CALIFORNIA WETFISH PRODUCERS ASSOCIATION
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March 10, 2023

Mr. Marc Gorelnik, Chair
And Members of the Pacific Fishery Management Council

REQUEST RENEWAL OF EXEMPTED FISHERY PERMIT (EFP)
TO ALLOW FISHING OF PACIFIC SARDINE FOR BIOLOGICAL SAMPLES IN 2023-24 NEARSHORE RESEARCH PROGRAM

Dear Chair Gorelnik and Council Members,

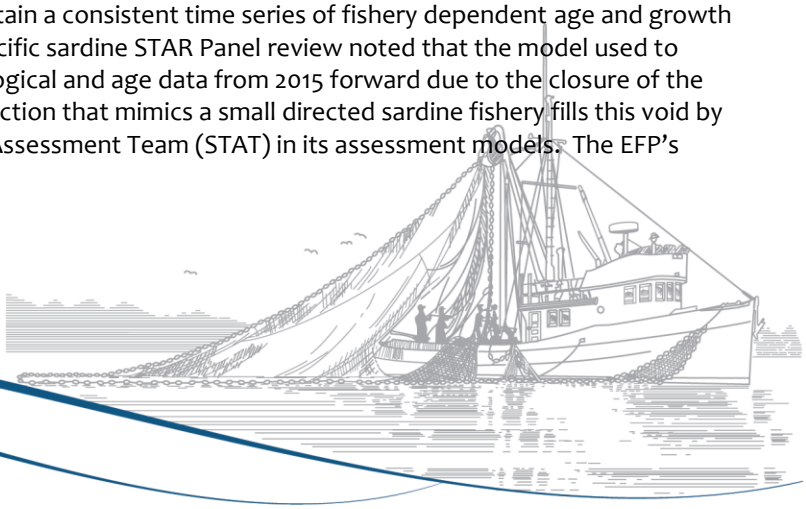
On behalf of CWPA, I am submitting this request for renewal of the EFP authorizing sardine fishing to collect fishery dependent biological samples, continuing the field work begun in May 2020.

Date of Application (4a): March 10, 2023

Applicant Name and Mailing Address (4b):
California Wetfish Producers Association
PO Box 1951, Buellton, CA 93427
(805) 693-5430

Purpose and Goals/Justification/Disposition of Catch (4c and d)
The proposed EFP will continue to serve the primary objective of the continuation of a time series of fishery dependent biological data for use in stock assessments. The EFP will secondarily be used to collect monthly biological data from two primary fishing areas to study the stock structure and dynamics of the northern and southern subpopulations of Pacific sardine under a Saltonstall-Kennedy (SK) grant. In 2020-2021, 2021-2022, and 2022-23 the Council recommended and NMFS approved EFPs allowing up to 520 mt of Pacific sardine harvests based on the first of these objectives. To maintain a continuing time series of fishery dependent biological data (and conduct the research under the SK grant) we again request 520 mt of Pacific sardine, although we have adopted a strategy to reduce catch of sardines under the EFP, as described below. The amount requested would come from the 2023-24 ACL for use during the fishing year from July 1, 2023 to June 30, 2024. Based on recent catches, we believe that the 2023-24 ACL would sufficiently cover the three EFP requests proposed for 2023, as well as all other uses approved.

Our initial 2020 EFP was motivated by the need to maintain a consistent time series of fishery dependent age and growth data for Pacific sardine stock assessments. The 2020 Pacific sardine STAR Panel review noted that the model used to estimate abundance had lacked fishery dependent biological and age data from 2015 forward due to the closure of the directed Pacific sardine fishery. Establishing a data collection that mimics a small directed sardine fishery fills this void by providing fishery dependent data for use by the Stock Assessment Team (STAT) in its assessment models. The EFP's



structure and protocols were developed in coordination with the Southwest Fisheries Science Center's lead Pacific sardine stock assessment scientist and the California Department Fish and Wildlife (CDFW) to use a systematic framework for carefully controlled collection of sardines that mirror directed fishery landings for biological information, including age, in both Southern California and Monterey-Central Coast throughout the usual fishing year.

Responding to a question from the CPS Management Team regarding the value of these data, senior assessment scientist Dr. Kevin Hill affirmed the continuing importance of maintaining a time series of fishery dependent age data, while the Pacific sardine fishery remains closed stating, "Biological samples from EFP fishing permits (directed loads), as well as the live bait fishery, are essential to assessing the sardine population. It is important to correctly characterize fishery removals with this sampling, because samples collected from incidental catches do not necessarily reflect local population demographics accurately due to size-selective schooling with other species (e.g. anchovy, mackerels)." (Personal Communication, September 2, 2022). The absence of biological sampling from fishery dependent data after the anchovy fishery declined in the early 1980s caused a 25-year gap in fishery dependent data, which limited stock assessment scientists' ability to develop a new model-based anchovy stock assessment. This EFP is intended to prevent that problem from occurring in Pacific sardine management by filling the data void arising from the directed fishery closure.

The EFP would allow the harvests to collect biological and age data representative of fishery dependent samples unavailable because of the directed fishery closure. To provide data that are most reflective of typical fishery dependent data streams, we collect EFP sets from two areas: Southern California and Monterey-Central Coast. Harvests under the EFP would be limited to 520 mt of sardines (30 sets of approximately 17 tons each), but we anticipate using substantially fewer tons by reducing catches any time grant monies are available to help support the harvests on a trip. Sale of EFP catches have been (and will continue to be) used to fund the fishing activity under the EFP. In cases where external funding is available to support a set, we plan to reduce the catches in that set from 17 mt to 10 mt.

Broader Significance (4e)

Beginning in October of 2022, biological and age data from this EFP and other sources (including prior EFPs) have been used for the analysis proposed by the SK project "Investigating Seasonal Nearshore Dynamics of Pacific Sardine (*Sardinops sagax*) in California" (a collaboration that includes Juan Zwolinski, a member of the SWFSC's Acoustic Trawl team, and that is supported by the California Department of Fish and Wildlife). The study will examine the northern and southern sardine subpopulation distributions and associated management challenges and complexities and is motivated by some of the same concerns that were the focus of the SWFSC's Pacific sardine stock structure workshop in November 2022. The project relies on a framework and protocol for collection and analysis of biological data year-round (including the fishery dependent data authorized by this EFP and monthly observations from fishermen targeting other CPS and live bait operators) to examine hypotheses related to the distribution and separation of the northern and southern subpopulations (including the 16.7°C (62° F) SST division). Analysis of these biological data and examination of Pacific sardine morphology compared with environmental indices and trends is intended to shed light on the stock structure and inform and improve Pacific sardine fishery management. We began this study in October 2022 and the project continues until March 31, 2024. See appendix 2 for a summary of preliminary data.

This project will also attempt to coordinate with spring and summer CDFW aerial surveys. When area and timing can be coordinated during survey months, vessels will attempt to capture schools identified by the CDFW observer to provide samples to corroborate aerial survey observations to further validate information collected by those surveys as suggested by the STAT and Stock Assessment Review panel. Since the spring of 2020, CWPA and CDFW have coordinated 13 sets (or approximately 20 percent of the sets under the EFP with the CDFW aerial surveys. We will again make efforts to coordinate sets with aerial survey observations starting in early April of 2023.

Continuation of the EFP (4f)

The EFP is proposed to be continued as long as the ongoing need for fishery dependent biological samples for the stock assessment exists. Continuation also depends on the economic feasibility of the EFP, as determined by funding to support this fishing and the marketability of catches from the EFP.

Vessels, Processors and Captains in the EFP (4g)
CWPA has identified 5 vessels that meet the criteria for this research project: 2 in Central California and 3 in Southern California. These vessels also participated in our 2021-22 and 2022-23 EFP work.

VESSEL NAME	SKIPPER	OWNER	USCG /REG	CPS PERMIT
Southern CA				
Triton	Pete Ciaramitaro	Triton Fishing Inc.	CF7218UH	14
Provider	Jamie Ashley	Provider LLC	D572344	1
Eileen	Nick Jurlin / Corbin Hanson	South Sound Fisheries Inc.	D252749	38
Monterey				
King Philip	Anthony Russo	SAAS Fishing LLC	D1061827	9
Trionfo	Aniello Guglielmo	Captain Squid, Inc.	D625449	45

Note: All vessels also are listed on our 2023-24 EFP renewal application to conduct point sets for the aerial survey.

Four processors have been identified to participate in the EFP, 2 in Southern California and 2 in Central California:

Cal-Marine Fish Co., 220 Cannery Street, San Pedro, CA 90731
(offloads FV Eileen, FV Provider, Contact; Vince Torre)

J. DeLuca Fish Company, 2194 Signal Place, San Pedro, CA 90731
(offloads FV Triton; Contact: John DeLuca)

Monterey Fish Company, 960 South Sanborn Road, Salinas, CA 93901, offloading in Moss Landing, CA
(offloads FV King Philip; Contact Anthony Tringali, or Ken Towsley)

Southern Cal Seafood, Pillar Point Harbor, Half Moon Bay or Monterey, CA; Contact Pete Guglielmo
(offloads FV Trionfo)

Species to be harvested (4h)
Under this project, purse seine vessels will be directed to capture up to 17 mts of sardines from a school of sardines each month in each area, with total catch of at most 520 mt. An EFP is necessary because the directed Pacific sardine fishery is closed and is anticipated to remain closed in 2023-24. No measurable impacts to non-target species are anticipated.

Justification of the amount of harvest (4i)
The request for 520 mt of sardines to support this EFP will allow for approximately 30 sets of approximately 17 mts each spread throughout the year. As noted above, the targeted catch amount in sets will be reduced to 10 mt when funding is available to subsidize the trip. The quantity of fish requested creates a reasonable incentive for fishermen to participate

in the EFP, given fuel and crew costs and the potential for some trips to yield no or few sardines. The sale of fish also helps to offset costs for processors who support the EFP through fish handling and bucket sampling the sets. This request acknowledges the current stock status of the northern subpopulation of Pacific Sardine, and the need for allocation of available tonnage to other fishery sectors.

Although sale of EFP catches have been (and will continue to be) used to fund the fishing activity under the EFP, we will use grant monies to offset vessel operational costs, reducing the target catch amount from 17 mt per trip to 10 mt per trip when external monies are available. So, while harvests under the EFP would be limited to 520 mt of sardines (30 sets of approximately 17 tons each), we anticipate using substantially fewer tons by reducing catches any time grant monies are available to help support the harvests on a trip.

Monitoring of catch (4j)
Fishermen will maintain a log to identify the location and time of each set (see Appendix 3). Upon landing, biologists will take a subset of each set at the dock for processing to obtain biological characteristics and age of individual fish. Processors will maintain bucket sample records of the weight of Pacific sardine and other species groups, to validate species composition.

CWPA will notify NMFS and CDFW Enforcement at least 12 hours before a vessel goes out to inform them of vessel's name and locations to be targeted for sampling, and the processor who will be receiving research fish that day. The survey plan anticipates sending no more than one vessel per month in each area, except during aerial survey months.

CWPA will also maintain a record of the volume/total weight of sardines captured on each trip and will monitor progress toward the EFP limit. These weights and species composition per set will also be included in a final report.

Data collection methods (4k)
All trip catches will be subsampled by CDFW biologists dockside upon landing. CDFW biologists will obtain a 5-gallon subsample of fish at quarterly intervals of pumping each set, using a quantitative bucket sampling method. Up to 50 fish per species (if set consists of mixed fish) per set will be collected by a CDFW biologist/sampler upon landing of the daily catch. The four collected fish subsamples will be stored in plastic bags and preserved on ice. At the CDFW laboratories these samples will be measured for biological characteristics (length, weight, sex, maturity, and age).

Scientific data collection and analysis will be supervised by CDFW and NOAA scientific staff, who will collaborate on procedures to ensure and evaluate data quality during the survey, and data analysis methodology through completion of the project.

Vessel selection (4l)
Vessels were identified for participation in the research based on vessel size, equipment, skippers' experience, and commitment to the research. The five vessels identified have committed to participate voluntarily in this research, notwithstanding any other fishing opportunities during the project period. All vessels have participated in EFP work in prior years and have demonstrated the ability to carry out the required protocols.

Fishing time, place, and gear (4m)
This project will take place in nearshore waters of the Central Coast of California (Monterey – Half Moon Bay) and the Southern California Bight. We plan to follow the same protocols as currently employed (including taking at least one set per month in both Monterey-Central Coast and Southern California to have samples distributed throughout the year) following the protocol recommended by sardine stock assessment scientists and the scientists collaborating on the SK grant project, with possible additional sampling attempted during survey months. Fishing gear used is purse seine net of suitable mesh size and length for capturing CPS schools.

We look forward to the opportunity to continue to provide support for sardine stock assessments and furthering the understanding of sardine stock structures through this EFP.

Thank you very much for your consideration.

Sincerely,

Mark Fina
Executive Director

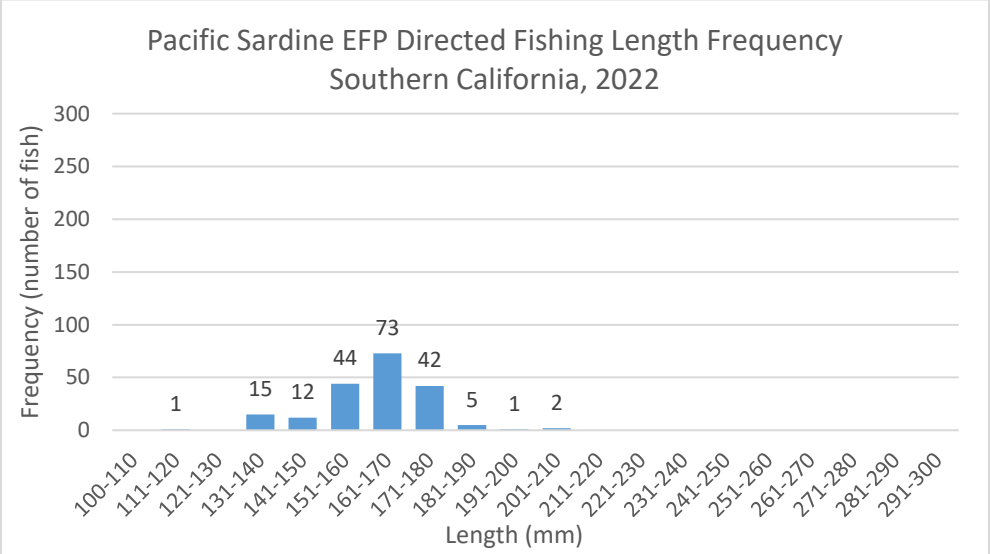
Appendix 1 – Summary of data collected in the 2021-22 EFP and the 2022-23 EFP to date.

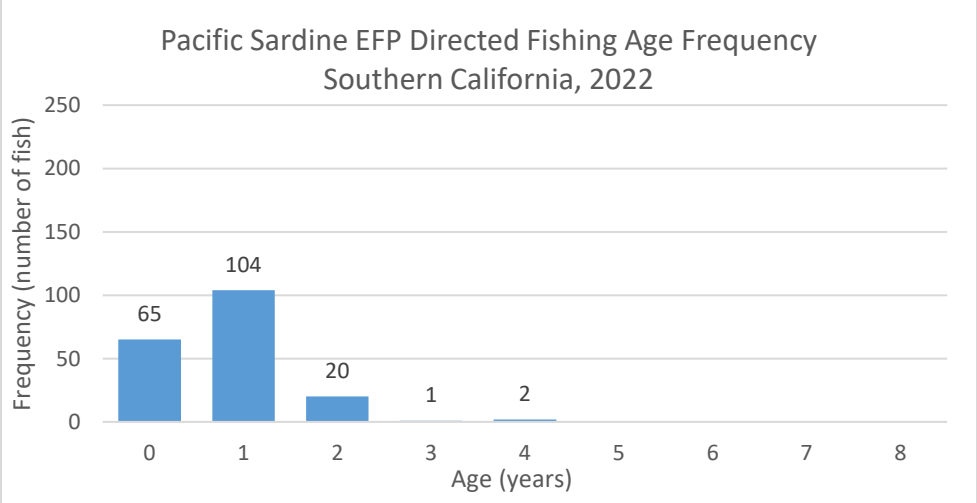
July 1 '22- June 30 '23 – 520 metric tons

	S.CA Set #	260 mt Landing Date	Vessel	Port	Processor	Capture Latitude	Capture Longitude	SST	Total Sardine Lbs	Sardine MT
SEMESTER 1 Jul-Dec '22	1 - SK	11/15/22	Provider	San Pedro	Cal Marine	N 33.36.55	W 118.59.23	62	29,308	13.29
SEMESTER 2 Jan-Jun '23	2 - SK	1/30/23	Provider	San Pedro	Cal Marine	N33.42.10	W 118.16.81	57	40,840	18.52
	3 - SK	2/10/23	Provider	San Pedro	Cal Marine	N 33.42.69	W 118.08.33	58	41,062	18.63
SubTotal S.CA									111,210	50.44

	MONTEREY Set #	260 mt Landing Date	Vessel	Port	Processor	Capture Latitude	Capture Longitude	SST	Total Sardine Lbs	Sardine MT
SEMESTER 1 Jul-Dec '22	1	9/7/22	King Philip	Moss Landing	MFC	N 36.52.08	W 121.50.63	61	78,452	35.59
	2	9/8/22	Trionfo	Monterey	SoCal Sfd	N 36.44.88	W 121.49.040	58	90,936	41.25
	3 - SK	10/4/22	Trionfo	Monterey	SoCal Sfd	N 36.37.71	W 121.54.15	60	41,789	18.96
SEMESTER 2 Jan-Jun '23										
SubTotal Monterey									211,177	95.79

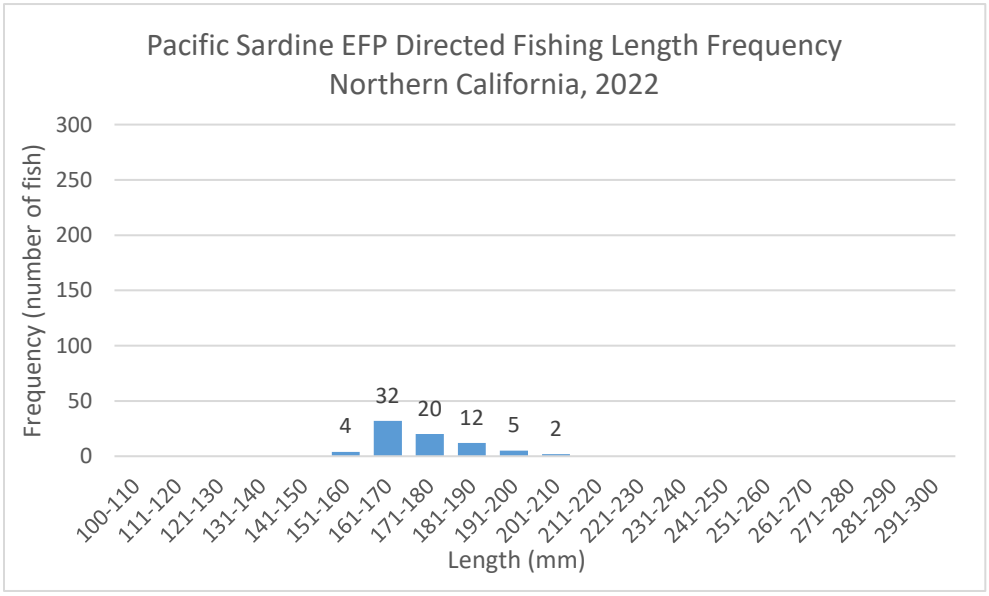
Appendix 2. Preliminary data collected under EFP 2022 (including some comparisons to 2020 and 2021).

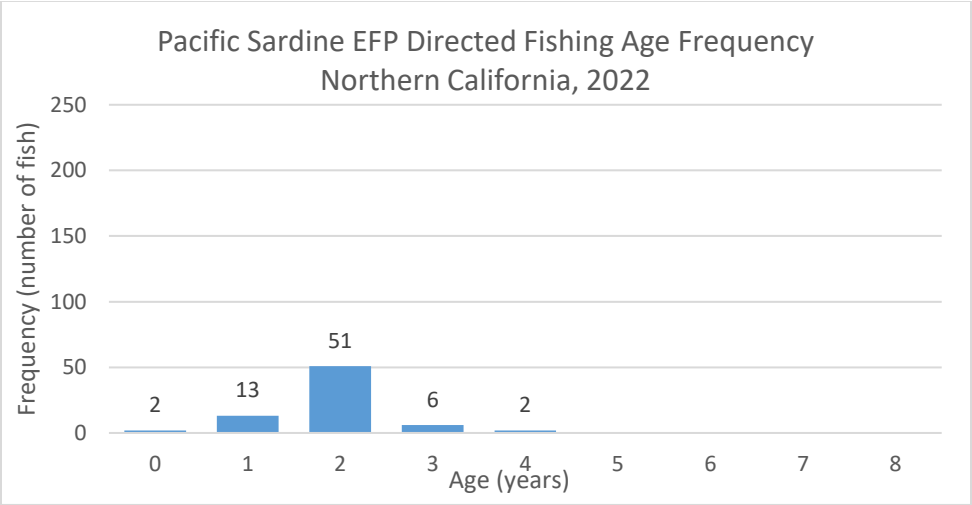




South

Month	# of samples taken	# of fish
January	0	0
February	0	0
March	2	50
April	1	25
May	0	0
June	4	95
July	0	0
August	0	0
September	0	0
October	0	0
November	1	25
December	0	0
Totals	**8**	**195**

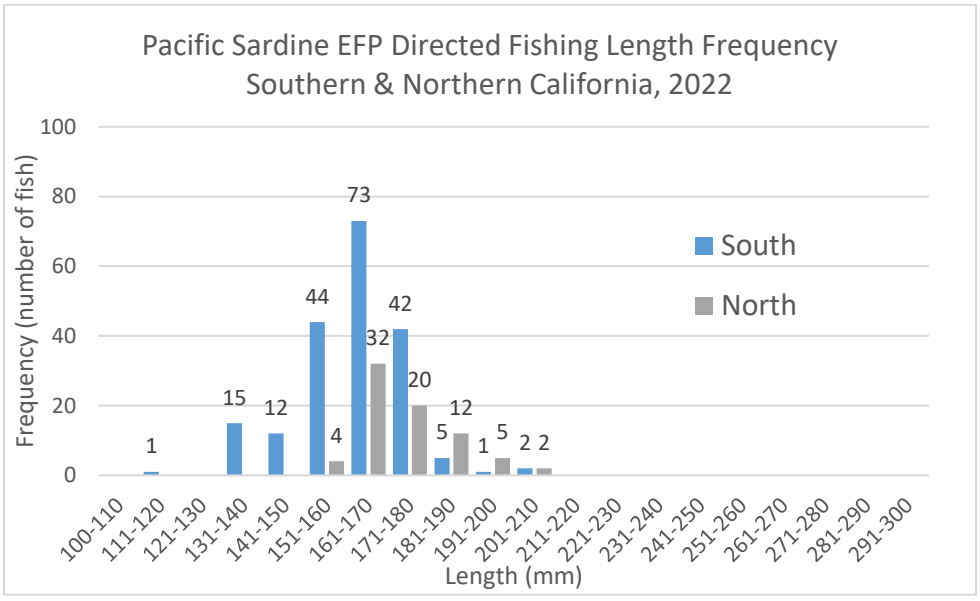


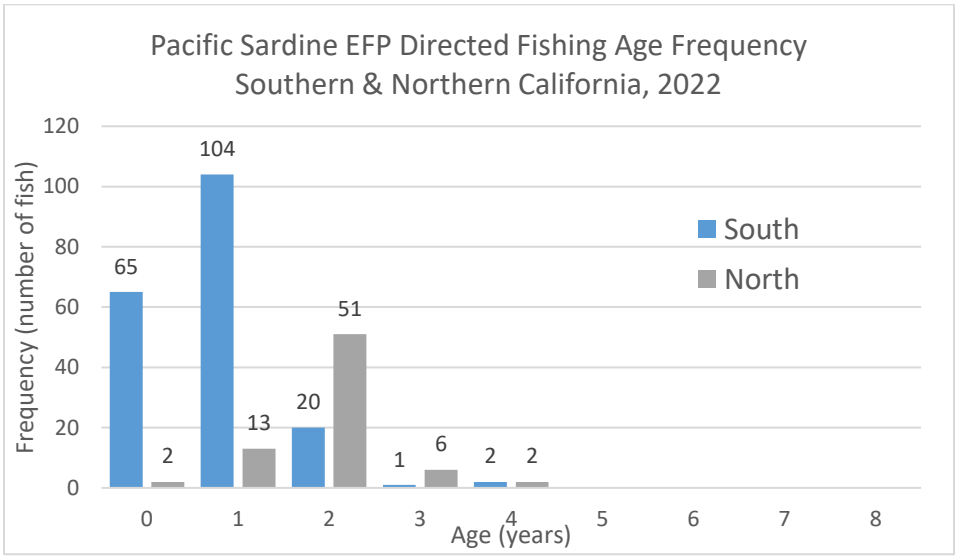


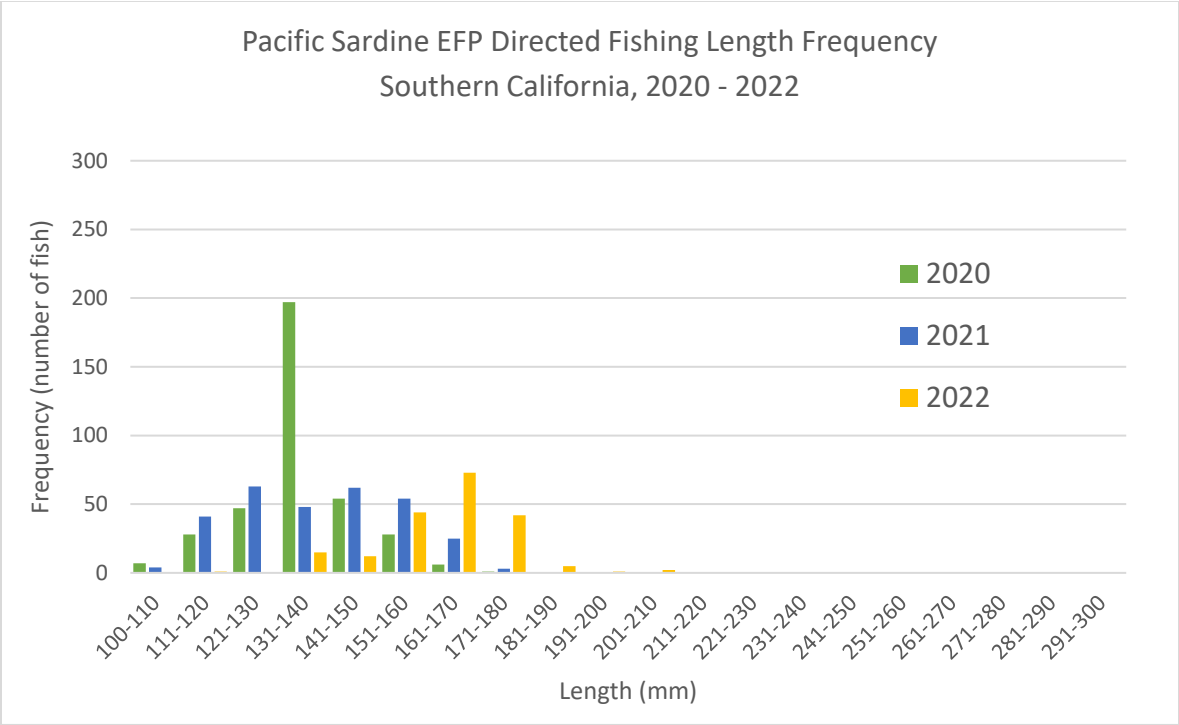
North

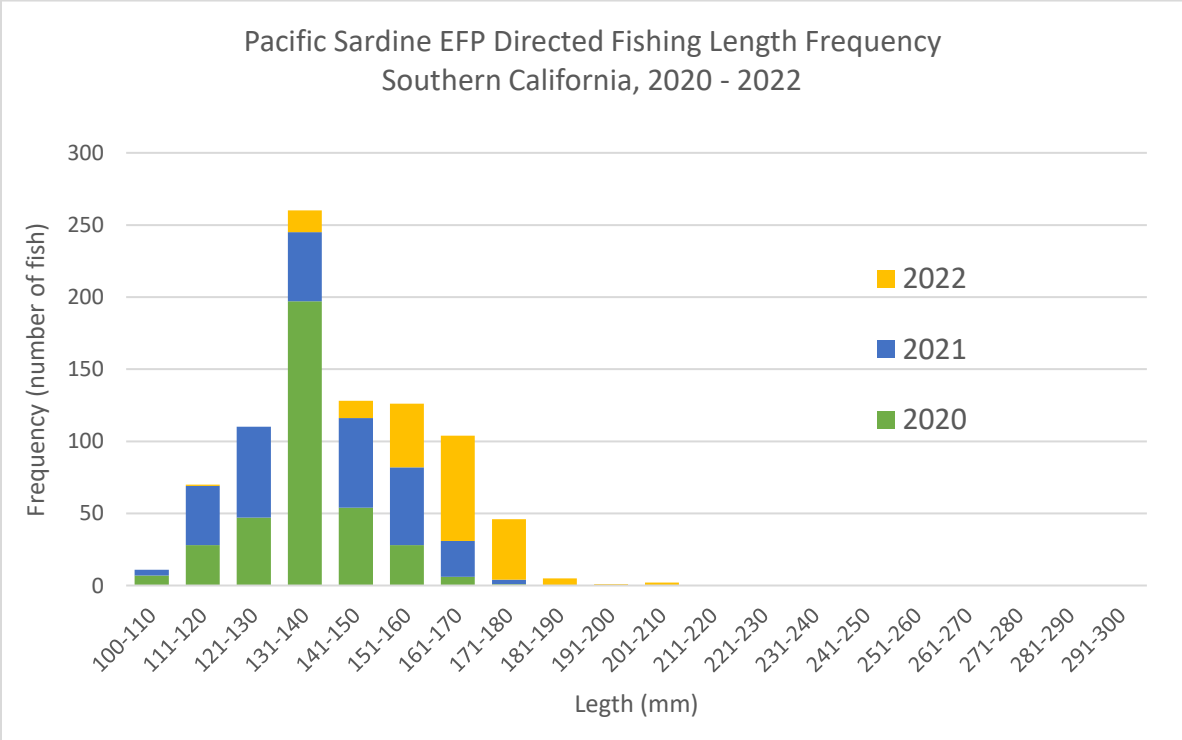
Month	# of samples taken	# of fish
January	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	0
July	0	0
August	0	0
September	2	50
October	1	25
November	0	0
December	0	0
Totals	**3**	**75**

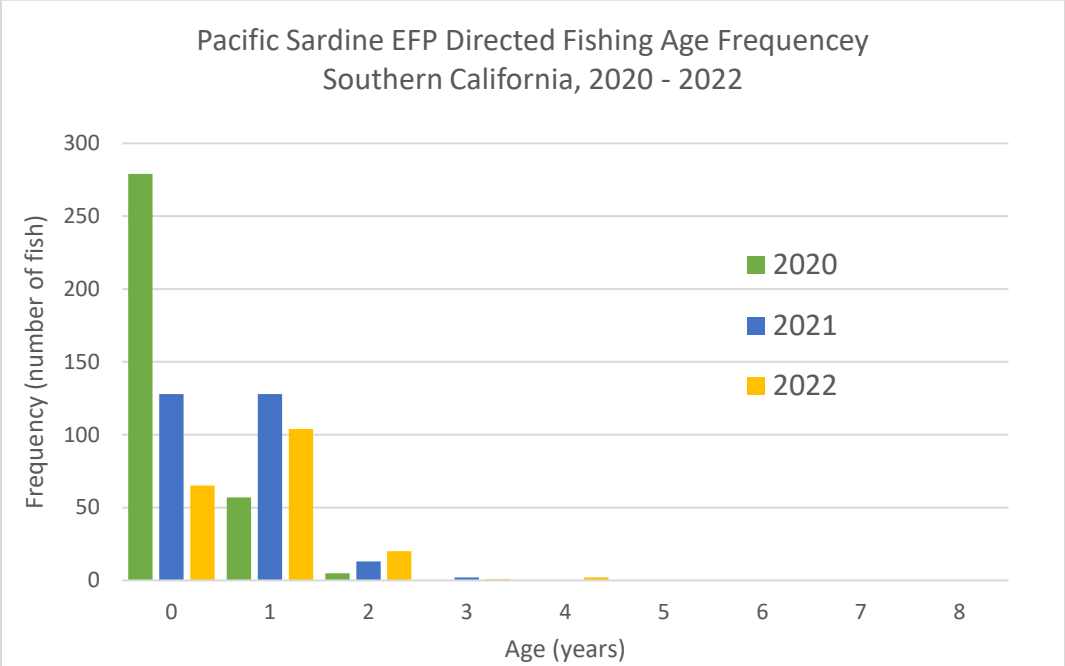
Or combined:


Pacific Sardine EFP Directed Fishing Length Frequency
Southern & Northern California, 2022
Frequency (number of fish)
Length (mm)
South
North
100-110 111-120 121-130 131-140 141-150 151-160 161-170 171-180 181-190 191-200 201-210 211-220 221-230 231-240 241-250 251-260 261-270 271-280 281-290 291-300
1 15 12 44 4 73 32 42 20 5 12 1 5 2 2

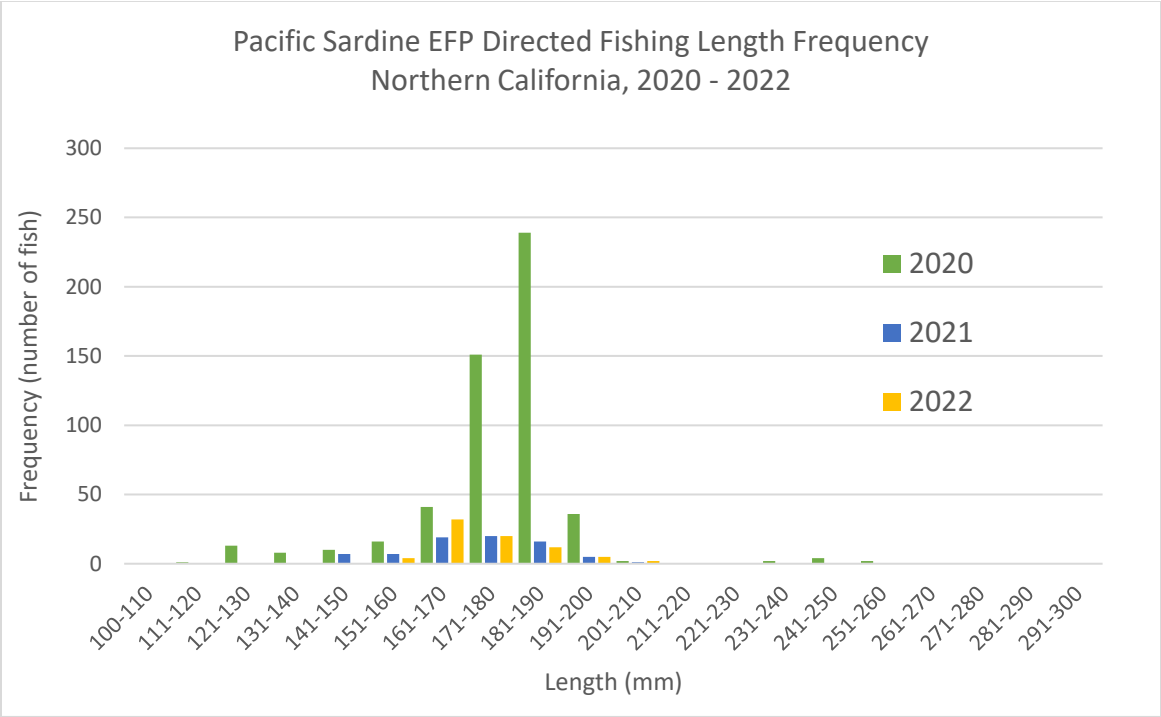

Pacific Sardine EFP Directed Fishing Age Frequency
Southern & Northern California, 2022
Frequency (number of fish)
Age (years)
South
North
65 2 104 13 20 51 1 6 2 2

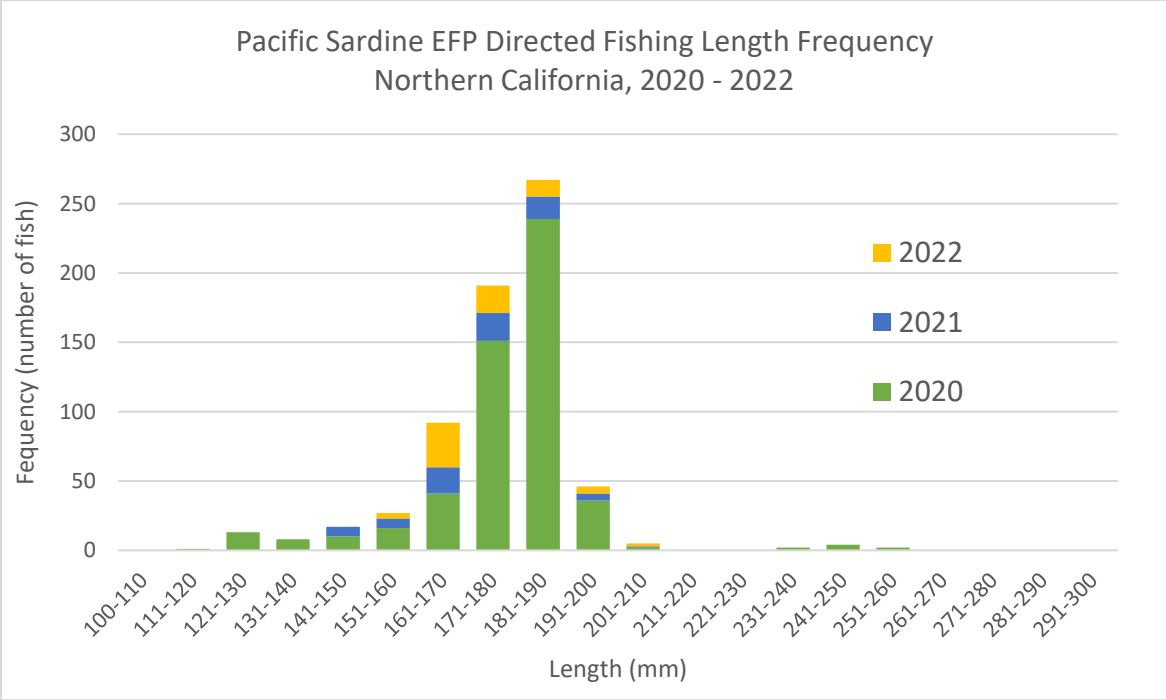

Pacific Sardine EFP Directed Fishing Length Frequency
Southern California, 2020 - 2022
Frequency (number of fish)
300
250
200
150
100
50
0
2020
2021
2022
100-110
111-120
121-130
131-140
141-150
151-160
161-170
171-180
181-190
191-200
201-210
211-220
221-230
231-240
241-250
251-260
261-270
271-280
281-290
291-300
Length (mm)

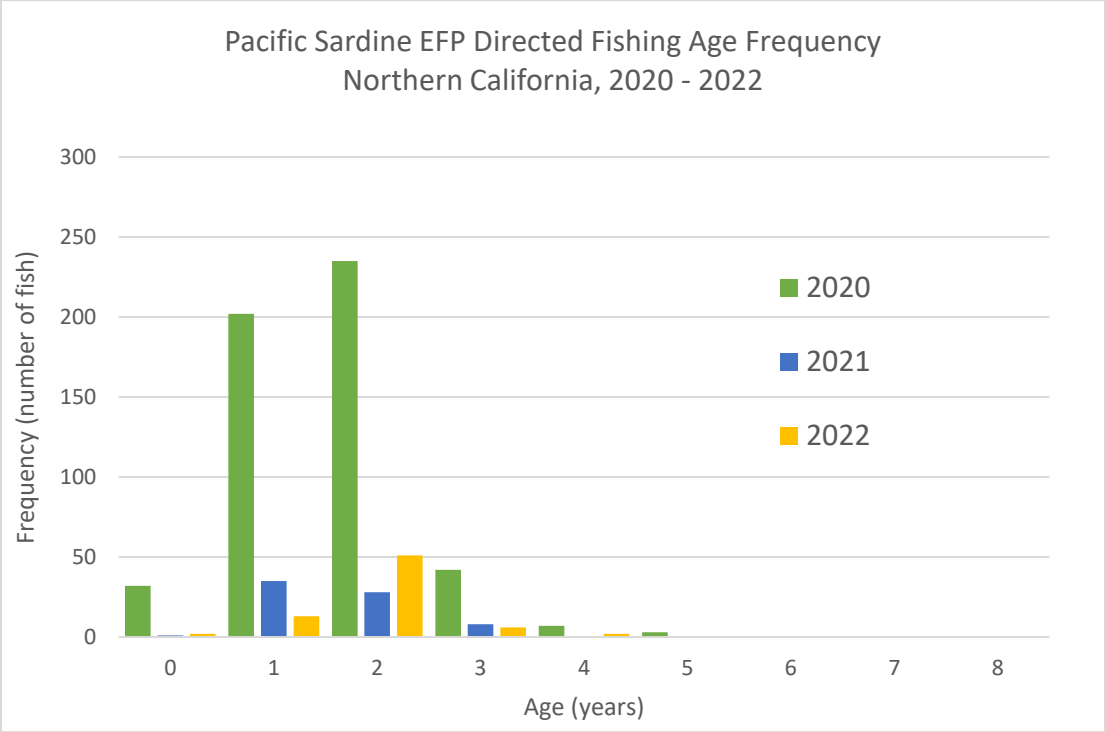

Pacific Sardine EFP Directed Fishing Length Frequency
Southern California, 2020 - 2022
Frequency (number of fish)
300
250
200
150
100
50
0
2022
2021
2020
100-110
111-120
121-130
131-140
141-150
151-160
161-170
171-180
181-190
191-200
201-210
211-220
221-230
231-240
241-250
251-260
261-270
271-280
281-290
291-300
Legth (mm)



South	# of samples taken			# of fish		
Month	2020	2021	2022	2020	2021	2022
January	0	0	0	0	0	0
February	0	2	0	0	50	0
March	0	1	2	0	25	50
April	0	1	1	0	25	25
May	4	1	0	100	25	0
June	6	1	4	150	25	95
July	0	1	0	0	25	0
August	0	0	0	0	0	0
September	0	2	0	0	50	0
October	1	1	0	25	25	0
November	3	1	1	75	25	25
December	1	1	0	25	25	0
Totals	**15**	**12**	**8**	**375**	**300**	**195**


Pacific Sardine EFP Directed Fishing Length Frequency
Northern California, 2020 - 2022
Frequency (number of fish)
300
250
200
150
100
50
0
2020
2021
2022
100-110
111-120
121-130
131-140
141-150
151-160
161-170
171-180
181-190
191-200
201-210
211-220
221-230
231-240
241-250
251-260
261-270
271-280
281-290
291-300
Length (mm)


Pacific Sardine EFP Directed Fishing Length Frequency
Northern California, 2020 - 2022
Fequency (number of fish)
300
250
200
150
100
50
0
2022
2021
2020
100-110
111-120
121-130
131-140
141-150
151-160
161-170
171-180
181-190
191-200
201-210
211-220
221-230
231-240
241-250
251-260
261-270
271-280
281-290
291-300
Length (mm)



North Month	# of samples taken 2020	2021	2022	# of fish 2020	2021	2022
January	0	0	0	0	0	0
February	0	3	0	0	75	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	3	0	0	75	0	0
June	11	0	0	275	0	0
July	0	0	0	0	0	0
August	0	0	0	0	0	0
September	5	0	2	125	0	50
October	1	0	1	25	0	25
November	1	0	0	25	0	0
December	0	0	0	0	0	0
Totals	**21**	**3**	**3**	**525**	**75**	**75**

Appendix 3. Fisherman's log form

CPS Biological Sample Sardine EFP
Fisherman's Log Form

Date: _____ **Captain:** _____

Vessel: _____ **Processor:** _____

Estimated Catch _____**(st) Delivered Weight** _____**(lbs) Fish Ticket No.** _____

Species Observed _____

Hydroacoustic Gear

Type	Make	Model	Frequency
Sounder			
Sonar			

Net Dimensions

Net Length (fm)	Net Depth (fm)	Mesh Size (in)

School and Ocean Data

Set Start Time	Latitude	Longitude	Top Depth of School (fm)	Bottom Depth of School (fm)	Ocean Depth (fm)	SST (F)	Weather Condition	Picture of Sonar (Y/N)

Weather Codes: 1= calm, clear; 2= light wind, good visibility; 3= moderate wind, fair visibility; 4= poor fishing conditions

Comments and sonar interpretations:

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_____

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