

Substantial quantities of first-quality cod are being taken off the market for human consumption and sold as mink food. Prices for fish used in reduction have fallen from 10-11 U.S. cents/kg in March 1974, to 3-4 cents/kg at present.

In a related development Danish fishery associations have increased pressure on the Government not to renew permission for Polish fishing vessels to land fish in Denmark, as much of the Polish-caught fish is processed into frozen fillets and blocks for export to the United States. Such exports are in direct competition with Danish exports.

Falling fish prices have likewise affected the fishing industries of other member states of the European Economic Community (EEC). Weak export markets in the United States for cod fillets and blocks, and in Europe for fish meal have further aggravated the situation. Danish officials therefore met with their EEC counterparts to seek answers to this international dilemma. The Danes believe that much of their problem in exporting frozen cod to the United States comes from semi-hidden government export subsidies paid by their major competitors—Norway, Iceland<sup>1</sup> and Canada.

Export subsidy measures were being considered by the Danish government, when, on April 1, the EEC Council approved a subsidy for all member countries on the exports of frozen fillets and blocks of cod and saithe to all destinations. The subsidies paid to each member country will vary slightly because of complicated accounting procedures. The effect for Denmark will be a U.S. 14.1 cents/kg subsidy for cod exports, and 9.2 cents/kg subsidy for saithe products. This action by the EEC Council should help improve the competitive position of Danish exports against non-EEC nations.

## JAPAN WHALING FIRMS MERGE, HALVE FLEETS

Six Japanese fishing companies have merged their whaling operations into a single new firm, which will have a capitalization of US\$33 million (10 billion yen), according to the U.S. Em-

<sup>1</sup>Iceland's exports were also helped by the devaluation of her currency.

bassy in Tokyo. The participants in the merger are: Taiyo, Nippon Suisan, Kyokuyo, Nitto Hoge, Nihon Hoge, and Hokuyo Hoge.

The merger was considered necessary as whale quotas have been declining, and the individual companies involved did not feel their independent whaling operations were economically viable. The Japanese Federal Trade Commission ruled that the merger was not monopolistic in view of the economic pressures, but it did stipulate that only needed assets could be transferred to the new firm to preclude the passing on of consolidation costs to the consumer through higher prices. This ruling is expected to complicate and delay merger negotiations. In addition the participating companies must share the financial burden of reducing the four whaling fleets currently in existence, to the two projected for the successor firm, before the planned consolidation can take place.

## Iceland Discusses 200-Mile Fish Zone

Prime Minister Geir Hallgrimsson, Foreign Minister Einar Agustsson, and Justice (and Commerce) Minister Olafur Johanasson, each made statements on March 5 concerning the Icelandic government's plan to implement a 200-mile Fisheries Zone (FZ) in 1975 according to the U.S. Embassy in Reykjavik.

The Prime Minister stated that the political decision for extended jurisdiction had already been made, but that no unilateral action would be taken until the Law of Sea Conference at Geneva had been concluded on May 10. He indicated that the extension would probably be put into effect by November 13, when the current fisheries agreement with the United Kingdom will have expired. Hallgrimsson reiterated

his government's official position that Iceland alone could utilize the entire catch within the 200-mile FZ.

Foreign Minister Agustsson advised that a 200-mile FZ would require negotiations to establish suitable midlines, but declined to speculate when such talks might begin. The Justice Minister, who has the responsibility for the Icelandic Coast Guard and for fisheries enforcement, indicated that his office was currently studying the problems that extended jurisdiction would bring about. A new Coast Guard cutter is expected to be available in May, but as one additional vessel would not be sufficient for adequate surveillance, his Ministry was seriously considering the possibility of strengthening the Guard's air fleet.

## Polish Fishermen Drown in Danish Port Accident

The Polish side trawler *Brda* became careened in a 15-20 feet of water at the entrance to the Danish North Sea port of Hanstholm on 10 January 1975. Ten of the 27 crewmen were lost before a helicopter could take all hands off the vessel.

The *Brda* was entering Hanstholm at 11 p.m. in a Force 6 wind when it struck bottom and lost the use of its steering mechanism. While waiting for a tugboat to aid in maneuvering the trawler, whose engines were still in good order, the *Brda* anchored, but at 2:15 a.m. the anchor chain parted and the wind blew the vessel toward the cement breakwater. A wave smashed the *Brda* against the breakwater; after that, the vessel lay on its starboard side 10 meters from the breakwater. During the helicopter rescue operations, 10 seamen were washed overboard and drowned. A special commission and a maritime court are investigating the incident.

## Publications

### Recent NMFS Scientific Publications

Data Report 98. Petersen, Duane H. "Trawl catches and oceanographic data from NMFS surveys of the Gulf of Alaska pandalid shrimp resources, 1973." February 1975, 206 p. (3 microfiche). For sale by U.S. Department of Commerce, National Technical

Information Service, 5285 Port Royal Rd., Springfield, VA 22151.

#### ABSTRACT

Trawl catch and oceanographic data collected from two National Marine Fisheries Service cruises to assess the relative abundance of

the pandalid shrimp resource in the Gulf of Alaska during 1973 are presented.

Station data are arranged in a tabular form and provide information on location, depth, time and distance trawled, type of fishing gear used, and species catch by weight. Bottom temperatures and salinities for some stations are also included.

Data Report 99. Dean, David. "**Raritan Bay macrobenthos survey, 1957-1960.**" February 1975, 51 p. (1 microfiche). For sale by U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22151.

#### ABSTRACT

This paper describes a quantitative and qualitative census of benthic macrofauna from Raritan Bay and Lower Bay during the summers of 1957 to 1960, prior to and following the operation of a sewer outfall at the head of Raritan Bay. A total of 193 stations were sampled yielding 127 taxa that were identified to genus or species. Polychaetes, molluscs, and crustaceans accounted for 86% of the taxa. Most prevalent species were the soft-shell clam, *Mya arenaria*, the polychaetes, *Nereis succinea* and *Polydora ligni*, the amphipod, *Ampelisca* sp., and the gastropod, *Nassarius obsoletus*. Three types of species distribution were found, viz., those found only in Raritan Bay, those only in Lower Bay, and those common to both bays. Of the 10 stations sampled in Raritan Bay for four consecutive years, by the summer of 1960 one had the same number of species in quantitative samples as in 1957, four stations averaged a 30% decrease, and six stations averaged a 96% increase.

Data Report 100. Hall, John R., and Carl H. Saloman. "**Distribution and abundance of macroinvertebrate species of six phyla in Tampa Bay, Florida, 1963-64 and 1969.**" March 1975, 505 p. (8 microfiche). For sale by U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22151.

#### ABSTRACT

Data include a species checklist and distribution and abundance of species by station. Phyla reported are Annelida (179 species of Polychaeta), Mollusca (295 species), Phoronida (*Phoronis architecta*), Brachiopoda (*Glottidia pyramidata*), Echinodermata (35 species), and Chordata (Cephalochordata: *Branchiostoma caribaeum*).

NOAA Technical Report NMFS SSRF-686. Nakatani, Roy E., Gerald J. Paulik, and Richard Van Cleve. "**Pink salmon, *Oncorhynchus gorbuscha*, tagging experiments in southeastern Alaska, 1938-42 and 1945.**" April 1975. 39 p.

#### ABSTRACT

A total of 20,532 pink salmon (*Oncorhynchus gorbuscha*) were tagged and released in southeastern Alaska north of Sumner Strait during the years of 1938 to 1942 inclusive, and in 1945. The recovery of 7,027 of these tags in the fish traps confirmed the findings of other investigators that the pink salmon stocks of the northern part of southeast Alaska are separate from those in the southern part. They also show that pink salmon enter the northern part of southeast Alaska through two paths: (1) through Icy Strait, and (2) through the lower end of Chatham Strait. No evidence was found of movement through Peril Strait from Salisbury Sound into Chatham Strait. The centers of density of each group of tags appeared to move in a consistent manner, but a smaller number of tags from each release were dispersed throughout the northern part of southeastern Alaska. Differences were noted between the movements of fish in odd and even years. Also a larger proportion of earlier tagged fish moved to recovery locations farther inland. In all areas and in all years the fishing season closed about the time of the greatest abundance of fish in the fishery, therefore the later parts of the runs were not studied. Apparently the 1941 run was the largest and that in 1945 the smallest. Migration rates were studied by plotting the catch per trap as well as by the recovery of tags. The latter showed movements of 9.05 to 33.37 miles per day. Survival rates computed for thirty releases with total tag recovery periods of two or more weeks averaged 0.384. Weekly exploitation rates varied from 0.142 to 0.452 averaging 0.250. The weekly *F* exponential rate of fishing averaged 0.514. Recoveries of tags from seines were not used since their proportion of tags recovered was less than one-half their proportion of the catch. Recommendations are made for future tagging experiments based upon the results of this analysis.

NOAA Technical Report NMFS SSRF-675. Shomura, Richard S., and Francis Williams (editors). "**Proceedings of the International Billfish Symposium. Kailua-Kona, Hawaii, 9-12**

**August 1972. Part 1. Report of the Symposium.**" March 1975. 33 p.

(No abstract)

NOAA Technical Report NMFS SSRF-682. Clark, N. E., L. Eber, R. M. Laurs, J. A. Renner, and J. F. T. Saur. "**Heat exchange between ocean and atmosphere in the eastern North Pacific for 1961-71.**" December 1974. 108 p.

#### ABSTRACT

Summaries of large-scale heat exchange between ocean and atmosphere in the eastern North Pacific Ocean are presented for the period 1961 through 1971. The summaries are based on computations made from synoptic marine radio weather reports and include 1) monthly values of total heat exchange and departures from a long-term mean; 2) long-term monthly mean values of the total heat exchange, including solar radiation, effective back radiation, and evaporative and sensible heat transfer; and 3) annual cycles of total heat exchange for selected areas.

Outstanding spatial and temporal features of the heat exchange values are discussed. However, little detail is given since this is a summary report, and readers can draw their own conclusions depending upon the intended use of the charts.

Comparisons are also made between the total heat exchange values and those given in two other reports. Discrepancies between values given in this report and those published in the other reports are attributed to differences in the empirical equations used to make the heat exchange computations, differences in data processing techniques, differences in the observed data used in the computations due to different methods of acquisition, and the possibility of ocean climate changes.

NOAA Technical Report NMFS SSRF-685. Fahay, Michael P. "**An annotated list of larval and juvenile fishes captured with surface-towed meter net in the South Atlantic Bight during four RV *Dolphin* cruises between May 1967 and February 1968.**" March 1975. 39 p.

(No abstract)

NOAA Technical Report NMFS SSRF-683. Dow, Robert L., Frederick W. Bell, and Donald M. Harri-man. "**Bioeconomic relationships for the Maine lobster fishery with consideration of alternative management schemes.**" March 1975. 44 p.

(No abstract)