U.S. Commercial Fishermen Land 6.4 Billion Pounds of Fish in 1983

United States fishermen landed 6.4 billion pounds of edible and industrial fish last year, up about 71 million pounds from 1982 landings and just short of the 1980 record of 6.5 billion pounds. Despite the 1983 catch increase, the price paid for those fish at the dock, $2.4 billion, decreased by $34.5 million compared with 1982.

Record landings of American lobster and menhaden and increased landings of clams, cod, flounder, salmon, and tuna helped offset declines in other major species including anchovies, shrimp, and squid. The end result was that fishermen received about a penny a pound less for their fish and shellfish in 1983 than they did in 1982.

Records Set

A number of records were set in 1983. They include landings of 3.0 billion pounds of industrially-important menhaden (the previous high was 2.8 billion pounds in 1982); 44.2 million pounds of American lobster worth $106.8 million (the previous high was 39.4 million pounds worth $90.9 million in 1982), and exports of 404.1 million pounds of fish oils (the previous high was 284.0 million pounds in 1980).

Among the losers were king crab, with landings of 25.6 million pounds, the lowest level since 1959, and anchovies, which showed an equally dramatic plunge, down from 103.3 million pounds in 1982, to only 22.3 million pounds last year.

Top Fishing Ports

New Bedford, Mass., led all other U.S. cities in the value of its fish landings in 1983, and Cameron, La., led all others in the volume of its catch. Specifically, New Bedford led with more than $109 million worth of fish and shellfish landed, up substantially from $83.3 million in 1982. Cameron, as in the past 6 years, was first in volume, with 744 million pounds of fish landed, mostly the lower-valued menhaden.

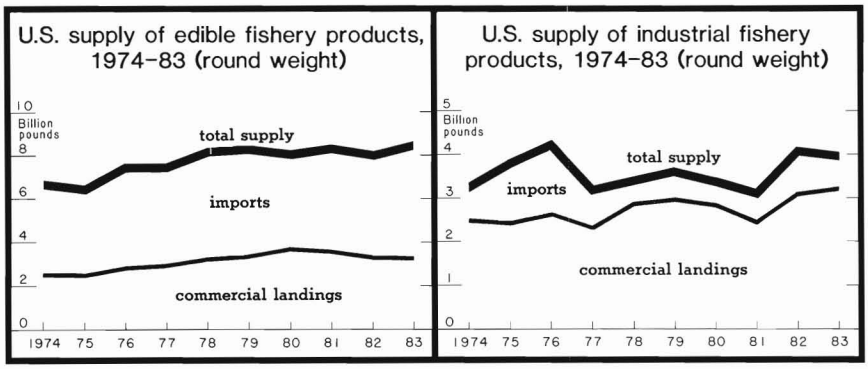
The most dramatic shifts resulted from continued lower landings of tuna in California, which caused values in the Los Angeles and San Diego areas to continue to tumble, and a crash in the king crab fishery which brought Kodiak, Alaska, landings to less than half their 1981 value.

The ten leading U.S. ports in volume of fish and shellfish landed in 1983 (in millions of pounds), with 1982 figures for comparison were:

	1983	1982
Cameron, La.	743.9	714.7
Pascagoula-Moss Point, Miss.	380.2	331.6
Empire-Venice, La.	281.9	267.3
Dulac-Chauvin, La.	269.2	265.6
Los Angeles Area, Calif.	262.3	334.8
Beaufort-Morehead City, N.C.	167.2	116.4
Gloucester, Mass.	150.9	146.6
New Bedford, Mass.	111.8	94.9
Kodiak, Alaska	89.0	105.3
San Diego, Calif.	84.6	106.8

The ten leading U.S. ports in value of fish and shellfish landed in 1983 (in millions of dollars), with 1982 figures for comparison were:

	1983	1982
New Bedford, Mass.	109.2	83.3
Los Angeles Area, Calif.	85.1	92.9
Kodiak, Alaska	60.4	90.1
Brownsville-Port Isabel, Tex.	55.0	52.0
Aransas-Rockport, Tex.	50.0	41.0
Dulac-Chauvin, La.	47.7	51.7
Cameron, La.	39.5	40.4
Gloucester, Mass.	38.0	43.6
San Diego, Calif.	37.5	59.7
Dutch Harbor-Unalaska, Alaska	36.4	47.8



U.S. Shrimp Imports and Consumption Set Records

According to preliminary figures, U.S. landings of shrimp in 1983 were down from a year earlier, while imports and consumption reached record levels. Prices averaged slightly lower to slightly higher in 1983 compared with 1982, but most were 10-24 percent lower in December 1983 than a year earlier. Prices of the largest sizes were strongest, and prices of middle sizes were weakest.

Gulf and South Atlantic landings were 141 million pounds (heads-off) in 1983, down 5 percent from 1982, and 12 percent below the 1978-82 average. The value was $485 million, down 0.1 percent, according to preliminary estimates. The largest drop occurred in Louisiana. Among species, brown shrimp was down significantly, while whites and pinks were up somewhat.

U.S. supply and use of fresh and frozen shrimp, 1982-83[1] (in millions of pounds, heads-off).

Item	Supply	
	1982	1983
Beginning inventory	52.4	49.2
Landings[2]	149.2	141.2
Imports	302.4	388.0
Total supply	504.0	578.4
Ending inventory	49.2	56.8
Exports	31.1	28.3
Canned pack[3]	9.6	12.2
Apparent consumption	414.1	481.1

[1]Some data preliminary; totals from unrounded data.
[2]Gulf and South Atlantic only.
[3]Gulf only.

U.S. imports of fresh and frozen shrimp were a record 388 million pounds (heads-off) in 1983, up 28 percent from a year earlier and 50 percent above the 1978-82 average. Imports of all shrimp totaled 341 million pounds (product weight), valued at $1,224 billion. Imports from Mexico were up 5 percent to 84.6 million pounds ($384 million). Imports from Ecuador advanced sharply—up 42 percent—to 51.4 million pounds ($219 million). Based on shrimp farming primarily, imports from Ecuador grew from averages of 6.7 million pounds in 1968-72 and 21.1 million pounds in 1978-82. Counting Ecuador alone, aquaculture represented perhaps 13 percent of U.S. imports of shrimp in 1983, and future supplies from shrimp farms will be much larger. (See related article in Foreign Fisheries Development section.)

Inventories of frozen shrimp were 57 million pounds (heads-off) at the end of 1983, 15 percent above a year earlier, but 5 percent below the 1978-82 average. The Gulf pack of canned shrimp rose 27 percent to 12 million pounds (heads-off). Consumption of fresh and frozen shrimp in 1983 reached a record 481 million pounds, 16 percent above 1982, and 30 percent above the 1978-82 average.

Ex-vessel and wholesale prices of most Gulf shrimp were trending downward in the second half of 1983. Although prices of larger shrimp began turning upward in the last quarter, most prices closed lower in 1983 than in 1982. Wholesale prices of Gulf browns at New York were 4-18 percent lower in December 1983 than a year earlier, except for under 15's, which were 0.5 percent higher. Ex-vessel prices of western Gulf shrimp were 10-22 percent lower. The greatest declines were in the middle sizes. For the year, ex-vessel and wholesale prices averaged 5.7 percent higher to 1.8 percent lower.

U.S. 1983 Albacore Landings Up from 1982

Michael Laurs, Leader of the Fisheries Environment Investigations at the La Jolla Laboratory of the NMFS Southwest Fisheries Center, reports that the preliminary estimated catch for the 1983 U.S. albacore fishery is between 10,500 and 11,000 tons. While this total is about 30 percent below the 10 year average of 15,675 tons, it is about 40 percent higher than the catch landed in 1982, which was about 7,650 tons. Several factors contributed to the increased catch in 1983, including oceanographic conditions, in part associated with the El Niño, relatively good weather (especially off central and northern California), and a more stable market for fish-buying for processors.

Albacore arrived in waters south of Pt. Conception about a month earlier than usual, and fair catches were made until the end of July. After July, catches became virtually nil for the remainder of the season owing to very warm upper-layer ocean temperatures and deep thermocline conditions associated with the El Niño. While oceanographic conditions related to the El Niño were detrimental to albacore fishing south of Pt. Conception and in much of the Pacific Northwest, the El Niño was partly responsible for the best albacore fishing in a number of years off central and northern California. Water conditions were favorable, oceanic fronts important for the aggregation of albacore were close to shore, and weather conditions were generally good, resulting in the best fishing conditions and catch rates for several seasons between Pt. Conception and Eureka.

In coastal waters off much of Oregon and Washington, however, except for brief periods in local areas, e.g., off the Columbia River, Newport, Coos Bay, etc., albacore catches were generally low owing in large part to the lack of upwelling fronts to concentrate fish. Some of the best albacore fishing during the 1983 season occurred about 1,000 miles off northern Oregon, where a large fleet of boats made high catches for a number of weeks during August to late September. There was relatively good fishing in coastal waters off British Columbia for brief periods in the latter part of the season, as is usually the case.

The albacore fishing accurately reflected the albacore forecast prepared by Laurs and his staff in early June prior to the start of the 1983 season. In addition to the seasonal forecast, albacore fish bulletins detailing fishery information were issued biweekly by the Investigation Staff.

Daily albacore fishing broadcasts were also made during the 1983 fishing season, as they have been since 1967. In all, 72 broadcasts were made this year over 9 radio stations twice daily by Ron Dotson, Fishery Biologist, who prepared the broadcasts, based on information gathered from contacts with fishermen, fish buyers, fish processors, and State agency personnel.

Sablefish Assessment Made Off Alaska

The 1983 assessment survey for sablefish off southeast Alaska compared catch rates of conical and rectangular traps and provided estimates of relative abundance of prerecruit and marketable size sablefish. The ratio of catches in conical traps to catches in rectangular traps did not differ significantly from 1.0, showing that either type trap may be used for survey purposes. Compared with 1982, catch rates of marketable sablefish increased, reversing a downward trend evident for several years. Abundance of prerecruit sablefish continued to increase throughout the survey area. The increased abundance of sablefish in southeast Alaska is believed to be a result of the relatively strong 1977 year class.

U.S. Delegates Gain High Posts in New Salmon Organization

Representatives of several nations gathered earlier this year in Edinburgh, Scotland, for the inaugural meeting of the North Atlantic Salmon Conservation Organization (NASCO). NASCO, established under an international treaty which came into force on 1 October 1983, is composed of a Council and three Regional Commissions. Countries signing the treaty include Canada, Denmark (in respect to the Faroe Islands), the European Economic Community, Iceland, Norway, Sweden, and the United States. Finland also took part in the meeting as an observer and is expected to join NASCO.

The U.S. delegation to the Edinburgh meeting consisted of the three U.S. Commissioners to NASCO—Allen E. Peterson, Jr., of Sandwich, Mass.; Frank E. Carlton, Jr., of Savannah, Ga.; and Richard A. Buck of Dublin, N.H.—as well as government advisors and scientists.

At the meeting, Peterson, Director of the National Marine Fisheries Service's Northeast Fisheries Center in Woods Hole, Mass., was appointed by the multinational delegation as Vice President of NASCO's Council. Also, Buck, well known salmon conservationist and Chairman of Restoration of Atlantic Salmon in America, Inc., was appointed as Vice Chairman of the North American Commission.

NASCO seeks to promote the conservation, restoration, enhancement, and rational management of Atlantic salmon stocks. It will, for the first time, bring salmon-producing and salmon-harvesting nations together for cooperatively assessing the health of the resource and for reversing the decline of salmon throughout the North Atlantic. Scientific and statistical information, scientific research, and regulatory measures will be NASCO's focus in the future.

Scientific research will provide data on salmon stocks and enable NASCO to propose regulatory measures to control the harvest of Atlantic salmon by ocean fisheries. Until such data are available, however, it may be necessary to adopt temporary measures to curb overharvest and rebuild stocks now considered by many at a crisis level.

U.S. Squid Exports to Japan Decline

The U.S. Regional Fisheries Attaché in Tokyo reports that the quantity and value of U.S. exports of squid to Japan, during January-September 1983, decreased by about 95 percent compared with the same period in 1982. The United States had shipped only 170 t of squid worth $0.3 million through September 1983, while 3,200 t of squid worth $4.3 million was shipped during the first three quarters of 1982. The Branch of Foreign Fisheries Analysis, NMFS, has been following the world squid situation for some time and believes that the primary reason for this decrease is the greatly increased squid exports to Japan by the Polish (state-owned) fishing industry. Japanese imports of Polish-caught squid were 22,400 t during January-August 1983, almost double the 11,400 t shipped to Japan during the entire previous year.

Yellowtail Flounder Fishery Reviewed

The NMFS Northeast Fisheries Center has released its 1983 assessment of the status of New England yellowtail flounder stocks which indicates a substantial increase in abundance. The fishery has responded dramatically to this increase: Landings for 1982 exceeded the 1981 figure by 60 percent and landings for 1983 were running well above 1982 levels and could reach 34,000 metric tons (t), 36 percent above the 1982 figure of 25,000 t and the highest U.S. catch since 1970.

The ex-vessel value of the 1982 catch was $26,226,000 which reaffirms the yellowtail as the nation's second most important flatfish and as one of the three most important groundfish species caught commercially on the East Coast. Increased yellowtail landings have been a boon to New England harvesters who, in recent years, have experienced greatly reduced catches of haddock.

The biology and distribution of yellowtail flounder are interesting and have had important effects on fishery trends. Off the U.S. coast, abundance is highest on the southern New England, Georges Bank, and Cape Cod fishing grounds at 15-40 fathoms. Since 1960, about 80 percent of the total landings have come from the southern New England and Georges Bank grounds. Yellowtail have also been fished in the Mid-Atlantic (off Long Island and New Jersey) and in the Gulf of Maine, although landings from these areas have been minor in comparison.

Foreign Fishing Vessels Seized

Three foreign fishing vessels were seized last fall in the U.S. FCZ (200-mile zone) for violating U.S. fishing regulations. The Japanese longliner *Kiyo Maru No. 455* was seized off the Alaskan coast on 23 October for grossly underlogging its catch of sablefish; the vessel was released on $300,000 bond pending further judicial proceedings. The Italian stern trawler *Maria Michela* was seized about 70 miles southeast of Cape May, N.J., also on 23 October for multiple violations, including underlogging of catch by 44 tons; the case was settled on 28 October with payment of a $65,000 fine. The Japanese transport *Nikko Maru* was seized in the Bering Sea on 12 November for multiple underlogging violations amounting to about 2,200 tons of fish during 1982 and 1983; the vessel was released on $400,000 bond pending further judicial proceedings. This brought to 11 the total number of foreign fishing vessels seized during CY 1983: Japan, 7; Canada, 3; and Italy, 1.

Recreational Fisheries Development Progresses

In 1982, an S-K study identified impediments to further recreational fishing

industry development. The 1983 S-K Program is funding $456,000 in projects to resolve these impediments. A national artificial reef center will guide the use and deployment of materials for artificial reef development. A guide to fishing pier funding sources and right-of-way acquisition will be produced for local governments. Charter boat marketing strategies will promote increased consumer awareness of recreational fishing opportunities.

In the Southeast, Southwest, and Northwest regions, S-K efforts focus on shifting the recreational angler's interest from popular, heavily pressured species to underutilized resources through public education programs. The Northwest will include information on the potential health risks of harvested shellfish. For additional information on recreational fisheries development contact: Richard H. Wheeler, NMFS, Industry Development Division, Washington, DC 20235.

Fishery Market News: 46 Years of Service

In 1937, the 75th Congress of the United States provided for the establishment of a Market News Service for the commercial fisheries at the request of the industry which felt such a service was vital to the successful marketing of fishery products. The New York office published the first daily report on 17 February 1938.

Thus, the Market News Service is observing its 46th year of continual service to the seafood industry. Within the first few years, as quickly as personnel could be trained and offices established, daily Market News reports were being released at four additional offices: Boston, 26 May 1938; Seattle, 1 October 1938; New Orleans, 5 January 1940; and Terminal Island, Calif., 1 August 1945.

For the first 37 years, the reports were provided free to the industry. In 1975 Federal government policy changes required a subscription fee to cover printing and mailing of the reports. Today that fee is $50 per year for a full service of 3 reports per week. A weekly summary published each Friday is available for $20 per year. This is one of the "best buys" in the seafood business. A year's worth of detailed market prices, both dockside and wholesale, receipts, port production, cold storage holdings, imports, exports, and numerous trade opportunities can be obtained for only 19¢ per business day. The cost of collecting and compiling this data is still borne by the government.

The purpose of the Fishery Market News Service is to provide current and timely fisheries information to fishermen, processors, wholesalers, retailers, government agencies, and others. These data aid in determining proper utilization of fishery products and in making decisions regarding fisheries and regulations.

Subscription rates for Fishery Market News Reports were increased as of 1 March 1984. The subscription rate for the full service (issued Monday, Wednesday and Friday) is $50 per year. The weekly summary, including the Friday report, remains at $20 per year. The rates for changing from a weekly to a full service report during a subscription year will be provided by the issuing office.

These rates are now in effect for all new subscriptions and renewed subscriptions. Persons subscribing to these reports should make checks (drawn on a U.S. bank) and money orders, in U.S. dollars, payable to: U.S. Department of Commerce, NOAA. Mail check or money order to the National Marine Fisheries Service Office below that issues the report desired: Blue Sheet, 470 Atlantic Ave., First Floor, Rear, Boston, MA 02210; Green Sheet, 201 Varick St., Room 1144, New York, NY 10014; Goldenrod Sheet, 600 South St., Room 1046, New Orleans, LA 70130; Buff Sheet, 300 S. Ferry St., P.O. Box 3266, Terminal Island, CA 90731; and the Pink Sheet, 7600 Sand Point Way N.E., Bin C15700, Seattle, WA 98115.

Mandatory Gulf Shrimp Data Reporting to Aid Fishery Management

Regulations requiring the reporting of Gulf of Mexico shrimp statistical information were implemented on 30 May 1984, reports Jack T. Brawner, Director of the Southeast Region of the National Marine Fisheries Service (NMFS) in St. Petersburg, Fla. This information will lead to better management of the shrimp fishery which will ultimately benefit the shrimp industry by sustaining resources at the highest possible levels, Brawner noted.

The regulations implement a management measure contained in the Fishery Management Plan (FMP) for the Shrimp Fishery in the Gulf of Mexico which was developed by the Gulf of Mexico Fishery Management Council under the Magnuson Fishery Conservation and Management Act and implemented by NMFS through regulations in 1981. However, this mandatory reporting section of the regulations was reserved to allow NMFS to develop a data collection system.

NMFS has now designed a statistical reporting system which essentially makes mandatory the voluntary reporting program utilized in the shrimp fishery since 1956. Although the reporting of shrimp statistical information under the voluntary program worked relatively well in the past, Brawner said, it was inadequate for purposes of management of the shrimp fishery under the FMP. Timely reporting of shrimp catch data during the fishing season has become essential to implementation of the FMP. For example, the acquisition of data is necessary for such management purposes as determining the time for the seasonal closure to shrimp fishing off Texas, evaluating the effects of the Tortugas Shrimp Sanctuary, and assisting states in the management of the shrimp re-

source when it is in their jurisdiction.

Brawner indicated that information collected under the mandatory system will be used only for management of the shrimp fishery, and will be released only in aggregate or summary form so as not to disclose the identity of the sources.

The regulations require shrimp vessel owners and operators randomly selected by NMFS in the Gulf of Mexico or adjoining state waters to provide, upon request, the following information: Name and official number of the vessel; amount of catch of shrimp by species; condition of the shrimp (heads on or off); depth fished and fishing location; person to whom sold, bartered, or traded; number, size, and type of gear; and effort and period of fishing.

The regulations require the receiving shrimp dealers and processors to provide, upon request, the following data: Fishing vessel (name and official number) or person from whom received; amount of shrimp or parts thereof received by species and size category for each trip; and ex-vessel value (by size category) of shrimp or portions thereof received. Further information is available from Edward Burgess, Southeast Region, National Marine Fisheries Service, 9450 Koger Boulevard, St. Petersburg, FL 33702 (telephone 813-893-3723).

Sea Scallops Show Continued Decline

The 1983 U.S. sea scallop research vessel survey was conducted from 26 July to 2 September 1983 using the R/V *Albatross IV* to evaluate resource abundance, age composition, and recruitment patterns in the Georges Bank, Mid-Atlantic, and Gulf of Maine. Catch-per-tow indices indicated that scallops have declined to very low levels on Georges Bank and in the Mid-Atlantic region. In both resource areas, the 1983 survey abundance and biomass indices were the lowest recorded in the 1975-83 survey time series, and were between one-third and one-quarter of the survey values observed during 1975-79. Consistent annual declines in survey abundance indices have now been noted for the past 3 years on Georges Bank and for the past 4 years in the Mid-Atlantic.

Recruitment in almost all areas remains low. The 1980 year class is not strong in any resource area. The very abundant 1979 year class, which has been limited to the South Channel region of Georges Bank, has been significantly reduced in size more rapidly than anticipated due to "mixing" of these scallops with larger scallops in the commercial landings. Accordingly, resource abundance on both Georges Bank and in the Mid-Atlantic will remain depressed through at least 1985 with recovery expected only when and if recruitment improves.

Significant densities of sea scallops were observed in survey tows on Fippennies Ledge and Jeffreys Ledge in the Gulf of Maine. Most of these scallops, however, were small with mean counts of 50-100 per pound. No large beds of sea scallops were located in any of the deep-water (>60 fathoms) Gulf of Maine areas surveyed. These results suggest that the Gulf of Maine sea scallop fishery will become more dependent on the inshore scallop resource than in past years.

ANUGA-83 Food Show Trade Leads Available

ANUGA-83, the largest food show in the world, was held 15-20 Oct. 1983, in Cologne, West Germany. Exhibitors totaling 4,883 from 81 countries had contact with 170,000 food buyers from around the world with attendance up by 21 percent over ANUGA-81. The Alaska Fisheries Development Foundation in conjunction with the National Marine Fisheries Service sponsored a U.S. seafood exhibit at ANUGA-83 which included 16 exhibit booths.

Fishery Development Foundations from all sections of the United States representing their regional seafood industries participated at ANUGA-83. Trade leads compiled by the Mid-Atlantic Fisheries Development Foundation, New England Fisheries Development Foundation and National Marine Fisheries Service are presently available to interested U.S. seafood companies. Anyone interested in receiving these export opportunities should write to: ANUGA-83, National Marine Fisheries Service, P.O. Box 1109, Gloucester, MA 01930-5309.

Pollock Handling Techniques Studied

Initial evaluations of samples prepared during a comprehensive field study last year in Kodiak, Alaska, to continue research on the proper handling, processing, and utilization of Alaska pollock indicate interesting results that will be important to the fishing industry, according to the Utilization Research Division of the NMFS Northwest and Alaska Fisheries Center.

Pollock used in this study were caught by a commercial fisherman in the Shelikof Straits and landed within 16 hours. Immediately after unloading the fish, the pollock were placed in ice, refrigerated seawater (32°F), and superchilled seawater (28°F), and held an additional 4 days in these systems.

The average length and weight of the pollock used in this study was 42.4 cm and 587 g, respectively. Interestingly, 48 percent of the pollock were 41-42 cm in length and 84 percent of the pollock were between 39 and 44 cm (15-17 inches) in length. This uniformity in size would be very important for processors if they intended to mechanically process the pollock.

Initial results suggest that pollock can be held in ice, refrigerated seawater (RSW), or superchilled (SC) seawater without appreciably affecting the functionality or sensory properties of pollock fillets. However, chemical tests indicated that undesirable changes were beginning to occur after 4 days, particularly in the RSW and SC systems, and this was reflected by the slightly lower desirability scores given the fried breaded fillet portions as well as the slight loss in functionality properties of the fillet muscle. Analysis of these samples will continue for 1 year to determine storage characteristics of the various treatments during frozen storage at 0°F.

Jerry Babbitt