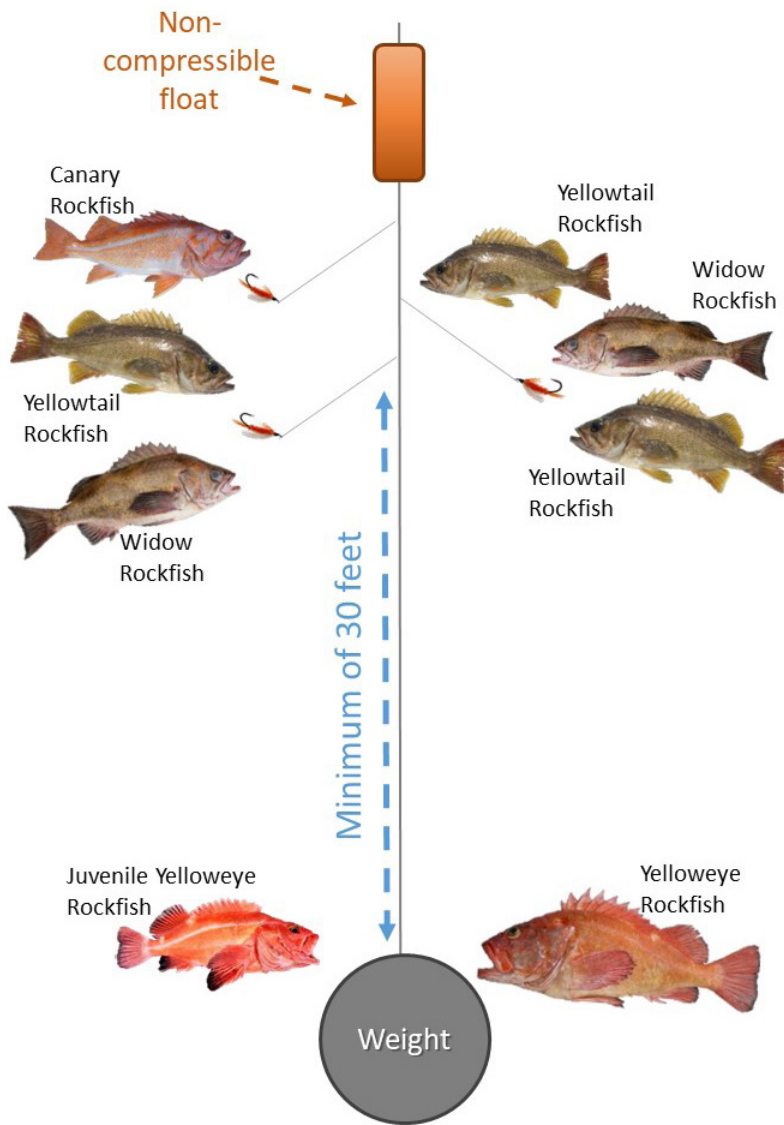
The black rockfish quota will continue to decline slightly over the next several years, based on the 2015 stock assessment. On the other hand, the yelloweye rockfish bycatch quota more than doubled for 2019, because the population size has improved. Although the improvement was not large enough to allow anglers to keep yelloweye rockfish, it did allow some regulations designed to avoid yelloweye rockfish to be somewhat relaxed. Cabazon will remain the same. Canary rockfish and kelp greenling both have decreases, however recent years catches have been well under the reduced quotas. New in 2019, blue and deacon rockfish have been removed from the Nearshore Rockfish Species group. Therefore, trying to compare quotas between 2018 and 2019 can be a bit confusing as it is like trying to compare apples to oranges. The 2019 quota for the remaining species in the Nearshore Rockfish Species group (China, copper, and quillback rockfish) haven't changed much.

**Example of inseason tracking for black rockfish found on ODFW's [Sport Groundfish Estimates](#) webpage**



## New Gear; New Opportunity

In April 2018, ODFW was able to open a new longleader fishery for bottomfish outside of 40 fathoms. This new opportunity is the culmination of over a decade of work by ODFW researchers and fisheries managers, and Mr. John Holloway, an angler based out of Garibaldi.



Longleader fishing allows anglers to target abundant mid-water species such as yellowtail rockfish and widow rockfish, while avoiding the more bottom-dwelling yelloweye rockfish. This fishery uses longleader gear, which includes a minimum of 30 feet between the weight and the lowest hook, as well as a non-compressible float above the top hook. This set up keeps the hooks off the bottom, away from the yelloweye rockfish, and higher in the water column where the schooling mid-water species hang out. Current regulations make this gear legal anytime and anywhere that the sport bottomfish fishery is open and allows anglers to go farther offshore than 40 fathoms during the seasonal depth restrictions. The gear can be a bit challenging, learning how to handle 30 feet of line, but once dialed in many anglers report having a lot of fun and success in catching limits. Additionally, these offshore fish tend to be generally larger than the more common nearshore fish.



## More Benefits of Longleader Gear: Winchester Bay

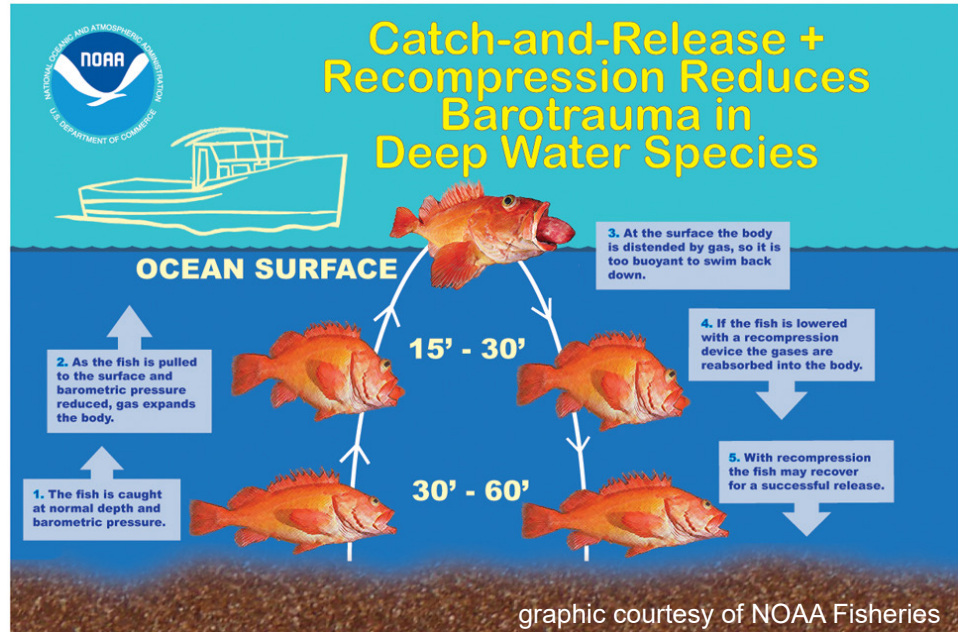
Due to the lack of reef structure inside of the 40-fathom regulatory line, the port of Winchester Bay has had limited bottomfish fishing opportunities since 2004, when yelloweye rockfish were declared overfished and seasonal depth restrictions were put in place. As a result, there were fewer than 100 bottomfish angler trips each year from 2004-2017. In 2018, approximately 500 offshore longleader trips were made out of Winchester Bay. Those offshore longleader trips contributed over \$40,000 to the Oregon economy. As more anglers become familiar with this gear, effort out of Winchester Bay could continue to increase.

# Rockfish Recompression: Help the Fish, Help the Fishery

Rockfish have a swim bladder, a gas-filled organ that helps regulate buoyancy. The gas in the swim bladder expands when a fish is brought up to the surface, resulting in barotrauma. Signs of barotrauma include: swollen body, stomach and/or esophagus extending out the mouth and/or bulging eyes. Because of the extra buoyancy from the expanded gas, some rockfish may not be able to swim down from the surface on their own.

Recompressing rockfish (or descending back to depth) is good for both the fish and the fishery. Recompressing rockfish

gives the fish a much better chance of surviving, and hopefully reproducing, than leaving them floating on the surface does. Video of a yelloweye rockfish being released back at depth can be found at: <https://www.youtube.com/watch?v=4EqJzWtsKrm>




Research has shown that rockfish released near the depth of capture have a higher survival rate. The Pacific Fishery Management Council (PFMC) incorporates this into management. For yelloweye rockfish, releasing fish at depth has helped prevent additional depth restrictions and reduced the chance of a recreational fishery closure due to bycatch of this species

The [Oregon Coalition for Educating ANglers](#) (OCEAN) partnered with ODFW starting in 2010 to do education and outreach about the advantages of recompressing rockfish. Through a number of grants, from ODFW and the National Marine Fisheries Service, and other partnerships, including [Utah's Hogle Zoo](#), over 25,000 descending devices have been purchased and distributed to Oregon anglers free of charge between 2010 and 2018.


Through 2016, the use of descending devices was voluntary and angler-reported use rates averaged around 65-70 percent for yelloweye rockfish. Since descending devices became mandatory in 2017 for all rockfish species released when outside of 30 fathoms, reported use rates have increased to 97-100 percent, which is great for both fish and the fishery.

**Types of Descending Devices**  
There are a variety of devices available commercially, as well as homemade. Find what works for your vessel and set up.


The three most common are:



[Seaqualizer](#)



[Shelton](#)



[Fish Gripper](#)

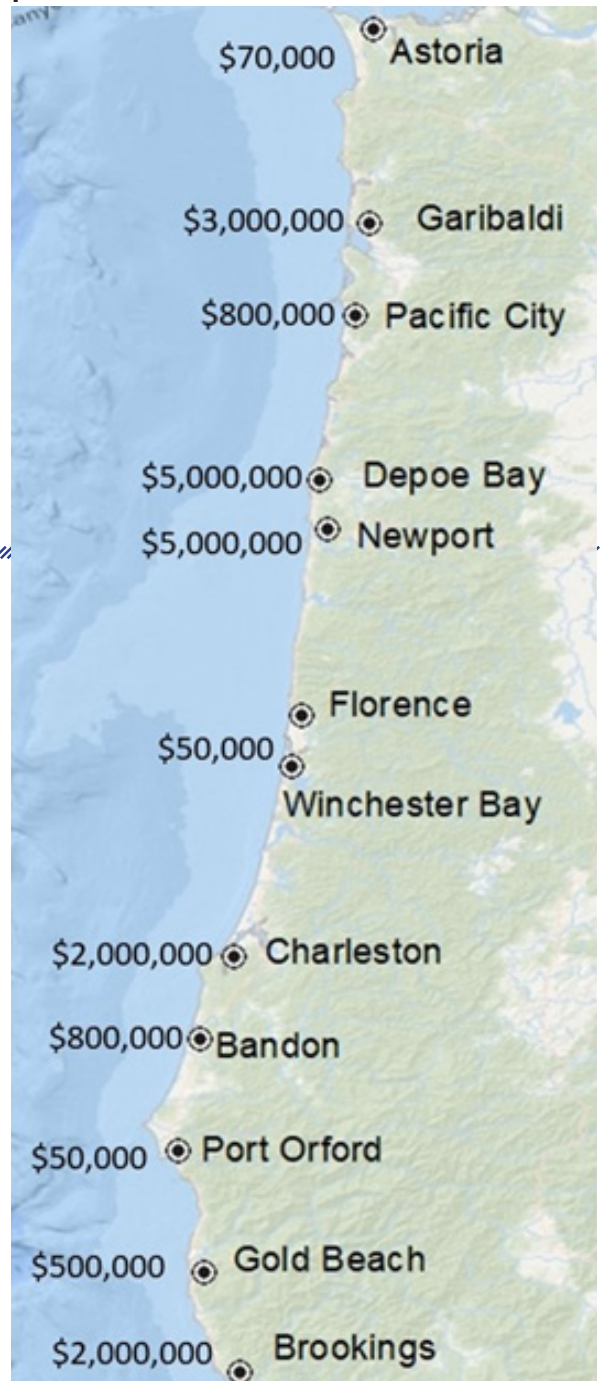


For additional information, see ODFW's Rockfish Recompression webpage: <https://myodfw.com/articles/rockfish-recompression>

## Bottomfishing is Good for the Oregon Economy

The record number of bottomfish trips in 2018 has been good for the economy of Oregon. Overall bottomfish trips, charter and private trips combined, contributed approximately \$19 million to the Oregon economy through fishing related expenditures such as gas, bait, gear, moorage, restaurants, and hotels. This translates to approximately 400 full-time job equivalents. Anglers fishing out of Newport and Depoe Bay had the most effort and highest economic contribution, with around \$5 million from each port. Anglers fishing out of Brookings, Charleston, and Garibaldi contributed between \$2 and \$3 million dollars from each port. Even in smaller ports with lower absolute economic contribution numbers from a statewide perspective, those contributions can be large relative to other economic activity, and are a very important part of local economies.

Contribution to the Oregon economy by bottomfish anglers fishing out of each port.



## Enforcement

The Oregon State Police Fish and Wildlife Division's Marine Fisheries Team helps ODFW by enforcing fishing regulations. They patrol both on land and at sea to ensure that fishing regulations are followed. Regulations are in place to keep fisheries sustainable, and enforcement of regulations is a key piece to the overall management. Common issues encountered are: fishing without a license, exceeding the bag limit, retaining prohibited species (e.g., yelloweye rockfish) or undersized fish (e.g., lingcod or cabezon), and fishing in closed areas (e.g., Stonewall Bank Yelloweye Rockfish Conservation Area).



Oregon State Police patrol vessel Guardian

### Marine Reserves



For Information, see:

<https://oregonmarinereserves.com/>



## ODFW Research

In the spring of 2019, ODFW Marine Resources Program research staff received funding to conduct a coastwide combined acoustic and visual survey of black, blue, and deacon rockfish. The survey will not give total number (abundance) of those three species, but will provide valuable information on the scale of the populations that will help inform future stock assessments. ODFW has conducted similar localized surveys, however, because the entire coast was not covered, the survey data were not used in the 2015 black rockfish stock



assessment. The results of the coastwide survey work are expected to help in ensuring that the next black rockfish assessment (2021 or 2023) is more robust than the previous one. ODFW successfully obtained grant funding from NOAA Fisheries via a Saltonstall/Kennedy Grant to develop and test the methodology, and won approval from ODFW's Restoration and Enhancement Board for additional funds to conduct the survey.

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## Looking Ahead/ How to Get Involved

The [Oregon Fish and Wildlife Commission](#) will finalize the 2020 sport bottomfish season at its meeting in December 2019. ODFW staff will be hosting a series of public meetings during the summer to get your input on the 2020 season. See the [Sport Bottomfish Webpage](#) for more information.

Believe it or not, the [Pacific Fishery Management Council](#) process to set up allocations and fishery regulations for 2021-2022 has already started. During the summer of 2019 several stocks are being assessed; the most important one to Oregon anglers is cabezon. Starting in September of 2019, the Council will begin the process of setting the harvest limits and developing management measures to stay within those limits. At the summer 2019 public meetings, ODFW will also be asking for input on the 2021-2022 seasons. The Council's Groundfish Management Team (ODFW has 2 members) will then spend the winter doing the analysis necessary to inform the Council's decisions.

At its June 2020 meeting, the Council will finalize all of the allocations, season structures, and regulations for 2021 and 2022. At each Council meeting, there is an opportunity for public input.



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<https://myodfw.com/sport-bottomfish-seasons>