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Results of the 2025 Eastern and Northern Bering Sea Continental Shelf Bottom Trawl Survey of Groundfish and Invertebrate Fauna

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June 2026

U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Alaska Fisheries Science Center

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NOAA FISHERIES

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Abstract

In 2025, the Groundfish and Shellfish Assessment Programs in the Resource Assessment and Conservation Engineering Division of the National Marine Fisheries Service's Alaska Fisheries Science Center conducted the 43rd eastern Bering Sea bottom trawl survey and the 7th northern Bering Sea bottom trawl survey. The surveys occurred from May to August and covered the eastern and northern Bering Sea continental shelf (bottom depths between 20 and 200 m) from the Alaska mainland coast west to the U.S.-Russia Maritime Boundary, and from the Alaska Peninsula north to the Bering Strait. Survey sampling was conducted aboard two chartered commercial stern trawlers, the FV *Alaska Knight* and FV *Northwest Explorer*, across 350 stations in the eastern Bering Sea and 137 (of 144) stations in the northern Bering Sea. The 2025 mean bottom and surface temperatures in the eastern Bering Sea, 3.0°C and 6.1°C, were near the time-series averages of 2.5°C and 6.7°C. The estimated total biomass of fishes and invertebrates in the eastern Bering Sea was 13.8 million metric tons (t) in 2025, a decrease from 15 million t in 2024. The estimated total biomass of fishes and invertebrates in the northern Bering Sea was 2.4 million t in 2025, a decrease from 2.8 million t in 2023, and less than the time series average of 3.3 million t. A total of 128 fish taxa and 273 invertebrate taxa were identified on the eastern and northern Bering Sea surveys, combined. This report compares the distribution and relative abundance of 37 commercially or ecologically important fish species and three invertebrate taxa with side-by-side maps from the 2025 eastern and northern Bering Sea bottom trawl survey and past surveys. Distributional shifts in the abundance of some species may reflect northward movement during recent warm years. Some species may shift south when seasonal sea ice cover becomes more extensive. This annual variation underscores the need to continue annual survey monitoring of Bering Sea fish and invertebrate populations to gauge their responses to a changing climate.

Table of Contents

Introduction

In 2025, the Groundfish and Shellfish Assessment Programs in the Resource Assessment and Conservation Engineering (RACE) Division of the National Marine Fisheries Service's (NMFS') Alaska Fisheries Science Center (AFSC) conducted the 43rd eastern Bering Sea survey from May to July 2025 and the 7th northern Bering Sea survey from July to August 2025. The surveys collect information about fish and invertebrate populations and environmental conditions to support fisheries stock assessment and management. The eastern Bering Sea survey has occurred annually since 1982 (except in 2020 due to the COVID-19 pandemic) and is the longest-running, standardized time series of fish and invertebrate data in the region (Conner and Lauth, 2017). The standardized northern Bering Sea survey (Lauth, 2011) has been conducted in 2010, 2017, 2019, 2021, 2022, 2023, and 2025.

The data collected during these surveys are vital for fisheries management and ecosystem monitoring. Fishery-independent abundance estimates, in addition to other biological and oceanographic information collected, are used by the AFSC, the North Pacific Fishery Management Council (NPFMC), and the Alaska Department of Fish and Game (ADF&G). These organizations use the survey data products to manage groundfish and crab stocks, and to conduct ecosystem forecast modeling, which are requirements of the Bering Sea and Aleutian Island (BSAI) Fishery Management Plan (FMP) established under the Magnuson-Stevens Fishery Conservation and Management Act[1].

The most recent modeling results on the status of these commercial groundfish[2] and crab[3] stocks are reported in the annual Stock Assessment and Fishery Evaluation reports prepared by the NPFMC. Commercial crab stocks are managed by the ADF&G with federal oversight by NMFS. Detailed information on bottom trawl survey results for commercial crab species, including Tanner crab (*Chionoecetes bairdi*), snow crab (*Chionoecetes opilio*), red king crab (*Paralithodes camtschaticus*), blue king crab (*Paralithodes platypus*), and hair crab (*Erimacrus isenbeckii*) are discussed and analyzed separately in the AFSC Shellfish Assessment Program's annual data report (Zacher et al., 2025).

This Technical Memorandum compares results from the 2025 Bering Sea surveys with results from the prior survey in the same region (Markowitz et al., 2024). The results of the 2023 and 2024 surveys can be found in their respective data reports (Markowitz et al., 2024; Markowitz et al., 2025). Technical Memoranda reporting past survey data can be found on the NOAA[4] and AFSC websites[5].

History of Bering Sea Bottom Trawl Surveys

Federal government agencies have conducted bottom trawl surveys of the eastern Bering Sea continental shelf since the 1940s. Early surveys were often exploratory efforts to locate commercial fisheries resources (Zimmermann et al., 2009), and led to the development of a red king crab fishery. Bottom trawl surveys by the United States continued into the 1970s, with private industry involvement, to study the biology, distribution, abundance, and best fishing practices for red king crab (Zimmermann et al., 2009). The first large-scale survey of the Bering Sea was conducted in 1975 under contract from the U.S. Bureau of Land Management. The purpose was to collect baseline data for assessing the potential impact of growth in the offshore oil industry on Bering Sea groundfish and crab fishery

[1] https://www.fisheries.noaa.gov/topic/laws-policies
[2] https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessments-and-fishery-evaluation
[3] https://www.npfmc.org/about-the-council/plan-teams/bsai-crab-planning-team/ and https://www.npfmc.org/library/safe-reports/
[4] https://repository.library.noaa.gov/
[5] https://www.fisheries.noaa.gov/resource/publication-database/alaska-fisheries-science-center-technical-memorandums and https://www.fisheries.noaa.gov/alaska/science-data/groundfish-assessment-program-bottom-trawl-surveys

resources (Pereyra et al., 1977). During the 1975 baseline survey, sampling was conducted across the shelf between the 20 m and 200 m isobaths from the Alaska Peninsula north to approximately 62°N.

In subsequent years, the areal coverage of the annual surveys was reduced. However, in 1979, a comprehensive survey of the Bering Sea was undertaken in cooperation with the Japan Fisheries Agency (Bakkala and Wakabayashi, 1985). That survey encompassed the entire region sampled in the 1975 baseline study and included the upper continental slope waters between St. Matthew and St. Lawrence islands.

Following the 1979 survey, annual bottom trawl surveys have resampled the areas and stations established during the 1975 survey, with slight modifications in sampling design in some years. Beginning in 1979 and continuing triennially until 1991, the survey was extended to include the continental slope and the area between St. Matthew and St. Lawrence islands. After a hiatus from 1992 to 1999, due to lack of funding, the Bering Sea slope survey resumed in 2002 as an independent, standardized bottom trawl survey conducted on a quasi-biennial and funding-dependent basis until 2016 (Hoff, 2016; Hoff and Britt, 2011; Stauffer, 2004).

The current eastern Bering Sea survey design was adopted in 1982. This design consists of standardized survey gear (Stauffer, 2004), collection methods, and timing, in addition to implementing a systematic survey grid design of 330 regularly spaced (37.04 square kilometers, km^2; 20 square nautical miles, nmi^2) stations (Figs. **1** and **2**; Bakkala et al. (1985)). A total of 26 additional "corner stations" were established near the Pribilof Islands in 1981 and St. Matthew Island in 1983. These stations were placed at the corners of the standard grid station to increase sampling effort and improve blue king crab population estimates in the area.

Two major changes to the total station count have occurred since the survey design was standardized in 1982. First, beginning in 1987, 20 regularly spaced stations that comprise Strata 82 and 90 in the northwest (Fig. **1**) were added to monitor more northerly distributions of snow crab and walleye pollock, bringing the total eastern Bering Sea station count from 356 to 376. Annual sampling of the northwestern strata has continued since 1987 because the region encompasses major portions of the commercially important Bering Sea groundfish and crab populations that require management actions under the Bering Sea-Aleutian Islands Fisheries Management Plan (BSAI FMP). Second, to maximize the efficient use of survey resources, the 26 corner stations near the Pribilof Islands and St. Matthew Island were discontinued after 2023 following an analysis by DeFilippo et al. (2023). This study indicated that the removal of corner stations in high-density sampling areas would lead to negligible impacts on the precision and accuracy of groundfish and crab biomass estimates. The eastern Bering Sea survey area now consists of 350 total stations, with no additional high-density sampling areas.

The northern Bering Sea survey was initiated by the AFSC as part of the Loss of Sea Ice (LOSI) Research Plan to monitor long-term climate trends in the transition zone between the temperate waters of the eastern Bering Sea and the Arctic waters of the Chukchi Sea, where climate change can have a significant effect on physical and biological ecosystem processes (Hollowed et al., 2007; Hunt et al., 2011; Stabeno, Kachel, et al., 2012; Stevenson and Lauth, 2012, 2019). Although LOSI funding for the northern Bering Sea extension was discontinued after the 2010 northern Bering Sea survey, the survey resumed biennially in 2017 to monitor the effects of changing ocean conditions on fish and crab distributions (Sigler et al., 2015). The northern Bering Sea survey consists of 144 bottom trawl stations extending the eastern Bering Sea survey grid northward to the Bering Strait and the U.S.-Russia Maritime Boundary, and includes all of Norton Sound and the Chirikov Basin (Fig. **2**). The standard northern Bering Sea survey was conducted in 2010, 2017, 2019, 2021, 2022, 2023, and 2025 (Lauth, 2011; Lauth et al., 2019; Markowitz, Dawson, Charriere, Prohaska, Rohan, Haehn, et al., 2022; Markowitz, Dawson, Charriere, Prohaska, Rohan, Stevenson, et al., 2022a, 2022b; Markowitz et al., 2023; Markowitz et al., 2024). In 2018, a rapid-response survey was conducted in the northern Bering

Sea using a different sampling design than the standard northern Bering Sea survey. Therefore, the survey results from the 2018 northern Bering Sea rapid-response survey are not directly comparable to the results from other standard northern Bering Sea surveys. In 2020, no Bering Sea surveys were conducted due to the COVID-19 pandemic.

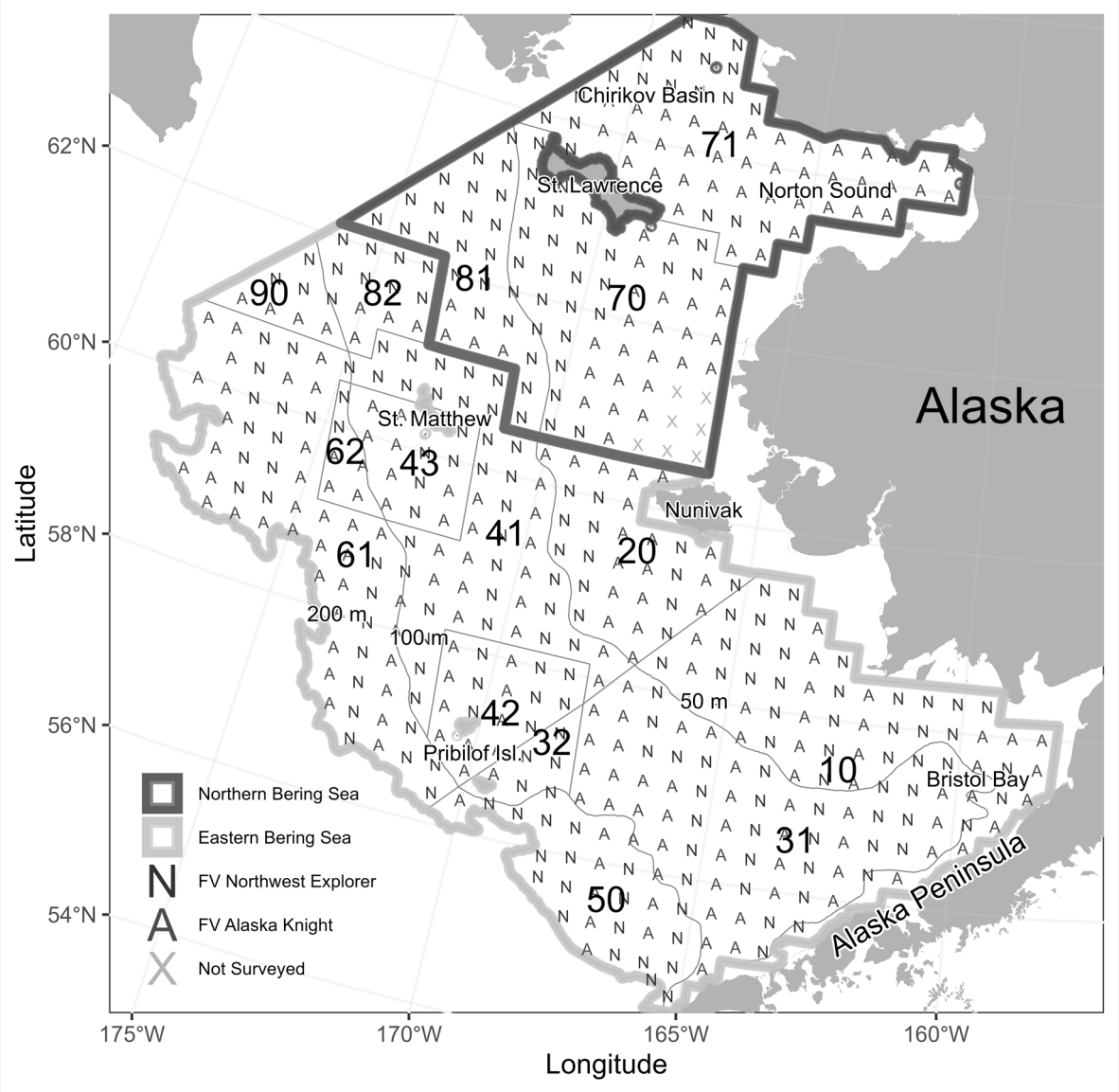

Figure 1. -- Stratification scheme used for data analysis of the 2025 eastern Bering Sea and northern Bering Sea surveys. The map also depicts the stations sampled by the FV *Alaska Knight* (A), FV *Northwest Explorer* (N), and stations that were not surveyed (X).

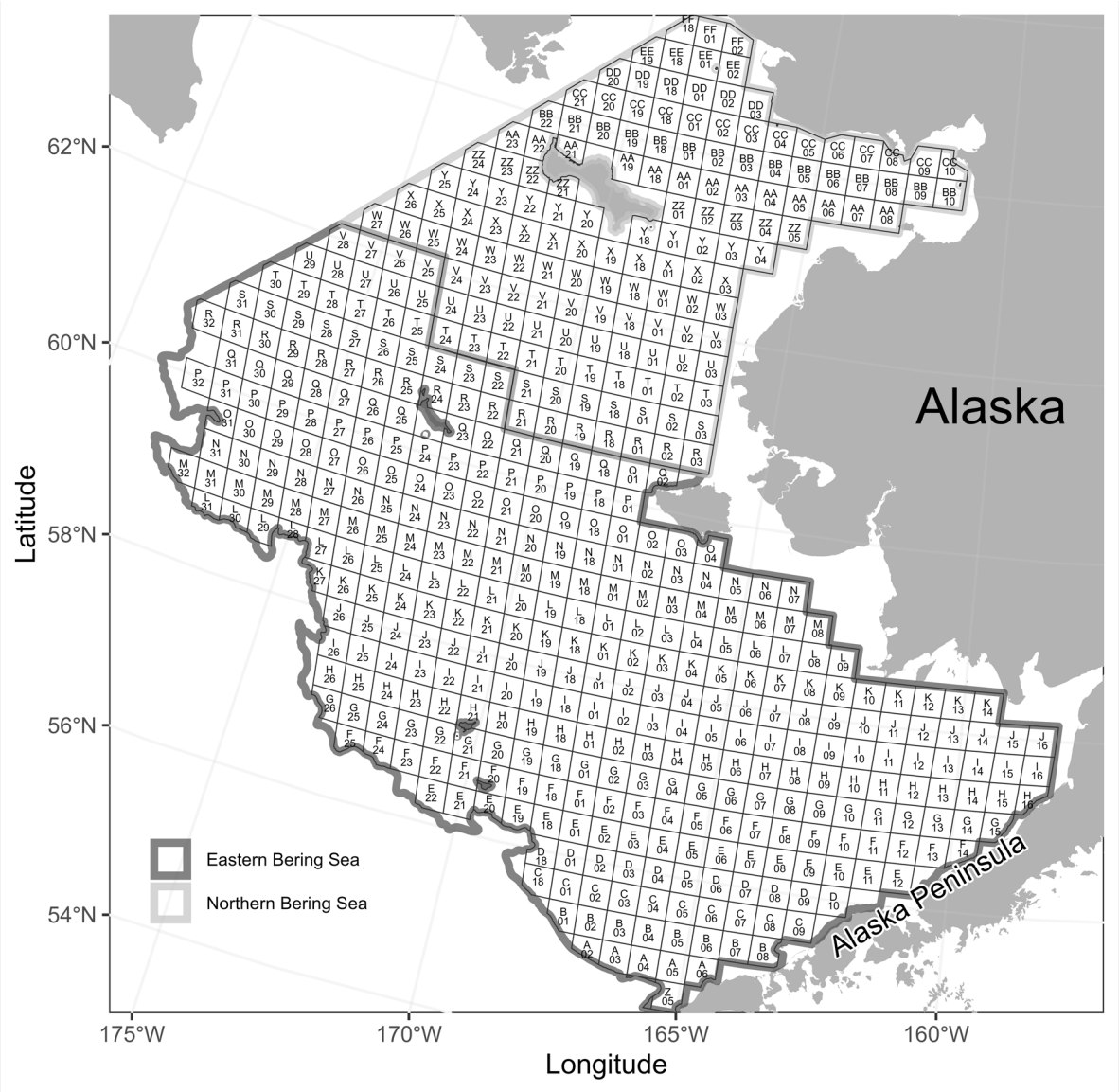

Figure 2. -- Sampling grid and station identifiers for the 2025 eastern and northern Bering Sea surveys.

Methods

Survey Area and Sampling Design

The standardized eastern and northern Bering Sea surveys consist of a systematic design with 350 and 144 fixed sampling stations, respectively, arranged on a regularly spaced 37.04 x 37.04 km grid (20 x 20 nmi; Fig. **2**).

Survey Vessels and Sampling Gear

The 2025 eastern and northern Bering Sea surveys were conducted aboard the chartered commercial stern-trawlers FV *Alaska Knight* and FV *Northwest Explorer* (Fig. **3**). Both vessels are house-forward trawlers with stern ramps. The overall length of the FV *Alaska Knight* is 43.9 m (144 ft) and the FV *Northwest Explorer* is 49.4 m (162 ft). All fishing operations were conducted in compliance with national and regional protocols detailed in Stauffer (2004). Trawl sampling was conducted using 83-112 eastern otter trawls, each with a 25.3 m (83 ft) headrope and 34.1 m (112 ft) footrope (Figs. **4** and **5**). The net was attached to tail chains with 54.9 m (180 ft or 30 fm) paired bridles. Each lower bridle had a 0.61 m (2 ft) chain extension connected to the lower wing edge to improve bottom tending. Steel "V" doors measuring 1.8 × 2.7 m (6 × 9 ft) and weighing 816 kg (1800 lbs) each were used for spreading the net opening while the trawl was fishing on the seafloor.

Figure 3. -- Fishing vessels FV *Alaska Knight* (left) and FV *Northwest Explorer* (right) contracted to conduct the 2025 eastern and northern Bering Sea surveys.

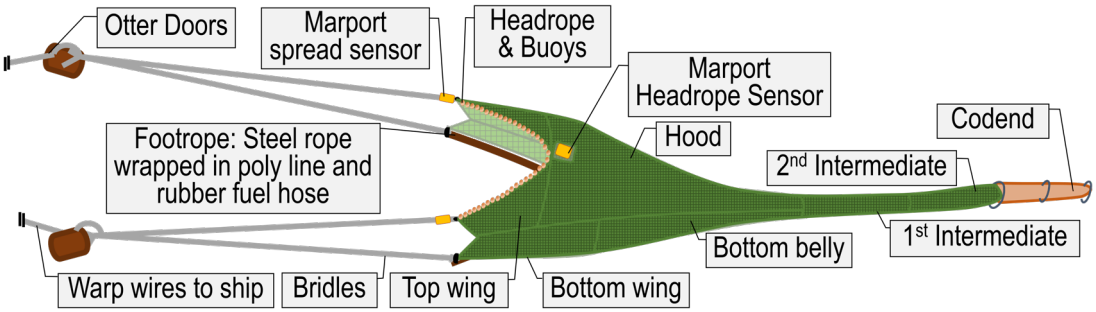

Figure 4. -- Diagram of the 83-112 Eastern otter trawl net with labeled parts.

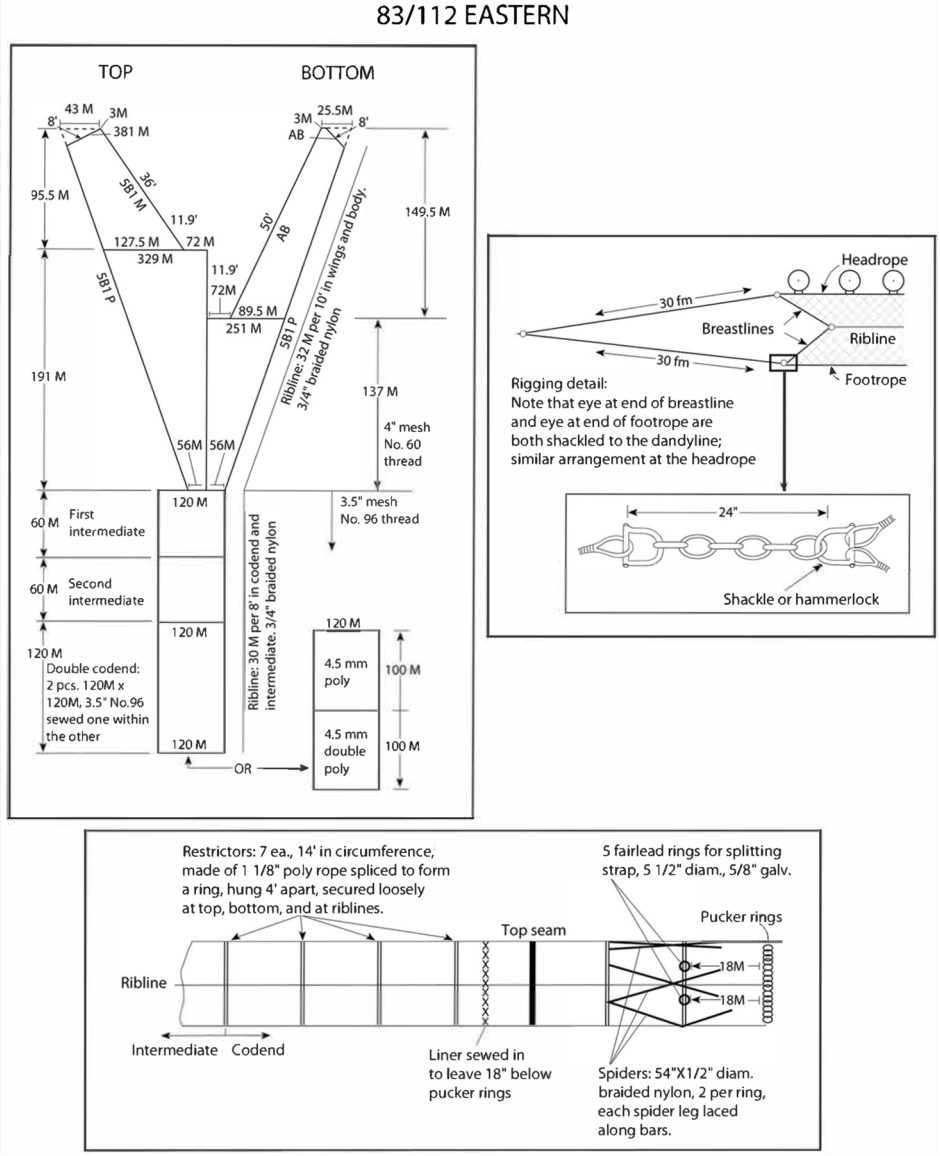

Figure 5. -- Schematic blueprint of the 83-112 eastern otter trawl gear used during the 2025 eastern and northern Bering Sea surveys.

The Marport Deep Sea Technologies Inc. net mensuration system was used to record net spread and height. Net spread was measured as the horizontal distance between two sensors attached on the upper bridle, immediately forward of the top wing tips (Fig. **4**). Net height was measured from the headrope to the seafloor. Mean net spread values for estimating area swept per tow were calculated according to methods described by Lauth and Kotwicki (2014). A customized Onset HOBO Pendant G Data Logger (accelerometer) in a custom housing was attached to the center of the footrope for use as a bottom contact sensor to determine tow duration based on footrope contact with the seafloor.

Temperature and depth profiles were primarily recorded using a Sea-Bird SBE 39 temperature-depth recorder (Sea-Bird Electronics Inc., Bellevue, WA) attached to the headrope of the trawl. Due to equipment malfunction, temperature and depth profiles were recorded using the Marport Trawl Explorer sensor for the last 44 hauls of the northern Bering Sea survey on the FV *Alaska Knight*. Observations were made at 3-second intervals at each station. Average bottom depth was calculated by adding the average net height to the average depth of the headrope while the net was in contact with the seafloor.

In the eastern Bering Sea, the net mensuration system failed to record net data for two tows on the FV *Alaska Knight* and two tows on the FV *Northwest Explorer*. In the northern Bering Sea, the net mensuration system failed to record net data for one tow on the FV *Alaska Knight*. To estimate missing net width values, the *mgcv* R package (Wood, 2004) was used to relate mean net width with the inverse scope (m) and mean net height (m) from valid tows following the relationship investigated by Rose and Walters (1990), where w is the net width (m), h is the net height (m), s is the scope, and ϵ represents the modeled error

$$w \sim s^{-1} + h + \frac{h}{s} + \epsilon$$

$$\epsilon \sim N(0, \sigma^2).$$

Eastern Bering Sea Sampling Logistics and Stratification Scheme

Scientists boarded the chartered vessels in Dutch Harbor, Alaska before transiting to eastern Bristol Bay to begin sampling. From Bristol Bay, the survey proceeded westward, completing north-south columns of grid cells to the shelf edge (Fig. **1**). The east-to-west survey progression is based on an understanding of historical trends in fish movement and is intended to ensure the survey moves in the opposite direction of the seasonal on-shelf (eastward) migration patterns typical of yellowfin sole and other species. This strategy reduces the likelihood of encountering a portion of these populations multiple times (Nichol et al., 2019; Smith and Bakkala, 1982). FV *Northwest Explorer* and FV *Alaska Knight* started sampling on May 31, 2025 and ended on July 26, 2025.

The survey footprint covered bathymetric depths ranging from 20 m to 200 m. For design-based indices of abundance, this footprint was separated into 12 strata by the 50 m and 100 m isobaths and a biogeographic boundary line running from the southwest to the northeast (Fig. **1**; Halliday and Sassano (1988)). The stratum boundaries correspond with different oceanographic domains and biological communities (Coachman, 1986). This stratification scheme reflects some differences observed in Bering Sea groundfish distributions across the oceanographic domains and was designed to reduce the variances of population and biomass estimates (Bakkala, 1993). Overall sampling density across the eastern Bering Sea was one station per 1,409 km^2, and within-stratum sampling density ranged from one station per 1,077 km^2 (stratum 62) to one per 1,769 km^2 (stratum 32; Table **1**). For some analyses (e.g., abundance-at-length), strata were combined by depth region, resulting in eight subareas: 10, 20, 30 (31+32), 40 (41+42+43), 50, 60 (61+62), 82, and 90 (Fig. **1**; Table **1**).

Northern Bering Sea Sampling Logistics and Stratification Scheme

After the completion of the eastern Bering Sea survey, both vessels began sampling survey stations in the northern Bering Sea survey region. In the northern Bering Sea, the FV *Northwest Explorer* and FV *Alaska Knight* started sampling on July 27, 2025 and ended on August 17, 2025, when both vessels returned to Dutch Harbor. The northern Bering Sea is divided into three strata: one including the area north of St. Lawrence Island and Norton Sound, and two others south of St. Lawrence Island separated by the 50 m isobath (Fig. **1**). In 2025,137 of 144 stations were sampled, and all density calculations are based on the area of the reduced station set. Sampling density was 1,554 km^2/station for stratum 70, 1,401 km^2/station for stratum 71, and 1,370 km^2/station for stratum 81. Overall sampling density for the northern Bering Sea survey area was 1,452 km^2/station (Table **1**).

Table 1. -- Stratum areas and sampling densities used during the 2025 eastern and northern Bering Sea surveys. Stratum area calculations were updated in 2022.

Stratum		Representative area (km²)	Stations in stratum	Stations successfully sampled	Sampling density (km²/stations successfully sampled)
Eastern Bering Sea					
Inner	10	78,706	58	58	1,357
(0-50 m)	20	41,193	31	31	1,329
Middle	31	94,978	69	69	1,376
(51-100 m)	32	8,847	5	5	1,769
	41	62,310	44	44	1,416
	42	24,122	18	18	1,340
	43	21,064	13	13	1,620
	82	17,954	12	12	1,496
Outer	50	38,039	26	26	1,463
(101-200 m)	61	87,777	60	60	1,463
	62	6,462	6	6	1,077
	90	11,539	8	8	1,442
Total		492,990	350	350	1,409
Northern Bering Sea					
Inner	70	79,260	58	51	1,554
(0-50 m)	71	81,255	58	58	1,401
Middle (51-100 m)	81	38,352	28	28	1,370
Total		198,867	144	137	1,452
Eastern and northern Bering Sea combined					
Total		691,857	494	487	1,421

Catch Sampling Procedures

Standard sampling procedures used in these Bering Sea surveys are described in detail by Wakabayashi et al. (1985) and Stauffer (2004). In summary, samples were collected by trawling near the center of each grid square for a target fishing time of 30 minutes at a speed of 1.54 m/sec (3 knots). If the center of the grid cell was not considered trawlable due to obstructions visible on the depth sounder, or a known history of obstructions, the nearest trawlable site within the same grid square was used. Hauls that resulted in significant gear damage, contained debris (e.g., derelict crab pots), or had visible changes in reported net mensuration during deployment were repeated to obtain a successful sample.

Catches estimated to be less than approximately 1,000 kg were fully sorted and enumerated, while larger catches were either weighed in the net or volumetrically measured, then subsampled before sorting. The goal of subsampling is to obtain a representative sample, which requires some variation in catch processing methods among hauls. After sorting subsampled catches, individual species present in low numbers were weighed and counted in aggregate, while species present in high numbers were weighed in aggregate, and further subsampled to obtain counts. These secondary subsample counts were extrapolated to the subsample weight for the species. All subsample weights and numbers were then expanded proportionally to the total catch. Organisms were sorted and identified to the lowest reliable taxonomic level.

All commercial crab species were typically sorted from the entire catch and weighed. Additionally, select species were completely sorted from the catch and weighed, including Pacific halibut (*Hippoglossus stenolepis*; not weighed as per IPHC protocol), Greenland turbot (*Reinhardtius hippoglossoides*), rockfish (*Sebastes* spp.), Atka mackerel (*Pleurogrammus monopterygius*), prowfish (*Zaprora silenus*), Bering wolffish (*Anarhichas orientalis*), Pacific cod (*Gadus macrocephalus*), skates, some sculpins, sharks, and any other large, rare species that were not represented in the subsample.

For all hauls, subsampling for length measurements aimed to cover the species' size range, with a target of 100 specimens per species. For each fish in a length subsample, sex was determined and then the length (fork or total, depending on the species) was measured to the nearest centimeter.

Pacific halibut are sampled as per agreement with the International Pacific Halibut Commission (IPHC). Up to 100 Pacific halibut on the FV *Alaska Knight* were sampled for length, weight, sex, fin clip, and age (otoliths) by an IPHC sampler. Pacific halibut weights were estimated using an IPHC-established length-weight regression (Webster and Stewart, 2023).

Sagittal otoliths were collected from nine species in the eastern Bering Sea and five species in the northern Bering Sea (Table **2**). Otolith samples were collected following a random-by-haul sampling method. Otoliths were preserved in a glycerol-thymol solution for age determination by the Age and Growth Program of the AFSC's Resource Ecology and Fisheries Management (REFM) Division[6]. Weight, length, and sex were collected for each fish from which otoliths were taken. For walleye pollock, age structure sampling effort was further divided into low-density and high-density regions based on historical population densities and an isobath of approximately 70 m.

Stomachs were collected from nine fish species and were preserved in 10% formalin for later analysis by the Food Habits Lab of the AFSC's REFM Division[7] (Table **3**). Arrowtooth flounder and Kamchatka flounder (*Atheresthes* spp.) stomachs were collected together because they occupy a similar trophic niche in the Bering Sea (Yang and Livingston, 1986).

[6] https://www.fisheries.noaa.gov/alaska/science-data/age-and-growth-research-alaska
[7] https://www.fisheries.noaa.gov/alaska/science-data/resource-ecology-and-ecosystem-modeling

Table 2. -- Otolith collection types and target counts during the 2025 eastern Bering Sea and northern Bering Sea surveys.

Common name	Target collection number per haul
Eastern Bering Sea	
random-by-haul	
Alaska Plaice	2 individuals.
Arrowtooth flounder	3 individuals. Collect none when <10.
Flathead sole	3 individuals. Collect none when <10.
Greenland turbot	Collect all individuals encountered
Kamchatka flounder	10 individuals. Collect none when <4.
Northern rock sole	4 individuals. Collect none when <10.
Pacific cod	4 adults and 1 juvenile. Collect all when <4. Collect juveniles only when the juvenile code is used for lengthing.
Walleye pollock	3 adults and 1 juvenile in low-density area, and 5 adults and 1 juvenile in high-density area. Collect none when <20. Collect juveniles only when the juvenile code is used for lengthing.
Yellowfin sole	3 individuals. Collect none when <10.
Northern Bering Sea	
random-by-haul	
Alaska Plaice	2 individuals.
Arrowtooth flounder	3 individuals. Collect none when <10.
Pacific cod	4 adults and 1 juvenile. Collect all when <4. Collect juveniles only when the juvenile code is used for lengthing.
Walleye pollock	3 adults and 1 juvenile. Collect juveniles only when the juvenile code is used for lengthing.
Yellowfin sole	3 individuals.

Table 3. -- Stomach collection target size category bins (cm) used to collect each fish species during the 2025 eastern Bering Sea and northern Bering Sea survey.

	Target collection size categories per haul	
Common name	**Eastern Bering Sea**	**Northern Bering Sea**
Arctic Cod	all sizes	-
Arrowtooth flounder and Kamchatka flounder	1-29; 30-49; 50+ cm	1-29; 30-49; 50+ cm
Flathead sole	1-19; 20-29; 30+ cm	-
Great Sculpin	1-49; 50+ cm	1-49; 50+ cm
Northern rock sole	all sizes	-
Pacific Halibut	1-49; 50-69; 70+ cm only collected on the FV *Alaska Knight*	1-49; 50-69; 70+ cm only collected on the FV *Alaska Knight*
Pacific cod	1-29; 30-44; 45-59, 60+ cm	1-29; 30-44; 45-59, 60+ cm
Saffron Cod	all sizes	all sizes
Walleye pollock	1-24; 25-39; 40-54; 55+ cm	1-24; 25-39; 40-54; 55+ cm

Catch Data Analysis

The standard sampling procedures are described in detail by Wakabayashi et al. (1985) and Stauffer (2004). Some species were grouped by family for catch data analysis because of their limited commercial value or an inability to identify to lower taxonomic level while in the field.

Mean catch per unit effort (CPUE) for each species was calculated in kilograms per square kilometer (kg/km^2) and number of fish per square kilometer (no/km^2) for each stratum (Alverson and Pereyra, 1969; Lauth and Kotwicki, 2014). Area swept (km^2) was computed as the linear distance towed, multiplied by the mean net width (m; Alverson and Pereyra (1969); Lauth and Kotwicki (2014)). Mean CPUE was calculated for individual strata and summed proportionally for the overall survey area. Design-based biomass (t) and population (count) estimates were calculated for each stratum by multiplying the stratum mean CPUE by the stratum area. Stratum estimates were then summed for total survey area estimates.

For size composition estimates, the proportion of fish at each centimeter length interval (from subsamples at each station), weighted by CPUE (no/km^2), was expanded to the stratum population. Stratum abundance-at-length estimates were summed for the total estimated size composition for the survey area.

Age estimates were obtained from otolith samples by the AFSC's Age and Growth Program for all fish except for Pacific halibut, which were processed by the IPHC. The most current information about age, growth, and population analyses are presented in the 2025 NPFMC Stock Assessment and Fishery Evaluation Report for the Groundfish Resources of the Bering Sea/Aleutian Islands Region[8].

Scientific Collections and Research Projects

Twenty-seven scientific collections and research projects were conducted on the 2025 eastern and northern Bering Sea surveys. Projects were selected through an annual request for proposals in January 2025 (Table **4**). Data for these projects were collected at sea and disseminated to the requesting principal investigator(s). For details about a project or collection, please contact the principal investigator(s) identified in Table **4**.

[8] https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessments-and-fishery-evaluation

Table 4. -- Non-core scientific collections and research projects undertaken during the 2025 eastern Bering Sea and northern Bering Sea survey.

Project title	Principal investigator	Agency[1]
Eastern and northern Bering Sea		
Whole Bristol Bay red king crab genome sequencing to inform fisheries management	Kristen Gruenthal, Wes Larson, Mike Litzow, Erin Fedewa, Leah Zacher	ADF&G
Population genetics and age structure sampling of Pacific sleeper shark and salmon shark	Cindy Tribuzio	AFSC-ABL
Stable Isoscapes mapping	Todd Miller, Cynthia Yeung	AFSC-ABL & AFSC-RACE-GAP
Observer crab training specimen collection	Greg Stephens	AFSC-FMA
Observer fish training specimen collection	Jenny Gardner	AFSC-FMA
Prowfish collection and stomach scans	Melanie Paquin	AFSC-RACE
Visual maturity collection of groundfish	Susanne McDermott, Emily Slesinger, Bianca Prohaska, Nicole Charierre, Christina Conrath	AFSC-RACE
Juvenile yellowfin sole essential fish habitat	Cynthia Yeung	AFSC-RACE-GAP
Snow crab condition	Erin Fedewa, Louise Copeman	AFSC-RACE-GAP
Outreach event specimen collection	Nicole Charriere	AFSC-RACE-GAP
Molecular ecology DNA collection	Emily Markowitz, Zack Gold	AFSC-RACE-GAP & PMEL
Arctic cod and saffron cod age and growth	Esther Goldstein, Beth Matta, Kali Stone, Margaret Siple, Sean Rohan	AFSC-REFM
Spatial variation in body condition of juvenile Pacific cod	Steven Barbeaux	AFSC-REFM
IPHC halibut sampling	Kayla Ualesi	IPHC
US EEZ Marine Fish DNA Reference Library	Matthew Girard	NMNH
Harmful algal bloom toxins in Alaskan food webs	Kathi Lefebvre	NWFSC
Understanding movements and trophic ecology of lamprey in Alaskan marine waters	Laurie Weitkamp	NWFSC
Vouchered specimen collection	Krista Nichols	NWFSC & UW Ichth. Collection
Gastropod/chiton distribution and taxonomy collection	Roger Clark	SBMNH
Pacific sand lance collection for comparative genomics	Hannes Baumann	UConn
Snow crab bitter crab syndrome blood sampling	Hamish Small, Erin Fedewa	VIMS & AFSC-RACE-SAP
Eastern Bering Sea		
Pollock collection for observer program	Adriana Myers	AFSC-FMA
Developing training resources for wire marking and ES80 calibration	Christina Conrath, Christopher Anderson, Meg Burns, Nate Raring	AFSC-RACE
Female red king crab tagging	Leah Zacher	AFSC-RACE-SAP
Live snow crab for ocean acidification research	W. Chris Long	AFSC-RACE-SAP
Crab for pot selectivity to assess bycatch reduction	Noëlle Yochum, Ben Daly	Trident Seafoods & ADF&G
Northern Bering Sea		
Benthic grab samples from the St. Lawrence Island examining spectacled eider prey availability	Daniel Rizzolo, Jim Lovvorn	USFWS & UofWyo

[1]AFSC-ABL - Alaska Fisheries Science Center's Auke Bay Laboratories; ADF&G - Alaska Department of Fish & Game; AFSC-FMA - Alaska Fisheries Science Center's Fisheries Monitoring & Assessment Division; AFSC-RACE-GAP - Alaska Fisheries Science Center's Groundfish Assessment Program; IPHC - International Pacific Halibut Commission; NWFSC - Northwest Fisheries Science Center; PMEL - Pacific Marine Environmental Laboratory; AFSC-RACE - Alaska Fisheries Science Center's Resource Assessment & Conservation Engineering Division; AFSC-REFM - Alaska Fisheries Science Center's Resource Ecology & Fisheries Management Division; AFSC-RACE-SAP - Alaska Fisheries Science Center's Shellfish Assessment Program; SBMNH - Santa Barbara Museum of Natural History; UofWyo - University of Wyoming; UW Ichth. Collection - University of Washington Ichthyology Collection; VIMS - Virginia Institute of Marine Science; USFWS - US Fish and Wildlife Service; UConn - University of Connecticut; NMNH - National Museum of Natural History, Smithsonian Institution

Results and Discussion

Ocean Temperatures and the Cold Pool

Bottom (Fig. **6**) and surface (Fig. **7**) water temperatures varied spatially and among years due to variation in atmospheric and oceanic conditions that influence temperature patterns in the eastern Bering Sea (Stabeno, Farley, et al., 2012). The warmest bottom temperatures were typically observed in the inner domain (< 50 m; Fig. **1**) along the Alaskan mainland where the water column is fully mixed during summer, which allows solar heat transfer throughout the water column (Coachman, 1986). The coldest bottom temperatures typically occurred in the middle domain (50–100 m), where strong two-layer stratification during the summer inhibits heat transfer to the bottom layer, which allows a seasonal 'cold pool' to persist from spring through the end of fall. Surface temperatures generally increased as the survey progressed westward from the interior of Bristol Bay to the northwestern outer shelf and northward into Norton Sound. These surface temperature patterns reflect seasonal warming that occurs over the course of the survey (Cokelet, 2016; Rohan et al., 2022).

The mean bottom temperature on the eastern Bering Sea was 3.0°C in 2025, which was 0.5°C warmer than the time series average from 1982 to 2025 and mean bottom temperature in 2024 (both 2.5°C; Fig. **8**). Although temperatures increased from 2024 to 2025, the 2025 mean bottom temperature was still classified as near-average (within one standard deviation of the time series mean). Near-average bottom temperatures have been observed for the last four surveys from 2022 to 2025. Over the history of the eastern Bering Sea survey (1982–2025), annual mean summer bottom temperatures have ranged from 0.7°C to 4.4°C, and surface temperatures have ranged from 3.9°C to 9.5°C. The 2025 mean eastern Bering Sea surface temperature (6.1°C) was colder than the times-series average surface temperature (6.7°C), and warmer than the mean surface temperature in 2024 (5.8°C).

The cold pool area is defined as the extent of the eastern Bering Sea survey area with bottom temperatures less than or equal to 2°C (Rohan et al., 2022). The size and location of the cold pool is primarily influenced by the extent of seasonal sea ice cover during the preceding winter and spring and the timing of sea ice retreat during spring (Stabeno and Bell, 2019). The cold pool is primarily found in the middle domain (50–100 m), which is fully mixed during the winter and has two-layer stratification during the summer. Years with extensive sea ice that persists into spring have a larger cold pool that can extend into Bristol Bay and as far south as the Alaska Peninsula. When the sea ice extent is smaller, the cold pool is limited to the northern edge of the eastern Bering Sea survey area. The cold pool area is strongly correlated ($r^2 = 0.94$) with mean bottom temperature on the shelf.

The cold pool covered 23.0% (113,525 km^2) of the eastern Bering Sea survey area in 2025 and was primarily located north of 57°N (Figs. **6** and **9**). The cold pool was 27.7% (43,425 km^2) smaller than in 2024 and was 36.6% smaller than the time series mean (179,000 km^2). The extent of isotherms for bottom temperatures of ≤ 0°C (30,275 km^2) and ≤ -1°C (8,350 km^2) were 6.0% and 19.8% larger than in 2024. The extents of the ≤ 0°C and ≤ -1°C isotherms were similar to those observed in warm years. During the 43-year time series, the cold pool area has ranged from a minimum of 6,150 km^2 in 2018 to a maximum of 385,975 km^2 in 1999, comprising 1.2% to 78.2% of the total eastern Bering Sea survey area.

Interannual variation in bottom temperature and cold pool area influences the distribution (Kotwicki and Lauth, 2013; Stevenson et al., 2022; Stevenson and Lauth, 2019; Thorson et al., 2020), migration (Nichol et al., 2019), recruitment (Cooper et al., 2020), and biological productivity (Grüss et al., 2021) of fishes and crabs in the Bering Sea. The size of the cold pool also affects the availability of demersal species to bottom-trawl surveys by mediating migration between the eastern Bering Sea shelf, northern Bering Sea, western Bering Sea, and the deeper waters of the continental slope (O'Leary et al., 2022;

Zador et al., 2011). Subarctic fish species tend to avoid areas with bottom temperatures below 0°C or 1°C, depending on the species (Baker, 2021; Eisner et al., 2020), and cold temperatures may provide a habitat refuge for cold-adapted species (Fedewa et al., 2020).

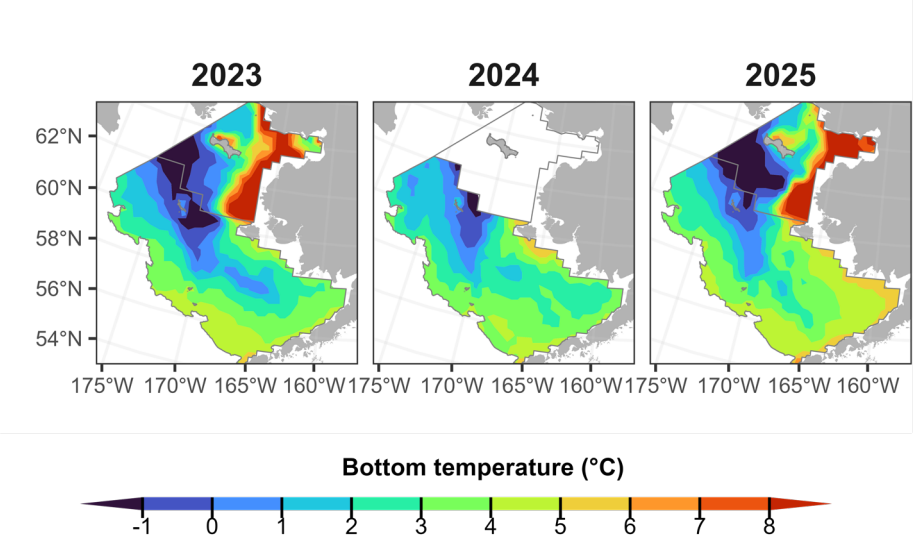

Figure 6. -- Bottom temperatures (°C) during the 2023-2025 eastern and northern Bering Sea surveys.

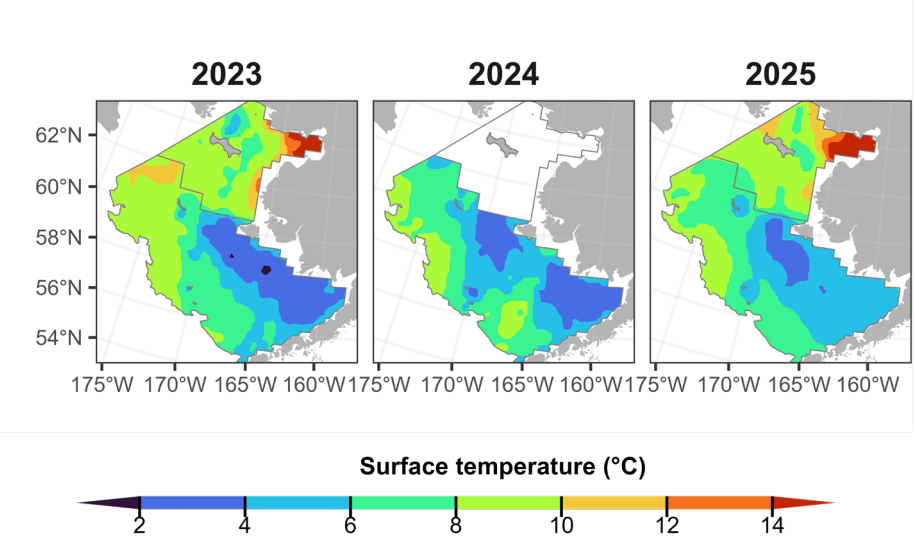

Figure 7. -- Surface temperatures (°C) during the 2023-2025 eastern and northern Bering Sea surveys.

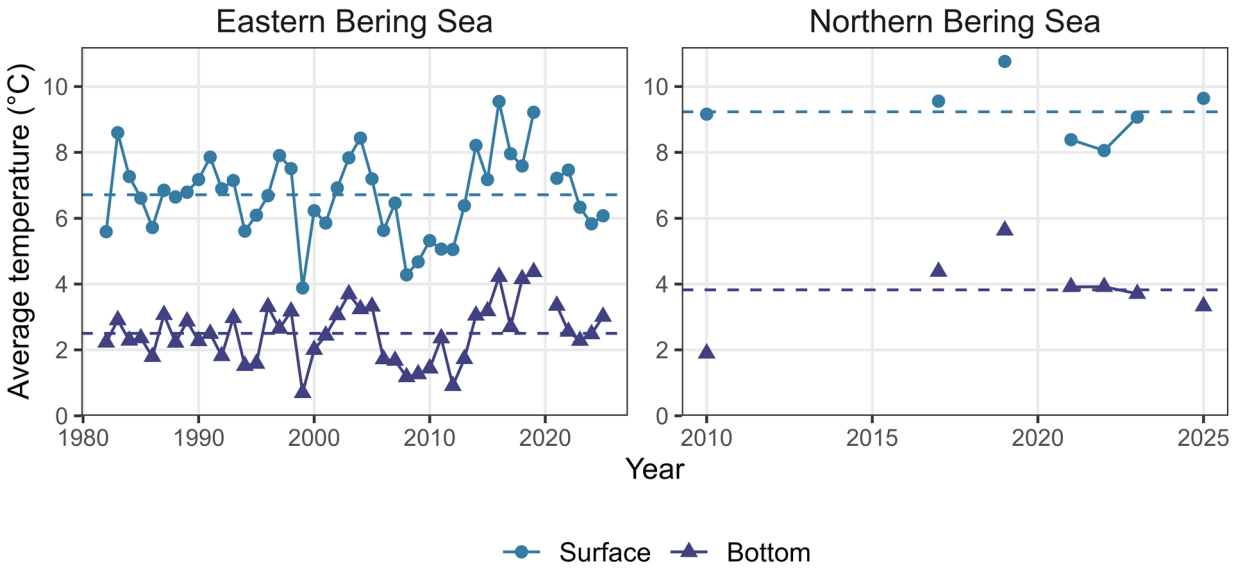

Figure 8. -- Average summer surface and bottom (points and solid lines), and time series average (dashed lines) surface and bottom temperatures (°C) for the eastern Bering Sea shelf (left) and northern Bering Sea (right), based on data collected during standardized summer surveys.

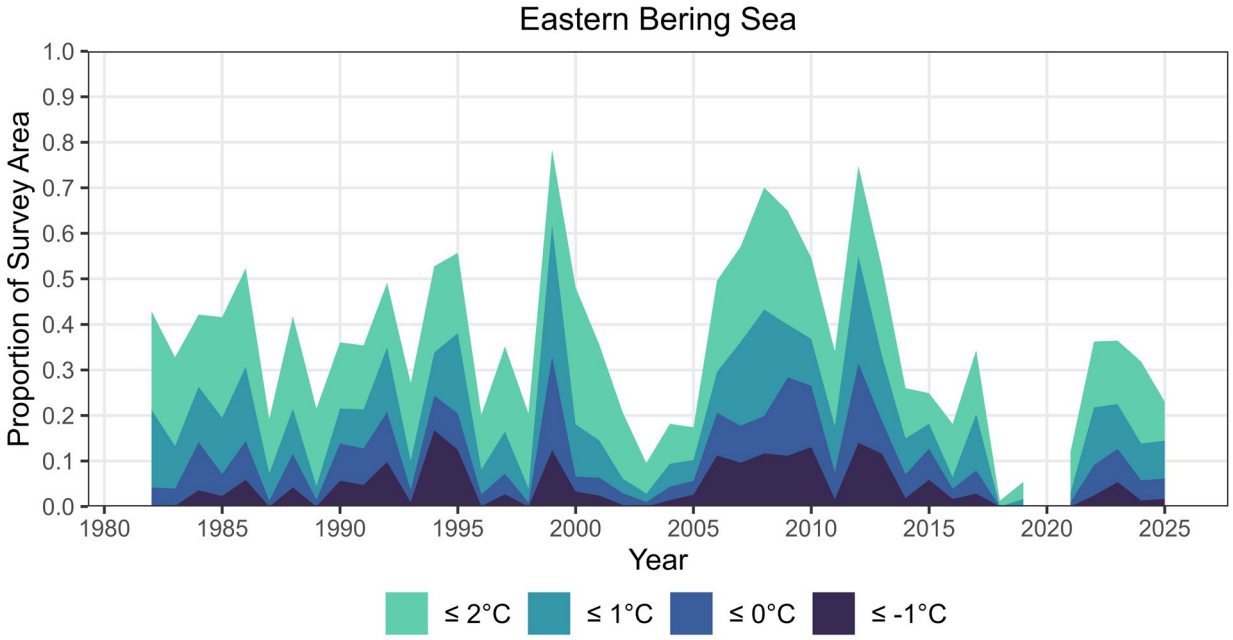

Figure 9. -- Annual extent of the summer cold pool, based on observations from the eastern Bering Sea survey. The extent of the cold pool is shown as a percentage of the total survey area. Note that the northern Bering Sea is not included here. Shading denotes near-bottom temperatures ≤ 2°C, ≤ 1°C, ≤ 0°C, and ≤ -1°C.

Survey Data and Specimen Collections

Survey teams collected 124,170 lengths; 6,532 otolith age structures; 4,408 stomach samples; and 2,484 maturity samples during the 2025 eastern Bering Sea survey and 37,237 lengths; 1,348 otolith age structures; 1,261 stomach samples; and 593 maturity samples during the northern Bering Sea survey (Tables **5** and **6**). Other scientific collections are listed in Table **4**.

Table 5. -- Biological data collected during the 2025 eastern Bering Sea survey.

Eastern Bering Sea	Lengths	Otolith age structures	Stomach samples	Maturity samples
Alaska plaice	7,592	370	-	-
Alaska skate	3,427	-	-	-
Aleutian skate	38	-	-	-
Arctic cod	60	-	4	-
Arrowtooth flounder	7,460	440	509	-
Arrowtooth flounder and Kamchatka flounder	46	-	-	-
Atka mackerel	7	-	-	-
Bering flounder	1,871	-	-	-
Bering skate	265	-	-	-
Big skate	41	-	-	-
Bigmouth sculpin	114	-	-	-
Blackspotted rockfish	7	-	-	-
Butter sole	368	-	-	-
Butterfly sculpin	17	-	-	-
Dover sole	7	-	-	-
Dusky rockfish	6	-	-	-
Flathead sole	14,530	647	656	-
Great sculpin	651	-	241	-
Greenland turbot	50	43	-	-
Hybrid starry flounder X Alaska plaice	1	-	-	-
Kamchatka flounder	1,384	594	102	-
Longhead dab	864	-	-	-
Magistrate armhook squid	4	-	-	-
Mud skate	7	-	-	-
Northern rock sole	19,270	833	-	-
Northern rockfish	41	-	-	-
Pacific cod	11,249	1,403	1,047	1,014
Pacific halibut	2,505	-	446	-
Pacific ocean perch	346	-	-	-
Pacific tomcod	2	-	-	-
Plain sculpin	2,515	-	-	-
Prowfish	1	-	-	-
Rex sole	992	-	-	-
Rougheye rockfish	8	-	-	-
Sablefish	51	-	-	-
Saffron cod	130	-	11	-
Sakhalin sole	16	-	-	-
Sand sole	2	-	-	-
Shorthorn sculpin	37	-	-	-
Skate unid.	16	-	-	-
Southern rock sole	220	-	-	-
Starry flounder	616	-	-	-
Walleye pollock	30,862	1,639	1,392	1,093
Whitebrow skate	1	-	-	-
Yellow Irish lord	405	-	-	-
Yellowfin sole	16,068	563	-	377
Total	**124,170**	**6,532**	**4,408**	**2,484**

Table 6. -- Biological data collected during the 2025 northern Bering Sea survey.

Northern Bering Sea	Lengths	Otolith age structures	Stomach samples	Maturity samples
Alaska plaice	6,646	201	-	-
Alaska skate	381	-	-	-
Arctic cod	158	-	52	-
Bering flounder	2,591	-	-	-
Butterfly sculpin	11	-	-	-
Chum salmon	1	-	-	-
Flathead sole	4	2	-	-
Great sculpin	286	-	81	-
Greenland turbot	1	-	-	-
Irish lord	1	-	-	-
Longhead dab	345	-	-	-
Northern rock sole	1,815	-	-	-
Pacific cod	1,265	319	292	172
Pacific halibut	233	-	77	-
Plain sculpin	1,240	-	-	-
Saffron cod	2,281	-	186	-
Sakhalin sole	1,176	-	-	-
Shorthorn sculpin	423	-	-	-
Starry flounder	762	-	-	-
Walleye pollock	8,311	452	573	247
Yellowfin sole	9,306	374	-	174
Total	**37,237**	**1,348**	**1,261**	**593**

Species Composition

In the eastern Bering Sea, 101 fish taxa representing 21 families and 57 genera were identified (Appendix Table A **116**). Of these 101 taxa, 88 were identified to species level, while the remaining taxa were identified to the lowest taxonomic level possible (most often genus) by field scientists. There were 234 different invertebrate taxa representing nine phyla identified on the 2025 eastern Bering Sea survey, of which 133 taxa were identified to species level (Appendix Tables A **117**). Similarly, in the northern Bering Sea, 75 fish taxa representing 18 families and 46 genera were identified (Appendix Table B **118**). Of these 75 taxa, 68 were identified to species level, while the remaining taxa were identified to the lowest taxonomic level possible (most often genus) by field scientists. There were 158 different invertebrate taxa representing 10 phyla identified on the 2025 northern Bering Sea survey, of which 92 taxa were identified to species level (Appendix Tables B **119**). The lack of species-level identifications among invertebrates was due to a variety of factors that are outlined in Stevenson and Hoff (2009) and Stevenson et al. (2016).

Of the 101 fish species found in the eastern Bering Sea, 44 did not occur in the northern Bering Sea (Table **7**). Of the 75 fish species encountered in the northern Bering Sea, 23 did not occur in the eastern Bering Sea (Table **7**). In 2025, seven flatfish species were encountered in the eastern Bering Sea but not in the northern Bering Sea: Dover sole (*Microstomus pacificus*), Kamchatka flounder (*Atheresthes evermanni*), arrowtooth flounder (*Atheresthes stomias*), butter sole (*Isopsetta isolepis*), rex sole (*Glyptocephalus zachirus*), sand sole (*Psettichthys melanostictus*), and southern rock sole (*Lepidopsetta bilineata*); and one flatfish species was encountered in the northern Bering Sea but not in the eastern Bering Sea: Arctic flounder (*Liopsetta glacialis*; Table **7**).

Table 7. -- List of fish taxa encountered only in the eastern Bering Sea or northern Bering Sea in 2025 survey catches.

Only Encountered in Eastern Bering Sea **Common name *(scientific name)***	**Only Encountered in Northern Bering Sea** **Common name *(scientific name)***
Aleutian alligatorfish (*Aspidophoroides monopterygius*)	Arctic alligatorfish (*Aspidophoroides olrikii*)
Aleutian skate (*Bathyraja aleutica*)	Arctic flounder (*Liopsetta glacialis*)
Atka mackerel (*Pleurogrammus monopterygius*)	Arctic sand lance (*Ammodytes hexapterus*)
Bering skate (*Bathyraja interrupta*)	Arctic shanny (*Stichaeus punctatus*)
Dover sole (*Microstomus pacificus*)	Arctic staghorn sculpin (*Gymnocanthus tricuspis*)
Kamchatka flounder (*Atheresthes evermanni*)	Pacific spiny lumpsucker (*Eumicrotremus orbis*)
Pacific ocean perch (*Sebastes alutus*)	Antlered sculpin (*Enophrys diceraus*)
Pacific sand lance (*Ammodytes personatus*)	Bearded warbonnet (*Chirolophis snyderi*)
Pacific sandfish (*Trichodon trichodon*)	Belligerent sculpin (*Megalocottus platycephalus*)
Pacific tomcod (*Microgadus proximus*)	Bicolor eelpout (*Lycodes akuugun*)
Armorhead sculpin (*Gymnocanthus galeatus*)	Chum salmon (*Oncorhynchus keta*)
Arrowtooth flounder (*Atheresthes stomias*)	Eyeshade sculpin (*Nautichthys pribilovius*)
Big skate (*Beringraja binoculata*)	Fourhorn sculpin (*Myoxocephalus quadricornis*)
Bigeye poacher (*Bathyagonus pentacanthus*)	Fourline snakeblenny (*Eumesogrammus praecisus*)
Bigmouth sculpin (*Hemitripterus bolini*)	Hairhead sculpin (*Trichocottus brashnikovi*)
Blackspotted rockfish (*Sebastes melanostictus*)	Hamecon (*Artediellus scaber*)
Blotched snailfish (*Crystallichthys cyclospilus*)	Leister sculpin (*Enophrys lucasi*)
Butter sole (*Isopsetta isolepis*)	Nebulous snailfish (*Liparis bathyarcticus*)
Darkfin sculpin (*Malacocottus zonurus*)	Ninespine stickleback (*Pungitius pungitius*)
Dusky rockfish (*Sebastes variabilis*)	Pimpled lumpsucker (*Eumicrotremus andriashevi*)
Eulachon (*Thaleichthys pacificus*)	Polar eelpout (*Lycodes turneri*)
Fish doctor (*Gymnelus viridis*)	Saddled eelpout (*Lycodes mucosus*)
Gray starsnout (*Bathyagonus alascanus*)	Tubenose poacher (*Pallasina barbata*)
Hookhorn sculpin (*Artediellus pacificus*)	
Longnose poacher (*Sarritor leptorhynchus*)	
Mud skate (*Bathyraja taranetzi*)	
Northern rockfish (*Sebastes polyspinis*)	
Northern sculpin (*Icelinus borealis*)	
Prowfish (*Zaprora silenus*)	
Rex sole (*Glyptocephalus zachirus*)	
Rougheye rockfish (*Sebastes aleutianus*)	
Roughspine sculpin (*Triglops macellus*)	
Sablefish (*Anoplopoma fimbria*)	
Sand sole (*Psettichthys melanostictus*)	
Sawback poacher (*Sarritor frenatus*)	
Shortfin eelpout (*Lycodes brevipes*)	
Southern rock sole (*Lepidopsetta bilineata*)	
Spectacled sculpin (*Triglops scepticus*)	
Spinycheek starsnout (*Bathyagonus infraspinatus*)	
Spinyhead sculpin (*Dasycottus setiger*)	
Thorny sculpin (*Icelus spiniger*)	
Whitebarred prickleback (*Poroclinus rothrocki*)	
Whitebrow skate (*Bathyraja minispinosa*)	
Yellow Irish lord (*Hemilepidotus jordani*)	

Biomass, Abundance, and Catch per Unit Effort

The total biomass of demersal organisms in the eastern Bering Sea was estimated at 13.8 million t and total biomass of demersal organisms in the northern Bering Sea was estimated at 2.4 million t. In the eastern Bering Sea, the proportion of fishes (73%; Table **8**) was higher than invertebrates (27%; Table **9**) and in the northern Bering Sea, the proportion of fishes (56%; Table **10**) was also higher than invertebrates (44%; Table **11**). The lower relative fish biomass in the northern Bering Sea than in the eastern Bering Sea is consistent with results of a broader analysis of all survey years presented by Stevenson and Lauth (2012), which showed decreasing fish biomass with increasing latitude on the eastern Bering Sea continental shelf. Pleuronectidae (flatfishes) and Gadidae (cods) were the fish families with highest biomass in both the eastern Bering Sea (48.6% and 43.8% of the total fish biomass) and the northern Bering Sea (44% and 49.2% of the total fish biomass; Tables **8** and **10**). In the eastern Bering Sea, the family Gadidae, by biomass, was primarily comprised of walleye pollock (*Gadus chalcogrammus*, 38.1%) and Pacific cod (*Gadus macrocephalus*, 5.7%); and the family Pleuronectidae was primarily comprised of yellowfin sole (*Limanda aspera*, 15.4%) and northern rock sole (*Lepidopsetta polyxystra*, 14.8%). In the northern Bering Sea, the family Gadidae, by biomass, was primarily comprised of walleye pollock (*Gadus chalcogrammus*, 40.1%) and Pacific cod (*Gadus macrocephalus*, 5.1%); and the family Pleuronectidae was primarily comprised of yellowfin sole (*Limanda aspera*, 22.9%) and Alaska plaice (*Pleuronectes quadrituberculatus*, 15.1%).

The total estimated biomass in the eastern Bering Sea decreased from 15 million t in 2024 to 13.8 million t in 2025. Large increases in eastern Bering Sea biomass were observed for plain sculpin (81.6%), worms (63.6%), snow crab (52.2%), sea urchins (52.0%), and eelpouts (32.5%; Table **12**). Large decreases in eastern Bering Sea biomass were observed for Pacific herring (-70.1%), snailfishes (-52.2%), walleye pollock (-30.1%), great sculpin (-30.1%), and arrowtooth flounder (-15.5%; Table **12**). The total estimated biomass in the northern Bering Sea decreased from 2.8 million t in 2023 to 2.4 million t in 2025. Large increases in northern Bering Sea biomass were observed for snailfishes (223.8%), Pacific herring (203.6%), great sculpin (100.7%), eelpouts (83.5%), and plain sculpin (60.0%; Table **13**). Large decreases in northern Bering Sea biomass were observed for worms (-82.1%), prickleback (-69.6%), sea urchins (-48.3%), starry flounder (-44.8%), and clams (-43.6%; Table **13**). While exhaustive efforts are made to standardize catch processing and data collection, variation in catchability may contribute to some of the differences in biomass between years (Kotwicki and Ono, 2019).

The ten most abundant fish taxa (from catch per unit effort by weight) in the eastern Bering Sea accounted for 14.4% of total mean combined fish and invertebrate CPUE and 20.7% of total mean fish CPUE. The ten most numerically abundant fish taxa in the northern Bering Sea accounted for 11.0% of total mean combined fish and invertebrate CPUE and 21.2% of total mean fish CPUE.

Table 8. -- Total taxon biomass estimates (t), ± 95% confidence limits (CL), and biomass estimates by stratum for fish taxa collected during the 2025 eastern Bering Sea survey. The 'Proportion' column represents the estimated taxon biomass divided by the total fish estimated biomass (10,043,647 t).

Taxon		Estimated fish biomass across survey		Estimated fish biomass by stratum											
		Biomass ± 95% CL	Proportion	10	20	31	32	41	42	43	50	61	62	82	90
Agonidae (poachers)		28,515 ± 7,836	0.0028	4,382	3,154	6,404	2,700	2,938	7,741	695	346	146	3	4	1
Cottidae (sculpins)		131,234 ± 25,037	0.0131	36,224	12,392	15,313	11,173	7,758	9,346	6,036	1,728	24,360	1,832	1,087	3,985
Gadidae (cods)	Pacific cod	570,986 ± 61,368	0.0569	69,575	35,351	139,073	10,922	83,046	50,592	27,393	25,411	97,142	11,254	11,617	9,610
	walleye pollock	3,825,362 ± 768,406	0.3809	120,112	258,031	269,852	54,977	574,377	145,986	196,213	97,913	1,868,464	69,685	93,100	76,654
	other	2,784 ± 4,828	0.0003	2,688	22	3	0	40	0	6	0	2	0	22	0
	total	4,399,131 ± 782,906	0.4380	192,375	293,403	408,927	65,899	657,463	196,578	223,612	123,324	1,965,607	80,939	104,739	86,264
Hexagrammidae (greenlings)		346 ± 258	<0.0001	110	0	15	44	0	0	0	62	114	0	0	0
Liparidae (snailfishes)		1,851 ± 1,364	0.0002	1	62	2	0	425	1	824	0	203	36	170	127
Osmeridae (smelts)		943 ± 387	<0.0001	446	25	107	0	11	0	2	342	8	0	1	0
Pleuronectidae (flatfishes)	Alaska plaice	333,810 ± 72,477	0.0332	96,761	67,019	63,004	1,530	88,040	10,004	3,125	0	1,195	0	3,045	87
	Bering flounder	12,315 ± 5,461	0.0012	0	118	0	0	2,207	2	287	0	87	252	7,521	1,841
	Kamchatka flounder	33,231 ± 9,024	0.0033	496	0	4,236	767	1,813	1,421	1,189	9,529	12,176	324	102	1,179
	Pacific halibut	133,705 ± 17,796	0.0133	44,122	14,564	36,684	4,072	6,632	7,516	2,943	5,647	10,920	86	194	323
	arrowtooth flounder	491,918 ± 102,016	0.0490	4,360	0	173,349	19,421	11,639	21,495	1,814	148,889	108,179	2,019	0	753
	flathead sole	714,106 ± 146,535	0.0711	22,804	852	170,733	17,209	31,331	53,915	837	45,585	359,797	585	3,786	6,671
	northern rock sole	1,490,955 ± 243,238	0.1484	750,157	136,119	367,002	27,054	47,992	142,950	14,530	974	2,467	161	1,431	119
	yellowfin sole	1,548,142 ± 236,005	0.1541	837,464	156,700	394,458	5,461	84,937	65,652	2,886	0	0	0	575	9
	other	118,701 ± 36,486	0.0118	58,449	3,810	21,580	0	51	101	0	20,994	13,706	0	10	0
	total	4,882,541 ± 440,234	0.4861	1,814,613	379,184	1,231,045	75,515	275,312	303,056	27,704	231,619	512,052	3,871	16,814	11,756
Rajidae (skates)	Alaska skate	399,887 ± 40,029	0.0398	52,232	32,023	59,404	13,628	42,211	32,002	6,735	48,077	91,345	5,095	4,938	12,195
	other	60,421 ± 27,772	0.0060	4,156	1	24,107	151	435	906	1	8,978	21,192	0	0	492
	total	460,308 ± 47,035	0.0458	56,388	32,025	83,511	13,779	42,646	32,908	6,737	57,055	112,538	5,095	4,938	12,688
Scorpaenidae (rockfishes)	Pacific ocean perch	11,741 ± 9,293	0.0012	0	0	0	0	0	0	0	3,943	7,798	0	0	0
	other	2,219 ± 2,602	0.0002	0	0	0	0	0	0	0	1,814	405	0	0	0
	total	13,960 ± 9,799	0.0014	0	0	0	0	0	0	0	5,757	8,203	0	0	0
Stichaeidae (pricklebacks)		16 ± 12	<0.0001	4	0	5	0	0	2	0	0	5	0	0	0
Zoarcidae (eelpouts)		95,521 ± 20,137	0.0095	51	19	7,990	110	7,551	2,345	3,608	130	49,182	5,080	5,573	13,882
Other fish		166,174 ± 28,225	0.0165	51,080	13,854	20,237	11,223	9,467	9,604	6,315	2,966	31,959	2,352	1,268	5,848
Total fish		**10,043,647 ± 967,442**	**1.0000**	**2,119,449**	**721,725**	**1,758,244**	**169,270**	**995,143**	**552,236**	**269,404**	**421,602**	**2,676,493**	**96,933**	**133,356**	**129,793**

Table 9. -- Total taxon biomass estimates (t), ± 95% confidence limits (CL), and biomass estimates by stratum for invertebrate taxa collected during the 2025 eastern Bering Sea survey. The 'Proportion' column represents the estimated taxon biomass divided by the total invertebrate estimated biomass (3,726,178 t).

Taxon		Estimated invertebrate biomass across survey		Estimated invertebrate biomass by stratum											
		Biomass ± 95% CL	Proportion	10	20	31	32	41	42	43	50	61	62	82	90
Ascidiacea		245,784 ± 242,961	0.0660	7,585	2,712	39,101	6,650	24,187	161,926	2,921	0	0	0	702	0
Coelenterata		213,424 ± 42,532	0.0573	16,372	4,453	54,669	8,202	23,003	40,934	5,688	17,969	20,140	2,612	14,019	5,363
Crustacea	shrimps	7,434 ± 2,905	0.0020	42	10	77	0	298	92	359	701	4,553	873	16	413
	other	1,275,918 ± 141,488	0.3424	53,983	13,084	271,607	36,958	330,980	252,026	79,920	35,554	142,211	9,816	30,042	19,737
	total	1,283,352 ± 141,610	0.3444	54,025	13,095	271,684	36,958	331,278	252,118	80,279	36,255	146,764	10,689	30,058	20,150
Echinodermata	Asteroidea (sea stars)	1,051,915 ± 156,082	0.2823	321,896	138,036	190,339	11,859	72,597	39,250	7,947	1,923	212,345	6,466	4,938	44,319
	Echinoidea (sea urchins)	53,637 ± 41,526	0.0144	39	0	12,682	137	254	20,079	1,640	10,743	8,034	29	0	0
	Holothuroidea (sea cucumbers)	11,254 ± 9,598	0.0030	953	0	3,055	4,167	3	2,868	13	83	113	0	0	0
	Ophiuroidea (brittle stars)	385,191 ± 134,117	0.1034	18,718	2,866	75,859	12,860	23,333	43,076	16,526	613	185,820	754	2,938	1,827
	total	1,501,997 ± 209,421	0.4031	341,606	140,902	281,934	29,024	96,187	105,273	26,126	13,362	406,313	7,249	7,876	46,146
Mollusca	Gastropoda (snails)	431,047 ± 90,101	0.1157	30,158	11,077	103,090	4,505	58,327	49,486	12,938	8,125	117,420	23,183	1,964	10,774
	Pelecypoda (bivalves)	16,698 ± 7,961	0.0045	1,327	570	6,661	81	4,233	451	142	1,816	1,317	2	14	85
	octopuses	4,178 ± 3,010	0.0011	663	0	564	1,092	0	0	0	264	1,440	0	10	145
	squids	181 ± 174	<0.0001	0	0	0	0	0	0	0	122	60	0	0	0
	total	452,105 ± 91,709	0.1213	32,148	11,647	110,316	5,678	62,560	49,937	13,080	10,326	120,237	23,184	1,988	11,004
Porifera (sponges)		11,074 ± 9,938	0.0030	133	122	10,032	388	23	72	0	107	177	20	0	0
Other invertebrates		18,442 ± 11,629	0.0049	285	19	1,538	29	409	188	57	130	15,558	25	21	181
Total invertebrates		**3,726,178 ± 379,367**	**1.0000**	**452,153**	**172,951**	**769,274**	**86,929**	**537,646**	**610,448**	**128,152**	**78,150**	**709,189**	**43,779**	**54,664**	**82,845**

Table 10. -- Total taxon biomass estimates (t), ± 95% confidence limits (CL), and biomass estimates by stratum for fish taxa collected during the 2025 northern Bering Sea survey. The 'Proportion' column represents the estimated taxon biomass divided by the total fish estimated biomass (1,365,283 t).

Taxon		Estimated fish biomass across survey		Estimated fish biomass by stratum		
		Biomass ± 95% CL	Proportion	70	71	81
Agonidae (poachers)		1,068 ± 450	0.0008	793	127	148
Cottidae (sculpins)		26,955 ± 5,576	0.0197	11,167	15,483	305
Cyclopteridae (lumpsuckers)		2 ± 3	<0.0001	0	2	0
Gadidae (cods)	Pacific cod	69,383 ± 20,040	0.0508	48,588	11,129	9,666
	walleye pollock	547,843 ± 289,906	0.4013	210,731	91,855	245,258
	other	55,057 ± 26,146	0.0403	9,733	45,282	43
	total	672,283 ± 299,962	0.4924	269,051	148,265	254,966
Hexagrammidae (greenlings)		81 ± 58	<0.0001	31	50	0
Liparidae (snailfishes)		5,286 ± 1,617	0.0039	1,515	254	3,517
Osmeridae (smelts)		2,734 ± 766	0.0020	1,344	902	488
Pleuronectidae (flatfishes)	Alaska plaice	206,777 ± 65,555	0.1515	140,627	28,686	37,464
	Bering flounder	6,213 ± 1,434	0.0046	1,351	640	4,221
	Pacific halibut	18,423 ± 11,963	0.0135	13,577	4,734	112
	flathead sole	66 ± 83	<0.0001	41	11	14
	northern rock sole	26,962 ± 12,583	0.0197	19,731	2,847	4,385
	yellowfin sole	312,489 ± 48,473	0.2289	246,875	44,056	21,559
	other	29,502 ± 11,750	0.0216	8,206	19,830	1,466
	total	600,434 ± 93,226	0.4398	430,408	100,804	69,221
Rajidae (skates)	Alaska skate	48,854 ± 26,921	0.0358	43,114	620	5,120
	other	13 ± 15	<0.0001	7	1	5
	total	48,867 ± 26,921	0.0358	43,121	621	5,125
Stichaeidae (pricklebacks)		1,002 ± 787	0.0007	80	922	0
Zoarcidae (eelpouts)		1,758 ± 862	0.0013	110	980	668
Other fish		31,769 ± 7,526	0.0233	14,193	17,271	305
Total fish		**1,365,283 ± 327,658**	**1.0000**	**760,646**	**270,198**	**334,439**

Table 11. -- Total taxon biomass estimates (t), ± 95% confidence limits (CL), and biomass estimates by stratum for invertebrate taxa collected during the 2025 northern Bering Sea survey. The 'Proportion' column represents the estimated taxon biomass divided by the total invertebrate estimated biomass (1,066,602 t).

Taxon		Estimated invertebrate biomass across survey				Estimated invertebrate biomass by stratum		
		Biomass	±	95% CL	Proportion	70	71	81
Ascidiacea		57,186	±	27,676	0.0536	9,286	44,516	3,385
Coelenterata		88,739	±	26,202	0.0832	21,285	45,387	22,067
Crustacea	shrimps	4,277	±	2,056	0.0040	684	3,306	287
	other	284,812	±	50,989	0.2670	88,285	128,665	67,862
	total	289,089	±	51,055	0.2710	88,969	131,971	68,149
Echinodermata	Asteroidea (sea stars)	263,756	±	57,549	0.2473	95,071	158,660	10,025
	Echinoidea (sea urchins)	97,662	±	88,584	0.0916	1,263	96,385	15
	Holothuroidea (sea cucumbers)	5,492	±	6,223	0.0051	816	4,665	10
	Ophiuroidea (brittle stars)	46,050	±	23,268	0.0432	3,944	35,650	6,456
	total	412,961	±	101,263	0.3872	101,095	295,361	16,505
Mollusca	Gastropoda (snails)	167,563	±	41,948	0.1571	90,907	53,411	23,246
	Pelecypoda (bivalves)	1,971	±	1,169	0.0018	304	1,553	115
	octopuses	3	±	6	<0.0001	0	0	3
	other	3,015	±	6,001	0.0028	0	3,015	0
	total	172,553	±	42,609	0.1618	91,210	57,979	23,363
Porifera (sponges)		24,686	±	43,918	0.0231	32	24,654	0
Other invertebrates		21,388	±	16,423	0.0201	221	20,318	849
Total invertebrates		**1,066,602**	**±**	**174,433**	**1.0000**	**312,099**	**620,185**	**134,319**

Table 12. -- Total estimated biomasses (t) in 2024-2025 and the percent change between the 2024 and 2025 eastern Bering Sea surveys for predominant fish and invertebrate taxa. Taxa are listed in descending order of percent change from 2024 to 2025. Percent changes denoted with '-' indicate that fewer than 100 individuals were caught.

Common name	2025	2024	2023	% Change (2025, 2024)
Plain sculpin	46,023	25,338	26,716	81.6%
Worms	19,298	11,799	6,600	63.6%
Snow crab	518,124	340,401	90,341	52.2%
Sea urchins	47,680	31,368	31,116	52.0%
Eelpouts	95,521	72,078	55,297	32.5%
Basket sea stars	330,051	249,470	253,039	32.3%
Tanner crab	151,174	127,241	51,259	18.8%
Bering flounder	12,315	10,370	6,813	18.8%
Kamchatka flounder	33,231	28,362	24,875	17.2%
Pacific halibut	133,705	125,145	170,238	6.8%
Clams	16,665	15,761	13,069	5.7%
Neptune whelks	253,632	244,100	204,288	3.9%
Northern rock sole	1,490,955	1,439,739	1,380,684	3.6%
Yellowfin sole	1,548,142	1,503,618	1,393,379	3.0%
Red king crab	53,839	52,581	45,810	2.4%
Flathead sole	714,106	723,996	594,851	-1.4%
Alaska skate	399,887	407,133	418,483	-1.8%
Purple-orange sea star	713,017	736,479	815,015	-3.2%
Hermit crabs	464,158	480,841	372,306	-3.5%
Starry flounder	55,095	57,240	81,383	-3.7%
Alaska plaice	333,810	349,579	358,845	-4.5%
Jellyfish	110,686	116,757	146,492	-5.2%
Pacific cod	570,986	635,840	663,075	-10.2%
Arrowtooth flounder	491,918	582,469	462,575	-15.5%
Great sculpin	42,697	61,076	45,918	-30.1%
Walleye pollock	3,825,362	5,476,067	3,154,668	-30.1%
Snailfishes	1,851	3,873	2,236	-52.2%
Pacific herring	19,818	66,282	54,795	-70.1%
Saffron cod	2,710	10	3	-
Arctic cod	71	19	1	-
Octopuses	3,462	2,046	2,529	-
Blue king crab	3,106	2,424	2,787	-
Greenland turbot	5,659	4,959	5,857	-
Prickleback	16	15	41	-
Shorthorn sculpin	1,258	1,330	546	-

Table 13. -- Total estimated biomasses (t) in 2023 and 2025 and the percent change between the 2023 and 2025 northern Bering Sea surveys for predominant fish and invertebrate taxa (note that the northern Bering Sea was not surveyed in 2024). Taxa are listed in descending order of percent change from 2023 to 2025. Percent changes denoted with '-' indicate that fewer than 100 individuals were caught.

Common name	2025	2023	% Change (2025, 2023)
Snailfishes	5,286	1,632	223.8%
Pacific herring	4,160	1,370	203.6%
Great sculpin	1,285	640	100.7%
Eelpouts	1,758	958	83.5%
Plain sculpin	19,185	11,990	60.0%
Walleye pollock	547,843	363,839	50.6%
Saffron cod	54,896	38,225	43.6%
Shorthorn sculpin	4,664	3,414	36.6%
Bering flounder	6,213	4,704	32.1%
Blue king crab	4,960	4,033	23.0%
Snow crab	131,886	115,166	14.5%
Jellyfish	66,667	58,256	14.4%
Basket sea stars	44,061	40,122	9.8%
Pacific halibut	18,423	19,076	-3.4%
Neptune whelks	147,427	154,763	-4.7%
Alaska skate	48,854	51,728	-5.6%
Hermit crabs	128,624	138,997	-7.5%
Northern rock sole	26,962	29,225	-7.7%
Yellowfin sole	312,489	393,305	-20.5%
Alaska plaice	206,777	307,919	-32.8%
Pacific cod	69,383	108,346	-36.0%
Purple-orange sea star	183,029	317,349	-42.3%
Clams	1,971	3,494	-43.6%
Starry flounder	22,733	41,169	-44.8%
Sea urchins	97,457	188,480	-48.3%
Prickleback	1,002	3,299	-69.6%
Worms	21,545	120,331	-82.1%
Arctic cod	161	35	-
Tanner crab	90	30	-
Flathead sole	66	45	-
Red king crab	2,959	3,746	-
Greenland turbot	0	1	-

Summary of Results for Selected Fish and Invertebrate Fauna of the Eastern and Northern Bering Sea

Summary results for 40 abundant and/or ecologically important taxa caught during the eastern and northern Bering Sea surveys are presented below. Plots of biomass and abundance time series, spatial distribution, abundance-at-length estimates, and stratum-level CPUE (kg/km^2 and no/km^2) tables are provided for each taxon. The spatial distribution maps are presented as inverse-distance-weighted interpolations of CPUE (kg/km^2), which uses a weighted average of nearby measured stations to estimate values at unmeasured locations between stations. Similar interactive maps of these highlighted taxa and others are available through the NOAA Distribution Mapping and Analysis Portal[9]. More information on how to find, download, and interact with the data used to produce this report is available in the Data Sources section. Taxa are presented in alphabetical order by common name.

Alaska Plaice (*Pleuronectes quadrituberculatus*)

The estimated biomass of Alaska plaice in the eastern Bering Sea decreased by 5% from 2024 to 2025 (Tables **14** and **15**; Fig. **10**), and the population was estimated at 586.3 million individuals (Tables **14** and **16**; Fig. **10**). Similarly, the biomass estimate in the northern Bering Sea decreased by 33% from 2023 to 2025 (Tables **14** and **15**; Fig. **10**), and the population was estimated at 400.2 million individuals (Tables **14** and **16**; Fig. **10**).

The distribution of Alaska plaice was similar from 2023 to 2025, with the highest concentrations of Alaska plaice just south of St. Lawrence Island and throughout the inner- and middle-shelves (20-100 m; Fig. **10**). In 2025, length modes in the eastern Bering Sea were observed around 37 cm for males and 40 cm for females (Fig. **10**). Peaks were less prominent in the northern Bering Sea compared to 2023, but spanned a similar length range (15 to 55 cm; Fig. **10**). Overall, the size and sex composition of Alaska plaice varies by depth in the eastern Bering Sea. Males are more prevalent in the shallower (0-50 m) inner-shelf and are females more prevalent in the middle (50-100 m) and deeper outer-shelves (100-200 m). Both sexes show average length increases with depth (Bakkala et al., 1985; Zhang et al., 1998).

[9] https://apps-st.fisheries.noaa.gov/dismap

Table 14. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Alaska plaice in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	216 of 350 (61.7%)	130 of 137 (94.9%)
Bottom Depth	22 - 128 m	13 - 79 m
Bottom Temperature	-1.4 - 5.9 °C	-1.4 - 12.6 °C
Surface Temperature	2.3 - 8.6 °C	4.9 - 16.9 °C
% of Total Biomass	2.4%	8.5%
% Change in Biomass	5% decrease from 2024	33% decrease from 2023
Population; Biomass	586.3 million; 333,810 t	400.2 million; 206,777 t

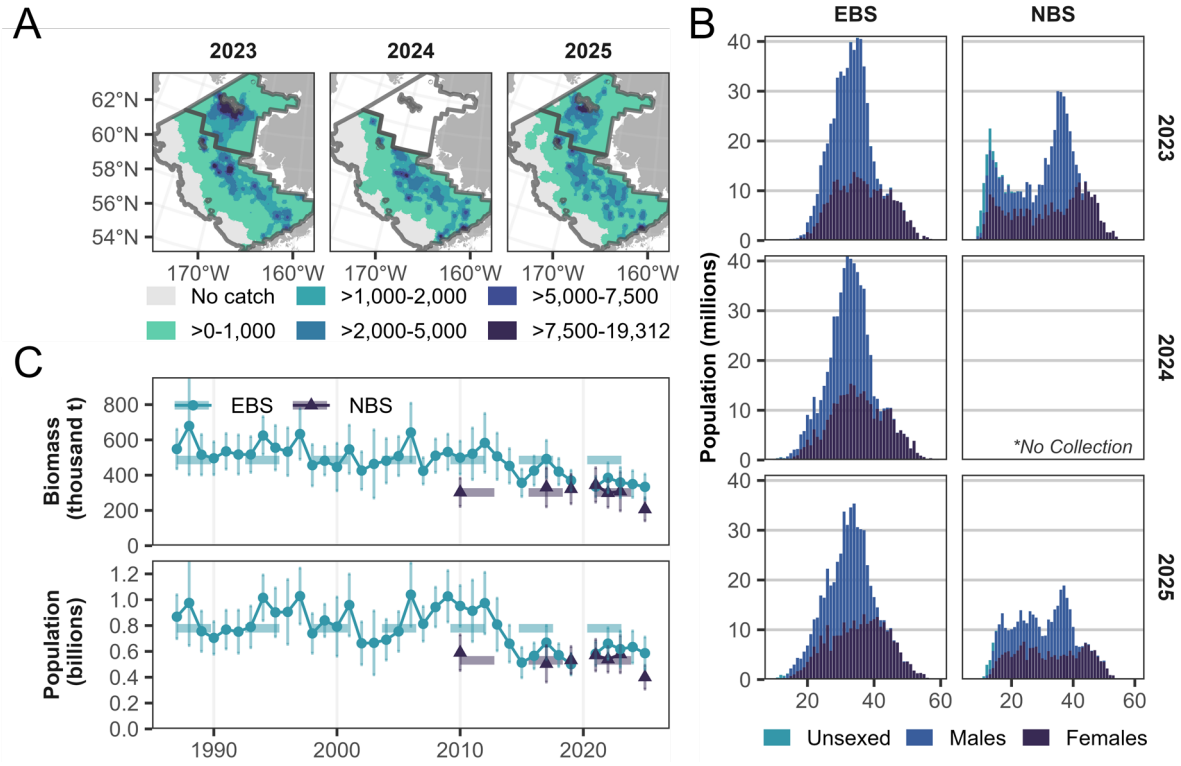

Figure 10. -- Alaska plaice (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 485,905 t biomass, 778,980,438 individuals; NBS mean: 301,942 t biomass, 530,701,137 individuals).

Table 15. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which Alaska plaice were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	1,229.40	255.56	96,761	20,114	56,532	136,989	56
20	1,626.95	288.68	67,019	11,892	43,236	90,803	31
31	663.35	133.19	63,004	12,650	37,703	88,305	53
32	172.98	82.41	1,530	729	72	2,988	4
41	1,412.93	391.05	88,040	24,366	39,307	136,772	36
42	414.73	123.86	10,004	2,988	4,029	15,980	13
43	148.37	68.89	3,125	1,451	223	6,027	10
50	-	-	-	-	-	-	-
61	13.61	10.02	1,195	879	0	2,953	3
62	-	-	-	-	-	-	-
82	169.60	60.06	3,045	1,078	888	5,201	9
90	7.56	7.56	87	87	0	262	1
Total	**677.11**	**73.51**	**333,810**	**36,239**	**261,332**	**406,287**	**216**
Northern Bering Sea							
70	2,020.95	445.16	140,627	30,976	78,675	202,579	51
71	353.03	72.30	28,686	5,874	16,937	40,435	56
81	976.85	233.69	37,464	8,962	19,539	55,389	23
Total	**1,092.95**	**173.25**	**206,777**	**32,777**	**141,222**	**272,331**	**130**

Table 16. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which Alaska plaice were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	3,456.44	654.34	169,041.78	375,041.68	272,041.73	51,499.98	56
20	3,004.41	459.50	85,904.53	161,618.17	123,761.35	18,928.41	31
31	768.37	144.63	45,505.17	100,452.97	72,979.07	13,736.95	53
32	157.85	87.49	0.00	2,944.46	1,396.42	774.02	4
41	1,613.44	417.12	48,551.94	152,514.60	100,533.27	25,990.67	36
42	362.18	96.79	4,067.18	13,406.13	8,736.66	2,334.74	13
43	164.82	82.57	0.00	6,950.35	3,471.79	1,739.28	10
50	-	-	-	-	-	-	-
61	6.31	4.73	0.00	1,383.38	553.54	414.92	3
62	-	-	-	-	-	-	-
82	153.47	58.56	652.70	4,858.13	2,755.42	1,051.36	9
90	5.47	5.47	0.00	189.28	63.09	63.09	1
Total	**1,189.26**	**126.43**	**461,631.09**	**710,953.60**	**586,292.34**	**62,330.63**	**216**
Northern Bering Sea							
70	3,600.98	592.06	168,176.02	332,968.51	250,572.26	41,198.12	51
71	1,265.64	194.07	71,300.84	134,379.09	102,839.96	15,769.56	56
81	1,220.40	339.52	20,762.33	72,846.65	46,804.49	13,021.08	22
Total	**2,115.41**	**243.11**	**308,227.30**	**492,206.12**	**400,216.71**	**45,994.71**	**129**

Alaska Skate (*Arctoraja parmifera*)

Previous scientific name: *Bathyraja parmifera*

The estimated biomass of Alaska skate in the eastern Bering Sea decreased by 2% from 2024 to 2025 (Tables **17** and **18**; Fig. **11**), and the population was estimated at 113.4 million individuals (Tables **17** and **19**; Fig. **11**). Similarly, the biomass estimate in the northern Bering Sea decreased by 6% from 2023 to 2025 (Tables **17** and **18**; Fig. **11**), and the population was estimated at 13.3 million individuals (Tables **17** and **19**; Fig. **11**).

The Alaska skate is the most abundant skate species in the Bering Sea. The highest concentrations of Alaska skate in 2025 were southeast of St. Lawrence Island and along the coasts and outer-shelf (100-200 m; Fig. **11**). Alaska skate lengths in the eastern Bering Sea peaked around 50 cm and 100 cm (Fig. **11**). Survey participants have been trained to reliably distinguish skates to species level since 1999 (note truncated time series in Fig. **11**).

Table 17. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Alaska skate in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	331 of 350 (94.6%)	57 of 137 (41.6%)
Bottom Depth	22 - 177 m	24 - 79 m
Bottom Temperature	-1.4 - 6.4 °C	-1.4 - 7.6 °C
Surface Temperature	2.5 - 9.5 °C	7 - 10.1 °C
% of Total Biomass	2.9%	2.0%
% Change in Biomass	2% decrease from 2024	6% decrease from 2023
Population; Biomass	113.4 million; 399,887 t	13.3 million; 48,854 t

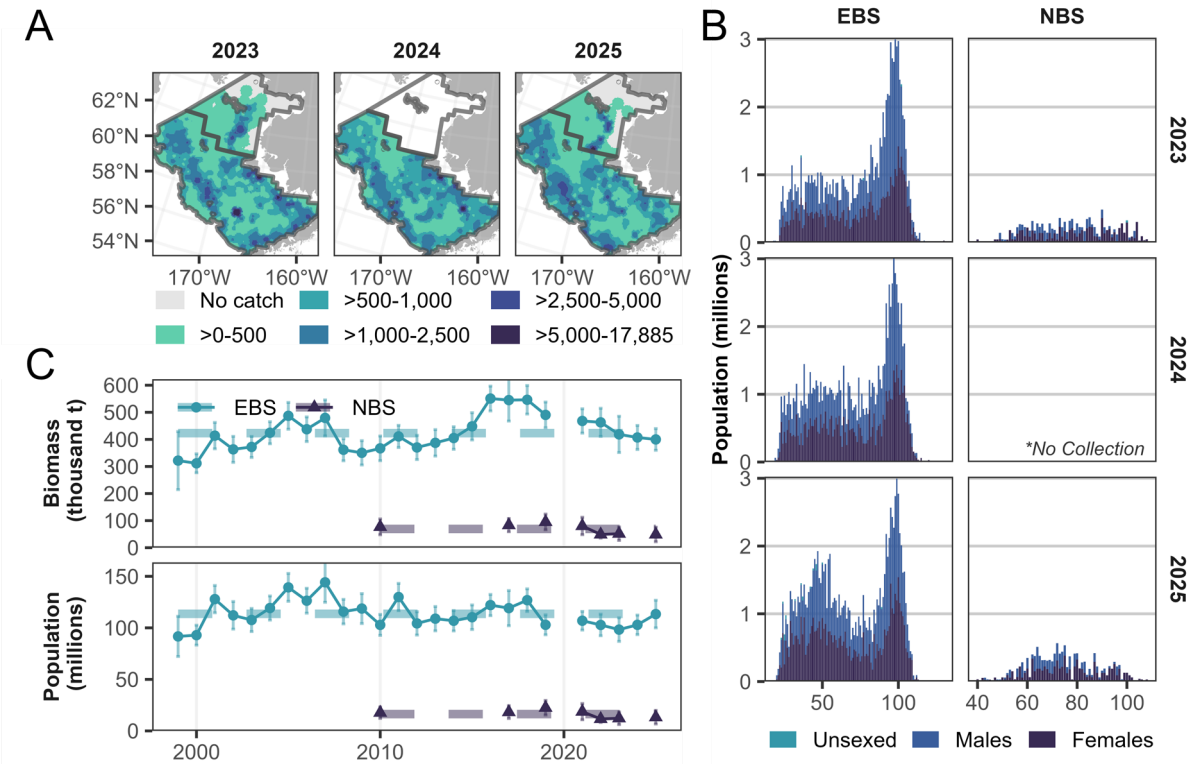

Figure 11. -- Alaska skate (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1999-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 423,101 t biomass, 113,626,088 individuals; NBS mean: 69,287 t biomass, 16,312,065 individuals).

Table 18. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which Alaska skate were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	663.63	91.43	52,232	7,196	37,839	66,624	49
20	777.39	110.98	32,023	4,572	22,880	41,166	29
31	625.45	83.05	59,404	7,888	43,628	75,181	66
32	1,540.42	521.51	13,628	4,614	4,400	22,855	5
41	677.43	134.81	42,211	8,400	25,411	59,010	44
42	1,326.69	198.31	32,002	4,784	22,435	41,570	18
43	319.77	73.11	6,735	1,540	3,655	9,815	12
50	1,263.90	240.10	48,077	9,133	29,811	66,344	25
61	1,040.65	88.27	91,345	7,748	75,849	106,841	57
62	788.59	181.88	5,095	1,175	2,745	7,446	6
82	275.06	54.67	4,938	982	2,975	6,901	12
90	1,056.89	144.42	12,195	1,666	8,863	15,528	8
Total	**811.15**	**40.60**	**399,887**	**20,014**	**359,858**	**439,916**	**331**
Northern Bering Sea							
70	619.59	192.99	43,114	13,429	16,255	69,973	32
71	7.63	5.42	620	440	0	1,500	2
81	133.51	20.85	5,120	800	3,521	6,720	23
Total	**258.23**	**71.15**	**48,854**	**13,460**	**21,933**	**75,775**	**57**

Table 19. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which Alaska skate were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	179.08	22.74	10,514.78	17,674.44	14,094.61	1,789.92	49
20	204.59	28.77	6,057.62	10,797.74	8,427.68	1,185.03	29
31	253.83	55.07	13,647.86	34,568.59	24,108.22	5,230.18	66
32	467.15	149.65	1,485.04	6,780.53	4,132.78	1,323.87	5
41	225.87	31.45	10,153.84	17,993.63	14,073.74	1,959.95	44
42	337.30	43.10	6,056.92	10,215.79	8,136.35	1,039.72	18
43	119.10	17.35	1,777.86	3,239.31	2,508.58	365.36	12
50	188.31	33.96	4,579.56	9,746.51	7,163.04	1,291.74	25
61	252.42	20.36	18,582.24	25,730.58	22,156.41	1,787.08	57
62	198.95	29.68	902.01	1,669.04	1,285.52	191.76	6
82	130.77	16.32	1,761.91	2,933.84	2,347.87	292.98	12
90	428.03	91.00	2,838.84	7,039.23	4,939.03	1,050.10	8
Total	**229.97**	**13.59**	**99,978.48**	**126,769.22**	**113,373.85**	**6,697.69**	**331**
Northern Bering Sea							
70	157.35	46.66	4,455.48	17,442.32	10,948.90	3,246.71	32
71	0.89	0.63	0.00	174.21	72.20	51.00	2
81	58.55	9.39	1,525.19	2,965.62	2,245.41	360.11	23
Total	**70.12**	**17.27**	**6,732.47**	**19,800.55**	**13,266.51**	**3,267.02**	**57**

Antlered Sculpin (*Enophrys diceraus*)

The estimated biomass of antlered sculpin in the northern Bering Sea increased to 336 t in 2025 (Tables **20** and **21**; Fig. **12**), and the population was estimated at 6.5 million individuals (Tables **20** and **22**; Fig. **12**). These estimates were extrapolated from 195 individuals caught during the northern Bering Sea survey. No antlered sculpin were observed in the eastern Bering Sea in 2025 (Fig. **12**).

Table 20. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for antlered sculpin in the northern Bering Sea. Too few organisms were observed on the northern Bering Sea survey to share meaningful percent change of total biomass values, so observed values are shared instead.

	Northern Bering Sea
Stations Present	18 of 137 (13.1%)
Bottom Depth	13 - 63 m
Bottom Temperature	-1.4 - 12.6 °C
Surface Temperature	7.8 - 16.1 °C
Population; Biomass	6.5 million; 336 t
Observed Catch Totals	Increased from 57 in 2023 to 195 individuals in 2025

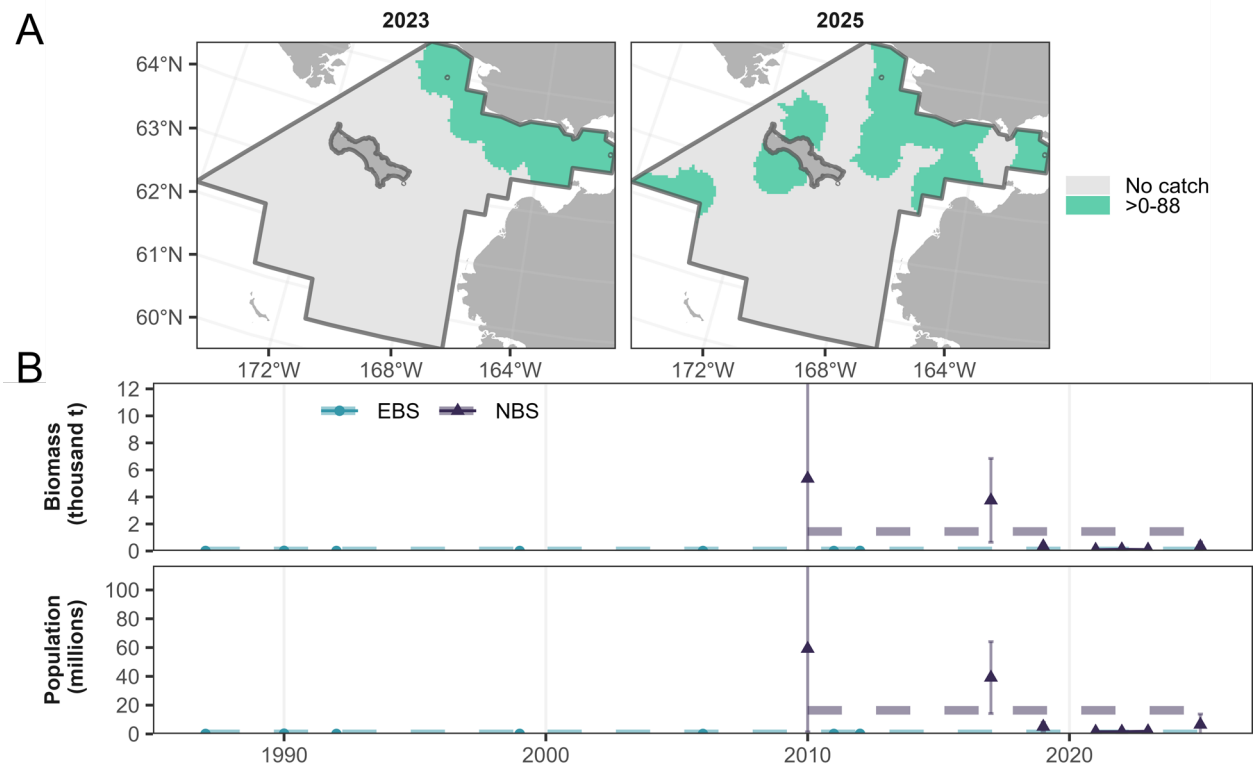

Figure 12. -- Antlered sculpin (A) CPUE distribution (kg/km^2) from the 2023-2025 northern Bering Sea survey. (B) Biomass and population time series estimated from the 1987-2025 northern Bering Sea survey (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 5 t biomass, 66,116 individuals; NBS mean: 1,445 t biomass, 16,416,420 individuals).

Table 21. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which antlered sculpin were encountered and weighed during the 2025 northern Bering Sea survey. This taxon was not encountered in the 2025 eastern Bering Sea survey.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Northern Bering Sea							
70	0.19	0.15	13	10	0	34	2
71	3.96	2.04	322	165	0	653	15
81	0.02	0.02	1	1	0	2	1
Total	**1.78**	**0.88**	**336**	**166**	**4**	**667**	**18**

Table 22. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which antlered sculpin were encountered and weighed during the 2025 northern Bering Sea survey. This taxon was not encountered in the 2025 eastern Bering Sea survey.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Northern Bering Sea							
70	1.51	1.14	0.00	264.60	105.35	79.62	2
71	78.10	45.12	0.00	13,677.92	6,346.18	3,665.87	15
81	0.79	0.79	0.00	90.34	30.11	30.11	1
Total	**34.26**	**19.38**	**0.00**	**13,815.36**	**6,481.65**	**3,666.86**	**18**

Arctic Cod (*Boreogadus saida*)

The estimated biomass of Arctic cod in the eastern Bering Sea increased to 71 t in 2025 (Tables **23** and **24**; Fig. **13**), and the population was estimated at 1.9 million individuals (Tables **23** and **25**; Fig. **13**). These estimates were extrapolated from 64 individuals caught during the eastern Bering Sea survey. Similarly, the biomass estimate in the northern Bering Sea increased to 161 t in 2025 (Tables **23** and **24**; Fig. **13**), and the population was estimated at 5.1 million individuals (Tables **23** and **25**; Fig. **13**). These estimates were extrapolated from 161 individuals caught during the northern Bering Sea survey.

Table 23. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Arctic cod in the eastern and northern Bering Sea. Too few organisms were observed on the eastern and northern Bering Sea survey to share meaningful percent change of total biomass values, so observed values are shared instead.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	18 of 350 (5.1%)	54 of 137 (39.4%)
Bottom Depth	60 - 112 m	18 - 79 m
Bottom Temperature	-1.4 - 2 °C	-1.4 - 11.6 °C
Surface Temperature	4.4 - 7.7 °C	5.1 - 15.7 °C
Population; Biomass	1.9 million; 71 t	5.1 million; 161 t
Observed Catch Totals	Increased from 14 in 2024 to 64 individuals in 2025	Increased from 28 in 2023 to 161 individuals in 2025

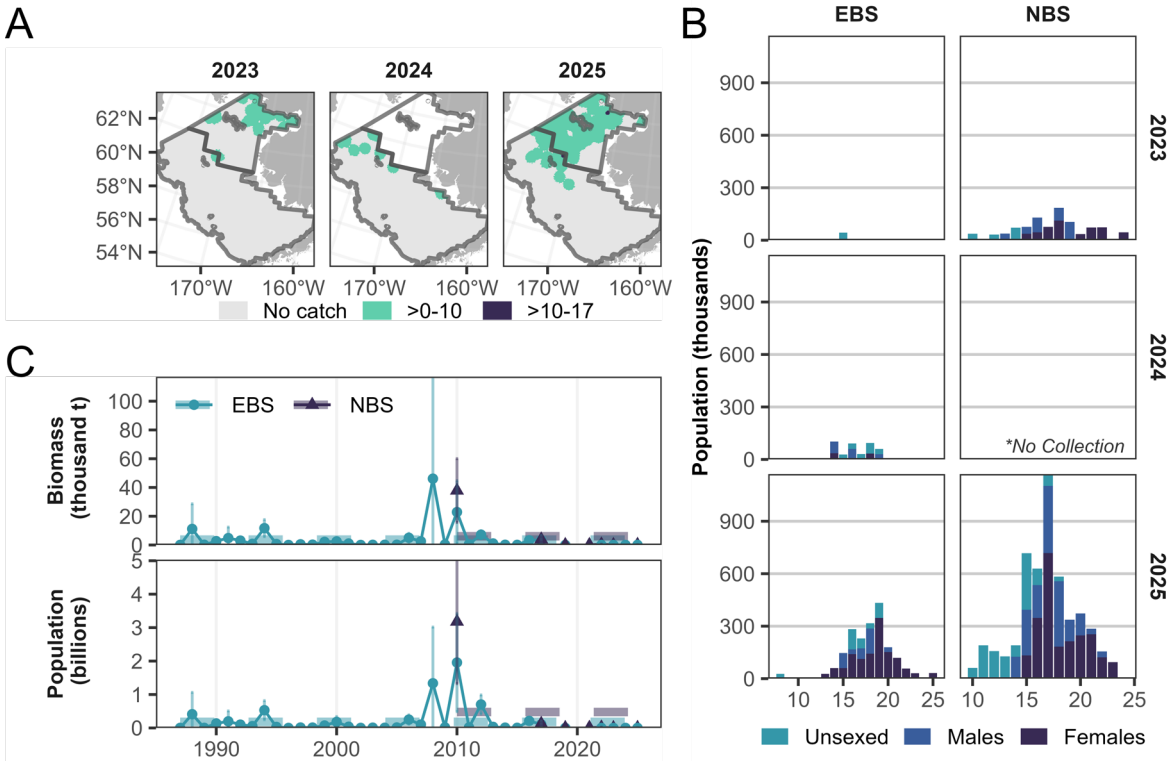

Figure 13. -- Arctic cod (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 3,745 t biomass, 182,292,719 individuals; NBS mean: 6,069 t biomass, 476,484,123 individuals).

Table 24. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which Arctic cod were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	0.65	0.38	40	24	0	88	9
42	-	-	-	-	-	-	-
43	0.31	0.31	6	6	0	19	1
50	-	-	-	-	-	-	-
61	0.02	0.02	2	2	0	6	1
62	-	-	-	-	-	-	-
82	1.24	0.54	22	10	3	42	7
90	-	-	-	-	-	-	-
Total	**0.14**	**0.05**	**71**	**26**	**18**	**124**	**18**
Northern Bering Sea							
70	0.70	0.20	49	14	21	76	16
71	0.86	0.32	70	26	18	122	21
81	1.11	0.31	43	12	19	67	17
Total	**0.85**	**0.17**	**161**	**32**	**98**	**225**	**54**

Table 25. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which Arctic cod were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	19.36	10.71	0.00	2,541.25	1,206.08	667.59	9
42	-	-	-	-	-	-	-
43	5.97	5.97	0.00	377.36	125.78	125.79	1
50	-	-	-	-	-	-	-
61	0.65	0.65	0.00	171.17	57.06	57.06	1
62	-	-	-	-	-	-	-
82	31.11	12.58	106.71	1,010.30	558.50	225.90	7
90	-	-	-	-	-	-	-
Total	**3.95**	**1.46**	**511.07**	**3,383.78**	**1,947.42**	**718.18**	**18**
Northern Bering Sea							
70	20.58	5.47	670.06	2,193.43	1,431.74	380.84	16
71	30.90	12.13	538.69	4,482.36	2,510.53	985.92	21
81	29.50	8.55	475.58	1,787.56	1,131.57	327.99	17
Total	**26.82**	**5.85**	**2,860.56**	**7,287.12**	**5,073.84**	**1,106.64**	**54**

Arctic Staghorn Sculpin (*Gymnocanthus tricuspis*)

The estimated biomass of Arctic staghorn sculpin in the northern Bering Sea increased to 507 t in 2025 (Tables **26** and **27**; Fig. **14**), and the population was estimated at 13.8 million individuals (Tables **26** and **28**; Fig. **14**). These estimates were extrapolated from 428 individuals caught during the northern Bering Sea survey. No Arctic staghorn sculpin were observed in the eastern Bering Sea in 2025 (Fig. **14**).

Table 26. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Arctic staghorn sculpin in the northern Bering Sea. Too few organisms were observed on the northern Bering Sea survey to share meaningful percent change of total biomass values, so observed values are shared instead.

	Northern Bering Sea
Stations Present	33 of 137 (24.1%)
Bottom Depth	21 - 79 m
Bottom Temperature	-1.4 - 7 °C
Surface Temperature	4.9 - 11.8 °C
Population; Biomass	13.8 million; 507 t
Observed Catch Totals	Increased from 36 in 2023 to 428 individuals in 2025

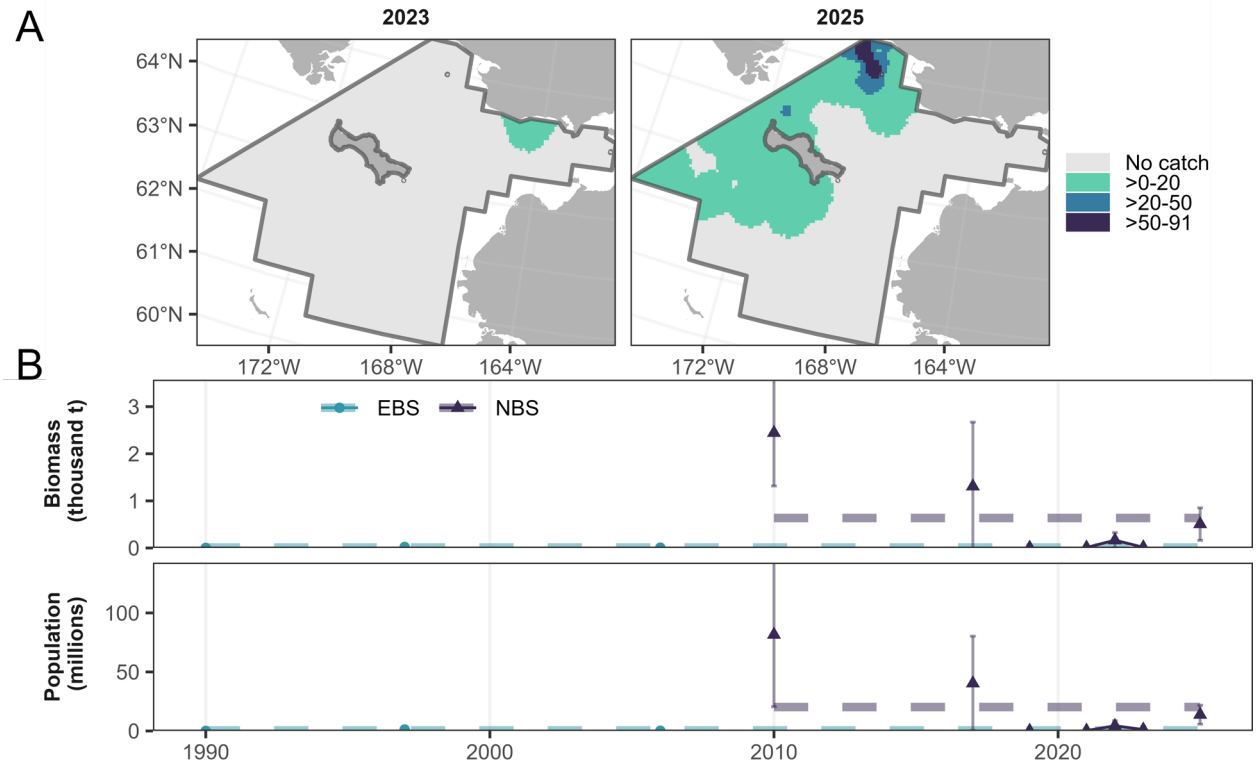

Figure 14. -- Arctic staghorn sculpin (A) CPUE distribution (kg/km^2) from the 2023-2025 northern Bering Sea survey. (B) Biomass and population time series estimated from the 1990-2025 northern Bering Sea survey (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 11 t biomass, 476,425 individuals; NBS mean: 637 t biomass, 20,244,963 individuals).

Table 27. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which Arctic staghorn sculpin were encountered and weighed during the 2025 northern Bering Sea survey. This taxon was not encountered in the 2025 eastern Bering Sea survey.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Northern Bering Sea							
70	0.63	0.25	44	17	9	78	9
71	5.57	2.11	452	172	109	796	16
81	0.29	0.09	11	3	4	18	8
Total	**2.68**	**0.91**	**507**	**173**	**162**	**852**	**33**

Table 28. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which Arctic staghorn sculpin were encountered and weighed during the 2025 northern Bering Sea survey. This taxon was not encountered in the 2025 eastern Bering Sea survey.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Northern Bering Sea							
70	20.10	7.42	366.87	2,430.75	1,398.81	515.97	9
71	148.79	48.95	4,134.89	20,045.73	12,090.31	3,977.71	16
81	7.03	2.27	95.41	443.49	269.45	87.02	8
Total	**72.72**	**21.21**	**5,734.61**	**21,782.53**	**13,758.57**	**4,011.98**	**33**

Arrowtooth Flounder (*Atheresthes stomias*)

The estimated biomass of arrowtooth flounder in the eastern Bering Sea decreased by 16% from 2024 to 2025 (Tables **29** and **30**; Fig. **15**), and the population was estimated at 669.9 million individuals (Tables **29** and **31**; Fig. **15**). No arrowtooth flounder were observed in the northern Bering Sea in 2025 (Fig. **15**).

The majority of arrowtooth flounder biomass occurs in the middle- and outer-shelves (50-200 m) of the eastern Bering Sea, with the highest biomass on the southwest edge of the survey area (Fig. **15**). As with all previous years, females outnumbered males at a rate of approximately 2:1, with females attaining larger average sizes (Fig. **15**). This disparity in sex ratio has been attributed to sex-specific differences in natural mortality rates, but the topic requires further research (Spies et al., 2018; Zimmermann and Goddard, 1996). The length mode for arrowtooth flounder was approximately 47 cm for females and 43 cm for males (Fig. **15**).

Arrowtooth flounder generally inhabit deeper waters as adults and primarily occupy the shelf waters until age four. As individuals mature, they begin to recruit to the upper continental slope waters (Spies et al., 2018). Thus, the shelf survey estimates are not synoptically inclusive of the entire population.

Arrowtooth flounder and Kamchatka flounder are congeners and can be difficult to morphologically distinguish in the field (Yang, 1988). Since survey participants have been trained to distinguish between the two species in 1992 (note truncated time series in Fig. **15**), arrowtooth flounder and Kamchatka flounder are discussed separately in this report. Arrowtooth flounder and Kamchatka flounder typically occupy similar areas (Baker and Hollowed, 2014). In 2024, arrowtooth flounder were mainly prevalent in the southern end of the eastern Bering Sea survey area and the northwestern edge of the outer domain, while Kamchatka flounder were most abundant along the northwestern edge (Figs. **15** and **23**). Arrowtooth flounder are much more abundant than Kamchatka flounder in the eastern Bering Sea survey area.

Table 29. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for arrowtooth flounder in the eastern Bering Sea.

	Eastern Bering Sea
Stations Present	196 of 350 (56.0%)
Bottom Depth	43 - 177 m
Bottom Temperature	0.6 - 6.4 °C
Surface Temperature	3.9 - 9.5 °C
% of Total Biomass	3.6%
% Change in Biomass	16% decrease from 2024
Population; Biomass	669.9 million; 491,918 t

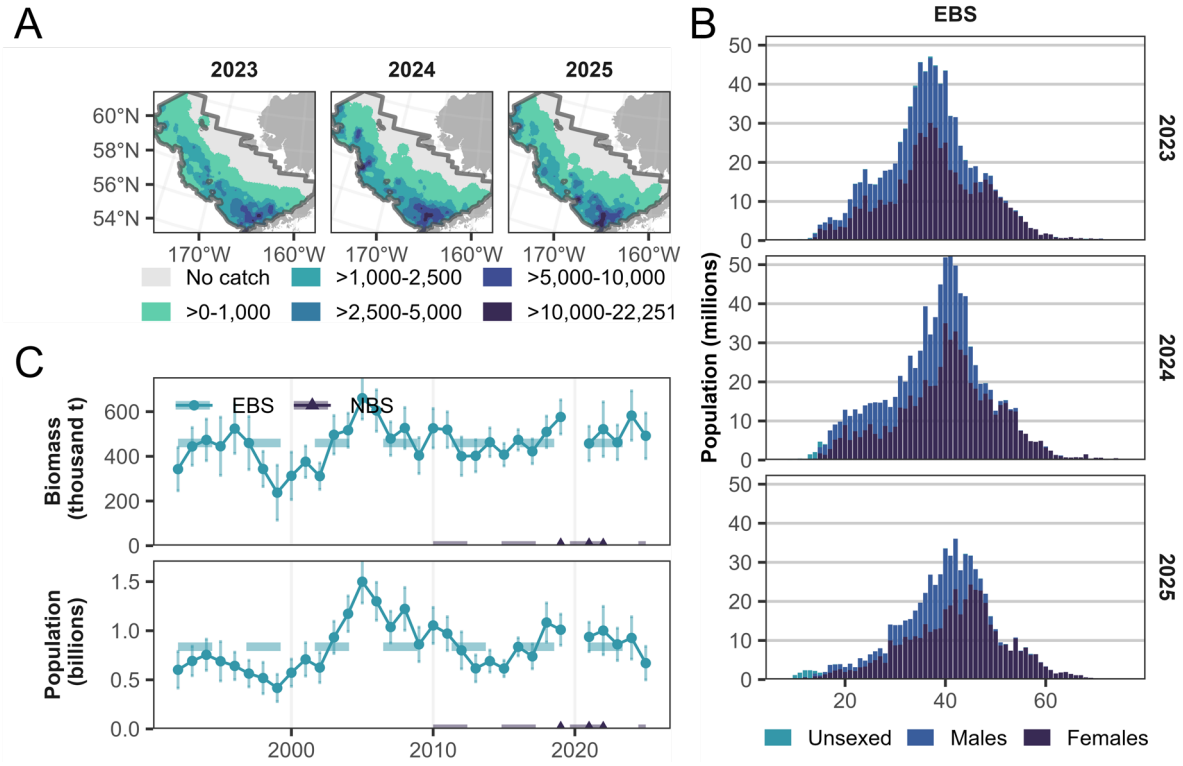

Figure 15. -- Arrowtooth flounder (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern Bering Sea survey. (C) Biomass and population time series estimated from the 1992-2025 survey (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 459,867 t biomass, 836,917,626 individuals; NBS mean: 1,197 t biomass, 1,398,659 individuals).

Table 30. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which arrowtooth flounder were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	55.40	25.31	4,360	1,992	376	8,344	11
20	-	-	-	-	-	-	-
31	1,825.14	331.76	173,349	31,510	110,328	236,369	57
32	2,195.30	474.86	19,421	4,201	11,019	27,823	5
41	186.79	87.99	11,639	5,483	674	22,604	11
42	891.11	260.95	21,495	6,295	8,906	34,085	14
43	86.13	58.26	1,814	1,227	0	4,269	5
50	3,914.13	970.87	148,889	36,931	75,028	222,751	26
61	1,232.43	140.39	108,179	12,323	83,533	132,825	58
62	312.43	80.52	2,019	520	978	3,059	5
82	-	-	-	-	-	-	-
90	65.22	29.80	753	344	65	1,440	4
Total	**997.83**	**103.47**	**491,918**	**51,008**	**389,902**	**593,934**	**196**

Table 31. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which arrowtooth flounder were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	54.73	30.47	0.00	9,103.42	4,307.58	2,397.92	11
20	-	-	-	-	-	-	-
31	2,571.64	515.36	146,353.39	342,146.94	244,250.17	48,948.39	57
32	3,598.74	616.38	20,931.16	42,742.94	31,837.05	5,452.95	5
41	173.04	81.66	606.35	20,958.18	10,782.26	5,087.96	11
42	825.22	231.61	8,732.12	31,080.14	19,906.13	5,587.00	14
43	69.51	47.96	0.00	3,484.34	1,464.08	1,010.13	5
50	6,232.25	1,783.70	101,368.10	372,767.47	237,067.78	67,849.84	26
61	1,343.52	146.48	92,214.99	143,644.82	117,929.91	12,857.46	58
62	262.83	68.94	807.37	2,589.17	1,698.27	445.45	5
82	-	-	-	-	-	-	-
90	54.34	25.90	29.15	1,224.82	626.99	298.92	4
Total	**1,358.79**	**172.82**	**499,473.58**	**840,266.87**	**669,870.22**	**85,198.32**	**196**

Bering Flounder (*Hippoglossoides robustus*)

The estimated biomass of Bering flounder in the eastern Bering Sea increased by 19% from 2024 to 2025 (Tables **32** and **33**; Fig. **16**), and the population was estimated at 72.8 million individuals (Tables **32** and **34**; Fig. **16**). Similarly, the biomass estimate in the northern Bering Sea increased by 32% from 2023 to 2025 (Tables **32** and **33**; Fig. **16**), and the population was estimated at 115.4 million individuals (Tables **32** and **34**; Fig. **16**).

In 2025, the distribution of Bering flounder in the Bering Sea was similar to 2024 and 2023, with all specimens found north of 58°N (Fig. **16**). The highest densities occurred northwest of St. Matthew Island in the northernmost portion of the eastern Bering Sea (Fig. **16**). The 2025 northern Bering Sea size distribution indicated a lower proportion of juvenile Bering flounder biomass in the eastern Bering Sea compared to 2023, with length modes were around 15 cm for males and females (Fig. **16**). Lengths in the eastern Bering Sea were similar between 2025, 2024, and 2023, with no apparent peaks between 10 and 25 cm for males and 10 and 40 cm for females (Fig. **16**).

Bering flounder and flathead sole are congeners and can be difficult to morphologically distinguish in the field. Consequently, the accuracy of their identification in commercial fishery data is unknown and the two species are combined into a single stock assessment by the NPFMC (Kapur, 2023). However, since survey participants are trained to distinguish between the two species, flathead sole and Bering flounder are discussed separately in this report. Despite many similarities, the two species have differing geographic distributions and environmental associations (Figs. **16** and **20**). Bering flounder tend to occupy arctic regions and shallow waters, while flathead sole are more subarctic/boreal and are found in deeper waters (Baker and Hollowed, 2014).

Table 32. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Bering flounder in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	68 of 350 (19.4%)	95 of 137 (69.3%)
Bottom Depth	36 - 141 m	22 - 79 m
Bottom Temperature	-1.4 - 4.3 °C	-1.4 - 11.1 °C
Surface Temperature	2.3 - 9.1 °C	4.9 - 14.5 °C
% of Total Biomass	0.1%	0.3%
% Change in Biomass	19% increase from 2024	32% increase from 2023
Population; Biomass	72.8 million; 12,315 t	115.4 million; 6,213 t

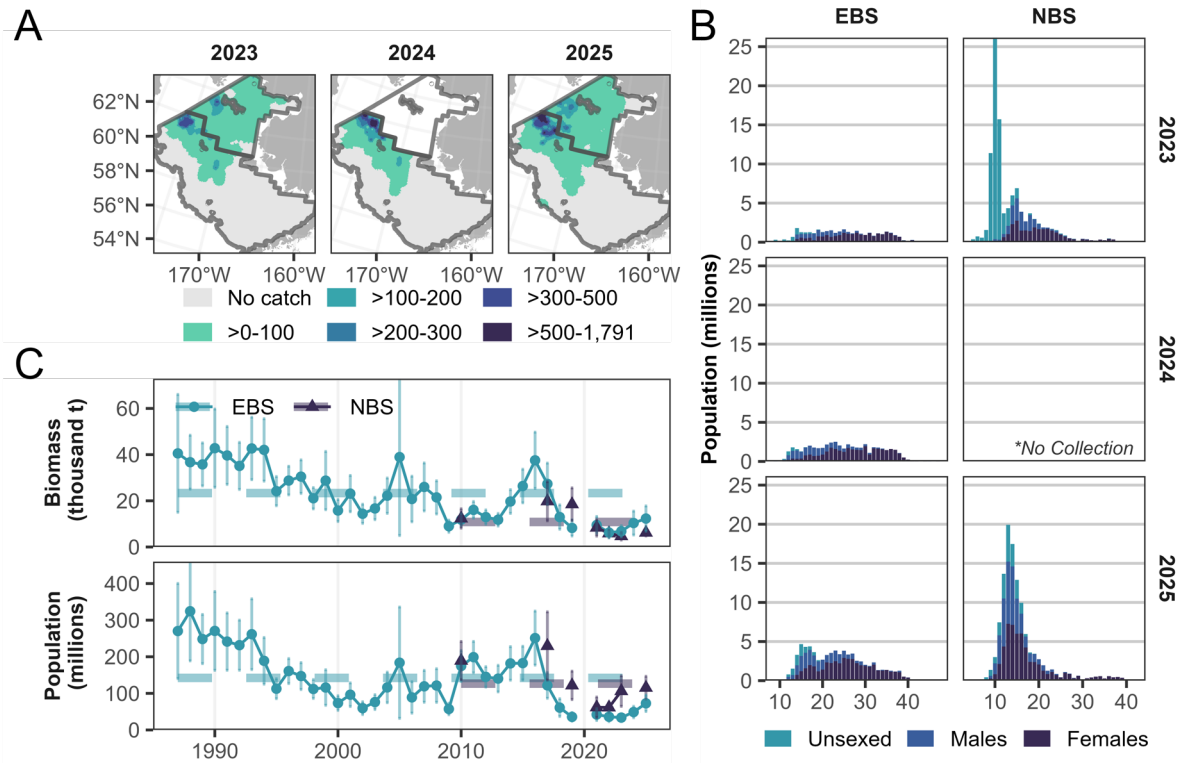

Figure 16. -- Bering flounder (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 23,345 t biomass, 142,218,838 individuals; NBS mean: 10,843 t biomass, 126,529,238 individuals).

Table 33. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which Bering flounder were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	2.88	2.09	118	86	0	290	4
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	35.42	9.52	2,207	593	1,021	3,394	27
42	0.09	0.09	2	2	0	6	1
43	13.63	4.45	287	94	100	475	9
50	-	-	-	-	-	-	-
61	0.99	0.47	87	42	3	170	8
62	39.06	39.06	252	252	0	757	1
82	418.90	141.29	7,521	2,537	2,448	12,594	12
90	159.53	66.43	1,841	767	308	3,374	6
Total	**24.98**	**5.54**	**12,315**	**2,730**	**6,854**	**17,776**	**68**
Northern Bering Sea							
70	19.42	5.69	1,351	396	560	2,143	36
71	7.88	1.93	640	157	327	954	32
81	110.07	15.04	4,221	577	3,068	5,375	27
Total	**32.84**	**3.79**	**6,213**	**717**	**4,779**	**7,647**	**95**

Table 34. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which Bering flounder were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	15.73	10.32	0.00	1,498.23	648.03	425.10	4
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	305.19	79.08	9,161.46	28,871.46	19,016.46	4,927.50	27
42	1.17	1.17	0.00	84.86	28.29	28.29	1
43	127.08	41.20	941.10	4,412.61	2,676.86	867.88	9
50	-	-	-	-	-	-	-
61	10.54	4.14	197.70	1,652.80	925.25	363.77	8
62	269.41	269.41	0.00	5,222.37	1,740.79	1,740.79	1
82	2,021.53	480.31	19,047.33	53,540.31	36,293.82	8,623.24	12
90	993.94	405.74	2,105.28	20,832.87	11,469.08	4,681.90	6
Total	**147.67**	**22.65**	**50,468.48**	**95,128.65**	**72,798.56**	**11,165.04**	**68**
Northern Bering Sea							
70	499.63	138.50	15,492.01	54,041.66	34,766.84	9,637.41	36
71	243.07	73.73	7,767.81	31,733.15	19,750.48	5,991.34	32
81	1,586.58	276.06	39,673.64	82,022.82	60,848.23	10,587.29	27
Total	**609.78**	**82.03**	**84,325.79**	**146,405.30**	**115,365.55**	**15,519.88**	**95**

Bering Skate (*Bathyraja interrupta*)

The estimated biomass of Bering skate in the eastern Bering Sea increased by 15% from 2024 to 2025 (Tables **35** and **36**; Fig. **17**), and the population was estimated at 8.9 million individuals (Tables **35** and **37**; Fig. **17**). No Bering skate were observed in the northern Bering Sea in 2025 (Fig. **17**).

The distribution of Bering skate in the eastern Bering Sea survey area was similar from 2023 to 2025, with highest CPUE along the outer-shelf (100-200 m) and along the northwestern edge (Fig. **17**). Length modes of 74 cm for males and 77 cm for females were observed in 2025 (Fig. **17**). Survey participants have been trained to reliably distinguish skates to species level since 1999 (note truncated time series in Fig. **17**).

Table 35. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Bering skate in the eastern Bering Sea.

	Eastern Bering Sea
Stations Present	92 of 350 (26.3%)
Bottom Depth	67 - 164 m
Bottom Temperature	0.8 - 6.4 °C
Surface Temperature	4 - 9.3 °C
% of Total Biomass	0.1%
% Change in Biomass	15% increase from 2024
Population; Biomass	8.9 million; 14,959 t

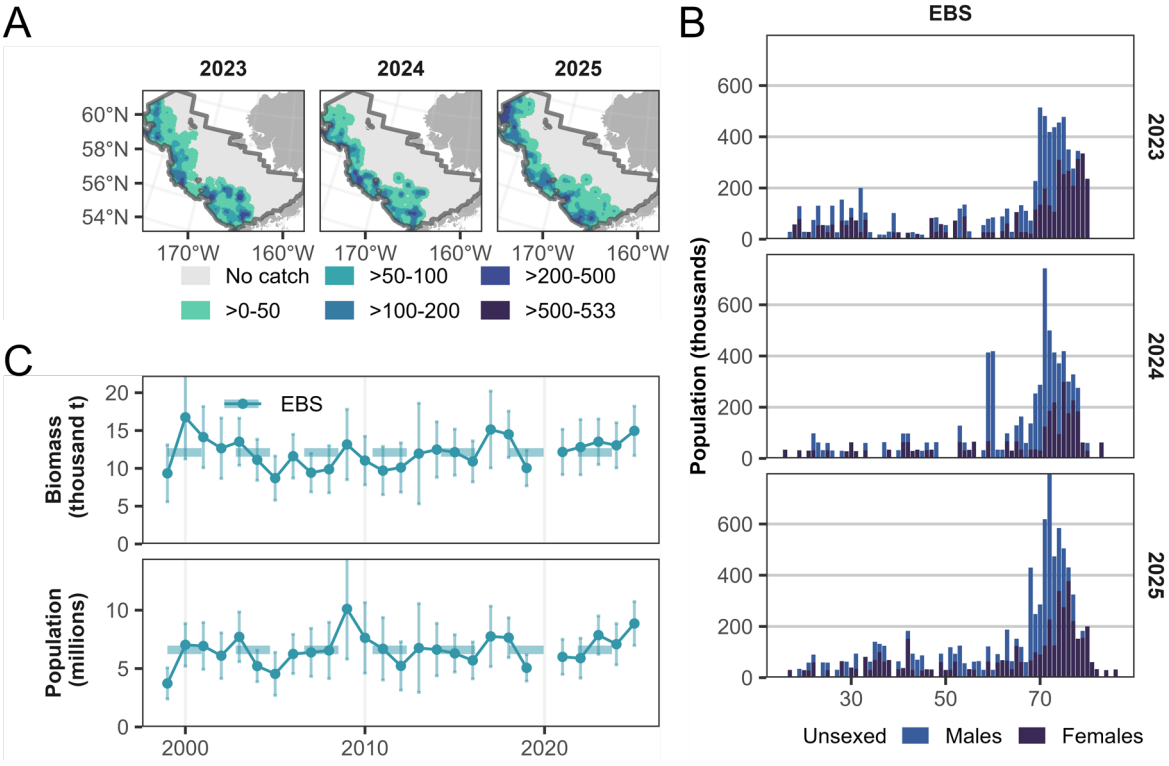

Figure 17. -- Bering skate (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern Bering Sea survey. (C) Biomass and population time series estimated from the 1999-2025 survey (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 12,108 t biomass, 6,602,323 individuals).

Table 36. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which Bering skate were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
31	16.41	3.88	1,558	368	822	2,294	20
32	16.43	10.91	145	97	0	338	2
41	6.67	4.88	415	304	0	1,023	2
42	37.56	16.45	906	397	112	1,699	5
43	-	-	-	-	-	-	-
50	117.77	22.88	4,480	870	2,739	6,221	22
61	79.32	13.78	6,963	1,209	4,544	9,381	37
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	42.67	19.44	492	224	44	941	4
Total	**30.34**	**3.31**	**14,959**	**1,632**	**11,694**	**18,224**	**92**

Table 37. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which Bering skate were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
31	9.38	2.16	479.93	1,301.32	890.62	205.35	20
32	22.22	17.20	0.00	500.93	196.60	152.16	2
41	2.68	1.92	0.00	406.46	167.00	119.73	2
42	18.06	8.19	40.66	830.78	435.72	197.53	5
43	-	-	-	-	-	-	-
50	80.67	14.68	1,951.67	4,185.79	3,068.73	558.53	22
61	44.92	7.60	2,608.53	5,277.51	3,943.02	667.24	37
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	13.51	5.74	23.46	288.40	155.93	66.24	4
Total	**17.97**	**1.90**	**6,981.21**	**10,734.04**	**8,857.63**	**938.21**	**92**

Bigmouth Sculpin (*Hemitripterus bolini*)

The estimated biomass of bigmouth sculpin in the eastern Bering Sea decreased by 29% from 2024 to 2025 (Tables **38** and **39**; Fig. **18**), and the population was estimated at 3.4 million individuals (Tables **38** and **40**; Fig. **18**). No bigmouth sculpin were observed in the northern Bering Sea in 2025 (Fig. **18**).

Table 38. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for bigmouth sculpin in the eastern Bering Sea.

	Eastern Bering Sea
Stations Present	53 of 350 (15.1%)
Bottom Depth	74 - 162 m
Bottom Temperature	0.9 - 4.7 °C
Surface Temperature	4.2 - 9.5 °C
% of Total Biomass	0.1%
% Change in Biomass	29% decrease from 2024
Population; Biomass	3.4 million; 16,434 t

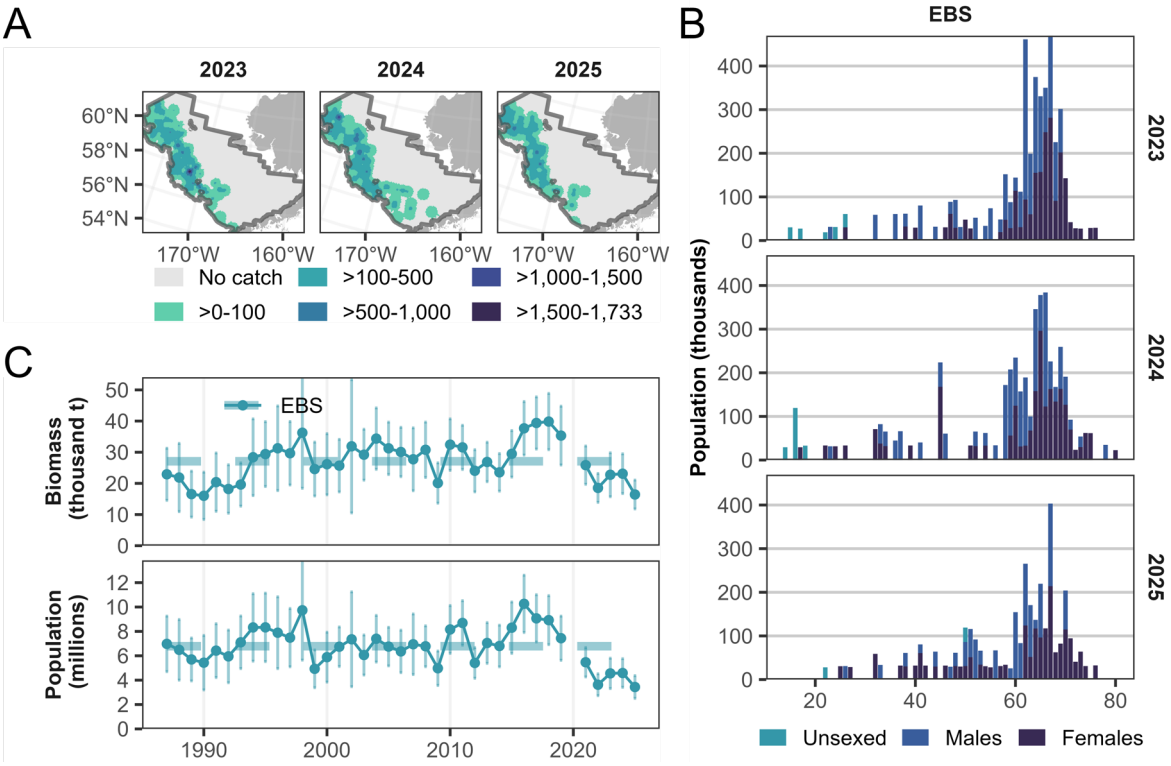

Figure 18. -- Bigmouth sculpin (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern Bering Sea survey. (C) Biomass and population time series estimated from the 1987-2025 survey (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 27,089 t biomass, 6,784,807 individuals).

Table 39. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which bigmouth sculpin were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
31	4.56	2.94	433	279	0	992	3
32	46.99	46.99	416	416	0	1,247	1
41	22.81	11.57	1,421	721	0	2,863	4
42	13.53	9.30	326	224	0	775	2
43	25.48	18.25	537	384	0	1,306	2
50	7.24	7.09	276	270	0	815	2
61	135.85	23.45	11,925	2,058	7,809	16,041	34
62	170.35	39.69	1,101	256	588	1,614	5
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**33.34**	**4.69**	**16,434**	**2,311**	**11,811**	**21,057**	**53**

Table 40. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which bigmouth sculpin were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
31	0.98	0.56	0.00	198.88	93.03	52.93	3
32	8.45	8.45	0.00	224.16	74.72	74.72	1
41	4.52	2.36	0.00	575.58	281.80	146.89	4
42	2.17	1.49	0.00	124.17	52.35	35.91	2
43	3.00	2.03	0.00	148.93	63.25	42.84	2
50	1.81	1.28	0.00	166.20	68.90	48.65	2
61	29.27	4.81	1,725.30	3,413.56	2,569.43	422.07	34
62	36.18	8.96	117.96	349.55	233.76	57.90	5
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**6.97**	**0.94**	**2,505.68**	**4,368.77**	**3,437.23**	**465.77**	**53**

Eulachon (*Thaleichthys pacificus*)

The estimated biomass of eulachon in the eastern Bering Sea increased by 54% from 2024 to 2025 (Tables **41** and **42**; Fig. **19**), and the population was estimated at 8.2 million individuals (Tables **41** and **43**; Fig. **19**). No eulachon were observed in the northern Bering Sea in 2025 (Fig. **19**). Eulachon lengths are not collected during the eastern and northern Bering Sea surveys.

Table 41. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for eulachon in the eastern Bering Sea.

	Eastern Bering Sea
Stations Present	32 of 350 (9.1%)
Bottom Depth	27 - 156 m
Bottom Temperature	0.1 - 5.4 °C
Surface Temperature	4.2 - 8.2 °C
% of Total Biomass	<0.01%
% Change in Biomass	54% increase from 2024
Population; Biomass	8.2 million; 475 t

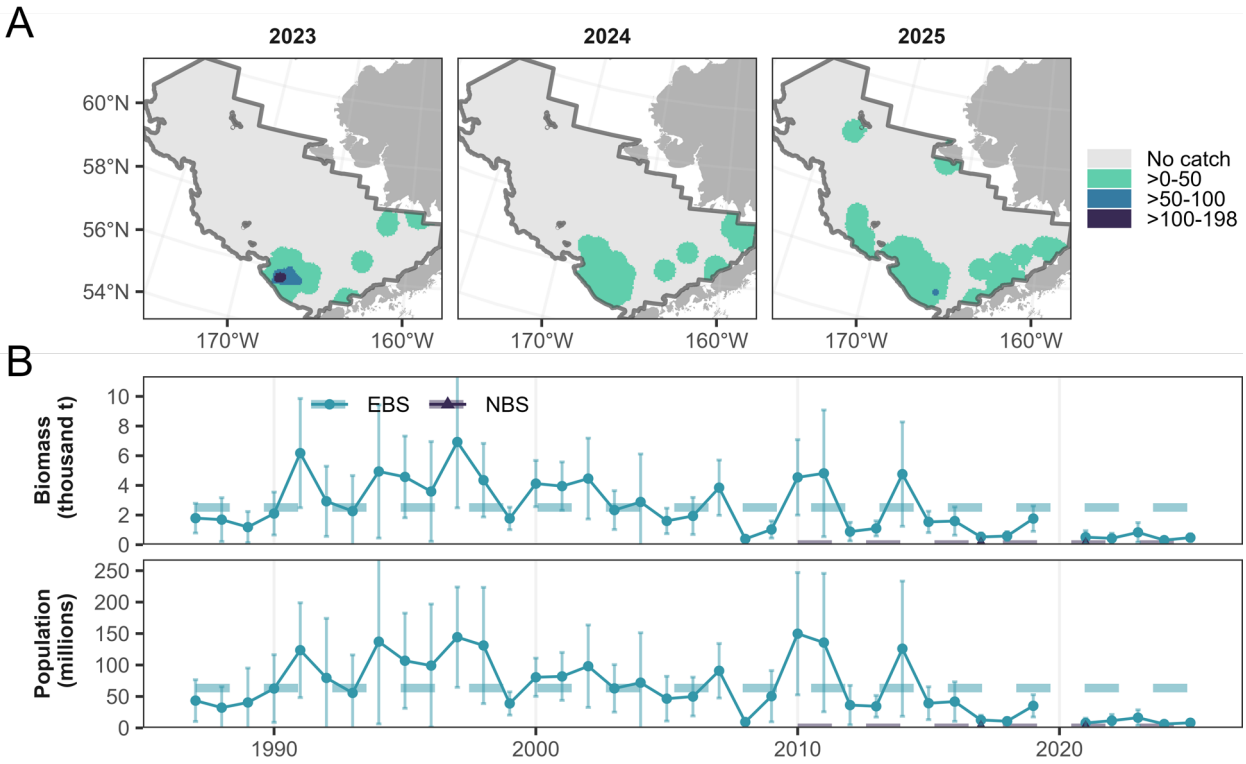

Figure 19. -- Eulachon (A) CPUE distribution (kg/km^2) from the 2023-2025 eastern Bering Sea survey. (B) Biomass and population time series estimated from the 1987-2025 eastern Bering Sea survey (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 2,513 t biomass, 63,372,528 individuals; NBS mean: 14 t biomass, 141,186 individuals).

Table 42. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which eulachon were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	0.17	0.11	13	9	0	31	3
20	0.05	0.05	2	2	0	6	1
31	1.11	0.57	105	54	0	214	7
32	-	-	-	-	-	-	-
41	0.06	0.06	4	4	0	11	1
42	-	-	-	-	-	-	-
43	0.03	0.03	1	1	0	2	1
50	9.00	3.03	342	115	112	573	16
61	0.09	0.05	8	5	0	17	3
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**0.96**	**0.26**	**475**	**128**	**219**	**731**	**32**

Table 43. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which eulachon were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	1.89	1.23	0.00	341.58	148.36	96.61	3
20	0.78	0.78	0.00	96.36	32.12	32.12	1
31	11.97	5.83	29.90	2,243.28	1,136.59	553.35	7
32	-	-	-	-	-	-	-
41	1.09	1.09	0.00	204.36	68.12	68.12	1
42	-	-	-	-	-	-	-
43	1.48	1.48	0.00	93.46	31.15	31.15	1
50	173.90	52.17	2,646.27	10,583.64	6,614.95	1,984.34	16
61	1.76	1.04	0.00	337.46	154.59	91.43	3
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**16.60**	**4.19**	**4,053.99**	**12,317.79**	**8,185.89**	**2,065.95**	**32**

Flathead Sole (*Hippoglossoides elassodon*)

The estimated biomass of flathead sole in the eastern Bering Sea decreased by 1% from 2024 to 2025 (Tables **44** and **45**; Fig. **20**), and the population was estimated at 2.3 billion individuals (Tables **44** and **46**; Fig. **20**). The biomass estimate in the northern Bering Sea increased to 66 t in 2025 (Tables **44** and **45**; Fig. **20**), and the population was estimated at 194,853 individuals (Tables **44** and **46**; Fig. **20**). These estimates were extrapolated from six individuals caught during the northern Bering Sea survey.

In 2025, flathead sole were found at higher densities in the deeper water of the outer-shelf (100-200 m; Fig. **20**). The size distribution of flathead sole in 2025 was unimodal, similar to 2024, with most males observed at approximately 32 cm and females observed at 37 cm (Fig. **20**).

As previously mentioned, flathead sole and Bering flounder are congeneric (Yang, 1988), and survey participants have been trained to reliably distinguish between the two species. However, the accuracy of their identification in commercial fishery data is unknown and the two species are combined into a single stock assessment by the NPFMC (Kapur, 2023). While the two species co-occur (Figs. **16** and **20**), Bering flounder tend to inhabit shallower arctic regions, while flathead sole are found in deeper and more subarctic/boreal waters (Baker and Hollowed, 2014).

Table 44. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for flathead sole in the eastern and northern Bering Sea. Too few organisms were observed on the northern Bering Sea survey to share meaningful percent change of total biomass values (note cells with '-'), so observed values are shared instead.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	292 of 350 (83.4%)	4 of 137 (2.9%)
Bottom Depth	24 - 177 m	29 - 54 m
Bottom Temperature	-1.4 - 6.4 °C	-1.1 - 4.6 °C
Surface Temperature	2.6 - 9.5 °C	9.3 - 9.8 °C
% of Total Biomass	5.2%	-
% Change in Biomass	1% decrease from 2024	-
Population; Biomass	2.3 billion; 714,106 t	194,853; 66 t
Observed Catch Totals	Increased from 71,106 in 2024 to 71,837 individuals in 2025	Increased from five in 2023 to six individuals in 2025

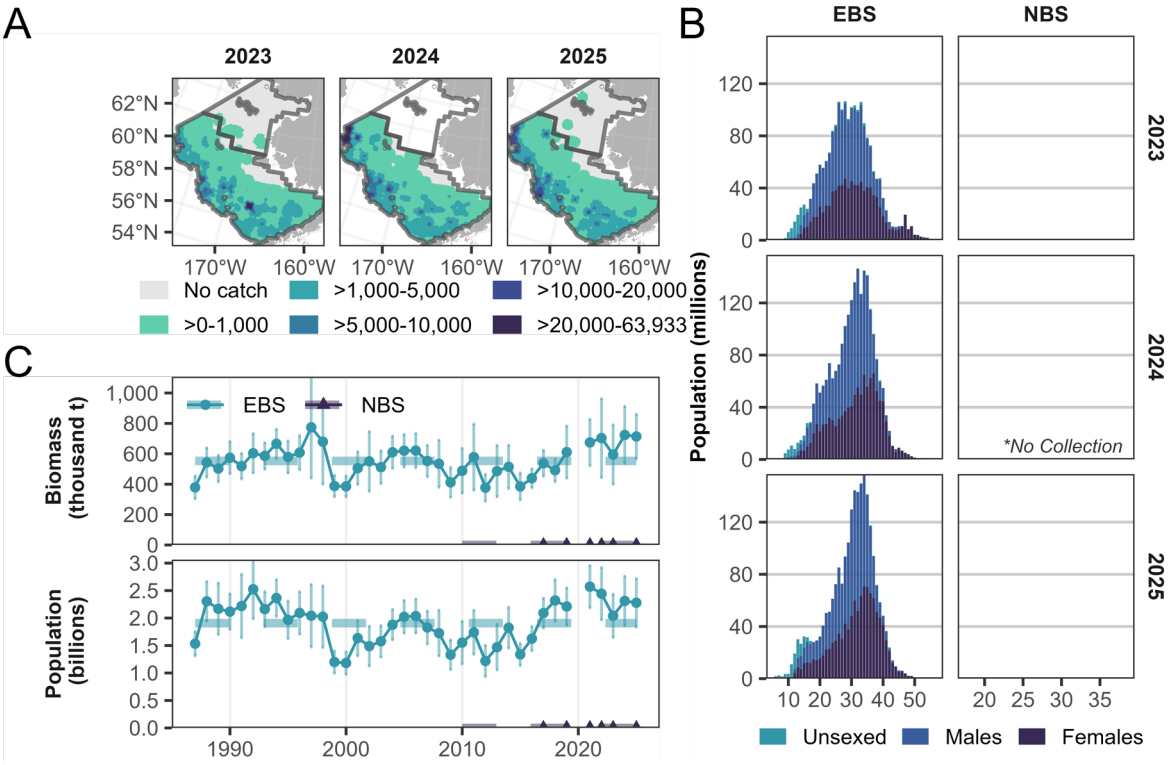

Figure 20. -- Flathead sole (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 553,286 t biomass, 1,907,006,766 individuals; NBS mean: 153 t biomass, 704,535 individuals).

Table 45. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which flathead sole were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	289.74	45.20	22,804	3,557	15,690	29,919	44
20	20.69	10.54	852	434	0	1,720	7
31	1,797.59	271.56	170,733	25,792	119,148	222,317	69
32	1,945.28	1,363.04	17,209	12,058	0	41,326	5
41	502.83	261.87	31,331	16,317	0	63,966	36
42	2,235.10	657.28	53,915	15,855	22,205	85,625	17
43	39.73	18.01	837	379	78	1,596	9
50	1,198.39	149.61	45,585	5,691	34,203	56,967	26
61	4,098.99	718.37	359,797	63,056	233,685	485,909	59
62	90.51	70.56	585	456	0	1,497	4
82	210.87	96.73	3,786	1,737	312	7,259	8
90	578.13	337.12	6,671	3,890	0	14,451	8
Total	**1,448.52**	**148.62**	**714,106**	**73,267**	**567,571**	**860,641**	**292**
Northern Bering Sea							
70	0.59	0.54	41	37	0	116	2
71	0.14	0.14	11	11	0	34	1
81	0.35	0.35	14	14	0	41	1
Total	**0.35**	**0.22**	**66**	**41**	**0**	**149**	**4**

Table 46. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which flathead sole were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	580.67	129.59	25,302.94	66,100.69	45,701.82	10,199.44	43
20	32.64	16.10	18.22	2,670.48	1,344.35	663.06	7
31	5,246.21	886.87	329,809.86	666,744.74	498,277.30	84,233.72	69
32	4,585.59	2,674.98	0.00	87,897.13	40,567.47	23,664.83	5
41	809.25	366.05	4,807.85	96,041.16	50,424.50	22,808.33	36
42	4,820.46	1,522.50	42,827.96	189,731.33	116,279.65	36,725.84	17
43	130.64	59.34	251.84	5,251.48	2,751.66	1,249.91	9
50	7,142.05	978.01	197,270.92	346,080.18	271,675.55	37,202.32	26
61	13,953.10	2,201.09	838,350.62	1,611,170.47	1,224,760.55	193,204.96	59
62	388.26	300.90	0.00	6,397.32	2,508.76	1,944.28	4
82	422.47	173.93	1,339.48	13,830.41	7,584.94	3,122.73	8
90	1,464.83	745.43	0.00	34,105.90	16,902.78	8,601.56	8
Total	**4,622.36**	**446.40**	**1,838,642.66**	**2,718,915.99**	**2,278,779.33**	**220,068.33**	**291**
Northern Bering Sea							
70	1.81	1.43	0.00	324.92	126.17	99.38	2
71	0.45	0.45	0.00	109.48	36.49	36.49	1
81	0.84	0.84	0.00	96.56	32.19	32.19	1
Total	**1.03**	**0.58**	**0.00**	**416.15**	**194.85**	**110.65**	**4**

Great Sculpin (*Myoxocephalus polyacanthocephalus*)

The estimated biomass of great sculpin in the eastern Bering Sea decreased by 30% from 2024 to 2025 (Tables **47** and **48**; Fig. **21**), and the population was estimated at 22.3 million individuals (Tables **47** and **49**; Fig. **21**). The biomass estimate in the northern Bering Sea increased by 101% from 2023 to 2025 (Tables **47** and **48**; Fig. **21**), and the population was estimated at 10.4 million individuals (Tables **47** and **49**; Fig. **21**).

Table 47. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for great sculpin in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	168 of 350 (48.0%)	41 of 137 (29.9%)
Bottom Depth	23 - 177 m	15 - 79 m
Bottom Temperature	-1.4 - 5.8 °C	-1.4 - 11.8 °C
Surface Temperature	3.2 - 9.3 °C	7.1 - 16 °C
% of Total Biomass	0.3%	0.1%
% Change in Biomass	30% decrease from 2024	101% increase from 2023
Population; Biomass	22.3 million; 42,697 t	10.4 million; 1,285 t

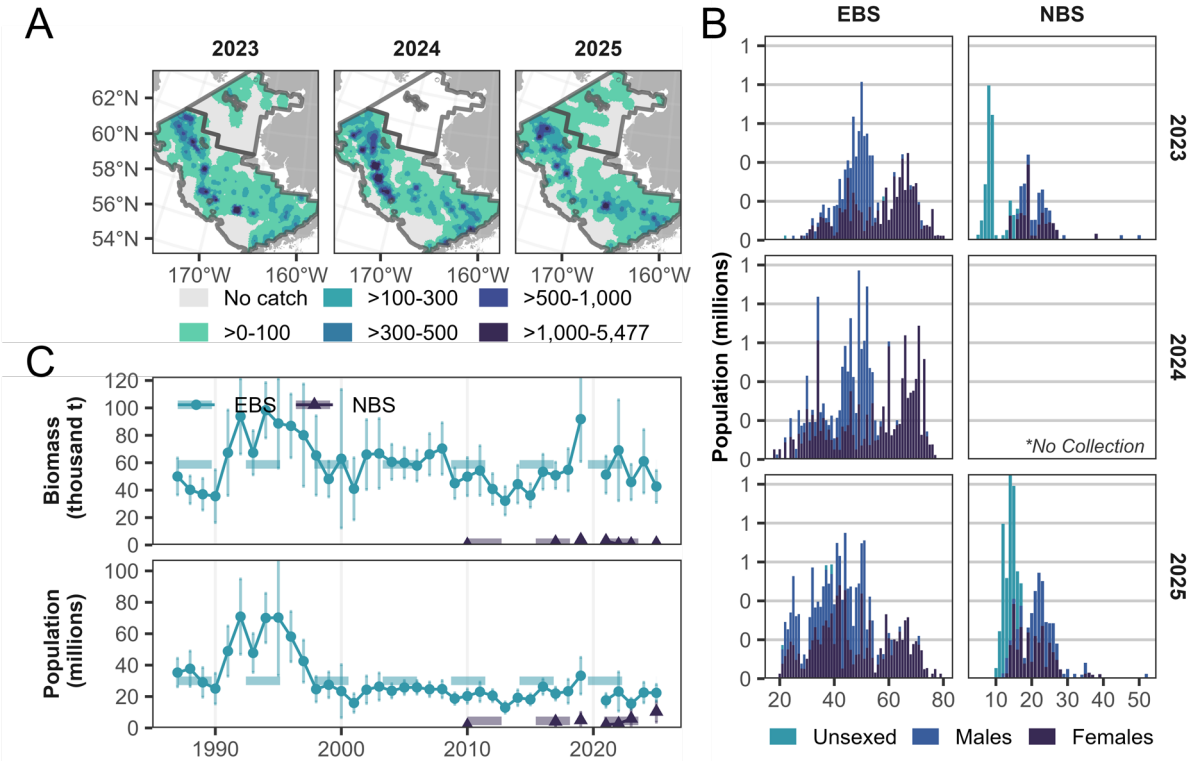

Figure 21. -- Great sculpin (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 58,792 t biomass, 30,032,118 individuals; NBS mean: 1,650 t biomass, 4,512,900 individuals).

Table 48. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which great sculpin were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	58.74	15.18	4,624	1,195	2,234	7,013	31
20	5.86	3.01	241	124	0	489	8
31	129.50	38.92	12,300	3,697	4,906	19,694	46
32	53.75	28.00	476	248	0	971	3
41	73.11	32.32	4,556	2,014	528	8,583	18
42	69.52	27.53	1,677	664	349	3,005	9
43	192.04	64.72	4,045	1,363	1,318	6,772	10
50	7.82	7.82	297	297	0	892	1
61	102.49	34.05	8,996	2,989	3,018	14,974	19
62	89.12	35.85	576	232	113	1,039	5
82	59.76	37.09	1,073	666	0	2,405	10
90	332.54	146.86	3,837	1,695	448	7,226	8
Total	**86.61**	**11.81**	**42,697**	**5,824**	**31,050**	**54,345**	**168**
Northern Bering Sea							
70	5.19	1.83	361	128	106	617	11
71	9.26	3.09	752	251	250	1,254	17
81	4.48	1.30	172	50	72	272	13
Total	**6.79**	**1.51**	**1,285**	**286**	**714**	**1,857**	**41**

Table 49. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which great sculpin were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	33.36	8.17	1,339.95	3,911.11	2,625.53	642.79	30
20	6.84	2.25	96.67	466.65	281.66	92.49	8
31	69.24	19.08	2,951.38	10,201.73	6,576.55	1,812.59	46
32	21.94	9.91	18.81	369.42	194.12	87.65	3
41	30.68	9.33	748.82	3,074.48	1,911.65	581.41	18
42	26.42	9.13	196.99	1,077.84	637.41	220.21	9
43	147.14	46.93	1,122.18	5,076.47	3,099.32	988.57	10
50	3.21	3.21	0.00	366.03	122.01	122.01	1
61	38.03	11.97	1,237.08	5,438.70	3,337.89	1,050.41	19
62	53.92	16.16	139.53	557.32	348.43	104.45	5
82	66.88	20.92	449.55	1,951.93	1,200.74	375.60	10
90	174.44	80.02	166.04	3,859.67	2,012.85	923.41	8
Total	**45.33**	**5.44**	**16,980.99**	**27,715.31**	**22,348.15**	**2,683.58**	**167**
Northern Bering Sea							
70	21.58	8.45	325.56	2,678.19	1,501.87	588.16	11
71	100.77	40.32	1,635.85	14,740.92	8,188.39	3,276.27	17
81	17.51	4.59	319.28	1,023.64	671.46	176.09	13
Total	**54.77**	**17.62**	**3,695.12**	**17,028.31**	**10,361.72**	**3,333.30**	**41**

Greenland Turbot (*Reinhardtius hippoglossoides*)

The estimated biomass of Greenland turbot in the eastern Bering Sea decreased to 5,659 t in 2025 (Tables **50** and **51**; Fig. **22**), and the population was estimated at 1.6 million individuals (Tables **50** and **52**; Fig. **22**). These estimates were extrapolated from 50 individuals caught during the eastern Bering Sea survey. The biomass estimate in the northern Bering Sea decreased to >1 t in 2025 (Tables **50** and **51**; Fig. **22**), and the population was estimated at 25,613 individuals (Tables **50** and **52**; Fig. **22**). These estimates were extrapolated from one individual caught during the northern Bering Sea survey.

In 2025, Greenland turbot were encountered exclusively in the northwest portion of the middle- and outer-shelves (50-200 m) near the U.S.-Russia Maritime Boundary (Fig. **22**). Greenland turbot are typically most abundant on the upper continental slope outside of the standard eastern Bering Sea survey area, although juveniles may spend several years on the continental shelf before moving to deeper water (Sohn et al., 2010; Vestfals et al., 2016). Length modes for Greenland turbot are difficult to distinguish, though appear to be 30 and 85 cm in 2025 (Fig. **22**).

Table 50. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Greenland turbot in the eastern and northern Bering Sea. Too few organisms were observed on the eastern and northern Bering Sea survey to share meaningful percent change of total biomass values, so observed values are shared instead.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	28 of 350 (8.0%)	1 of 137 (0.7%)
Bottom Depth	62 - 177 m	79 m
Bottom Temperature	-1.3 - 3.5 °C	-1.3 °C
Surface Temperature	5.9 - 8.6 °C	9.5 °C
Population; Biomass	1.6 million; 5,659 t	25,613; >1 t
Observed Catch Totals	Decreased from 53 in 2024 to 50 individuals in 2025	Decreased from four in 2023 to one individual in 2025

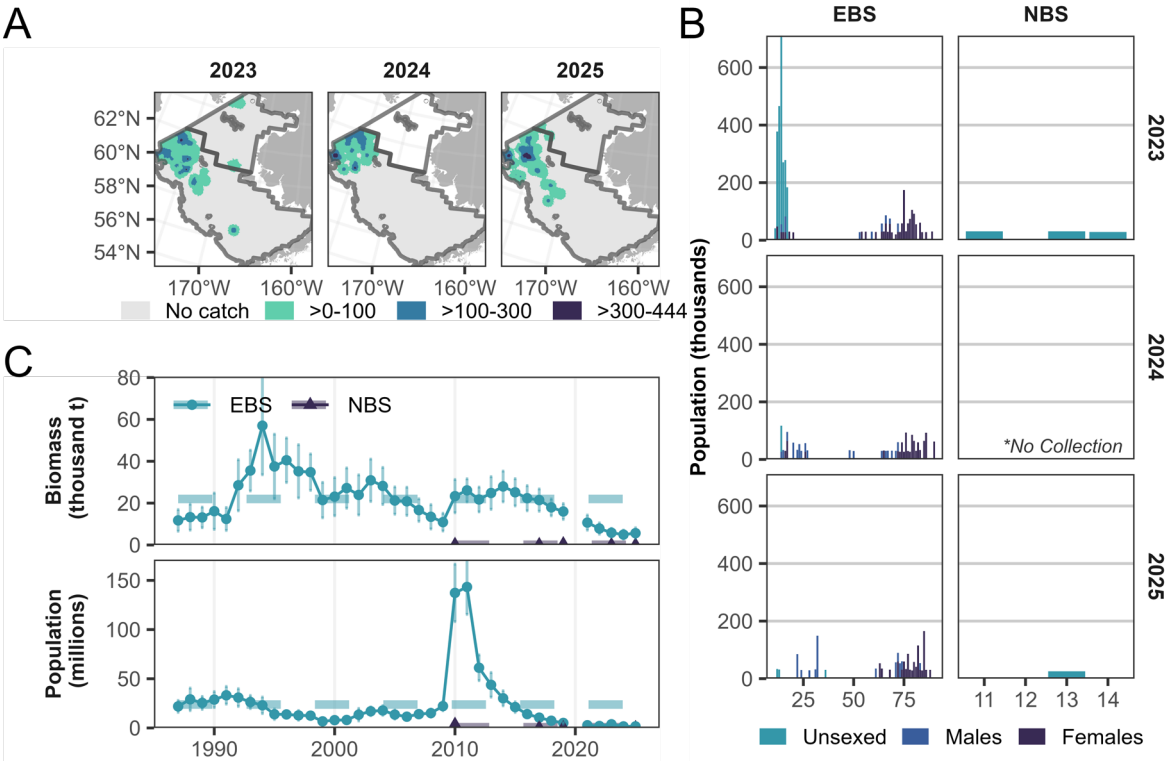

Figure 22. -- Greenland turbot (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 21,995 t biomass, 23,809,128 individuals; NBS mean: 122 t biomass, 763,957 individuals).

Table 51. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which Greenland turbot were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	10.75	5.30	670	330	10	1,330	5
42	-	-	-	-	-	-	-
43	4.42	4.06	93	86	0	264	2
50	-	-	-	-	-	-	-
61	40.16	13.08	3,526	1,148	1,229	5,822	11
62	68.77	33.65	444	217	10	879	3
82	8.43	7.72	151	139	0	429	3
90	67.11	32.89	774	379	15	1,533	4
Total	**11.48**	**2.60**	**5,659**	**1,283**	**3,093**	**8,224**	**28**
Northern Bering Sea							
70	-	-	-	-	-	-	-
71	-	-	-	-	-	-	-
81	0.01	0.01	0	0	0	1	1
Total	**0.00**	**0.00**	**0**	**0**	**0**	**1**	**1**

Table 52. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which Greenland turbot were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	2.96	1.33	18.65	349.73	184.19	82.77	5
42	-	-	-	-	-	-	-
43	3.04	2.06	0.00	150.74	64.03	43.35	2
50	-	-	-	-	-	-	-
61	8.49	2.73	265.78	1,224.39	745.09	239.65	11
62	13.65	6.78	0.60	175.74	88.17	43.78	3
82	12.51	8.95	0.00	545.90	224.59	160.65	3
90	25.46	12.25	10.96	576.52	293.74	141.39	4
Total	**3.25**	**0.68**	**924.88**	**2,274.74**	**1,599.81**	**337.46**	**28**
Northern Bering Sea							
70	-	-	-	-	-	-	-
71	-	-	-	-	-	-	-
81	0.67	0.67	0.00	76.84	25.61	25.61	1
Total	**0.14**	**0.14**	**0.00**	**76.84**	**25.61**	**25.61**	**1**

Kamchatka Flounder (*Atheresthes evermanni*)

The estimated biomass of Kamchatka flounder in the eastern Bering Sea increased by 17% from 2024 to 2025 (Tables **53** and **54**; Fig. **23**), and the population was estimated at 73.1 million individuals (Tables **53** and **55**; Fig. **23**). No Kamchatka flounder were observed in the northern Bering Sea in 2025 (Fig. **23**).

The distribution of Kamchatka flounder in the eastern Bering Sea survey area was similar from 2023 to 2025, with the highest CPUE along the middle- and outer-shelf (50-200 m), and along the northwestern edge (Fig. **23**). The Kamchatka flounder sex ratio was roughly 1:1, with a single length mode at 33 cm for both males and females (Fig. **23**). There was a smaller number of small Kamchatka flounder (< 20 cm) observed in the eastern Bering Sea than in previous years (Fig. **23**).

Kamchatka flounder and arrowtooth flounder are congeneric (Yang, 1988). Survey participants have been trained to distinguish between the two species since 1992 (note truncated time series in Fig. **23**), so arrowtooth flounder and Kamchatka flounder are discussed separately in this report. While the two species typically occupy similar areas (Baker and Hollowed, 2014), arrowtooth flounder were mainly found in the southern end of the eastern Bering Sea and the northwestern edge of the outer domain (Fig. **15**). Kamchatka flounder are much less abundant than arrowtooth flounder in the eastern Bering Sea.

Table 53. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Kamchatka flounder in the eastern Bering Sea.

	Eastern Bering Sea
Stations Present	142 of 350 (40.6%)
Bottom Depth	51 - 177 m
Bottom Temperature	0.6 - 6.4 °C
Surface Temperature	4.3 - 9.5 °C
% of Total Biomass	0.2%
% Change in Biomass	17% increase from 2024
Population; Biomass	73.1 million; 33,231 t

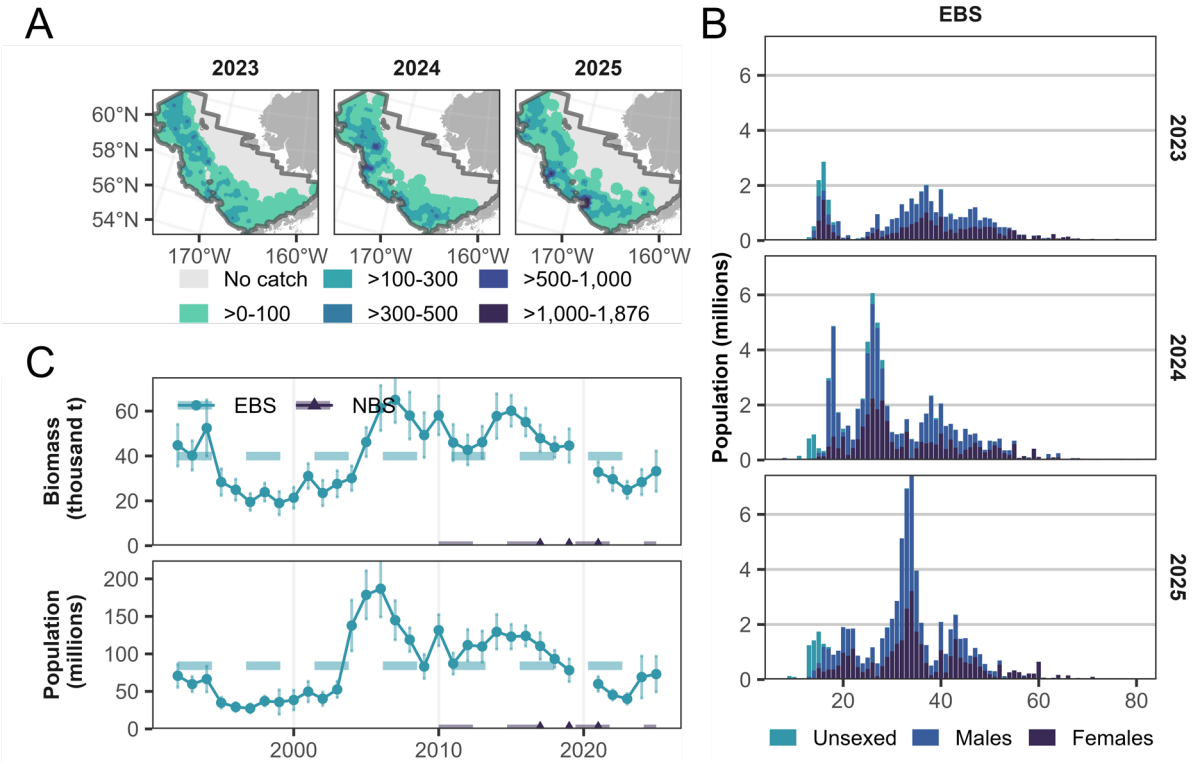

Figure 23. -- Kamchatka flounder (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern Bering Sea survey. (C) Biomass and population time series estimated from the 1992-2025 survey (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 39,940 t biomass, 84,210,773 individuals; NBS mean: 63 t biomass, 65,982 individuals).

Table 54. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which Kamchatka flounder were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	6.30	6.03	496	475	0	1,445	2
20	-	-	-	-	-	-	-
31	44.60	8.30	4,236	789	2,659	5,814	32
32	86.71	36.82	767	326	116	1,419	5
41	29.09	12.12	1,813	755	302	3,323	10
42	58.92	28.04	1,421	676	68	2,774	5
43	56.44	18.43	1,189	388	412	1,965	7
50	250.51	95.45	9,529	3,631	2,268	16,790	24
61	138.72	25.13	12,176	2,206	7,765	16,588	47
62	50.17	34.08	324	220	0	765	3
82	5.67	5.67	102	102	0	305	1
90	102.14	29.91	1,179	345	488	1,869	6
Total	**67.41**	**9.15**	**33,231**	**4,512**	**24,207**	**42,255**	**142**

Table 55. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which Kamchatka flounder were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	16.69	13.21	0.00	3,393.27	1,313.31	1,039.98	2
20	-	-	-	-	-	-	-
31	149.36	32.21	8,068.11	20,304.19	14,186.15	3,059.02	32
32	325.17	102.24	1,067.79	4,685.61	2,876.70	904.45	5
41	22.28	8.06	383.37	2,393.12	1,388.25	502.44	10
42	67.36	32.02	79.96	3,169.93	1,624.94	772.49	5
43	39.81	14.83	213.63	1,463.35	838.49	312.43	7
50	685.90	254.34	6,741.65	45,440.23	26,090.94	9,674.65	24
61	267.57	67.90	11,566.28	35,407.40	23,486.84	5,960.28	47
62	37.43	23.15	0.00	540.96	241.84	149.56	3
82	3.10	3.10	0.00	166.74	55.58	55.58	1
90	82.80	25.40	369.19	1,541.63	955.41	293.11	6
Total	**148.19**	**24.12**	**49,272.81**	**96,844.08**	**73,058.45**	**11,892.82**	**142**

Longhead Dab (*Myzopsetta proboscidea*)

Previous scientific name: *Limanda proboscidea*

The estimated biomass of longhead dab in the eastern Bering Sea decreased by 18% from 2024 to 2025 (Tables **56** and **57**; Fig. **24**), and the population was estimated at 45.7 million individuals (Tables **56** and **58**; Fig. **24**). The biomass estimate in the northern Bering Sea increased by 262% from 2023 to 2025 (Tables **56** and **57**; Fig. **24**), and the population was estimated at 34 million individuals (Tables **56** and **58**; Fig. **24**).

Table 56. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for longhead dab in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	35 of 350 (10.0%)	36 of 137 (26.3%)
Bottom Depth	22 - 55 m	13 - 55 m
Bottom Temperature	2.7 - 5.9 °C	-1.2 - 12.6 °C
Surface Temperature	2.9 - 6 °C	7 - 16.1 °C
% of Total Biomass	<0.01%	0.2%
% Change in Biomass	18% decrease from 2024	262% increase from 2023
Population; Biomass	45.7 million; 5,183 t	34 million; 4,761 t

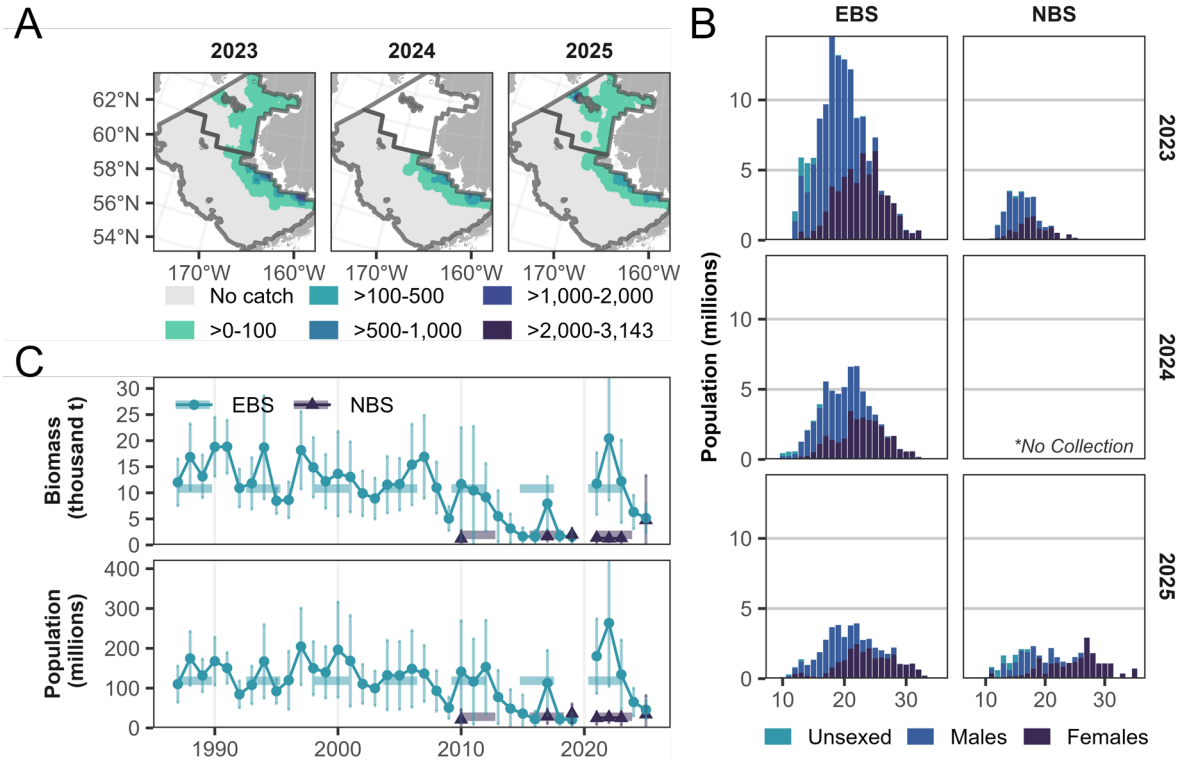

Figure 24. -- Longhead dab (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 10,818 t biomass, 118,662,202 individuals; NBS mean: 1,939 t biomass, 28,131,563 individuals).

Table 57. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which longhead dab were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	60.12	17.55	4,732	1,381	1,969	7,494	25
20	10.95	4.18	451	172	107	795	10
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**10.51**	**2.82**	**5,183**	**1,392**	**2,399**	**7,966**	**35**
Northern Bering Sea							
70	64.92	61.57	4,517	4,284	0	13,086	15
71	2.82	1.07	229	87	55	404	20
81	0.38	0.38	15	15	0	44	1
Total	**25.17**	**22.65**	**4,761**	**4,285**	**0**	**13,331**	**36**

Table 58. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which longhead dab were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	516.46	144.10	17,964.56	63,332.05	40,648.31	11,341.87	25
20	123.08	50.54	906.31	9,233.54	5,069.92	2,081.81	10
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**92.74**	**23.39**	**22,655.53**	**68,780.92**	**45,718.23**	**11,531.35**	**35**
Northern Bering Sea							
70	419.93	342.17	0.00	76,840.01	29,220.74	23,809.64	15
71	56.84	20.59	1,272.26	7,965.16	4,618.71	1,673.22	20
81	3.12	3.12	0.00	358.78	119.59	119.59	1
Total	**179.50**	**126.16**	**0.00**	**81,696.36**	**33,959.05**	**23,868.66**	**36**

Marbled Eelpout (*Lycodes raridens*)

The estimated biomass of marbled eelpout in the eastern Bering Sea increased to 2,372 t in 2025 (Table **59**; Fig. **25**), and the population was estimated at 2.4 million individuals (Table **59**; Fig. **25**). These estimates were extrapolated from 84 individuals caught during the eastern Bering Sea survey. Similarly, the biomass estimate in the northern Bering Sea increased to 384 t in 2025 (Table **59**; Fig. **25**), and the population was estimated at 1.2 million individuals (Table **59**; Fig. **25**). These estimates were extrapolated from 35 individuals caught during the northern Bering Sea survey.

Table 59. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for marbled eelpout in the eastern and northern Bering Sea. Too few organisms were observed on the eastern and northern Bering Sea survey to share meaningful percent change of total biomass values, so observed values are shared instead.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	6 of 350 (1.7%)	12 of 137 (8.8%)
Bottom Depth	73 - 91 m	54 - 71 m
Bottom Temperature	-1.4 - -0.2 °C	-1.4 - -0.9 °C
Surface Temperature	7.3 - 7.8 °C	7.2 - 10.1 °C
Population; Biomass	2.4 million; 2,372 t	1.2 million; 384 t
Observed Catch Totals	Increased from 79 in 2024 to 84 individuals in 2025	Increased from 15 in 2023 to 35 individuals in 2025

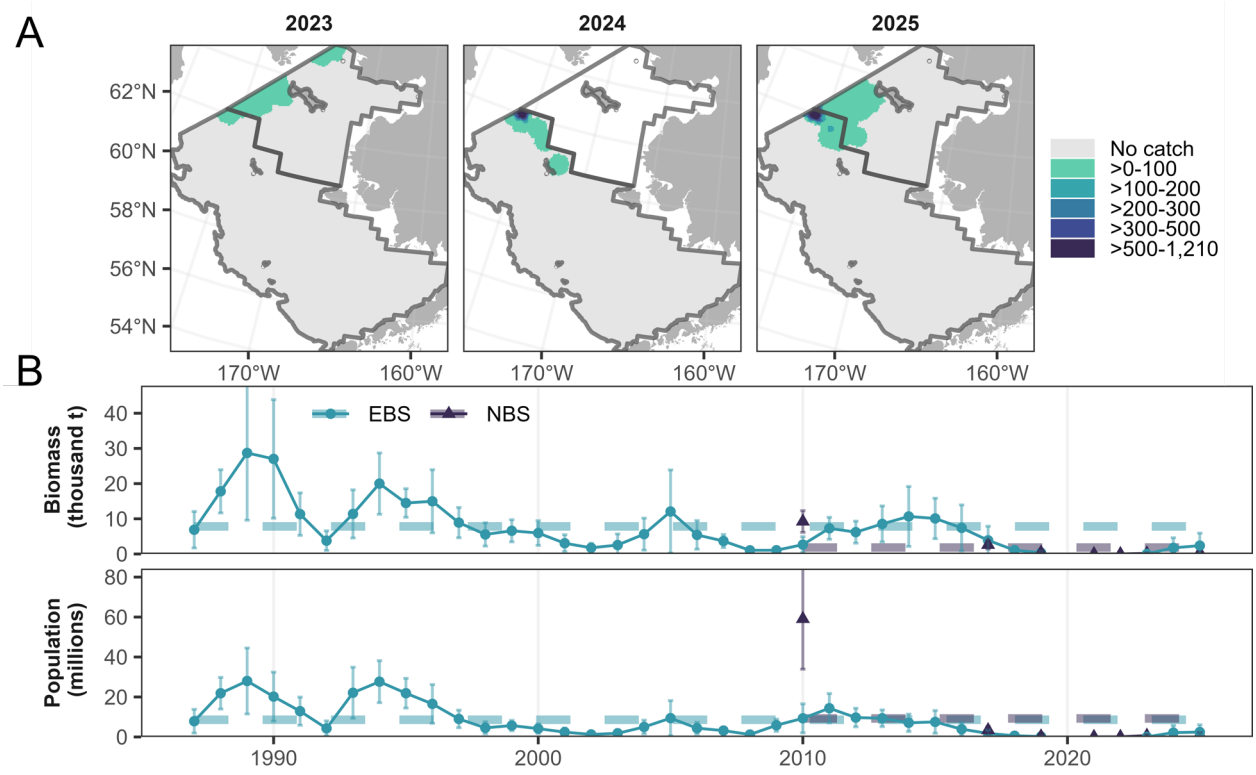

Figure 25. -- Marbled eelpout (A) CPUE distribution (kg/km^2) from the 2023-2025 eastern and northern Bering Sea surveys. (B) Biomass and population time series estimated from the 1987-2025 eastern and northern Bering Sea surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 7,834 t biomass, 8,606,731 individuals; NBS mean: 1,835 t biomass, 9,257,109 individuals).

Neptune Whelks (*Neptune* spp.)

Previous common name: Neptune snail

The estimated biomass of Neptune whelks in the eastern Bering Sea increased by 4% from 2024 to 2025 (Table **60**; Fig. **26**), and the population was estimated at 2.4 billion individuals (Table **60**; Fig. **26**). The biomass estimate in the northern Bering Sea decreased by 5% from 2023 to 2025 (Table **60**; Fig. **26**), and the population was estimated at 1.6 billion individuals (Table **60**; Fig. **26**).

Table 60. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Neptune whelks in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	281 of 350 (80.3%)	111 of 137 (81.0%)
Bottom Depth	31 - 177 m	15 - 71 m
Bottom Temperature	-1.4 - 5.5 °C	-1.4 - 11.8 °C
Surface Temperature	2.3 - 9.5 °C	4.9 - 16.9 °C
% of Total Biomass	1.8%	6.1%
% Change in Biomass	4% increase from 2024	5% decrease from 2023
Population; Biomass	2.4 billion; 253,632 t	1.6 billion; 147,427 t

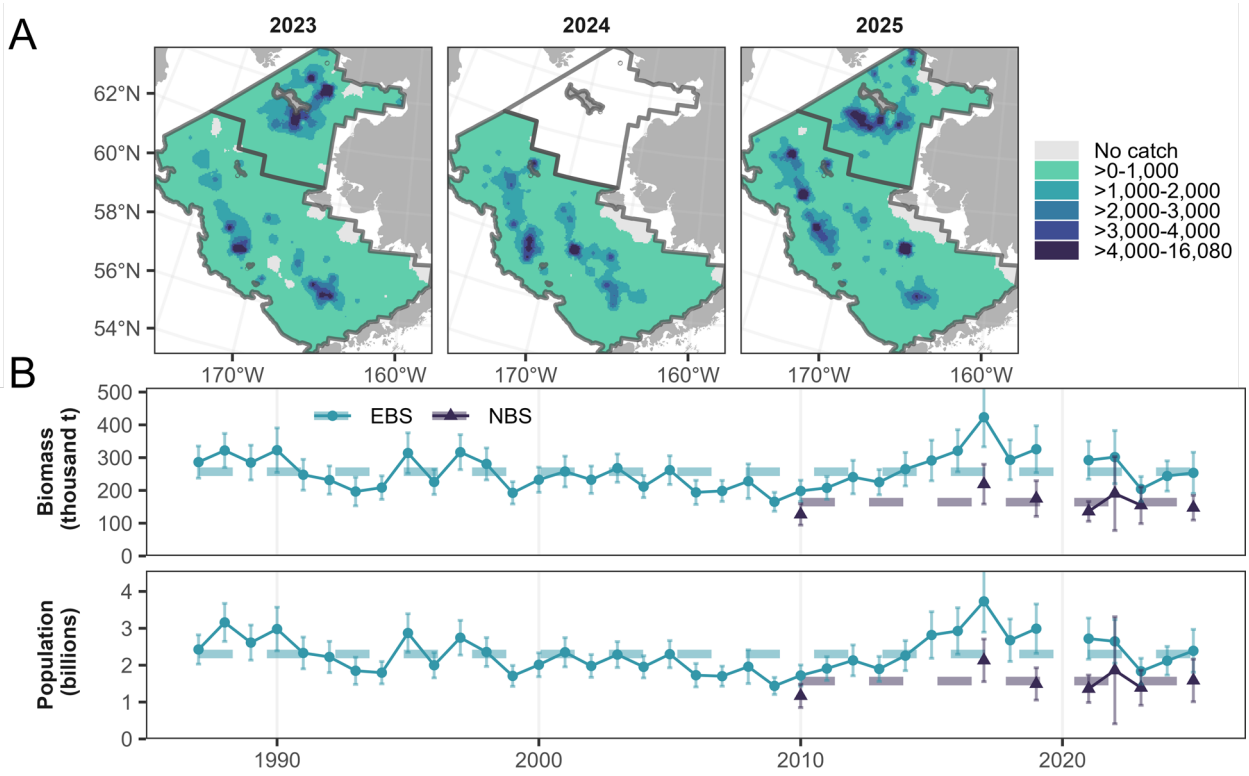

Figure 26. -- Neptune whelks (A) CPUE distribution (kg/km^2) from the 2023-2025 eastern and northern Bering Sea surveys. (B) Biomass and population time series estimated from the 1987-2025 eastern and northern Bering Sea surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 257,078 t biomass, 2,303,758,655 individuals; NBS mean: 164,265 t biomass, 1,570,003,404 individuals).

Northern Rock Sole (*Lepidopsetta polyxystra*)

The estimated biomass of northern rock sole in the eastern Bering Sea increased by 4% from 2024 to 2025 (Tables **61** and **62**; Fig. **27**), and the population was estimated at 7.8 billion individuals (Tables **61** and **63**; Fig. **27**). The biomass estimate in the northern Bering Sea decreased by 8% from 2023 to 2025 (Tables **61** and **62**; Fig. **27**), and the population was estimated at 123.2 million individuals (Tables **61** and **63**; Fig. **27**).

The distribution of northern rock sole was similar from 2023 to 2025 (Fig. **27**). The highest densities in the eastern Bering Sea were observed in the southeast portion of the inner-shelf (50-100 m), along the Alaska Peninsula and in the vicinity of the Pribilof Islands (Fig. **27**). Northern rock sole are more abundant in the eastern Bering Sea than in the northern Bering Sea. The distribution of northern rock sole appears to be correlated with the extent of the cold pool, as relatively low densities of northern rock sole were observed where bottom temperatures were < 1°C in the middle and outer domains (Fig. **27**; and Tables **62** and **63**). The length modes in the eastern Bering Sea were approximately 15 and 33 cm, similar to those seen in 2023 and 2024 (Fig. **27**).

Northern and southern rock sole (not presented in this report) are congeners and can be difficult to morphologically distinguish in the field. Survey participants have been trained to reliably distinguish between the two species since 1996 (note truncated time series in Fig. **27**). Northern and southern rock sole overlap spatially, but their overall distributions differ (Fig. **27**). Southern rock sole are distributed in the southeastern corner of the Bering sea, while northern rock sole are distributed across the eastern Bering Sea.

While spawning and feeding migrations for northern rock sole are poorly understood, they are believed to use active tidal stream transport during nighttime hours (Nichol and Somerton, 2009) to migrate from shallow summer feeding grounds to deep winter and spring spawning grounds (Fadeev, 1965; Shubnikov and Lisovenko, 1964).

Table 61. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for northern rock sole in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	280 of 350 (80.0%)	92 of 137 (67.2%)
Bottom Depth	22 - 162 m	22 - 69 m
Bottom Temperature	-1.4 - 6.4 °C	-1.4 - 11.1 °C
Surface Temperature	2.3 - 9.1 °C	5.9 - 14.5 °C
% of Total Biomass	10.8%	1.1%
% Change in Biomass	4% increase from 2024	8% decrease from 2023
Population; Biomass	7.8 billion; 1.5 million t	123.2 million; 26,962 t

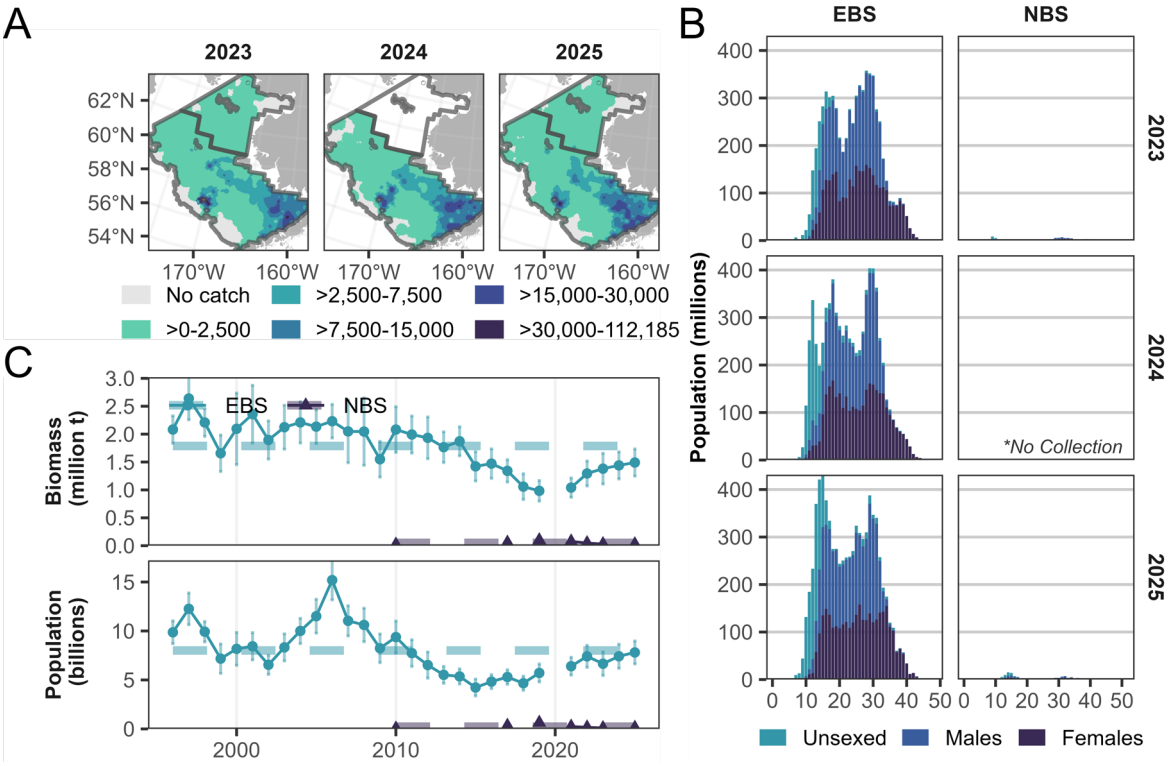

Figure 27. -- Northern rock sole (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1996-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 1,787,896 t biomass, 8,008,456,180 individuals; NBS mean: 50,718 t biomass, 230,524,527 individuals).

Table 62. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which northern rock sole were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	9,531.16	959.19	750,157	75,494	599,169	901,144	58
20	3,304.41	538.81	136,119	22,195	91,729	180,510	31
31	3,864.05	747.52	367,002	70,999	225,005	508,999	64
32	3,058.07	1,226.13	27,054	10,847	5,359	48,748	5
41	770.22	183.49	47,992	11,433	25,126	70,858	44
42	5,926.09	2,358.67	142,950	56,896	29,157	256,742	18
43	689.79	401.35	14,530	8,454	0	31,437	13
50	25.61	17.64	974	671	0	2,316	5
61	28.11	9.14	2,467	802	862	4,072	25
62	24.85	13.20	161	85	0	331	4
82	79.68	34.58	1,431	621	189	2,672	9
90	10.33	4.19	119	48	22	216	4
Total	**3,024.31**	**246.70**	**1,490,955**	**121,619**	**1,247,716**	**1,734,193**	**280**
Northern Bering Sea							
70	283.55	80.31	19,731	5,588	8,554	30,907	46
71	35.04	10.55	2,847	857	1,133	4,561	24
81	114.33	71.97	4,385	2,760	0	9,905	22
Total	**142.51**	**33.25**	**26,962**	**6,291**	**14,380**	**39,545**	**92**

Table 63. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which northern rock sole were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	59,359.57	5,552.17	3,797,960.75	5,545,909.71	4,671,935.23	436,987.24	58
20	17,188.73	2,902.18	468,958.92	947,159.39	708,059.15	119,550.12	31
31	17,922.83	3,544.78	1,028,927.50	2,375,639.35	1,702,283.42	336,677.96	64
32	11,370.25	3,505.78	38,560.09	162,618.94	100,589.51	31,014.71	5
41	2,726.58	764.37	74,637.05	265,149.73	169,893.39	47,628.17	44
42	16,862.91	5,912.46	121,526.96	692,011.38	406,769.17	142,621.11	18
43	1,730.44	1,023.83	0.00	79,580.58	36,449.47	21,565.56	13
50	55.76	38.13	0.00	5,021.87	2,121.22	1,450.33	5
61	60.60	18.16	2,131.88	8,507.46	5,319.67	1,593.90	25
62	63.48	31.54	2.54	817.81	410.17	203.82	4
82	174.50	74.16	469.95	5,795.85	3,132.90	1,331.47	9
90	28.37	11.35	65.32	589.35	327.34	131.01	4
Total	**15,836.61**	**1,187.36**	**6,636,573.23**	**8,978,008.05**	**7,807,290.64**	**585,358.70**	**280**
Northern Bering Sea							
70	1,421.31	398.62	43,426.52	154,376.40	98,901.46	27,737.47	46
71	72.53	21.56	2,389.88	9,397.07	5,893.47	1,751.80	24
81	481.16	320.58	0.00	43,043.02	18,453.33	12,294.85	22
Total	**651.45**	**160.64**	**62,466.71**	**184,029.82**	**123,248.26**	**30,390.78**	**92**

Pacific Capelin (*Mallotus villosus*)

The estimated biomass of Pacific capelin in the eastern Bering Sea increased by 40% from 2024 to 2025 (Tables **64** and **65**; Fig. **28**), and the population was estimated at 24.2 million individuals (Tables **64** and **66**; Fig. **28**). Similarly, the biomass estimate in the northern Bering Sea increased by 219% from 2023 to 2025 (Tables **64** and **65**; Fig. **28**), and the population was estimated at 107.4 million individuals (Tables **64** and **66**; Fig. **28**). Pacific capelin lengths are not collected during the eastern and northern Bering Sea surveys.

Table 64. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Pacific capelin in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	55 of 350 (15.7%)	82 of 137 (59.9%)
Bottom Depth	22 - 85 m	22 - 74 m
Bottom Temperature	-1.4 - 5.9 °C	-1.4 - 8.7 °C
Surface Temperature	2.3 - 7.4 °C	5.9 - 12.6 °C
% of Total Biomass	<0.01%	0.1%
% Change in Biomass	40% increase from 2024	219% increase from 2023
Population; Biomass	24.2 million; 445 t	107.4 million; 1,481 t

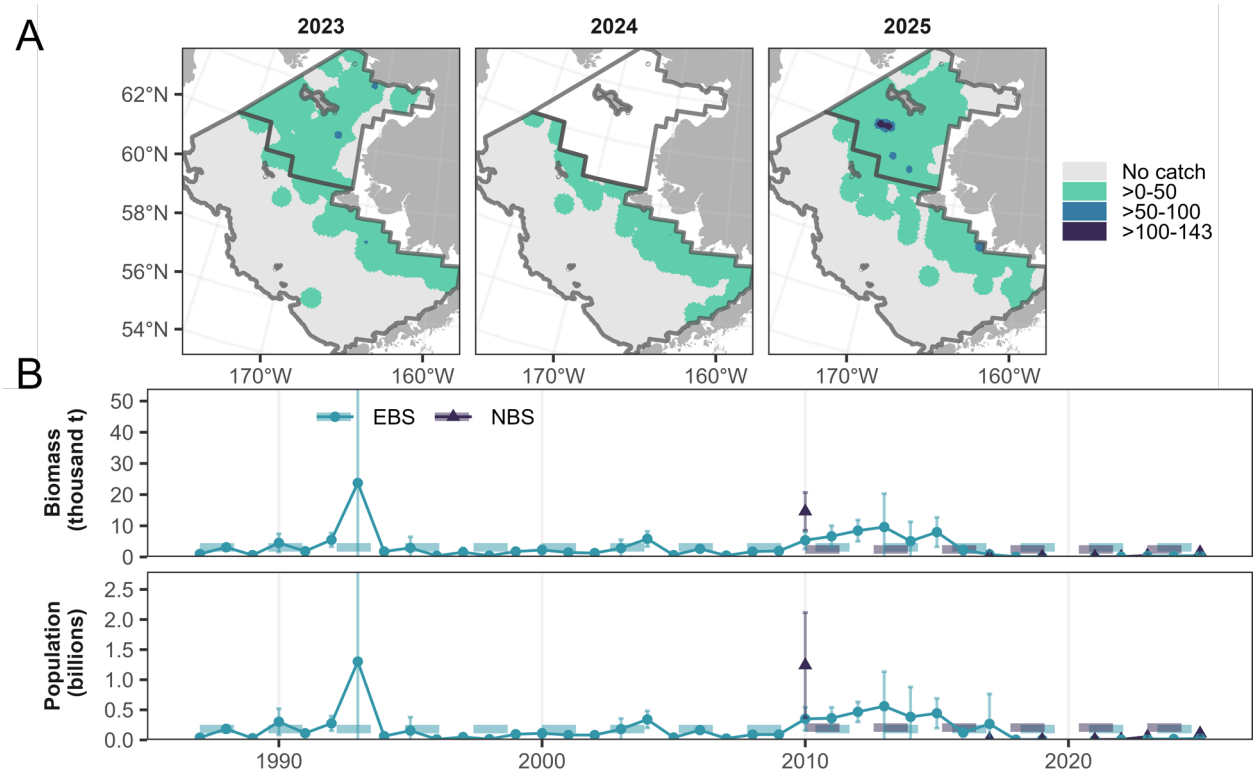

Figure 28. -- Pacific capelin (A) CPUE distribution (kg/km^2) from the 2023-2025 eastern and northern Bering Sea surveys. (B) Biomass and population time series estimated from the 1987-2025 eastern and northern Bering Sea surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 3,092 t biomass, 180,539,674 individuals; NBS mean: 2,422 t biomass, 205,376,890 individuals).

Table 65. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which Pacific capelin were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	5.22	1.85	411	145	120	701	29
20	0.57	0.25	23	10	3	44	10
31	0.02	0.01	2	1	0	5	2
32	-	-	-	-	-	-	-
41	0.12	0.04	7	2	3	12	10
42	-	-	-	-	-	-	-
43	0.07	0.06	2	1	0	4	2
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	0.03	0.02	1	0	0	1	2
90	-	-	-	-	-	-	-
Total	**0.90**	**0.30**	**445**	**146**	**154**	**737**	**55**
Northern Bering Sea							
70	12.40	3.40	863	237	389	1,336	41
71	1.60	0.58	130	47	37	224	17
81	12.73	5.16	488	198	92	884	24
Total	**7.83**	**1.65**	**1,481**	**312**	**857**	**2,106**	**82**

Table 66. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which Pacific capelin were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	277.20	95.19	6,833.40	36,801.44	21,817.42	7,492.01	29
20	38.74	17.51	153.43	3,038.13	1,595.78	721.18	10
31	1.01	0.76	0.00	240.68	96.27	72.21	2
32	-	-	-	-	-	-	-
41	8.72	2.67	210.96	876.23	543.59	166.32	10
42	-	-	-	-	-	-	-
43	3.17	2.14	0.00	157.06	66.72	45.17	2
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	3.63	2.45	0.00	153.08	65.18	43.95	2
90	-	-	-	-	-	-	-
Total	**49.06**	**15.27**	**9,126.78**	**39,243.13**	**24,184.96**	**7,529.09**	**55**
Northern Bering Sea							
70	909.36	277.49	24,659.11	101,896.12	63,277.61	19,309.25	41
71	154.37	59.24	2,916.31	22,170.17	12,543.24	4,813.46	17
81	824.18	290.00	9,364.98	53,852.46	31,608.72	11,121.87	24
Total	**567.84**	**120.50**	**61,835.16**	**153,023.99**	**107,429.57**	**22,797.21**	**82**

Pacific Cod (*Gadus macrocephalus*)

The estimated biomass of Pacific cod in the eastern Bering Sea decreased by 10% from 2024 to 2025 (Tables **67** and **68**; Fig. **29**), and the population was estimated at 516.7 million individuals (Tables **67** and **69**; Fig. **29**). Similarly, the biomass estimate in the northern Bering Sea decreased by 36% from 2023 to 2025 (Tables **67** and **68**; Fig. **29**), and the population was estimated at 43 million individuals (Tables **67** and **69**; Fig. **29**).

Since 2019, Pacific cod biomass and abundance have stabilized around the long-term mean. In 2025, as in 2024, Pacific cod biomass was distributed across the eastern Bering Sea shelf. Some of the highest concentrations of Pacific cod were encountered to the northwest and to the east of the Pribilof islands and the southwest portion of the middle domain near the Alaska Peninsula. Pacific cod size composition in the eastern Bering Sea had three modes around 15 cm, 38 cm, and 50 cm (Fig. **29**).

Pacific cod migration between the eastern and northern Bering Sea survey areas is likely related to interannual variability in temperature patterns. Satellite tagging studies indicate high mobility from the Gulf of Alaska to the northern Bering Sea (Nielsen et al., 2023).

Based on the work of Ciannelli and Bailey (2005), thermal corridors (between 1° and 6°C) are created due to higher-than-average bottom temperatures during warm stanzas, which may allow Pacific cod to move from areas such as the southeastern shelf to the inner domain in order to feed on high densities of Pacific capelin, Pacific herring, and smelt. The recent 2014 - 2021 warm stanza may have therefore led to a decrease in Pacific cod abundance in the eastern Bering Sea, along with a concomitant increase of same-sized Pacific cod in the northern Bering Sea, suggesting a northward migration (Stevenson and Lauth, 2019) through a thermal corridor.

These migrations to the northern Bering Sea were potentially taking place prior to 2017, as high densities of Pacific cod were observed along the northern edge of the eastern Bering Sea survey area from 2014-2016 (Conner, Stevenson, et al., 2017; Conner, Nichol, et al., 2017; Conner and Lauth, 2017). The increase in northern Bering Sea abundance was likely facilitated by the three warm years preceding 2017, when Pacific cod abundance and biomass were relatively high, with large aggregations in the middle and inner domains, close to the border of the eastern and northern Bering Sea survey areas.

Table 67. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Pacific cod in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	335 of 350 (95.7%)	99 of 137 (72.3%)
Bottom Depth	22 - 177 m	21 - 79 m
Bottom Temperature	-1.4 - 6.4 °C	-1.4 - 11.6 °C
Surface Temperature	2.3 - 9.5 °C	4.9 - 14.5 °C
% of Total Biomass	4.1%	2.9%
% Change in Biomass	10% decrease from 2024	36% decrease from 2023
Population; Biomass	516.7 million; 570,986 t	43 million; 69,383 t

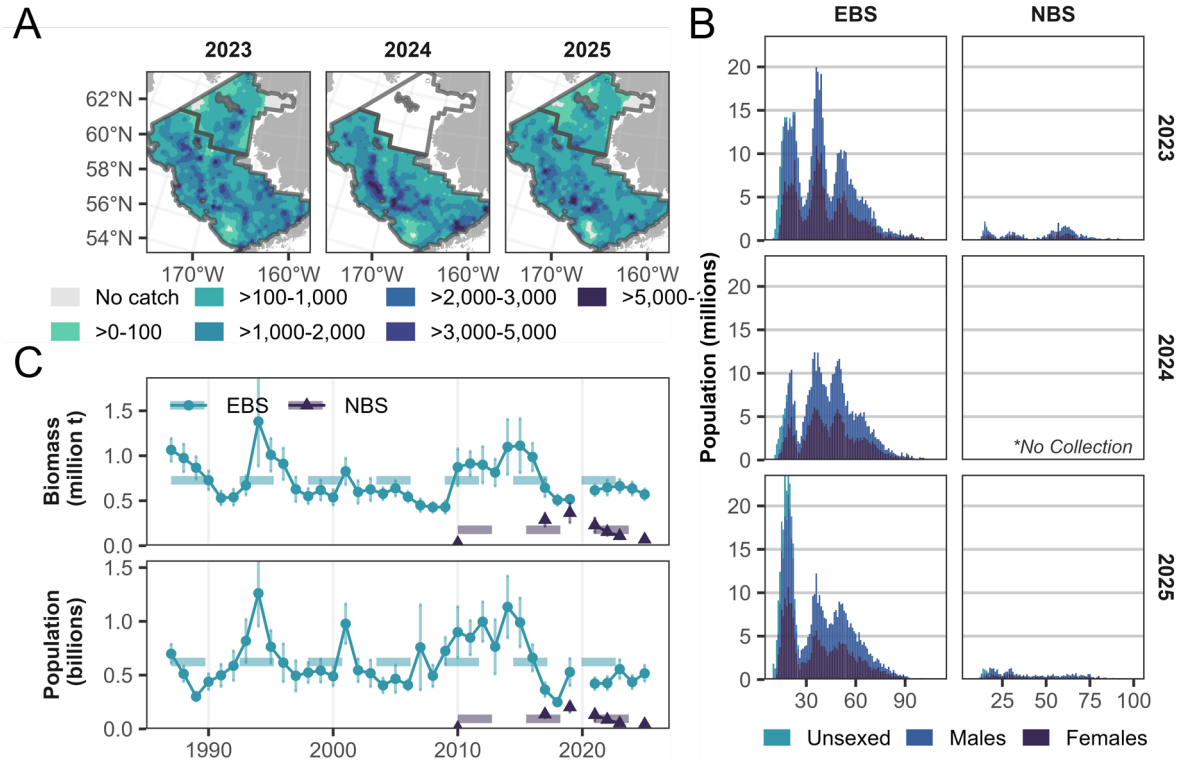

Figure 29. -- Pacific cod (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 727,028 t biomass, 622,039,360 individuals; NBS mean: 177,247 t biomass, 93,927,677 individuals).

Table 68. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (thousand t) with SD (thousand t), 95% lower (LCL; thousand t) and upper (UCL; thousand t) confidence limits, and number of hauls in which Pacific cod were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (Kt)	Biomass SD (Kt)	95% LCL (Kt)	95% UCL (Kt)	Hauls w/ weights
Eastern Bering Sea							
10	883.99	83.32	69.57	6.56	56.46	82.69	58
20	858.17	86.69	35.35	3.57	28.21	42.49	31
31	1,464.25	166.31	139.07	15.80	107.48	170.66	67
32	1,234.57	146.53	10.92	1.30	8.33	13.51	5
41	1,332.79	152.20	83.05	9.48	64.08	102.01	44
42	2,097.32	659.54	50.59	15.91	18.77	82.41	18
43	1,300.48	273.14	27.39	5.75	15.89	38.90	13
50	668.04	207.83	25.41	7.91	9.60	41.22	16
61	1,106.69	139.42	97.14	12.24	72.67	121.62	60
62	1,741.76	466.70	11.25	3.02	5.22	17.29	5
82	647.04	315.78	11.62	5.67	0.28	22.96	10
90	832.86	191.47	9.61	2.21	5.19	14.03	8
Total	**1,158.21**	**62.24**	**570.99**	**30.68**	**509.62**	**632.35**	**335**
Northern Bering Sea							
70	698.25	128.28	48.59	8.93	30.73	66.44	46
71	136.97	31.73	11.13	2.58	5.97	16.29	33
81	252.03	97.82	9.67	3.75	2.16	17.17	20
Total	**366.73**	**52.96**	**69.38**	**10.02**	**49.34**	**89.42**	**99**

Table 69. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (millions) with SD (thousands), 95% lower (LCL; millions) and upper (UCL; millions) confidence limits, and number of hauls in which Pacific cod were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (M)	95% UCL (M)	Population (M)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	1,953.93	276.68	110.23	197.34	153.79	21,776.07	58
20	1,131.49	125.12	36.30	56.92	46.61	5,154.09	31
31	1,311.09	189.63	88.50	160.55	124.53	18,011.06	67
32	582.87	122.48	2.99	7.32	5.16	1,083.57	5
41	832.91	98.89	39.57	64.22	51.90	6,161.83	44
42	2,069.18	833.15	9.72	90.11	49.91	20,097.43	18
43	1,394.05	412.59	11.98	46.75	29.36	8,690.75	13
50	280.35	83.56	4.31	17.02	10.66	3,178.66	16
61	341.96	49.61	21.31	38.73	30.02	4,354.61	60
62	550.38	142.63	1.71	5.40	3.56	921.60	5
82	445.96	201.15	0.78	15.23	8.01	3,611.31	10
90	275.06	40.81	2.23	4.12	3.17	470.88	8
Total	**1,048.03**	**75.54**	**442.19**	**591.15**	**516.67**	**37,241.34**	**335**
Northern Bering Sea							
70	450.17	84.24	19.60	43.05	31.32	5,861.55	46
71	54.85	10.89	2.69	6.23	4.46	884.60	33
81	189.38	68.89	1.98	12.55	7.26	2,642.20	20
Total	**227.52**	**34.30**	**30.06**	**56.02**	**43.04**	**6,490.11**	**99**

Pacific Halibut (*Hippoglossus stenolepis*)

The estimated biomass of Pacific halibut in the eastern Bering Sea increased by 7% from 2024 to 2025 (Tables **70** and **71**; Fig. **30**), and the population was estimated at 80.5 million individuals (Tables **70** and **72**; Fig. **30**). The biomass estimate in the northern Bering Sea decreased by 3% from 2023 to 2025 (Tables **70** and **71**; Fig. **30**), and the population was estimated at 7.2 million individuals (Tables **70** and **72**; Fig. **30**).

The distribution of Pacific halibut across the Bering Sea surveys areas in 2025 was similar to both 2023 and 2024, with the highest densities south of Nunavik Island and southwest of Cape Newenham, as well as the southeast corner of the northern Bering Sea survey area (Fig. **30**). The most common length group of Pacific halibut were around 40 cm in the eastern Bering Sea (Fig. **30**).

Management of Pacific halibut is the purview of the IPHC, and their stock assessments include data from numerous fisheries and scientific surveys from both the United States and Canada, in addition to data from an IPHC longline survey (Stewart and Martell, 2015). When an IPHC sampler is not present on the vessel, Pacific halibut are deliberately left unsexed and unweighed by survey teams as per agreement with IPHC (see Catch Sampling Procedures).

Table 70. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Pacific halibut in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	257 of 350 (73.4%)	28 of 137 (20.4%)
Bottom Depth	22 - 177 m	16 - 55 m
Bottom Temperature	-1.4 - 6.4 °C	-1.3 - 11.1 °C
Surface Temperature	2.3 - 9.5 °C	7.1 - 16.6 °C
% of Total Biomass	1.0%	0.8%
% Change in Biomass	7% increase from 2024	3% decrease from 2023
Population; Biomass	80.5 million; 133,705 t	7.2 million; 18,423 t

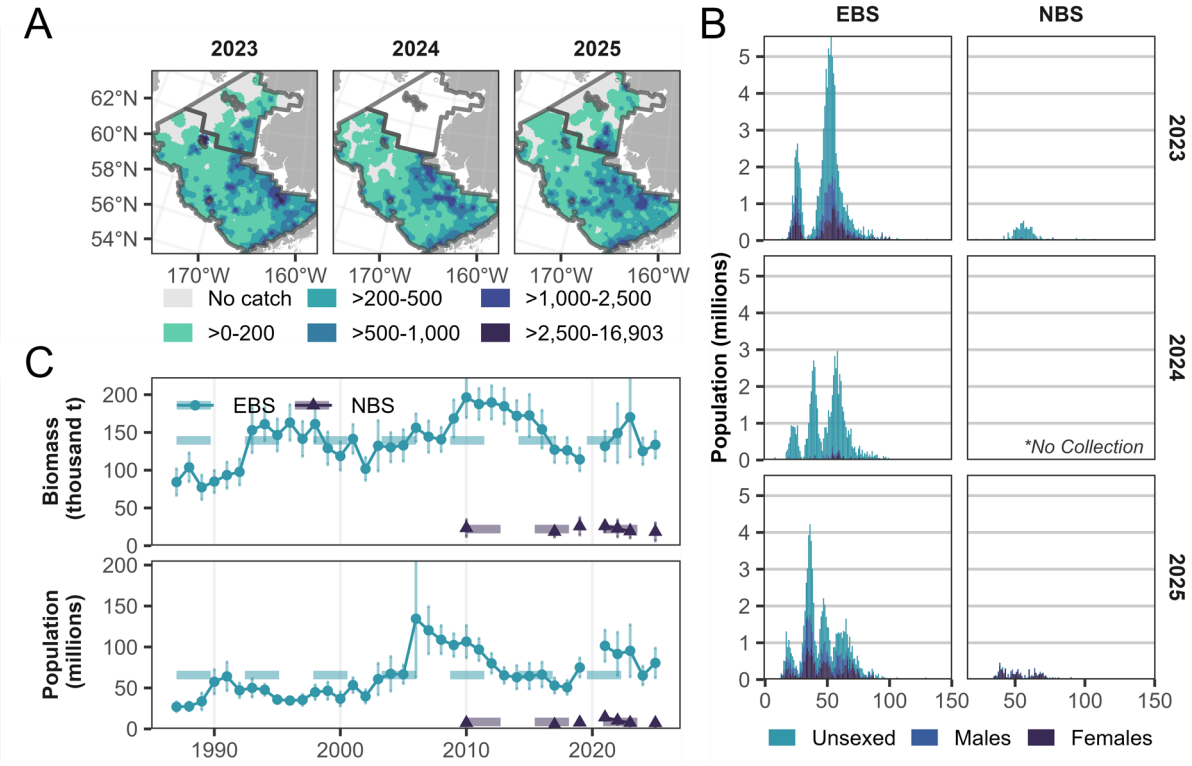

Figure 30. -- Pacific halibut (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 139,453 t biomass, 65,730,013 individuals; NBS mean: 22,000 t biomass, 8,492,271 individuals).

Table 71. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which Pacific halibut were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	560.60	72.42	44,122	5,700	32,722	55,523	54
20	353.56	69.86	14,564	2,878	8,809	20,319	29
31	386.24	44.11	36,684	4,190	28,305	45,064	63
32	460.28	152.60	4,072	1,350	1,372	6,772	5
41	106.44	33.96	6,632	2,116	2,400	10,865	24
42	311.58	101.35	7,516	2,445	2,626	12,405	17
43	139.70	46.16	2,943	972	998	4,887	9
50	148.45	36.96	5,647	1,406	2,835	8,459	16
61	124.41	26.91	10,920	2,362	6,197	15,644	32
62	13.35	9.70	86	63	0	212	2
82	10.83	7.35	194	132	0	458	3
90	27.98	18.60	323	215	0	752	3
Total	**271.21**	**18.05**	**133,705**	**8,898**	**115,909**	**151,500**	**257**
Northern Bering Sea							
70	195.12	80.46	13,577	5,599	2,380	24,775	15
71	58.26	25.88	4,734	2,102	529	8,938	11
81	2.92	2.38	112	91	0	295	2
Total	**97.38**	**31.61**	**18,423**	**5,981**	**6,461**	**30,386**	**28**

Table 72. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which Pacific halibut were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	517.38	106.48	23,960.14	57,481.44	40,720.79	8,380.33	54
20	202.79	39.49	5,099.81	11,607.15	8,353.48	1,626.84	29
31	197.26	26.45	13,712.15	23,759.21	18,735.68	2,511.76	63
32	189.19	71.41	410.21	2,937.21	1,673.71	631.75	5
41	37.93	12.52	803.43	3,923.46	2,363.44	780.01	24
42	124.08	37.87	1,166.36	4,819.99	2,993.18	913.41	17
43	33.89	8.45	357.96	1,069.56	713.76	177.90	9
50	43.85	14.22	586.32	2,750.03	1,668.17	540.93	16
61	34.21	6.25	1,904.97	4,099.89	3,002.43	548.73	32
62	6.92	4.38	0.00	101.33	44.72	28.30	2
82	5.15	2.69	0.00	189.18	92.51	48.34	3
90	14.07	7.40	0.00	333.17	162.36	85.40	3
Total	**163.34**	**18.33**	**62,450.71**	**98,597.76**	**80,524.23**	**9,036.76**	**257**
Northern Bering Sea							
70	92.33	40.49	789.19	12,059.86	6,424.52	2,817.67	15
71	8.75	2.87	244.67	1,176.55	710.61	232.97	11
81	1.65	1.14	0.00	150.94	63.20	43.87	2
Total	**38.05**	**14.95**	**1,543.08**	**12,853.58**	**7,198.33**	**2,827.62**	**28**

Pacific Herring (*Clupea pallasii*)

The estimated biomass of Pacific herring in the eastern Bering Sea decreased by 70% from 2024 to 2025 (Tables **73** and **74**; Fig. **31**), and the population was estimated at 100.7 million individuals (Tables **73** and **75**; Fig. **31**). The biomass estimate in the northern Bering Sea increased by 204% from 2023 to 2025 (Tables **73** and **74**; Fig. **31**), and the population was estimated at 55.4 million individuals (Tables **73** and **75**; Fig. **31**). Pacific herring lengths are not collected during the eastern and northern Bering Sea surveys.

Table 73. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Pacific herring in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	94 of 350 (26.9%)	35 of 137 (25.5%)
Bottom Depth	22 - 114 m	13 - 45 m
Bottom Temperature	-1.1 - 5.9 °C	3.1 - 12.6 °C
Surface Temperature	3.2 - 8.6 °C	7 - 16.9 °C
% of Total Biomass	0.1%	0.2%
% Change in Biomass	70% decrease from 2024	204% increase from 2023
Population; Biomass	100.7 million; 19,818 t	55.4 million; 4,160 t

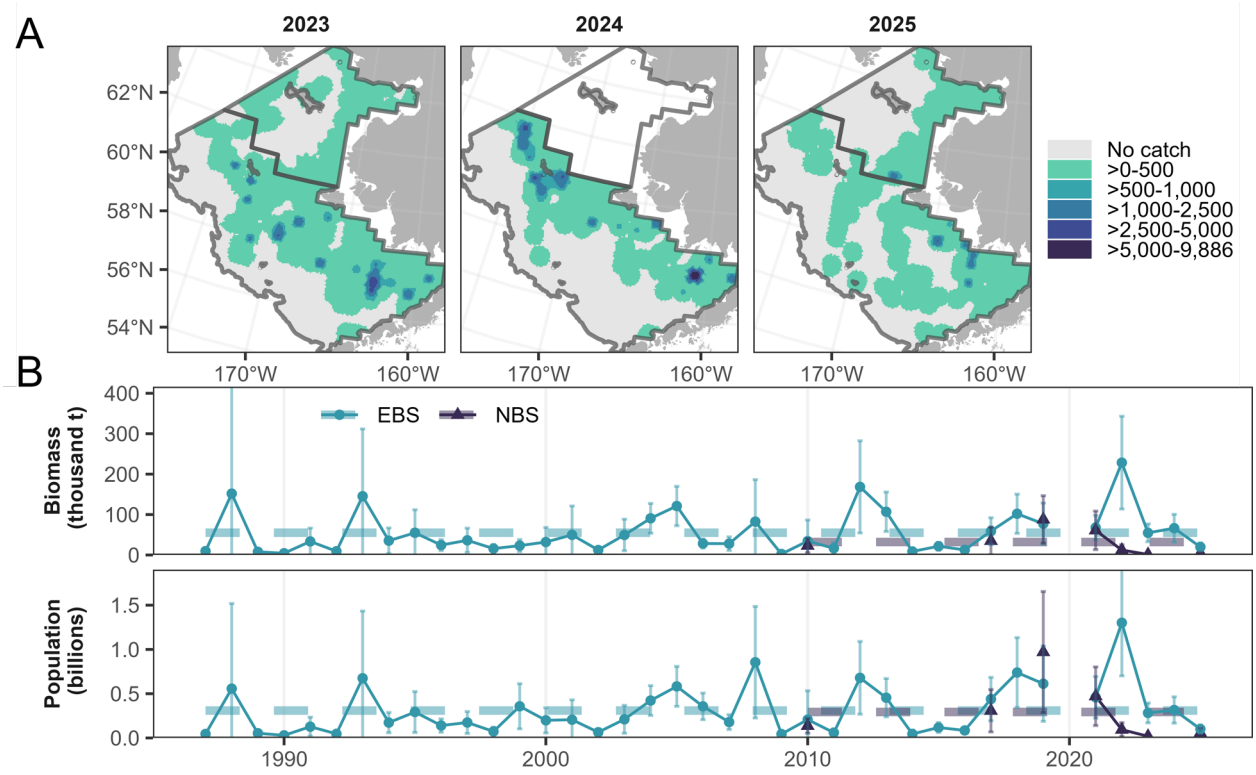

Figure 31. -- Pacific herring (A) CPUE distribution (kg/km^2) from the 2023-2025 eastern and northern Bering Sea surveys. (B) Biomass and population time series estimated from the 1987-2025 eastern and northern Bering Sea surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 55,091 t biomass, 309,624,252 individuals; NBS mean: 32,069 t biomass, 293,406,562 individuals).

Table 74. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which Pacific herring were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	177.66	62.24	13,983	4,898	4,186	23,780	30
20	26.73	11.26	1,101	464	173	2,029	14
31	22.14	7.84	2,102	744	614	3,591	22
32	5.61	5.61	50	50	0	149	1
41	16.67	6.45	1,039	402	235	1,842	13
42	7.17	7.17	173	173	0	519	1
43	8.71	7.61	183	160	0	504	3
50	0.35	0.35	13	13	0	40	1
61	0.32	0.32	28	28	0	85	1
62	4.02	4.02	26	26	0	78	1
82	1.69	1.17	30	21	0	72	3
90	94.38	47.33	1,089	546	0	2,181	4
Total	**40.20**	**10.20**	**19,818**	**5,028**	**9,761**	**29,875**	**94**
Northern Bering Sea							
70	41.52	30.90	2,889	2,150	0	7,189	17
71	15.63	7.56	1,270	614	42	2,498	18
81	-	-	-	-	-	-	-
Total	**21.99**	**11.82**	**4,160**	**2,236**	**0**	**8,631**	**35**

Table 75. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which Pacific herring were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	914.79	293.68	25,770.63	118,227.74	71,999.19	23,114.28	30
20	177.39	71.74	1,396.65	13,217.48	7,307.06	2,955.21	14
31	85.88	31.12	2,244.74	14,068.21	8,156.47	2,955.87	21
32	21.12	21.12	0.00	560.40	186.80	186.80	1
41	90.57	34.42	1,353.96	9,933.28	5,643.62	2,144.83	13
42	44.40	44.40	0.00	3,213.15	1,071.05	1,071.05	1
43	54.40	47.67	0.00	3,153.93	1,145.80	1,004.07	3
50	0.84	0.84	0.00	95.98	31.99	31.99	1
61	1.05	1.05	0.00	277.72	92.57	92.57	1
62	10.78	10.78	0.00	208.90	69.63	69.63	1
82	9.24	6.08	0.00	384.04	165.87	109.08	3
90	420.31	221.33	0.00	9,957.69	4,849.93	2,553.88	4
Total	**204.30**	**48.22**	**53,177.19**	**148,262.78**	**100,719.99**	**23,771.40**	**93**
Northern Bering Sea							
70	503.40	374.55	0.00	87,154.40	35,029.07	26,062.67	17
71	251.18	124.48	180.83	40,637.89	20,409.36	10,114.27	18
81	-	-	-	-	-	-	-
Total	**293.03**	**147.77**	**0.00**	**111,351.25**	**55,438.42**	**27,956.41**	**35**

Pacific Ocean Perch (*Sebastes alutus*)

The estimated biomass of Pacific ocean perch in the eastern Bering Sea decreased by 77% from 2024 to 2025 (Tables **76** and **77**; Fig. **32**), and the population was estimated at 12.4 million individuals (Tables **76** and **78**; Fig. **32**). No Pacific ocean perch were observed in the northern Bering Sea in 2025 (Fig. **32**).

Table 76. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Pacific ocean perch in the eastern Bering Sea.

	Eastern Bering Sea
Stations Present	11 of 350 (3.1%)
Bottom Depth	116 - 164 m
Bottom Temperature	3.4 - 4.4 °C
Surface Temperature	6.7 - 9.5 °C
% of Total Biomass	0.1%
% Change in Biomass	77% decrease from 2024
Population; Biomass	12.4 million; 11,741 t

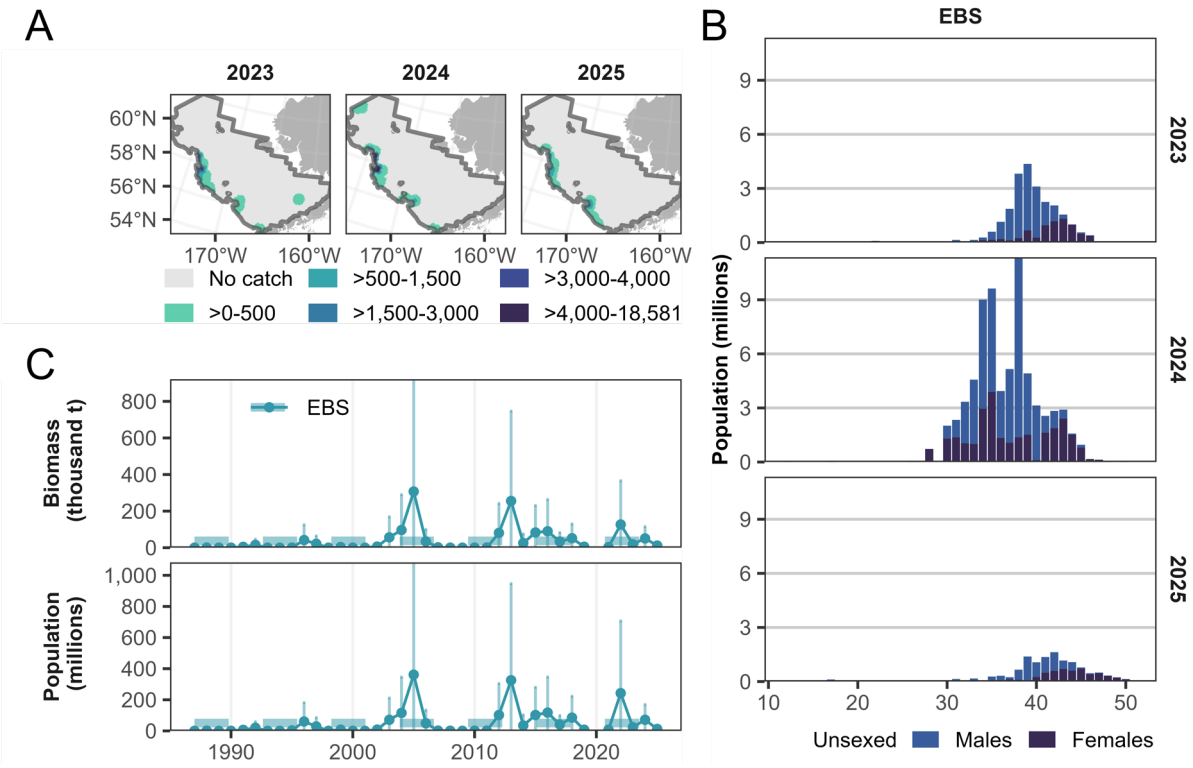

Figure 32. -- Pacific ocean perch (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern Bering Sea survey. (C) Biomass and population time series estimated from the 1987-2025 survey (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 37,647 t biomass, 50,519,888 individuals).

Table 77. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (thousand t) with SD (thousand t), 95% lower (LCL; thousand t) and upper (UCL; thousand t) confidence limits, and number of hauls in which Pacific ocean perch were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (Kt)	Biomass SD (Kt)	95% LCL (Kt)	95% UCL (Kt)	Hauls w/ weights
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-
50	103.66	73.66	3.94	2.80	0.00	9.55	4
61	88.84	42.23	7.80	3.71	0.39	15.21	7
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**23.82**	**9.42**	**11.74**	**4.65**	**2.45**	**21.03**	**11**

Table 78. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (millions) with SD (millions), 95% lower (LCL; millions) and upper (UCL; millions) confidence limits, and number of hauls in which Pacific ocean perch were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (M)	95% UCL (M)	Population (M)	Population SD (M)	Hauls w/ counts
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-
50	92.19	63.39	0.00	8.33	3.51	2.41	4
61	101.54	50.30	0.08	17.74	8.91	4.42	7
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**25.19**	**10.21**	**2.36**	**22.48**	**12.42**	**5.03**	**11**

Plain Sculpin (*Myoxocephalus jaok*)

The estimated biomass of plain sculpin in the eastern Bering Sea increased by 82% from 2024 to 2025 (Tables **79** and **80**; Fig. **33**), and the population was estimated at 111.9 million individuals (Tables **79** and **81**; Fig. **33**). Similarly, the biomass estimate in the northern Bering Sea increased by 60% from 2023 to 2025 (Tables **79** and **80**; Fig. **33**), and the population was estimated at 44.7 million individuals (Tables **79** and **81**; Fig. **33**).

Table 79. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for plain sculpin in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	108 of 350 (30.9%)	87 of 137 (63.5%)
Bottom Depth	22 - 93 m	13 - 64 m
Bottom Temperature	-1.1 - 5.9 °C	-1.3 - 12.6 °C
Surface Temperature	2.3 - 7.6 °C	4.9 - 16.9 °C
% of Total Biomass	0.3%	0.8%
% Change in Biomass	82% increase from 2024	60% increase from 2023
Population; Biomass	111.9 million; 46,023 t	44.7 million; 19,185 t

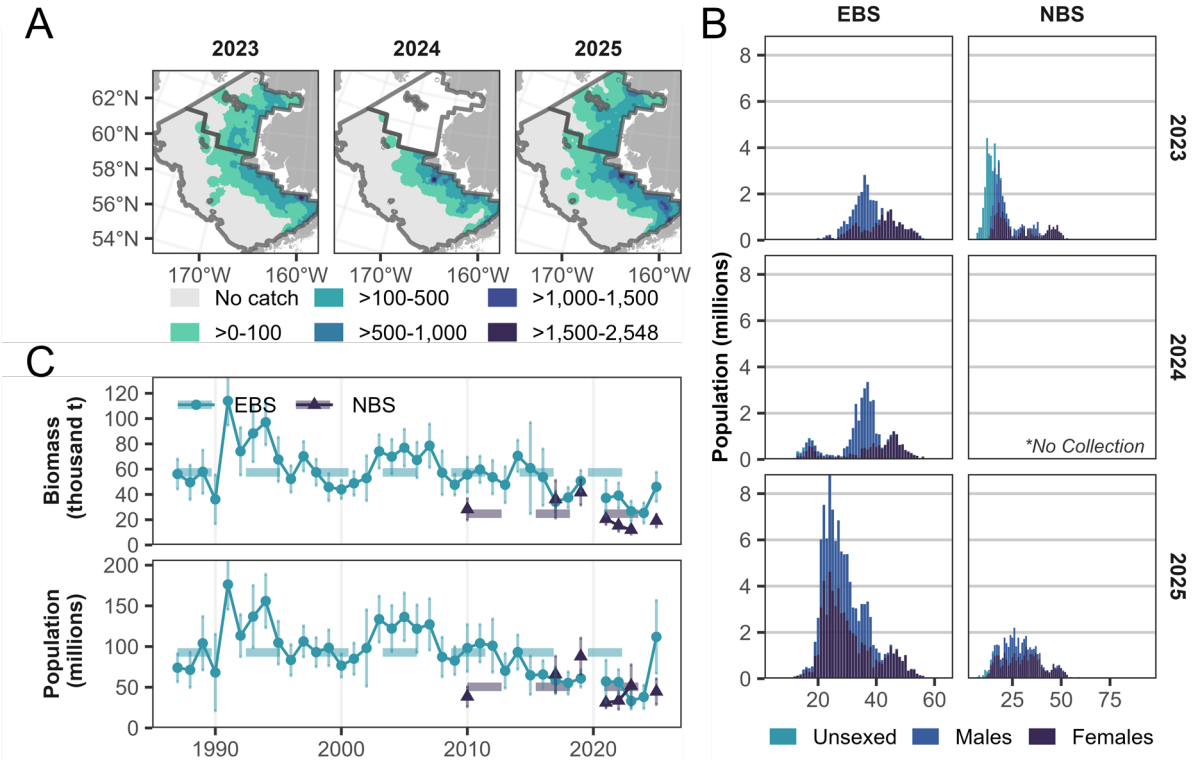

Figure 33. -- Plain sculpin (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 57,434 t biomass, 92,770,788 individuals; NBS mean: 24,763 t biomass, 50,508,414 individuals).

Table 80. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which plain sculpin were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	387.35	57.63	30,487	4,536	21,415	39,559	53
20	290.72	84.87	11,976	3,496	4,984	18,968	28
31	22.24	10.16	2,112	965	183	4,041	9
32	-	-	-	-	-	-	-
41	19.26	5.37	1,200	334	531	1,869	15
42	8.20	6.32	198	153	0	503	2
43	2.41	2.41	51	51	0	152	1
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**93.36**	**11.80**	**46,023**	**5,819**	**34,384**	**57,662**	**108**
Northern Bering Sea							
70	145.93	19.11	10,154	1,330	7,494	12,814	43
71	110.26	26.34	8,959	2,141	4,678	13,240	40
81	1.87	0.96	72	37	0	146	4
Total	**101.41**	**13.32**	**19,185**	**2,520**	**14,144**	**24,226**	**87**

Table 81. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which plain sculpin were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	862.31	147.34	44,676.13	91,061.30	67,868.71	11,596.29	52
20	992.20	463.58	2,679.50	79,064.32	40,871.91	19,096.20	28
31	20.80	8.71	321.74	3,629.52	1,975.63	826.95	9
32	-	-	-	-	-	-	-
41	15.16	4.04	441.43	1,447.50	944.47	251.52	15
42	5.49	4.37	0.00	343.09	132.37	105.36	2
43	3.21	3.21	0.00	203.04	67.68	67.68	1
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**226.90**	**45.35**	**67,143.80**	**156,577.74**	**111,860.77**	**22,358.48**	**107**
Northern Bering Sea							
70	270.95	50.17	11,871.71	25,835.89	18,853.80	3,491.05	43
71	316.08	87.38	11,483.06	39,883.87	25,683.47	7,100.20	40
81	3.27	1.54	7.00	243.48	125.24	59.12	4
Total	**236.07**	**41.82**	**28,837.99**	**60,487.01**	**44,662.50**	**7,912.25**	**87**

Purple-Orange Sea Star (*Asterias amurensis*)

The estimated biomass of purple-orange sea star in the eastern Bering Sea decreased by 3% from 2024 to 2025 (Tables **82** and **83**; Fig. **34**), and the population was estimated at 11.2 billion individuals (Tables **82** and **84**; Fig. **34**). Similarly, the biomass estimate in the northern Bering Sea decreased by 42% from 2023 to 2025 (Tables **82** and **83**; Fig. **34**), and the population was estimated at 1.7 billion individuals (Tables **82** and **84**; Fig. **34**).

Table 82. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for purple-orange sea star in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	239 of 350 (68.3%)	71 of 137 (51.8%)
Bottom Depth	22 - 136 m	13 - 59 m
Bottom Temperature	-1.2 - 5.9 °C	-1.2 - 12.6 °C
Surface Temperature	2.3 - 9.3 °C	6.1 - 16.9 °C
% of Total Biomass	5.2%	7.5%
% Change in Biomass	3% decrease from 2024	42% decrease from 2023
Population; Biomass	11.2 billion; 713,017 t	1.7 billion; 183,029 t

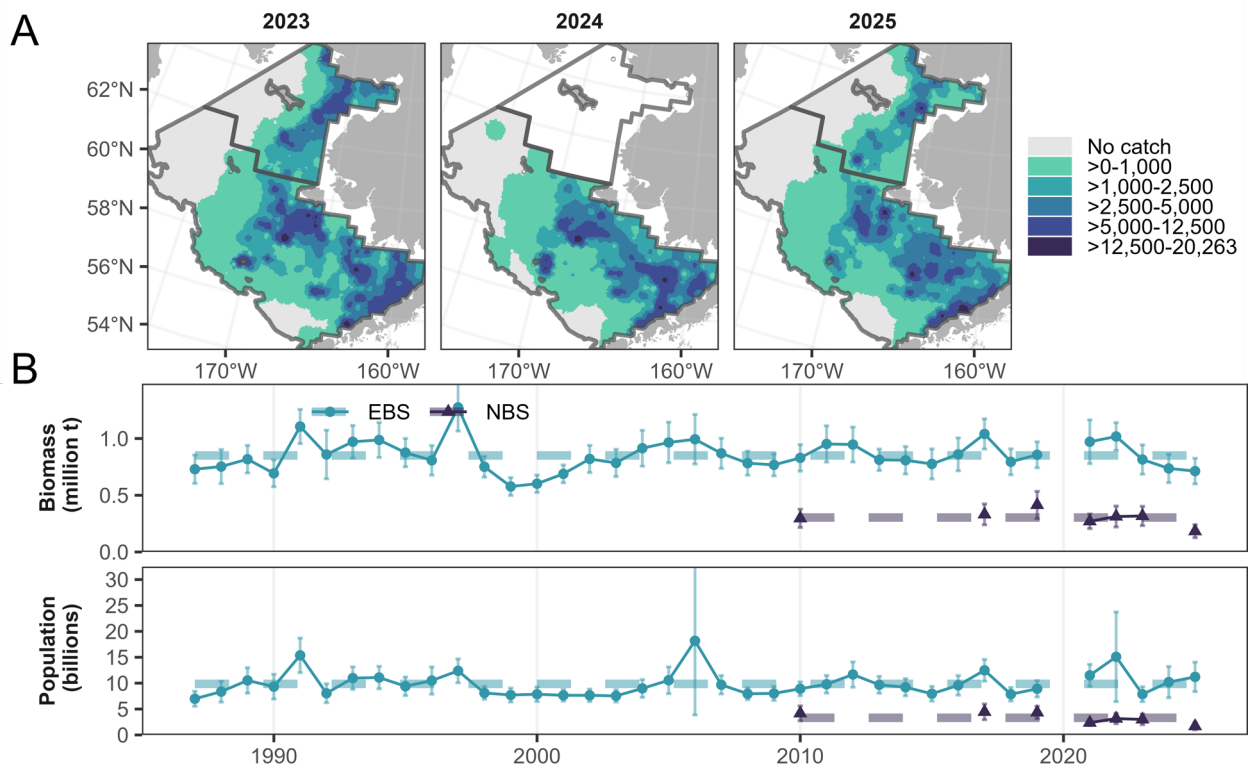

Figure 34. -- Purple-orange sea star (A) CPUE distribution (kg/km^2) from the 2023-2025 eastern and northern Bering Sea surveys. (B) Biomass and population time series estimated from the 1987-2025 eastern and northern Bering Sea surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 850,656 t biomass, 9,862,725,328 individuals; NBS mean: 303,750 t biomass, 3,313,295,889 individuals).

Table 83. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which purple-orange sea star were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	4,026.04	435.33	316,872	34,263	248,347	385,397	58
20	3,350.88	654.82	138,033	26,974	84,085	191,982	31
31	1,657.51	328.21	157,428	31,172	95,083	219,773	59
32	1,085.67	239.63	9,605	2,120	5,365	13,845	5
41	906.58	244.18	56,489	15,215	26,060	86,918	38
42	1,350.10	357.86	32,567	8,632	15,302	49,832	18
43	14.25	5.63	300	119	63	538	6
50	8.49	5.21	323	198	0	719	4
61	15.90	5.13	1,395	450	495	2,296	19
62	0.54	0.54	3	3	0	10	1
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**1,446.31**	**114.46**	**713,017**	**56,427**	**600,163**	**825,871**	**239**
Northern Bering Sea							
70	1,219.32	233.85	84,845	16,273	52,300	117,391	35
71	1,196.80	291.04	97,246	23,648	49,949	144,542	33
81	24.46	19.24	938	738	0	2,414	3
Total	**967.43**	**151.78**	**183,029**	**28,716**	**125,598**	**240,460**	**71**

Table 84. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which purple-orange sea star were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	62,286.40	8,634.34	3,543,150.06	6,261,435.46	4,902,292.76	679,571.35	58
20	70,787.88	27,621.91	640,310.17	5,191,651.57	2,915,980.87	1,137,835.35	30
31	23,417.39	4,519.81	1,365,579.67	3,082,717.27	2,224,148.47	429,284.40	58
32	18,809.96	6,953.75	43,370.74	289,442.42	166,406.58	61,517.92	5
41	9,218.74	3,659.90	118,323.09	1,030,516.05	574,419.57	228,048.24	38
42	16,806.30	6,896.67	72,679.20	738,128.15	405,403.67	166,362.24	18
43	60.30	24.57	235.11	2,305.00	1,270.06	517.47	6
50	151.90	89.80	0.00	12,609.59	5,778.12	3,415.73	4
61	176.42	93.52	0.00	31,903.38	15,485.64	8,208.87	19
62	3.10	3.10	0.00	60.05	20.02	20.02	1
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**22,741.25**	**2,886.03**	**8,365,635.32**	**14,056,776.19**	**11,211,205.75**	**1,422,785.22**	**237**
Northern Bering Sea							
70	8,259.21	1,539.74	360,429.59	788,996.47	574,713.03	107,141.72	35
71	13,606.35	4,138.35	433,061.09	1,778,107.87	1,105,584.48	336,261.70	33
81	229.72	175.43	0.00	22,266.32	8,810.14	6,728.09	3
Total	**8,928.04**	**1,865.74**	**983,142.94**	**2,395,072.37**	**1,689,107.65**	**352,982.36**	**71**

Rainbow Smelt (*Osmerus mordax*)

The estimated biomass of rainbow smelt in the eastern Bering Sea was 22 t in 2025 (Tables **85** and **86**; Fig. **35**), and the population was estimated at 235,269 individuals (Tables **85** and **87**; Fig. **35**). These estimates were extrapolated from seven individuals caught during the eastern Bering Sea survey. The biomass estimate in the northern Bering Sea decreased by 20% from 2023 to 2025 (Tables **85** and **86**; Fig. **35**), and the population was estimated at 33.8 million individuals (Tables **85** and **87**; Fig. **35**).

Table 85. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for rainbow smelt in the eastern and northern Bering Sea. Too few organisms were observed on the eastern Bering Sea survey to share meaningful percent change of total biomass values (note cells with '-'), so observed values are shared instead.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	4 of 350 (1.1%)	36 of 137 (26.3%)
Bottom Depth	24 - 43 m	13 - 53 m
Bottom Temperature	5.2 - 5.9 °C	2.3 - 12.6 °C
Surface Temperature	5.2 - 6 °C	7.5 - 16.9 °C
% of Total Biomass	-	0.1%
% Change in Biomass	-	20% decrease from 2023
Population; Biomass	235,269; 22 t	33.8 million; 1,252 t
Observed Catch Totals	Increased from zero in 2024 to seven individuals in 2025	Decreased from 1,230 in 2023 to 959 individuals in 2025

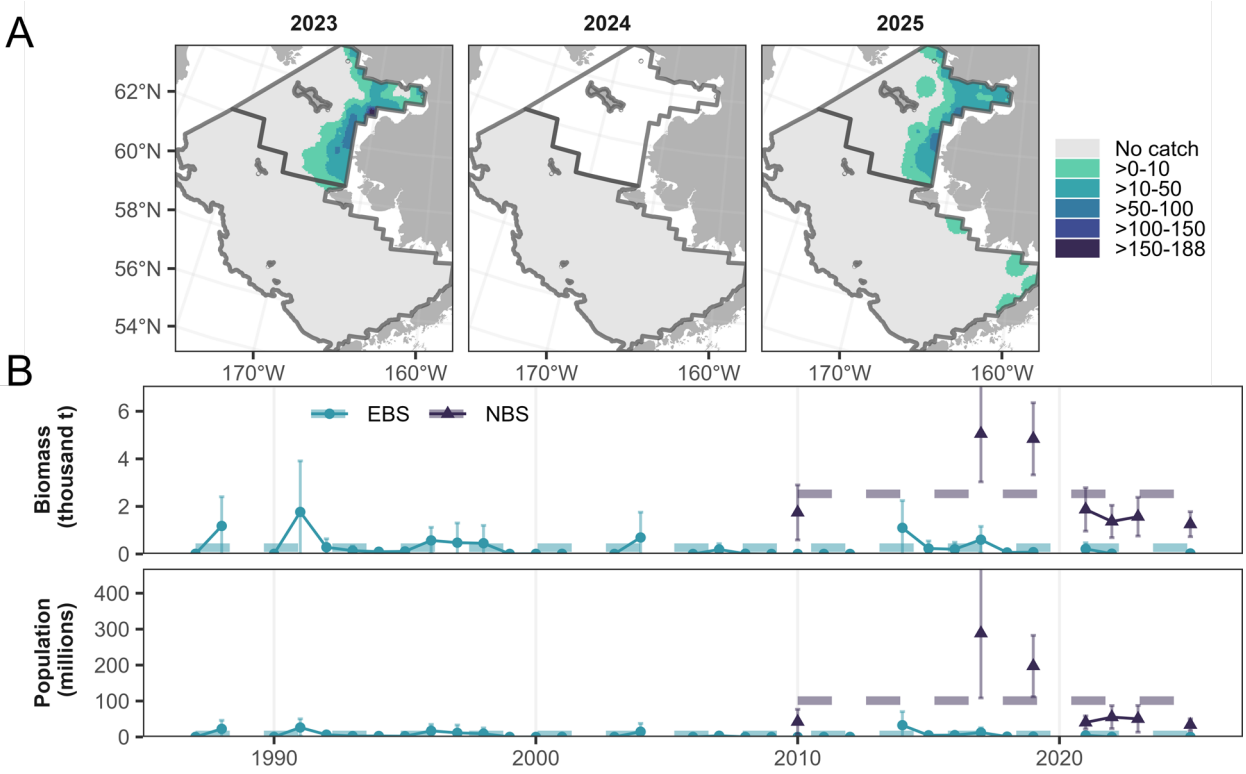

Figure 35. -- Rainbow smelt (A) CPUE distribution (kg/km^2) from the 2023-2025 eastern and northern Bering Sea surveys. (B) Biomass and population time series estimated from the 1987-2025 eastern and northern Bering Sea surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 266 t biomass, 5,624,241 individuals; NBS mean: 2,529 t biomass, 101,132,428 individuals).

Table 86. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which rainbow smelt were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	0.28	0.17	22	13	0	48	4
20	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**0.04**	**0.03**	**22**	**13**	**0**	**48**	**4**
Northern Bering Sea							
70	6.91	2.68	481	187	108	854	12
71	9.49	2.27	771	185	402	1,141	24
81	-	-	-	-	-	-	-
Total	**6.62**	**1.39**	**1,252**	**262**	**727**	**1,777**	**36**

Table 87. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which rainbow smelt were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	2.99	1.64	0.00	492.86	235.27	128.80	4
20	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**0.48**	**0.26**	**0.00**	**492.86**	**235.27**	**128.80**	**4**
Northern Bering Sea							
70	110.53	41.49	1,916.64	13,465.63	7,691.13	2,887.25	12
71	321.65	94.44	10,788.15	41,483.50	26,135.83	7,673.84	24
81	-	-	-	-	-	-	-
Total	**178.80**	**43.34**	**17,428.91**	**50,225.00**	**33,826.96**	**8,199.02**	**36**

Rex Sole (*Glyptocephalus zachirus*)

The estimated biomass of rex sole in the eastern Bering Sea decreased by 40% from 2024 to 2025 (Tables **88** and **89**; Fig. **36**), and the population was estimated at 56.1 million individuals (Tables **88** and **90**; Fig. **36**). No rex sole were observed in the northern Bering Sea in 2025 (Fig. **36**).

Table 88. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for rex sole in the eastern Bering Sea.

	Eastern Bering Sea
Stations Present	73 of 350 (20.9%)
Bottom Depth	35 - 164 m
Bottom Temperature	2.8 - 5.6 °C
Surface Temperature	4.4 - 9.5 °C
% of Total Biomass	0.3%
% Change in Biomass	40% decrease from 2024
Population; Biomass	56.1 million; 36,106 t

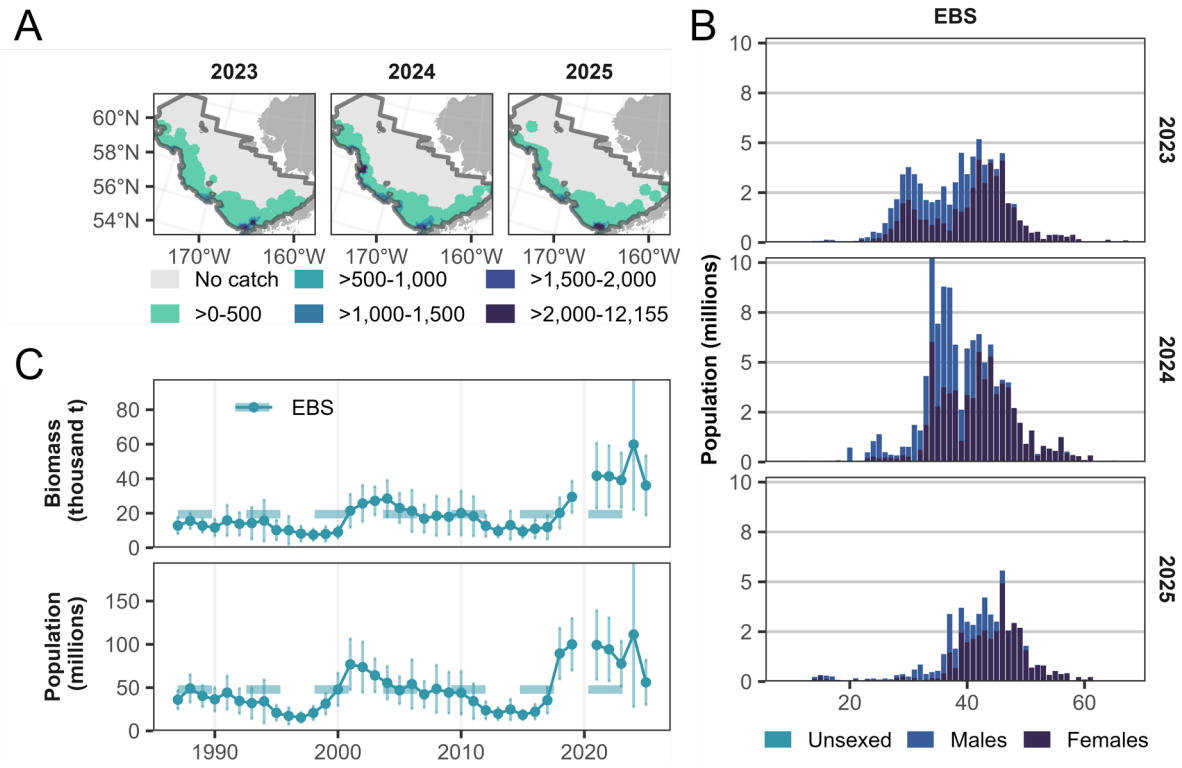

Figure 36. -- Rex sole (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern Bering Sea survey. (C) Biomass and population time series estimated from the 1987-2025 survey (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 19,470 t biomass, 47,848,002 individuals).

Table 89. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which rex sole were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	1.31	0.83	103	65	0	234	3
20	-	-	-	-	-	-	-
31	35.44	11.92	3,366	1,133	1,101	5,631	20
32	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-
42	1.19	1.19	29	29	0	86	1
43	-	-	-	-	-	-	-
50	540.74	206.22	20,569	7,844	4,880	36,258	25
61	137.17	39.36	12,040	3,455	5,131	18,950	24
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**73.24**	**17.54**	**36,106**	**8,646**	**18,814**	**53,399**	**73**

Table 90. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which rex sole were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	2.29	1.40	0.00	399.75	179.90	109.93	3
20	-	-	-	-	-	-	-
31	48.37	15.66	1,619.04	7,568.60	4,593.82	1,487.39	20
32	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-
42	1.07	1.07	0.00	77.50	25.83	25.83	1
43	-	-	-	-	-	-	-
50	844.56	303.36	9,047.23	55,205.39	32,126.31	11,539.54	25
61	218.76	61.81	8,351.50	30,052.59	19,202.05	5,425.27	24
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**113.85**	**26.04**	**30,451.48**	**81,804.33**	**56,127.90**	**12,838.21**	**73**

Saffron Cod (*Eleginus gracilis*)

Alternate common name: tomcod

The estimated biomass of saffron cod in the eastern Bering Sea increased to 2,710 t in 2025 (Tables **91** and **92**; Fig. **37**), and the population was estimated at 69.2 million individuals (Tables **91** and **93**; Fig. **37**). These estimates were extrapolated from 2,146 individuals caught during the eastern Bering Sea survey. Similarly, the biomass estimate in the northern Bering Sea increased by 44% from 2023 to 2025 (Tables **91** and **92**; Fig. **37**), and the population was estimated at 704.5 million individuals (Tables **91** and **93**; Fig. **37**).

Table 91. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for saffron cod in the eastern and northern Bering Sea. Too few organisms were observed on the eastern Bering Sea survey to share meaningful percent change of total biomass values (note cells with '-'), so observed values are shared instead.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	6 of 350 (1.7%)	62 of 137 (45.3%)
Bottom Depth	22 - 31 m	13 - 45 m
Bottom Temperature	4 - 5.9 °C	-0.4 - 12.6 °C
Surface Temperature	4 - 6 °C	5.9 - 16.9 °C
% of Total Biomass	-	2.3%
% Change in Biomass	-	44% increase from 2023
Population; Biomass	69.2 million; 2,710 t	704.5 million; 54,896 t
Observed Catch Totals	Increased from seven in 2024 to 2,146 individuals in 2025	Increased from 20,454 in 2023 to 20,768 individuals in 2025

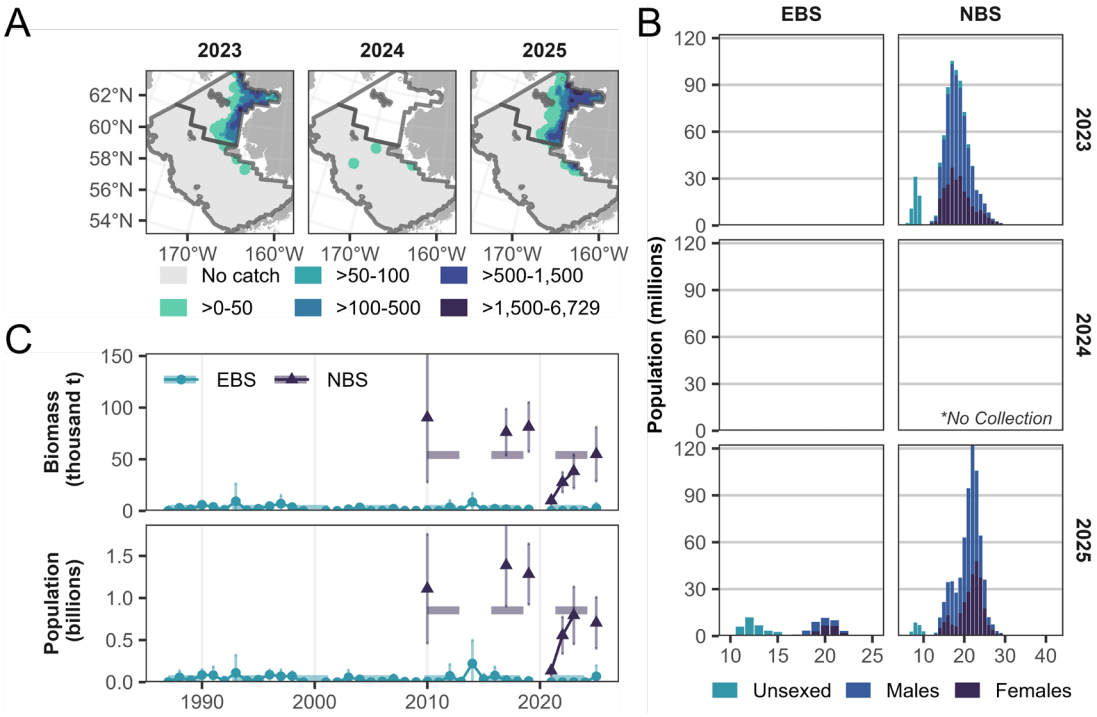

Figure 37. -- Saffron cod (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 1,936 t biomass, 36,365,298 individuals; NBS mean: 54,094 t biomass, 852,842,843 individuals).

Table 92. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which saffron cod were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	34.15	30.67	2,688	2,414	0	7,516	4
20	0.53	0.40	22	16	0	55	2
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**5.50**	**4.90**	**2,710**	**2,414**	**0**	**7,538**	**6**
Northern Bering Sea							
70	139.17	56.34	9,684	3,921	1,843	17,526	22
71	556.41	153.51	45,211	12,473	20,265	70,158	40
81	-	-	-	-	-	-	-
Total	**290.16**	**69.11**	**54,896**	**13,075**	**28,746**	**81,046**	**62**

Table 93. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which saffron cod were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	875.39	820.89	0.00	198,115.93	68,898.35	64,608.79	4
20	6.78	5.37	0.00	721.40	279.27	221.06	2
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**140.32**	**131.06**	**0.00**	**198,395.96**	**69,177.63**	**64,609.17**	**6**
Northern Bering Sea							
70	1,910.07	859.55	13,289.27	252,533.31	132,911.29	59,811.01	22
71	7,034.71	1,723.71	291,484.82	851,725.87	571,605.34	140,060.26	40
81	-	-	-	-	-	-	-
Total	**3,723.83**	**804.99**	**399,923.56**	**1,009,109.70**	**704,516.63**	**152,296.53**	**62**

Sakhalin Sole (*Limanda sakhalinensis*)

The estimated biomass of Sakhalin sole in the eastern Bering Sea increased to 27 t in 2025 (Tables **94** and **95**; Fig. **38**), and the population was estimated at 670,901 individuals (Tables **94** and **96**; Fig. **38**). These estimates were extrapolated from 22 individuals caught during the eastern Bering Sea survey. Similarly, the biomass estimate in the northern Bering Sea increased by 85% from 2023 to 2025 (Tables **94** and **95**; Fig. **38**), and the population was estimated at 59.2 million individuals (Tables **94** and **96**; Fig. **38**).

Table 94. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for Sakhalin sole in the eastern and northern Bering Sea. Too few organisms were observed on the eastern Bering Sea survey to share meaningful percent change of total biomass values (note cells with '-'), so observed values are shared instead.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	8 of 350 (2.3%)	80 of 137 (58.4%)
Bottom Depth	44 - 83 m	22 - 74 m
Bottom Temperature	-1.4 - 1.7 °C	-1.4 - 7 °C
Surface Temperature	5.2 - 7.8 °C	4.9 - 14.5 °C
% of Total Biomass	-	0.1%
% Change in Biomass	-	85% increase from 2023
Population; Biomass	670,901; 27 t	59.2 million; 1,899 t
Observed Catch Totals	Increased from 15 in 2024 to 22 individuals in 2025	Increased from 698 in 2023 to 1,848 individuals in 2025

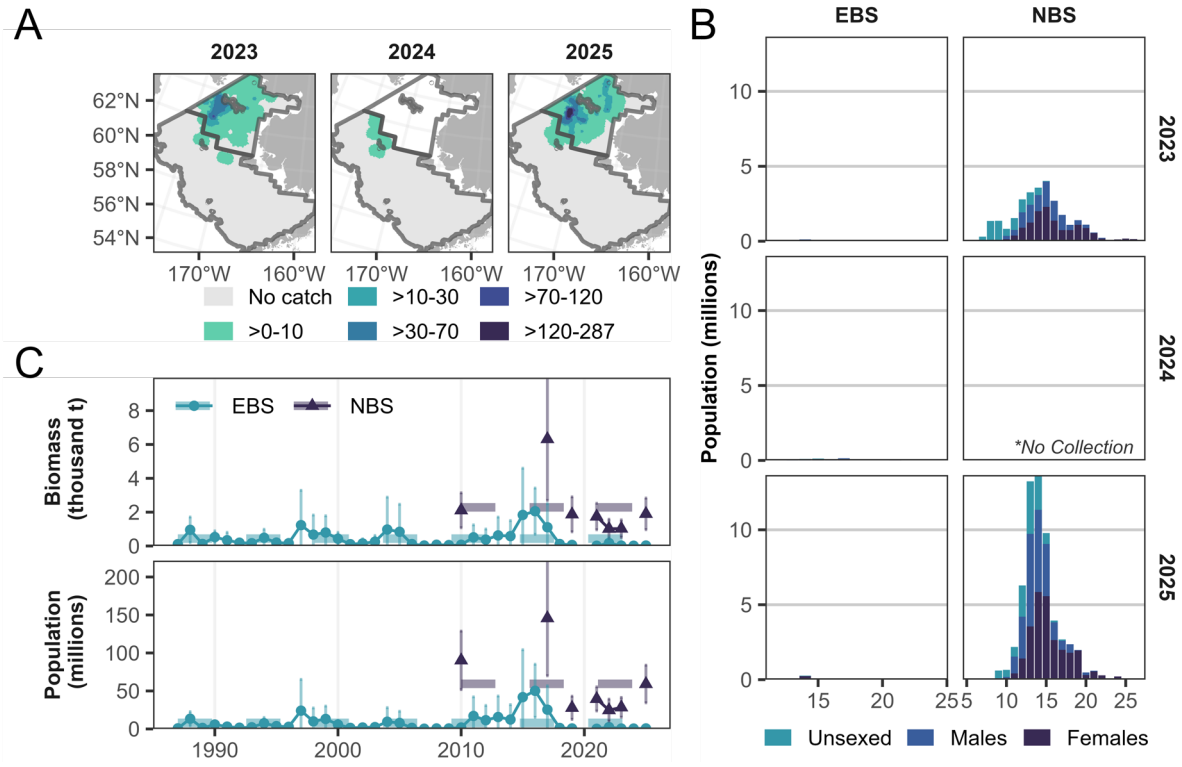

Figure 38. -- Sakhalin sole (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 436 t biomass, 7,996,979 individuals; NBS mean: 2,284 t biomass, 59,397,245 individuals).

Table 95. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which Sakhalin sole were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	0.28	0.14	17	9	0	35	6
42	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	0.55	0.43	10	8	0	25	2
90	-	-	-	-	-	-	-
Total	**0.05**	**0.02**	**27**	**12**	**4**	**50**	**8**
Northern Bering Sea							
70	7.51	2.10	523	146	230	815	27
71	4.21	1.17	342	95	152	532	29
81	26.97	11.28	1,035	433	169	1,900	24
Total	**10.04**	**2.47**	**1,899**	**466**	**966**	**2,832**	**80**

Table 96. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which Sakhalin sole were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	8.03	3.85	20.25	979.95	500.10	239.93	5
42	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	9.51	7.82	0.00	451.58	170.80	140.39	2
90	-	-	-	-	-	-	-
Total	**1.36**	**0.56**	**114.94**	**1,226.86**	**670.90**	**277.98**	**7**
Northern Bering Sea							
70	268.28	73.43	8,449.19	28,887.19	18,668.19	5,109.50	27
71	172.26	48.44	6,124.56	21,870.00	13,997.28	3,936.36	29
81	691.13	275.64	5,363.90	47,648.43	26,506.16	10,571.13	24
Total	**312.76**	**65.45**	**34,404.66**	**83,938.61**	**59,171.64**	**12,383.49**	**80**

Shortfin Eelpout (*Lycodes brevipes*)

The estimated biomass of shortfin eelpout in the eastern Bering Sea increased by 47% from 2024 to 2025 (Table **97**; Fig. **39**), and the population was estimated at 909.3 million individuals (Table **97**; Fig. **39**). No shortfin eelpout were observed in the northern Bering Sea in 2025 (Fig. **39**).

Table 97. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for shortfin eelpout in the eastern Bering Sea.

	Eastern Bering Sea
Stations Present	105 of 350 (30.0%)
Bottom Depth	61 - 162 m
Bottom Temperature	0.1 - 4.7 °C
Surface Temperature	4.4 - 8.9 °C
% of Total Biomass	0.5%
% Change in Biomass	47% increase from 2024
Population; Biomass	909.3 million; 65,104 t

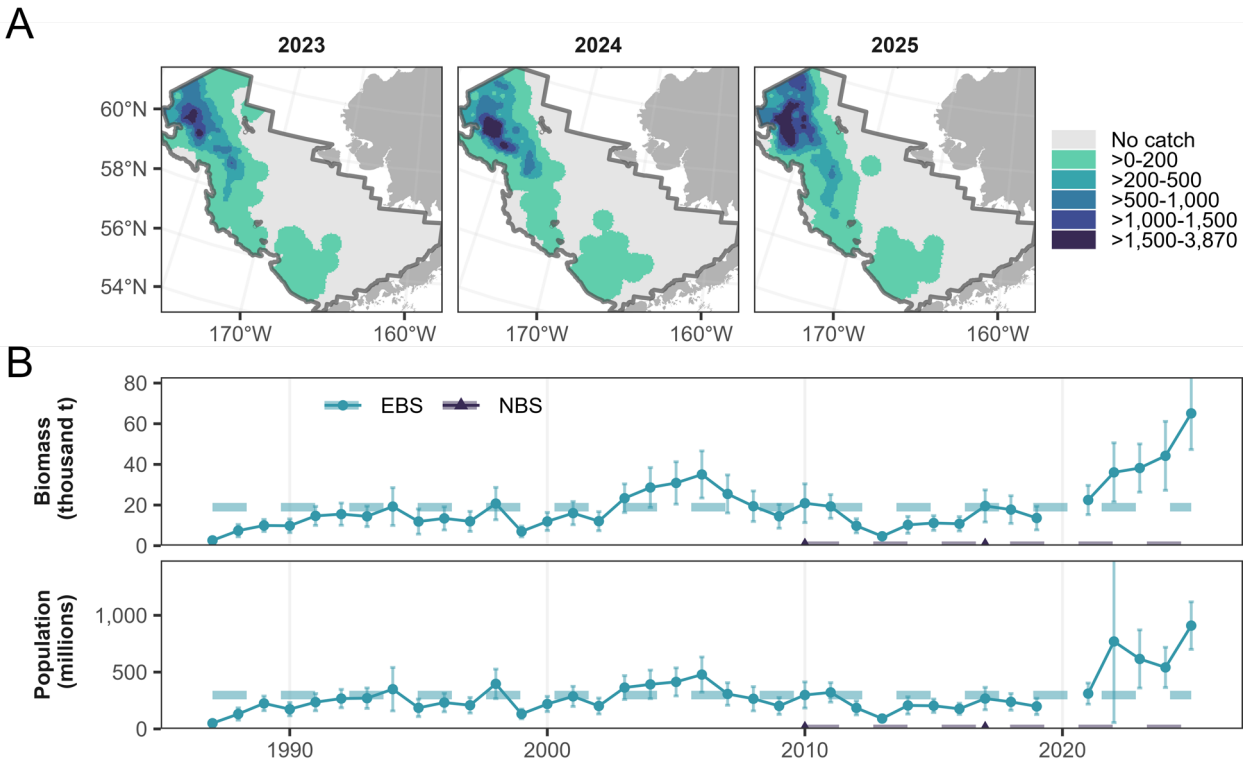

Figure 39. -- Shortfin eelpout (A) CPUE distribution (kg/km^2) from the 2023-2025 eastern Bering Sea survey. (B) Biomass and population time series estimated from the 1987-2025 eastern Bering Sea survey (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 18,945 t biomass, 297,899,070 individuals; NBS mean: 2 t biomass, 48,852 individuals).

Shorthorn Sculpin (*Myoxocephalus scorpius*)

Previous scientific name: *Myoxocephalus verrucosus* | **Previous common name**: warty sculpin

The estimated biomass of shorthorn sculpin in the eastern Bering Sea increased to 1,258 t in 2025 (Tables **98** and **99**; Fig. **40**), and the population was estimated at 1.2 million individuals (Tables **98** and **100**; Fig. **40**). These estimates were extrapolated from 37 individuals caught during the eastern Bering Sea survey. The biomass estimate in the northern Bering Sea increased by 37% from 2023 to 2025 (Tables **98** and **99**; Fig. **40**), and the population was estimated at 15.7 million individuals (Tables **98** and **100**; Fig. **40**).

Table 98. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for shorthorn sculpin in the eastern and northern Bering Sea. Too few organisms were observed on the eastern Bering Sea survey to share meaningful percent change of total biomass values (note cells with '-'), so observed values are shared instead.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	7 of 350 (2.0%)	39 of 137 (28.5%)
Bottom Depth	49 - 67 m	21 - 58 m
Bottom Temperature	-1 - 2.4 °C	-1.3 - 7 °C
Surface Temperature	3.5 - 7 °C	4.9 - 14.5 °C
% of Total Biomass	-	0.2%
% Change in Biomass	-	37% increase from 2023
Population; Biomass	1.2 million; 1,258 t	15.7 million; 4,664 t
Observed Catch Totals	Increased from 31 in 2024 to 37 individuals in 2025	Decreased from 611 in 2023 to 467 individuals in 2025

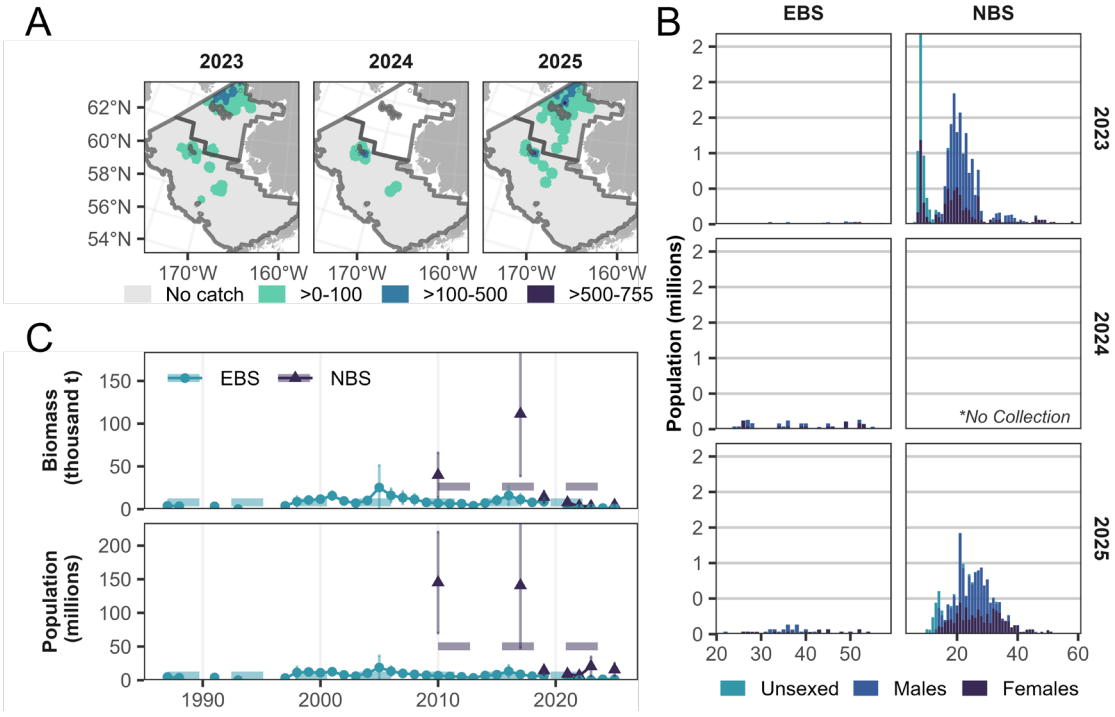

Figure 40. -- Shorthorn sculpin (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 7,933 t biomass, 6,892,345 individuals; NBS mean: 26,389 t biomass, 50,314,512 individuals).

Table 99. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which shorthorn sculpin were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	0.76	0.76	31	31	0	94	1
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	1.55	1.05	97	65	0	227	3
42	-	-	-	-	-	-	-
43	53.65	51.93	1,130	1,094	0	3,318	3
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**2.55**	**2.22**	**1,258**	**1,096**	**0**	**3,450**	**7**
Northern Bering Sea							
70	7.72	3.25	537	226	85	989	10
71	50.44	16.13	4,099	1,311	1,477	6,720	27
81	0.74	0.52	28	20	0	68	2
Total	**24.65**	**7.03**	**4,664**	**1,330**	**2,004**	**7,324**	**39**

Table 100. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which shorthorn sculpin were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	0.72	0.72	0.00	89.18	29.73	29.73	1
31	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-
41	1.97	1.18	0.00	269.38	122.81	73.29	3
42	-	-	-	-	-	-	-
43	51.35	47.98	0.00	3,102.88	1,081.57	1,010.65	3
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**2.50**	**2.06**	**0.00**	**3,261.59**	**1,234.11**	**1,013.74**	**7**
Northern Bering Sea							
70	16.03	8.03	0.00	2,232.59	1,115.76	558.42	10
71	178.59	58.53	5,000.50	24,022.33	14,511.41	4,755.46	27
81	1.64	1.14	0.00	150.59	63.02	43.79	2
Total	**82.93**	**25.31**	**6,113.52**	**25,266.85**	**15,690.19**	**4,788.33**	**39**

Snailfishes (Liparidae)

The estimated biomass of snailfishes (several species of *Liparis* and *Careproctus* that are difficult to distinguish in the field) in the eastern Bering Sea decreased by 52% from 2024 to 2025 (Table **101**; Fig. **41**), and the population was estimated at 7.5 million individuals (Table **101**; Fig. **41**). The biomass estimate in the northern Bering Sea increased by 224% from 2023 to 2025 (Table **101**; Fig. **41**), and the population was estimated at 17.8 million individuals (Table **101**; Fig. **41**).

Table 101. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for snailfishes in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	60 of 350 (17.1%)	76 of 137 (55.5%)
Bottom Depth	36 - 162 m	27 - 79 m
Bottom Temperature	-1.4 - 4.4 °C	-1.4 - 9.8 °C
Surface Temperature	2.3 - 9.5 °C	4.9 - 12.6 °C
% of Total Biomass	<0.01%	0.2%
% Change in Biomass	52% decrease from 2024	224% increase from 2023
Population; Biomass	7.5 million; 1,851 t	17.8 million; 5,286 t

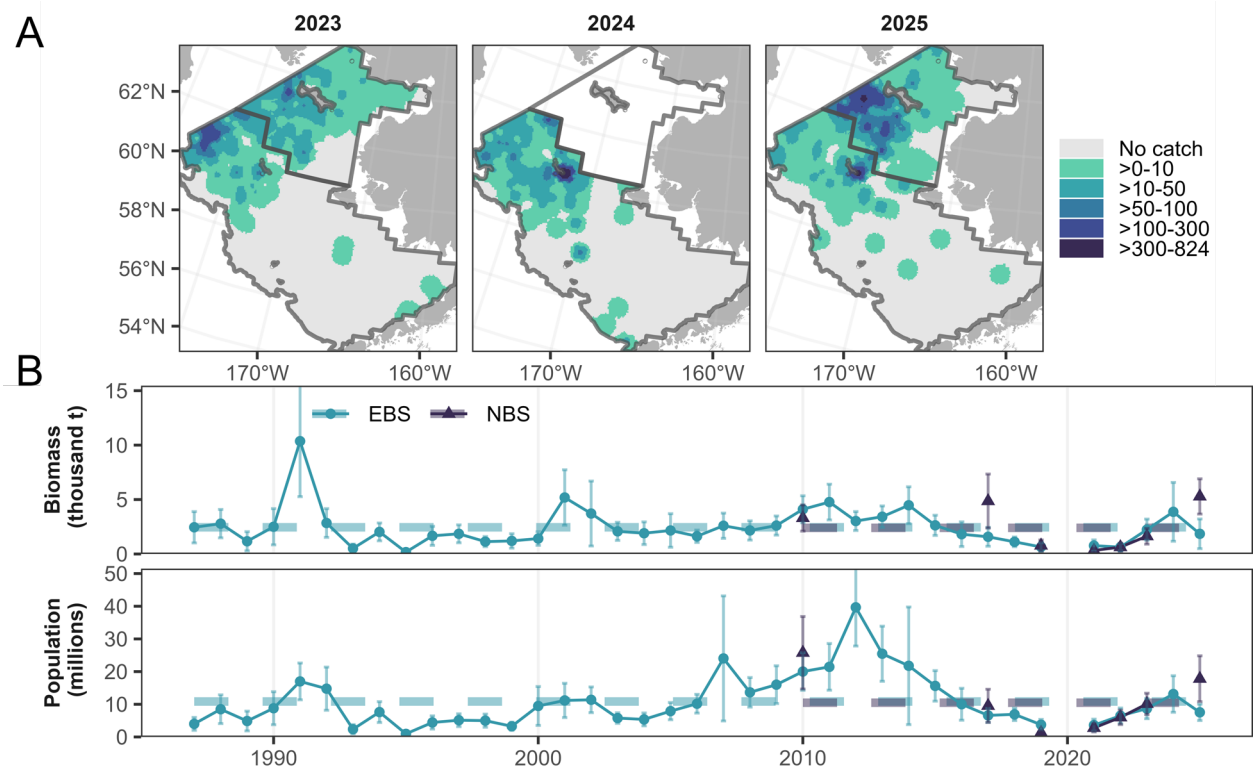

Figure 41. -- Snailfishes (A) CPUE distribution (kg/km^2) from the 2023-2025 eastern and northern Bering Sea surveys. (B) Biomass and population time series estimated from the 1987-2025 eastern and northern Bering Sea surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 2,450 t biomass, 10,849,945 individuals; NBS mean: 2,403 t biomass, 10,474,429 individuals).

Starry Flounder (*Platichthys stellatus*)

The estimated biomass of starry flounder in the eastern Bering Sea decreased by 4% from 2024 to 2025 (Tables **102** and **103**; Fig. **42**), and the population was estimated at 41.6 million individuals (Tables **102** and **104**; Fig. **42**). Similarly, the biomass estimate in the northern Bering Sea decreased by 45% from 2023 to 2025 (Tables **102** and **103**; Fig. **42**), and the population was estimated at 35.2 million individuals (Tables **102** and **104**; Fig. **42**).

Table 102. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for starry flounder in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	51 of 350 (14.6%)	67 of 137 (48.9%)
Bottom Depth	22 - 83 m	13 - 59 m
Bottom Temperature	3.2 - 6.4 °C	-0.7 - 12.6 °C
Surface Temperature	3.2 - 6.8 °C	7 - 16.9 °C
% of Total Biomass	0.4%	0.9%
% Change in Biomass	4% decrease from 2024	45% decrease from 2023
Population; Biomass	41.6 million; 55,095 t	35.2 million; 22,733 t

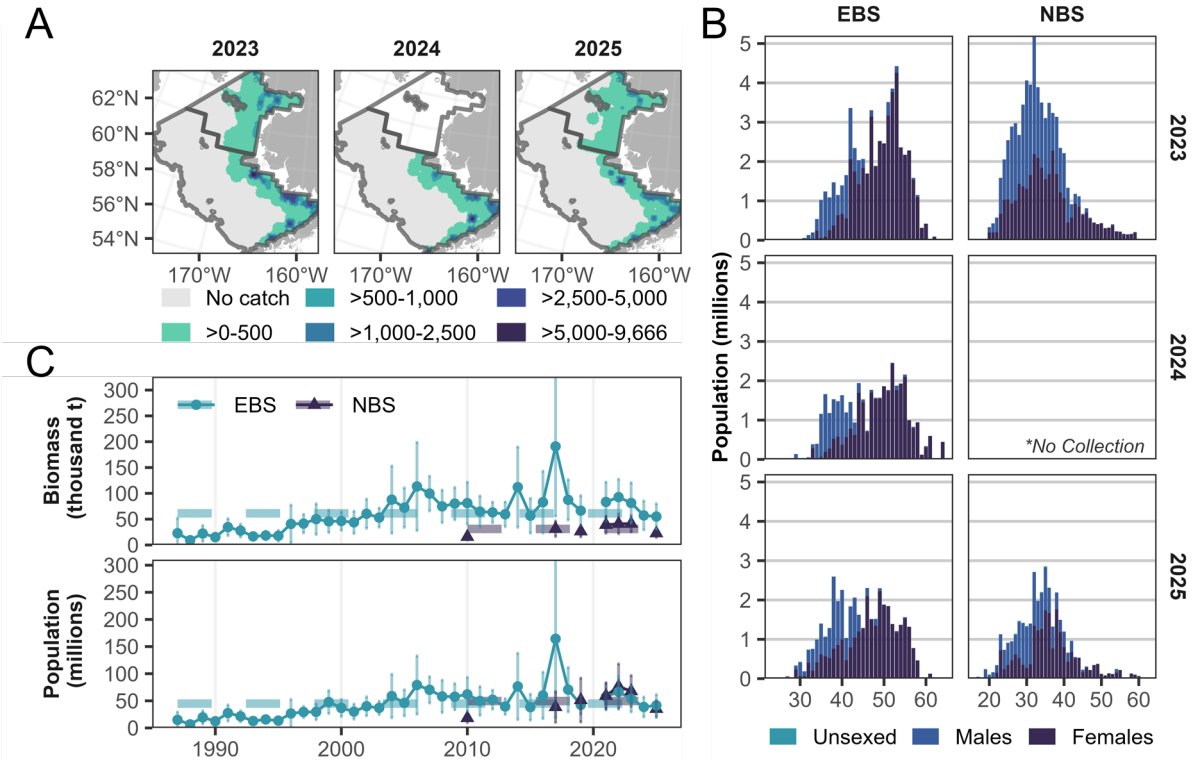

Figure 42. -- Starry flounder (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 61,294 t biomass, 44,885,800 individuals; NBS mean: 31,101 t biomass, 49,569,118 individuals).

Table 103. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which starry flounder were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	596.67	150.49	46,961	11,845	23,272	70,650	32
20	81.54	55.52	3,359	2,287	0	7,933	10
31	50.28	28.77	4,775	2,732	0	10,240	9
32	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**111.76**	**25.09**	**55,095**	**12,369**	**30,357**	**79,833**	**51**
Northern Bering Sea							
70	45.03	9.21	3,133	641	1,852	4,415	24
71	236.07	49.28	19,182	4,004	11,174	27,190	42
81	10.88	10.88	417	417	0	1,252	1
Total	**120.16**	**21.55**	**22,733**	**4,076**	**14,580**	**30,885**	**67**

Table 104. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which starry flounder were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	463.70	123.21	17,101.72	55,889.67	36,495.70	9,696.99	32
20	61.44	35.73	0.00	5,474.81	2,530.82	1,472.00	10
31	26.76	15.39	0.00	5,465.63	2,542.03	1,461.80	9
32	-	-	-	-	-	-	-
41	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-
Total	**84.32**	**20.11**	**21,735.72**	**61,401.36**	**41,568.54**	**9,916.41**	**51**
Northern Bering Sea							
70	62.59	15.20	2,239.85	6,470.16	4,355.01	1,057.58	24
71	377.60	94.35	15,349.30	46,014.02	30,681.66	7,666.18	42
81	4.10	4.10	0.00	471.60	157.20	157.20	1
Total	**186.02**	**40.91**	**19,713.10**	**50,674.62**	**35,193.86**	**7,740.38**	**67**

Sturgeon Poacher (*Podothecus accipenserinus*)

The estimated biomass of sturgeon poacher in the eastern Bering Sea increased by 23% from 2024 to 2025 (Table **105**; Fig. **43**), and the population was estimated at 486.3 million individuals (Table **105**; Fig. **43**). Similarly, the biomass estimate in the northern Bering Sea increased by 326% from 2023 to 2025 (Table **105**; Fig. **43**), and the population was estimated at 22.8 million individuals (Table **105**; Fig. **43**).

Table 105. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for sturgeon poacher in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	228 of 350 (65.1%)	43 of 137 (31.4%)
Bottom Depth	22 - 149 m	18 - 59 m
Bottom Temperature	-1.2 - 6.4 °C	-1.2 - 11.1 °C
Surface Temperature	2.3 - 8.5 °C	6.1 - 15.7 °C
% of Total Biomass	0.2%	<0.01%
% Change in Biomass	23% increase from 2024	326% increase from 2023
Population; Biomass	486.3 million; 27,609 t	22.8 million; 827 t

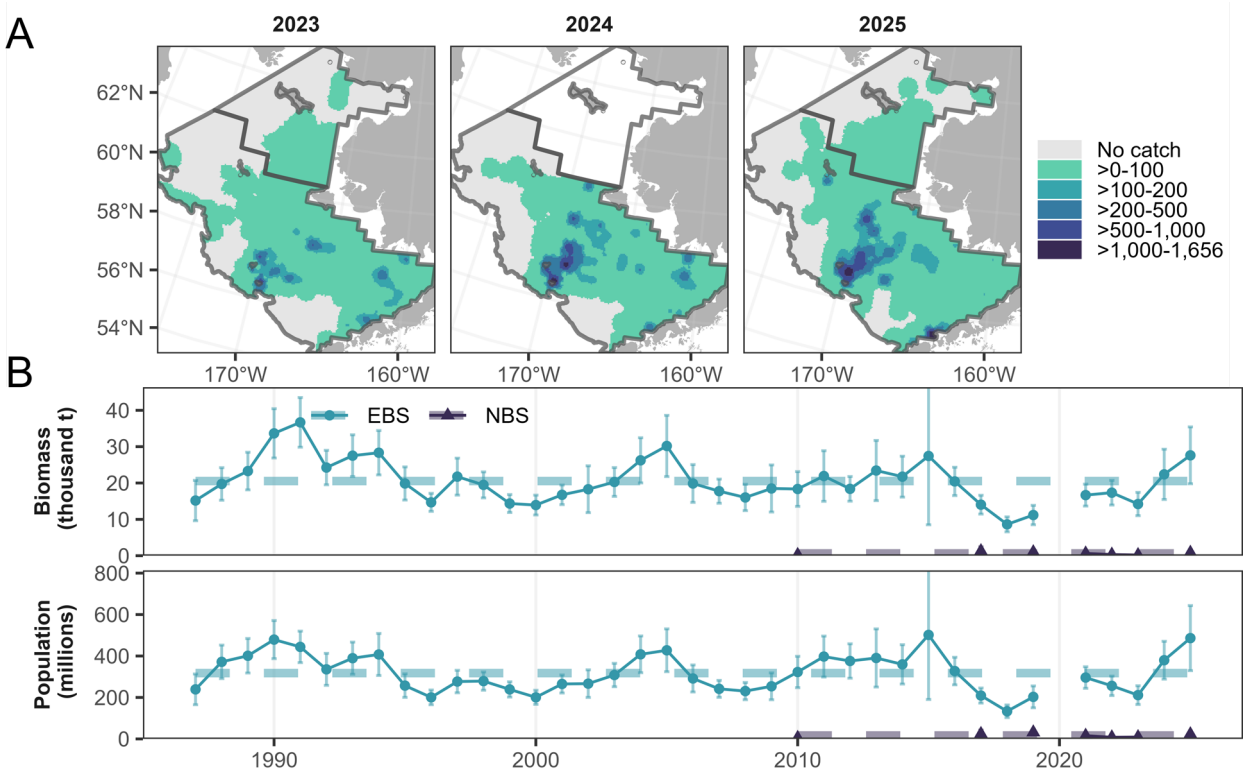

Figure 43. -- Sturgeon poacher (A) CPUE distribution (kg/km^2) from the 2023-2025 eastern and northern Bering Sea surveys. (B) Biomass and population time series estimated from the 1987-2025 eastern and northern Bering Sea surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 20,537 t biomass, 317,472,162 individuals; NBS mean: 630 t biomass, 16,537,367 individuals).

Walleye Pollock (*Gadus chalcogrammus*)

The estimated biomass of walleye pollock in the eastern Bering Sea decreased by 30% from 2024 to 2025 (Tables **106** and **107**; Fig. **44**), and the population was estimated at 6.6 billion individuals (Tables **106** and **108**; Fig. **44**). The biomass estimate in the northern Bering Sea increased by 51% from 2023 to 2025 (Tables **106** and **107**; Fig. **44**), and the population was estimated at 1.1 billion individuals (Tables **106** and **108**; Fig. **44**).

In 2025, the overall distribution of pollock was relatively consistent with previous years, but more concentrated in the northwestern mid-shelf (50-100 m; Fig. **44**). The highest densities of walleye pollock were in the deeper waters of the eastern Bering Sea and around St. Matthew Island (Fig. **44**).

During colder years (2006 to 2013), the highest densities of pollock were along the eastern Bering Sea outer-shelf (100-200 m), and the lowest densities of pollock were along the inner-shelf (< 50 m). During the recent warm stanza (2014 to 2021), pollock were more widely distributed across the shelf when compared to cold years. In these instances, high catch densities sometimes reached into the inner-shelf close to Nunivak Island and against the northern edge of the standard eastern Bering Sea survey area. These distribution patterns are consistent with shoreward and northward feeding migrations typical of pollock during the spring and summer (Kotwicki et al., 2005).

In the eastern Bering Sea, the total abundance of > 40 cm fish was lower than in 2024, but was much higher than 2023, with length modes around 55 cm (Fig. **44**). Pollock in the 20-35 cm size range (representing 2-3 year-olds) were also present in lower abundances than in previous years (Fig. **44**). Individuals in the 20-30 cm size range are historically absent or rare in survey catch samples in the eastern Bering Sea, likely because they occupy a position high above the seafloor where they are unavailable to the survey trawl (Kotwicki et al., 2015). Their vertical availability depends on environmental factors and can be affected by bottom depth, light conditions, and fish density (Kotwicki et al., 2014; Kotwicki et al., 2015). Northern Bering Sea length modes were similar in 2025 and 2023, with a similar distribution as in the eastern Bering Sea. The total abundance of juvenile fish (<20 cm) was also similar for both surveys in 2025, compared to 2024 and 2023, with a mode of 14 cm for unsexed individuals.

Table 106. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for walleye pollock in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	348 of 350 (99.4%)	128 of 137 (93.4%)
Bottom Depth	22 - 177 m	13 - 79 m
Bottom Temperature	-1.4 - 6.4 °C	-1.4 - 12.6 °C
Surface Temperature	2.3 - 9.5 °C	4.9 - 16.6 °C
% of Total Biomass	27.8%	22.5%
% Change in Biomass	30% decrease from 2024	51% increase from 2023
Population; Biomass	6.6 billion; 3.8 million t	1.1 billion; 547,843 t

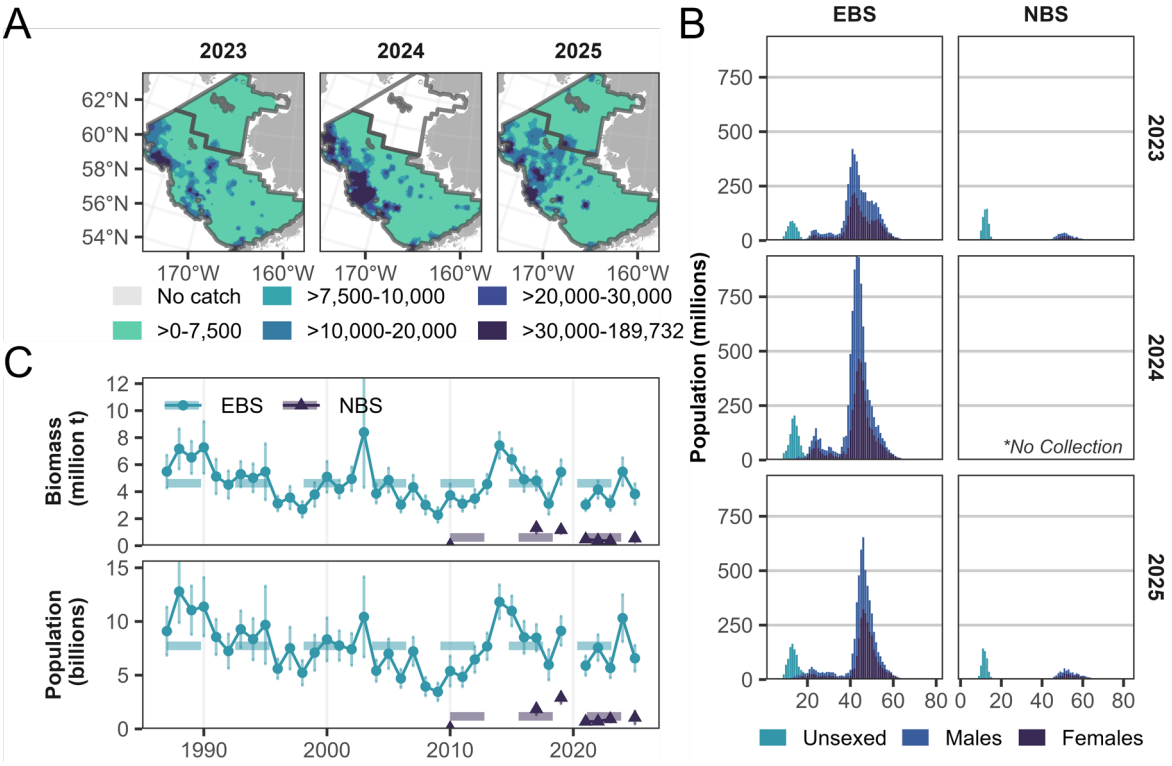

Figure 44. -- Walleye pollock (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 4,624,678 t biomass, 7,731,443,742 individuals; NBS mean: 612,593 t biomass, 1,165,784,643 individuals).

Table 107. -- Mean CPUE (thousand kg/km²) with standard deviation (SD; kg/km²), estimated biomass (thousand t) with SD (thousand t), 95% lower (LCL; thousand t) and upper (UCL; thousand t) confidence limits, and number of hauls in which walleye pollock were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (Kkg/km²)	CPUE SD (kg/km²)	Biomass (Kt)	Biomass SD (Kt)	95% LCL (Kt)	95% UCL (Kt)	Hauls w/ weights
Eastern Bering Sea							
10	1.53	232.61	120.11	18.31	83.50	156.73	58
20	6.26	875.08	258.03	36.05	185.94	330.13	31
31	2.84	849.65	269.85	80.70	108.45	431.25	69
32	6.21	2,589.76	54.98	22.91	9.16	100.80	5
41	9.22	1,042.88	574.38	64.98	444.41	704.34	44
42	6.05	3,065.17	145.99	73.94	0.00	293.86	18
43	9.32	2,000.41	196.21	42.14	111.94	280.48	13
50	2.57	1,063.49	97.91	40.45	17.00	178.82	24
61	21.29	4,028.92	1,868.46	353.65	1,161.17	2,575.76	60
62	10.78	2,264.17	69.69	14.63	40.43	98.95	6
82	5.19	1,138.97	93.10	20.45	52.20	134.00	12
90	6.64	1,027.18	76.65	11.85	52.95	100.36	8
Total	**7.76**	**779.33**	**3,825.36**	**384.20**	**3,056.96**	**4,593.77**	**348**
Northern Bering Sea							
70	3.03	672.04	210.73	46.76	117.20	304.26	51
71	1.13	413.21	91.85	33.58	24.70	159.01	49
81	6.39	3,468.70	245.26	133.03	0.00	511.32	28
Total	**2.90**	**766.17**	**547.84**	**144.95**	**257.94**	**837.75**	**128**

Table 108. -- Mean CPUE (thousand no/km²) with standard deviation (SD; no/km²), estimated population (millions) with SD (millions), 95% lower (LCL; millions) and upper (UCL; millions) confidence limits, and number of hauls in which walleye pollock were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (Kno/km²)	CPUE SD (no/km²)	95% LCL (M)	95% UCL (M)	Population (M)	Population SD (M)	Hauls w/ counts
Eastern Bering Sea							
10	4.06	732.63	204.61	435.26	319.93	57.66	58
20	7.75	966.06	239.56	398.74	319.15	39.80	31
31	4.25	1,162.85	183.21	624.99	404.10	110.45	69
32	8.79	3,501.58	15.82	139.73	77.77	30.98	5
41	16.91	2,137.97	787.04	1,319.91	1,053.47	133.22	44
42	13.67	5,825.96	48.69	610.82	329.75	140.53	18
43	16.84	2,969.21	229.67	479.84	354.75	62.54	13
50	2.87	1,186.09	18.92	199.39	109.16	45.12	24
61	35.11	6,214.46	1,990.55	4,172.50	3,081.52	545.49	60
62	19.38	3,977.28	73.80	176.60	125.20	25.70	6
82	11.11	2,872.88	96.27	302.58	199.42	51.58	12
90	17.45	4,770.09	91.30	311.47	201.38	55.04	8
Total	**13.34**	**1,226.18**	**5,366.63**	**7,784.61**	**6,575.62**	**604.50**	**348**
Northern Bering Sea							
70	5.52	992.25	245.78	521.97	383.88	69.05	51
71	4.14	2,693.60	0.00	774.11	336.37	218.87	49
81	8.68	4,855.28	0.00	705.26	332.84	186.21	28
Total	**5.57**	**1,562.13**	**462.01**	**1,644.18**	**1,053.10**	**295.54**	**128**

Wattled Eelpout (*Lycodes palearis*)

The estimated biomass of wattled eelpout in the eastern Bering Sea increased by 7% from 2024 to 2025 (Table **109**; Fig. **45**), and the population was estimated at 156.7 million individuals (Table **109**; Fig. **45**). The biomass estimate in the northern Bering Sea decreased to 397 t in 2025 (Table **109**; Fig. **45**), and the population was estimated at 3.1 million individuals (Table **109**; Fig. **45**). These estimates were extrapolated from 99 individuals caught during the northern Bering Sea survey.

Table 109. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for wattled eelpout in the eastern and northern Bering Sea. Too few organisms were observed on the northern Bering Sea survey to share meaningful percent change of total biomass values (note cells with '-'), so observed values are shared instead.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	161 of 350 (46.0%)	23 of 137 (16.8%)
Bottom Depth	37 - 147 m	18 - 79 m
Bottom Temperature	-1.4 - 4.6 °C	-1.4 - 11.6 °C
Surface Temperature	3.3 - 9.3 °C	7.1 - 16.9 °C
% of Total Biomass	0.2%	-
% Change in Biomass	7% increase from 2024	-
Population; Biomass	156.7 million; 28,044 t	3.1 million; 397 t
Observed Catch Totals	Increased from 4,821 in 2024 to 5,049 individuals in 2025	Decreased from 116 in 2023 to 99 individuals in 2025

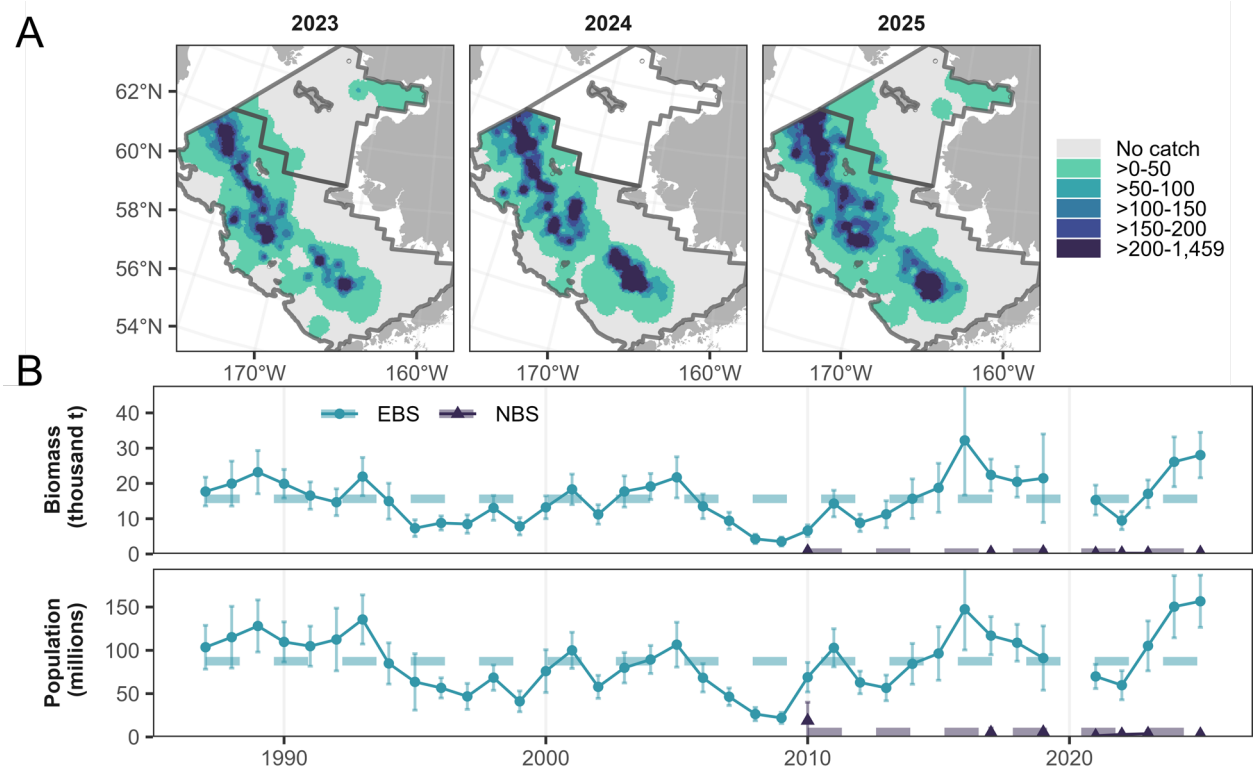

Figure 45. -- Wattled eelpout (A) CPUE distribution (kg/km^2) from the 2023-2025 eastern and northern Bering Sea surveys. (B) Biomass and population time series estimated from the 1987-2025 eastern and northern Bering Sea surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 15,647 t biomass, 87,416,223 individuals; NBS mean: 390 t biomass, 5,743,174 individuals).

Yellow Irish Lord (*Hemilepidotus jordani*)

The estimated biomass of yellow Irish lord in the eastern Bering Sea decreased by 37% from 2024 to 2025 (Tables **110** and **111**; Fig. **46**), and the population was estimated at 28.3 million individuals (Tables **110** and **112**; Fig. **46**). No yellow Irish lord were observed in the northern Bering Sea in 2025 (Fig. **46**).

Table 110. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for yellow Irish lord in the eastern Bering Sea.

	Eastern Bering Sea
Stations Present	58 of 350 (16.6%)
Bottom Depth	31 - 127 m
Bottom Temperature	0.1 - 4.8 °C
Surface Temperature	2.9 - 9.3 °C
% of Total Biomass	0.1%
% Change in Biomass	37% decrease from 2024
Population; Biomass	28.3 million; 17,761 t

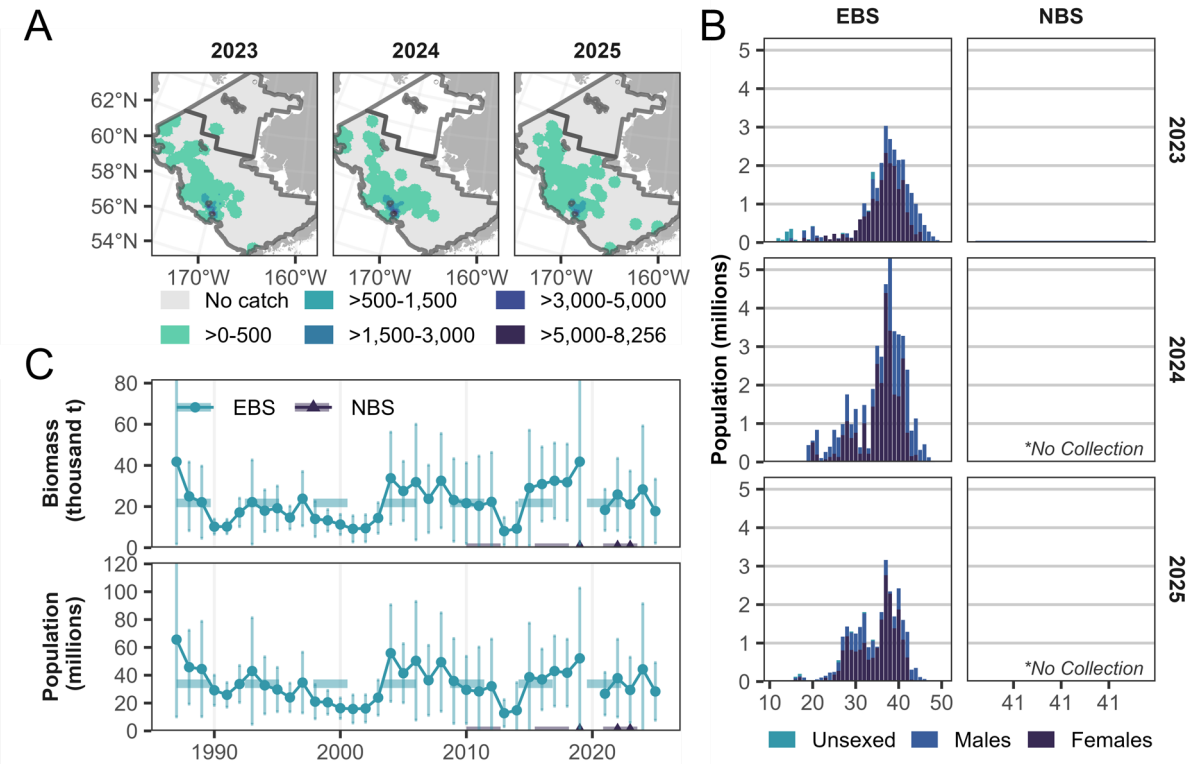

Figure 46. -- Yellow Irish lord (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern Bering Sea survey. (C) Biomass and population time series estimated from the 1987-2025 survey (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 21,786 t biomass, 33,912,569 individuals; NBS mean: 31 t biomass, 53,163 individuals).

Table 111. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which yellow Irish lord were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	0.45	0.27	18	11	0	41	4
31	1.09	0.65	103	62	0	227	5
32	1,071.97	817.88	9,483	7,236	0	23,955	4
41	6.02	2.61	375	163	50	701	15
42	279.06	117.24	6,731	2,828	1,075	12,388	9
43	1.90	1.11	40	23	0	87	3
50	0.66	0.66	25	25	0	75	1
61	10.19	4.56	894	400	94	1,695	14
62	11.84	8.97	77	58	0	192	2
82	0.73	0.73	13	13	0	39	1
90	-	-	-	-	-	-	-
Total	**36.03**	**15.78**	**17,761**	**7,781**	**2,199**	**33,323**	**58**

Table 112. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which yellow Irish lord were encountered and weighed during the 2025 eastern Bering Sea survey. This taxon was not encountered in the 2025 northern Bering Sea survey.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	-	-	-	-	-	-	-
20	3.79	1.88	1.65	310.96	156.31	77.33	4
31	2.29	1.06	16.72	417.91	217.32	100.30	5
32	1,337.99	1,007.36	0.00	29,660.60	11,836.83	8,911.89	4
41	15.63	5.12	335.39	1,612.57	973.98	319.30	15
42	507.83	208.17	2,206.80	22,292.90	12,249.85	5,021.52	9
43	5.94	3.39	0.00	267.87	125.11	71.38	3
50	0.80	0.80	0.00	91.51	30.50	30.50	1
61	27.02	15.78	0.00	5,142.74	2,371.76	1,385.49	14
62	53.53	39.80	0.00	860.27	345.90	257.18	2
82	1.55	1.55	0.00	83.37	27.79	27.79	1
90	-	-	-	-	-	-	-
Total	**57.48**	**20.96**	**7,671.57**	**48,999.12**	**28,335.34**	**10,331.89**	**58**

Yellowfin Sole (*Limanda aspera*)

The estimated biomass of yellowfin sole in the eastern Bering Sea increased by 3% from 2024 to 2025 (Tables **113** and **114**; Fig. **47**), and the population was estimated at 5.8 billion individuals (Tables **113** and **115**; Fig. **47**). The biomass estimate in the northern Bering Sea decreased by 21% from 2023 to 2025 (Tables **113** and **114**; Fig. **47**), and the population was estimated at 1.6 billion individuals (Tables **113** and **115**; Fig. **47**).

In 2025, similar to previous years, the yellowfin sole population in the eastern Bering Sea was distributed along the inner- and middle-shelf (20-100 m) between Norton Sound and the Alaska Peninsula. The highest densities were observed along the Alaska coast south of Nunivak Island and along the Alaska Peninsula (Fig. **47**). High densities continue to be observed near Togiak Bay and the spawning grounds in Kuskokwim Bay and Bristol Bay. In 2025, the abundance-at-length in the eastern Bering Sea was similar to 2024 and the abundance-at-length in the northern Bering Sea was similar to 2023. Both surveys had length modes around 18 cm and 34 cm (Fig. **47**).

Yellowfin sole support one of the largest commercial flatfish fisheries in the world (Wilderbuer et al., 2018) and are the most abundant flatfish in the eastern Bering Sea (Table **8**). The cross-shelf distribution of yellowfin sole, and the availability of sexually mature males and females to the survey, varies from year to year because of temperature-mediated differences in the timing of their spring-summer spawning migration into shallow waters (Nichol et al., 2019).

Most spawning activity occurs at bottom depths less than 30 m (Nichol, 1995). Size segregation among spawning and non-spawning portions of the population can also affect the spatial distribution of yellowfin sole (Nichol et al., 2019). This segregation occurs because length or age at sexual maturity differs for males and females (Nichol, 1998), and sexually immature individuals undergo a gradual (multi-year) ontogenetic migration away from the nearshore that differs from the annual spawning migrations of mature individuals (Nichol, 1997). Interannual differences in the proportion of the yellowfin sole population that is available to the eastern Bering Sea survey, as well as the sex and size composition of this available population, may bias survey estimates. The bottom temperature and the survey start date are both used in the stock assessment model to adjust the catchability parameter (Nichol et al., 2019; Wilderbuer et al., 2018).

Table 113. -- Summary of 2025 catch presence, temperature ranges, and extrapolated biomass and population estimates for yellowfin sole in the eastern and northern Bering Sea.

	Eastern Bering Sea	Northern Bering Sea
Stations Present	215 of 350 (61.4%)	134 of 137 (97.8%)
Bottom Depth	22 - 105 m	13 - 79 m
Bottom Temperature	-1.4 - 5.9 °C	-1.4 - 12.6 °C
Surface Temperature	2.3 - 7.8 °C	4.9 - 16.9 °C
% of Total Biomass	11.2%	12.8%
% Change in Biomass	3% increase from 2024	21% decrease from 2023
Population; Biomass	5.8 billion; 1.5 million t	1.6 billion; 312,489 t

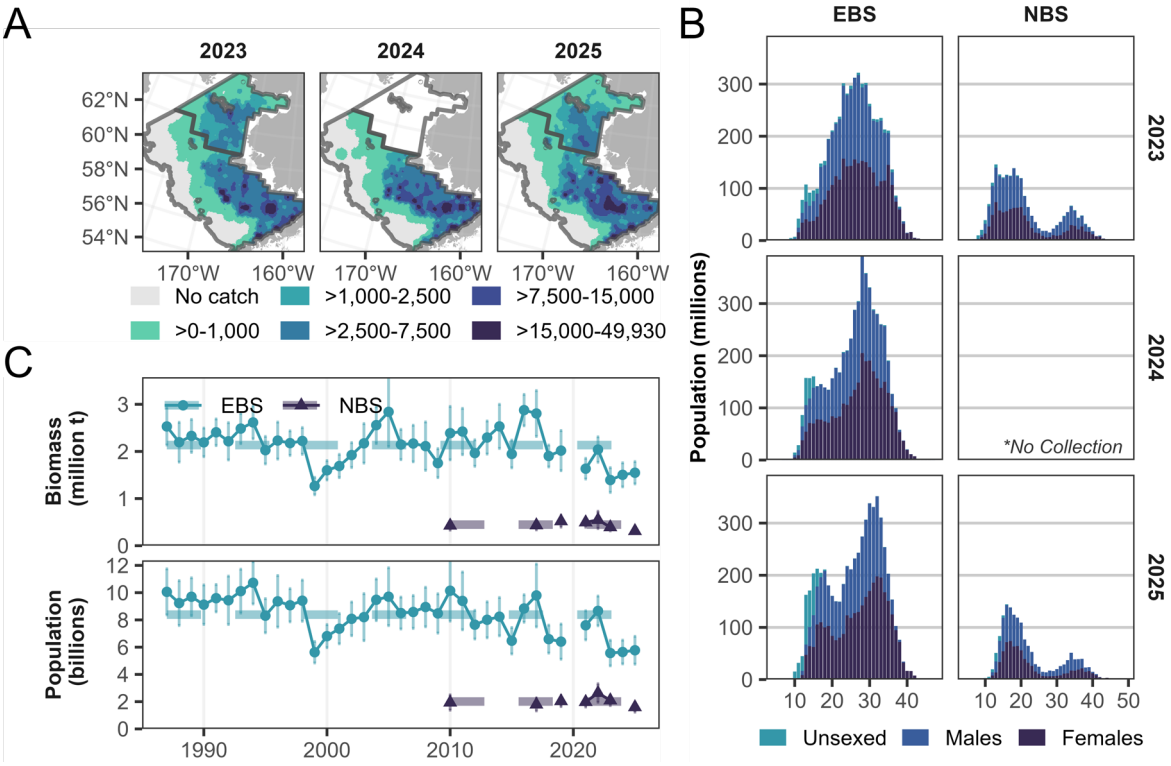

Figure 47. -- Yellowfin sole (A) CPUE distribution (kg/km^2) and (B) total abundance-at-length (cm) estimates by sex scaled to the total estimated population from the 2023-2025 eastern and northern Bering Sea surveys. (C) Biomass and population time series estimated from the 1987-2025 surveys (points and solid lines, with estimated 95% confidence interval error bars) and time series mean (dashed lines; EBS mean: 2,134,939 t biomass, 8,386,128,068 individuals; NBS mean: 447,337 t biomass, 2,011,916,721 individuals).

Table 114. -- Mean CPUE (kg/km²) with standard deviation (SD; kg/km²), estimated biomass (t) with SD (t), 95% lower (LCL; t) and upper (UCL; t) confidence limits, and number of hauls in which yellowfin sole were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (kg/km²)	CPUE SD (kg/km²)	Biomass (t)	Biomass SD (t)	95% LCL (t)	95% UCL (t)	Hauls w/ weights
Eastern Bering Sea							
10	10,640.46	1,144.38	837,464	90,070	657,325	1,017,604	58
20	3,804.03	784.96	156,700	32,335	92,030	221,371	31
31	4,153.13	609.93	394,458	57,931	278,597	510,319	54
32	617.25	540.07	5,461	4,778	0	15,016	3
41	1,363.13	339.26	84,937	21,139	42,658	127,215	38
42	2,721.64	1,270.08	65,652	30,637	4,378	126,926	13
43	137.03	68.51	2,886	1,443	0	5,773	10
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	32.01	20.66	575	371	0	1,317	7
90	0.76	0.76	9	9	0	26	1
Total	**3,140.31**	**239.36**	**1,548,142**	**118,002**	**1,312,137**	**1,784,147**	**215**
Northern Bering Sea							
70	3,547.84	325.88	246,875	22,676	201,523	292,226	51
71	542.19	87.32	44,056	7,095	29,866	58,246	58
81	562.13	124.68	21,559	4,782	11,995	31,122	25
Total	**1,651.71**	**128.10**	**312,489**	**24,236**	**264,017**	**360,962**	**134**

Table 115. -- Mean CPUE (no/km²) with standard deviation (SD; no/km²), estimated population (thousands) with SD (thousands), 95% lower (LCL; thousands) and upper (UCL; thousands) confidence limits, and number of hauls in which yellowfin sole were encountered and weighed during the 2025 eastern and northern Bering Sea surveys.

Stratum	CPUE mean (no/km²)	CPUE SD (no/km²)	95% LCL (K)	95% UCL (K)	Population (K)	Population SD (K)	Hauls w/ counts
Eastern Bering Sea							
10	45,417.04	5,748.69	2,669,670.43	4,479,487.36	3,574,578.90	452,454.23	58
20	17,803.54	3,265.91	464,318.27	1,002,452.32	733,385.30	134,533.51	31
31	10,839.03	1,672.87	711,702.33	1,347,247.47	1,029,474.90	158,886.28	54
32	1,853.24	1,756.01	0.00	47,464.95	16,395.10	15,534.93	3
41	3,688.99	1,000.82	105,138.58	354,583.45	229,861.02	62,361.22	38
42	7,319.10	3,628.84	1,481.39	351,623.11	176,552.25	87,535.43	12
43	515.85	265.53	0.00	22,051.68	10,865.75	5,592.97	10
50	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-
82	98.50	71.32	0.00	4,329.28	1,768.39	1,280.45	7
90	2.69	2.69	0.00	93.16	31.05	31.05	1
Total	**11,710.00**	**1,034.08**	**4,753,335.12**	**6,792,490.16**	**5,772,912.64**	**509,788.76**	**214**
Northern Bering Sea							
70	16,184.80	2,319.78	803,369.25	1,449,052.26	1,126,210.75	161,420.75	50
71	5,000.42	1,012.64	241,744.32	570,874.22	406,309.27	82,282.47	58
81	1,708.87	434.63	32,200.34	98,876.28	65,538.31	16,668.99	25
Total	**8,446.78**	**961.71**	**1,234,163.18**	**1,961,953.48**	**1,598,058.33**	**181,947.57**	**133**

Data Sources

The Groundfish Assessment Program's Bering Sea team and the Shellfish Assessment Program conduct the Bering Sea surveys each summer. Haul-level data are expanded to CPUE, population abundance, size-class abundance, and biomass estimates. These results are presented in this document, produced using R and R Markdown. For earlier survey results, see AFSC technical memoranda on the NOAA repository [10], the AFSC website [11], and the Groundfish Assessment Program website [12].

Several tools used in this report were developed through the AFSC Groundfish Assessment Program. The *akgfmaps* package [13] (v4.2.1) generated distribution maps. The *coldpool* package [14] (v3.5.3) describes temperature patterns and the cold pool. The *gapindex* package [15] (v3.0.3) calculates design-based indices.

Catch, environmental, and location data are available through FOSS [16], while biomass and composition estimates are provided through AKFIN [17]. NOAA survey data also support DisMAP [18], and additional information is available through ACEPO [19] and the Human Dimensions Explorer [20].

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We also thank the many Bering Sea communities whose knowledge, experience, and feedback help guide and strengthen this document, highlighting locally important issues and species. This document was prepared in the greater Seattle area, on the traditional lands of the Coast Salish peoples, including the Duwamish. This research was conducted on the traditional homelands of the Inupiat, Yupiit, Siberian Yupiit, Unangax, Alutiiq/Sugpiaq, Eyak, Dena'ina Athabascan, Tlingit, Haida, and Tsimshian peoples. We honor their stewardship and deep connections to these lands and waters.

[10] https://repository.library.noaa.gov/
[11] https://www.fisheries.noaa.gov/resource/publication-database/alaska-fisheries-science-center-technical-memorandums
[12] https://www.fisheries.noaa.gov/alaska/science-data/groundfish-assessment-program-bottom-trawl-surveys
[13] https://github.com/afsc-gap-products/akgfmaps
[14] https://github.com/afsc-gap-products/coldpool
[15] https://github.com/afsc-gap-products/gapindex
[16] https://www.fisheries.noaa.gov/foss
[17] https://www.psmfc.org/program/alaska-fisheries-information-network-akfin
[18] https://apps-st.fisheries.noaa.gov/dismap
[19] https://shinyfin.psmfc.org/acepo/
[20] https://reports.psmfc.org/akfin

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Appendix A: List of taxa encountered in the eastern Bering Sea

List of Tables

Appendix Table A 116.-- Fish taxa encountered during the 2025 eastern Bering Sea survey listed alphabetically by family.

Family	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
Agonidae	*Aspidophoroides monopterygius*	Aleutian alligatorfish	53	43	144	75.9	56.3	60.3
	Bathyagonus alascanus	gray starsnout	8	67	136	91.1	55.3	57.0
	Bathyagonus infraspinatus	spinycheek starsnout	1	71	71	71.0	57.0	57.0
	Bathyagonus pentacanthus	bigeye poacher	1	133	133	133.0	59.0	59.0
	Bathyagonus sp.	starsnout poacher unid.	1	118	118	118.0	55.4	55.4
	Occella dodecaedron	Bering poacher	23	19	44	29.9	57.4	60.3
	Podothecus accipenserinus	sturgeon poacher	228	19	147	60.5	54.7	61.7
	Podothecus veternus	veteran poacher	1	78	78	78.0	59.3	59.3
	Sarritor frenatus	sawback poacher	84	53	161	93.4	55.3	62.0
	Sarritor leptorhynchus	longnose poacher	3	69	93	79.7	56.7	57.0
Ammodytidae	*Ammodytes personatus*	Pacific sand lance	2	29	31	30.0	57.0	57.4
	Ammodytes sp.	sand lance unid.	7	19	41	29.7	57.6	59.7
Anarhichadidae	*Anarhichas orientalis*	Bering wolffish	3	25	62	40.0	55.0	60.3
Anoplopomatidae	*Anoplopoma fimbria*	sablefish	10	50	147	115.4	54.8	56.7
Arhynchobatidae	*Bathyraja aleutica*	Aleutian skate	22	106	175	136.6	54.8	60.0
	Bathyraja aleutica egg case	Aleutian skate egg case	3	90	136	108.3	55.3	57.3
	Bathyraja interrupta	Bering skate	92	64	161	114.2	54.7	61.3
	Bathyraja interrupta egg case	Bering skate egg case	12	36	161	124.6	55.0	59.3
	Bathyraja minispinosa	whitebrow skate	1	140	140	140.0	57.0	57.0
	Bathyraja minispinosa egg case	whitebrow skate egg case	1	132	132	132.0	58.7	58.7
	Bathyraja taranetzi	mud skate	1	133	133	133.0	59.0	59.0
Bathymasteridae	*Bathymaster signatus*	searcher	32	53	161	126.0	55.0	60.7
Clupeidae	*Clupea pallasii*	Pacific herring	94	19	111	57.5	55.3	62.0
Cottidae	*Artediellus pacificus*	hookhorn sculpin	9	58	110	72.6	56.7	58.7
	Gymnocanthus galeatus	armorhead sculpin	7	54	114	75.9	55.0	58.0
	Gymnocanthus pistilliger	threaded sculpin	36	19	84	33.4	56.7	61.7
	Hemilepidotus jordani	yellow Irish lord	58	28	125	84.0	55.0	61.3
	Hemilepidotus papilio	butterfly sculpin	5	42	63	56.2	60.3	61.0
	Hemilepidotus sp.	Irish lord	1	68	68	68.0	58.0	58.0
	Icelinus borealis	northern sculpin	2	114	142	128.0	57.7	58.0
	Icelinus sp.		1	77	77	77.0	56.7	56.7
	Icelus spatula	spatulate sculpin	62	50	161	92.7	56.3	61.0

Family	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Icelus spiniger	thorny sculpin	47	65	153	113.9	55.0	61.6
	Myoxocephalus jaok	plain sculpin	108	19	91	42.9	56.3	61.0
	Myoxocephalus polyacanthocephalus	great sculpin	168	20	175	74.2	55.0	62.0
	Myoxocephalus scorpius	shorthorn (=warty) sculpin	7	47	65	60.3	58.7	60.7
	Triglops macellus	roughspine sculpin	18	73	147	105.3	54.8	60.0
	Triglops pingelii	ribbed sculpin	20	29	80	55.5	56.3	60.3
	Triglops scepticus	spectacled sculpin	7	134	161	148.9	56.0	58.7
Gadidae	*Boreogadus saida*	Arctic cod	18	58	110	71.3	59.3	62.0
	Eleginus gracilis	saffron cod	6	19	28	22.2	59.0	60.3
	Gadus chalcogrammus	walleye pollock	348	19	175	78.6	54.7	62.0
	Gadus macrocephalus	Pacific cod	335	19	175	77.4	54.7	62.0
	Microgadus proximus	Pacific tomcod	2	59	63	61.0	57.0	57.3
Hemitripteridae	*Hemitripterus bolini*	bigmouth sculpin	53	71	160	115.8	55.0	60.7
Hexagrammidae	*Hexagrammos decagrammus*	kelp greenling	1	70	70	70.0	56.6	56.6
	Hexagrammos stelleri	whitespotted greenling	7	20	32	26.9	57.0	59.0
	Pleurogrammus monopterygius	Atka mackerel	5	72	134	112.8	56.3	60.3
Liparidae	*Careproctus phasma*	monster snailfish	38	59	160	101.7	58.7	62.0
	Careproctus scottae	peachskin snailfish	22	60	160	109.6	59.6	62.0
	Careproctus sp.		1	134	134	134.0	61.0	61.0
	Crystallichthys cyclospilus	blotched snailfish	1	142	142	142.0	57.7	57.7
	Liparis gibbus	variegated snailfish	18	33	145	69.6	57.3	62.0
	Liparis sp.		2	41	68	54.5	58.0	60.3
	Liparis tunicatus	kelp snailfish	4	38	140	73.5	57.7	60.3
Osmeridae	*Mallotus villosus*	Pacific capelin	55	19	83	43.9	57.0	62.0
	Osmerus mordax	rainbow smelt	4	21	40	31.2	56.7	59.3
	Thaleichthys pacificus	eulachon	32	24	153	102.1	55.0	60.0
Pleuronectidae	*Atheresthes evermanni*	Kamchatka flounder	142	49	175	107.0	54.7	61.6
	Atheresthes sp.		1	133	133	133.0	56.7	56.7
	Atheresthes stomias	arrowtooth flounder	196	41	175	98.7	54.7	61.3
	Glyptocephalus zachirus	rex sole	73	32	161	113.0	54.8	60.0
	Hippoglossoides elassodon	flathead sole	292	22	175	85.8	54.7	62.0

Family	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Hippoglossoides robustus	Bering flounder	68	33	139	78.9	56.7	62.0
	Hippoglossus stenolepis	Pacific halibut	257	19	175	71.7	54.7	61.7
	Isopsetta isolepis	butter sole	30	31	80	54.4	54.7	58.3
	Lepidopsetta bilineata	southern rock sole	9	50	89	68.7	55.0	59.0
	Lepidopsetta polyxystra	northern rock sole	280	19	160	67.6	54.7	62.0
	Limanda aspera	yellowfin sole	215	19	103	55.9	55.0	62.0
	Limanda sakhalinensis	Sakhalin sole	8	42	81	65.2	60.7	61.7
	Microstomus pacificus	Dover sole	6	50	147	96.5	55.0	57.3
	Myzopsetta proboscidea	longhead dab	35	19	53	31.3	58.0	60.3
	Platichthys stellatus	starry flounder	51	19	80	39.4	54.7	60.3
	Platichthys stellatus X Pleuronectes quadrituberculatus hybrid	hybrid starry flounder X Alaska plaice	1	77	77	77.0	56.0	56.0
	Pleuronectes quadrituberculatus	Alaska plaice	216	19	126	57.2	55.3	62.0
	Psettichthys melanostictus	sand sole	1	51	51	51.0	55.7	55.7
	Reinhardtius hippoglossoides	Greenland turbot	28	60	175	106.8	58.0	62.0
Psychrolutidae	*Dasycottus setiger*	spinyhead sculpin	72	67	161	116.4	55.0	61.0
	Malacocottus zonurus	darkfin sculpin	1	123	123	123.0	59.7	59.7
Rajidae	*Arctoraja parmifera*	Alaska skate	331	19	175	79.8	54.7	62.0
	Arctoraja parmifera egg case	Alaska skate egg case	43	39	157	110.8	54.8	60.7
	Beringraja binoculata	big skate	12	31	118	64.2	54.7	57.3
	Rajidae	skate unid.	2	99	133	116.0	55.3	56.7
Sebastidae	*Sebastes aleutianus*	rougheye rockfish	3	131	144	138.0	55.0	55.7
	Sebastes alutus	Pacific ocean perch	11	114	161	141.5	55.0	58.7
	Sebastes melanostictus	blackspotted rockfish	3	131	144	135.7	55.4	55.7
	Sebastes polyspinis	northern rockfish	9	116	157	136.6	55.0	58.4
	Sebastes variabilis	dusky rockfish	1	144	144	144.0	55.4	55.4
Stichaeidae	*Acantholumpenus mackayi*	pighead prickleback	1	22	22	22.0	58.3	58.3
	Leptoclinus maculatus	daubed shanny	5	53	122	97.0	56.0	60.6
	Lumpenus fabricii	slender eelblenny	4	71	105	86.0	56.3	57.7
	Lumpenus sagitta	snake prickleback	2	26	50	38.0	55.3	59.0

Family	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Poroclinus rothrocki	whitebarred prickleback	2	106	116	111.0	55.7	56.7
Trichodontidae	*Trichodon trichodon*	Pacific sandfish	13	22	56	37.7	56.3	58.7
Zaproridae	*Zaprora silenus*	prowfish	1	140	140	140.0	57.0	57.0
Zoarcidae	*Gymnelus viridis*	fish doctor	1	145	145	145.0	60.7	60.7
	Lycodes brevipes	shortfin eelpout	105	59	160	107.8	55.3	61.7
	Lycodes palearis	wattled eelpout	161	34	145	83.6	55.7	62.0
	Lycodes raridens	marbled eelpout	6	71	89	76.7	61.3	62.0
Other		fish egg unid.	5	41	68	48.2	58.0	58.7
		fish larvae unid.	1	131	131	131.0	55.7	55.7

Appendix Table A 117.-- Invertebrate taxa encountered during the 2025 eastern Bering Sea survey listed alphabetically by phylum.

Phylum	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
Annelida	Annelida	worm unid.	14	40	133	75.6	55.6	62.0
	Aphrodita negligens		8	89	148	104.6	55.3	59.3
	Aphrodita sp.		1	131	131	131.0	59.4	59.4
	Aphroditidae	sea mouse unid.	23	99	161	131.8	56.7	61.0
	Chaetopterus sp.	parchment tubeworms	1	115	115	115.0	57.0	57.0
	Eunoe depressa	depressed scale worm	69	34	134	78.7	55.6	61.7
	Eunoe nodosa	giant scale worm	57	42	135	77.4	56.0	62.0
	Hirudinea	leech unid.	2	68	68	68.0	57.7	58.3
	Notostomum cyclostomum	striped sea leech	15	42	139	82.3	57.0	62.0
	Phascolosomatidae		1	57	57	57.0	60.3	60.3
	Polychaeta	polychaete worm unid.	12	29	130	71.8	55.0	60.3
	Polychaeta tubes		21	22	160	102.0	55.3	61.3
	Polynoidae	scale worm unid.	1	58	58	58.0	57.7	57.7
	Serpula columbiana	red trumpet calcareous tubeworm	2	123	136	129.5	55.3	56.7
	Sipuncula	peanut worm unid.	2	78	95	86.5	56.6	62.0
		tube worm unid.	5	29	140	104.2	55.3	59.0
Arthropoda	*Argis* sp.		56	36	161	87.1	55.0	62.0
	Chionoecetes bairdi	Tanner crab	243	35	175	90.7	54.7	61.0
	Chionoecetes hybrid	hybrid Tanner crab	129	41	147	82.3	55.0	61.7
	Chionoecetes opilio	snow crab	198	42	175	91.6	55.4	62.0
	Chirona evermanni	giant barnacle	3	29	157	91.0	56.7	58.4
	Crangon alaskensis	shell shrimp	1	29	29	29.0	59.4	59.4
	Crangon sp.		100	19	153	84.8	55.0	62.0
	Elassochirus cavimanus	purple hermit	21	60	161	116.6	55.7	59.0
	Elassochirus tenuimanus	widehand hermit crab	3	51	60	55.3	55.7	57.0

Phylum	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Erimacrus isenbeckii	horsehair crab	62	24	147	63.8	55.7	61.0
	Eualus barbatus	barbed eualid	1	116	116	116.0	56.7	56.7
	Eualus gaimardii	circumpolar eualid	1	58	58	58.0	61.0	61.0
	Eualus sp.		4	71	136	99.8	55.3	59.7
	Glebocarcinus oregonensis	Oregon rock crab	18	51	108	78.1	55.0	57.7
	Hyas coarctatus	circumboreal toad crab	85	28	120	61.8	56.7	61.7
	Hyas lyratus	Pacific lyre crab	117	29	157	82.1	55.3	60.3
	Isopoda	isopod unid.	6	43	132	78.0	55.6	58.3
	Labidochirus splendescens	splendid hermit	167	23	161	80.9	55.3	62.0
	Metacarcinus magister	Dungeness crab	1	50	50	50.0	55.3	55.3
	Mysidae		1	19	19	19.0	59.3	59.3
	Oregonia gracilis	graceful decorator crab	28	29	143	63.6	54.8	58.3
	Paguridae	hermit crab unid.	1	51	51	51.0	57.3	57.3
	Pagurus aleuticus	Aleutian hermit	148	50	175	100.1	55.0	60.3
	Pagurus capillatus	hairy hermit crab	165	31	154	77.8	55.3	60.3
	Pagurus confragosus	knobbyhand hermit	95	59	161	102.0	54.7	59.3
	Pagurus ochotensis	Alaskan hermit	103	19	91	44.2	55.7	60.3
	Pagurus rathbuni	longfinger hermit	100	42	175	97.1	56.6	62.0
	Pagurus sp.		1	101	101	101.0	56.3	56.3
	Pagurus townsendi	Townsend hermit crab	1	71	71	71.0	62.0	62.0
	Pagurus trigonocheirus	fuzzy hermit crab	139	29	160	81.1	55.0	62.0
	Pandalidae	pandalid shrimp unid.	3	93	154	129.0	58.7	60.0
	Pandalus eous	Alaskan pink shrimp	103	29	175	114.3	54.8	61.3
	Pandalus goniurus	humpy shrimp	14	58	103	80.4	58.0	62.0
	Pandalus jordani	ocean shrimp	3	81	153	123.3	55.0	58.7
	Pandalus sp.		1	81	81	81.0	57.3	57.3
	Pandalus tridens	yellowleg pandalid	3	89	107	100.3	56.0	59.0
	Paralithodes camtschaticus	red king crab	102	24	87	50.2	56.0	60.3
	Paralithodes platypus	blue king crab	14	42	103	72.9	57.3	60.7
	Rocinela angustata	sea cockroach	2	127	139	133.0	55.0	55.0
	Sclerocrangon boreas	sculptured shrimp	1	56	56	56.0	57.0	57.0
	Spirontocaris sp.		1	131	131	131.0	55.7	55.7
	Telmessus cheiragonus	helmet crab	28	19	68	31.3	57.0	59.7
	Thoracica	barnacle unid.	29	29	111	72.3	56.3	59.3
		crab unid.	3	38	68	56.0	57.4	59.0
		empty barnacle shells	3	32	70	49.7	56.6	57.6
Bryozoa	*Alcyonidium pedunculatum*	fruit leather bryozoan	1	120	120	120.0	61.0	61.0
	Bryozoa	bryozoan unid.	74	19	147	62.4	55.7	62.0
	Crisularia pacifica		3	59	64	61.7	60.7	61.0

Phylum	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Dendrobeania sp.		2	59	62	60.5	60.7	61.0
Chordata	*Aplidium* sp.		7	33	77	62.1	56.7	60.3
	Ascidiacea	tunicate unid.	13	29	89	53.5	56.3	62.0
	Boltenia ovifera	sea onion	52	21	81	54.2	56.6	60.7
	Boltenia sp.		1	61	61	61.0	58.7	58.7
	Halocynthia aurantium	sea peach	23	58	72	65.3	57.0	61.0
	Halocynthia sp.	sea peach unid.	10	49	73	61.6	58.0	60.3
	Styela rustica	sea potato	75	33	84	58.1	56.7	60.3
	Thaliacea	salp unid.	1	139	139	139.0	55.0	55.0
		compound ascidian unid.	33	34	80	57.4	54.7	60.3
Cnidaria	Actiniaria	sea anemone unid.	55	29	123	81.0	55.0	59.7
	Aequorea sp.		7	81	153	123.0	55.0	61.3
	Aurelia labiata		4	38	64	52.0	58.0	61.0
	Aurelia limbata	brown rimmed jelly	6	37	67	53.3	59.0	60.7
	Aurelia sp.		1	134	134	134.0	56.3	56.3
	Balticina willemoesi		10	80	147	119.1	55.0	57.0
	Chrysaora melanaster		291	19	161	77.6	55.0	62.0
	Cribrinopsis fernaldi	chevron-tentacled anemone	6	114	160	134.0	57.0	60.7
	Cyanea capillata	lion's mane jelly	16	32	153	121.3	54.7	59.7
	Gersemia sp.	sea raspberry	61	33	101	60.0	56.7	62.0
	Hydroidolina	hydroid unid.	38	22	107	58.5	56.3	61.3
	Liponema brevicorne	tentacle-shedding anemone	38	29	175	119.8	54.8	60.7
	Metridium farcimen	gigantic anemone	32	24	144	67.5	55.0	60.0
	Metridium sp.		66	29	133	63.3	55.3	60.3
	Paragorgia arborea	Kamchatka coral	1	157	157	157.0	58.4	58.4
	Pennatuloidea	sea whip or sea pen unid.	10	81	153	107.3	55.0	57.3
	Phacellophora camtschatica	egg yolk jelly	13	77	153	125.8	55.0	60.0
	Scyphozoa	jellyfish unid.	16	33	147	108.2	55.0	60.7
	Staurostoma mertensii	whitecross jelly	1	114	114	114.0	61.3	61.3
	Stomphia coccinea	swimming anemone	10	54	148	93.9	56.3	59.3
	Stomphia sp.		18	86	160	123.3	58.3	61.3
	Urticina crassicornis	mottled anemone	33	29	134	84.1	55.3	62.0
	Urticina sp.		44	47	160	110.5	55.0	62.0
	Zoanthidae A sp.	hot dog zoanthid	1	157	157	157.0	58.4	58.4
		red striated sea anemone	11	95	161	127.6	57.0	60.0
Echinodermata	*Asterias amurensis*	purple-orange sea star	239	19	134	63.4	55.0	61.0
	Bathyplotes sp.		1	142	142	142.0	57.7	57.7

Phylum	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Ceramaster japonicus	red bat star	1	147	147	147.0	56.3	56.3
	Ceramaster sp.		2	153	154	153.5	55.0	58.7
	Crossaster papposus	rose sea star	20	61	160	100.7	56.3	60.7
	Ctenodiscus crispatus	common mud star	78	67	175	114.7	55.0	61.7
	Cucumaria fallax	sea football	17	29	93	65.8	56.0	58.3
	Diplopteraster multipes	pincushion sea star	5	133	161	145.6	56.0	59.0
	Dipsacaster borealis	northern sea star	3	132	161	144.3	57.0	58.7
	Echinacea	sea urchin unid.	6	35	140	69.7	55.0	60.0
	Echinarachnius parma	parma sand dollar	9	62	99	73.8	55.0	60.7
	Evasterias echinosoma	giant sea star	32	29	107	64.6	55.3	58.3
	Evasterias retifera		1	94	94	94.0	55.6	55.6
	Gorgonocephalus eucnemis	basketstar	231	22	160	79.5	55.0	62.0
	Henricia sp.		14	42	161	107.2	55.7	62.0
	Holothuroidea	sea cucumber unid.	7	58	131	77.7	55.7	58.3
	Leptasterias arctica		42	44	118	67.1	56.7	62.0
	Leptasterias groenlandica		10	66	134	89.0	57.7	61.0
	Leptasterias polaris		134	29	160	90.1	56.3	62.0
	Leptasterias sp.		1	114	114	114.0	58.3	58.3
	Leptychaster anomalus		7	91	138	118.0	55.3	59.0
	Lethasterias nanimensis	blackspined sea star	82	47	157	86.3	56.0	60.7
	Molpadia intermedia	sweet sea potato	1	132	132	132.0	56.0	56.0
	Molpadia sp.		2	77	107	92.0	56.3	56.7
	Nearchaster variabilis		1	135	135	135.0	58.7	58.7
	Odontohenricia sp.		6	89	161	135.5	56.3	60.3
	Ophiopholis aculeata	ubiquitous brittle star	1	68	68	68.0	57.3	57.3
	Ophiura sarsii	notched brittlestar	50	54	120	82.4	56.3	62.0
	Ophiuroidea	brittlestar unid.	54	44	127	70.9	55.0	61.0
	Pseudarchaster alascensis		1	105	105	105.0	59.0	59.0
	Pseudarchaster parelii	scarlet sea star	3	114	133	122.3	56.7	57.3
	Pseudarchaster sp.		9	112	161	135.2	55.0	59.0
	Psolus sp.		1	73	73	73.0	60.0	60.0
	Pteraster obscurus	obscure sea star	29	63	160	105.9	57.3	62.0
	Pteraster tesselatus		1	143	143	143.0	54.8	54.8
	Pycnopodia helianthoides	sunflower sea star	4	50	99	69.0	55.3	55.7
	Solaster sp.		5	61	134	97.4	56.3	60.3
	Strongylocentrotus droebachiensis	green sea urchin	32	41	161	112.6	55.3	60.7
	Strongylocentrotus fragilis	orange-pink sea urchin	2	133	133	133.0	55.7	59.0
	Strongylocentrotus sp.		30	29	147	93.5	54.8	59.7
	Synallactes challengeri		1	147	147	147.0	56.3	56.3
		sand dollar unid.	6	67	126	88.2	54.7	61.0

Phylum	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Aforia circinata	keeled Aforia	32	75	160	110.7	56.3	61.6
	Arctomelon sp.		1	161	161	161.0	58.7	58.7
	Aulacofusus herendeeni	thin-ribbed whelk	1	120	120	120.0	57.0	57.0
	Bathypolypus sp.		1	84	84	84.0	56.3	56.3
	Beringius behringii	Bering beringius	25	61	136	107.6	55.3	61.3
	Beringius kennicottii		2	118	133	125.5	56.7	57.6
	Beringius sp.		29	55	160	97.7	55.0	60.7
	Beringius stimpsoni		2	63	64	63.5	58.0	60.7
	Berryteuthis magister	magistrate armhook squid	3	139	153	146.3	55.0	56.3
	Bivalvia	bivalve unid.	1	107	107	107.0	56.3	56.3
	Boreotrophon alaskanus	Alaskan trophon	1	76	76	76.0	61.3	61.3
	Boreotrophon sp.		6	59	84	75.5	57.0	58.3
	Buccinum angulosum	angular whelk	75	49	145	89.9	57.3	62.0
	Buccinum angulosum transliratum	transect whelk	1	43	43	43.0	58.0	58.0
	Buccinum oedematum	swollen whelk	35	64	175	114.5	56.7	61.3
	Buccinum plectrum	sinuous whelk	20	29	135	84.0	55.7	61.3
	Buccinum polare	polar whelk	68	44	145	74.7	55.7	62.0
	Buccinum scalariforme	ladder whelk	99	42	157	91.7	54.8	62.0
	Buccinum sp.		10	33	101	67.7	55.7	59.0
	Calyptraeidae	slippersnails	6	64	75	68.5	57.0	58.3
	Chlamys sp.		3	77	134	105.3	56.3	57.7
Mollusca	*Ciliatocardium ciliatum*	hairy cockle	16	54	134	82.9	58.0	62.0
	Clinocardium sp.		13	58	147	77.2	56.0	60.3
	Clinopegma		1	75	75	75.0	59.7	59.7
	Clinopegma magnum	helmet whelk	45	61	134	90.0	56.3	62.0
	Colus sp.		31	59	147	92.1	55.0	62.0
	Cryptonatica aleutica	Aleutian moonsnail	10	64	100	79.4	60.3	62.0
	Cryptonatica russa	rusty moonsnail	24	42	125	82.5	57.0	62.0
	Cryptonatica sp.		4	64	120	80.2	57.7	61.0
	Cyclocardia sp.		5	43	77	61.4	56.7	59.0
	Enteroctopus dofleini	giant octopus	19	50	161	122.3	55.3	61.0
	Euspira pallida	pale moonsnail	12	49	138	88.2	56.4	61.3
	Fusitriton oregonensis	Oregon triton	99	55	175	111.2	54.7	60.7
	Gastropoda egg	snail egg	172	19	175	75.1	55.4	62.0
	Gonatus sp.		1	123	123	123.0	55.7	55.7
	Grandicrepidula grandis	great slippersnail	2	62	65	63.5	57.4	57.7
	Hiatella arctica	Arctic Hiatella	2	29	67	48.0	57.4	58.0
	Hiatella sp.		5	67	132	95.0	55.7	58.0
	Lamellariinae	lamellarid unid.	2	68	68	68.0	58.0	58.3
	Latisipho hypolispus		1	96	96	96.0	59.0	59.0
	Macoma nasuta	bent-nose Macoma	4	37	111	76.5	56.7	61.0
	Macoma sp.		3	29	84	48.3	57.4	58.0
	Mactromeris polynyma	Arctic surfclam	41	28	87	54.3	55.7	62.0

Phylum	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Megangulus luteus	Alaska great-tellin	40	19	72	37.4	56.7	59.7
	Modiolus modiolus	northern horsemussel	8	50	80	67.2	55.3	62.0
	Musculus discors	discordant mussel	17	28	69	57.6	57.0	59.7
	Muusoctopus oregonensis		10	78	139	120.9	58.7	62.0
	Mytilus edulis	blue mussel	2	29	49	39.0	58.3	59.4
	Mytilus sp.		4	22	54	36.0	57.3	59.3
	Naticidae	moonsnail	3	61	68	64.7	58.0	59.0
	gastropod egg	moonsnail egg unid.	8	29	84	63.5	57.7	59.7
	Neoberingius frielei		15	73	160	122.1	55.0	60.7
	Neoberingius sp.		2	111	115	113.0	56.3	57.0
	Neptunea borealis		53	38	119	67.4	57.0	62.0
	Neptunea heros		108	31	100	58.1	55.7	62.0
	Neptunea lyrata	lyre whelk	127	33	175	101.4	55.0	61.3
	Neptunea pribiloffensis	Pribilof whelk	94	54	157	105.0	55.0	61.3
	Neptunea sp.		5	44	84	68.8	56.3	58.6
	Neptunea ventricosa	fat whelk	109	29	114	57.3	55.7	61.3
	Neptunea ventricosa egg	fat whelk egg	1	47	47	47.0	57.3	57.3
	Neverita lewisii	Lewis moonsnail	1	75	75	75.0	59.7	59.7
	Nudibranchia	nudibranch unid.	26	54	126	74.1	56.3	62.0
	Onchidiopsis clarki	warty blobsnail	2	62	69	65.5	57.0	57.7
	Onchidiopsis sp.		5	61	72	66.8	57.3	60.3
	Patinopecten caurinus	weathervane scallop	29	76	147	107.8	55.3	58.3
	Plicifusus kroyeri		24	64	148	97.4	56.6	60.3
	Plicifusus sp.		1	134	134	134.0	56.3	56.3
	Pododesmus macrochisma	abalone jingle	3	61	73	65.7	57.0	60.3
	Pyrulofusus deformis	warped whelk	41	44	157	92.5	55.7	60.3
	Pyrulofusus melonis		47	61	160	113.2	55.0	61.3
	Pyrulofusus sp.		1	108	108	108.0	59.3	59.3
	Rossia pacifica	eastern Pacific bobtail	7	132	161	141.9	55.7	60.0
	Serripes groenlandicus	Greenland cockle	3	38	49	43.7	58.3	59.0
	Serripes notabilis	oblique smoothcockle	46	22	135	69.0	55.7	62.0
	Serripes sp.		14	49	127	84.1	56.6	60.3
	Siliqua alta	Alaska razor	12	23	44	34.2	57.7	60.3
	Tachyrhynchus erosus	eroded turretsnail	2	19	21	20.0	59.3	59.3
	Tellina sp.		1	75	75	75.0	57.0	57.0
	Tridonta arctica		1	65	65	65.0	60.0	60.0
	Tridonta borealis	boreal Astarte	1	65	65	65.0	60.0	60.0
	Tritonia festiva	festive Tritonia	5	61	105	86.4	60.3	61.3
	Tritonia sp.		1	68	68	68.0	58.0	58.0
	Tritonia tetraquetra	rosy Tritonia	3	73	112	95.3	59.6	61.0
	Volutopsius fragilis	fragile whelk	27	49	123	74.7	56.7	59.0
	Volutopsius middendorffi	tulip whelk	3	107	118	111.7	57.6	58.7

Phylum	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Volutopsius simplex	simple whelk	3	106	135	125.3	59.3	60.0
	Volutopsius sp.		5	61	132	91.0	55.7	60.7
	Volutopsius stefanssoni	shouldered whelk	2	64	133	98.5	56.7	60.0
	Yoldia hyperborea	northern Yoldia	1	29	29	29.0	59.4	59.4
	Yoldia sp.		5	41	77	65.6	56.3	61.3
		empty bivalve shells	233	19	175	76.2	54.7	62.0
		empty gastropod shells	284	19	175	80.8	54.7	62.0
Nemertea	Nemertea	nemertean worm unid.	1	106	106	106.0	58.3	58.3
Porifera	Porifera	sponge unid.	43	38	161	90.2	54.7	60.3
	Suberites montalbidus	stinky sponge	4	49	91	77.2	55.7	58.3
	Suberites sp.		1	89	89	89.0	56.0	56.0
Other		unsorted catch and debris	40	25	160	81.0	56.0	61.0
		unsorted shelfish, hermits, and associated biomass	1	115	115	115.0	59.0	59.0

Appendix B: List of taxa encountered in the northern Bering Sea

List of Tables

Appendix Table B 118.-- Fish taxa encountered during the 2025 northern Bering Sea survey listed alphabetically by family.

Family	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
Agonidae	*Aspidophoroides olrikii*	Arctic alligatorfish	15	28	56	40.9	62.3	65.3
	Occella dodecaedron	Bering poacher	16	10	35	21.4	61.0	64.3
	Pallasina barbata	tubenose poacher	1	15	15	15.0	64.0	64.0
	Podothecus accipenserinus	sturgeon poacher	43	15	57	34.6	60.7	64.3
	Podothecus veternus	veteran poacher	46	12	68	36.3	60.7	65.3
Ammodytidae	*Ammodytes hexapterus*	Arctic sand lance	5	28	51	39.2	64.7	65.3
	Ammodytes sp.	sand lance unid.	6	16	32	25.7	63.0	65.0
Anarhichadidae	*Anarhichas orientalis*	Bering wolffish	4	22	34	26.5	61.0	64.7
Bathymasteridae	*Bathymaster signatus*	searcher	2	46	48	47.0	64.0	65.0
Clupeidae	*Clupea pallasii*	Pacific herring	35	10	43	23.9	60.7	65.3
Cottidae	*Artediellus scaber*	hamecon	3	29	40	34.0	64.0	64.4
	Artediellus sp.		1	23	23	23.0	64.7	64.7
	Enophrys diceraus	antlered sculpin	18	10	61	26.8	62.3	65.3
	Enophrys lucasi	leister sculpin	1	37	37	37.0	63.2	63.2
	Gymnocanthus pistilliger	threaded sculpin	49	12	58	27.1	61.7	64.7
	Gymnocanthus sp.		1	28	28	28.0	64.7	64.7
	Gymnocanthus tricuspis	Arctic staghorn sculpin	33	18	77	45.3	62.3	65.3
	Hemilepidotus papilio	butterfly sculpin	11	37	62	49.2	61.3	64.0
	Hemilepidotus sp.	Irish lord	1	28	28	28.0	64.3	64.3
	Icelus spatula	spatulate sculpin	8	38	77	56.6	62.3	65.0
	Megalocottus platycephalus	belligerent sculpin	2	12	12	12.0	63.7	64.3
	Myoxocephalus jaok	plain sculpin	87	10	62	30.8	60.7	65.3
	Myoxocephalus polyacanthocephalus	great sculpin	41	12	77	42.8	61.0	65.3
	Myoxocephalus quadricornis	fourhorn sculpin	2	12	12	12.0	63.7	64.3
	Myoxocephalus scorpius	shorthorn (=warty) sculpin	39	18	56	37.7	61.0	65.3
	Trichocottus brashnikovi	hairhead sculpin	1	37	37	37.0	63.7	63.7
	Triglops pingelii	ribbed sculpin	10	19	56	40.8	61.7	65.3
Cyclopteridae	*Eumicrotremus andriashevi*	pimpled lumpsucker	1	26	26	26.0	64.0	64.0
	Eumicrotremus orbis	Pacific spiny lumpsucker	1	43	43	43.0	64.7	64.7
Gadidae	*Boreogadus saida*	Arctic cod	54	15	77	43.1	61.0	65.3
	Eleginus gracilis	saffron cod	62	10	43	25.0	60.7	65.3

Family	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Gadus chalcogrammus	walleye pollock	128	10	77	38.3	60.7	65.3
	Gadus macrocephalus	Pacific cod	99	18	77	39.5	60.7	65.2
Gasterosteidae	*Pungitius pungitius*	ninespine stickleback	1	12	12	12.0	64.3	64.3
Hemitripteridae	*Nautichthys pribilovius*	eyeshade sculpin	5	15	33	24.2	64.0	64.7
Hexagrammidae	*Hexagrammos decagrammus*	kelp greenling	1	35	35	35.0	61.0	61.0
	Hexagrammos stelleri	whitespotted greenling	9	12	24	19.0	61.7	64.3
Liparidae	*Careproctus phasma*	monster snailfish	17	52	77	63.5	61.3	63.3
	Careproctus scottae	peachskin snailfish	1	65	65	65.0	61.7	61.7
	Careproctus sp.		2	36	51	43.5	65.3	65.3
	Liparis bathyarcticus	nebulous snailfish	1	53	53	53.0	62.0	62.0
	Liparis gibbus	variegated snailfish	65	26	77	48.0	61.3	65.3
	Liparis sp.		2	40	46	43.0	64.3	65.0
	Liparis tunicatus	kelp snailfish	15	25	65	33.5	60.7	64.4
Osmeridae	*Mallotus villosus*	Pacific capelin	82	19	72	42.6	60.7	65.0
	Osmerus mordax	rainbow smelt	36	10	51	20.7	61.0	65.3
Pleuronectidae	*Hippoglossoides elassodon*	flathead sole	4	26	52	43.5	61.0	64.0
	Hippoglossoides robustus	Bering flounder	95	19	77	43.1	61.0	65.3
	Hippoglossus stenolepis	Pacific halibut	28	13	53	30.4	60.7	65.3
	Lepidopsetta polyxystra	northern rock sole	92	19	67	40.0	60.7	65.0
	Limanda aspera	yellowfin sole	134	10	77	36.6	60.7	65.3
	Limanda sakhalinensis	Sakhalin sole	80	19	72	43.6	61.0	65.3
	Liopsetta glacialis	Arctic flounder	8	10	20	14.0	62.0	64.3
	Myzopsetta proboscidea	longhead dab	36	10	53	27.2	61.3	65.3
	Platichthys stellatus	starry flounder	67	10	57	26.4	60.7	65.3
	Platichthys stellatus X Pleuronectes quadrituberculatus hybrid	hybrid starry flounder X Alaska plaice	2	19	35	27.0	60.7	62.3
	Pleuronectes quadrituberculatus	Alaska plaice	130	10	77	36.1	60.7	65.3
	Reinhardtius hippoglossoides	Greenland turbot	1	77	77	77.0	62.3	62.3
Rajidae	*Arctoraja parmifera*	Alaska skate	57	21	77	46.2	60.7	63.7

Family	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Arctoraja parmifera egg case	Alaska skate egg case	5	21	50	36.8	61.7	63.3
Salmonidae	*Oncorhynchus keta*	chum salmon	1	32	32	32.0	65.0	65.0
Stichaeidae	*Acantholumpenus mackayi*	pighead prickleback	22	10	27	16.7	61.7	64.3
	Chirolophis snyderi	bearded warbonnet	1	23	23	23.0	64.7	64.7
	Eumesogrammus praecisus	fourline snakeblenny	1	35	35	35.0	64.3	64.3
	Leptoclinus maculatus	daubed shanny	3	19	27	23.3	62.3	63.0
	Lumpenus fabricii	slender eelblenny	1	56	56	56.0	63.2	63.2
	Lumpenus sagitta	snake prickleback	30	12	51	26.1	63.3	65.3
	Stichaeidae	prickleback unid.	1	23	23	23.0	64.7	64.7
	Stichaeus punctatus	Arctic shanny	8	15	35	20.0	63.6	64.7
Zoarcidae	*Lycodes akuugun*	bicolor eelpout	1	48	48	48.0	64.0	64.0
	Lycodes mucosus	saddled eelpout	10	12	38	20.6	63.3	64.3
	Lycodes palearis	wattled eelpout	23	15	77	47.6	61.0	64.3
	Lycodes raridens	marbled eelpout	12	52	69	60.5	61.7	63.3
	Lycodes sp.		1	21	21	21.0	64.3	64.3
	Lycodes turneri	polar eelpout	3	34	51	44.0	63.5	65.2

Appendix Table B 119.-- Invertebrate taxa encountered during the 2025 northern Bering Sea survey listed alphabetically by phylum.

Phylum	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
Annelida	Annelida	worm unid.	1	13	13	13.0	63.3	63.3
	Eunoe depressa	depressed scale worm	17	12	52	31.6	61.0	65.3
	Eunoe nodosa	giant scale worm	12	31	69	53.4	61.0	64.0
	Phascolosomatidae		2	57	71	64.0	62.3	62.7
	Polychaeta	polychaete worm unid.	4	20	68	47.2	62.0	63.3
	Polychaeta tubes		15	12	51	29.6	60.7	65.3
	Sipuncula	peanut worm unid.	10	28	71	51.6	62.3	65.0
Arthropoda	Amphipoda	amphipod unid.	3	46	53	49.0	62.0	64.6
	Argis sp.		95	12	77	36.9	60.7	65.3
	Chionoecetes bairdi	Tanner crab	12	18	59	33.1	62.7	64.3
	Chionoecetes hybrid	hybrid Tanner crab	14	18	71	36.6	62.7	64.7
	Chionoecetes opilio	snow crab	101	16	77	42.8	60.7	65.3
	Chirona evermanni	giant barnacle	1	48	48	48.0	64.0	64.0
	Crangon sp.		36	12	77	31.5	61.7	65.3
	Erimacrus isenbeckii	horsehair crab	9	33	57	40.7	60.7	62.3
	Eualus gaimardii	circumpolar eualid	1	77	77	77.0	62.3	62.3
	Gammaridae	gammarid amphipod unid.	2	45	50	47.5	62.0	63.0
	Hyas coarctatus	circumboreal toad crab	95	16	72	40.2	60.7	65.3
	Isopoda	isopod unid.	1	24	24	24.0	62.3	62.3
	Labidochirus splendescens	splendid hermit	73	12	65	35.2	60.7	65.3
	Lebbeus groenlandicus	spiny lebbeid	2	23	28	25.5	64.3	64.7
	Lebbeus sp.		2	28	37	32.5	63.2	64.7
	Pagurus capillatus	hairy hermit crab	62	12	51	27.9	60.7	65.3
	Pagurus ochotensis	Alaskan hermit	43	12	40	24.2	60.7	65.3
	Pagurus rathbuni	longfinger hermit	33	26	77	53.5	61.3	64.6
	Pagurus trigonocheirus	fuzzy hermit crab	92	18	69	41.2	60.7	65.3
	Pandalus eous	Alaskan pink shrimp	4	48	71	55.2	62.0	62.7
	Pandalus goniurus	humpy shrimp	24	12	58	31.3	61.3	64.7
	Pandalus hypsinotus	coonstripe shrimp	2	23	28	25.5	64.3	64.7
	Pandalus sp.		7	28	69	51.6	62.3	64.7
	Paralithodes camtschaticus	red king crab	20	15	38	23.6	60.7	65.3
	Paralithodes platypus	blue king crab	22	18	68	40.3	62.7	65.3
	Saduria sibirica		3	10	16	13.0	63.3	63.7
	Sclerocrangon boreas	sculptured shrimp	8	18	47	35.9	63.2	65.0
	Telmessus cheiragonus	helmet crab	29	10	36	20.3	61.7	65.3

Phylum	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Thoracica	barnacle unid.	4	12	39	29.0	61.7	63.7
		crab unid.	1	23	23	23.0	64.7	64.7
		empty barnacle shells	2	23	38	30.5	64.2	64.7
		shrimp unid.	15	36	72	54.0	62.3	65.3
Bryozoa	*Alcyonidium disciforme*	disc bryozoan	9	29	52	39.6	62.3	64.4
	Alcyonidium enteromorpha	noodle bryozoan	13	26	51	38.0	63.0	65.2
	Bryozoa	bryozoan unid.	25	12	51	28.7	61.0	65.3
	Leieschara subgracilis		1	35	35	35.0	64.3	64.3
	Rhamphostomella costata	ribbed bryozoan	5	31	48	36.4	62.3	65.0
	Serratiflustra serrulata	leafy bryozoan	1	19	19	19.0	62.3	62.3
Chordata	*Aplidium* sp.		9	19	31	24.8	62.3	63.3
	Ascidiacea	tunicate unid.	1	43	43	43.0	65.0	65.0
	Boltenia ovifera	sea onion	12	26	48	35.7	62.9	64.7
	Halocynthia aurantium	sea peach	5	23	59	42.2	61.0	64.7
	Halocynthia sp.	sea peach unid.	3	28	39	33.3	61.7	64.3
	Ritterella pulchra	orange compound tunicate	13	27	51	37.8	63.7	65.2
	Styela rustica	sea potato	64	16	58	36.3	61.0	65.0
		compound ascidian unid.	36	13	57	30.7	60.7	65.3
Cnidaria	Actiniaria	sea anemone unid.	16	28	62	43.9	61.3	65.3
	Actiniidae	actinid sea anemones unid.	3	37	67	53.3	62.7	63.2
	Aequorea sp.		1	37	37	37.0	63.7	63.7
	Aurelia limbata	brown rimmed jelly	2	52	53	52.5	61.0	61.7
	Chrysaora melanaster		118	10	77	37.9	60.7	65.3
	Gersemia sp.	sea raspberry	62	12	71	33.5	61.0	65.3
	Hydroidolina	hydroid unid.	5	24	48	35.6	62.3	65.0
	Hydrozoa		2	15	39	27.0	62.0	64.0
	Metridium farcimen	gigantic anemone	28	10	52	25.7	60.7	65.0
	Metridium sp.		4	16	62	28.0	62.7	64.0
	Scyphozoa	jellyfish unid.	5	38	52	45.6	61.0	64.7
	Stomphia coccinea	swimming anemone	22	38	77	57.1	62.3	65.2
	Stomphia sp.		2	23	65	44.0	61.7	64.7
	Urticina crassicornis	mottled anemone	4	25	58	41.0	61.7	64.3
	Urticina sp.		14	12	56	26.9	62.0	64.7
		red striated sea anemone	1	51	51	51.0	65.2	65.2
Ctenophora	Ctenophora	comb jelly unid.	1	12	12	12.0	64.3	64.3
Echinodermata	*Amphiodia* sp.		1	37	37	37.0	63.2	63.2

Phylum	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Amphiuridae	burrowing brittle star unid.	1	35	35	35.0	64.3	64.3
	Asterias amurensis	purple-orange sea star	71	10	57	28.4	60.7	65.3
	Crossaster papposus	rose sea star	13	15	48	32.1	64.0	65.3
	Cucumaria sp.		1	69	69	69.0	62.3	62.3
	Echinarachnius parma	parma sand dollar	5	29	37	33.0	62.3	64.4
	Evasterias echinosoma	giant sea star	22	12	51	24.4	63.7	65.3
	Gorgonocephalus eucnemis	basketstar	80	18	77	41.1	60.7	65.3
	Henricia sp.		12	12	38	28.1	63.0	65.3
	Henricia tumida	tumid sea star	1	41	41	41.0	62.3	62.3
	Holothuroidea	sea cucumber unid.	3	23	71	50.0	62.0	64.7
	Leptasterias arctica		75	12	77	41.2	60.7	65.3
	Leptasterias groenlandica		6	24	65	42.7	61.3	64.3
	Leptasterias polaris		85	18	77	43.9	61.3	65.3
	Lethasterias nanimensis	blackspined sea star	31	12	51	27.0	63.3	65.3
	Molpadia intermedia	sweet sea potato	1	45	45	45.0	64.7	64.7
	Ocnus glacialis		1	29	29	29.0	64.4	64.4
	Ophiura sarsii	notched brittlestar	23	12	77	55.3	61.3	64.3
	Ophiura sp.		1	40	40	40.0	62.7	62.7
	Ophiuroidea	brittlestar unid.	3	37	62	49.0	63.2	64.0
	Pentamera lissoplaca	crescent sea cucumber	3	38	51	44.0	64.7	65.2
	Psolus fabricii	brownscaled sea cucumber	7	23	38	30.9	63.2	64.7
	Pteraster obscurus	obscure sea star	4	33	77	54.8	62.3	64.0
	Pteraster octaster		1	36	36	36.0	65.3	65.3
	Solaster sp.		2	35	48	41.5	64.0	64.3
	Solasteridae	solasterid sea star unid.	1	28	28	28.0	64.3	64.3
	Strongylocentrotus droebachiensis	green sea urchin	28	12	56	24.7	61.7	64.4
	Strongylocentrotus sp.		15	18	51	37.5	61.0	65.3
Mollusca	*Admete solida*	noble Admete	1	52	52	52.0	63.0	63.0
	Amicula vestita		2	38	46	42.0	64.6	64.7
	Arctomelon sp.		1	23	23	23.0	62.0	62.0
	Aulacofusus herendeeni	thin-ribbed whelk	1	47	47	47.0	61.3	61.3
	Beringius behringii	Bering beringius	9	12	51	25.6	63.0	65.3
	Beringius sp.		5	32	53	40.2	61.3	65.3
	Beringius stimpsoni		1	56	56	56.0	63.2	63.2
	Bivalvia	bivalve unid.	2	28	32	30.0	64.7	65.0
	Boreotrophon sp.		1	52	52	52.0	63.0	63.0
	Buccinum angulosum	angular whelk	21	24	67	46.9	61.3	65.0

Phylum	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Buccinum oedematum	swollen whelk	4	22	65	45.0	61.3	62.7
	Buccinum plectrum	sinuous whelk	7	15	53	31.0	61.7	64.0
	Buccinum polare	polar whelk	49	24	77	48.8	61.0	65.2
	Buccinum scalariforme	ladder whelk	33	25	77	49.2	61.0	65.2
	Buccinum sp.		6	33	48	41.2	62.3	64.0
	Chlamys sp.		1	33	33	33.0	64.0	64.0
	Ciliatocardium ciliatum	hairy cockle	5	15	53	32.8	61.3	64.3
	Clinocardium sp.		3	43	71	60.3	62.7	64.7
	Clinopegma magnum	helmet whelk	3	38	57	49.0	62.3	62.3
	Colus sp.		4	51	71	59.8	61.7	65.2
	Cryptonatica aleutica	Aleutian moonsnail	5	37	58	47.2	61.6	62.9
	Cryptonatica russa	rusty moonsnail	21	31	77	57.5	61.4	64.0
	Cyclocardia sp.		1	53	53	53.0	63.7	63.7
	Euspira pallida	pale moonsnail	12	40	67	56.3	61.4	65.0
	Gastropoda egg	snail egg	79	12	72	39.6	60.7	65.3
	Hiatella arctica	Arctic Hiatella	1	15	15	15.0	64.3	64.3
	Latisipho hypolispus		1	52	52	52.0	61.0	61.0
	Macoma inquinata	pointed Macoma	1	69	69	69.0	62.3	62.3
	Macoma nasuta	bent-nose Macoma	3	22	46	35.3	61.7	64.6
	Mactromeris polynyma	Arctic surfclam	5	12	51	31.8	64.3	65.3
	Megangulus luteus	Alaska great-tellin	1	23	23	23.0	62.0	62.0
	Modiolus modiolus	northern horsemussel	3	12	53	28.3	61.7	64.3
	Muusoctopus sibiricus		1	77	77	77.0	62.3	62.3
	Mytilus sp.		1	59	59	59.0	63.0	63.0
	Mytilus trossulus	foolish mussel	1	26	26	26.0	64.0	64.0
	gastropod egg	moonsnail egg unid.	24	39	77	55.6	61.0	65.2
	Neptunea borealis		54	23	69	41.1	61.0	64.3
	Neptunea heros		97	12	69	38.2	60.7	65.3
	Neptunea lyrata	lyre whelk	1	44	44	44.0	61.6	61.6
	Neptunea sp.		10	12	68	44.1	62.3	64.3
	Neptunea ventricosa	fat whelk	60	12	53	31.6	60.7	65.3
	Nuculana pernula	stout nutclam	2	61	71	66.0	62.3	62.7
	Nudibranchia	nudibranch unid.	12	13	62	37.6	62.3	65.3
	Onchidiopsis sp.		8	12	46	28.5	62.3	65.0
	Panomya norvegica		1	21	21	21.0	64.3	64.3
	Pyrulofusus deformis	warped whelk	3	15	36	25.3	63.3	65.3
	Scabrotrophon sp.		1	38	38	38.0	62.3	62.3
	Serripes groenlandicus	Greenland cockle	3	18	35	26.0	61.0	63.7
	Serripes notabilis	oblique smoothcockle	27	12	67	36.2	61.0	65.0
	Siliqua alta	Alaska razor	1	12	12	12.0	64.3	64.3
	Siliqua sp.		2	10	13	11.5	63.3	63.7

Phylum	Scientific name	Common name	#Hauls	Bottom depth (m)			Latitude	
				Min.	Max.	Avg.	N	S
	Tellina sp.		2	18	33	25.5	64.0	64.0
	Trichotropis bicarinata	two-keel hairysnail	1	33	33	33.0	64.0	64.0
	Tritonia sp.		1	45	45	45.0	61.3	61.3
	Tritonia tetraquetra	rosy Tritonia	3	45	50	47.3	61.3	62.0
	Volutopsius fragilis	fragile whelk	1	52	52	52.0	62.3	62.3
	Volutopsius sp.		2	19	53	36.0	62.0	64.0
	Yoldia aeolica	crisscrossed Yoldia	1	37	37	37.0	62.9	62.9
		empty bivalve shells	101	12	69	35.7	60.7	65.3
		empty gastropod shells	113	12	77	36.3	60.7	65.3
Nemertea	*Tubulanus* sp.		1	59	59	59.0	63.0	63.0
	Tubulanus A (Clark 2006) sp.	red ribbon worm	3	62	71	66.7	62.7	63.0
Porifera	Porifera	sponge unid.	15	12	48	27.0	62.7	65.0
Other		unsorted catch and debris	1	12	12	12.0	63.7	63.7

Appendix C: List of population estimates by sex and size group for principal fish species in the eastern Bering Sea

List of Tables

Appendix Table C 120.-- Population estimates by sex and size for Alaska plaice from the 2025 eastern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
100	33,724	0	161,590	195,314	0.0003	0.0003
110	0	33,724	387,139	420,863	0.0007	0.0011
120	97,683	145,671	676,647	920,001	0.0016	0.0026
130	161,590	256,001	353,467	771,058	0.0013	0.0039
140	936,626	161,590	127,918	1,226,134	0.0021	0.0060
150	1,502,403	709,715	0	2,212,118	0.0038	0.0098
160	1,966,149	1,047,211	0	3,013,360	0.0051	0.0149
170	2,675,795	1,690,240	0	4,366,035	0.0074	0.0224
180	2,309,345	1,869,439	0	4,178,784	0.0071	0.0295
190	3,153,130	2,457,974	0	5,611,104	0.0096	0.0391
200	3,288,766	3,550,657	0	6,839,423	0.0117	0.0507
210	4,537,978	4,589,462	0	9,127,440	0.0156	0.0663
220	5,475,470	6,605,239	0	12,080,709	0.0206	0.0869
230	7,101,705	5,327,886	0	12,429,591	0.0212	0.1081
240	8,063,663	8,832,753	0	16,896,416	0.0288	0.1369
250	9,204,959	7,237,985	0	16,442,944	0.0280	0.1650
260	11,344,270	10,923,400	0	22,267,670	0.0380	0.2030
270	13,100,997	5,785,048	0	18,886,045	0.0322	0.2352
280	10,810,042	8,766,718	0	19,576,760	0.0334	0.2686
290	14,828,617	8,836,955	0	23,665,572	0.0404	0.3089
300	16,465,345	8,829,335	0	25,294,680	0.0431	0.3521
310	22,264,032	11,482,690	0	33,746,722	0.0576	0.4096
320	21,598,614	9,473,780	0	31,072,394	0.0530	0.4626
330	24,318,148	10,279,305	0	34,597,453	0.0590	0.5216
340	23,509,612	11,850,791	0	35,360,403	0.0603	0.5820
350	20,488,568	10,135,275	0	30,623,843	0.0522	0.6342
360	19,082,614	11,115,100	0	30,197,714	0.0515	0.6857
370	16,892,860	13,123,539	0	30,016,399	0.0512	0.7369
380	11,800,540	11,186,777	0	22,987,317	0.0392	0.7761
390	7,054,555	11,780,703	0	18,835,258	0.0321	0.8082
400	4,449,425	12,118,522	0	16,567,947	0.0283	0.8365
410	1,940,189	12,573,062	0	14,513,251	0.0248	0.8612
420	1,318,709	10,601,809	0	11,920,518	0.0203	0.8816
430	422,547	11,510,047	0	11,932,594	0.0204	0.9019
440	268,221	9,645,583	0	9,913,804	0.0169	0.9188
450	223,682	10,110,989	0	10,334,671	0.0176	0.9365
460	194,358	7,660,975	0	7,855,333	0.0134	0.9499
470	40,100	7,414,193	0	7,454,293	0.0127	0.9626
480	0	5,435,076	0	5,435,076	0.0093	0.9718
490	164,385	3,474,398	0	3,638,783	0.0062	0.9781
500	33,658	3,604,048	0	3,637,706	0.0062	0.9843
510	0	3,101,718	0	3,101,718	0.0053	0.9895
520	0	1,808,127	0	1,808,127	0.0031	0.9926
530	0	1,264,986	0	1,264,986	0.0022	0.9948
540	0	1,337,886	0	1,337,886	0.0023	0.9971
550	0	1,098,172	0	1,098,172	0.0019	0.9989
560	0	349,117	0	349,117	0.0006	0.9995
570	0	208,646	0	208,646	0.0004	0.9999
580	0	60,184	0	60,184	0.0001	1.0000
Total	**293,123,074**	**291,462,501**	**1,706,761**	**586,292,336**	**1.0000**	**1.0000**

Appendix Table C 121.-- Population estimates by sex and size for Alaska skate from the 2025 eastern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
200	60,069	32,588	0	92,657	0.0008	0.0008
210	92,359	95,061	0	187,420	0.0017	0.0025
220	188,648	241,819	0	430,467	0.0038	0.0063
230	409,985	206,426	29,972	646,383	0.0057	0.0120
240	434,902	714,421	29,972	1,179,295	0.0104	0.0224
250	351,357	254,227	89,916	695,500	0.0061	0.0285
260	315,650	602,794	59,944	978,388	0.0086	0.0371
270	352,392	496,174	0	848,566	0.0075	0.0446
280	150,986	362,721	0	513,707	0.0045	0.0492
290	440,156	896,253	0	1,336,409	0.0118	0.0609
300	501,115	714,085	0	1,215,200	0.0107	0.0717
310	495,490	544,615	0	1,040,105	0.0092	0.0808
320	514,719	671,589	29,972	1,216,280	0.0107	0.0916
330	283,361	680,586	0	963,947	0.0085	0.1001
340	629,387	624,163	0	1,253,550	0.0111	0.1111
350	618,431	550,285	0	1,168,716	0.0103	0.1214
360	466,372	955,926	29,972	1,452,270	0.0128	0.1342
370	499,057	696,227	59,944	1,255,228	0.0111	0.1453
380	485,669	947,454	0	1,433,123	0.0126	0.1579
390	740,611	394,930	0	1,135,541	0.0100	0.1680
400	562,393	528,254	0	1,090,647	0.0096	0.1776
410	758,158	564,199	0	1,322,357	0.0117	0.1892
420	662,034	709,028	29,972	1,401,034	0.0124	0.2016
430	580,743	818,356	0	1,399,099	0.0123	0.2139
440	697,015	941,546	29,972	1,668,533	0.0147	0.2287
450	1,072,977	736,296	0	1,809,273	0.0160	0.2446
460	887,682	751,640	93,602	1,732,924	0.0153	0.2599
470	1,133,330	791,346	0	1,924,676	0.0170	0.2769
480	637,924	888,631	0	1,526,555	0.0135	0.2903
490	829,158	625,627	0	1,454,785	0.0128	0.3032
500	789,570	937,833	29,972	1,757,375	0.0155	0.3187
510	845,466	778,666	0	1,624,132	0.0143	0.3330
520	885,582	850,929	0	1,736,511	0.0153	0.3483
530	552,043	532,050	0	1,084,093	0.0096	0.3579
540	1,071,011	736,324	0	1,807,335	0.0159	0.3738
550	1,145,870	740,100	0	1,885,970	0.0166	0.3905
560	402,888	683,618	0	1,086,506	0.0096	0.4000
570	590,918	578,574	0	1,169,492	0.0103	0.4104
580	552,427	681,355	0	1,233,782	0.0109	0.4212
590	583,052	613,797	0	1,196,849	0.0106	0.4318
600	448,264	496,841	0	945,105	0.0083	0.4401
610	647,589	638,869	0	1,286,458	0.0113	0.4515
620	306,689	671,795	0	978,484	0.0086	0.4601
630	563,724	527,133	0	1,090,857	0.0096	0.4697
640	530,474	589,587	0	1,120,061	0.0099	0.4796
650	460,446	735,282	0	1,195,728	0.0105	0.4902
660	431,694	495,748	0	927,442	0.0082	0.4983
670	713,323	379,501	0	1,092,824	0.0096	0.5080
680	530,855	518,788	0	1,049,643	0.0093	0.5172
690	312,540	307,995	0	620,535	0.0055	0.5227

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
700	441,720	350,472	0	792,192	0.0070	0.5297
710	211,837	471,420	0	683,257	0.0060	0.5357
720	432,446	445,860	0	878,306	0.0077	0.5435
730	305,536	367,082	0	672,618	0.0059	0.5494
740	547,399	411,022	0	958,421	0.0085	0.5579
750	532,668	296,510	0	829,178	0.0073	0.5652
760	277,425	374,677	0	652,102	0.0058	0.5709
770	549,783	726,571	0	1,276,354	0.0113	0.5822
780	524,840	373,407	0	898,247	0.0079	0.5901
790	389,313	407,255	0	796,568	0.0070	0.5971
800	377,519	379,623	0	757,142	0.0067	0.6038
810	398,554	551,847	0	950,401	0.0084	0.6122
820	477,727	279,310	0	757,037	0.0067	0.6189
830	409,385	175,831	0	585,216	0.0052	0.6240
840	360,083	701,800	0	1,061,883	0.0094	0.6334
850	516,016	342,104	0	858,120	0.0076	0.6410
860	657,909	554,186	0	1,212,095	0.0107	0.6517
870	674,712	449,325	0	1,124,037	0.0099	0.6616
880	889,098	492,539	0	1,381,637	0.0122	0.6738
890	678,639	391,090	29,972	1,099,701	0.0097	0.6835
900	766,720	481,573	0	1,248,293	0.0110	0.6945
910	819,167	767,823	0	1,586,990	0.0140	0.7085
920	1,499,871	679,248	0	2,179,119	0.0192	0.7277
930	1,096,430	746,377	0	1,842,807	0.0163	0.7439
940	1,301,245	817,362	0	2,118,607	0.0187	0.7626
950	1,121,730	1,445,065	0	2,566,795	0.0226	0.7853
960	1,349,812	1,080,669	0	2,430,481	0.0214	0.8067
970	1,271,035	1,000,700	0	2,271,735	0.0200	0.8267
980	1,442,413	1,294,742	0	2,737,155	0.0241	0.8509
990	1,797,524	1,197,424	0	2,994,948	0.0264	0.8773
1000	1,232,807	1,539,706	0	2,772,513	0.0245	0.9018
1010	1,031,797	1,158,070	0	2,189,867	0.0193	0.9211
1020	973,743	1,037,566	0	2,011,309	0.0177	0.9388
1030	640,663	966,465	0	1,607,128	0.0142	0.9530
1040	789,796	832,642	0	1,622,438	0.0143	0.9673
1050	666,416	491,291	0	1,157,707	0.0102	0.9775
1060	409,035	433,387	0	842,422	0.0074	0.9849
1070	259,737	345,144	0	604,881	0.0053	0.9903
1080	94,401	353,345	0	447,746	0.0039	0.9942
1090	87,166	318,135	0	405,301	0.0036	0.9978
1100	63,633	26,513	0	90,146	0.0008	0.9986
1110	0	32,749	0	32,749	0.0003	0.9989
1120	34,435	60,260	0	94,695	0.0008	0.9997
1130	0	31,711	0	31,711	0.0003	1.0000
Total	**56,618,740**	**56,211,950**	**543,182**	**113,373,872**	**1.0000**	**1.0000**

Appendix Table C 122.-- Population estimates by sex and size for arrowtooth flounder from the 2025 eastern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
80	0	0	71,426	71,426	0.0001	0.0001
90	0	31,100	329,363	360,463	0.0005	0.0006
100	0	60,781	1,081,336	1,142,117	0.0017	0.0023
110	31,627	0	1,742,159	1,773,786	0.0026	0.0050
120	86,517	543,538	1,752,371	2,382,426	0.0036	0.0086
130	0	59,118	2,339,523	2,398,641	0.0036	0.0121
140	679,508	832,857	721,620	2,233,985	0.0033	0.0155
150	339,391	768,955	647,936	1,756,282	0.0026	0.0181
160	614,828	1,324,904	0	1,939,732	0.0029	0.0210
170	1,981,110	1,755,488	0	3,736,598	0.0056	0.0266
180	1,542,922	2,283,846	63,083	3,889,851	0.0058	0.0324
190	1,323,493	2,631,951	0	3,955,444	0.0059	0.0383
200	1,253,675	1,950,091	0	3,203,766	0.0048	0.0431
210	1,667,745	2,409,180	0	4,076,925	0.0061	0.0491
220	963,043	2,182,273	0	3,145,316	0.0047	0.0538
230	2,329,043	3,117,201	0	5,446,244	0.0081	0.0620
240	1,518,042	3,346,895	0	4,864,937	0.0073	0.0692
250	2,174,353	4,264,977	0	6,439,330	0.0096	0.0788
260	2,264,209	4,950,683	0	7,214,892	0.0108	0.0896
270	2,082,907	5,938,687	0	8,021,594	0.0120	0.1016
280	2,407,046	4,280,626	0	6,687,672	0.0100	0.1116
290	4,046,484	10,018,074	0	14,064,558	0.0210	0.1326
300	5,167,487	8,739,111	0	13,906,598	0.0208	0.1533
310	5,052,682	8,927,071	0	13,979,753	0.0209	0.1742
320	4,170,920	10,918,781	0	15,089,701	0.0225	0.1967
330	5,293,698	10,169,922	0	15,463,620	0.0231	0.2198
340	6,541,875	11,099,747	0	17,641,622	0.0263	0.2461
350	9,038,412	10,615,463	0	19,653,875	0.0293	0.2755
360	7,986,190	14,184,459	0	22,170,649	0.0331	0.3086
370	14,679,970	12,187,158	0	26,867,128	0.0401	0.3487
380	11,367,648	12,844,918	0	24,212,566	0.0361	0.3848
390	13,836,271	13,110,382	0	26,946,653	0.0402	0.4251
400	15,542,400	17,978,476	81,581	33,602,457	0.0502	0.4752
410	12,758,184	18,952,211	0	31,710,395	0.0473	0.5226
420	12,942,371	23,096,932	0	36,039,303	0.0538	0.5764
430	11,283,054	16,672,541	0	27,955,595	0.0417	0.6181
440	11,527,920	20,513,588	163,163	32,204,671	0.0481	0.6662
450	7,361,920	24,287,117	81,581	31,730,618	0.0474	0.7135
460	5,278,308	22,961,480	0	28,239,788	0.0422	0.7557
470	3,029,831	22,758,222	81,581	25,869,634	0.0386	0.7943
480	2,337,331	19,627,970	0	21,965,301	0.0328	0.8271
490	2,085,613	14,061,071	81,581	16,228,265	0.0242	0.8513
500	562,049	12,343,618	0	12,905,667	0.0193	0.8706
510	836,209	8,699,864	0	9,536,073	0.0142	0.8848
520	55,889	8,944,784	81,581	9,082,254	0.0136	0.8984
530	0	7,387,726	0	7,387,726	0.0110	0.9094
540	248,639	10,515,619	0	10,764,258	0.0161	0.9255
550	167,140	7,219,622	0	7,386,762	0.0110	0.9365
560	0	8,168,415	81,581	8,249,996	0.0123	0.9488
570	224,269	6,282,506	81,581	6,588,356	0.0098	0.9587

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
580	0	6,502,727	0	6,502,727	0.0097	0.9684
590	77,973	4,370,279	0	4,448,252	0.0066	0.9750
600	86,517	3,287,441	0	3,373,958	0.0050	0.9801
610	59,958	2,423,248	0	2,483,206	0.0037	0.9838
620	0	1,571,071	0	1,571,071	0.0023	0.9861
630	0	1,821,437	0	1,821,437	0.0027	0.9888
640	0	1,941,076	0	1,941,076	0.0029	0.9917
650	0	1,436,153	0	1,436,153	0.0021	0.9939
660	0	1,121,926	0	1,121,926	0.0017	0.9955
670	0	1,093,534	0	1,093,534	0.0016	0.9972
680	0	577,422	0	577,422	0.0009	0.9980
690	0	437,473	0	437,473	0.0007	0.9987
700	0	370,656	0	370,656	0.0006	0.9992
710	0	81,088	0	81,088	0.0001	0.9994
720	0	127,814	0	127,814	0.0002	0.9996
730	0	41,939	0	41,939	0.0001	0.9996
740	0	184,230	0	184,230	0.0003	0.9999
760	0	70,983	0	70,983	0.0001	1.0000
Total	**196,906,671**	**463,480,496**	**9,483,047**	**669,870,214**	**1.0000**	**1.0000**

Appendix Table C 123.-- Population estimates by sex and size for Bering flounder from the 2025 eastern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
90	31,987	0	0	31,987	0.0004	0.0004
110	31,987	31,987	57,582	121,556	0.0017	0.0021
120	358,084	126,692	316,111	800,887	0.0110	0.0131
130	482,454	235,016	812,586	1,530,056	0.0210	0.0341
140	1,236,075	730,089	1,336,915	3,303,079	0.0454	0.0795
150	1,946,900	1,217,668	1,505,352	4,669,920	0.0641	0.1436
160	1,995,954	1,570,023	747,764	4,313,741	0.0593	0.2029
170	1,964,069	1,979,114	435,956	4,379,139	0.0602	0.2631
180	1,392,339	1,824,580	420,128	3,637,047	0.0500	0.3130
190	1,265,075	1,196,380	156,252	2,617,707	0.0360	0.3490
200	1,283,181	1,408,230	0	2,691,411	0.0370	0.3859
210	947,809	2,328,424	0	3,276,233	0.0450	0.4310
220	1,294,396	2,244,560	0	3,538,956	0.0486	0.4796
230	1,375,527	2,477,026	0	3,852,553	0.0529	0.5325
240	1,175,491	2,208,380	0	3,383,871	0.0465	0.5790
250	932,323	2,903,298	0	3,835,621	0.0527	0.6317
260	548,383	2,786,338	0	3,334,721	0.0458	0.6775
270	712,841	2,758,081	0	3,470,922	0.0477	0.7251
280	323,866	2,224,162	0	2,548,028	0.0350	0.7601
290	494,341	1,963,179	0	2,457,520	0.0338	0.7939
300	125,055	1,893,819	0	2,018,874	0.0277	0.8216
310	100,943	1,791,841	0	1,892,784	0.0260	0.8476
320	302,726	2,039,279	0	2,342,005	0.0322	0.8798
330	53,558	1,301,656	0	1,355,214	0.0186	0.8984
340	100,943	1,284,955	0	1,385,898	0.0190	0.9175
350	0	1,370,827	0	1,370,827	0.0188	0.9363
360	118,868	1,148,807	0	1,267,675	0.0174	0.9537
370	34,198	1,142,773	0	1,176,971	0.0162	0.9699
380	205,798	1,056,448	0	1,262,246	0.0173	0.9872
390	0	511,574	0	511,574	0.0070	0.9942
400	34,198	385,352	0	419,550	0.0058	1.0000
Total	**20,869,369**	**46,140,558**	**5,788,646**	**72,798,573**	**1.0000**	**1.0000**

Appendix Table C 124.-- Population estimates by sex and size for Bering skate from the 2025 eastern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
170	0	29,789	0	29,789	0.0034	0.0034
190	34,523	0	0	34,523	0.0039	0.0073
200	0	29,681	0	29,681	0.0034	0.0106
210	30,947	27,924	0	58,871	0.0066	0.0173
220	30,947	59,232	0	90,179	0.0102	0.0274
240	59,362	0	0	59,362	0.0067	0.0341
250	29,217	29,681	0	58,898	0.0066	0.0408
270	30,661	0	0	30,661	0.0035	0.0443
280	0	64,204	0	64,204	0.0072	0.0515
290	62,872	0	0	62,872	0.0071	0.0586
300	0	39,288	0	39,288	0.0044	0.0630
310	59,430	34,523	0	93,953	0.0106	0.0736
330	0	81,489	0	81,489	0.0092	0.0828
340	32,749	29,789	0	62,538	0.0071	0.0899
350	70,866	69,037	0	139,903	0.0158	0.1057
360	32,849	99,246	0	132,095	0.0149	0.1206
370	62,341	62,341	0	124,682	0.0141	0.1347
380	0	68,969	0	68,969	0.0078	0.1425
400	30,675	33,110	0	63,785	0.0072	0.1497
410	0	37,564	0	37,564	0.0042	0.1539
420	30,675	152,171	0	182,846	0.0206	0.1746
430	64,032	29,789	0	93,821	0.0106	0.1851
440	70,146	0	0	70,146	0.0079	0.1931
450	59,262	27,488	0	86,750	0.0098	0.2029
460	0	32,749	0	32,749	0.0037	0.2066
470	0	32,138	0	32,138	0.0036	0.2102
490	33,302	60,647	0	93,949	0.0106	0.2208
500	0	29,789	0	29,789	0.0034	0.2242
510	88,173	30,675	0	118,848	0.0134	0.2376
520	30,947	62,341	0	93,288	0.0105	0.2481
530	124,954	0	0	124,954	0.0141	0.2622
540	56,507	0	0	56,507	0.0064	0.2686
550	0	32,867	0	32,867	0.0037	0.2723
560	31,666	30,858	0	62,524	0.0071	0.2794
570	64,725	0	0	64,725	0.0073	0.2867
580	30,788	0	0	30,788	0.0035	0.2901
590	59,263	62,965	0	122,228	0.0138	0.3039
600	30,788	0	0	30,788	0.0035	0.3074
610	33,135	58,691	0	91,826	0.0104	0.3178
620	0	68,515	0	68,515	0.0077	0.3255
630	121,226	66,231	0	187,457	0.0212	0.3467
640	30,788	33,487	0	64,275	0.0073	0.3539
650	27,926	124,082	0	152,008	0.0172	0.3711
660	58,530	61,577	0	120,107	0.0136	0.3847
670	60,705	0	0	60,705	0.0069	0.3915
680	363,176	66,737	0	429,913	0.0485	0.4401
690	148,972	99,523	0	248,495	0.0281	0.4681
700	195,896	90,259	0	286,155	0.0323	0.5004
710	493,903	124,879	0	618,782	0.0699	0.5703
720	571,849	227,166	0	799,015	0.0902	0.6605

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
730	347,481	126,079	0	473,560	0.0535	0.7139
740	246,223	338,356	0	584,579	0.0660	0.7799
750	229,629	275,053	0	504,682	0.0570	0.8369
760	53,029	377,418	0	430,447	0.0486	0.8855
770	103,234	221,586	0	324,820	0.0367	0.9222
780	0	151,904	0	151,904	0.0171	0.9393
790	27,163	155,243	0	182,406	0.0206	0.9599
800	0	200,204	0	200,204	0.0226	0.9825
810	0	60,411	0	60,411	0.0068	0.9893
820	0	33,487	0	33,487	0.0038	0.9931
840	0	29,217	0	29,217	0.0033	0.9964
860	0	31,648	0	31,648	0.0036	1.0000
Total	**4,455,532**	**4,402,097**	**0**	**8,857,629**	**1.0000**	**1.0000**

Appendix Table C 125.-- Population estimates by sex and size for flathead sole from the 2025 eastern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
60	0	446,211	1,539,622	1,985,833	0.0009	0.0009
70	0	281,301	2,191,337	2,472,638	0.0011	0.0020
80	0	0	1,718,397	1,718,397	0.0008	0.0027
90	0	0	3,511,258	3,511,258	0.0015	0.0043
100	279,162	266,660	3,166,430	3,712,252	0.0016	0.0059
110	1,020,107	0	9,982,053	11,002,160	0.0048	0.0107
120	2,875,388	4,254,499	12,141,645	19,271,532	0.0085	0.0192
130	7,248,560	8,577,020	14,445,780	30,271,360	0.0133	0.0324
140	10,213,675	7,291,328	9,318,211	26,823,214	0.0118	0.0442
150	11,930,152	11,707,688	8,650,942	32,288,782	0.0142	0.0584
160	15,778,987	12,304,985	3,647,016	31,730,988	0.0139	0.0723
170	14,676,495	11,927,875	2,332,337	28,936,707	0.0127	0.0850
180	13,042,715	14,884,779	321,953	28,249,447	0.0124	0.0974
190	15,126,886	14,142,234	148,680	29,417,800	0.0129	0.1103
200	16,828,954	15,525,190	0	32,354,144	0.0142	0.1245
210	22,993,134	17,651,839	0	40,644,973	0.0178	0.1424
220	28,037,727	22,383,607	0	50,421,334	0.0221	0.1645
230	28,293,473	22,867,880	148,680	51,310,033	0.0225	0.1870
240	33,863,727	27,378,305	0	61,242,032	0.0269	0.2139
250	43,483,611	28,994,975	0	72,478,586	0.0318	0.2457
260	50,632,178	34,579,051	0	85,211,229	0.0374	0.2831
270	42,310,930	30,548,187	0	72,859,117	0.0320	0.3150
280	51,395,116	42,189,939	0	93,585,055	0.0411	0.3561
290	66,773,857	37,681,776	0	104,455,633	0.0458	0.4019
300	81,590,523	48,081,723	0	129,672,246	0.0569	0.4589
310	84,421,318	59,846,058	189,809	144,457,185	0.0634	0.5222
320	91,246,705	51,781,814	189,809	143,218,328	0.0628	0.5851
330	86,367,366	63,226,949	0	149,594,315	0.0656	0.6507
340	86,020,748	70,663,870	189,809	156,874,427	0.0688	0.7196
350	70,605,007	70,171,686	569,428	141,346,121	0.0620	0.7816
360	51,124,096	65,438,373	949,047	117,511,516	0.0516	0.8332
370	32,046,553	61,706,022	379,619	94,132,194	0.0413	0.8745
380	20,558,588	50,975,228	189,809	71,723,625	0.0315	0.9060
390	11,163,591	46,765,126	759,238	58,687,955	0.0258	0.9317
400	6,652,117	41,209,710	379,619	48,241,446	0.0212	0.9529
410	6,666,448	29,205,522	759,238	36,631,208	0.0161	0.9690
420	1,867,169	20,930,485	1,138,857	23,936,511	0.0105	0.9795
430	1,499,211	11,959,873	569,428	14,028,512	0.0062	0.9856
440	530,862	8,912,268	0	9,443,130	0.0041	0.9898
450	644,256	5,336,948	379,619	6,360,823	0.0028	0.9926
460	210,854	5,728,674	189,809	6,129,337	0.0027	0.9952
470	84,996	4,030,821	0	4,115,817	0.0018	0.9971
480	68,997	2,111,083	0	2,180,080	0.0010	0.9980
490	0	2,124,995	0	2,124,995	0.0009	0.9989
500	0	1,026,774	0	1,026,774	0.0005	0.9994
510	0	896,579	0	896,579	0.0004	0.9998
520	0	228,009	0	228,009	0.0001	0.9999
530	0	263,705	0	263,705	0.0001	1.0000
Total	**1,110,174,239**	**1,088,507,624**	**80,097,479**	**2,278,779,342**	**1.0000**	**1.0000**

Appendix Table C 126.-- Population estimates by sex and size for Greenland turbot from the 2025 eastern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
120	0	0	33,191	33,191	0.0207	0.0207
130	0	0	31,543	31,543	0.0197	0.0405
220	85,105	0	0	85,105	0.0532	0.0937
240	29,971	0	0	29,971	0.0187	0.1124
280	28,848	0	0	28,848	0.0180	0.1304
310	32,455	0	0	32,455	0.0203	0.1507
320	149,460	0	0	149,460	0.0934	0.2441
360	0	0	30,726	30,726	0.0192	0.2633
610	35,028	0	0	35,028	0.0219	0.2852
630	0	53,558	0	53,558	0.0335	0.3187
640	0	35,028	0	35,028	0.0219	0.3406
680	0	31,309	0	31,309	0.0196	0.3602
710	57,058	0	0	57,058	0.0357	0.3958
720	29,971	59,838	0	89,809	0.0561	0.4520
730	53,348	0	0	53,348	0.0333	0.4853
740	28,732	31,412	0	60,144	0.0376	0.5229
750	0	59,482	0	59,482	0.0372	0.5601
760	0	33,487	0	33,487	0.0209	0.5810
770	0	86,448	0	86,448	0.0540	0.6351
780	0	31,309	0	31,309	0.0196	0.6546
790	0	28,529	0	28,529	0.0178	0.6725
800	0	58,138	0	58,138	0.0363	0.7088
810	0	41,301	0	41,301	0.0258	0.7346
820	0	115,400	0	115,400	0.0721	0.8068
830	23,211	30,540	0	53,751	0.0336	0.8404
840	0	28,529	0	28,529	0.0178	0.8582
850	0	165,625	0	165,625	0.1035	0.9617
860	0	30,540	0	30,540	0.0191	0.9808
880	0	30,693	0	30,693	0.0192	1.0000
Total	**553,187**	**951,166**	**95,460**	**1,599,813**	**1.0000**	**1.0000**

Appendix Table C 127.-- Population estimates by sex and size for Kamchatka flounder from the 2025 eastern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
90	0	0	130,115	130,115	0.0018	0.0018
100	0	0	97,021	97,021	0.0013	0.0031
120	37,638	0	0	37,638	0.0005	0.0036
130	104,494	0	1,141,183	1,245,677	0.0171	0.0207
140	292,011	31,666	1,095,785	1,419,462	0.0194	0.0401
150	187,704	410,360	1,146,923	1,744,987	0.0239	0.0640
160	902,119	286,865	111,863	1,300,847	0.0178	0.0818
170	763,088	362,033	55,513	1,180,634	0.0162	0.0980
180	537,723	364,208	0	901,931	0.0123	0.1103
190	539,576	507,161	0	1,046,737	0.0143	0.1246
200	933,398	972,645	0	1,906,043	0.0261	0.1507
210	977,263	865,129	0	1,842,392	0.0252	0.1759
220	738,301	1,116,322	0	1,854,623	0.0254	0.2013
230	422,927	447,477	0	870,404	0.0119	0.2132
240	316,540	270,085	0	586,625	0.0080	0.2213
250	416,653	382,423	0	799,076	0.0109	0.2322
260	552,053	620,351	0	1,172,404	0.0160	0.2482
270	466,255	124,995	0	591,250	0.0081	0.2563
280	1,009,592	489,718	0	1,499,310	0.0205	0.2769
290	1,050,605	821,025	29,972	1,901,602	0.0260	0.3029
300	1,186,319	1,025,274	0	2,211,593	0.0303	0.3332
310	1,555,063	1,298,249	0	2,853,312	0.0391	0.3722
320	3,710,436	1,419,775	0	5,130,211	0.0702	0.4424
330	4,338,107	2,577,109	29,972	6,945,188	0.0951	0.5375
340	4,195,246	3,216,738	29,972	7,441,956	0.1019	0.6394
350	2,215,917	1,741,985	0	3,957,902	0.0542	0.6935
360	785,605	1,279,990	0	2,065,595	0.0283	0.7218
370	654,344	598,664	0	1,253,008	0.0172	0.7390
380	351,903	157,446	0	509,349	0.0070	0.7459
390	425,299	275,162	0	700,461	0.0096	0.7555
400	1,021,965	1,068,063	0	2,090,028	0.0286	0.7841
410	674,924	256,592	0	931,516	0.0128	0.7969
420	972,440	853,451	0	1,825,891	0.0250	0.8219
430	860,920	1,471,153	30,092	2,362,165	0.0323	0.8542
440	689,502	791,562	0	1,481,064	0.0203	0.8745
450	879,111	623,475	0	1,502,586	0.0206	0.8950
460	293,367	572,409	0	865,776	0.0119	0.9069
470	332,869	814,368	0	1,147,237	0.0157	0.9226
480	451,098	470,820	0	921,918	0.0126	0.9352
490	242,562	320,129	0	562,691	0.0077	0.9429
500	124,776	193,053	0	317,829	0.0044	0.9473
510	205,047	97,847	0	302,894	0.0041	0.9514
520	156,496	535,967	0	692,463	0.0095	0.9609
530	66,983	57,475	0	124,458	0.0017	0.9626
540	0	264,452	0	264,452	0.0036	0.9662
550	0	332,186	0	332,186	0.0045	0.9708
560	0	269,688	0	269,688	0.0037	0.9745
570	45,175	108,982	0	154,157	0.0021	0.9766
580	0	219,557	0	219,557	0.0030	0.9796
590	0	215,468	0	215,468	0.0029	0.9825

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
600	0	645,786	0	645,786	0.0088	0.9914
610	0	68,013	0	68,013	0.0009	0.9923
630	0	64,933	0	64,933	0.0009	0.9932
640	0	166,468	0	166,468	0.0023	0.9955
650	0	26,514	0	26,514	0.0004	0.9958
660	0	151,823	0	151,823	0.0021	0.9979
680	0	56,289	0	56,289	0.0008	0.9987
710	0	97,239	0	97,239	0.0013	1.0000
Total	**36,683,414**	**32,476,617**	**3,898,411**	**73,058,442**	**1.0000**	**1.0000**

Appendix Table C 128.-- Population estimates by sex and size for northern rock sole from the 2025 eastern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
10	345,451	0	0	345,451	0.0000	0.0000
50	0	0	494,072	494,072	0.0001	0.0001
60	0	0	3,016,216	3,016,216	0.0004	0.0005
70	0	0	9,498,863	9,498,863	0.0012	0.0017
80	373,699	303,831	12,365,375	13,042,905	0.0017	0.0034
90	684,749	909,311	42,685,259	44,279,319	0.0057	0.0091
100	3,162,440	3,789,789	124,623,578	131,575,807	0.0169	0.0259
110	10,481,680	11,117,500	162,962,695	184,561,875	0.0236	0.0495
120	29,156,140	13,589,701	190,662,882	233,408,723	0.0299	0.0794
130	65,609,499	57,619,132	246,489,353	369,717,984	0.0474	0.1268
140	134,608,373	97,087,643	189,427,048	421,123,064	0.0539	0.1808
150	185,854,528	134,975,446	110,392,688	431,222,662	0.0552	0.2360
160	176,935,743	148,698,093	51,402,349	377,036,185	0.0483	0.2843
170	180,384,922	136,448,603	17,479,836	334,313,361	0.0428	0.3271
180	160,760,879	109,190,644	5,002,484	274,954,007	0.0352	0.3623
190	160,491,031	112,067,437	2,584,880	275,143,348	0.0352	0.3976
200	130,422,837	107,568,416	5,843,475	243,834,728	0.0312	0.4288
210	126,397,774	115,988,666	8,065,131	250,451,571	0.0321	0.4609
220	130,825,354	121,295,073	4,785,770	256,906,197	0.0329	0.4938
230	147,050,455	108,575,939	3,053,309	258,679,703	0.0331	0.5269
240	141,612,229	119,955,487	9,068,019	270,635,735	0.0347	0.5616
250	172,569,895	135,972,125	15,181,874	323,723,894	0.0415	0.6031
260	146,061,687	157,866,490	4,712,913	308,641,090	0.0395	0.6426
270	154,724,848	125,504,412	15,941,723	296,170,983	0.0379	0.6805
280	171,581,530	125,066,028	13,463,288	310,110,846	0.0397	0.7203
290	231,142,609	138,976,998	17,386,173	387,505,780	0.0496	0.7699
300	218,128,122	120,695,195	7,994,735	346,818,052	0.0444	0.8143
310	201,849,383	126,421,986	12,116,837	340,388,206	0.0436	0.8579
320	108,894,126	140,702,840	8,179,476	257,776,442	0.0330	0.8910
330	43,075,168	142,459,127	7,901,449	193,435,744	0.0248	0.9157
340	14,251,687	154,645,525	5,749,042	174,646,254	0.0224	0.9381
350	5,775,254	110,888,668	3,274,500	119,938,422	0.0154	0.9535
360	2,194,348	102,170,516	4,593,244	108,958,108	0.0140	0.9674
370	2,067,631	57,067,511	1,670,681	60,805,823	0.0078	0.9752
380	490,626	64,846,549	593,652	65,930,827	0.0084	0.9837
390	3,548,846	53,361,058	323,640	57,233,544	0.0073	0.9910
400	266,050	33,444,842	436,113	34,147,005	0.0044	0.9954
410	353,156	11,634,809	0	11,987,965	0.0015	0.9969
420	0	13,890,690	0	13,890,690	0.0018	0.9987
430	1,716,203	4,946,670	0	6,662,873	0.0009	0.9995
440	0	906,892	0	906,892	0.0001	0.9997
450	0	894,869	0	894,869	0.0001	0.9998
460	0	1,682,671	0	1,682,671	0.0002	1.0000
470	0	102,123	0	102,123	0.0000	1.0000
Total	**3,263,848,952**	**3,223,329,305**	**1,319,422,622**	**7,806,600,879**	**1.0000**	**1.0000**

Appendix Table C 129.-- Population estimates by sex and size for Pacific cod from the 2025 eastern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
100	63,932	0	1,772,097	1,836,029	0.0036	0.0036
110	30,452	60,840	1,186,670	1,277,962	0.0025	0.0060
120	794,058	600,789	3,157,527	4,552,374	0.0088	0.0148
130	2,345,518	2,883,194	3,889,258	9,117,970	0.0176	0.0325
140	5,055,900	3,728,441	3,628,716	12,413,057	0.0240	0.0565
150	6,744,178	8,012,270	3,426,928	18,183,376	0.0352	0.0917
160	6,679,772	7,287,882	3,305,848	17,273,502	0.0334	0.1251
170	9,399,360	9,381,069	4,711,290	23,491,719	0.0455	0.1706
180	9,897,666	8,448,277	3,393,769	21,739,712	0.0421	0.2127
190	10,594,272	10,673,444	2,329,086	23,596,802	0.0457	0.2584
200	10,889,435	8,751,648	2,930,913	22,571,996	0.0437	0.3020
210	7,508,375	8,760,598	2,523,754	18,792,727	0.0364	0.3384
220	6,878,400	7,133,019	1,650,985	15,662,404	0.0303	0.3687
230	3,441,564	4,635,132	1,225,434	9,302,130	0.0180	0.3867
240	2,393,670	3,021,384	892,268	6,307,322	0.0122	0.3989
250	1,745,342	1,790,182	442,492	3,978,016	0.0077	0.4066
260	1,379,769	1,121,765	0	2,501,534	0.0048	0.4115
270	1,475,886	1,942,279	0	3,418,165	0.0066	0.4181
280	1,547,786	2,024,237	0	3,572,023	0.0069	0.4250
290	1,889,093	1,944,522	0	3,833,615	0.0074	0.4324
300	2,056,886	1,886,040	0	3,942,926	0.0076	0.4401
310	2,636,286	2,267,881	0	4,904,167	0.0095	0.4496
320	2,980,866	2,275,926	0	5,256,792	0.0102	0.4597
330	3,209,544	3,093,629	30,185	6,333,358	0.0123	0.4720
340	4,697,629	4,934,974	0	9,632,603	0.0186	0.4906
350	4,787,874	5,050,196	0	9,838,070	0.0190	0.5097
360	6,558,515	5,634,793	30,858	12,224,166	0.0237	0.5333
370	4,229,222	4,542,610	60,371	8,832,203	0.0171	0.5504
380	5,136,643	4,598,137	0	9,734,780	0.0188	0.5693
390	4,598,744	3,830,186	0	8,428,930	0.0163	0.5856
400	4,086,981	3,873,773	0	7,960,754	0.0154	0.6010
410	3,320,997	3,771,546	30,858	7,123,401	0.0138	0.6148
420	3,661,610	3,336,990	0	6,998,600	0.0135	0.6283
430	3,249,217	2,676,687	0	5,925,904	0.0115	0.6398
440	3,240,053	3,154,065	0	6,394,118	0.0124	0.6522
450	3,264,970	3,228,920	0	6,493,890	0.0126	0.6647
460	2,979,655	3,364,009	0	6,343,664	0.0123	0.6770
470	3,923,780	3,846,651	0	7,770,431	0.0150	0.6921
480	4,337,439	3,670,396	0	8,007,835	0.0155	0.7075
490	3,797,741	3,406,560	0	7,204,301	0.0139	0.7215
500	4,613,924	4,354,760	0	8,968,684	0.0174	0.7389
510	4,593,819	4,062,855	0	8,656,674	0.0168	0.7556
520	4,607,980	4,150,561	0	8,758,541	0.0170	0.7726
530	3,781,633	4,137,167	0	7,918,800	0.0153	0.7879
540	3,593,866	4,056,493	0	7,650,359	0.0148	0.8027
550	3,459,327	3,398,398	0	6,857,725	0.0133	0.8160
560	3,035,346	2,971,163	0	6,006,509	0.0116	0.8276
570	3,698,541	2,753,121	30,185	6,481,847	0.0125	0.8401
580	2,753,650	3,218,397	0	5,972,047	0.0116	0.8517
590	2,972,008	2,586,595	0	5,558,603	0.0108	0.8625

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
600	3,119,496	2,185,969	0	5,305,465	0.0103	0.8727
610	2,423,479	1,960,899	0	4,384,378	0.0085	0.8812
620	2,765,037	2,689,171	0	5,454,208	0.0106	0.8918
630	1,963,414	2,576,237	0	4,539,651	0.0088	0.9006
640	1,913,367	2,073,615	30,858	4,017,840	0.0078	0.9083
650	2,153,819	2,166,710	0	4,320,529	0.0084	0.9167
660	1,622,487	2,227,884	0	3,850,371	0.0075	0.9241
670	1,556,660	2,021,085	0	3,577,745	0.0069	0.9311
680	1,400,918	1,496,590	0	2,897,508	0.0056	0.9367
690	1,578,618	1,411,506	0	2,990,124	0.0058	0.9425
700	1,601,946	1,117,591	0	2,719,537	0.0053	0.9477
710	698,138	1,331,391	0	2,029,529	0.0039	0.9517
720	1,005,849	1,119,869	0	2,125,718	0.0041	0.9558
730	1,152,387	1,280,948	0	2,433,335	0.0047	0.9605
740	830,911	1,414,895	30,858	2,276,664	0.0044	0.9649
750	986,044	902,507	0	1,888,551	0.0037	0.9685
760	549,156	932,876	0	1,482,032	0.0029	0.9714
770	843,771	971,576	0	1,815,347	0.0035	0.9749
780	336,964	1,002,236	0	1,339,200	0.0026	0.9775
790	583,969	645,150	0	1,229,119	0.0024	0.9799
800	847,388	627,863	0	1,475,251	0.0029	0.9827
810	430,535	583,922	0	1,014,457	0.0020	0.9847
820	474,051	311,217	0	785,268	0.0015	0.9862
830	365,937	721,879	0	1,087,816	0.0021	0.9883
840	414,826	343,333	0	758,159	0.0015	0.9898
850	212,509	409,614	0	622,123	0.0012	0.9910
860	87,559	366,422	35,028	489,009	0.0009	0.9920
870	188,379	393,414	0	581,793	0.0011	0.9931
880	134,660	278,872	0	413,532	0.0008	0.9939
890	127,692	471,471	0	599,163	0.0012	0.9950
900	157,480	221,439	0	378,919	0.0007	0.9958
910	94,409	269,584	0	363,993	0.0007	0.9965
920	86,031	181,349	0	267,380	0.0005	0.9970
930	57,745	90,183	0	147,928	0.0003	0.9973
940	79,952	90,996	0	170,948	0.0003	0.9976
950	32,796	121,011	0	153,807	0.0003	0.9979
960	0	99,302	0	99,302	0.0002	0.9981
970	66,726	62,825	0	129,551	0.0003	0.9984
980	33,069	120,027	0	153,096	0.0003	0.9986
990	34,734	62,922	0	97,656	0.0002	0.9988
1000	29,677	154,627	0	184,304	0.0004	0.9992
1010	0	95,700	0	95,700	0.0002	0.9994
1020	0	60,139	0	60,139	0.0001	0.9995
1030	0	102,167	0	102,167	0.0002	0.9997
1040	0	90,996	0	90,996	0.0002	0.9999
1050	0	66,951	0	66,951	0.0001	1.0000
Total	**237,661,759**	**238,261,381**	**40,746,236**	**516,669,376**	**1.0000**	**1.0000**

Appendix Table C 130.-- Population estimates by sex and size for Pacific halibut from the 2025 eastern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
60	0	0	32,709	32,709	0.0004	0.0004
130	39,109	101,563	31,987	172,659	0.0021	0.0026
140	101,293	0	31,362	132,655	0.0016	0.0042
150	132,925	132,386	250,897	516,208	0.0064	0.0106
160	125,179	62,185	313,621	500,985	0.0062	0.0168
170	343,656	273,597	689,966	1,307,219	0.0162	0.0331
180	195,919	281,180	410,069	887,168	0.0110	0.0441
190	219,265	328,305	529,602	1,077,172	0.0134	0.0575
200	281,719	156,172	435,222	873,113	0.0108	0.0683
210	187,363	93,277	436,044	716,684	0.0089	0.0772
220	134,980	187,633	309,774	632,387	0.0079	0.0851
230	194,639	94,086	248,781	537,506	0.0067	0.0917
240	31,092	99,989	186,325	317,406	0.0039	0.0957
250	194,075	93,817	90,124	378,016	0.0047	0.1004
260	107,735	31,092	123,908	262,735	0.0033	0.1036
270	0	64,198	91,971	156,169	0.0019	0.1056
280	124,250	63,362	317,756	505,368	0.0063	0.1118
290	208,763	68,626	183,322	460,711	0.0057	0.1176
300	535,791	185,952	273,320	995,063	0.0124	0.1299
310	402,968	490,960	570,109	1,464,037	0.0182	0.1481
320	584,837	494,704	785,393	1,864,934	0.0232	0.1713
330	960,741	677,851	993,205	2,631,797	0.0327	0.2039
340	853,980	859,750	1,302,538	3,016,268	0.0375	0.2414
350	863,751	762,234	2,299,400	3,925,385	0.0487	0.2902
360	1,098,679	660,153	2,462,819	4,221,651	0.0524	0.3426
370	692,641	831,701	2,245,272	3,769,614	0.0468	0.3894
380	655,719	628,478	1,730,620	3,014,817	0.0374	0.4268
390	310,681	405,845	1,373,864	2,090,390	0.0260	0.4528
400	30,843	468,723	549,593	1,049,159	0.0130	0.4658
410	121,381	131,174	682,964	935,519	0.0116	0.4774
420	63,525	98,900	428,597	591,022	0.0073	0.4848
430	157,223	186,577	363,768	707,568	0.0088	0.4936
440	225,594	317,042	829,357	1,371,993	0.0170	0.5106
450	506,743	313,097	893,980	1,713,820	0.0213	0.5319
460	280,262	433,241	1,142,758	1,856,261	0.0231	0.5549
470	467,793	505,322	1,238,974	2,212,089	0.0275	0.5824
480	559,614	463,542	1,016,079	2,039,235	0.0253	0.6077
490	284,580	443,251	976,404	1,704,235	0.0212	0.6289
500	241,599	503,655	684,641	1,429,895	0.0178	0.6467
510	282,134	349,034	776,905	1,408,073	0.0175	0.6641
520	95,288	382,093	597,325	1,074,706	0.0133	0.6775
530	95,214	190,426	343,718	629,358	0.0078	0.6853
540	70,799	126,645	300,665	498,109	0.0062	0.6915
550	257,149	63,564	556,942	877,655	0.0109	0.7024
560	279,578	31,362	568,726	879,666	0.0109	0.7133
570	429,414	345,530	470,498	1,245,442	0.0155	0.7288
580	498,106	159,218	589,859	1,247,183	0.0155	0.7443
590	504,920	123,251	657,988	1,286,159	0.0160	0.7602
600	379,060	275,401	600,060	1,254,521	0.0156	0.7758
610	563,140	160,873	560,464	1,284,477	0.0160	0.7918

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
620	434,354	127,995	569,101	1,131,450	0.0141	0.8058
630	331,238	181,871	812,409	1,325,518	0.0165	0.8223
640	182,182	384,770	730,492	1,297,444	0.0161	0.8384
650	373,436	379,839	902,848	1,656,123	0.0206	0.8590
660	123,373	530,974	581,767	1,236,114	0.0154	0.8743
670	114,517	176,650	579,928	871,095	0.0108	0.8851
680	61,345	544,800	562,784	1,168,929	0.0145	0.8997
690	56,931	250,605	444,629	752,165	0.0093	0.9090
700	93,128	433,236	389,727	916,091	0.0114	0.9204
710	123,694	313,839	126,724	564,257	0.0070	0.9274
720	63,299	224,675	288,612	576,586	0.0072	0.9345
730	30,108	126,207	255,341	411,656	0.0051	0.9396
740	0	290,559	353,677	644,236	0.0080	0.9476
750	70,506	183,509	261,296	515,311	0.0064	0.9540
760	62,127	60,784	189,556	312,467	0.0039	0.9579
770	58,721	0	256,860	315,581	0.0039	0.9618
780	65,949	32,025	196,337	294,311	0.0037	0.9655
790	55,990	29,811	94,775	180,576	0.0022	0.9677
800	64,634	0	64,240	128,874	0.0016	0.9693
810	0	120,178	0	120,178	0.0015	0.9708
820	33,687	0	34,303	67,990	0.0008	0.9717
830	63,672	61,328	94,804	219,804	0.0027	0.9744
840	156,499	28,446	39,453	224,398	0.0028	0.9772
850	93,538	0	31,701	125,239	0.0016	0.9788
860	58,299	98,575	139,391	296,265	0.0037	0.9824
870	66,010	94,873	61,758	222,641	0.0028	0.9852
890	30,108	29,504	72,673	132,285	0.0016	0.9868
900	33,958	0	66,185	100,143	0.0012	0.9881
910	0	34,046	128,140	162,186	0.0020	0.9901
930	0	0	32,769	32,769	0.0004	0.9905
940	30,191	0	69,235	99,426	0.0012	0.9917
950	0	33,135	33,840	66,975	0.0008	0.9926
960	0	32,085	30,683	62,768	0.0008	0.9934
970	0	32,262	0	32,262	0.0004	0.9938
980	0	0	33,302	33,302	0.0004	0.9942
990	0	0	29,494	29,494	0.0004	0.9945
1020	0	0	29,609	29,609	0.0004	0.9949
1030	0	0	30,870	30,870	0.0004	0.9953
1060	0	34,046	31,640	65,686	0.0008	0.9961
1070	0	31,695	0	31,695	0.0004	0.9965
1080	0	30,796	0	30,796	0.0004	0.9969
1140	32,835	0	0	32,835	0.0004	0.9973
1150	0	30,266	0	30,266	0.0004	0.9977
1210	0	32,262	0	32,262	0.0004	0.9981
1290	0	0	60,877	60,877	0.0008	0.9988
1300	0	0	29,293	29,293	0.0004	0.9992
1330	33,382	0	0	33,382	0.0004	0.9996
1350	0	32,799	0	32,799	0.0004	1.0000
Total	**18,973,420**	**19,229,462**	**42,321,368**	**80,524,250**	**1.0000**	**1.0000**

Appendix Table C 131.-- Population estimates by sex and size for walleye pollock from the 2025 eastern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
50	0	0	147,980	147,980	0.0000	0.0000
70	0	0	226,893	226,893	0.0000	0.0001
80	0	60,071	5,956,722	6,016,793	0.0009	0.0010
90	0	210,247	23,050,955	23,261,202	0.0035	0.0045
100	0	270,317	67,242,902	67,513,219	0.0103	0.0148
110	120,141	55,115	94,675,519	94,850,775	0.0144	0.0292
120	1,287,507	525,756	146,977,113	148,790,376	0.0226	0.0518
130	4,572,753	3,825,569	155,662,836	164,061,158	0.0249	0.0768
140	5,944,957	8,631,761	124,160,858	138,737,576	0.0211	0.0979
150	14,754,137	5,252,588	93,130,050	113,136,775	0.0172	0.1151
160	10,772,212	10,886,897	37,449,167	59,108,276	0.0090	0.1241
170	9,459,468	13,140,387	21,655,956	44,255,811	0.0067	0.1308
180	13,244,768	16,067,777	5,983,525	35,296,070	0.0054	0.1362
190	15,335,020	10,773,898	2,599,835	28,708,753	0.0044	0.1405
200	12,463,786	16,227,220	1,250,947	29,941,953	0.0046	0.1451
210	22,144,458	25,184,786	509,496	47,838,740	0.0073	0.1524
220	31,793,834	25,378,882	1,227,586	58,400,302	0.0089	0.1612
230	21,245,215	25,790,789	310,594	47,346,598	0.0072	0.1684
240	20,924,165	20,575,310	353,687	41,853,162	0.0064	0.1748
250	19,845,938	13,308,895	423,724	33,578,557	0.0051	0.1799
260	17,561,949	12,881,816	59,506	30,503,271	0.0046	0.1846
270	15,810,885	17,962,381	0	33,773,266	0.0051	0.1897
280	13,633,979	16,154,503	0	29,788,482	0.0045	0.1942
290	20,374,131	14,276,291	271,405	34,921,827	0.0053	0.1995
300	14,454,233	20,204,319	0	34,658,552	0.0053	0.2048
310	18,915,506	13,974,594	0	32,890,100	0.0050	0.2098
320	17,631,213	15,462,187	0	33,093,400	0.0050	0.2148
330	12,763,459	13,597,123	0	26,360,582	0.0040	0.2188
340	8,430,984	6,535,367	0	14,966,351	0.0023	0.2211
350	10,094,514	7,916,694	0	18,011,208	0.0027	0.2239
360	9,763,179	9,664,967	0	19,428,146	0.0030	0.2268
370	8,637,412	7,352,170	0	15,989,582	0.0024	0.2292
380	14,211,197	13,477,064	0	27,688,261	0.0042	0.2335
390	20,137,221	10,845,635	0	30,982,856	0.0047	0.2382
400	27,557,578	16,648,460	98,634	44,304,672	0.0067	0.2449
410	74,106,749	45,354,322	0	119,461,071	0.0182	0.2631
420	134,919,448	51,944,386	0	186,863,834	0.0284	0.2915
430	246,837,245	108,604,394	0	355,441,639	0.0541	0.3455
440	289,033,438	190,048,694	0	479,082,132	0.0729	0.4184
450	315,016,027	281,943,252	0	596,959,279	0.0908	0.5092
460	330,934,413	322,491,322	0	653,425,735	0.0994	0.6086
470	198,420,957	305,153,492	0	503,574,449	0.0766	0.6851
480	168,305,430	262,200,010	0	430,505,440	0.0655	0.7506
490	144,450,075	219,766,084	98,634	364,314,793	0.0554	0.8060
500	101,802,780	201,749,059	0	303,551,839	0.0462	0.8522
510	81,649,310	137,338,153	0	218,987,463	0.0333	0.8855
520	65,231,100	105,500,506	260,599	170,992,205	0.0260	0.9115
530	45,829,420	79,845,369	230,147	125,904,936	0.0191	0.9306
540	41,165,024	65,526,194	230,147	106,921,365	0.0163	0.9469
550	28,917,352	51,809,916	756,197	81,483,465	0.0124	0.9593

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
560	21,736,724	46,017,421	328,781	68,082,926	0.0104	0.9696
570	11,662,299	34,509,340	427,416	46,599,055	0.0071	0.9767
580	9,788,072	31,652,523	328,781	41,769,376	0.0064	0.9831
590	6,669,489	27,330,518	0	34,000,007	0.0052	0.9882
600	4,123,158	16,573,179	129,086	20,825,423	0.0032	0.9914
610	4,586,060	13,101,741	98,634	17,786,435	0.0027	0.9941
620	2,186,978	9,435,276	129,086	11,751,340	0.0018	0.9959
630	1,844,252	6,585,345	0	8,429,597	0.0013	0.9972
640	837,600	5,745,195	0	6,582,795	0.0010	0.9982
650	357,195	3,068,071	0	3,425,266	0.0005	0.9987
660	858,850	2,241,902	0	3,100,752	0.0005	0.9992
670	655,942	622,061	0	1,278,003	0.0002	0.9994
680	254,441	1,316,920	0	1,571,361	0.0002	0.9996
690	0	642,396	0	642,396	0.0001	0.9997
700	32,206	338,367	0	370,573	0.0001	0.9998
710	0	32,182	0	32,182	0.0000	0.9998
720	0	337,548	0	337,548	0.0001	0.9998
730	0	125,834	0	125,834	0.0000	0.9998
750	0	261,731	0	261,731	0.0000	0.9999
760	0	93,926	0	93,926	0.0000	0.9999
790	0	651,566	0	651,566	0.0001	1.0000
Total	**2,766,097,833**	**3,023,078,031**	**786,443,398**	**6,575,619,262**	**1.0000**	**1.0000**

Appendix Table C 132.-- Population estimates by sex and size for yellowfin sole from the 2025 eastern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
50	0	0	2,088,742	2,088,742	0.0004	0.0004
70	0	833,828	641,034	1,474,862	0.0003	0.0006
80	0	0	1,282,069	1,282,069	0.0002	0.0008
90	0	0	2,854,669	2,854,669	0.0005	0.0013
100	0	0	15,301,192	15,301,192	0.0027	0.0040
110	2,043,589	0	29,908,537	31,952,126	0.0055	0.0095
120	7,868,524	8,602,021	28,498,303	44,968,848	0.0078	0.0173
130	19,869,376	47,271,583	95,293,930	162,434,889	0.0281	0.0454
140	36,733,835	63,920,930	70,158,684	170,813,449	0.0296	0.0750
150	60,928,238	62,483,416	80,206,381	203,618,035	0.0353	0.1103
160	72,923,674	105,576,837	34,032,746	212,533,257	0.0368	0.1471
170	86,451,150	109,753,520	8,448,590	204,653,260	0.0355	0.1826
180	108,347,007	99,905,117	2,805,424	211,057,548	0.0366	0.2191
190	77,698,944	102,740,771	116,133	180,555,848	0.0313	0.2504
200	76,515,682	83,834,212	174,200	160,524,094	0.0278	0.2782
210	74,393,170	75,389,222	232,266	150,014,658	0.0260	0.3042
220	68,696,396	80,345,688	522,599	149,564,683	0.0259	0.3301
230	95,521,205	87,328,962	464,533	183,314,700	0.0318	0.3619
240	94,375,049	122,945,540	522,599	217,843,188	0.0377	0.3996
250	93,114,703	118,134,580	92,343	211,341,626	0.0366	0.4362
260	104,711,075	127,285,331	324,609	232,321,015	0.0402	0.4765
270	113,358,011	129,622,193	324,609	243,304,813	0.0421	0.5186
280	131,875,610	142,124,890	300,819	274,301,319	0.0475	0.5661
290	147,622,762	158,548,232	580,666	306,751,660	0.0531	0.6192
300	168,228,254	169,690,377	174,200	338,092,831	0.0586	0.6778
310	144,930,134	185,840,333	174,200	330,944,667	0.0573	0.7351
320	153,488,203	197,907,234	174,200	351,569,637	0.0609	0.7960
330	114,913,125	195,582,096	232,266	310,727,487	0.0538	0.8499
340	85,942,849	167,404,089	696,799	254,043,737	0.0440	0.8939
350	51,934,072	150,732,800	498,809	203,165,681	0.0352	0.9291
360	28,461,747	124,883,216	174,200	153,519,163	0.0266	0.9557
370	7,824,161	94,879,459	58,067	102,761,687	0.0178	0.9735
380	4,044,714	72,058,517	58,067	76,161,298	0.0132	0.9867
390	2,258,657	32,338,888	0	34,597,545	0.0060	0.9926
400	0	16,604,501	0	16,604,501	0.0029	0.9955
410	0	16,255,434	58,067	16,313,501	0.0028	0.9983
420	0	7,835,344	0	7,835,344	0.0014	0.9997
430	0	1,577,761	0	1,577,761	0.0003	1.0000
440	0	127,252	0	127,252	0.0000	1.0000
Total	**2,235,073,916**	**3,160,364,174**	**377,474,552**	**5,772,912,642**	**1.0000**	**1.0000**

Appendix D: List of population estimates by sex and size group for principal fish species in the northern Bering Sea

List of Tables

Appendix Table D 133.-- Population estimates by sex and size for Alaska plaice from the 2025 northern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
80	0	0	37,014	37,014	0.0001	0.0001
90	0	0	79,331	79,331	0.0002	0.0003
100	0	0	300,752	300,752	0.0008	0.0010
110	35,760	65,620	552,643	654,023	0.0016	0.0027
120	517,813	316,250	2,120,699	2,954,762	0.0074	0.0101
130	1,023,261	1,054,809	1,817,706	3,895,776	0.0097	0.0198
140	3,446,904	2,297,441	1,670,580	7,414,925	0.0185	0.0383
150	5,948,141	3,680,438	185,786	9,814,365	0.0245	0.0628
160	6,738,532	4,339,507	0	11,078,039	0.0277	0.0905
170	8,325,550	5,000,584	0	13,326,134	0.0333	0.1238
180	4,909,777	5,459,767	0	10,369,544	0.0259	0.1497
190	4,223,119	5,685,073	0	9,908,192	0.0248	0.1745
200	5,537,211	4,555,131	0	10,092,342	0.0252	0.1997
210	5,393,744	5,136,095	0	10,529,839	0.0263	0.2260
220	5,786,595	5,846,146	0	11,632,741	0.0291	0.2551
230	7,064,670	6,848,365	0	13,913,035	0.0348	0.2898
240	4,233,294	7,616,176	0	11,849,470	0.0296	0.3195
250	7,383,774	3,942,198	0	11,325,972	0.0283	0.3478
260	7,398,555	6,317,524	0	13,716,079	0.0343	0.3820
270	6,681,549	6,388,338	0	13,069,887	0.0327	0.4147
280	5,829,602	6,621,143	0	12,450,745	0.0311	0.4458
290	5,224,336	5,365,552	0	10,589,888	0.0265	0.4723
300	4,476,225	4,256,980	0	8,733,205	0.0218	0.4941
310	4,877,187	3,962,253	0	8,839,440	0.0221	0.5162
320	6,374,312	5,691,252	0	12,065,564	0.0301	0.5463
330	7,019,121	4,545,544	0	11,564,665	0.0289	0.5752
340	9,176,925	4,901,384	0	14,078,309	0.0352	0.6104
350	10,813,025	4,014,940	0	14,827,965	0.0370	0.6474
360	13,306,189	4,728,136	0	18,034,325	0.0451	0.6925
370	13,881,939	5,003,642	0	18,885,581	0.0472	0.7397
380	11,659,917	4,754,050	0	16,413,967	0.0410	0.7807
390	8,314,155	5,804,196	0	14,118,351	0.0353	0.8160
400	5,717,283	4,857,393	0	10,574,676	0.0264	0.8424
410	2,560,215	4,252,152	0	6,812,367	0.0170	0.8594
420	1,008,346	5,551,588	0	6,559,934	0.0164	0.8758
430	270,088	6,441,928	0	6,712,016	0.0168	0.8926
440	92,077	7,328,915	0	7,420,992	0.0185	0.9111
450	171,340	6,907,427	0	7,078,767	0.0177	0.9288
460	123,411	5,666,625	0	5,790,036	0.0145	0.9433
470	0	5,892,711	0	5,892,711	0.0147	0.9580
480	242,183	4,574,537	0	4,816,720	0.0120	0.9700
490	50,189	3,658,748	0	3,708,937	0.0093	0.9793
500	234,283	3,557,693	0	3,791,976	0.0095	0.9888
510	0	2,228,197	0	2,228,197	0.0056	0.9943
520	0	900,977	0	900,977	0.0023	0.9966
530	0	846,608	0	846,608	0.0021	0.9987
540	0	267,391	0	267,391	0.0007	0.9994
550	0	91,144	0	91,144	0.0002	0.9996
560	0	125,766	0	125,766	0.0003	0.9999
570	0	33,273	0	33,273	0.0001	1.0000

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
Total	196,070,597	197,381,607	6,764,511	400,216,715	1.0000	1.0000

Appendix Table D 134.-- Population estimates by sex and size for Alaska skate from the 2025 northern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
400	0	32,188	0	32,188	0.0024	0.0024
420	0	55,153	0	55,153	0.0042	0.0066
430	32,039	25,613	0	57,652	0.0043	0.0109
440	32,188	0	0	32,188	0.0024	0.0134
450	0	29,122	0	29,122	0.0022	0.0156
470	0	58,388	0	58,388	0.0044	0.0200
480	30,781	0	0	30,781	0.0023	0.0223
490	29,673	0	0	29,673	0.0022	0.0245
500	0	61,648	0	61,648	0.0046	0.0292
510	25,613	32,811	0	58,424	0.0044	0.0336
520	32,188	93,693	0	125,881	0.0095	0.0430
530	119,012	56,282	0	175,294	0.0132	0.0563
540	0	151,212	0	151,212	0.0114	0.0677
550	0	33,543	0	33,543	0.0025	0.0702
560	127,007	65,337	0	192,344	0.0145	0.0847
570	0	222,587	0	222,587	0.0168	0.1015
580	224,411	59,255	0	283,666	0.0214	0.1228
590	30,670	127,554	0	158,224	0.0119	0.1348
600	156,375	191,580	0	347,955	0.0262	0.1610
610	0	62,881	0	62,881	0.0047	0.1657
620	62,709	338,685	0	401,394	0.0303	0.1960
630	224,755	151,243	0	375,998	0.0283	0.2243
640	321,877	189,961	0	511,838	0.0386	0.2629
650	189,449	189,210	0	378,659	0.0285	0.2915
660	153,475	161,790	0	315,265	0.0238	0.3152
670	93,332	223,570	0	316,902	0.0239	0.3391
680	125,353	182,927	0	308,280	0.0232	0.3624
690	193,358	126,654	0	320,012	0.0241	0.3865
700	185,002	114,526	0	299,528	0.0226	0.4091
710	188,950	223,503	0	412,453	0.0311	0.4401
720	256,260	309,395	0	565,655	0.0426	0.4828
730	221,014	191,091	0	412,105	0.0311	0.5138
740	221,160	218,728	0	439,888	0.0332	0.5470
750	153,108	381,327	0	534,435	0.0403	0.5873
760	89,740	123,821	0	213,561	0.0161	0.6034
770	189,678	181,086	0	370,764	0.0279	0.6313
780	0	30,781	0	30,781	0.0023	0.6336
790	189,345	222,330	0	411,675	0.0310	0.6647
800	91,666	325,605	0	417,271	0.0315	0.6961
810	0	194,620	0	194,620	0.0147	0.7108
820	96,640	185,608	0	282,248	0.0213	0.7321
830	164,971	129,064	0	294,035	0.0222	0.7542
840	31,568	67,146	0	98,714	0.0074	0.7617
850	94,893	91,502	0	186,395	0.0141	0.7757
860	32,056	64,379	0	96,435	0.0073	0.7830
870	128,166	290,979	0	419,145	0.0316	0.8146
880	94,502	128,796	0	223,298	0.0168	0.8314
890	28,953	32,937	0	61,890	0.0047	0.8361
900	32,513	128,639	0	161,152	0.0121	0.8482
910	63,624	127,903	0	191,527	0.0144	0.8627

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
920	0	92,784	0	92,784	0.0070	0.8697
930	32,056	194,620	0	226,676	0.0171	0.8868
940	0	190,580	0	190,580	0.0144	0.9011
950	32,056	258,575	0	290,631	0.0219	0.9230
960	129,994	92,735	0	222,729	0.0168	0.9398
970	57,211	187,723	0	244,934	0.0185	0.9583
980	32,056	0	0	32,056	0.0024	0.9607
990	0	130,874	0	130,874	0.0099	0.9706
1000	0	130,511	0	130,511	0.0098	0.9804
1010	0	93,550	0	93,550	0.0071	0.9875
1020	0	62,595	0	62,595	0.0047	0.9922
1050	0	40,569	0	40,569	0.0031	0.9952
1060	0	31,659	0	31,659	0.0024	0.9976
1080	0	31,633	0	31,633	0.0024	1.0000
Total	**5,041,447**	**8,225,061**	**0**	**13,266,508**	**1.0000**	**1.0000**

Appendix Table D 135.-- Population estimates by sex and size for Bering flounder from the 2025 northern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
60	0	0	59,715	59,715	0.0005	0.0005
70	0	0	182,441	182,441	0.0016	0.0021
80	149,777	0	284,887	434,664	0.0038	0.0059
90	339,130	270,005	766,108	1,375,243	0.0119	0.0178
100	1,392,792	822,111	805,393	3,020,296	0.0262	0.0440
110	3,679,177	2,121,052	1,665,397	7,465,626	0.0647	0.1087
120	6,142,361	4,357,475	3,165,210	13,665,046	0.1184	0.2271
130	7,939,394	7,276,502	4,718,942	19,934,838	0.1728	0.3999
140	7,475,774	7,135,842	2,858,360	17,469,976	0.1514	0.5514
150	4,501,519	5,991,782	2,397,681	12,890,982	0.1117	0.6631
160	2,535,770	6,029,679	1,381,135	9,946,584	0.0862	0.7493
170	1,398,722	4,236,750	324,423	5,959,895	0.0517	0.8010
180	1,054,347	2,400,991	142,251	3,597,589	0.0312	0.8322
190	1,023,297	2,379,964	30,505	3,433,766	0.0298	0.8619
200	660,947	2,078,644	0	2,739,591	0.0237	0.8857
210	703,406	1,269,411	0	1,972,817	0.0171	0.9028
220	416,194	847,611	0	1,263,805	0.0110	0.9137
230	337,742	1,100,663	0	1,438,405	0.0125	0.9262
240	133,640	721,893	0	855,533	0.0074	0.9336
250	26,760	407,090	0	433,850	0.0038	0.9374
260	94,639	1,006,390	0	1,101,029	0.0095	0.9469
270	59,915	844,546	0	904,461	0.0078	0.9548
280	26,158	314,507	0	340,665	0.0030	0.9577
290	26,158	606,328	0	632,486	0.0055	0.9632
300	0	180,400	0	180,400	0.0016	0.9648
310	0	314,925	0	314,925	0.0027	0.9675
320	0	409,959	0	409,959	0.0036	0.9710
330	0	521,436	0	521,436	0.0045	0.9756
340	0	564,841	0	564,841	0.0049	0.9805
350	0	292,227	0	292,227	0.0025	0.9830
360	0	569,780	0	569,780	0.0049	0.9879
370	0	425,127	0	425,127	0.0037	0.9916
380	0	471,680	0	471,680	0.0041	0.9957
390	0	364,862	0	364,862	0.0032	0.9989
400	0	131,010	0	131,010	0.0011	1.0000
Total	**40,117,619**	**56,465,483**	**18,782,448**	**115,365,550**	**1.0000**	**1.0000**

Appendix Table D 136.-- Population estimates by sex and size for flathead sole from the 2025 northern Bering Sea survey.

Length (cm)	Females	Males	Unsexed	Total	Proportion	Cumulative proportion
250	31,190	0	0	31,190	0.1601	0.1601
310	36,495	0	0	36,495	0.1873	0.3474
340	94,981	0	0	94,981	0.4874	0.8348
350	32,188	0	0	32,188	0.1652	1.0000
Total	**194,854**	**0**	**0**	**194,854**	**1.0000**	**1.0000**

Appendix Table D 137.-- Population estimates by sex and size for Greenland turbot from the 2025 northern Bering Sea survey.

Length (cm)	Unsexed	Males	Females	Total	Proportion	Cumulative proportion
130	25,613	0	0	25,613	1.0000	1.0000
Total	**25,613**	**0**	**0**	**25,613**	**1.0000**	**1.0000**

Appendix Table D 138.-- Population estimates by sex and size for northern rock sole from the 2025 northern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
90	95,290	0	96,745	192,035	0.0016	0.0016
100	0	190,398	837,902	1,028,300	0.0083	0.0099
110	276,062	588,047	1,925,013	2,789,122	0.0226	0.0325
120	1,800,805	655,026	2,819,011	5,274,842	0.0428	0.0753
130	1,901,123	2,775,066	4,791,972	9,468,161	0.0768	0.1522
140	4,098,130	3,918,088	7,110,659	15,126,877	0.1227	0.2749
150	4,524,259	4,027,168	5,298,121	13,849,548	0.1124	0.3873
160	2,257,832	3,285,398	1,559,554	7,102,784	0.0576	0.4449
170	2,719,239	2,354,218	481,757	5,555,214	0.0451	0.4900
180	1,023,728	1,631,248	66,416	2,721,392	0.0221	0.5120
190	297,471	974,480	0	1,271,951	0.0103	0.5224
200	551,516	665,877	0	1,217,393	0.0099	0.5322
210	751,258	343,853	0	1,095,111	0.0089	0.5411
220	545,699	293,674	0	839,373	0.0068	0.5479
230	0	1,293,766	0	1,293,766	0.0105	0.5584
240	423,437	581,138	0	1,004,575	0.0082	0.5666
250	1,028,271	789,862	0	1,818,133	0.0148	0.5813
260	1,287,589	781,768	0	2,069,357	0.0168	0.5981
270	1,346,350	964,228	0	2,310,578	0.0187	0.6169
280	1,745,749	1,032,388	0	2,778,137	0.0225	0.6394
290	2,382,418	1,184,469	0	3,566,887	0.0289	0.6684
300	2,025,105	1,771,537	0	3,796,642	0.0308	0.6992
310	3,766,960	2,172,686	0	5,939,646	0.0482	0.7474
320	3,494,675	3,645,684	0	7,140,359	0.0579	0.8053
330	689,367	3,073,313	0	3,762,680	0.0305	0.8358
340	699,689	3,908,067	0	4,607,756	0.0374	0.8732
350	258,455	1,851,752	0	2,110,207	0.0171	0.8903
360	127,206	3,387,875	0	3,515,081	0.0285	0.9188
370	209,213	1,928,673	0	2,137,886	0.0173	0.9362
380	33,430	1,724,439	0	1,757,869	0.0143	0.9505
390	33,680	1,876,005	0	1,909,685	0.0155	0.9659
400	34,330	1,518,449	0	1,552,779	0.0126	0.9785
410	0	1,083,387	0	1,083,387	0.0088	0.9873
420	0	676,751	0	676,751	0.0055	0.9928
430	0	425,040	0	425,040	0.0034	0.9963
440	0	160,943	0	160,943	0.0013	0.9976
450	0	232,241	0	232,241	0.0019	0.9995
470	0	65,772	0	65,772	0.0005	1.0000
Total	**40,428,336**	**57,832,774**	**24,987,150**	**123,248,260**	**1.0000**	**1.0000**

Appendix Table D 139.-- Population estimates by sex and size for Pacific cod from the 2025 northern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
70	0	0	31,318	31,318	0.0007	0.0007
100	0	0	71,895	71,895	0.0017	0.0024
110	0	0	95,836	95,836	0.0022	0.0046
120	73,695	31,071	160,504	265,270	0.0062	0.0108
130	137,562	197,085	343,840	678,487	0.0158	0.0265
140	411,131	156,055	716,035	1,283,221	0.0298	0.0564
150	372,582	418,101	373,653	1,164,336	0.0270	0.0834
160	156,787	561,981	315,115	1,033,883	0.0240	0.1074
170	452,461	274,342	62,652	789,455	0.0183	0.1258
180	1,088,093	279,736	0	1,367,829	0.0318	0.1575
190	570,226	675,868	0	1,246,094	0.0289	0.1865
200	806,337	492,920	0	1,299,257	0.0302	0.2167
210	470,369	440,890	0	911,259	0.0212	0.2379
220	712,849	447,599	0	1,160,448	0.0270	0.2648
230	271,940	372,685	0	644,625	0.0150	0.2798
240	328,583	274,498	0	603,081	0.0140	0.2938
250	179,880	251,769	0	431,649	0.0100	0.3038
260	191,487	572,091	0	763,578	0.0177	0.3216
270	577,804	333,135	0	910,939	0.0212	0.3427
280	379,514	548,850	0	928,364	0.0216	0.3643
290	591,398	643,204	0	1,234,602	0.0287	0.3930
300	761,657	546,269	0	1,307,926	0.0304	0.4234
310	313,578	567,765	0	881,343	0.0205	0.4438
320	243,395	272,046	0	515,441	0.0120	0.4558
330	379,663	290,889	0	670,552	0.0156	0.4714
340	153,212	338,893	0	492,105	0.0114	0.4828
350	257,799	319,896	0	577,695	0.0134	0.4962
360	150,968	221,087	0	372,055	0.0086	0.5049
370	90,392	400,627	0	491,019	0.0114	0.5163
380	112,807	258,191	0	370,998	0.0086	0.5249
390	287,294	299,416	0	586,710	0.0136	0.5385
400	247,876	132,959	0	380,835	0.0088	0.5474
410	127,120	210,388	0	337,508	0.0078	0.5552
420	89,025	273,886	0	362,911	0.0084	0.5637
430	238,119	189,108	0	427,227	0.0099	0.5736
440	238,141	305,213	0	543,354	0.0126	0.5862
450	116,714	282,858	0	399,572	0.0093	0.5955
460	92,580	280,970	0	373,550	0.0087	0.6042
470	101,800	331,754	0	433,554	0.0101	0.6142
480	259,407	206,075	0	465,482	0.0108	0.6251
490	26,200	293,532	0	319,732	0.0074	0.6325
500	101,800	194,199	0	295,999	0.0069	0.6394
510	187,877	327,499	0	515,376	0.0120	0.6513
520	187,031	225,264	0	412,295	0.0096	0.6609
530	124,598	344,095	0	468,693	0.0109	0.6718
540	319,996	310,636	0	630,632	0.0147	0.6865
550	118,782	311,957	0	430,739	0.0100	0.6965
560	283,005	130,315	0	413,320	0.0096	0.7061
570	259,628	142,979	0	402,607	0.0094	0.7154
580	153,012	169,984	0	322,996	0.0075	0.7229

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
590	215,281	190,286	0	405,567	0.0094	0.7323
600	218,803	258,091	0	476,894	0.0111	0.7434
610	216,810	192,264	0	409,074	0.0095	0.7529
620	363,838	277,919	0	641,757	0.0149	0.7678
630	354,223	155,853	0	510,076	0.0119	0.7797
640	155,422	308,213	0	463,635	0.0108	0.7905
650	490,291	160,736	0	651,027	0.0151	0.8056
660	217,478	276,479	0	493,957	0.0115	0.8171
670	414,892	320,198	0	735,090	0.0171	0.8341
680	158,965	212,757	0	371,722	0.0086	0.8428
690	196,951	220,257	0	417,208	0.0097	0.8525
700	285,005	248,342	0	533,347	0.0124	0.8649
710	256,423	229,455	0	485,878	0.0113	0.8761
720	187,925	254,380	0	442,305	0.0103	0.8864
730	62,587	287,130	0	349,717	0.0081	0.8945
740	379,885	232,125	0	612,010	0.0142	0.9088
750	263,292	392,145	0	655,437	0.0152	0.9240
760	185,937	97,695	0	283,632	0.0066	0.9306
770	30,781	250,929	0	281,710	0.0065	0.9371
780	0	104,285	0	104,285	0.0024	0.9395
790	129,980	153,123	0	283,103	0.0066	0.9461
800	95,198	320,394	0	415,592	0.0097	0.9558
810	97,445	97,818	0	195,263	0.0045	0.9603
820	30,931	148,199	0	179,130	0.0042	0.9645
830	94,692	122,329	0	217,021	0.0050	0.9695
840	101,576	132,729	0	234,305	0.0054	0.9750
850	68,022	0	0	68,022	0.0016	0.9765
860	94,404	64,267	0	158,671	0.0037	0.9802
870	95,482	31,298	0	126,780	0.0029	0.9832
880	31,660	155,704	0	187,364	0.0044	0.9875
890	60,171	32,552	0	92,723	0.0022	0.9897
900	0	60,409	0	60,409	0.0014	0.9911
910	0	31,897	0	31,897	0.0007	0.9918
920	31,773	32,513	0	64,286	0.0015	0.9933
930	31,660	65,406	0	97,066	0.0023	0.9956
940	0	30,781	0	30,781	0.0007	0.9963
960	0	63,301	0	63,301	0.0015	0.9978
990	0	65,621	0	65,621	0.0015	0.9993
1010	0	31,008	0	31,008	0.0007	1.0000
Total	**19,413,957**	**21,459,518**	**2,170,848**	**43,044,323**	**1.0000**	**1.0000**

Appendix Table D 140.-- Population estimates by sex and size for Pacific halibut from the 2025 northern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
350	0	91,755	0	91,755	0.0127	0.0127
360	30,228	91,755	0	121,983	0.0169	0.0297
370	30,228	30,228	34,321	94,777	0.0132	0.0429
380	61,547	157,212	0	218,759	0.0304	0.0732
390	90,685	367,059	0	457,744	0.0636	0.1368
400	0	281,022	0	281,022	0.0390	0.1759
410	31,298	245,210	62,329	338,837	0.0471	0.2230
420	60,457	120,914	0	181,371	0.0252	0.2481
430	30,228	278,729	0	308,957	0.0429	0.2911
440	0	62,637	0	62,637	0.0087	0.2998
450	124,317	30,228	0	154,545	0.0215	0.3212
460	62,637	0	0	62,637	0.0087	0.3299
470	91,775	133,566	0	225,341	0.0313	0.3612
480	91,589	150,605	31,659	273,853	0.0380	0.3993
490	0	151,748	0	151,748	0.0211	0.4204
500	0	125,273	28,598	153,871	0.0214	0.4417
510	31,318	183,760	0	215,078	0.0299	0.4716
520	63,252	218,797	0	282,049	0.0392	0.5108
530	0	122,476	30,884	153,360	0.0213	0.5321
540	31,318	158,323	0	189,641	0.0263	0.5585
550	62,637	31,452	0	94,089	0.0131	0.5715
570	90,895	31,318	0	122,213	0.0170	0.5885
580	0	31,318	0	31,318	0.0044	0.5929
590	31,318	31,318	0	62,636	0.0087	0.6016
600	28,258	256,081	0	284,339	0.0395	0.6411
610	59,839	0	31,017	90,856	0.0126	0.6537
620	0	95,269	32,526	127,795	0.0178	0.6714
630	31,318	62,616	0	93,934	0.0130	0.6845
640	123,973	184,002	0	307,975	0.0428	0.7273
650	0	181,769	0	181,769	0.0253	0.7525
660	31,298	84,140	0	115,438	0.0160	0.7686
670	28,258	118,064	0	146,322	0.0203	0.7889
680	27,623	152,077	32,660	212,360	0.0295	0.8184
690	0	155,291	0	155,291	0.0216	0.8400
700	0	185,205	0	185,205	0.0257	0.8657
710	28,258	67,100	0	95,358	0.0132	0.8789
720	28,258	90,247	0	118,505	0.0165	0.8954
730	31,298	28,258	0	59,556	0.0083	0.9037
740	0	0	32,345	32,345	0.0045	0.9082
750	28,258	0	32,660	60,918	0.0085	0.9166
760	0	0	32,345	32,345	0.0045	0.9211
770	0	61,069	0	61,069	0.0085	0.9296
780	0	31,318	0	31,318	0.0044	0.9340
790	0	27,623	32,345	59,968	0.0083	0.9423
800	0	31,452	0	31,452	0.0044	0.9467
810	0	62,794	0	62,794	0.0087	0.9554
820	0	34,579	0	34,579	0.0048	0.9602
840	0	31,318	0	31,318	0.0044	0.9645
860	0	28,258	0	28,258	0.0039	0.9685
900	39,477	31,452	0	70,929	0.0099	0.9783

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
920	0	31,318	0	31,318	0.0044	0.9827
1020	0	31,298	0	31,298	0.0043	0.9870
1080	0	31,452	0	31,452	0.0044	0.9914
1140	0	0	31,017	31,017	0.0043	0.9957
1440	0	0	31,017	31,017	0.0043	1.0000
Total	**1,501,843**	**5,220,753**	**475,723**	**7,198,319**	**1.0000**	**1.0000**

Appendix Table D 141.-- Population estimates by sex and size for walleye pollock from the 2025 northern Bering Sea survey.

Length (cm)	Females	Unsexed	Males	Total	Proportion	Cumulative proportion
30	0	158,954	0	158,954	0.0002	0.0002
50	0	34,623	0	34,623	0.0000	0.0002
70	0	222,353	0	222,353	0.0002	0.0004
80	0	3,342,755	0	3,342,755	0.0032	0.0036
90	0	17,201,660	0	17,201,660	0.0163	0.0199
100	0	64,127,245	62,235	64,189,480	0.0610	0.0809
110	0	142,859,795	151,487	143,011,282	0.1358	0.2167
120	0	130,290,316	121,190	130,411,506	0.1238	0.3405
130	0	97,022,413	0	97,022,413	0.0921	0.4326
140	122,631	35,459,993	31,938	35,614,562	0.0338	0.4664
150	743,937	9,861,953	1,219,493	11,825,383	0.0112	0.4777
160	1,710,072	4,322,829	822,807	6,855,708	0.0065	0.4842
170	378,058	243,738	158,100	779,896	0.0007	0.4849
180	472,566	59,744	427,190	959,500	0.0009	0.4858
190	732,581	120,207	29,443	882,231	0.0008	0.4867
200	647,577	0	0	647,577	0.0006	0.4873
210	471,399	0	58,416	529,815	0.0005	0.4878
220	285,583	0	1,353,723	1,639,306	0.0016	0.4893
230	108,598	0	0	108,598	0.0001	0.4895
240	72,399	0	339,075	411,474	0.0004	0.4898
250	1,136,749	0	0	1,136,749	0.0011	0.4909
280	0	0	32,188	32,188	0.0000	0.4910
320	36,199	0	0	36,199	0.0000	0.4910
330	140,786	0	0	140,786	0.0001	0.4911
340	72,399	0	0	72,399	0.0001	0.4912
350	72,399	0	0	72,399	0.0001	0.4913
360	108,598	0	0	108,598	0.0001	0.4914
370	72,399	0	33,279	105,678	0.0001	0.4915
380	101,881	0	0	101,881	0.0001	0.4916
390	1,100,550	0	88,962	1,189,512	0.0011	0.4927
400	1,136,749	0	137,155	1,273,904	0.0012	0.4939
410	409,151	0	0	409,151	0.0004	0.4943
420	36,199	0	760,200	796,399	0.0008	0.4950
430	110,715	0	4,881,186	4,991,901	0.0047	0.4998
440	1,292,301	0	2,858,382	4,150,683	0.0039	0.5037
450	3,039,622	0	3,842,201	6,881,823	0.0065	0.5103
460	4,119,092	0	9,345,487	13,464,579	0.0128	0.5230
470	11,913,998	0	7,338,719	19,252,717	0.0183	0.5413
480	12,399,780	0	17,237,740	29,637,520	0.0281	0.5695
490	18,194,676	0	18,539,260	36,733,936	0.0349	0.6043
500	16,831,406	0	15,517,347	32,348,753	0.0307	0.6351
510	30,445,288	0	21,025,232	51,470,520	0.0489	0.6839
520	25,274,545	0	15,637,724	40,912,269	0.0388	0.7228
530	24,855,454	0	21,493,270	46,348,724	0.0440	0.7668
540	20,394,982	0	11,187,401	31,582,383	0.0300	0.7968
550	22,439,307	0	10,867,546	33,306,853	0.0316	0.8284
560	15,918,208	0	7,266,457	23,184,665	0.0220	0.8504
570	19,663,410	0	8,930,109	28,593,519	0.0272	0.8776
580	18,673,845	0	6,444,727	25,118,572	0.0239	0.9014
590	12,312,420	0	4,702,520	17,014,940	0.0162	0.9176

Length (cm)	Females	Unsexed	Males	Total	Proportion	Cumulative proportion
600	12,113,272	0	5,568,581	17,681,853	0.0168	0.9344
610	11,981,814	0	4,894,972	16,876,786	0.0160	0.9504
620	8,956,512	0	3,117,900	12,074,412	0.0115	0.9619
630	7,982,697	0	2,185,343	10,168,040	0.0097	0.9715
640	6,634,559	0	1,673,376	8,307,935	0.0079	0.9794
650	4,488,459	0	1,172,360	5,660,819	0.0054	0.9848
660	4,026,915	0	933,651	4,960,566	0.0047	0.9895
670	3,176,331	0	435,274	3,611,605	0.0034	0.9929
680	2,643,318	0	93,766	2,737,084	0.0026	0.9955
690	1,102,077	0	127,691	1,229,768	0.0012	0.9967
700	635,421	0	166,103	801,524	0.0008	0.9975
710	429,391	0	96,473	525,864	0.0005	0.9980
720	882,034	0	95,232	977,266	0.0009	0.9989
730	490,833	0	66,141	556,974	0.0005	0.9994
740	94,780	0	0	94,780	0.0001	0.9995
750	126,074	0	31,897	157,971	0.0002	0.9997
760	188,359	0	0	188,359	0.0002	0.9998
770	98,631	0	0	98,631	0.0001	0.9999
790	33,680	0	0	33,680	0.0000	1.0000
810	32,243	0	0	32,243	0.0000	1.0000
Total	**334,165,909**	**505,328,578**	**213,600,949**	**1,053,095,436**	**1.0000**	**1.0000**

Appendix Table D 142.-- Population estimates by sex and size for yellowfin sole from the 2025 northern Bering Sea survey.

Length (cm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
60	0	0	192,526	192,526	0.0001	0.0001
70	0	0	84,330	84,330	0.0001	0.0002
80	30,287	902,584	110,994	1,043,865	0.0007	0.0008
90	60,573	253,283	462,026	775,882	0.0005	0.0013
100	1,378,228	588,726	1,230,160	3,197,114	0.0020	0.0033
110	1,425,255	1,413,991	2,333,473	5,172,719	0.0032	0.0065
120	6,139,456	7,698,302	5,893,440	19,731,198	0.0123	0.0189
130	21,230,975	13,506,145	16,257,297	50,994,417	0.0319	0.0508
140	40,537,471	33,597,828	9,204,144	83,339,443	0.0522	0.1030
150	64,365,399	54,021,229	4,748,098	123,134,726	0.0771	0.1800
160	71,214,762	71,552,832	1,649,333	144,416,927	0.0904	0.2704
170	64,432,373	73,720,802	209,420	138,362,595	0.0866	0.3570
180	60,927,557	63,401,964	0	124,329,521	0.0778	0.4348
190	54,300,642	64,373,758	0	118,674,400	0.0743	0.5090
200	53,238,773	55,960,312	0	109,199,085	0.0683	0.5774
210	37,517,862	39,362,804	0	76,880,666	0.0481	0.6255
220	32,396,417	32,067,118	0	64,463,535	0.0403	0.6658
230	26,726,770	26,199,103	0	52,925,873	0.0331	0.6989
240	14,168,701	15,402,716	0	29,571,417	0.0185	0.7174
250	13,365,668	11,166,173	0	24,531,841	0.0154	0.7328
260	7,844,810	6,916,332	0	14,761,142	0.0092	0.7420
270	7,790,490	6,052,794	0	13,843,284	0.0087	0.7507
280	11,036,727	6,249,377	0	17,286,104	0.0108	0.7615
290	9,827,172	6,341,770	0	16,168,942	0.0101	0.7716
300	12,982,744	7,107,252	0	20,089,996	0.0126	0.7842
310	17,593,417	8,142,980	0	25,736,397	0.0161	0.8003
320	17,521,170	11,326,702	0	28,847,872	0.0181	0.8183
330	25,199,584	11,899,257	0	37,098,841	0.0232	0.8416
340	34,378,842	17,153,169	0	51,532,011	0.0322	0.8738
350	21,723,509	17,062,218	0	38,785,727	0.0243	0.8981
360	20,110,119	18,963,536	0	39,073,655	0.0245	0.9225
370	18,130,674	21,469,287	0	39,599,961	0.0248	0.9473
380	8,285,513	14,837,851	0	23,123,364	0.0145	0.9618
390	7,404,983	16,432,768	0	23,837,751	0.0149	0.9767
400	2,590,157	12,031,787	0	14,621,944	0.0091	0.9858
410	2,140,049	8,216,609	0	10,356,658	0.0065	0.9923
420	64,942	4,406,942	0	4,471,884	0.0028	0.9951
430	0	2,925,802	0	2,925,802	0.0018	0.9969
440	0	3,300,268	0	3,300,268	0.0021	0.9990
450	92,634	877,947	0	970,581	0.0006	0.9996
460	0	524,181	0	524,181	0.0003	1.0000
480	0	79,882	0	79,882	0.0000	1.0000
Total	**788,174,705**	**767,508,381**	**42,375,241**	**1,598,058,327**	**1.0000**	**1.0000**

Appendix E: Survey participants

RACE Division directors: Lyle Britt and Alix Laferriere
Survey team program manager: Stan Kotwicki
Bering Sea survey team supervisor: Duane Stevenson
Bering Sea survey coordinators: Nicole Charriere, Rebecca Haehn-Tam, and Leah Zacher
Net loft: Shawn Russel, Lorin Anderson, Sand Borrego, and Mike Mac Ewan
RACE survey support team (RSST): Joanna Magner, Kevin McCarty, and Gary McMurrin
Back Deck and Acquisition Working Group (BDAWG): Chris Anderson, Christina Conrath, Leah Zacher, Nate Raring, and Megan Burns
Fieldwork and At-sea Safety Team (FAST): Alex Dowlin, Thaddaeus Buser, Joanna Magner, and Shannon Hennessey
Scientific collections and research projects: Alex Dowlin, Sean Rooney, Rebecca Haehn-Tam, and Thaddaeus Buser
Taxonomy and voucher coordination: Sarah Friedman and Thaddaeus Buser
Chart printing: Rebecca Haehn-Tam, Alex Dowlin, and Pearl Rojas
Hardware and software development and maintenance: Chris Anderson, Sean Rohan, Margret Siple, Gary McMurrin, Alex Guffey, and Mahesh Bhaya
Medic and At-Sea Safety Training Coordination: Chris Anderson and Alex Dowlin
Procurement: Chris Anderson, Alex Dowlin, Joanna Magner, Bianca Prohaska, Nicole Charriere, and Bethany Riggle

Appendix Table E 143.-- Survey participants on the 2025 eastern Bering Sea and northern Bering Sea survey.

	F/V Alaska Knight				**F/V Northwest Explorer**			
	Leg 1: EBS May 30 - June 21	*Leg 2: EBS June 21 - July 11*	*Leg 3: EBS July 11 - August 1*	*Leg 4: NBS August 1 - August 22*	*Leg 1: EBS May 30 - June 21*	*Leg 2: EBS June 21 - July 11*	*Leg 3: EBS July 11 - August 1*	*Leg 4: NBS August 1 - August 22*
Chief Scientist	Stan Kotwicki[6]	Jerry Hoff[2]	Lyle Britt[5]	Nicole Charriere[6]	Duane Stevenson[6]	Sean Rohan[6]	Chris Anderson[6]	Lewis Barnett[6]
Deck Lead	Sophia Wassermann[6]	Thaddaeus Buser[6]	Adriana Myers[3]	Adriana Myers[3]	Sean Rohan[6]	Lewis Barnett[6]	Nicole Charriere[6]	Emily Markowitz[6]
Crab Lead	Shannon Hennessey[7]	Jon Richar[7]	Shannon Hennessey[7]	Jen Gardner[7]	Emily Ryznar[7]	Chris Long[7]	Erin Fedewa[7]	Chris Long[7]
Crab Assist	Emily Markowitz[6]	Christian Gredzens[3]	Meghan Korte[1]	Sophia Wassermann[6]	Alix Laferriere[7]	William Stockhausen[8]	Connor Cleary[7]	Mike Litzow[7]
General Biologist					Chris Anderson[6]	Emily Slesinger[5]	Darin Jones[4]	Jim Lovvorn[13]
Stomach Collector	Thaddaeus Buser[6]	Joel Kraski[9]	Sandy Parker-Stetter[4]	Errol Ronje[12]	Patrick Ressler[4]	Cynthia Yeung[6]	Will Fennie[10]	Cynthia Yeung[6]
IPHC Sampler	Francis Maddox[11]	Francis Maddox[11]	Francis Maddox[11]	Francis Maddox[11]				

[1]Alaska Department of Fish & Game (ADF&G)
[2]Alaska Fisheries Science Center (AFSC)
[3]Alaska Fisheries Science Center's Fisheries Monitoring & Assessment Division (FMA)
[4]Alaska Fisheries Science Center's Midwater Assessment & Conservation Engineering Division (MACE)
[5]Alaska Fisheries Science Center's Resource Assessment & Conservation Engineering Division (RACE)
[6]Alaska Fisheries Science Center's Groundfish Assessment Program (GAP)
[7]Alaska Fisheries Science Center's Shellfish Assessment Program (SAP)
[8]Alaska Fisheries Science Center's Resource Ecology & Fisheries Management and Stock Assessment Division (REFM)
[9]Alaska Regional Office's Sustainable Fisheries Division (SFD)
[10]Ecosystems & Fisheries-Oceanography Coordinated Investigations (EcoFOCI)
[11]International Pacific Halibut Commission (IPHC)
[12]National Centers for Environmental Information (NCEI)
[13]University of Wyoming (UofWyo)

Appendix F: Survey on social media

In 2025, the survey team was able to share the work happening at sea through outreach and engagement. See the science and people behind our surveys:

Featured Interviews & Articles

- Stormy Seas: Warmer waters in the Bering Sea caused snow crabs to crash. Now, scientists are racing to predict the future of the lucrative fishery. Science Magazine [20]
- Life at Sea on a Fisheries Survey with Chris Anderson [21]
- Modernizing Fisheries Survey Science: Advancing NOAA's Fisheries-Independent Data Collection [22] featuring Sean Rohan and Shawn Russell
- Inside AFSC with Sophia Wassermann [23]
- Inside AFSC with Emily Markowitz [24]
- Inside AFSC with Erin Fedewa [25]

Near Real-Time Data Products

- Near Real-time Temperatures from the 2025 Bering Sea Bottom Trawl Survey [26]
- Near Real-time Temperatures from the 2025 Gulf of Alaska Bottom Trawl Survey [27]

Community Engagement

- January 22: "2025 Northern Bering Sea Survey: What Did They Find?" Strait Science Seminar Series [28] Presentation in Nome and Virtually, 6pm AKT.
- January 14: "Preliminary Results from the 2025 Gulf of Alaska Bottom Trawl Survey" at the Kodiak Fisheries Research Center 5:30-6:30 AKT in Kodiak.
- August 20: Presentation at the Unalaska Library with the Museum of the Aleutians in Dutch Harbor.

Social Media Platforms

- 2025 Research Photo Gallery [29]
- NOAA Fisheries Alaska on Facebook [30]
- NOAA Fisheries Alaska on Instagram [31]

Data Access

- Fisheries One Stop Shop public data portal [32]
- Distribution Mapping and Analysis Portal [33]
- Alaska Fisheries Information Network [34]

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[20] https://www.science.org/doi/epdf/10.1126/science.aed2504
[21] https://www.fisheries.noaa.gov/feature-story/life-sea-fisheries-survey-chris-anderson
[22] https://www.fisheries.noaa.gov/feature-story/modernizing-fisheries-survey-science-advancing-noaas-fisheries-independent-data
[23] https://videos.fisheries.noaa.gov/detail/video/6370598240112/inside-afsc-with-sophia-wassermann-fisheries-biologist
[24] https://videos.fisheries.noaa.gov/detail/video/6370711114112/inside-afsc-with-em-markowitz-fisheries-biologist-at-the-seattle-lab
[25] https://videos.fisheries.noaa.gov/detail/video/6370497321112/inside-afsc-with-erin-fedewa-shellfish-biologist-at-the-kodiak-lab
[26] https://www.fisheries.noaa.gov/alaska/science-data/near-real-time-temperatures-2025-bering-sea-bottom-trawl-survey
[27] https://www.fisheries.noaa.gov/alaska/science-data/near-real-time-temperatures-2025-gulf-alaska-bottom-trawl-survey
[28] https://www.uaf.edu/nwc/outreach/strait-science.php
[29] https://www.fisheries.noaa.gov/gallery/2025-alaska-research-surveys-photo-gallery
[30] https://www.facebook.com/NOAAFisheriesAK/
[31] https://www.instagram.com/noaafisheriesalaska/
[32] https://www.fisheries.noaa.gov/foss
[33] https://apps-st.fisheries.noaa.gov/dismap/
[34] https://www.psmfc.org/program/alaska-fisheries-information-network-akfin/

Latest Data Reports and Documents

Data reports are also available for each of our historical surveys in the Gulf of Alaska, Aleutian Islands, eastern Bering Sea, and northern Bering Sea through the publicly available NOAA Library[35].

- Results of the 2024 eastern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate fauna[36]
- Results of the 2023 eastern and northern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate fauna[37]
- Data Report: 2024 Aleutian Islands bottom trawl survey[38]
- Data report: 2023 Gulf of Alaska bottom trawl survey[39]
- Results of the 2016 eastern Bering Sea upper continental slope survey of groundfishes and invertebrate resources[40]
- The 2024 eastern Bering Sea continental shelf trawl survey: Results for commercial crab species[41]

General Resources

- Groundfish Assessment Program Bottom Trawl Surveys[42]
- AFSC's Resource Assessment and Conservation Engineering Division[43]
- Research Surveys conducted at AFSC[44]

Thank you to everyone who contributed your time, stories, photos, and expertise to make this season's outreach possible. Your participation not only strengthens the Groundfish Assessment Program's mission but also builds public understanding and appreciation of fisheries science.
We encourage you to explore, share, and continue contributing to these products.

[35] https://repository.library.noaa.gov/
[36] https://doi.org/10.25923/8qa3-x785
[37] https://doi.org/10.25923/2mry-yx09
[38] https://doi.org/10.25923/090j-8132
[39] https://doi.org/10.25923/gbb1-x748
[40] https://doi.org/10.7289/V5/TM-AFSC-339
[41] https://doi.org/10.25923/q0fw-z324
[42] https://www.fisheries.noaa.gov/alaska/science-data/groundfish-assessment-program-bottom-trawl-surveys
[43] https://www.fisheries.noaa.gov/about/resource-assessment-and-conservation-engineering-division
[44] https://www.fisheries.noaa.gov/alaska/ecosystems/alaska-fish-research-surveys

Appendix G: Data changes

The AFSC Groundfish Assessment Program (GAP) team are stewards of the haul-by-haul catch and effort data, as well as the following survey products: CPUE, biomass, abundance, age composition, and size composition estimates. Improvements are made to these data and products as necessary and include fixing previously missed errors from past years and incorporating new metadata. This year, 2025, marks the third year of the team disseminating the new production data to AKFIN and other partners.

The 2025 survey data products are generated by the *gapindex* R package (v3.0.3; https://github.com/afsc-gap-products/gapindex) and distributed from tables stored in the AFSC GAP_PRODUCTS Oracle schema. These data are accompanied by extensive documentation, metadata, and user examples (https://afsc-gap-products.github.io/gap_products/).

Since the 2024 eastern Bering Sea data report was published (April 2025; Markowitz et al. (2025)), there have been several updates to the GAP_PRODUCTS tables (see documentation[44]). Data used in this report were updated as of September 29, 2025. Those changes are documented on our release notes page[45].

[44] https://afsc-gap-products.github.io/gap_products/content/intro-news.html
[45] https://afsc-gap-products.github.io/gap_products/content/intro-news.html

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Howard Lutnick

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