

CALIFORNIA'S WETFISH INDUSTRY - A TRADITIONAL INDUSTRY WITH A CONTEMPORARY OUTLOOK

California's fishing industry was built largely on 'wetfish', so called because historically the fish were canned 'wet from the sea', with minimal preprocessing. Sardines, mackerel, anchovy and market squid {now called coastal pelagic species} have contributed the lion's share of California's commercial seafood harvest since before the turn of the 20th century. California's wetfish industry was founded by immigrant fishermen, and the enterprise of these fishing families helped to build the ports of Monterey and San Pedro, as well as San Diego and San Francisco.

Today's wetfish industry is a traditional industry with a contemporary outlook: streamlined and more efficient but still peopled by fourth and fifth-generation fishing families. Today the sons and daughters continue the enterprise begun by their fathers and grandfathers 100 years ago.

Until recent years, landings of **coastal pelagic species** {CPS} represented an average **82 percent of the total statewide commercial seafood harvest by volume**, and approximately **37 percent of the dockside value** (based on landings 2010-2012). Market squid was California's most valuable fishery in two of the three years, contributing more than \$206 million in ex-vessel value over the time period. Since 2007, the last year of substantial sardine landings (89,238 tons valued at more than \$8 million ex vessel), market squid also has become the economic driver of the wetfish industry. Due to squid's ultra-short shelf life fresh, processors produce mostly "fresher frozen" squid in retail and restaurant packs to serve local and domestic markets, and squid also represents a significant percentage, both by volume and value, of the Golden State's seafood exports.

With the 2015-16 El Niño and marine heat wave (called "the Blob), CPS landings declined. Causes for the decline included the closure of the sardine fishery in 2015 due to low stock assessments as well as a sharp reduction in market squid landings due to super warm ocean conditions. The sardine fishery remained closed in 2022, but market squid abundance has increased in California, responding to La Niña and cooler sea surface temperatures and enhanced ocean productivity. Even with the decline, CPS landings still represent the majority of seafood harvested in the Golden State. In non-El Niño years, market squid landings now account for more than 40 percent of total statewide volume.

STATEWIDE 2015-19*	CPS	CPS	TOT. STATE	TOT. STATE	PERCENT CPS	
	POUNDS	DOLLARS	POUNDS	DOLLARS	POUNDS	DOLLARS
TOTAL	579,492,646	\$194,279,229	849,538,272	\$860,638,907	68.2%	22.6%
5 YR AVERAGE	115,898,529	\$38,855,846	169,907,654	\$172,127,781		

(Latest CDFW Table 15 available)

Coastal pelagic species are among California's most important seafood exports. In a state that imports close to 90 percent of its seafood, California's wetfish complex contributes importantly to the Golden State's fishing economy, and in addition, helps substantially to offset the seafood trade imbalance.

The year 2011, during the last decadal squid "boom," illustrates the importance of market squid to California seafood export markets.

Major Wetfish Exports — 2011	150,202,828 kilos	\$195,418,835
Total CA (2011 export values)	186,859,917 kilos	\$402,700,721
% All Wetfish	80.4%	48.5%
% Squid	69.6%	44.3%

Transformed from its storied beginnings, California’s wetfish industry today remains an essential part of California’s fishing heritage and culture, as well as a critically important contributor to California’s economy.

ECONOMIC IMPORTANCE TO THE STATE OF CALIFORNIA

Coastal pelagic species comprise the foundation of many harbor communities; the volume crossing the dock is critically important to maintain harbor infrastructure and dockside employment.

Port	2011 Wetfish % of Total Port Landings	2011 Wetfish % of Total Port XV Value
Monterey Harbor	97.5%	76.3%
Moss Landing	96.2%	66.3%
Ventura	98.7%	82% (squid)
Port Hueneme	99.9%	99.9%
San Pedro	99.6%	93.4%
Terminal Island	97.7%	81.4%
2010-2012 Contribution to Statewide Landings	82%	37%

lawetfish.org/members/index.html

The CPS complex represents the lion’s share of fishery revenue paid to the Department of Fish and Wildlife. Over the past decade the wetfish industry contributed more than \$20 million in landing taxes and license fees to harvest coastal pelagic species.

Market squid fishing permit fees also are the highest of any fishery in California. In 2021, in addition to general fishing license and vessel registration fees, the squid fleet paid the Department more than \$382,297 in squid limited-entry permit fees.

In 2021 the market squid fleet numbered 145 vessels in all, including 68 transferable vessel permits, 3 non-transferable vessel permits, and 45 brail permits. In addition, there were 29 light boat permits, which assist the fleet in locating and aggregating squid, but are not allowed to catch squid themselves.

THE WETFISH FLEET:

CPS species are harvested with purse seine nets. CPS finfish are managed under the federal CPS Fishery Management Plan – California’s CPS fleet operates under a limited entry program with **65 transferable permits** issued (62 are currently active). Vessels range in size from approximately 30-90 feet in length and 20-140 gross registered tons in capacity. Purse seine vessels require **5-8 crewmen** to operate, including the skipper.

Market squid, a monitored species under the CPS FMP, is actively managed by the State of California under the Market Squid Fishery Management Plan. A state limited entry program was established in 2004, reducing fleet size to **77 transferable purse seine vessel permits** (down to 68 limited entry vessels in 2021, the number of permits reduced by attrition and permit stacking). Approximately **45-50 of the squid vessels also maintain CPS finfish permits** and fish for both squid and CPS species, depending on season and availability.

THE MARKETS:

Wetfish processing is concentrated in about **10-12 family-owned companies**, most of whom have operated in Monterey, San Pedro or points in-between for decades. **Each company employs 30 to more than 450 permanent employees**, who process and pack wetfish in myriad forms for domestic consumption and export to more than 26 countries worldwide.

*Excerpt from SOUTHERN CALIFORNIA CPS PROCESSOR COST-EARNINGS REPORT
– THE IMPORTANCE OF SARDINES IN THE SOUTHERN CA CPS FISHERY [2004]*

Overall, the S.CA. sardine/wetfish industry employs between 1,400 and 1,500 workers, including seasonal employees, and the maximum packing capacity is estimated between 1,900 and 2,000 tons per 24 hour day, in aggregate.

*Excerpt from MONTEREY REGION CPS PROCESSOR COST-EARNINGS REPORT
– THE IMPORTANCE OF SARDINES IN THE MONTEREY BAY AREA CPS FISHERY [2005]*

Overall, the Monterey Bay area sardine/wetfish industry employs at least 420 workers, including seasonal employees, and the maximum packing capacity is estimated at approximately 1,100 tons per 24 hour day, in aggregate.

In 2013 the City of Monterey commissioned a Fishing Community Sustainability Plan. An economic assessment of the wetfish industry in the Monterey Bay Area projected 720 jobs, including seasonal workers, and packing capacity of 1,400 tons per day.

The wetfish industry is alive and well, in both Monterey and Southern California, Indeed, California's historic wetfish industry is the foundation of California's commercial fishing economy.

THE PORTS:

Monterey and Moss Landing in central California, and **Ventura, Port Hueneme and San Pedro** in Southern California, are the primary ports of landing for the wetfish industry. Smaller volumes may also be landed in **San Diego** and **San Francisco**. Since 1982, in non-El Niño years, approximately 10-20 percent of landings typically have been offloaded in Monterey ports, and 80-90 percent of landings have been offloaded in southern California ports, mainly San Pedro and Terminal Island. During El Niño years, squid landings increase in the Monterey Bay area.



San Pedro wetfish fleet heads out from port



Vessels seine for market squid in Monterey Bay

Wetfish industry leadership established the nonprofit **California Wetfish Producers Association (CWPA)** in 2004. Members include fishermen and processors who produce most of the total statewide wetfish harvest. CWPA's mission includes sponsoring collaborative research to ensure sustainable fisheries and facilitating communications within and outside the wetfish industry.

This industry has heavily invested in research since early times, from the beginnings of the California Cooperative Fishery Investigations (CalCOFI). Today CWPA's research program continues the tradition, expanding knowledge of market squid, sardine and anchovy in collaboration with the Department of Fish and Wildlife and Southwest Fishery Science Center.