

Cordell Bank National Marine Sanctuary

Commercial Fisheries- Profiles of the Fisheries Summary

Economic Impact of the Commercial Fisheries on Local County Economies from Catch in the Cordell Bank National Marine Sanctuary, 2010, 2011 and 2012



Map: Tony Reyner

Map of CBNMS, California Department of Fish and Wildlife blocks and counties in the study area.



Photo: CBNMS

A fishing vessel operates in the CBNMS.

Introduction

This fact sheet summarizes a Conservation Series report on the economic impacts of commercial fishing in Cordell Bank National Marine Sanctuary (CBNMS). The California Ocean Fish Harvester Economic Model (COFHE) provides county multipliers to determine direct and indirect impacts on local county economies.

Species/Species Groups

Within the CBNMS, 15 different species were landed with a harvest revenue over \$1,000 in 2012. The top 10 species/species groups are outlined below in the table.

In 2012, *Dungeness crab* was the principal species caught in the CBNMS, representing 52% of total value. *Salmon* was the secondary species, representing 26% of total value. Combined, the top five species/species groups accounted for over 95% of total value. Detailed information on trends in each of the top

five fisheries is available in the report.

Gear Type & Vessel Activity

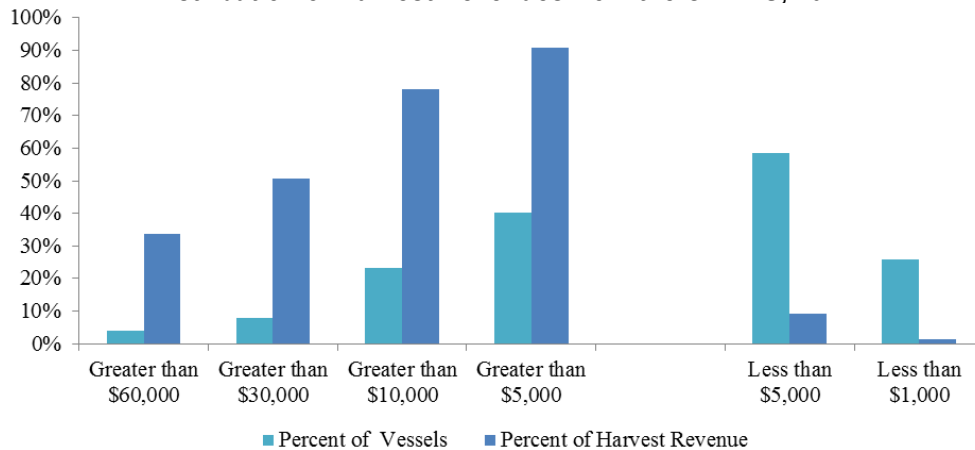
“Pots & Traps” was the primary gear type, with 53.17% in 2012. However, “Pots & Traps” experienced a consistent decline from 2010 to 2012. Conversely, “Troll” increased from 0% in 2010 to almost 26% in 2012. “Longlines” contributed between 4.33% and 14.67% of total value from 2010 to 2012. “Hook and Line” accounted for 2.84% to 7.13% in the same period. From 2011 to 2012, “Other Seine – Dip Net” contributed between 5.31% and 3.78%, while “Set Gill Nets” accounted for 0.22% to 0.26%. In 2012, “Trawl” accounted for 9.68%. “Purse Seine” contributed 2.97% in 2010.

The number of vessels landing catch from the CBNMS increased over the study period. Of the 35 vessels operating in 2010, 30 used “Pots & Traps” and three used “Longlines.” Of the 57 vessels operating in 2011, 30 used “Troll,” 20 used “Pots & Traps,” five used “Hook & Line” and three used “Longlines.” Of the 76 vessels operating in 2012, 44 used “Troll,” 22 used “Pots & Traps,” seven used

Top 10 Species/Species Groups in the CBNMS, 2012 (2013 \$)

Species/ Species Groups	Pounds	Value	% of Total
<i>Dungeness crab</i>	114,708	\$393,576	51.92%
<i>Salmon</i>	30,017	\$196,531	25.92%
<i>Dover Sole-Thornyheads-Sablefish Trawl</i>	14,995	\$73,366	9.68%
<i>Sablefish Non-Trawl</i>	12,664	\$42,928	5.66%
<i>Other Flatfish</i>	13,921	\$15,893	2.10%
<i>Shelf Rockfish</i>	22,010	\$15,549	2.05%
<i>Coonstriped Shrimp</i>	854	\$4,769	0.63%
<i>Rock Crab, Unspecified</i>	1,261	\$3,836	0.51%
<i>Deeper Nearshore Rockfish</i>	557	\$2,668	0.35%
<i>Tuna</i>	950	\$2,303	0.30%

Distribution of Harvest Revenues from the CBNMS, 2012



“Hook & Line” and four used “Longlines.”

Vessel Distribution & Dependence

In CBNMS 18 of the 76 vessels (23.4%) accounted for 77.95% of the total value of catch, which closely follows the idea that 20% of the fishermen catch 80% of the fish. Thus, the distribution of harvest revenue by vessel was skewed. Three vessels (3.9%) accounted over a third of all harvest revenue, receiving at least \$60,000 each. Six vessels (7.8%) accounted for over half of the total harvest revenue, receiving at least \$30,000 each. Alternatively, 45 vessels (58.5%) accounted for less than 10% of harvest revenue, receiving less than \$5,000 each.

For all 76 vessels operating in CBNMS in 2012, the total harvest revenue caught in CBNMS was \$758,078, which was less than 9% of their total harvest revenues from catch in all California waters. Those

vessels in the lower range of harvest revenue distribution, less than \$5,000 in harvest revenue, depended on CBNMS for only a small portion of their total revenue (3.34%). Relative to the lower end of the distribution, those vessels on the higher end, receiving greater than \$5,000 in harvest revenue, were more dependent on the sanctuary. However, even the most dependent vessels, those receiving \$90,000 or more, only attribute about 13.31% of their total revenue to CBNMS.

Port Dependence

Another indicator of economic dependence is port dependence, measured as the percent of total port landings from CBNMS at the top four ports: Bodega Bay, Fort Bragg, Princeton-Half Moon, and San Francisco. Harvest revenue from CBNMS at these four ports totaled \$730,671 or 96.4% of total harvest revenue from CBNMS at all California ports in 2012.

None of the four ports was highly dependent on the CBNMS. Bodega Bay depended on the CBNMS for 3.30% of total landings. San Francisco depended on CBNMS for 1.08% of total landings. Fort Bragg depended on CBNMS for 0.73% of total revenue. Finally, Princeton-Half Moon depended on CBNMS for 0.45% of total revenue. While overall dependence was low, at some ports landings of specific species were highly dependent on sanctuary resources. For example, at San Francisco, 41.13% of *Dover Sole-Thornyheads-Sablefish Trawl* by value was caught in the CBNMS. In addition, at Princeton-Half Moon, 21.48% of *Other Flatfish* and 15.06% of *Shelf Rockfish* by value were caught in the CBNMS.

More Information

The full report can be accessed online at:

http://sanctuaries.noaa.gov/science/conservation/pdfs/cbnms_fishing_report.pdf

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Photo: Cordell Bank Expeditions

A rosy rockfish rests near yellow sponges and strawberry anemones at Cordell Bank.



Photo: GFNMS

A Dungeness crab, the predominant species caught in the CBNMS.