

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REPORT ON
PACIFIC SARDINE LANDINGS 2015-2022

The California Department of Fish and Wildlife (CDFW) provides the following details on commercial Pacific sardine (sardine) landings in support of Pacific Fishery Management Council (PFMC) discussions regarding annual specifications for the fishery.

Sardine are landed incidentally in several coastal pelagic species (CPS) fisheries, including northern anchovy, Pacific mackerel, and market squid. Sardine are also landed in a variety of non-CPS fisheries, such as groundfish trawl fisheries including Pacific whiting and prawn. From 2015 to 2019, incidental sardine take was limited to not more than 40% by weight in CPS fisheries, except the targeted live-bait fishery and since 2018, the minor directed fishery. With sardine declared overfished in June 2019, the incidental landing limit was reduced to not more than 20% by weight. Directed take in the live bait fishery is allowed, within annual catch limits.

The incidental occurrence of sardine in particular fisheries is variable, depending on year, season, and fishery (Table 1). On average, 2,246 mt of sardine have been landed each season since the closure of the directed sardine fishery, for seasons 2015-2016 to 2020-2021 (Table 2). Most of these landings have come from the live bait industry, followed by sardine take under exempted fishing permits and incidental take in other fisheries. Market squid continues to have the highest number of landings containing incidental take of sardine (Table 3).

Table 1: Amount and value of incidental sardine take in other California fisheries.

Fishing Season	Number of Landings with Incidental Sardine	Other CPS landings (mt) with Incidental Sardine	Non-CPS landings (mt) with Incidental Sardine	Value of Landings with Incidental Sardine (dollars)
2015-2016	67	1,535	0.4	\$ 527,711
2016-2017	178	3,806	0.9	\$ 2,622,084
2017-2018	93	2,302	9.7	\$ 1,945,469
2018-2019	123	2,562	5.1	\$ 2,163,842
2019-2020	459	5,148	2.7	\$ 4,747,100
2020-2021	276	2,714	25.3	\$ 3,337,907
2021-2022¹	223	3,943	0.11	\$ 4,949,737
Average²	199	3,011	7	\$ 2,557,352

¹2021-2022 data extracted from Marine Landings Data System on 2/28/22. Data are preliminary and subject to change.

²Averages are for complete fishing seasons from 2015-2016 to 2020-2021.

Table 2: California landings (mt) of sardine in different sectors of the fishery.

Season	Incidental¹	EFP²	Live Bait³	Minor Directed	Total
2015-2016	164	-	2,097	-	2,261
2016-2017	514	-	1,614	-	2,128
2017-2018	275	-	1,894	5	2,174
2018-2019	246	470	1,694	67	2,479
2019-2020	248	728	1,008	65	2,050
2020-2021	107	976	1,308	79	2,494
2021-2022⁴	159	139	878	12	1,188
Average⁵	263	725	1,603	54	2,264

¹Directed sardine fishery closed beginning with 2015-2016 season. Sardine limited to 40% incidental in CPS fisheries and was reduced to 20% incidental starting in the 2019-2020 season.

²Research take per 2018, 2019, 2020, and 2021 California Wetfish Producers Association Exempted Fishing Permit request ([PFMC April 2018 Agenda Item C.2, Attachment 1](#) and [PFMC April 2019 Agenda Item E.2, Attachment 2, PFMC November 2019 Agenda Item D.2, Attachment 1](#))

³Reported catch from voluntary logbook submissions through December 2018 and from electronic fish tickets since January 2019.

⁴2021-2022 data extracted from Marine Landings Data System on 2/28/2022. Data are preliminary and subject to change.

⁵Averages are for complete fishing seasons from 2015-2016 to 2020-2021.

Table 3: Number of California incidental sardine landings by primary CPS fishery (excluding live bait) and proportion of incidental sardine for 2015-2016 to 2021-2022 (preliminary data) fishing seasons.

Target Species & Proportion of Incidental Sardine	Number of Landings per Fishing Season						
	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Northern Anchovy							
0-10%	12	3	0	6	14	1	4
11-20%	1	3	1	4	13	4	3
21-30%	3	7	8	3	0	0	0
31-40%	0	9	2	6	0	0	0
Jack Mackerel	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
0-10%	1	0	1	0	0	0	2
11-20%	0	0	1	0	0	0	1
21-30%	0	0	0	0	0	0	0
31-40%	0	0	0	0	0	0	0
Pacific Mackerel	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
0-10%	10	14	1	3	3	3	3
11-20%	5	7	2	1	3	0	3
21-30%	4	4	1	0	0	0	0
31-40%	2	0	0	0	0	0	0
Market Squid	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
0-10%	26	101	61	88	320	198	161
11-20%	0	15	7	9	24	35	24
21-30%	1	8	0	5	0	0	0
31-40%	0	1	0	2	0	0	0
Other Fisheries	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
0-10%	0	4	5	10	10	10	4
11-20%	0	1	2	3	0	0	0
21-30%	0	1	1	0	0	0	0
31-40%	2	0	0	0	0	0	0