

Persons interested in participating in the Symposium should contact the Western Society of Naturalists, David H. Montgomery, Secretary, Department of Biological Sciences, California Polytechnic State University, San Luis Obispo, California 93407.

Ocean Engineering Conference Slated

The fifth of the I.E.E.E. Conferences on "Engineering in the Ocean Environment" will be held in Halifax, Nova Scotia, Canada, August 21 to 23, 1974. All major Canadian organizations concerned with oceanographic research and development are providing support.

The conference will emphasize research and development in "temperate and arctic waters" and technology developed for high latitude environments. Since the stress is on originality, major advances in other areas will be welcomed, especially those that have wide application to the oceans as a whole. Contributions should accentuate new technology developed in response to scientific and engineering needs or resulting from operational difficulties in achieving specific goals.

Invited and contributed papers will be presented in concurrent sessions. Plenary and informal evening sessions will deal with overlying considerations affecting ocean engineering such as economics, ocean resource management, and the law of the sea. An evening session outlining "Current Engineering Problems in Local East Coast Laboratories" has already been planned.

The following subjects will be on the agenda: pollution monitoring and control; exploitation of ocean resources; deep water fishing technology; data acquisition, reduction and processing; and many others.

For more information about the conference, write Ocean '74, P.O. Box 1000, Halifax, Nova Scotia, Canada.

Publications

Recent NMFS Scientific Publications

NMFS Extension Publication Fishery Facts-6. Hoopes, David T. "Alaska's fishery resources—the Dungeness crab." November 1973. 14 p. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

ABSTRACT

Dungeness crabs, *Cancer magister*, occur in the inshore waters of the west coast of the United States and Alaska. Alaska production has averaged 9.2 million pounds annually since 1960; the yearly average value to the fishermen was between \$1 and \$2 million. A female may lay up to 1.5 million eggs, which adhere to small appendages under her abdomen until they hatch 7 to 10 mo later. After hatching, the minute larvae spend 3 to 4 mo in the water column as plankton. At the end of their planktonic development period, the larvae settle to the bottom and transform into juvenile crabs. Dungeness crabs grow only during the molting period. Males may live for 8 yr and attain 10 inches in width; females are considerably smaller. The commercial fishery takes only male crabs, which are caught in baited pots. Crabs are either delivered to market alive or are cooked and prepared in several ways. In Alaska the State Department of Fish and Game is responsible for conducting research required for rational management and protection of this valuable shellfish resource.

NOAA Technical Memorandum NMFS NWFC-1. Dangel, James R., Paul T. Macy, and Fred C. Withler. "Annotated bibliography of interspecific hybridization of fishes of the subfamily Salmoninae." November 1973. 48 p. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

ABSTRACT

This bibliography of 611 annotated references lists published and unpublished material on hybridization

between species of the subfamily Salmoninae and crosses of salmonids with non-salmonids. It does not include crosses within a species. The bibliography is indexed by species for the genera *Brachymystax*, *Hucho*, *Oncorhynchus*, *Salmo*, *Salmothymus*, and *Salvelinus* and certain non-salmonid species.

Data Report 79. Wolotira, Robert J., Jr. "Trawl catches and oceanographic data from the NMFS groundfish survey in the eastern Bering Sea, 1972." 108 p. (2 microfiche). For sale by U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22131.

ABSTRACT

Trawl catch and oceanographic data collected from the NOAA RV *Oregon* during the 1972 National Marine Fisheries Service (NMFS) eastern Bering Sea groundfish survey are presented. A total of 103 stations was sampled from May 26 to July 25. 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 each station are also included.

Data Report 80. Ingraham, W. James, Jr., and Donald M. Fisk. "Physical oceanographic data from the north Pacific Ocean, 1972." 131 p. (3 microfiche). For sale by U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22131.

ABSTRACT

Data on temperature and salinity versus depth were obtained from the RV *George B. Kelez* near Kodiak Island at 127 STD (salinity/temperature/depth) stations during April and May 1972. Values were digitized automatically during descent of the STD sensors to 1,500 m and stored on magnetic tape online with a shipboard PDP-8 computer. Secondary processing produced corrected temperature and salinity values and computations of sigma-t, sound velocity, anomaly of specific volume, and dynamic height—all of which are presented by standard depths.