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ECONOMIC STATUS OF THE CALIFORNIA PINK SHRIMP FISHERY IN 1984

by

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U.S. DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration National Marine Fisheries Service Southwest Region

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ECONOMIC STATUS OF THE CALIFORNIA PINK SHRIMP FISHERY IN 1984

I. OVERVIEW

This is the second report of an annual series on the economic status of the California pink shrimp fishery. The first report on the 1983 fishery is published as a Technical Memorandum and is available through the National Marine Fisheries Service, Southwest Regional Office.

The Washington, Oregon, and California (WOC) pink shrimp catch fell to a record low in 1984. A total of only 9.9 million pounds of pink shrimp (Pandalus jordani) were landed in the three states. This was 26 percent under the 1983 catch of 13.3 million pounds and 62 percent below the 1979-1983 coastal average of 35 million pounds (Table 1). California landings continued substantially below normal; however, the 1984 landings of 1.63 million pounds was 44 percent above the total of 1.13 million pounds landed in 1983. The best catch area shifted back to the historically productive beds off the Eureka/Crescent City area in contrast to the large concentration of shrimp caught and landed in the southern Morro Bay area in 1983.

II. COMPONENTS OF THE FISHERY

The West Coast pink shrimp population is considered to be a single stock. The stock is divided into 10 subunits according to the physical separation of the shrimp beds along the coast. Those beds important in California occur off of Eureka (State area A), Fort Bragg (area B-1), Bodega

Bay (area B-2), and Morro Bay (area C). The Eureka/Crescent City beds generally have been the most productive.

The California shrimp resource is exploited exclusively by commercial double-rig and single-rig otter trawl vessels. The commercial fleet mainly consists of combination vessels which are capable of switching into the groundfish, crab, salmon, and albacore fisheries. There is no recreational fishery for the pink shrimp resource.

III. HARVESTING SECTOR

The coastal shrimp trawl fleet continued to decline in 1984. The number of trawlers landing shrimp in WOC fell from 189 vessels in 1983 to only 98 vessels in 1984. In California only 42 trawl vessels landed shrimp compared to 55 in 1983. Of these 42, 30 were based in California, 10 in Oregon and 2 in Washington. Some of the vessels leaving the WOC shrimp fishery in 1984 reportedly went north to fish for shrimp in Alaska. Others went to the Gulf of Mexico, fished for prawns off of South America, or simply stopped fishing because of financial difficulties.

The return of shrimping to the Eureka/Crescent City area led California trawlers to fish more extensively off California in 1984. Six California vessels landed shrimp in Oregon in 1984 compared to 17 California trawlers

¹ This is the actual number of shrimpers participating as double counting of vessels has been eliminated.

making Oregon landings in 1983. At the same time, in 1984, ten Oregon vessels migrated to the south and landed shrimp in California, compared to eleven out-of-state Oregon vessels landing in California in 1983. The shrimp catch from the Eureka/Crescent City bed was especially productive late in the season.

The exvessel value of California shrimp landings in 1984 was only \$758,000, down 14 percent from the landed value of shrimp recorded during the 1983 season. Thus, the rise in landings was offset by a sharp decline in exvessel prices. The average exvessel price paid for California shrimp fell to \$0.465 per pound compared to a 1983 seasonal average price of \$0.52 per pound. Along the entire coast the average exvessel price fell from \$0.73 per pound in 1983 to \$0.48 per pound in 1984, a 34 percent decrease.

The combination of higher landings and a smaller trawl fleet caused average landings per vessel to increase to 38,800 pounds for California shrimpers. In 1983, shrimp trawlers landed an average of just 20,500 pounds per vessel. Average gross revenues per vessel increased slightly to \$18 thousand, up 11 percent from the \$16.3 thousand per vessel during 1983. Thus, California shrimp trawl vessel earnings appear to have recovered somewhat from the extremely low level of 1983. However, earnings from shrimp were still considerably below average in 1984.

The traditional alternative fisheries for shrimp trawl vessels were limited again in 1984. Alaskan pink shrimp trawl landings were only slightly higher (9,300 million pounds) than the record low of 7,500 million pounds landed in 1983. Production in the west coast groundfish fishery has declined substantially during the past three years due to the strict controls implemented to limit landings of several rockfish species on the West Coast. The once lucrative Dungeness crab fishery has become an unreliable alternative for shrimpers since landings have been extremely low in recent years. Therefore, with few profitable alternatives, shrimp trawlers probably were not able to compensate for the second consecutive year of extremely poor shrimp production.

The slight increase in California shrimp landings was due to the return of larger shrimp to the normally productive north beds off Eureka/Crescent City. Landings in the Eureka/Crescent City area recovered to over 1.3 million pounds, an increase of over 300 percent from 1983 (Table 2). These shrimp were primarily 80-count per pound size and were caught mostly in September and October. Adding hope for the future recovery in the shrimp resource was the abundance of zero-age shrimp appearing in the catch at the end of the 1984 season (Talley 1985). Another positive development has been the good catches of large sized shrimp off all three states during the early part of the 1985 season, suggesting that the shrimp resource may improve more next year.

IV. CALIFORNIA PROCESSORS AND MARKETS

California pink shrimp production has traditionally been in cooked and peeled shrimp form, frozen and vacuum packed in five pound tins. A smaller amount of shrimp is sold fresh to restaurants and retail fresh fish outlets. Wholesale prices for the vacuum-packed product in 1984 were between \$3.50-4.25 per pound, compared to a 1983 price range of \$3.60-4.50. At the 1984 price, sales of the tinned product were reportedly down for coastal processors. Talley (1985) reports that the continued importation of low-priced individually quick frozen (IQF) shrimp from Norway hindered sales of the traditional product form produced by domestic shrimp processors. In an effort to compete with the foreign IQF product, coastal shrimp processors began to produce a similar IQF product in large quantities and at low prices (Talley 1985). Coastal processors paid considerably lower exvessel prices for shrimp in 1984 to enable them to sell the IQF product at competitive prices. In June 1984 the West Coast IQF product sold for \$2.50 per pound and eventually dropped as low as \$2.20 per pound when Norway lowered IQF product prices further during the season. With shrimp supplies limited and processor prices at such low levels, revenues from shrimp production fell for coastal shrimp processors, even though the newly introduced IQF shrimp product reportedly sold well.

The reduced U.S. supply of west coast shrimp and inflated value of the U.S. dollar have resulted in imports of large quantities of Norwegian shrimp into domestic markets over the last two years. In 1984, Norwegian imports of peeled fresh and frozen shrimp increased 30 percent to 10.5 million pounds (Table 3); however, this was considerably less than the 300 percent increase in peeled shrimp imported from Norway in 1983. The rate of increase in Norwegian shrimp imports has slowed because of the success U.S. producers enjoyed in marketing their low-priced IQF product in 1984 (Talley 1985). The movement of west coast shrimp supplies is reflected by the level of cold storage shrimp holdings. Domestic and foreign holdings of peeled shrimp totaled 3.6 million pounds in December 1983, compared to only 1.3 million pounds in storage at the end of December 1984 (Talley 1985).

Literature Cited

- California Department of Fish and Game. 1978, 1980-1984. Unpubl. preliminary landings data.
- Oregon Department of Fish and Wildlife, Marine Region, Newport Oregon. 1985. Draft Report on 1984 Oregon Shrimp Fishery.
- Pacific Fishery Management Council. 1981. Draft Fishery Management Plan for the Pink Shrimp Fishery Off Washington, Oregon and California. 143 pages.
- Talley, K. 1985. Shrimp. Pacific Fishing Yearbook 6(4):71-77.
- U.S. Department of Commerce, 1983, 1984. Unpubl. Statistics by Bureau of the Census.

Table 1 - Annual Landings (thousands of pounds) and Exvessel Value (thousands of dollars) of Pink Shrimp (Pandalus jordani) in California, Oregon and Washington from 1978-1984.

	California	cosi	Oregon	ď	Washington	go	Total	
Year	rps	49	ह्वन	- 69	rps	- 69 1	हत्न	**
1978	13,889	3,658	56,997	14,900	13,987	3,000	84,973	21,558
1979	4,928	1,870	29,587	11,200	12, 135	004 4	46,650	17,470
1980	8. tu . tu	2,570	30,152	16,600	12,600	6,700	47,225	25,870
1981	†80 ° †	2,086	25,918	11,700	10,055	7,600	40,057	18,386
1982	ħ†9 * ħ	2,364	18,462	009,6	666,4	2,500	28,005	14,464
1983	1,130	881	6,547	4,673	5,656	4,191	13,335	9,745
1979-83 Average	3,832	1,954	22, 133	10,755	6,089	824,4	35,054	17,187
1984	1,629	754	ħħ8 * ħ	2,148	3, 423	1,566	9,896	4,472

Oregon and Washington catch data from PMFC Crab and Shrimp Data Series, reproduced in Oregon Department of Fish and Wildlife draft report on 1984 Oregon Shrimp Fishery, March 1985; 1978, 1980-1984 California catch data from California Department of Fish and Game, unpublished preliminary landings data; 1979 California data from Draft FMP for Pink Shrimp, April 1981. Source:

Table 2 - California Pink Shrimp Landings by Port in 1984 and 1983.

	2083			1984	
Port	डव्य	-⇔	डवन		-69
Eureka/Crescent City	212,227	147,173	1,350,767		613,270
Monterey	137	352	165		185
Santa Barbara	11,429	9,211	684 84		26,032
Morro Bay	758,550	606,150	126,628		65,846
Avila	145,913	116,707	27,843		14,900
Ventura	1,341	915	12,442		8,667
San Francisco/Bodega Bay	0	0	10,657		5,181
Los Angeles	ı	ı	51,979		24,059
TOTAL	1,129,597	880,517	1,628,970		758,140

Source: California Department of Fish and Game. 1983, 1984. Unpubl. preliminary landings data.

Table 3 - Imports of Shrimp into West Coast Markets for 1983 and 1984.

Origin

Norway

1983	1,451,644	815,076	6,913,830	27,078,895	36,259,445
Dollars (\$) 1984	765,713	562,770	3,989,615	27,353,505	32,671,603
Pounds 1983	552,620	236,685	2,012,236	8,093,073	10,864,614
PG 1984	386,873	186,588	1,718,965	10,548,235	12,840,661
Product Type	Shell-on, Fresh and Frozen	Canned	Peeled Raw, Fresh and Frozen	Peeled other, Fresh and Frozen	TOTAL

Source: U.S. Department of Commerce, unpublished statistics by Bureau of the Census.