

Japanese distant-water tuna purse seiners.

Name of vessel	Size (Gross Tons)	Owners
Nippon Maru	999.99	Kaigai Makiami Gyogyo K.K. (Overseas Purse Seine Fishing Company)
Hayabusa Maru	499.99	Taiyo Gyogyo
Hayabusa Maru No. 2	499.96	Taiyo Gyogyo
Wakaba Maru	499.37	Kyokuyo
Hakuryu Maru No. 55	499.06	Kyokuyo
Fukuichi Maru	499.57	Fukuichi Gyogyo
Gempuku Maru No. 82	499	Toyo Gyogyo
Hayabusa Maru No. 3	275.84	Taiyo Gyogyo
Nissho Maru	252.93	Fukuichi Gyogyo
Taikei Maru No. 23	210.20	Ogata Kimpei
Tokiwa Maru No. 58	357.95	Okura Gyogyo

nine months of fishing in the same oceans, and in the third year 1,700 tons were taken in ten months. This year, the *Nippon Maru*, which entered the eastern Pacific yellowfin regulatory area on January 10, reported a catch of 350 tons to February 28. In the South Pacific, 5-6 seiners were reported fishing in late April. The outlook for profitable operations in that region appears hopeful.

Japanese tuna seining in the eastern Atlantic was launched by Nichiro Fisheries in 1964 with five vessels consisting of a 1,600-ton mothership and two pair-boat seiners (pairs of 145-ton and 85-ton seiners). Nichiro continued operations unprofitably for the next nine years and terminated the venture in 1972 because of the deterioration of the vessels.

Sources: *Minato Shimban*, *Suisan Shuho*, and *Shin Suisan Shimban*.

JAPANESE UNIVERSITY TO BUILD LARGE U.S.-TYPE TUNA PURSE SEINER

The Department of Fisheries of Nagasaki University is building a U.S.-type tuna purse seiner of 1,000-gross-ton size. It will be the second 1,000-ton tuna seiner in Japan and probably the world's first U.S.-type seiner to be used as a training vessel by an educational institution. Construction completion is set for early April 1975.

To be built at an estimated cost of 1,400-1,500 million yen (US\$5-5.4 million at 280 yen=\$1), the seiner will have the following specifications: overall length, 62 meters (203 feet); width, 11.5 meters (38 feet); depth, 5.2 meters (17 feet); main propulsion,

2,800-hp diesel engine; maximum speed, 15 knots; cruising speed, 14 knots. It will carry four instructors and 50 students. Upon completion, the

vessel will be sent on a training cruise to the Coral Sea and the waters north of New Guinea in the southwest Pacific.

Publications

Recent NMFS Scientific Publications

Circular 330, Volume 8. Love, Cuthbert M. (editor). "EASTROPAC Atlas." March 1974. vii + 184 figures. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

ABSTRACT

This atlas contains charts depicting the distribution of physical, chemical, and biological oceanographic properties and associated meteorological properties observed during EASTROPAC. EASTROPAC was an international cooperative investigation of the eastern tropical Pacific Ocean (20°N. to 20°S., and from the west coasts of the American continents to 119°W.) which was intended to provide data necessary for a more effective use of the marine resources of the area, especially tropical tunas, and also to increase knowledge of the ocean circulation, air-sea interaction, and ecology. The Bureau of Commercial Fisheries (now National Marine Fisheries Service) was the coordinating agency. The field work, from February 1967 through March 1968, was divided into seven 2-month cruise periods. During each cruise period one or more ships were operating in the study area.

On completion of the field work the data seemed too numerous for a classical data report. Instead, it was decided to produce an 11-volume atlas of the results, with 5 volumes containing physical oceanographic and meteorological data from the principal participating ships, 5 volumes containing biological and nutrient chemistry data from the same ships, and 1 volume containing all data from Latin American cooperating ships and ships of opportunity. Extensive use was made of a computer and automatic plotter in preparation of the atlas charts. Methods used to collect and process the data upon which the atlas is based are described in detail by the contributors of the following categories of charts: temperature, salinity, and

derived quantities; thickness of the upper mixed layer; dissolved oxygen; meteorology; nutrient chemistry; phytoplankton standing stocks and production; zooplankton and fish larvae; micronekton; birds, fish schools, and marine mammals.

NOAA Technical Report NMFS CIRC-388. Shaw, William N. (editor) "Proceedings of the first U.S.-Japan meeting on aquaculture at Tokyo, Japan, October 18-19, 1971." February 1974. 133p. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. (No abstract)

Data Report 84. Saloman, Carl H. "Hydrographic and meteorological observations from Tampa Bay and adjacent waters—1971." 554 p. (9 microfiche). For sale by U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22131.

ABSTRACT

Hydrographic data include water temperature, salinity, total phosphorus, total Kjeldahl nitrogen, pH, dissolved oxygen, turbidity, water transparency, chlorophyll *a*, *b*, and *c*, astacin and nonastacin carotenoids, and primary productivity based on chlorophyll *a* extraction. Hourly observations on air and water temperature, rainfall, wind velocity and direction, tidal height, barometric pressure, and daily recordings of solar radiation are also included. Methods of collecting and analyzing samples are described. Tables summarizing data collected from 30 permanent stations according to month and area, tables summarizing data for each individual station of the 30 permanent sites for 1966-71, and tables summarizing the mean, range, and number of observations of samples taken twice daily at the Laboratory dock are included.