

Sea Scallop, Goosefish Landings Set New Records

Landings of sea scallops and goosefish (monkfish or angler) in the U.S. Northeast (Maine through Virginia) during 1989 set all-time record highs, according to NMFS data. Scallop landings were 31.6 million pounds worth 125.7 million dollars in dockside value. Goosefish landings were 24.8 million pounds worth 11.8 million dollars. Other species whose landings increased in 1989 were Atlantic cod, silver hake (whiting), yellowtail flounder, swordfish, and northern

shrimp. Although landings of white hake decreased in 1989, their value nonetheless increased. Atlantic cod was the most landed seafood species in 1989, replacing Atlantic herring which dropped from first to second.

Table 1 lists the landings and values of 15 fish and invertebrate species in the U.S. Northeast for 1988 and 1989. For comparison only, the all-time record landings (and year in which they occurred) are also listed for these species.

Table 1.—Landings in the U.S. northeast for 1989, 1988, and the record year in pounds and dollars (data in millions).

Species	1988		1989		Record	
	Pounds	Dollars	Pounds	Dollars	Pounds	(Year)
Atlantic cod	75.4	42.6	76.3	44.1	294	(1880)
Atlantic herring	89.1	5.2	73.7	4.4	201	(1902)
Silver hake (whiting)	35.2	8.5	37.9	9.4	134	(1957)
Sea scallop	28.3	120.0	31.6	125.7	32	(1989)
Goosefish (monkfish, angler)	16.6	10.1	24.8	11.8	25	(1989)
Pollock (Boston bluefish)	33.1	11.0	22.5	10.7	54	(1986)
Winter flounder (lemon sole, blackback)	17.6	21.4	14.3	20.5	35	(1981)
Summer flounder (fluke)	24.3	31.6	12.6	20.9	32	(1979)
Yellowtail flounder	9.3	11.1	11.2	14.5	83	(1963)
White hake	10.5	3.2	8.8	3.4	40	(1998)
Northern shrimp	6.8	7.5	7.4	7.6	29	(1969)
Scup (porgy)	11.6	7.6	7.1	5.9	49	(1960)
Swordfish	5.6	16.6	6.3	17.6	7	(1929)
Haddock	6.5	7.0	3.8	4.4	294	(1929)
Redfish (ocean perch)	2.4	1.5	1.2	0.8	258	(1951)

Cash Prizes Set for Atlantic Salmon Tags

The North Atlantic Salmon Conservation Organization (NASCO) has created a lottery to increase fishermen's return rates of tags found on harvested Atlantic salmon. Those fishermen returning tags will not only receive the current \$15 (U.S.) reward, but will also be automatically eligible for a drawing with 31 cash prizes totaling \$13,600. Prizes include a grand prize (\$2,500), three first prizes (\$1,500 each), three second prizes (\$1,000 each), three third prizes (\$500

each), and 21 fourth prizes (\$100 each).

NASCO is an international, treaty-based organization which promotes conservation, restoration, enhancement, and sound management of salmon stocks in the North Atlantic. It has nine members: Canada, Denmark (i.e., Faroe Islands and Greenland), the European Economic Community, Finland, Iceland, Norway, Sweden, the Soviet Union, and the United States. Participation in the lottery, or "Atlantic Salmon Tag Return Incentive Scheme," by the nine NASCO members is voluntary. All but the Soviet Union are taking part.

According to Allen E. Peterson, Jr.,

Science and Research Director of the National Marine Fisheries Service's Northeast Region and one of three U.S. commissioners to NASCO, "tag returns provide important, if not essential, information on the biology and harvests of the stocks of North Atlantic salmon." He said such information "is particularly valuable for the U.S. effort to restore fish to New England rivers."

The lottery applies only to readily identifiable, external ("Carlin"-type) tags that are returned to an official tag-return agency. In the United States, the official tag-return agency is the Atlantic Salmon Tag Return Clearinghouse, NOAA, National Marine Fisheries Service, Woods Hole, MA 02543. Each April, the Clearinghouse will inform NASCO headquarters in Edinburgh, Scotland, of all eligible U.S.-origin tags that were returned. Tags returned to the Clearinghouse after the closing date will be eligible the following year.

All tag returns from NASCO members participating in the lottery are eligible for the grand prize drawing for \$2,500 which will be announced at the NASCO annual meeting each June. The tag returns will then be sorted into the three Commission areas of NASCO—West Greenland, North American, and North East Atlantic—according to the place of harvest of the tagged salmon. Ten awards will then be selected randomly for each Commission area. The first selected will win \$1,500; the second, \$1,000; the third, \$500; and the next seven, \$100 each.

All U.S. tags returned from the United States and Canada will be entered into the grand prize drawing along with the North American Commission drawing. All U.S. tags returned from West Greenland will be entered into the grand prize drawing along with the West Greenland Commission drawing. All U.S. tags returned from East Greenland will be entered into the grand prize drawing along with the North East Atlantic Commission drawing.

NASCO headquarters will send checks in the appropriate amount within 60 days of the announcement of the awards. The first drawing of award winners was to take place at this year's seventh annual meeting of NASCO in Helsinki, Finland, during 12-15 June 1990.

Rule Asked for Mandatory Dealer Reporting for Atlantic Swordfishes

A proposed rule that would require mandatory reporting by all dealers handling Atlantic swordfish was published in the *Federal Register* on 29 December 1989, announced Andrew J. Kemmerer, Director, Southeast Region, National Marine Fisheries Service (NMFS). The proposed rule would implement a regulatory amendment to the Fishery Management Plan for Atlantic Swordfish (FMP). This proposed rule would require each dealer in the Atlantic swordfish fishery to provide information on all swordfish received and on other fish landed in conjunction with swordfish trips. The required information to be reported would include dates of receipt of swordfish; names and official numbers of the vessels from which swordfish were received; dates and ports of landing of the vessels; total carcass weights (by market category for swordfish and by species for related by-catch species received); prices paid for each market category and species; and individual carcass weights for swordfish. Although not required, individual carcass weights of the related by-catch species would also be desired.

Dealers would have the option of providing the information on a form available from the National Marine Fisheries Service or on copies of appropriate weigh-out sheets and sales receipts. Dealer reports for each month would have to be submitted to the Southeast Regions Science and Research Director so as to be received not later than the fourteenth day of the following month.

The information obtained from dealer reports would supplement the catch per unit of effort data from vessel logbooks by providing statistics on the size composition and total weight and value of landings of swordfish and associated species. This information is essential for stock assessments and for monitoring the status of stocks and the effectiveness of the FMP.

In addition to requiring dealer reporting, this proposed rule would: 1) Clarify the scope of the regulations; 2) modify the requirements and procedures for obtain-

ing a vessel permit; and 3) modify the procedures for submitting the daily fishing records. Comments were accepted through the end of January 1990.

Crustacean Shell Disease May Be Aggravated by Environmental Stress

About 2 years ago, when sewage sludge dumping shifted from the 12-Mile Dumpsite in the New York Bight apex to the 106-Mile Dumpsite beyond the continental shelf-slope margin, many offshore lobstermen and deep-sea red crabbers in the vicinity of the 106-Mile Dumpsite felt that there was a significant increase in the prevalence and severity of shell disease in their catches. Shell disease is characterized by darkening, pitting, even penetration of the exoskeleton of these crustaceans. While there is no evidence that the disease affects the wholesomeness of these animals as seafood, it may affect their marketability due to discoloration/disfiguration, and conceivably it may affect their population distribution, abundance, and productivity.

The NMFS Northeast Fisheries Center has issued two reports on this topic. The first report, "Shell Disease of Crustaceans in the New York Bight" (NOAA Technical Memorandum NMFS-F/NEC-74), emanated from a joint NOAA and U.S. Environmental Protection Agency-sponsored scientific working group composed of Federal, state, and university scientists. The report finds that: 1) Shell disease is a natural phenomenon; 2) its prevalence and severity, however, may be greater in polluted or stressful habitats, suggesting that various stresses, including pollution, can trigger and/or aggravate the disease; and 3) there aren't enough data yet to determine if or how much the disease has population-level effects.

The second report, "Shell Disease among Red Crabs Inhabiting Submarine Canyons of the New York Bight" (NOAA Technical Memorandum NMFS-F/NEC-77), finds shell disease prevalence to be 92, 92, and 86 percent, respectively, among crabs in Hudson, Block, and Atlantis Canyons. A comparison of spe-

cimens collected in 1988 with those collected in 1884 and subsequently stored in the Smithsonian Institution shows that shell disease also occurred more than a century ago. Copies of either report are available upon written request to: Information Services Section, Northeast Fisheries Center, Water St., Woods Hole, MA 02543. Technical inquiries on shell disease should be directed to: Carl J. Sindermann at the Oxford (Md.) Laboratory, telephone (301) 226-5193.

Threatened Status Eyed for Selected Salmonids

The National Marine Fisheries Service has published a new emergency rule to list the winter run of chinook salmon, *Oncorhynchus tshawytscha*, in the Sacramento River, California, as a threatened species under the Endangered Species Act of 1973. Meanwhile, the NMFS is also conducting a status review of sockeye salmon, *O. nerka*, populations in Idaho's Salmon River basin to determine if any should be proposed for listing as threatened or endangered under the ESA.

The chinook salmon of the Sacramento River was first listed by NMFS on an emergency basis on 4 August 1989. Since that time, NMFS has published a proposed rule to formally add the run to the list of threatened species (March 20, 1990 - 55 FR 10260). NMFS published this new emergency listing to avoid a hiatus in protection of the species until the formal listing process is completed. In 1989, the return of winter-run chinook salmon was estimated at only 500 fish, which is 75 percent below a consistent run size of 2,000 to 3,000 fish in recent years. This emergency rule includes a designation of critical habitat in a portion of the Sacramento River from Red Bluff Diversion Dam, Tehama County (River Mile 243) to Keswick Dam, Shasta County (River Mile 302) including the adjacent riparian zones, the water in the river, and the river bottom for winter-run. This section includes the portion of the river in which suitable conditions can be maintained for spawning, incubating eggs, and rearing juvenile fish. Winter-run chinook salmon in the Sacramento River are listed as threatened under the ESA and critical

habitat is designated effective 2 April 1990 through 28 November 1990, or until the final listing is effective, whichever occurs first.

New Marine Mammal Investigation in NEFC

A new Marine Mammal Investigation has been established by the NMFS Northeast Fisheries Center and assigned to the Fisheries Ecology Division. The center has been conducting marine mammal studies, largely through contracts with academic and private research institutions, for many years. Increasingly frequent and more comprehensive requests by resource and environmental managers for marine mammal information, however, have prompted the elevation of these studies into a formal investigation.

The new investigation's research will focus on: 1) The indirect interactions between marine mammals and commercially and recreationally important fish stocks through competition for space and food, 2) the incidental take of marine mammals during fishing operations and the effects on whale populations of whale watching operations, and 3) the current status of Northwest Atlantic marine mammal populations.

Leaflet Available on Nutritional Constituents of N.E. Seafood Species

The NMFS Northeast Fisheries Center has issued an information leaflet on "The Seafood Way to a Healthy Heart." The one-page leaflet includes a listing of the cholesterol, fat, and Omega-3 content in cooked, 4-ounce portions of 27 Northeast seafood species/products. (Omega-3 is a category of polyunsaturated fatty acids which are found in fish oils and which may have a therapeutic effect in the prevention of heart disease.)

The leaflet is the first in a series of informational leaflets to be issued by the Center which will summarize the practical applications and implications of Center research findings to current

popular concerns. For copies of the leaflet, write: Information Services section, Northeast Fisheries Center, Woods Hole, MA 02543. For further information on Center research on nutritional constituents of seafood species/products, contact Judith Krzynowek, FTS 837-9226 or (508) 281-9226.

Temperature Trends in N.E. Waters Documented

A report on "Surface and Bottom Temperature Distributions from the Northeast Fisheries Center Spring and Fall Bottom Trawl Survey Program, 1963-1987," has been issued as Northeast Fisheries Center Reference Document 90-03. The report shows that, in general, water temperatures in the 1960's were quite cold, in the early to mid-1970's were warmer, in the late 1970's to early 1980's were intermediate between the two previous extremes, and in the mid-1980's were warm again. These data have important applications in fisheries ecology and management.

Copies of the report are available upon written request to: Information Services Section, Northeast Fisheries Center, Water St., Woods Hole, MA 02543. Technical inquiries on water temperatures should be directed to David G. Mountain, FTS 840-1271 or (508) 548-5123.

Indo-Pacific Crab Is Reported From New Jersey

An egg-bearing female of a western Pacific crab, *Hemigrapsis sanguineus*, was found in the Cape May, N.J., area in September 1989 by a Franklin and Marshall College biology student. This crab species, a noncommercial "shore" crab, is one of the commonest crabs in Japan, and is known from Sakhalin, Korea, and China south to Hong Kong. Larvae from the captured crab were reared through the early life stages.

It's not known whether this capture represents a freak capture of the only individual of this exotic species, or the first capture from an established population.

If the latter, it's not known what ecological effect this exotic species might have on the Northeast's tidal community. The Cape May area should be monitored for the occurrence of this species, suggests Austin B. Williams of the NMFS National Systematics Laboratory in Washington, D.C.

NMFS Decides Against Emergency Regulations for Atlantic Swordfish

The National Marine Fisheries Service (NMFS) decided not to implement emergency regulations for the Atlantic swordfish fishery according to William W. Fox, Jr., Assistant Administrator for Fisheries, in a 5 February 1990 announcement. The agency has been analyzing for several weeks the potential conservation benefits of implementing emergency regulations under the Magnuson Fishery Conservation and Management Act for the overfished Atlantic swordfish resource. The agency concluded that emergency measures confined to the 200-mile zone, which could remain in effect for more than 6 months, would not have sufficient conservation benefits this year to justify their imposition through use of the Secretary of Commerce's emergency regulatory authority as provided by the Magnuson Act.

NMFS remains concerned about the overfished status of Atlantic swordfish and is committed to establishing effective conservation measures as soon as possible in cooperation with the Regional Fishery Management Councils. To be most effective, however, new U.S. swordfish regulatory efforts initiated through the Council fishery management plan process need to be coordinated with international negotiations aimed at achieving an effective international conservation program for Atlantic swordfish. NMFS is working through the International Commission for the Conservation of Atlantic Tunas to obtain, as soon as possible, the participation of all countries harvesting Atlantic swordfish in a successful international conservation effort.