improvements in a number of areas are possible this coming season.

Pennoyer cited the pink salmon fishery at Kodiak and the pink and chum salmon runs in Prince William Sound as examples of fisheries showing strong recovery because of adequate escapement and good streambed survival. The Prince William Sound forecast, for example, projects an allowable harvest of 5.2 million pink salmon and a chum harvest of 2.8 million. Even if the 1976 chum run is in the lower part of the forecast range, it will still be the largest on record for the Prince William Sound area. The Department of Fish and Game is also predicting a harvest of about 10.1 million pink salmon in the Kodiak area out of a run that could total about 12.9 million fish. Fishers harvested about 2.9 million pinks at Kodiak in 1975.

The forecasts predict harvestable returns of sockeye salmon in all Bristol Bay systems except the Snake River. A harvest of about 5.1 million fish should be possible out of the projected sockeye run of 12 million. Nushagak district pink salmon harvests are expected to total about 2.2 million fish. A small pink salmon harvest is expected in southern Cook Inlet and the Chignik fishery probably will be limited. Extremely low pink salmon runs are expected in Southeastern Alaska with virtually no harvests expected.

A total run of 5.6 million pinks is predicted for Southeastern Alaska and unless the returns are stronger than expected, all or most of the fish will be needed for escapement, Pennoyer said. Returns of chum, chinook, sockeye and coho salmon are expected to be about average in Southeastern Alaska. "But if the factors which weakened the 1975 runs of chum, sockeye and coho influence the 1976 return, runs of these species could also be less than anticipated," Pennoyer added. The extremely cold winters of 1970-1971 and 1971-1972 are believed to be the major factor causing the currently depressed salmon runs throughout much of Alaska.

Publications

Nicaragua and Brazil List Fishery Books

The Division of International Fisheries Analysis (F41), Office of International Fisheries, NMFS has obtained a 3-page bibliography of the publications issued by the Fisheries Division of the Nicaraguan Development Institute (Instituto de Fomento Nacional, or INFONAC). INFONAC's publications cover the following subjects: Official Nicaraguan fisheries statistics, artisanal fisheries, processing, exports, exploratory fishing, bibliographical data, fleet, gear and methods, and various aspects of the shrimp and lobster industry.

In Brazil, the UNDP/FAO Fisheries Research and Development Program has published a bibliography of its 1973-75 publications (in Portuguese). The 2-page bibliography includes technical documents on fishing methods, fisheries resources and fish processing, as well as studies dealing with various species, such as shrimp, corvina, sardine, lobster, and braise. Copies of either listing may be obtained from Dennis M. Weidner, Office of International Fisheries, F41, NMFS, NOAA, Commerce Department, Washington, DC 20235, and enclose a self-addressed mailing label to facilitate mailing.

Clam Potential Eyed in Alaskan Report

The economic potential of the Alaska clam industry is the subject of a new 148-page report published by the University of Alaska Sea Grant Program in cooperation with the university's Institute of Marine Science. Entitled **The Alaska Clam Fishery: A Survey and Analysis of Economic Potential,** the new report concludes there will be "significant growth" of the Alaskan clam industry if certain events occur.

These events are: 1) Alaska's obtaining and maintaining membership in the National Shellfish Sanitation Program; 2) introduction of environmentally safe clam dredges; and 3) devotion of more resources to clam source beach certification and monitoring; and transferring of harvesting efforts for bait razor clams (used in dungeness crab fishing) to non-certified beaches.

"Given the probable occurrence of these events, it is not unrealistic to expect annual harvests of around five million pounds shell weight within the next decade," says the report. "The value to the fishers of such a harvest will likely be in excess of $2 million."

The report—containing sections on history, regulation, harvesting, processing and marketing—was written by Franklin L. Orth, associate professor of economics; Howard M. Feder, professor of marine science; and John Williams, assistant professor of seafood science. All are with the University of Alaska. Another coauthor, Charles Smelcer, is with the U.S. Army. Copies of the report can be obtained by writing the Alaska Sea Grant Program, University of Alaska, Fairbanks, Alaska 99701.

Marine Geophysical Data Catalog—1975 Available

NOAA Environmental Data Service's National Geophysical and Solar-Terrestrial Data Center has released **Marine Geophysical Data Catalog—1975, Key to Geophysical Records Documentation No. 4,** which includes all bathymetric, magnetic, gravimetric, seismic profile, and navigation information available from the Center. It also indicates types of data formats, identifies specific cruises or surveys, depicts geographical distribution of the data by area index charts, and includes a trackline sketch for each cruise or survey.

The 1975 catalog updates and supersedes "Key to Geophysical Records Documentation No. 1" (published in June 1972), and includes 58 marine geophysical data sets that have become available since 1972. It also gives availability of complementary data, including map plots, charts, etc. A pocket insert map, "Multitrackline Plots," includes bathymetric, magnetic, gravimetric, and seismic reflection data collected worldwide along 2¼ million nautical miles of tracklines.

Further information about the catalog and available data may be obtained from: Solid Earth Data Services Division (D62), National Geophysical and

Solar-Terrestrial Data Center, Environmental Data Service, National Oceanic and Atmospheric Administration, Boulder, CO 80302. The catalog may be purchased from: Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 for $5.25 (Stock No. 003-017-00292).

In Brief . . . .

Fishery Development, Catches, and Values

. . . .**The International Oceanographic Foundation's 1975 Gold Medal Award** has been presented to Melville Bell Grosvenor "for his personal endeavors and support of the advancement of the scientific study of the oceans . . ." Grosvenor, Editor in Chief of *National Geographic* and Chairman of the Board of the National Geographic Society . . . .

. . . .**Alfred M. Beeton, associate dean for research administration** at the Graduate School, University of Wisconsin—Milwaukee, will become director of the Great Lakes and Marine Waters Center at the University of Michigan on 1 July 1976, the University of Michigan reports. Before joining the UW faculty, Beeton was chief of the Environmental Research Program at the Ann Arbor Biological Laboratory of the U.S. Fish and Wildlife Service . . . .

. . . .**The Solomon Islands has begun to develop its fisheries industry** to make it self-sufficient in fish by 1978 and then build an export market, *Australian Fisheries* reports. The Solomon Islands now has a live-bait skipjack tuna fishery which produced 11,000 tons of fish in 1974. Under study are projects on rock lobster stocks, offshore resources, fish smoking and preservation techniques, fish meal production, squid, etc. . . .

. . . . **The value of Australia's fish, crustacean, and mollusk production** in 1973-74 was more than A$100 million for the first time, according to an Australian Bureau of Statistics report in *Australian Fisheries*. The rock lobster fishery remained most valuable at a value of over $30 million, closely followed by the prawn fishery at $29 million. The wet fish catch was valued at $26 million, up $3 million from 1972-73. Tuna was the top fish in both weight, 9,700 metric tons, and in value, $3.6 million. Western Australia, with fish production valued at $25 million, was the leading fishing state, followed by New South Wales, $21 million, South Australia, $17 million, Queensland, $14 million, Victoria, $11 million, and Tasmania, $8 million. . . .

. . . .**Norman Doelling has been named manager of the Massachusetts** Institute of Technology Sea Grant Program's Marine Industry Advisory Service, a new link to exchange ideas and information on marine business opportunities with industry. A main component, the Marine Industry Collegium, will keep participating businesses abreast of the latest opportunities in utilization of chitin and chitosan, farming and use of kelp as an energy source, conversion of waste water and sewage sludge into a resource, and others. . . .

. . . .**Hatchery-reared trout and salmon released in the Great Lakes** and lower courses of tributary streams in 1975 totalled about 22.2 million, according to a report in *The Great Lakes Newsletter*. Total 1974 plantings were over 24 million fish. Principal species planted last year were chinook (7 million), coho salmon (4.7 million), and lake trout (6.5 million)—18.2 million altogether versus 18.4 million in 1974. Since the start of the lake trout restoration program in 1958, over 66 million young fish have been released in the Great Lakes. About 2.1 million steelhead trout, and 1.1 million brown trout were planted, as were lesser numbers of splake, brook trout, and Atlantic salmon. . . .

. . . .**A remote, underwater fish-tracking system** to test the reaction of migrating fish to pollutants from known point sources is being jointly developed by the Langley Research Center of the National Aeronautics and Space Administration (NASA) and the Virginia Institute of Marine Science (VIMS), according to a VIMS news release. Underwater listening stations pick up sonic signals from tiny fish-tag sized transmitters attached to the fish. Data is transmitted to a base station and relayed to a computer which sorts the information and plots the fish's position as it migrates through the study area. Any change in migratory behavior as the fish enters the polluted area—such as slowing, swimming around it, or turning back—will be detected. . . .

. . . .**Ownership of the R/V *Hernan Cortez* has been officially placed** with the Marine Research Laboratory of Florida's Department of Natural Resources, according to the *Florida Conservation News*. Built in 1964 by Desco Marine[1], the vessel was loaned by that company to the DNR for fisheries research work. One of its major efforts was Project Hourglass, a 28-month systematic biological sampling program on the west coast of Florida. More recently, it has been involved in a search for commercial clam beds on the west coast of Florida, a 2½-year study of rock shrimp off Cape Canaveral, and other cruises. It is now being used in the Gulf of Mexico in an effort to detect red tides from satellites. . . .

[1]Mention of trade or commercial names does not imply endorsement by the National Marine Fisheries Service, NOAA.

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