#### 10<sup>TH</sup> EDITION - 2024 SEASON SUMMARY

# Washington Pink Shrimp Fishery Newsletter 2025







Inside you will find information about the 2024 commercial pink shrimp season, historical trends, and news about the 2025 season.

Learn more at <u>wdfw.wa.gov/fishing/</u> commercial/shrimp/coastal.



## Contents

2024 season summary
Fisheries research and monitoring 5
2024 accomplishments 14
New for 2025 15
Management
Contact information

#### Washington Coastal Pink Shrimp



Pounds and ex-vessel value of pink shrimp landings into Washington, 1970-2024.

# 2024 season summary

Washington's 2024 pink shrimp fishery reached near record-breaking catch levels. During the 2024 season, which opened as usual April 1 and ended Oct. 31, fishers landed a total of 19.6 million pounds (Figure 1).

Total landings in 2024 were slightly lower than the 2021 and 2022 totals of just over 22 million and 24 million pounds, respectively. The season remained above the historical average of 10.3 million pounds (between 1993 and 2023). The total ex-vessel value paid to fishers at the time of landing was \$10.8 million - \$5 million more than the previous year. The average price per pound in 2024 was 55 cents - below the 10year average of 56 cents (Figure 2).

The Washington Department of Fish and Wildlife (WDFW) manages the state pink shrimp trawl fishery under a limited entry program; any license not renewed annually is returned to the state and not re-issued. Since the inception of the limited entry program in 1996, the total number of licenses has declined from 129 to 74 in 2024. Most of the decline occurred by 2004, and since then an additional 13 licenses have sunsetted.



Figure 1. Annual landings and ex-vessel value of pink shrimp into Washington, 1970-2024.



Figure 2. Average price per pound, 1990-2024.

In 2024, the number of active vessels increased from 18 the previous season to 25 (Figure 3), similar to participation in the 2020-21 fisheries. The total number of landings made into Washington ports in 2024 was also up from the previous year, with 415 deliveries into Washington (Figure 4).

A large portion of shrimp landed in the state in 2024 was caught in waters off Oregon, with an increase of 55% of shrimp coming from out-of-state waters — the most in recent history (Figure 5). After a down season in 2023, landings in nearly every month of 2024 were above the 10-year average. Effort, low catch per unit effort (CPUE), and weather in April and October depressed landings at the season start and end (Figure 6).

#### Pink shrimp fishery background

Commercial shrimp fishing off Washington began in the late 1950s. While other shrimp species inhabit coastal waters, only pink shrimp (Pandalus jordani) have been abundant enough to support a large, long- term commercial fishery. Pink shrimp are caught by trawl gear; the majority of active vessels in the Washington fleet are double- rigged with semi-pelagic, fine- meshed



Figure 3. Number of vessels actively fishing, 1970-2023.





shrimp nets.Along the Washington coast, the pink shrimp fishery operates only in federal waters (3-200 miles). Within Washington state waters (0-3 miles) most commercial gear, including trawl, is prohibited.

In 1982, Washington, Oregon, and California established a common season and a maximum count per pound regulation to minimize regulatory conflicts. The fishing season is fixed in permanent regulation, opening April 1 and closing Oct. 31. Since that time, state fishery managers have worked collaboratively with industry, federal, and research partners to develop additional regulatory measures. The establishment of limited entry license programs, fishery permits, reference points for season closures, gear modifications, and fishery monitoring programs have contributed to a sustainable fishery over its history.

In 2018, WDFW adopted a Fishery Management Plan (FMP) formally establishing a framework and principles to guide coastal pink shrimp fishery management. Included in the FMP is a commitment to continue to coordinate fishery management with Oregon and California.







**Figure 6.** Washington pink shrimp landings by month for 2022-24, and the 10-year average.

Δ

# **Fisheries research and monitoring**

## Effort

Effort, as measured by the number of hours fished in 2024, increased for the first time since 2020 (Figure 7). Here, fishing hours are estimated as "singlerig equivalents," or SREs. In the past, most vessels towed only one net, i.e., a single rig. Now, double-rig vessels are the most common. To maintain a consistent dataset, fishing hours for "double-rig" vessels are multiplied by 1.6.

Shrimping efforts shifted significantly southward in 2024, with increased effort off the Northern California and Oregon coasts. Landings from waters outside of Washington accounted for the largest recorded portion on record and represented the largest shift in year-to-year effort (Figure 8). Except for a few vessels that started fishing in Washington, most concentrated their efforts south of the Columbia River.

Some early effort in April occurred off of Grays Harbor and Destruction Island. In May that effort began to shift south along the Oregon coast and continued to shift south to Northern California through the season end.







Figure 8. Estimated hours fished by area and month in 2024.

#### **Catch distribution**

The heat map (Figure 9) displays the locations where shrimp landed in Washington were caught, with red indicating more catch came from that location. Unlike recent years, the majority of shrimp landed in Washington came from south of the Columbia River. In 2024, catch from the Cape Lookout area increased from 10% to 31%, while catch from the Grays Harbor area decreased from 36% to 23%. The volume of landings from Oregon and California increased, constituting 70% of the total annual landings.

Figure 10 illustrates pounds of shrimp landed by month and management area. With very little effort in April, shrimp catches did not pick up until May. Catch remained relatively consistent through September, with Northern California shrimp constituting the majority of catch in October. Peak landings occurred in the Grays Harbor and Cape Lookout management areas from May to August. In 2024, 14% of shrimp landed in the state were caught off California - the largest catch proportion from that area in recent years.



**Figure 9.** Percentage of 2024 catch by management area and effort distribution. Fishing activity south of Cape Foulweather, Ore., not pictured.





6

#### **Catch rates**

Fishing efficiency, or CPUE, was 1,074 pounds per hour (in singlerig equivalents) for the 2024 season (Figure 11). This is a slight decrease from the 2023 CPUE, representing the second year- overyear CPUE decline since the low of 480 in 2017. After a slow start in April, catch rates significantly increased in May, June, and July. CPUE in catch areas off the Oregon coast continued to improve to the south, with many finishing their season in California (Figure 12).



Figure 11. Estimated pounds of catch per single-rig equivalent hour, 2011-24.

#### **Biological sampling**

WDFW's pink shrimp sampling program aims to collect count per pound, length, and sex data following protocols consistent with the Oregon Department of Fish and Wildlife (ODFW). WDFW samples landings at Westport weekly, collecting data from catch that originates off of Washington and Oregon. Similarly, ODFW samples catch landed at Oregon ports that was caught off Washington. The departments exchange biological data, so each state receives all data collected for its respective catch areas.

WDFW technicians collected 68 samples (approximately 100 shrimp per sample), measuring shrimp length, sex, and the count per pound; 32 samples were from Washington catch areas, 28 were from Oregon, and eight were from



**Figure 12.** Estimated pounds of shrimp caught per hour (in single-rig equivalents) by area and month, 2024.



California.

Additionally, ODFW staff collected samples at Oregon ports representing shrimp caught off Washington during the 2024 season.

#### **Count per pound**

WDFW manages shrimp size in the fishery by count per pound. The legal maximum is 160 shrimp per pound.

- Season average for Washington catch areas only: 132 shrimp per pound
- Shrimp count per pound fluctuated throughout the season, with the lowest average in October (109) and highest in May (151).
- Five samples landed into Washington exceeded the 160-count limit (Figure 13).

#### Shrimp age classes

Shrimp lack physical "age" structures or body parts like otoliths (ear-bones) or scales that are typically used to age fish. Instead, carapace (back shell) length is measured. Because shrimp release eggs at the same general time, shrimp of similar size are assumed to be the same age. By grouping carapace lengths and plotting this data, we can visually characterize the age classes present in the fishery.

Figure 14 shows each month of the season in a separate panel, April through October. This figure includes all shrimp landed into Washington. The line in each panel represents the relative amount that each age contributed to the catch for that month.



**Figure 13.** Average count per pound from WDFW samples, 2024. Each point represents a sample of 100 shrimp. The red line indicates the legal maximum of 160 shrimp per pound.



In 2024, the fishery saw three age classes of shrimp (Figure 15). The oldest shrimp, age 3, were born in 2021 and the youngest, age 1, were born in 2023. Early catch was primarily comprised of age 2 and age 3 shrimp; however, a large number of shrimp caught after May belonged to the age 1 class. Age 1 class were a large catch component in the 2024 fishery — an unexpected result based on spawning conditions and age classes observed in the 2023 season. Catches of age 1 class shrimp increased in May, constituting over half of the catch for the season. Overall, age 2 shrimp remained the primary catch component throughout the 2024 season. The last biological sample was collected Oct. 18, and the last landing into Washington occurred Oct. 24.





## At-sea fishery observation and bycatch

Two decades of research, gear innovation, and regulatory actions have reduced bycatch in the Washington pink shrimp fishery. Driven initially by rockfish and eulachon conservation concerns, over a decade of onboard monitoring data has produced insights into the fishery's interactions with other marine organisms. Species of particular concern include eulachon (Thaleichthys pacificus), which are federally listed as a threatened species; yelloweye rockfish (Sebates ruberrimus), which are under a federal rebuilding plan; and Chinook and coho salmon (Oncorhynchus spp).

The <u>West Coast Groundfish Observer Program (WCGOP</u>) has documented bycatch within the Washington pink shrimp fishery since 2010 using onboard fishery observers. Coverage of the fishery is measured as the proportion of total observed shrimp pounds to total shrimp pounds landed and has averaged 12% since 2011 (Figure 16).

Figure 17 shows the number of vessels, trips, and tows observed each year from 2011-23, and Table 1 includes published bycatch data for marine fish and shellfish species<sup>1,2</sup>. Observer data lags by one year. Since observation began, estimated bycatch in the Washington fishery has averaged 400 metric tons (mt; SD 245) per year. As a percentage of total catch (sum of Washington fish landing receipts and WCGOP bycatch estimator), bycatch has ranged from 2% to almost 12% of the total catch, averaging about 6% (Figure 18).



Altogether, observers have

**Figure 16.** Federal observer coverage rate of Washington vessels, in terms of pounds of shrimp caught<sup>3</sup>.

9

documented nearly 185 bycatch species or species groups. Table 1 shows the top 20 species ranked by cumulative weight from 2014-23. Eulachon ranked second as the dominant bycatch species and Pacific hake was third. Rounding out the top 10 were soles, salps (a pelagic tunicate), smelt species, Pacific herring, and eelpouts. Figure 19 lists another 21 species and groups frequently caught, though in low volume, including additional species of rockfish, spiny dogfish shark, and northern anchovy. The total combined weight of these for the 2012-22 period was 52 mt.

The remaining approximately 142 species and groups recorded are infrequently caught, i.e., one or two instances, and in low volumes. Included are species of particular management interest. In 2015, 5 pounds of coho and 4 pounds of chum salmon were documented in two out of 9,745\* hauls where at least part of the tow was off Washington<sup>3</sup>. No Chinook salmon have been observed. Yelloweye rockfish were observed in 2012 (1.3 pounds).



Figure 17. Number of Washington pink shrimp vessels, trips, and tows observed since 2011.



**Figure 18.** Estimated bycatch (mt), pink shrimp catch (WDFW WaFT), percent bycatch, and excluder panel and fishing light gear requirements for vessels landing in Washington<sup>3</sup>.

\*The total number of hauls is from any vessel that participated in the 2015 shrimp fishery and completed at least a partial tow in Washington, not just Washington-licensed vessels that were observed. Hence this value is greater than the number of observed tows depicted in Figure 17.

Care should be taken when evaluating bycatch trends. Gear underwent significant changes during years the fishery has been observed. so there is no clear "before" or "after" point with which to compare bycatch in the fishery. When observation of Washington-licensed vessels began, bycatch reduction devices or excluders were mandatory and the most popular bar spacing on the



excluder panels was about 1 ½ inches, although rules allowed up to a 2-inch spacing. Regulations reduced the bar spacing to 3/4 of an inch in 2012 based on research that narrower bar spacing improved exclusion of eulachon. When new research in 2014 demonstrated further reductions in eulachon bycatch could be achieved when footropes were outfitted with LED lights, voluntary usage quickly became widespread. Rules requiring the use of LED lights went into effect in 2018.

Stock dynamics must also be considered when evaluating bycatch in the fishery. For example, a study looking at the distribution (in space and time) of eulachon and shrimp fishery data and National Oceanic and Atmospheric Administration (NOAA) research bottom trawl survey data found that increases in eulachon bycatch in 2012 could be attributed to increases in eulachon abundance<sup>4</sup>. However, the bycatch of 43 mt of eulachon in 2023 is lower than average despite runs during 2023 and 2024 being in the top four since 2011. This is the first major reduction in eulachon bycatch since the increase from 32 mt in 2018 to 231 mt in 2021 and may be attributed to fishing location, ocean conditions, better fishing practices, or a combination of factors.

Historically, eulachon have supported directed commercial and recreational fisheries in the mainstem Columbia River and the Cowlitz River, respectively. Closed most years since eulachon were federally listed (2010), indications of stronger run size have supported some limited directed fishing. From 2014-18, the Pacific states worked closely with the National Marine Fisheries Service (NMFS) to adopt limited, conservation-minded commercial and recreational eulachon fisheries. No fisheries occurred in 2019, but from 2020-24, the states again adopted limited commercial and recreational seasons. In 2024, recreational, commercial, and tribal ceremonial and subsistence fisheries harvested an estimated 82,285 pounds of eulachon.

Note: Due to the availability of final observer data or reports, the information here lags coastal shrimp fishery data by one year.

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Shrimp Unid	366.46	185.05	179.84	14.38	74.73	18.59	130.24	95.55	114.63	43.13
Eulachon	144.02	218.09	31.79	11.50	32.32	139.93	135.72	231.39	97.34	73.10
Pacific Hake	0.01	400.13	170.95	157.38	36.58	2.71	0.85	11.28	0.88	0.04
Slender Sole	30.33	40.13	13.73	6.31	7.54	18.80	24.14	97.38	17.07	27.48
Rex Sole	4.02	11.56	3.86	7.50	6.78	6.85	3.58	30.97	5.58	2.77
Non-Eulachon Smelt Unid	42.92	12.14	0.03	0.85	0.04	0.02	1.75	0.13	1.97	11.61
Salp Unid	0.01	0.02	0.29	29.42	30.68	0.00	0.02	0.05	0.02	0.00
Whitebait Smelt	44.91	1.43	0.01						0.12	
Pacific Herring	8.42	13.91	2.98	1.42	0.95	0.91	1.35	1.41	2.46	0.75
Darkblotched Rockfish	6.46	1.99	2.90	3.63	1.20	0.71	2.27	7.65	1.41	2.15
Eelpout Unid	4.97	2.46	4.31	1.42	3.30	3.42	1.52	1.44	1.60	1.12
Non-Humboldt Squid Unid	8.22	8.76	0.65	0.42	0.16	1.31	0.53	0.77	0.29	0.09
Pacific Sanddab	3.01	5.36	0.55	0.19	1.05	0.31	0.66	1.05	1.83	0.42
Arrowtooth Flounder		2.97	0.25	0.27	0.16	0.25	0.23	4.03	2.39	1.59
Jellyfish Unid	0.61	8.71	0.28	0.10	0.03	0.33	0.13	0.09	0.02	0.16
Pacific Ocean Perch	6.63	0.08	0.02	0.19	0.04	0.06	0.10	2.43	0.65	0.04
Dover Sole	0.48	1.40	0.57	0.39	0.39	1.05	0.66	2.17	0.45	0.75
Flathead Sole	0.21	4.63	0.68	0.33	0.09	0.05	0.05	0.14	0.31	1.37
Shortbelly Rockfish	0.31	0.18	0.24	5.05	0.97	0.31	0.03	0.05	0.44	0.04
Poacher Unid	0.26	0.42	0.19	0.06	0.21	0.42	1.06	1.61	0.68	0.61

**Table 1.** The top 20 bycatch species ranked by total cumulative metric tons for the 2014-23 period.

#### **Eulachon management and research**

WDFW completed the following projects in 2024 to better understand eulachon population abundance and dynamics:

- Passed new legislation requiring a recreational fishing license for smelt. The requirement aims to improve compliance with fishing regulations and help promote sustainable fishing practices. <u>Cowlitz River smelt fishing | Washington</u> <u>Department of Fish & Wildlife</u>.
- Continued annual spawning stock biomass estimation for the Columbia River (Figure 20) funded through the WDFW biodiversity package.

- Compared adult eulachon CPUE in the mainstem Columbia River commercial gillnet fishery and mean larval densities (Figure 21).
- Continued to collaborate with Eulachon Technical Recovery and Implementation Team (ETRIT).
- Completed the 2024 ODFW and WDFW joint staff report concerning stock status and fisheries for sturgeon and smelt. The report <u>can be found here</u>.



**Figure 20.** The estimated number of Eulachon spawning in the Columbia, Fraser, Chehalis, Naselle, and Grays rivers from 2011-24. Estimates for the Fraser River derived from data provided by the Canadian Department of Fisheries and Oceans (DFO). The 2024 Fraser River estimate was not finalized at the time of this publication. No estimate for the Columbia River is available for 2020 due to truncated sampling.



#### Figure 21.

Comparison of adult eulachon CPUE in terms of total pounds per landing in the mainstem Columbia **River commercial** gillnet fishery and mean larval densities captured at mainstem Columbia index sites using plankton tow nets, 1988-2024. **Commercial fisheries** CPUE data is not available for 2011-13 or 2019 due to no fisheries occurring in those years.

# **2024 accomplishments**

#### Logbook reporting

Documenting fishing location is important for marine spatial planning. Logbook data provides information necessary to evaluate the potential impacts of ocean energy projects and address new conservation challenges.

Logbook compliance was exceptional again in 2024 with over 98% of trips having a completed logbook. As in 2023, this exceeded our goal of having a completed logbook for 95% of shrimp trips (Figure 22). We appreciate your effort to routinely turn in your logbooks throughout the season. This year was exemplary; keep it up!



Figure 22. Percentage of trips each year with a submitted logbook.

The drop box located at Washington

Crab is a convenient way to submit logbooks; we hope as awareness increases, it will become a habit to use each trip. Logbooks can also be mailed and/ or handed to a WDFW shellfish technician at port. Logbooks are legally due by the 10th of the month following any month you've actively fished. Turning in your logbook on time helps us to process and enter the data as it comes in.

## Marine Stewardship Council (MSC) certification

Independent reviewers audit fishery performance annually. The most recent surveillance audit found the Washington pink shrimp fishery "continues to be a highly performing fishery and an excellent example of state-level and coordinated management" and "this fishery continues to meet the MSC Fisheries Standard and shall remain certified."

The MSC recently completed the most comprehensive <u>review</u> of the MSC Fisheries Standard in its 25-year history. The <u>new Standard (version 3.0)</u> went into effect May 1, 2023. It includes significant improvements, such as better marine



life protections, and stronger fisheries management and compliance requirements. These improvements will ensure that MSCcertified fisheries continue to be recognized as world leaders in sustainability.

For more on the MSC program, visit <u>msc.org</u>. Find notices, assessments, and audit reports specific to the U.S. West Coast pink shrimp fishery <u>on this webpage</u>.

#### Why is certification important?

Markets are dynamic, but preference for responsibly harvested seafood continues to grow. As much as 50% or more of the shrimp landed in Washington and Oregon is destined for markets that demand sustainably sourced seafood. Fishery sustainability has long been a factor for gaining and maintaining access to European markets; this is true for the United States as well.

# **New for 2025**

#### 2025 shrimping prospects

We look to two models developed by ODFW and the relative strength of the year classes in 2024 to forecast shrimp production for the coming season.

## Three year classes will contribute to shrimp catch in 2025:

- ▶ 2024 Age 1
- ▶ 2023 Age 2
- ▶ 2022 Age 3

Models and projections are never certain, but better than expected performance of age 1 shrimp in 2024



could translate to a showing of age 2 shrimp in the upcoming season.

The environmental conditions for larval shrimp in 2024 were considered more favorable than the previous year. ENSO-neutral conditions were observed by mid-summer and in December 2024 conditions crossed La Niña threshold. As of February 2025, weak La Niña conditions persisted.

An ODFW model comparing many years of shrimp population and environmental data demonstrates a relationship between ocean conditions and shrimp recruitment to the fishery. Sea-level height measured at Crescent City, Calif., has proven to be a useful indicator, with lower sea-level heights associated with better shrimp recruitment in Oregon. How well this model applies to shrimp recruitment off Washington is uncertain.



#### ALERT - scientific moorings north of Grays Harbor

Through funding from the National Science Foundation, the Quinault Indian Nation and Quileute Tribe, in collaboration with the <u>Northwest</u> <u>Association of Networked Ocean Observing System</u>, will maintain three wave sensor buoys in 2025. The mooring buoys are located on the Washington shelf between Moclips and Cape Johnson and measure just over 12 inches in height and 16 inches across.

These instruments are designed to:

- > Provide real-time, publicly accessible wave data.
- Improve understanding of hydrodynamic processes.
- Inform coastal management best practices.
- Enhance the safety of fishers operating off the Washington coast.

Once deployed, the location coordinates will be provided in updates to all ocean users.



#### **Questions? Contact:**

- Jennifer.hagen@quileutention.org or
- jschumacker@quinault.org

#### Enforcement

As in previous seasons, the WDFW Police Coastal Region Detachments saw no increased or significant enforcement issues in 2024. Coverage specific to the pink shrimp fishery included:

- License inspections
- Monitoring offloads
- Vessel/processor contacts
- Gear compliance checks

WDFW Enforcement continues to engage and adapt to new challenges on the coast. With Enforcement's veteran crew of officers patrolling with the necessary offshore patrol assets, crews are engaged in making both offshore contacts as well as dockside inspections.



# Management

## Collaboration



ODFW and WDFW benefit from a long- standing collaboration that includes coordination of fishery management activities, such as data sharing, cross-training, enforcement activities, and regular communication. Collaboration is expanding as managers from Washington, Oregon, and California increasingly consult with one another and share information in joint emails and meetings.

#### Industry engagement

Effective fisheries management depends on hearing from shrimpers and processors first-hand. While we value our dock interactions, we also recognize the importance of formal industry meetings and updates. In the past, managers were able to piggy-back on industry pre-season meetings.

While we continue to value in-person meetings, we also recognize a virtual format allows greater participation. Meetings typically occur in February or March with advanced notice provided to license holders, vessel operators, processors, and interested stakeholders.

#### **Coastal Pink Shrimp Fishery Listserv**

If you would like to receive coastal pink shrimp notices from WDFW, please email:

Travis.Haring@dfw.wa.gov

## **Fishing regulations**

#### **Coordination with Oregon and California**

While most regulations are similar, when fishing offshore of another state, shrimpers should confirm their operations conform to that state's regulations. For example, Oregon law does not authorize the landing of frozen shrimp, but it is allowed with a permit in Washington. Also, Oregon-licensed shrimpers can trawl in that state's territorial waters; conversely, Washington does not allow any trawling in its coastal territorial waters (0-3 miles).

Fishing lights are required in all three states.

Both WDFW and ODFW require shrimp trawl logbooks, and each agency will accept the other state's logbook.

#### Freezing at sea

Washington regulations do not explicitly prohibit freezing catch at sea. However, to address fisheryspecific needs, the pink shrimp trawl fishery permit requires those who intend to process shrimp by freezing their catch at sea off Washington to:

- notify WDFW of their intent;
- notify WDFW personnel 24 hours before landing; and
- provide WDFW, upon request, with a sample of 25 pounds of whole shrimp processed at sea by freezing and a sample of 25 pounds of fresh shrimp from the same trip.

#### Vessel monitoring system (VMS)

The National Marine Fisheries Service (NMFS) requires any vessel using non-groundfish trawl gear in federal waters to have a vessel monitoring system installed. Declaration reports are also mandated prior to fishing. Specific compliance information can be found at the NMFS <u>Vessel</u> <u>Monitoring System website</u> or by calling the NMFS Office of Law Enforcement at 206.526.6140.

#### **Groundfish limits**



Limits have not changed from 2021.

Shrimp trawlers are limited to 1,500 pounds of groundfish per

trip with a daily limit of 500 pounds. Included in the daily and trip limits are sub-limits for: lingcod at 300 pounds per month with a 24-inch minimum size and sablefish at 2,000 pounds per month. Yelloweye and thornyhead rockfish are prohibited. All other groundfish species taken count toward the 500 per day or 1,500-pound trip limits and do not have species-specific limits. The amount of groundfish landed may not exceed the amount of pink shrimp landed. The pink shrimp fishery is not subject to Rockfish Conservation Area provisions.

A complete copy of Pacific Coast groundfish fishery management measures for 2024, as well as in-season adjustments to trip limits, can be found on <u>NOAA's website</u>.

#### **Fishing lights**



Washington shrimpers must to use fishing lights on the footrope of each trawl net. Similar rules apply when fishing off

Oregon. Shrimpers fishing both Washington and Oregon should note the specifications are the same for both states.

Minimizing bycatch is important NOT ONLY when bycatch volumes are high. Low bycatch volumes can reflect poor abundance, **making the use of lights even more important**.

# Footrope lighting devices must meet the following criteria:

- Lighting devices must be operational;
- Lighting devices must be securely attached within 6 inches of the forward leading edge of the bottom panel of trawl netting; and
- Each trawl net must have a minimum of five lighting devices, spaced 4 feet apart in the central 16 feet of each net.

#### Four lighting devices are approved for use. Green is the only approved color.

- Rock-engineering "LED Rope Light"
- Fish Tek Marine, NetLight and PotLight (added in 2022)
- Catch All Tackle "Deep Drop LED Fishing Light"
- Lindgren-Pitman "LP Electrolume Light"

#### New logbook drop box

WDFW has a new drop box at the weigh shack at Ocean Gold Seafoods Inc., and with the continued cooperation of Washington Crab Producers Inc., the Department will now maintain two secure logbook drop boxes in Westport.

Please use these locations to drop off logbooks at the time of landing. Only WDFW staff will have access to the box contents, and they will regularly collect logbooks from these locations. We hope this convenience will make it easier for fishers to provide WDFW with logbooks in a timely fashion.

Logbooks may still be mailed to WDFW, dropped off at the WDFW Montesano office, or handed to a WDFW shrimp technician at port.

#### Our office location and mailing address are:

WDFW Region 6 Office 48 Devonshire Road Montesano, WA 98563



New WDFW logbook drop box in Westport.

#### **Reminder:**

Logbooks are due by the 10th day of the month following any shrimp fishing activity.



#### Sources:

- Somers, K. A., J. E. Jannot, K. E. Richerson, V. J. Tuttle, and J. T. McVeigh. 2022. Fisheries Observation Science Program Coverage Rates, 2002–20. U.S. Department of Commerce, NOAA Data Report NMFS-NWFSC-DR-2022-03. <u>doi.org/10.25923/9rpa-9t92</u>
- 2. NOAA Fisheries Westcoast Groundfish Observer Program
- 3. <u>West Coast Fishery Observer Bycatch and Mortality</u> <u>Reports</u>
- Ward, E.J., J.E. Jannot, Y.-W. Lee, K. Ono, A.O. Shelton, and J. T. Thorson. 2015 Using spatiotemporal species distribution models to identify temporally evolving hotspots of species co-occurrence. Ecological Applications, 25: 2198-2209.
- 5. Jannot, J. E., K. A. Somers, V. Tuttle, J. McVeigh, J. V. Carretta, and V. Helker. 2018. Observed and Estimated

# Contact information

#### Zach Forster

Coastal Shellfish Biologist 360-214-05555 Zachary.Forster@dfw.wa.gov

#### Matthew George

Coastal Shellfish Manager 360-640-1066 Matthew.George@dfw.wa.gov

#### Travis Haring

Scientific Technician 360-589-9584 <u>Travis.Haring@dfw.wa.gov</u>

#### Our Website: wdfw.wa.gov/fishing/commercial/ shrimp/coastal

Marine Mammal Bycatch in U.S. West Coast Groundfish Fisheries, 2002-16. U.S. Department of Commerce, NWFSC Processed Report 2018-03.

- MRAGS Americas. 2021. Oregon and Washington Pink Shrimp (Pandalus jordani) Trawl Fishery 3rd Surveillance Report. 8950 Martin Luther King Jr. Street N. #202, St. Petersburg, Florida, 33702-2211. 16pp.
- 7. Groth, S.D., Blume, M., and J.M. Smith (2022). 33rd Annual Pink Shrimp Review. Oregon Department of Fish and Wildlife Marine Resources Program, Newport, Oregon. 11 pp.
- 8. ENSO images provided by The International Research Institute for Climate and Society, Columbia University Climate School", with a link to https://iri.columbia.edu/ ENSO.



Request this information in an alternative format or language at <u>wdfw.wa.gov/accessibility/requests-accommodation</u>, 833-885-1012, TTY (711), or <u>CivilRightsTeam@dfw.wa.gov</u>.