

2026–2027 Southern Southeast Inside Subdistrict (Clarence Strait) Sablefish Pot Survey

by

Rhea Ehresmann

Alex McCarrel

Kalli Brettrager

Abigail Brady

and

Aaron Baldwin

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Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative Code		all standard mathematical signs, symbols and abbreviations	
deciliter	dL		AAC		
gram	g	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	alternate hypothesis	H _A
hectare	ha			base of natural logarithm	<i>e</i>
kilogram	kg	all commonly accepted		catch per unit effort	CPUE
kilometer	km	professional titles	e.g., Dr., Ph.D., R.N., etc.	coefficient of variation	CV
liter	L			common test statistics	(F, t, χ^2 , etc.)
meter	m	at	@	confidence interval	CI
milliliter	mL	compass directions:		correlation coefficient (multiple)	R
millimeter	mm	east	E	correlation coefficient (simple)	r
Weights and measures (English)		north	N	covariance	cov
cubic feet per second	ft ³ /s	south	S	degree (angular)	°
foot	ft	west	W	degrees of freedom	df
gallon	gal	copyright	©	expected value	<i>E</i>
inch	in	corporate suffixes:		greater than	>
mile	mi	Company	Co.	greater than or equal to	≥
nautical mile	nmi	Corporation	Corp.	harvest per unit effort	HPUE
ounce	oz	Incorporated	Inc.	less than	<
pound	lb	Limited	Ltd.	less than or equal to	≤
quart	qt	District of Columbia	D.C.	logarithm (natural)	ln
yard	yd	et alii (and others)	et al.	logarithm (base 10)	log
Time and temperature		et cetera (and so forth)	etc.	logarithm (specify base)	log ₂ , etc.
day	d	exempli gratia		minute (angular)	'
degrees Celsius	°C	(for example)	e.g.	not significant	NS
degrees Fahrenheit	°F	Federal Information Code	FIC	null hypothesis	H ₀
degrees kelvin	K	id est (that is)	i.e.	percent	%
hour	h	latitude or longitude	lat. or long.	probability	P
minute	min	monetary symbols		probability of a type I error	
second	s	(U.S.)	\$, ¢	(rejection of the null hypothesis when true)	α
Physics and chemistry		months (tables and figures): first three		probability of a type II error	
all atomic symbols		letters	Jan,...,Dec	(acceptance of the null hypothesis when false)	β
alternating current	AC	registered trademark	®	second (angular)	"
ampere	A	trademark	™	standard deviation	SD
calorie	cal	United States		standard error	SE
direct current	DC	(adjective)	U.S.	variance	
hertz	Hz	United States of America (noun)	USA	population sample	Var
horsepower	hp	U.S.C.	United States Code		var
hydrogen ion activity (negative log of)	pH				
parts per million	ppm	U.S. state	use two-letter abbreviations		
parts per thousand	ppt, ‰		(e.g., AK, WA)		
volts	V				
watts	W				

REGIONAL OPERATIONAL PLAN NO. ROP.CF.1J.2026.07

**2026–2027 SOUTHERN SOUTHEAST INSIDE SUBDISTRICT
(CLARENCE STRAIT) SABLEFISH POT SURVEY**

by

Rhea Ehresmann, Alex McCarrel, Kalli Brettrager, and Abigail Brady
Alaska Department of Fish and Game, Division of Commercial Fisheries, Sitka

and

Aaron Baldwin
Alaska Department of Fish and Game, Division of Commercial Fisheries, Douglas

Alaska Department of Fish and Game
Division of Commercial Fisheries
304 Lake St. Ste.103, Sitka, AK 99835

July 2026

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*Rhea Ehresmann, Alex McCarrel, Kalli Brettrager, and Abigail Brady
Alaska Department of Fish and Game, Division of Commercial Fisheries,
304 Lake St. Ste. 103, Sitka, Alaska, USA*

*Aaron Baldwin
Alaska Department of Fish and Game, Division of Commercial Fisheries
802 3rd St., Douglas, AK, USA*

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Signature Page

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Project Leader	Rhea Ehresmann		
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PURPOSE

This regional operational plan details the methodology for the first 2 years of the Southern Southeast Inside (SSEI) Subdistrict sablefish *Anoplopoma fimbria* pot survey that replaces the annual longline survey. This survey's primary objective is to estimate the relative abundance of sablefish through determination of catch per unit effort (CPUE) at fixed stations in the SSEI Subdistrict. Additionally, fishery independent sablefish biological data (age, length, weight, sex, and maturity) are obtained for assessment of biological trends and stock health. These data are used in conjunction with fishery CPUE and biological data and regional sablefish population trends to determine the SSEI annual harvest objective (AHO).

Keywords: sablefish, groundfish, Clarence Strait, codcoil pots, slinky pots, CPUE.

BACKGROUND

Sablefish or black cod *Anoplopoma fimbria* are a commercially important species found in the northeastern Pacific Ocean, ranging from Baja, California to the Aleutian Islands and into the Bering Sea (Mecklenburg et al. 2002). Adult sablefish inhabit the deep waters of the continental shelf, slope, and coastal fjords. Most adults live at depths ranging from 366 m to 914 m (200 to 500 fathoms), but sablefish have been captured at depths over 1,829 m (1,000 fathoms; Allen and Smith 1988). Sablefish are a long-lived species and have been aged to at least 94 years old in Alaska waters (Munk 2001); however, sablefish captured by the commercial fisheries in Southeast Alaska are often not older than 20 years (Mueter 2010).

The sablefish fishery within the Southern Southeast Inside (SSEI) Subdistrict waters (Figure 1) dates to the early 1900s, with the fishery becoming a regular feature in annual reports by 1935, and regulations governing the fishery passing in 1945 (Barry Bracken, Groundfish Project Leader, ADF&G Commercial Fisheries Management and Development Division, Petersburg, memorandum to Carl Rosier, Commissioner, ADF&G, Juneau, June 17, 1994). While the fishery remained small in comparison to the Northern Southeast Inside (NSEI) Subdistrict sablefish fishery, by 1973 it had become a developed fishery prosecuted using longline and pot gear (Holum and Coonradt 2005). The original SSEI Subdistrict consisted of Clarence Strait, Sumner Strait, Behm Canal, Ernest Sound, the outer coast of Prince of Wales Island, and a portion of southern Frederick Sound. The waters of Dixon Entrance were not formally recognized by the State of Alaska as part of the SSEI Subdistrict until 1983 (Holum and Coonradt 2005). As fleet effort and efficiency increased and the number of fishery days decreased over the next decade, the equal quota share (EQS) management system was implemented in 1997, with 30 longline permits and 5 pot permits authorized to fish SSEI (Holum and Coonradt 2005). Since 2019, the SSEI EQS limited entry system has had a maximum of 22 permits, though this number may be lower if permit holders let their permits lapse and do not renew.

Sablefish stock assessment surveys in SSEI began in 1979; however, these surveys were not standardized (Holum and Coonradt 2005). In 1988, the Alaska Department of Fish and Game (ADF&G) began conducting an annual longline research survey in SSEI to assess the relative abundance of sablefish over time. Fixed sampling stations were randomly assigned within 3 statistical areas in Clarence Strait (325531, 315502, 315432) where most of the fishing effort was focused, with each statistical area considered a separate stratum (Stahl et al. 2014). Survey stations were added to Dixon Entrance in 1996 as commercial fishery effort shifted over time (Figure 2). In 1997, survey methods were standardized to the National Marine Fisheries Service (NMFS) sablefish longline survey, which included switching bait from herring to cut squid and modifying survey soak times from 1 hour to a minimum of 3 hours and a maximum of 11 hours (Sigler 2000). Furthermore, in 2000 the department began using standardized skates of conventional longline

gear built to similar specifications as NMFS longline survey gear (Table 1; O’Connell et al. 2002). This gear consisted of 2 m (78 in) spacing of hooks attached to the groundline with 38 cm (15 in) gangions with beackets (Carlile et al. 2002).

In 2013, the SSEI survey was redesigned to improve the spatial coverage of the survey relative to the fishery as commercial harvest shifted from Clarence Strait into Dixon Entrance (Stahl and Baldwin 2013). Survey stations were proportionally allocated relative to the area of sablefish habitat by strata, with statistical areas included in the redesign that had 3% or more of the commercial fishery harvest on average from 2003 to 2012 (Stahl et al. 2014). The survey redesign also included increasing the minimum distance between stations to 5,400 m based on the average set length of 3,000 m and the distance sablefish can detect bait odor after 1 hour of soaking (1,200 m; Løkkeborg et al. 1995; Sigler 2000). The overall number of survey stations decreased from 37 to 29 stations in 2013, to maintain both the proportional allocation scheme by strata and to accommodate additional survey time needed to survey the more exposed stations in the Dixon Entrance area (Figure 2; Stahl et al. 2014).

Beginning in 2020, the Clarence Strait commercial sablefish fleet began switching from longline gear to collapsible pots (*codcoil* or *slinky* pots; Figure 3) to improve fishing efficiency and mitigate whale depredation. These pots are lightweight and can be fished with minimal vessel modifications on longline boats. To gain a better understanding of pot gear selectivity and catchability, as well as to examine the feasibility of changing the longline hook-and-line survey to longlined pot gear, ADF&G conducted side-by-side comparison surveys for sablefish in SSEI waters (Table 2) from 2023–2025. Beginning in 2026, the department completely changed to collapsible pot gear due to logistical issues with the hook-and-line surveys and ongoing whale depredation, which compromised survey data.

OBJECTIVES

1. Collect CPUE data from 29 survey stations in the SSEI Subdistrict and randomly sample 550 sablefish for biological data including fork length, weight, sex, gonad maturity stage, and otoliths (age structures).
2. Measure an additional 550 randomly sampled sablefish (fork length) during the survey.
3. Identify and enumerate, to the lowest possible taxonomic group, all other species captured in pot gear during the survey.
4. Recover tagged sablefish, record tag and recovery information, and collect length data for tagged fish caught in pots during the survey.

METHODS

SURVEY DESIGN

A total of 29 survey stations (Table 3) have been fished in the annual survey since 2013; however, 7 stations were changed in 2026. Four stations in Dixon Entrance were removed due to safety concerns and replaced with stations in southern Clarence Strait at similar depths. An additional 3 stations within Clarence Strait were relocated because they were situated in poor sablefish habitat (e.g., high hagfish presence), which had contributed to high variability in survey results; these were also replaced with stations at comparable depths within Clarence Strait. For the 7 stations that were removed, replacements were either selected from previously used survey stations (3 from pre-

2013) or newly generated (4) using a random stratified design within suitable sablefish habitat. New stations were drawn from 3 depth strata: 300–400 m, 400–500 m, and 500–750 m and allocated proportionally based on total area of sablefish habitat by depth strata within Clarence Strait and Dixon Entrance.

Typically, 2 vessels are chartered to conduct the annual survey; one is assigned to trip 1, fishing the northern portion (15 stations) of the survey, and the other is assigned to trip 2, fishing the southern portion (14 stations). Timing of the survey is based on the most favorable tide series (i.e., smallest difference between low and high tides) occurring between April and May, as large tides cause gear entanglements. In the event of weather or mechanical delays, the duration of the survey may be extended from approximately one week to a maximum of 14 days. If winds exceed 25 knots, fishing operations may be suspended to provide for the safety of crew and to prevent deterioration of data quality in rough seas.

Each vessel is staffed with 2 scientific ADF&G crew members, one of whom is assigned as crew leader. ADF&G staff are responsible for data collection and entry, as well as adherence to survey protocols outlined in this document. The vessel crew consists of a captain (skipper) and 2–3 experienced crewmembers. The skipper is responsible for general navigation, crew supervision, and control of the vessel. The vessel fishing the northern portion of the survey completes 3 stations per day for 5 days, and the vessel fishing the southern portion of the survey completes 3 stations per day for 4 days and has 1 day in which only 2 stations are fished due to additional run time. The skipper on this trip selects the shorter day at their discretion. The ADF&G crew leader on each vessel works with the skipper to adjust the number of sets fished per day to accommodate changes in weather, problems with gear or the vessel, or other issues that arise.

At each station, one pot set is deployed. Each set consists of 1,646 m (900 fathoms) of 1.11 cm (7/16 inch) floating groundline and 183 m (100 fathoms) of running line with a 23 kg (50 lb) anchor at each end (Figure 4). Approximately 640 m (350 fathoms) of buoy line, with buoys and a high-flier pole, are also attached at each end. Each string contains 30 slinky pots measuring 69 cm by 127 cm (27 inch x 50 inch), equipped with two 46 cm (18 inch) escape panels made of biodegradable twine, no escape rings, and a 1.8 m (6 ft) bridle for attachment to the groundline becket via a stainless steel swivel and carabiner clip. The groundline is arranged with 30 pot beckets and 33 cannonball beckets spaced at 27 m (30 fathoms), alternating every 13.5 m (15 fathoms) so that a cannonball becket precedes each pot becket along the line, ending with a cannonball. Slinky pot beckets are made of 0.64 cm (1/4 inch) yellow spectra line tied to a length of 1.8 m (6 ft), while cannonball beckets are 0.64 cm (1/4 inch) gray spectra line tied to a length of 20 cm (8 inch). Cannonball weights of 3.2 kg (7 lb) are attached to size 6/0 stainless steel swivel snaps using an overhand knotted 30 cm loop of #72 gangion twine (12 inch tied; 28 inch untied). The vessel crew is responsible for overhauling the gear after each set and ensuring the gear remains in good condition throughout the survey.

Each vessel receives 907 kg (2,000 lb) of squid *Illex* spp. for bait. ADF&G staff calculates the rate of bait used at the first 3 stations to ensure that enough bait is available to fish all survey stations. The rate of use is 1.8 kg (4 lb) per pot. Bait must be freshly cut squid, thawed no more than 24 hours prior to use. Squid bait is cut into 3.8 cm to 5 cm (1.5–2 in) pieces. The entirety of the squid is used as bait. Staff records details of the vessel, crew, and bait usage on the Vessel Information Form (Appendix A).

Pre-printed Survey Set Forms (Appendix B) for each station are provided and completed with trip number, station number, statistical area, and start and end coordinates for each set. It is at the skipper's discretion which end is set first based on ocean and tide conditions. All attempts are made to set between the 2 locations; however, the current or weather may force a deviation from course to fish the gear appropriately. If it is necessary to set differently, the set should be made as close to the original location points as possible. The start and end positions for each set are the locations where the anchors are deployed overboard. Any problems, unforeseen events, skipper comments, and start and end of the workday should be documented on the Daily Log Form (Appendix C).

Sets must soak at least 7 hours and no longer than 18 hours, as measured from second anchor overboard to first anchor on board. The length of soak depends on weather, daily schedule, presence of hagfish (Myxinidae) or sand fleas (Lysianassoidea), or other boat traffic in the area. A proposed schedule for setting gear is to set the first and second sets the evening before, set the third set the next morning, and haul all three sets beginning with the set that was set first the night before. Once all 3 sets have been hauled, the skipper should run to the next group of stations and again set the next 2 sets that evening. Seabird avoidance devices are not required for pots.

The vessel provides a crewmember who operates the gear to haul each set. Prior to hauling gear, a 46 cm (18 in) mark is placed on the hatch, deck, or rail so the crewmember can measure undersized fish. Sablefish less than the 46 cm (18 in) mark may be gently released due to low market value and to allow for future spawning potential. All other sablefish, rockfish including thornyheads *Sebastes* spp. and *Sebastolobus* spp., and Pacific cod *Gadus macrocephalus* are to be retained for sale. All other catch is carefully released with minimum damage. Fish returned to the water are not to be gaffed but should be gently released by hand (when safe to do so) overboard. Vessels with unfilled Pacific halibut *Hippoglossus stenolepis* individual fishing quota (IFQ) on board are required to retain legal halibut up to their IFQ amount; however, vessels without halibut IFQ must immediately release all Pacific halibut. A reasonable effort should be made to untangle live Pacific sleeper sharks *Somniosus pacificus* from gear when possible and safe to do so.

DATA COLLECTION

Pot Tallies

One ADF&G staff member is responsible for completing both the Survey Set Form (Appendix B) and the Pot Tally Form (Appendix D) for each set. The Survey Set Form is used to document set-level information during deployment and haulback, including set coordinates; dates and times of anchor and buoy deployment and retrieval; number and size of pots set and hauled; depths; haulback order; substrate type; and weather conditions during the setting of gear.

Dates and times (military) are recorded when the second anchor is deployed during setting and when the first and second anchors are retrieved during haulback. Depth (in fathoms) is recorded at each pot as it is set, with the first and last pots defining the start and end depths of the set; the average set depth is calculated as the mean depth across all pots. Staff also record whether gear is hauled in the same direction as it was set and describe substrate based on observations from retrieved gear. Any irregularities such as lost pots, damaged gear (e.g., holes, open ends), groundline breaks, missing bait bags, or tangled gear must be noted in the comments.

During haulback, the same staff member completes the Pot Tally Form for that set. This staff member must position themselves where they have an unobstructed view of pots as they come aboard

and are emptied onto the sorting table or into totes. From this vantage point, they identify and enumerate all species captured in each pot to the lowest possible taxonomic level. This person must also carefully and quickly visually inspect each pot for damage. If a pot is structurally damaged, has holes in the mesh, an open door, is missing the bait bag, or has rotted biotwine, such that the pot allows fish to escape or does not allow fish to enter, the staff member must note on the Pot Tally Form that the pot was compromised. If the pot was not set or the pot was lost, the staff member must also note this for that particular pot. There are four pot condition codes: normal, pot compromised, pot not set, and pot lost. Sablefish from compromised (invalid) pots are excluded from CPUE calculations.

Each pot is dumped by the vessel crew, and all sablefish from the pot are tallied by disposition on the form. Any bycatch species are also enumerated and either retained (Pacific cod and all rockfishes) or discarded alive (all other bycatch). A handheld tally counter is the preferred method for accurately counting sablefish in each pot, particularly as crew rapidly transfer fish from the sorting table or tote to the hold. Gear should be operated at a speed that allows accurate counting, and staff should request that operations be slowed or paused if additional time is needed.

As pots are processed, the tally person also tracks sablefish counts and calls out every 10th fish for biological sampling. Sampling begins with the first sablefish of the set and continues with every 10th fish thereafter for the first 25 pots. Only “retained” and “discard small” sablefish are included in the sampling count; damaged or lost fish are excluded. If a designated sample fish is missed, the next available sablefish is retained. The sampling rate may be adjusted during the first 2 survey days to achieve the target of 550 biological samples across vessels.

In addition to biological samples, length-only samples are collected. The sablefish immediately following each biological sample (i.e., the second fish of the set and every 11th fish thereafter) is retained for length measurement and serves as the first fish in the next sampling interval. It may be easiest to have 2 tally counters for sablefish: one counting the total sablefish in each pot that is cleared after all fish have been counted for that pot and another tally counting biological samples and length-only sablefish that is not cleared until it has reached 11 sablefish, which may span across multiple pots. The total number of sampled (full biological and length-only) sablefish from each pot must be recorded on the Pot Tally Form.

All irregularities related to pots, gear performance, setting, or haulback must be clearly documented on the Pot Tally Form and Survey Set Form, as appropriate. Staff must also carefully track pot order, particularly if gear is hauled out of sequence due to snarls, parted lines, or lost pots. If pots are skipped or missing, this should be reflected on both forms. Empty beckets observed during haulback should be recorded as missing pots or noted that the pot was not set to begin with. Staff should also note the weather during the haul on the Pot Tally Form, as these conditions will be entered later into the database.

If gear parts during haulback, staff must record the pot number where the break occurred and the time each end is brought aboard. When hauling resumes from the opposite end, pot numbering should continue in proper sequence (e.g., resuming at pot 30 and tallying backward). Biological sampling should continue until 25 pots have been sampled, with remaining pots tallied only. The time the second anchor is retrieved (i.e., the second end of parted gear) must be recorded.

Document the presence of orca or sperm whales on the Pot Tally Form, and later in the comments of the Survey Set Form, noting if any evidence of depredation or gear damage occurs. If there are signs of gear damage or depredation, the vessel needs to consider other options prior to proceeding

with additional fishing, and options to discourage additional interactions should be discussed by the ADF&G crew leader, skipper, and/or project leader. When feasible, staff should photograph identifying features (sperm whale flukes; left side of orca dorsal fins) for research purposes.

After the haulback for a set is complete, both forms must be reviewed and finalized. Staff should verify that all counts, species identifications, pot conditions, and comments are accurate and complete, correcting any errors as needed. Comments should clearly describe factors affecting gear performance or CPUE (e.g., gear loss, snarls, depredation). Finally, retained sablefish are summed on the Pot Tally Form and multiplied by the average weight derived from biological samples to estimate total catch weight for the set. Verified data are then transferred to the Summary Form (Appendix J) for further calculations. All set and pot data will be entered into the Zander Pot Survey Metadata application upon return to the office.

Biological Sampling

While one scientific staff member is conducting the pot tallies, the other is collecting biological samples. Sablefish Age-Sex-Length (ASL) samples consist of fork length (nearest whole centimeter), weight (nearest 0.1 kg), sex, and maturity. The ASL samples on the pot survey are recorded using the Groundfish At-Sea Survey Sampling application on the tablet (Appendix E); however, the biological sampler should also bring 3 Sablefish Biological Data Collection Forms on deck with them (Appendix F) in the event that the tablet fails. Specimen numbers are assigned sequentially to each sablefish sample, with the first sablefish sampled on each set assigned as “specimen 1.”

After taking a fork length measurement, sablefish are weighed using a Marel[®] electronic motion compensation scale. The scale is calibrated at the start of each set and as sea conditions change. If the Marel[®] scale cannot be properly calibrated due to rough weather or other issues, a hanging scale may be used. When using the hanging scale, weight readings should be taken twice to reduce misreading due to wave and wind action. Weight collection is skipped if the ocean conditions are not conducive to accurate and repeatable readings with either scale. Some sablefish may ingest water as they are hauled to the surface, as evidenced by their swollen appearance. Samplers must purge the water from the fish stomachs prior to recording weight.

Following the collection of length and weight data, the specimen’s otoliths are removed. The otoliths are accessed by making a horizontal cut across the top of the head, about a centimeter deep. The 2 otoliths are in opposing grooves within the cartilage and forward of the brain. The otoliths are removed with forceps and are stored temporarily on deck in 32-unit pill boxes or a similar style tray. The pill boxes are numbered from 1 through 32, 33 through 64, 65 through 96; specimens 97 through 100 must be placed in empty consecutive wells and noted in the comments to avoid otolith sequence issues while cleaning (e.g., specimen 97 placed in cell 67, 98 placed in 68, 99 placed in 69, and 100 placed in 70). This allows the trays to be reused for otoliths from 101 through 200 and so forth. Otolith numbers are assigned consecutively to sablefish with biological data beginning with the first sample collected (otolith 1) and ending with the last sample taken on the final set of the survey. Otolith numbers do not match specimen numbers, which restart numbering with 1 at the start of every set. To assign a specimen an otolith number in the Groundfish At-Sea Survey Sampling application (Appendix E), staff clicks on the “oto” button. Any notes for a sample’s otolith condition are made by clicking “Notes” in the Groundfish At-Sea Survey Sampling application and selecting the corresponding condition from the “notes/otolith comments” pop-up menu or by writing in the comments box. Length-only sablefish samples are

not included in the otolith number sequence. The sampler should continually verify that the otolith number on the sampling form or tablet application matches the cell's lid number on the pill box to avoid errors in sequencing.

Otoliths are cleaned daily to avoid compromising otolith storage capacity on deck and to reduce the chance of sample loss due to accidental spillage. Otoliths should be cleaned at the end of the day inside the vessel cabin by immersing individual pairs in a small bowl of water to remove any remaining blood or tissue and gently dabbing them using a paper towel. No more than one pair of otoliths should be cleaned or removed from their pill box cell at a time to avoid accidental mixing. Staff should ensure notes recorded for otoliths on paper and in the sampling application (e.g., no otoliths, 1 otolith lost, etc.) match the number and condition of otoliths they are cleaning before placing them in the long-term storage 48-cell trays, which are labeled with trip information and specimen numbers (Appendix G). If no otoliths were collected for a specimen, the corresponding cell is left empty and uncapped. Any otolith sequence issues or abnormalities with the otoliths while collecting, cleaning, or storing the otoliths must be fully documented on the sampling application. Any questionable otoliths are noted and addressed in port with the Age Determination Unit (ADU).

After otoliths are extracted, sex and maturity data are collected by examining the specimen's gonads macroscopically. Sablefish are cut and dressed (eastern cut) to industry standards (Figure 5) to view the gonads. Male specimens are recorded with sex code "01" and females with code "02." A code of "00" is assigned to those specimens where the sex is not observed, and code "99" to those that are indiscernible. Maturity is coded according to 1 of 2 stages, immature "01" or mature "07" (Figures 6 and 7). Sablefish with undeveloped gonads that have not previously spawned are assigned as immature. Fish with gonads that are developed and have spawned or are prepared to spawn are recorded as mature. Questionable gonads should be saved to review with the other staff member after the set is complete. After sex and maturity data are recorded for a fish, the fish is cleaned with a scraper, rinsed with a deck hose, and then iced in a fish hold separate from round fish. If staff encounter any abnormalities while sampling sablefish (e.g., malformed gonads), they should document the abnormality and photograph it for further investigation.

All tagged sablefish encountered on the survey are retained, and the tag number, fork length of the fish, and set number are recorded on the Deck Tag Recovery Form (Appendix H). If a tagged fish was designated as a biological sample, the individual is treated like a random biological sample, and the otoliths are included in the survey's otolith series. The tag number is also noted in the comments section of the sampling application or on the paper sample form for that specimen. Tags are removed from the fish and secured in a safe place (e.g., small sealable plastic bag or in an unused cell of the otolith pill box) on deck until the set is completed. Tags and associated information are then transferred to the Survey Tag Recovery Form (Appendix I) inside the vessel cabin in between sets or at the end of the day. If tags from other agencies are recovered (NMFS, ADF&G Homer, Fisheries and Oceans Canada Pacific Biological Station, or Japan), biological data (length, weight, sex, maturity, and otoliths) are collected from the tagged fish and mailed with the tag to the respective agency upon return to port. These otoliths are stored separately and not included in the survey's otolith number sequence, unless they were collected as part of the systematic sampling.

At the end of each day, the Vessel Summary Form (Appendix J) is filled out for the stations fished that day. The form captures the CPUE and the average sablefish weight for each station. A cumulative estimate of the catch weight is calculated to give the processor an estimate of landing

size on offload days. The CPUE and average weights can also be compared by station for previous surveys, as available, to estimate relative catches and to facilitate adjusting biological sample rates if needed (Table 4).

VESSEL SAFETY

The safety of department staff is of utmost importance and ADF&G staff can terminate a survey at any time if they feel that the vessel is unsafe or that the skipper is making poor decisions that jeopardize the safety of crew and/or the integrity of the survey. If there is a situation on the vessel in which survey crew are in danger, the Zoleo satellite communication device is utilized to contact the appropriate safety contacts for the current year's survey. If the situation warrants immediate response, staff should contact the United States Coast Guard (USCG) directly. If staff are unsure whether a situation constitutes a safety concern, they should: 1) address the concern with the skipper, 2) contact the land-based safety contact and Groundfish Project Leader, and 3) document the circumstances as the situation allows, utilizing photos or videos if necessary.

Each survey binder has a Vessel Safety Checklist Form (Appendix K) that must be completed with the skipper prior to the vessel leaving the dock along with a Vessel Diagram Form (Appendix L). The crew leader ensures that ADF&G staff have a safety orientation with the skipper that covers location and operation of the Emergency Position Indicating Radio Beacon (EPIRB), life raft, fire extinguishers, and other safety equipment. The Vessel Diagram Form illustrates locations of the necessary safety equipment and allows staff to orient themselves with the working space on deck. Staff are told where to report in an emergency and the best location to store their survival suits. Survey staff must wear a personal flotation device (PFD) while on deck. A personal locator beacon (PLB) is assigned to each ADF&G staff on each vessel and are stored in an accessible location of their choice. Staff and PLB assignments are documented and sent to the appropriate shoreside safety contacts if a PLB is activated. The PLBs are manually activated and send a signal to the USCG once activated.

Daily communication is required to ensure crew safety and operational awareness. Before departure, all crew must verify that their check-in message via Zoleo device and app successfully reach both designated emergency land contacts. Each day between 8:00 AM and 3:00 PM, crew leaders must send a check-in to both land contacts, who must confirm receipt. If a primary communication device fails, the other ADF&G crew member assumes check-in responsibilities, with Starlink or cellular SMS used if all Zoleo devices are unavailable. If no check-in is received by 3:00 PM, emergency land contacts will verify the missed check-in, attempt contact through the other vessel(s), notify the U.S. Coast Guard if communication cannot be established, and provide a situation update to project leadership. In addition, crew leaders must check in with the survey coordinator via the designated Microsoft Teams survey chat before 10:00 AM each day, providing planned survey activities, field conditions, schedule changes, and any safety concerns. By the end of each day, crew leaders must report biological sample totals and discuss any necessary sampling adjustments in the Teams survey chat, with the other ADF&G crew member assuming the above reporting duties if needed.

SCHEDULE AND DELIVERABLES

The SSEI sablefish survey coordinator will begin planning the annual sablefish survey in February, including ensuring two chartered vessels are contracted, opening a fish buy bid to local processors, organizing gear, and training ADF&G staff using the protocols outlined in this document. Chartered

vessel skippers and ADF&G staff assigned to the survey are provided with survey gear and materials prior to the survey departure. The survey is then conducted in April or May.

RESPONSIBILITIES

Aaron Baldwin, Fishery Biologist II, Crew/Crew Leader. Responsible for collecting data during the survey as outlined in this document.

Abigail Brady, Fish & Wildlife Technician III, Crew/Crew Leader. Responsible for collecting data during the survey as outlined in this document.

Kalli Brettrager, Fishery Biologist I, Crew/Crew Leader. Responsible for collecting data during the survey as outlined in this document.

Laura Coleman, Fishery Biologist II, Shore based Lead and Safety Contact. Oversight of survey logistics and safety, as well as gear storage and inventory. Assists with ADF&G survey staff training, participation in survey, and data review, when necessary.

Rhea Ehresmann, Fishery Biologist III, Crew/Crew Leader and Survey Coordinator. Oversight of all aspects of the project, including operational planning, processor and vessel contracts, equipment purchasing and inventory, ADF&G survey staff training, participation in survey, and data review. Utilizes survey results for the stock assessment the following year.

Alex McCarrel, Fishery Biologist II, Crew/Crew Leader. Responsible for collecting data during the survey as outlined in this document.

Ana Vinson, Fishery Biologist I, Crew/Crew Leader. Responsible for collecting data during the survey as outlined in this document.

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TABLES

Table 1.—Gear history of the Southern Southeast Inside (SSEI) Subdistrict longline survey from 1988 to 2025. Gear was standardized in 2000, and no survey was conducted in 2005. The final longline survey was conducted in 2025.

Year	ADF&G number	Vessel name	Gear type	Skate length (m)	Hook size	Hook spacing (m)	Tied gangion length (cm)	Bait	Skates per set	Hooks per skate	Soak time (hr)
1988	41440	<i>Isis</i>	Snap	300	13 C	3	25	Herring	10	100	1
1989	41440	<i>Isis</i>	Snap	300	13 C	3	25	Herring	5	100	1
1990	99999	<i>Isis</i>	Snap	300	13 C	3	25	Herring	5	100	1
1991	99999	<i>Isis</i>	Snap	300	13 C	3	25	Herring	5	100	1
1992	41440	<i>Isis</i>	Snap	300	13 C	3	25	Herring	5	100	1
1993	99999	<i>Isis</i>	Snap	300	13 C	3	25	Herring	5	100	1
1994	99941	<i>Medeia</i>	Snap	300	13 C	3	25	Herring	5	100	1
1995	99941	<i>Medeia</i>	Snap	300	13 C	3	25	Herring	5	100	1
1996	99941	<i>Medeia</i>	Snap	300	13 C	3	25	Herring	5	100	1
1997	44450	<i>Cherokee</i>	Conv.	182.9	13 C	1.8	36	Cut squid	15	100	3 to 11
	45211	<i>Providence</i>	Conv.	182.9	13 C	1.6	23	Cut squid	15	100	3 to 11
1998	41043	<i>Jennifer Lee</i>	Conv.	164.6	13 C	1.6	28	Cut squid	11	100	3 to 11
	45211	<i>Providence</i>	Conv.	182.9	13 C	1.6	23	Cut squid	11	100	3 to 11
1999	41043	<i>Jennifer Lee</i>	Conv.	164.6	13 C	1.6	28	Cut squid	11	100	3 to 11
	45211	<i>Providence</i>	Conv.	168.3	13 C	1.6	23	Cut squid	11	100	3 to 11
2000	41043	<i>Jennifer Lee</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
	45211	<i>Providence</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11

Table 1.–Page 2 of 4.

Year	ADF&G number	Vessel name	Gear type	Skate length (m)	Hook size	Hook spacing (m)	Tied gangion length (cm)	Bait	Skates per set	Hooks per skate	Soak time (hr)
2001	41043	<i>Jennifer Lee</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
	45211	<i>Providence</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
2002	41043	<i>Jennifer Lee</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
	45211	<i>Providence</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
2003	41043	<i>Jennifer Lee</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
	45211	<i>Providence</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
2004	41043	<i>Jennifer Lee</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
	45211	<i>Providence</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
2006	41043	<i>Jennifer Lee</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
	41022	<i>Viking Maid</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
2007	33468	<i>Masonic</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
	45211	<i>Providence</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
2008	45211	<i>Providence</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
	41022	<i>Viking Maid</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
2009	33468	<i>Masonic</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
	45211	<i>Providence</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
2010	45211	<i>Providence</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11
	41022	<i>Viking Maid</i>	Conv.	100	13 C	2	38	Cut squid	25	45	3 to 11

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Table 1.–Page 3 of 4.

Year	ADF&G number	Vessel name	Gear type	Skate length (m)	Hook size	Hook spacing (m)	Tied gangion length (cm)	Bait	Skates per set	Hooks per skate	Soak time (hr)
2011	33468	<i>Masonic</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	41022	<i>Viking Maid</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
2012	45211	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	41022	<i>Viking Maid</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
2013	45211	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	41022	<i>Viking Maid</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
2014	45211	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	41022	<i>Viking Maid</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
2015	45211	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	41022	<i>Viking Maid</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
2016	52119	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	41022	<i>Viking Maid</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
2017	45211	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	33468	<i>Masonic</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
2018	33468	<i>Masonic</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	45211	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
2019	45211	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
2020	45211	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	59664	<i>Sisu</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
2021	45211	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	33133	<i>Predator</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11

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Table 1.–Page 4 of 4.

Year	ADF&G number	Vessel name	Gear type	Skate length (m)	Hook size	Hook spacing (m)	Tied gangion length (cm)	Bait	Skates per set	Hooks per skate	Soak time (hr)
2022	41022	<i>Viking Maid</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	45211	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
2023	41022	<i>Viking Maid</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	45211	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
2024	41022	<i>Viking Maid</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	45211	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
2025	41022	<i>Viking Maid</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11
	45211	<i>Providence</i>	Conv.	100	13C	2	38	Cut squid	25	45	3 to 11

Table 2.—Gear history of the Southern Southeast Inside (SSEI) Subdistrict pot survey from 2023 to 2027.

Year	ADF&G number	Vessel name	Gear type	Skate length (m)	Pot size (cm)	Pot spacing (m)	Bait	Pots per set	Pots per skate	Soak time (hr)
2023 ^a	36135	<i>Lea</i>	Pots	550	69x127; 77x152	55	Cut squid	40	10	7 to 10
2024 ^a	37833	<i>Ilona B</i>	Pots	550	69x127; 77x152	55	Cut squid	30	10	7 to 10
2025 ^a	37833	<i>Ilona B</i>	Pots	550	69x127; 77x152	55	Cut squid	30	10	7 to 10
2026 ^b	37833	<i>Ilona B</i>	Pots	550	69x127	55	Cut squid	30	10	7 to 18
	41022	<i>Viking Maid</i>	Pots	550	69x127	55	Cut squid	30	10	7 to 18
2027 ^b	37833	<i>Ilona B</i>	Pots	550	69x127	55	Cut squid	30	10	7 to 18
	41022	<i>Viking Maid</i>	Pots	550	69x127	55	Cut squid	30	10	7 to 18

^a Surveys from 2023–2025 were side-by-side comparison studies along hook-and-line longline gear.

^b The first pot survey was conducted in 2026 with new, standardized pot gear for each boat and will be repeated in 2027.

Table 3.—Southern Southeast Inside (SSEI) Subdistrict pot survey master station list.

Station	Trip	Statistical area	Start latitude	Start longitude	End latitude	End longitude	Start depth (fathoms)	End depth (fathoms)	Area description
101	1	325533	55 50.11	132 29.83	55 48.71	132 28.76	276	291	Little Ratz Harbor
102	1	325533	55 48.06	132 24.93	55 46.95	132 23.96	326	330	Narrow Point
103	1	325531	55 42.30	132 19.65	55 40.87	132 18.48	320	326	Tolstoi Point
44	1	325531	55 35.40	132 15.03	55 34.10	132 13.52	300	268	Ship Island
37	1	315502	55 29.19	132 01.50	55 28.42	131 58.99	243	241	Caamano Island
36 ^a	1	315502	55 25.36	131 57.16	55 24.04	131 56.01	254	240	Vallenar Point
133 ^b	1	315502	55 21.50	131 54.36	55 20.20	131 54.29	171	234	Vallenar Point
27 ^a	1	315502	55 15.31	131 55.75	55 13.92	131 56.20	194	199	Wedge Island
107	1	315502	55 12.13	131 54.48	55 10.53	131 54.26	232	235	Wedge Island
116	1	315432	54 42.83	131 50.46	54 44.29	131 50.43	207	202	Cape Chacon
130 ^b	1	315432	54 43.27	131 45.85	54 41.98	131 45.83	207	207	West Devil Rock
117	1	315432	54 41.04	131 41.73	54 42.55	131 41.64	229	239	West Devil Rock
118	1	315431	54 39.76	131 47.72	54 38.31	131 47.78	193	189	West Devil Rock
2 ^a	1	315432	54 39.75	131 54.28	54 41.32	131 54.06	196	202	Cape Chacon
119	1	315431	54 36.82	131 57.01	54 35.23	131 57.03	195	184	Cape Chacon
109	2	315502	55 06.42	131 47.66	55 05.22	131 45.91	277	260	Canoe Cove
20	2	315502	55 01.87	131 43.66	55 00.39	131 43.16	217	217	Dall Head
110	2	315432	54 59.73	131 50.31	54 58.19	131 50.36	222	233	Percy Island
18	2	315432	54 55.52	131 48.17	54 54.37	131 48.20	226	225	Hidden Bay
12	2	315432	54 50.30	131 52.81	54 48.75	131 53.00	223	216	Island Point
132 ^b	2	315432	54 51.49	131 45.34	54 50.31	131 45.30	222	219	West Rock

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Table 3.–Page 2 of 2.

Station	Trip	Statistical area	Start latitude	Start longitude	End latitude	End longitude	Start depth (fathoms)	End depth (fathoms)	Area description
113	2	315432	54 50.62	131 40.06	54 49.15	131 41.14	195	227	West Rock
131 ^b	2	315432	54 47.29	131 46.31	54 45.99	131 46.28	210	208	West Rock
120	2	315431	54 34.39	131 51.83	54 32.73	131 51.19	184	185	Celestial Reef
121	2	315431	54 32.85	131 44.06	54 31.47	131 44.07	193	192	Celestial Reef
122	2	315431	54 35.42	131 40.01	54 33.78	131 40.11	210	182	West Devil Rock
124	2	325431	54 30.53	132 15.40	54 30.51	132 12.54	195	185	Point Nunez
126	2	325401	54 27.32	132 18.97	54 27.29	132 16.30	198	196	Surf Point
127	2	325401	54 27.33	132 25.50	54 27.31	132 23.64	196	197	Point Marsh

^a Stations 2, 27, and 36 are historic stations that were excluded during the 2013 redesign but were reinstated for use in beginning with the 2026 survey.

^b Stations 130–133 are new survey stations established in 2026 using a random stratified sampling design.

Table 4.–Station catch per unit effort (CPUE; sablefish per hook) and average sablefish weight (kg) from the 2023 to 2025 Southern Southeast Inside (SSEI) Subdistrict longline surveys with average for all 3 years.

Trip	Station number	2023		2024		2025		Average	
		Sablefish per hook	Average weight (kg)	Sablefish per hook	Average weight (kg)	Sablefish per hook	Average weight (kg)	Sablefish per hook	Average weight (kg)
1	20	0.27	1.7	0.20	1.7	NA	1.7	0.23	1.7
1	31	0.08	1.6	0.11	1.6	0.03	1.6	0.07	1.6
1	37	0.17	2.6	0.30	2.8	0.18	2.6	0.22	2.7
1	44	0.41	2.3	0.39	2.6	0.37	2.8	0.39	2.6
1	101	0.21	1.9	0.23	2.0	0.08	1.8	0.17	1.9
1	102	0.15	1.9	0.20	2.1	0.14	2.6	0.17	2.2
1	103	0.23	1.9	0.34	2.0	0.20	2.1	0.25	2.0
1	107	0.34	2.7	0.33	2.6	0.16	2.4	0.28	2.6
1	109	0.43	2.2	0.23	2.1	NA	2.1	0.33	2.1
1	118	0.65	1.7	NA	1.6	0.40	1.9	0.52	1.7
1	119	0.32	2.5	0.43	2.5	NA	2.6	0.37	2.5
1	120	0.52	2.1	NA	NA	NA	1.2	0.52	1.7
1	121	0.29	1.8	0.09	1.5	0.04	1.2	0.14	1.5
1	122	0.49	2.3	0.46	2.3	0.38	2.1	0.45	2.2
1	123	0.47	1.9	0.22	2.1	NA	2.0	0.35	2.0
2	12	0.24	1.7	0.23	1.4	0.15	1.6	0.21	1.6
2	18	0.17	1.7	0.16	1.6	0.09	1.7	0.14	1.7
2	110	0.16	2.2	0.15	2.1	NA	2.1	0.15	2.1
2	111	0.15	2.1	0.19	1.6	NA	1.9	0.17	1.9
2	113	0.53	1.9	0.37	1.8	0.20	1.7	0.36	1.8
2	115	0.40	1.7	0.25	1.5	0.14	1.6	0.26	1.6
2	116	0.35	1.4	0.35	1.6	0.13	1.5	0.27	1.5
2	117	0.55	1.6	0.20	1.9	0.10	1.4	0.28	1.6
2	124	0.55	2.4	0.44	2.1	0.38	2.3	0.46	2.3
2	125	0.48	2.4	0.39	2.2	0.32	2.4	0.40	2.4
2	126	0.51	2.3	0.48	2.0	0.28	2.2	0.42	2.2
2	127	0.49	2.1	0.40	2.1	NA	NA	0.44	2.1
2	128	0.43	2.4	0.25	2.3	0.29	2.8	0.32	2.5
2	129	0.57	1.9	0.41	2.0	NA	NA	0.49	1.9
Average		0.37	2.0	0.29	2.0	0.20	2.0	0.31	2.0

Note: NA= station not fished.

FIGURES

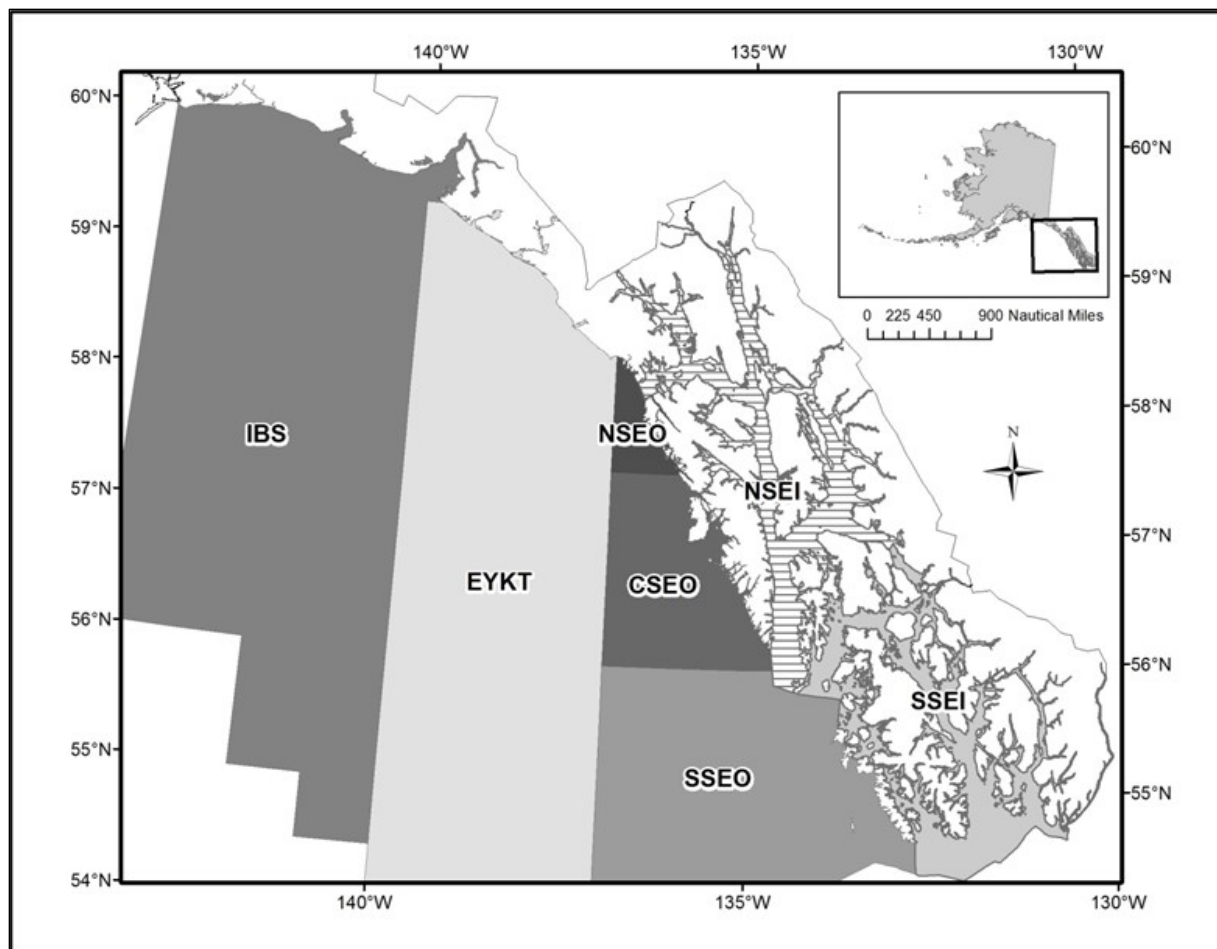


Figure 1.—Southeast District groundfish management area boundaries in Southeast Alaska waters excluding lingcod and black rockfish: Icy Bay Subdistrict (IBS), East Yakutat (EYKT) Section, Northern Southeast Outside (NSEO) Section, Central Southeast Outside (CSEO) Section, Southern Southeast Outside (SSEO) Section, Northern Southeast Inside (NSEI) Subdistrict and Southern Southeast Inside (SSEI) Subdistrict.

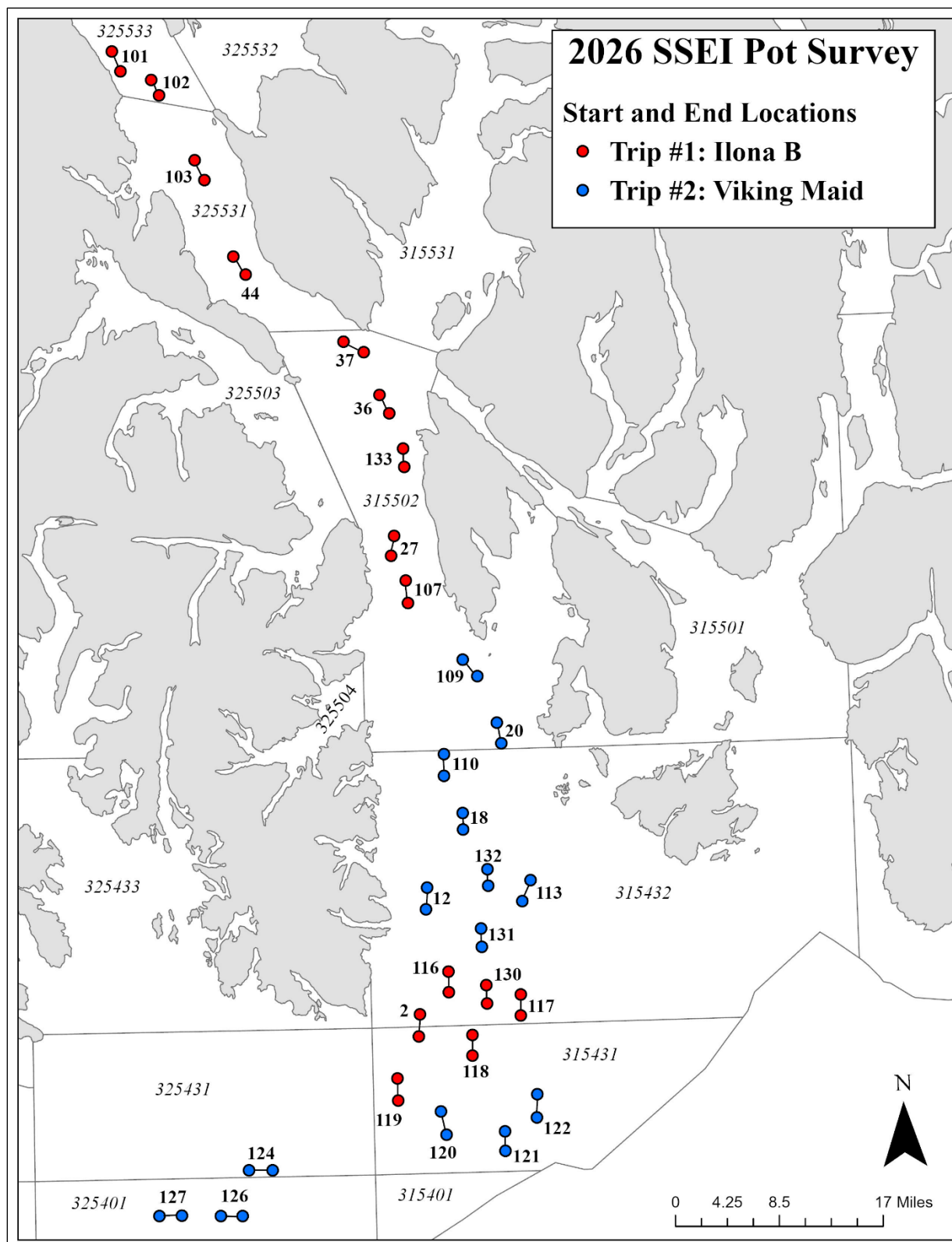


Figure 2.—Southern Southeast Inside (SSEI) survey station locations for the pot vessels.

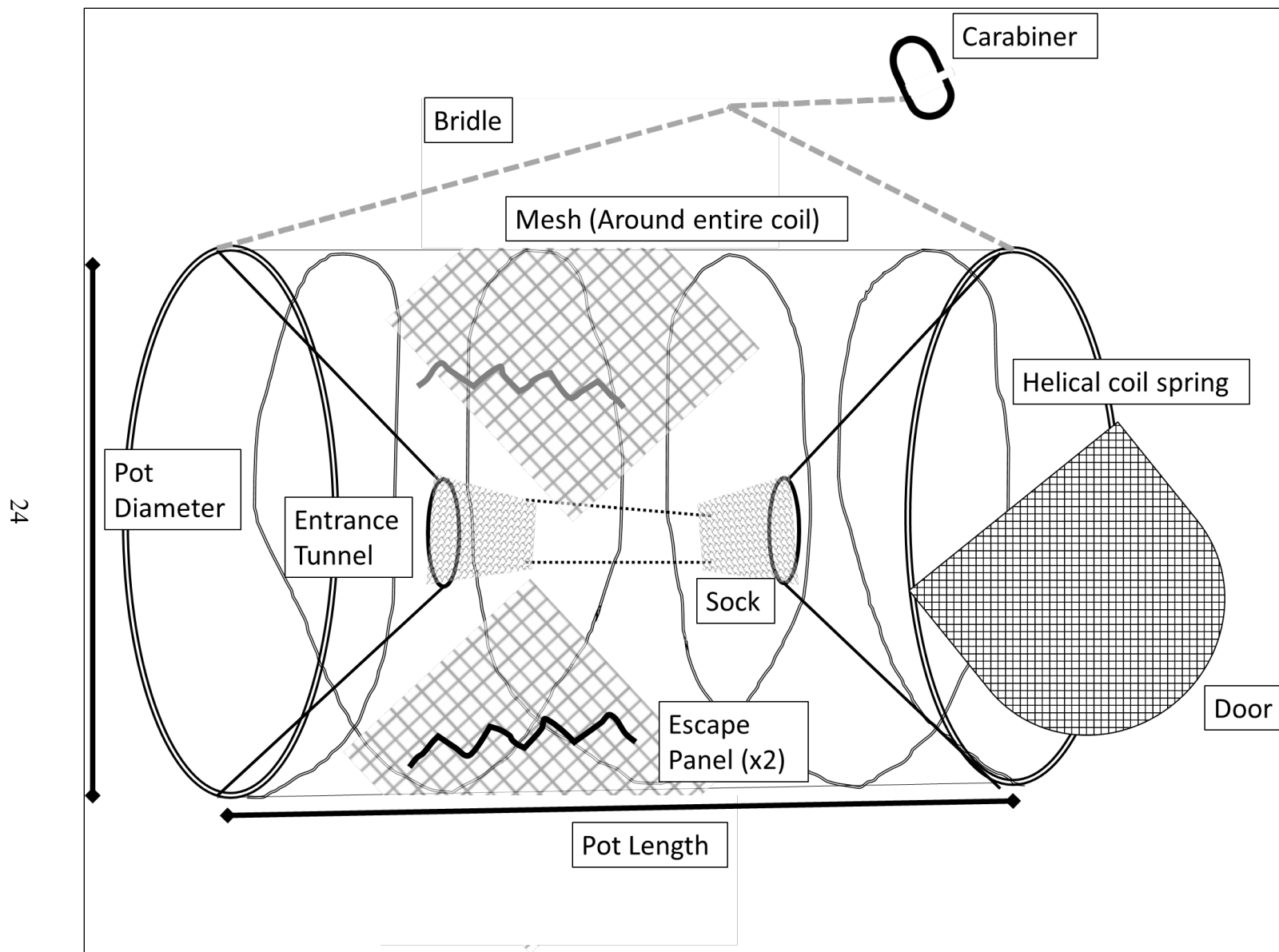


Figure 3.—One slinky pot configuration.

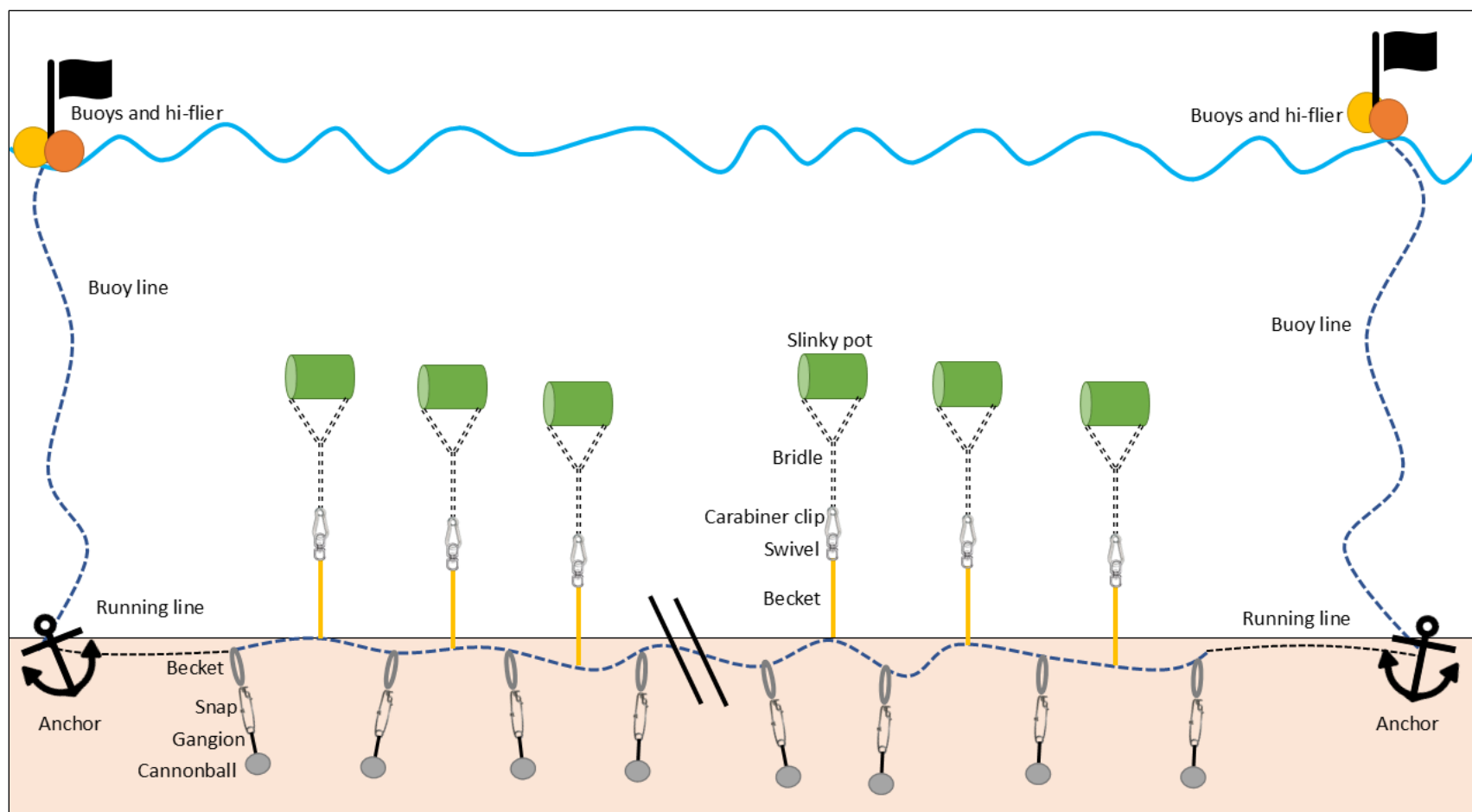


Figure 4.—Gear configuration for one pot set.



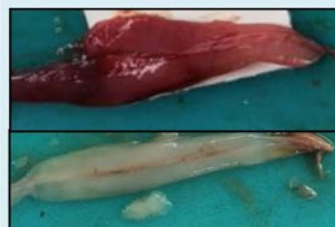
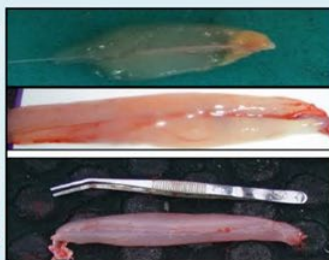
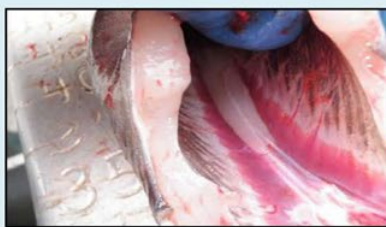
Figure 5.—Eastern cut sablefish.

Female (02) Macroscopic Maturity Guide

Sex Not Observed (00) or Sex Indiscernible (99)

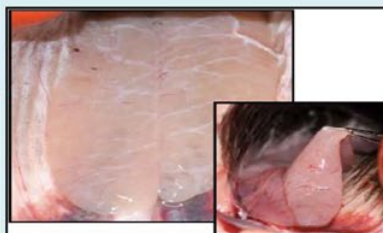
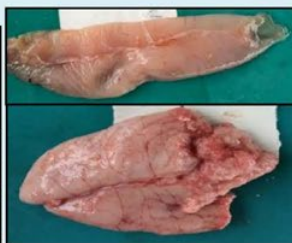
Immature (01)

- Two small elongated lobes or enlarging ovaries.
- Translucent (some light should pass through) and smooth.
- Clear, beige, yellowish, or red if experienced trauma.
- Has not spawned before.



Mature (07)

- Ovary medium to large in size.
- Full or flaccid.
- Flaccid if recently spawned, just beginning to develop yolk, or will skip spawning.
- Full if yolk further developed and eggs enlarged.
- Eggs visible if enlarged but not visible if no yolk or early yolk stage.
- Beige, yellowish, or somewhat red if experienced trauma or recently spawned.
- At spawning, eggs will run with light pressure.
- Has spawned before or may be first time to spawn.



Maturity Not Observed (09)

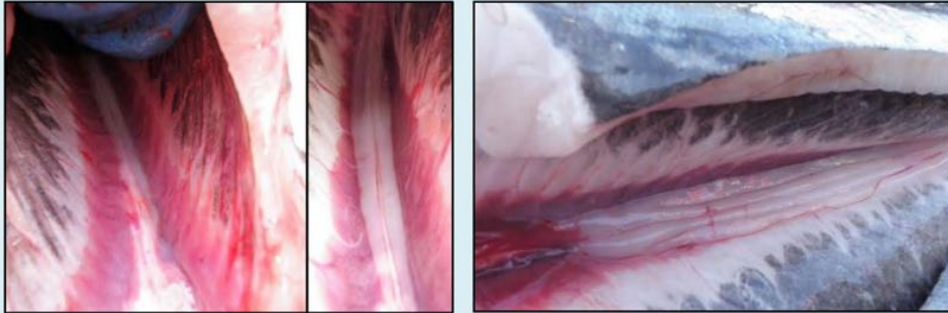
Figure 6.—Female sablefish macroscopic maturity guide.

Male (01) Macroscopic Maturity Guide

Sex Not Observed (00) or Sex Indiscernible (99)

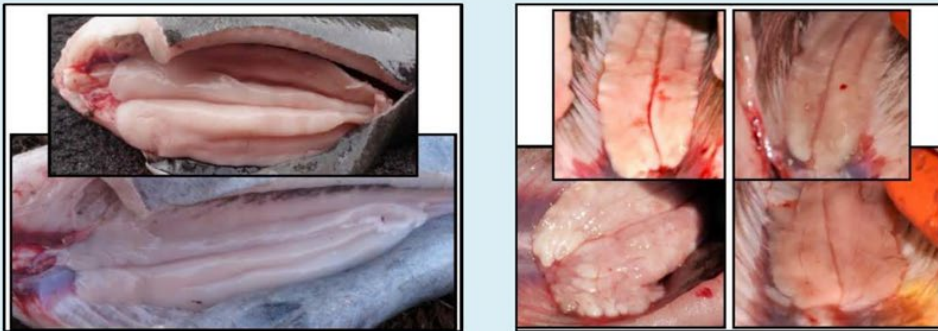
Immature (01)

- Testes small, narrow, flat; ribbon-like to enlarging with four discernible creases.
- Clear to light pink.
- Has not spawned before.



Mature (07)

- Testes large with 4 distinct lobes.
- Off-white to white.
- May be full, firm, or shriveled with wrinkles.
- Will be full if further developed in preparation for spawning.
- Will be shriveled or firm if recently spawned or early in preparation for spawning.
- When spawning, milt will extrude with slight pressure.
- Has spawned before or may be first time to spawn.



Maturity Not Observed (09)

Figure 7.—Male sablefish macroscopic maturity guide.

APPENDICES

VESSEL INFORMATION FORM

Project: Sablefish Pot Survey - NSEI or SSEI (circle one)

Year: 20____

Trip #:

Vessel:

Departure Port: _____ Date: _____ Time: _____

Return to Port: _____ Date: _____ Time: _____

Vessel Hold Type: ICE SLUSH RSW

ADF&G Crew: _____

Skipper and crew: _____

Amount of bait taken: _____ bags @ _____ lbs/bag = _____ lbs

Number of sets:

Amount of bait left over: _____ bags @ _____ lbs/bag = _____ lbs

Processor/Tender name: _____

Location, date, and time of 1st delivery: _____

Est. time to unload: _____

Location, date, and time of 2nd delivery: _____

Est. time to unload: _____

SABLEFISH POT SURVEY										SKIPPER SET FORM																					
YEAR 2026		PROJECT Clarence Strait Pot				TRIP NUMBER 1		SET NUMBER 		STATION NUMBER 101			STAT AREA 325533 Little Ratz Harbor																		
START LAT (DM) 55 50.11		START LONG (DM)		Depth 276		END LAT (DM) 55 48.71		END LONG (DM) 132 28.76		Depth 291																					
1st anchor overboard				X		2nd anchor overboard																									
DATE AND (military) TIME SECOND ANCHOR SET		DATE AND TIME FIRST BUOY HAULED		DATE AND TIME FIRST ANCHOR HAULED		DATE AND TIME SECOND ANCHOR HAULED		DATE AND TIME SECOND BUOY HAULED																							
# POTS SET	# POTS RETRIEVED	POT START DEPTH	POT END DEPTH	POT AVG DEPTH	HAULBACK ORDER same as set opposite of set			SOAK TIME (HRS) 7-18 hrs anchor to anchor																							
Comments (whale depredation, shark entanglement, gear loss, parted line, etc.): Weather during set Wind (kt): Seas (ft): Set: → Haul: → Sample rate 1: Pots Sampled: Average weight: kg lb										BOTTOM SUBSTRATE		WIND DIRECTION		WIND SPEED (KT)																	
										Mud	Boulder	Calm	Calm (0-5)																		
										Mud/gravel	Cobble	N	5-10																		
										Mud/clay	Rock	NE	10-15																		
										Mud/shell	Hard	E	15-20																		
Mud/soft	Soft	SE	20-25																												
Mud/hard	Shell	S	25-30																												
Clay	Coral	SW	30-35																												
Sand	Mixed	W	35-40																												
Gravel	Unknown	NW	40+																												
										SEAS (FT)																					
Bottom Profile (record depth in fathoms at each pot)																															
ANCHOR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	ANCHOR

Appendix D.–Pot tally form.

SSEI Sablefish Pot Survey Tally Form													
Year: <u>20</u>		Trip: _____		Date: _____		Set: <u> </u> → <u> </u>							
Set #:		Station:		Sample Rate 1:		# Pots Sampled:		Haul: <u> </u> → <u> </u>					
Haul Information		Time		Haul Weather, Substrate, Comments									
Start		1st Buoy:		Wind (kt):		Anchor (substrate):							
		1st Anchor:		Seas (ft):		Comments:							
End		2nd Anchor:		Wind (kt):		Anchor (substrate):							
		2nd Buoy:		Seas (ft):		Comments:							
Pot #	# of samples taken per pot	SABLEFISH					IS THE POT VALID? Y / N	COMMENTS	Pot #	BYCATCH *Note if Dead! *			
		Retained	Discard Small	Discard Hagfish	Discard Other	Lost		Biotwine, door closures, fleas, missing bait bag, etc.		Halibut (200)	ATF (121)	Dover (124)	Other
1									1				
2									2				
3									3				
4									4				
5									5				
6									6				
7									7				
8									8				
9									9				
10									10				
11									11				
12									12				
13									13				
14									14				
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16									16				
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19									19				
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21									21				
22									22				
23									23				
24									24				
25									25				
26									26				
27									27				
28									28				
29									29				
30									30				
Totals:													

Appendix E.—Annotated main screen for Groundfish at-sea survey sampling application and notes/otolith comments pop-up menu.

The screenshot displays the main interface of the Groundfish at-sea survey sampling application. At the top, a header bar contains three buttons: "Set number", "Enter next set", and "Launches Main Menu options". Below this, a "Bio Sampling" tab is active, showing input fields for "Year: 2026", "Project: Clarence Sablefish Pot Survey", "Trip #: 1", and "Effort #: 1". A "New Effort" button is also present. A checkbox for "Display weights in: kg" is checked, with "lbs" as an alternative. The main data entry area is a table with columns: SP, Wt (kg), L (cm), Spe, Sex, Maturity, OTO, Otolith Cond., Comment, and Actions. A red arrow points to the "Actions" column header, labeled "# 1".

A "Notes/Otolith Comments" pop-up window is open, featuring a "Comments:" text area, an "Otolith #" input field with a "Get Next" button, and a list of "Otolith Condition" options: "Not Taken", "Both Otolos Found" (selected), "1 Broken Oto", "2 Broken Otolos", "1 Lost Oto", "2 Lost Otolos", "1 Broken 1 Lost", and "Asymmetrical Otolos". At the bottom of the pop-up are "SAVE" and "CANCEL" buttons.

On the right side, a vertical panel contains several input fields: "Weight" (with kg/lbs radio buttons), "Length", "Species" (set to "Sablefish"), "Sex" (with a "Select Sex" dropdown), and "Maturity" (with a "Select Maturity" dropdown). Below these are "OTO" and "NOTES" buttons. A red arrow points to the "OTO" button, labeled "Assigns the specimen otolith number". Another red arrow points to the "NOTES" button, labeled "Running average of sample weights". Below the "NOTES" button is a field for "Avg. Sample Weight" with the value "N/A". A red arrow points to this field, labeled "Type custom notes or select Otolith Condition from menu". At the bottom of the panel is an "ADD" button, with a red arrow pointing to it labeled "Saves specimen data and moves forward to next specimen number".

Appendix G.—Example of 48-cell sablefish otolith tray label (front and back) and information written on front of completed 48-cell sablefish otolith tray in third rectangular image.

ALASKA DEPT. OF FISH & GAME - AGE DETERMINATION UNIT

SAMPLE DATE: 05/14/2024 TRAY NO. 1 OF 7

PORT/LOCATION: Clarence Strait SSEI

SAMPLE ID: 24SSEI-1 (1 - 48)

SPECIES: 710

SAMPLERS: Anna Plopoma & Sebastian Lobus

COMMENTS: #23 broken during cleaning

ADU CONTACT INFO: 907-465-3054(v); 907-465-2765(f); dfg.dcf.adu@alaska.gov
PO BOX 115526 JUNEAU, AK 99811

24SSEI-1 1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	24SSEI-1 48

SSEI Trip #, Specimen otolith range
Ex: 24SSEI-1 (1-48)

Tray #1 of ____
(fill in end of survey when total known)

ADFG Survey Tag Recovery Form for use only for tags with survey trip number and set number			
F/V _____	Trip # _____	Date of Landing _____ yr _____	
Species _____	Set Number _____	Port of landing _____	
Attach tags here (so tag numbers are visible)	Tag Number _____ Tag Number _____ Tag Number _____ Tag Number _____ Tag Number _____ Tag Number _____	Size _____ cm Size _____ cm Size _____ cm Size _____ cm Size _____ cm Size _____ cm	FL _____ FL _____ FL _____ FL _____ FL _____ FL _____ FL _____
			Reward _____
		Measured by staff _____	
Reward recipient _____			
Data entered (date) _____	Recovery Info: ADF&G Survey	Tag turned in by: ADF&G Survey	
Sampler _____ Please put your name in here if you are the one filling in this form		Return to: ADFG; 304 Lake St., Room 103; Sitka AK 99835 revised 6/16/26	

Appendix J.—Vessel summary form.

Vessel Summary Form -- Sablefish Pot Survey																Trip #: 20	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	
Date Hauled	Set #	Station #	Retained	Discard only + lost = Total	Sablefish from invalid pots only	Total valid sablefish = (D + E - F)	Number of valid pots	CPUE fish/valid pots (G / H)	Last Year CPUE fish/valid pots	Avg kg	Avg round lbs (K*2.2046)	Last Year Avg round lbs	Total round lbs for set (D * L)	Cumulative round lbs on board	Round lbs discarded (Discard only * L)	Stat area	
				____ + ____ =													
				____ + ____ =													
				____ + ____ =													
				____ + ____ =													
				____ + ____ =													
				____ + ____ =													
				____ + ____ =													
				____ + ____ =													
Date of Landing						Landed Weight				Stat Area % Breakdown for Fish Ticket							

Vessel Safety Checklist

Must be completed and signed **prior** to departure. Items in **RED** are no-go items. If these cannot be answered with a “Yes” or fixed prior to start of survey, the vessel may not depart!

Prior to the departure of the YYYY Circle One _____ SSEI/NSEI sablefish survey the ADF&G science crew (_____ and _____) met with _____ (vessel captain) to discuss vessel safety procedures and equipment. This meeting took place onboard the FV _____ at Time and Date _____, _____. During this meeting we saw and discussed:

- 1) The **USCG Commercial Fishing Safety Decal** (typically located on window of wheelhouse). We verified that this sticker is valid through the end of this survey (Yes) (No)
- 2) The **life raft** is located in a float-free location and has sufficient capacity for everyone who will be on board during this survey (Yes) (No)
- 3) The **hydrostatic release on the life raft** is correctly set up (see diagram on next page) and the hydrostatic release expiration date is valid through survey (Yes) (No)
- 4) The **Type 1 EPIRB** on this vessel was visually confirmed and is:
 Located in a float-free location (Yes) (No)

 Hydrostatic release expiration date is valid through survey (Yes) (No)

 Battery and NOAA registration sticker are valid through survey (Yes) (No)
- 5) There are sufficient **immersion suits** onboard for all crew. Both members of the science crew have their own and know where these will be stowed. Location is accessible in case of cabin fire or other emergency (Yes) (No)

6) During this safety check we have:

- ☐ Seen the location of radios and discussed emergency call procedures (these are posted)
- ☐ Discussed emergency alarms and procedures (duties, muster station, etc.)
- ☐ Discussed Man Overboard (MOB) procedures
- ☐ Seen the location of fire extinguishers, especially those near high-risk areas
- ☐ Know the location of primary and secondary first aid kits
- ☐ Seen station bill and have discussed our duties, if any, during the listed emergencies
- ☐ Seen location of vessel flares and have discussed which types are available
- ☐ Seen location of smoke detectors and confirmed Co2 detectors are up to date and functional

7) We have also discussed:

- ☐ The expected workflow and safe areas for us to be on deck
- ☐ Our mandatory daily check-in procedures with home port
- ☐ Verified, if needed, any allergies, potential medical conditions or dietary requirements of science crew
- ☐ Where our sampling gear, including raingear, should be stowed to be both accessible to us but not infringing upon crew space
- ☐ Where we can safely plug in and charge our electronics, both during the day and overnight

As the science crew onboard this vessel for the YYYY Circle One _____ SSEI/NSEI sablefish survey we certify that we participated in the above safety check in person and that the above checked statements are true to the best of our knowledge (sign and date).

_____ (Lead) _____ (Crew)

-continued-

Illustrations of safety checklist items.



Commercial Fishing Safety Examination Decal – Sticker typically located on window of wheelhouse. Verify that expiration date is after survey dates.

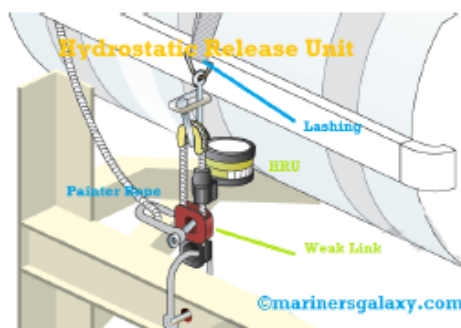
EPIRB Type 1 = will deploy automatically



Type 1 EPIRB – Needs to be located in a float-free location. Check registration, hydrostatic release expiration dates, and battery. Verify that expiration dates are after survey dates.



Examples of **life raft** – need to be in float-free locations. Check capacity (large enough for all personnel onboard). Check expiration dates – verify that these are after survey dates.



Setup of **hydrostatic release for life raft**. Verify that this is correctly assembled. Verify that expiration dates are after survey dates.



CLASSES OF FIRES						
	A	B	C	D	K	
EXTINGUISHING TYPE	CLASS A	CLASS B	CLASS C	CLASS D	CLASS K	
FLAMMABLE LIQUIDS	YES	YES	NO	NO	NO	
FLAMMABLE SOLIDS	YES	YES	YES	YES	NO	
FLAMMABLE GASES	YES	YES	YES	YES	YES	
FLAMMABLE METALS	YES	NO	NO	NO	YES	
COOKING OILS	YES	YES	YES	YES	YES	

Fire extinguishers – there need to be fire extinguishers in all hazard areas on board. This includes the galley, entry to engine room, outside crew quarters, and wheelhouse.

STATION BILL											
NAME	STATION	STATION	STATION	STATION	STATION	STATION	STATION	STATION	STATION	STATION	STATION
BOAT	BOAT	BOAT	BOAT	BOAT	BOAT	BOAT	BOAT	BOAT	BOAT	BOAT	BOAT
ENGINE	ENGINE	ENGINE	ENGINE	ENGINE	ENGINE	ENGINE	ENGINE	ENGINE	ENGINE	ENGINE	ENGINE
CAPTAIN	CAPTAIN	CAPTAIN	CAPTAIN	CAPTAIN	CAPTAIN	CAPTAIN	CAPTAIN	CAPTAIN	CAPTAIN	CAPTAIN	CAPTAIN
CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF
COOK	COOK	COOK	COOK	COOK	COOK	COOK	COOK	COOK	COOK	COOK	COOK
ENGINEER	ENGINEER	ENGINEER	ENGINEER	ENGINEER	ENGINEER	ENGINEER	ENGINEER	ENGINEER	ENGINEER	ENGINEER	ENGINEER
COXSWAIN	COXSWAIN	COXSWAIN	COXSWAIN	COXSWAIN	COXSWAIN	COXSWAIN	COXSWAIN	COXSWAIN	COXSWAIN	COXSWAIN	COXSWAIN
CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF	CHIEF

Example of Station Bill – this should include crew duties during major emergencies; Abandon ship, Fire, Man Overboard.

Vessel Diagram

At beginning of survey please make a sketch of working area of boat. Include locations for setting and hauling, area where pot tallies and biological sampling staff will typically stand, identify crew work areas, roller, block, direction of line, checker bins, and identify hazard areas.

Vessel Name: _____

Scientific Staff: _____ (Lead)

Scientific Staff: _____ (Crew)

Stern

Starboard

Port

Bow