

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REPORT ON  
PACIFIC SARDINE ASSESSMENT, HARVEST SPECIFICATIONS, AND MANAGEMENT  
MEASURES – FINAL ACTION

The California Department of Fish and Wildlife (CDFW) is providing the following details on commercial Pacific sardine (sardine) landings in support of Pacific Fishery Management Council (PFMC or Council) 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. They are also landed in a variety of non-CPS fisheries, such as groundfish trawl fisheries including Pacific whiting and prawn trawl. Since 2015, incidental sardine take has been limited to not more than 40 percent 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, incidental landings are now limited to not more than 20 percent by weight while directed take in the live-bait fishery is still allowed.

The incidental occurrence of sardine in particular fisheries is variable, depending on year, season, and fishery (Table 1). Landings with greater than 20 percent incidental sardine happened most frequently in the northern anchovy fishery but have been seen in all other fisheries with the exception of jack mackerel (Table 2). On average, 2,260 mt of sardine have been landed each season since the closure of the directed sardine fishery for seasons 2015-2016 to 2018-2019; with the vast majority of landings coming from the live bait industry (Table 3).

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

<b>Fishing Season</b>	<b>Number of Landings with Incidental Sardine</b>	<b>CPS landed with Incidental Sardine (mt)</b>	<b>Non-CPS landed with Incidental Sardine (mt)</b>	<b>Value of Landings with Sardine (dollars)</b>
<b>2015-2016</b>	67	1,535	0.4	\$ 527,711
<b>2016-2017</b>	178	3,806	0.85	\$ 2,622,084
<b>2017-2018</b>	93	2,302	9.66	\$ 1,945,469
<b>2018-2019</b>	123	2,562	5.09	\$ 2,163,842
<b>2019-2020<sup>1</sup></b>	250	3,362	2.69	\$ 2,607,719
<b>Average<sup>2</sup></b>	<b>115</b>	<b>2,551</b>	<b>4.0</b>	<b>\$ 1,814,777</b>

<sup>1</sup>2019-2020 data extracted from Marine Landings Data System on 2/14/20. Data are preliminary and subject to change.

<sup>2</sup>Averages are for complete fishing seasons from 2015-2016 to 2018-2019.

Table 2: Number of California incidental sardine landings by primary CPS fishery (excluding live bait) and proportion of incidental sardine for 2015-2016 to 2019-2020 (preliminary data) fishing seasons.

<b>Target Species &amp; Proportion of Incidental Sardine</b>	<b>Number of Landings per Fishing Season</b>				
	<b>2015-2016</b>	<b>2016-2017</b>	<b>2017-2018</b>	<b>2018-2019</b>	<b>2019-2020</b>
<b>Anchovy</b>					
0-10%	12	3	0	6	12
11-20%	1	3	1	4	12
21-30%	3	7	8	3	0
31-40%	0	9	2	6	0
<b>Jack Mackerel</b>					
0-10%	1	0	1	0	0
11-20%	0	0	1	0	0
21-30%	0	0	0	0	0
31-40%	0	0	0	0	0
<b>Pacific Mackerel</b>					
0-10%	10	14	1	3	3
11-20%	5	7	2	1	3
21-30%	4	4	1	0	0
31-40%	2	0	0	0	0
<b>Market Squid</b>					
0-10%	26	101	61	88	189
11-20%	0	15	7	9	23
21-30%	1	8	0	5	0
31-40%	0	1	0	2	0
<b>Other Fisheries</b>					
0-10%	0	4	5	10	10
11-20%	0	1	2	3	0
21-30%	0	1	1	0	0
31-40%	2	0	0	0	0

Table 3: California landings (mt) of sardine in different sectors of the fishery.

<b>Season</b>	<b>Incidental<sup>2</sup></b>	<b>EFP<sup>3</sup></b>	<b>Live Bait<sup>4</sup></b>	<b>Minor Directed</b>	<b>Total</b>
<b>2015-2016</b>	164	-	2,097	-	2,261
<b>2016-2017</b>	514	-	1,614	-	2,128
<b>2017-2018</b>	275	-	1,894	4.5	2,174
<b>2018-2019</b>	272	469	1,694	44	2,479
<b>2019-2020<sup>1</sup></b>	192	110	777	41	1,120
<b>Average<sup>5</sup></b>	<b>306</b>	<b>469</b>	<b>1,825</b>	<b>24</b>	<b>2,260</b>

<sup>1</sup>2019-2020 data extracted from Marine Landings Data System on 2/14/20. Data are preliminary and subject to change.

<sup>2</sup>Directed 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 .

<sup>3</sup>Research take per 2018 and 2019 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](#))

<sup>4</sup>Based on voluntary logbook submission through 2018 and based on electronic fish tickets since 2019.

<sup>5</sup>Averages are for complete fishing seasons from 2015-2016 to 2018-2019.