U.S. 1981 Fish Catch Drops But Reaps Record \$2.4 Billion

The U.S. fish catch in 1981 fell to 6 billion pounds, the lowest since 1977, but those fish brought a record dockside value of \$2.4 billion, the Commerce Department's National Oceanic and Atmospheric Administration (NOAA) has announced. Although the volume of the 1981 catch was about 8 percent below that for 1980, a record year, NOAA's National Marine Fisheries Service said last year's catch was still 2 percent higher than the previous 5-year average.

The upward trend in the catch of edible fish and shellfish also appears to be continuing, according to the latest

A Management Plan for New England Groundfish

A new plan to manage the cod, haddock, and yellowtail flounder fishery off the New England coast has been developed by the New England Fishery Management Council and approved by the National Oceanic and Atmospheric Administration's National Marine Fisheries Service. It was implemented by emergency regulations effective 31 March 1982.

"The New England Council has worked with the industry for more than 2 years in developing this Interim Fishery Management Plan for Atlantic Groundfish," said William G. Gordon, NOAA's Assistant Administrator for Fisheries. "The result is a new approach to groundfish management." Gordon said the regulations for the plan include the basic management measures of minimum mesh size, minimum fish length, and voluntary statistics. Estimated per capita consumption of fishery products edged up to 13.0 pounds in 1981 from 12.8 pounds in 1980.

The most valuable species caught in 1981 again was shrimp, worth more than \$463 million at dockside. That was followed by salmon (\$438 million), crabs (\$297 million), and tunas (\$206 million). The leading U.S. port in volume of commercial landings was Cameron, La., a distinction that city has held since 1978. It was followed by Los Angeles; Empire-Venice, La.; Pascagoula-Moss Point, Miss.; Dulac-Chauvin, La.; and Kodiak, Alaska.

Kodiak had the highest valued landings of any port in the nation, topping \$132 million. Following were Los Angeles; New Bedford, Mass.; Dutch Harbor-Unalaska, Alaska; and Dulac-Chauvin. Louisiana led all states in volume with 1.2 billion pounds landed, mostly industrially important menhaden, followed by Alaska (975 million pounds), and California (775 million pounds). Alaska's catch, worth \$640 million, was the country's highest. It was followed by California (\$275 million) and Massachusetts (\$197 million).

catch reporting. The goal, according to Gordon, is to reduce the catching of small fish, enhance fish spawning, and collect accurate catch data. These goals are a major change from the present plan which uses quotas, trip limits, and mandatory reporting requirements to control catch. "We are able to relax the fishing regulations," Gordon said, "because of an increase in abundance of these fish stocks."

The plan will be effective for 3 years. During the first 2 years the Council has agreed to define its long-term management goals for these species and determine if certain levels of stocks should be maintained and what measures will be needed to reach those levels. Any additional protection measures will be implemented during the third year of the plan.

When asked when the fleet can actually begin to fish under the new plan, Gordon responded "On March 31, but this was not an easy date to arrive at. This new management approach requires NMFS to notify the public for its reaction to the plan and to process final regulations. The proposed regulations process could have kept the industry under the existing quotas until mid-summer. But after careful consideration of the record, the Secretary of Commerce has made the decision to implement the plan now, so that the industry can begin receiving its benefits."

The plan thus began on 31 March under emergency regulations for 90 days. During the first 45 days, the public was invited to comment on the proposed regulations. The Secretary also used the emergency period to monitor the fishery and see how well the plan was working. The final regulations were expected to be in force by mid-year.

The specific management measures included:

1) Optimum yield, which will be the

amount of fish actually harvested by the U.S. fishermen in accordance with the measures listed below.

2) Minimum mesh size for trawl net cod ends of $5\frac{1}{8}$ inches the first year, and $5\frac{1}{2}$ inches the following 2 years in a designated large mesh area. Gill nets must be $5\frac{1}{2}$ inches. This large mesh area includes a part of the Gulf of Maine and Georges Bank areas, where about 90 percent of the cod, haddock, and yellowtail flounder are normally taken.

3) Minimum fish lengths of 17 inches for cod and haddock caught and kept or bought commercially, 15 inches for cod and haddock caught and kept by recreational fishermen, and 11 inches for yellowtail flounder. These minimum lengths apply to any cod, haddock, or yellowtail flounder, regardless of where caught.

4) An optional settlement program under which a vessel may fish in the large mesh area for species requiring the use of small mesh nets.

5) Spawning area closures (March, April, and May) are essentially the same as they were under the previous management system, though Area I has been modified slightly.

6) No change in permit requirements.

7) Collection of catch data is based upon a voluntary system being implemented by the Northeast Fisheries Center at Woods Hole, Mass. Fishermen with permits will be contacted concerning participation in the program.

For further information, contact Peter D. Colosi, Jr., National Marine Fisheries Service, State Fish Pier, Gloucester, MA 01930. Telephone (617) 281-3600, extension 272.

Sea Scallop Plan to Aid Reproduction and Harvest

The Fishery Management Plan for the Atlantic sea scallop fishery, approved by NMFS Assistant Administrator for Fisheries (NOAA) William G. Gordon on 26 April 1982, was implemented by emergency regulations on 15 May 1982. The plan was

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developed by the New England Fishery Management Council in consultation with the Mid-Atlantic and South Atlantic Councils, and has regulated the harvest of sea scallops, *Placopecten magellanicus*, throughout their range, from Maine through North Carolina.

The emergency regulations implemented a management program designed to protect and enhance the sea scallop fishery resource. The program is expected, over the long term, to increase the yield per scallop by about 10 percent, and the reproductive potential of the stock by about 35 percent, providing significant net economic benefits to fishermen, consumers, and the nation. These benefits will be achieved through a single conservation measure, a restriction on the size at harvest of sea scallops.

For the first year of implementation, sea scallops must meet a standard of 40 meat count (40 meats per pound), or a corresponding $3\frac{1}{4}$ -inch (83 mm) shell height. Thereafter, the standard will rise to 30 meat count (30 meats per pound), or a corresponding $3\frac{1}{2}$ -inch (89 mm) shell height. The Regional Director of the National Marine Fisheries Service may then adjust the standard under limited circumstances within a range of from 40 to 25 meat count, in increments of 5 meat count, on a temporary basis.

Enforcement of the meat count standard will apply to sea scallops landed shucked and sold to a dealer up to the point in the U.S. where they are mixed, sorted, or processed. Sea scallops landed and sold in the shell must comply with the shell height standard up to the point in the U.S. where they are shucked. Sea scallops taken in Canada, under regulations which are substantially consistent with U.S. regulations, will be admitted to the United States if they are properly labeled and accompanied by a certificate of compliance issued by the Government of Canada.

All vessels harvesting sea scallops in quantities greater than 5 bushels or 25 pounds of meats per trip must obtain and carry on board a Federal fisheries permit with an endorsement for the sea scallop fishery. Information for management of the fishery will be collected as part of a voluntary fishery information collection program similar to that presently used by fishermen.

Fishermen had a 15-day grace period to restrict their harvests to scallops which met the meat count or shell height standards. A 60-day grace period was given so fishermen could apply for, and receive, their fishery permits.

New Albacore Fishing Area Holds Promise

Scientists with the Commerce Department's National Oceanic and Atmospheric Administration (NOAA), who completed preliminary evaluation of results of a 30-day albacore fishing expedition in waters 600-1,200 miles off San Diego earlier this year, are confident they have found a profitable winter fishing area for U.S. tuna fishermen. Izadore Barrett, director of NOAA's National Marine Fisheries Service Southwest Fisheries Center (SWFC) in La Jolla, Calif., said during January and February six chartered vessels conducted exploratory longline fishing for albacore tuna in waters not normally fished for the species.

The longline fishing method has not been used by U.S. tuna fishermen, according to Frank Mason of the American Fisherman's Research Foundation, an albacore fishing industry organization which cooperated in the project with NOAA. While on the fishing grounds the boats caught an average of about 0.5 ton per vessel, with high daily catches up to 1.5 tons. Albacore tuna sells for about \$1,800 per ton dockside.

"By U.S. tuna industry standards, a fisherman could make some money out there," Barrett said, adding "not a huge amount, but enough to make the trip worth his time and effort." He pointed out that during the fall and winter months, most albacore vessels are used in crab, shrimp, and sablefish fishing. These fisheries have become increasingly competitive and, accordingly, less profitable. The normal albacore season runs from July through October, and in the spring the vessels fish for salmon.

Barrett and Mason said albacore fishermen along the west coast have expressed considerable enthusiasm about the possibilities of productive winter fishing grounds. One ship was fishing out there early this year, Mason said, "and we expect a number will go out next winter."

The scientists were at a loss to explain why one of the six chartered vessels consistently caught more tuna than the other boats fishing in the same area. "We are going to look into every aspect of what he was doing, to try to find out what made the difference," Barrett said.

Albacore Tagged

During the expedition NOAA scientists tagged several albacore with ultrasonic transmitters, tracking one fish for 24 hours. The tracking results confirmed the belief that tuna cue on the ocean thermocline, that layer of water separating the warmer, oxygen-rich surface waters from the lower, colder ocean depths.

Vessels which cast their lines above the thermocline caught fewer than one fish per 100 hooks on the line, while those whose lines passed through the thermocline caught approximately eight fish per 100 hooks. This knowledge makes it economically feasible for the U.S. albacore tuna fleet, which until now has not fished during winter months, to expand its activities into the area being studied during months when the vessels normally would be idle, reports Michael Laurs of the SWFC.

In addition to measuring the potential catch, the six vessels are making observations on oceanographic conditions, collecting data for albacore biology and fishery studies, and tagging and releasing albacore for migration and stock structure studies.

The activity is sponsored by the American Fishermen's Research Foundation, a west coast industry group, under a grant from funds managed by NOAA's National Marine Fisheries Service.

Guam, Marianas Fishery Resources Are Surveyed

The NOAA ship *Townsend Cromwell* returned to Apra Harbor, Hawaii, on 16 April after a 15-day cruise around Guam and the Northern Mariana Islands where potential fishing grounds were surveyed and primary biological production and energy flow were assessed. The cruise was the first of a series of four to assess the fisheries resources, according to Richard S. Shomura, Director, Honolulu Laboratory, NMFS Southwest Fisheries Center.

Bert Kikkawa, Chief Scientist on the cruise reported that the bathymetry was conducted around Guam, Rota Island, Tinian, Saipan, and Farallon de Medinilla at bottom depths down to 600 fathoms (3,600 feet). One interesting result of this survey was the documentation that Farallon de Medinilla is surrounded by a very large bank with relatively large level plateaus at depths ranging from 50 fathoms (300 feet) to 400 fathoms (2,400 feet). These plateaus will be sampled for bottomfish and deepwater shrimps on subsequent cruises. Bathymetric data will be released after processing to aid local fishermen.

The biological assessment conducted during the cruise consisted of determining the abundance and distribution of the primary producers and zooplankton in their relationships to depth, light levels, and nutrient distribution.

Following the first bathymetric cruise, three biological cruises of 40 days each are scheduled. These will sample atulai (akule), tunas, bottomfishes, and shrimps along the Mariana Archipelago. The data collected on these cruises will be used to produce distributional charts and provide estimates of sustainable yields.

This series of research cruises is part of a cooperative agreement for the survey of the resources of the Mariana Archipelago that is being entered into by the Territory of Guam, the Commonwealth of the Northern Mariana Islands, and the United States (through the National Marine Fisheries Service and the U.S. Fish and Wildlife Service), according to Shomura. The *Townsend Cromwell* is commanded by Robert C. Roush.

Foreign Fishery Developments

Japan and Russia Sign Salmon Catch Quota Pact

Japan and the Soviet Union signed, on 23 April 1982, protocols on Japan's salmon catch quota for 1982 in the

> Note: Unless otherwise credited, material in this section is from either the Foreign Fishery Information Releases (FFIR) compiled by Sunee C. Sonu, Foreign Reporting Branch, Fishery Development Division, Southwest Region, National Marine Fisheries Service, NOAA, Terminal Island, CA 90731, or the International Fishery Releases (IFR) or Language Services Biweekly (LSB) reports produced by the Office of International Fisheries Affairs, National Marine Fisheries Service, NOAA, Washington, DC 20235.

northwest Pacific Ocean. Japanese Charge d'Affaires Hisashi Owada and the Soviet Fisheries Minister Vladimir M. Kamentsev signed the protocols at the Fisheries Ministry in Moscow.

The agreement set the 1982 Japanese catch quota for salmon at the same amount, 42,500 metric tons, as in 1981. The fishing period, the restricted fishing zones, and fishery cooperation fee of ± 4 billion (\$16 million) for 1982 remained also unchanged from 1981.

The two countries reached agreement on the salmon catch on 22 April in an unusually short period of 10 days. Both Owada and Kamentsev expressed satisfaction with the early conclusion of their negotiations. (Sources: LSB 82-6 and FFIR 82-8.)