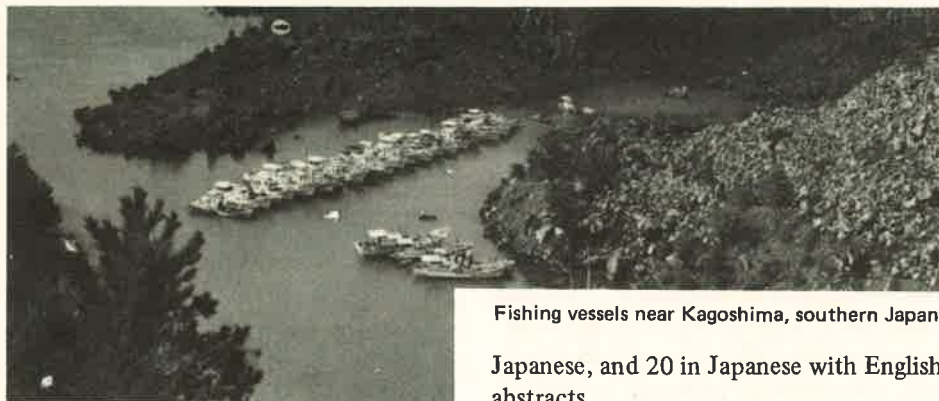


.....Fisheries Information Retrieval in Japan.....



Fishing vessels near Kagoshima, southern Japan.

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As might be expected of the world's leading fisheries and aquaculture producer, the volume of fisheries literature produced in Japan is quite substantial. There are now 349 fisheries periodicals and 64 oceanography periodicals (excluding tide-tables) being published. Agricultural journals often carry fisheries-related articles as well.

Most of the fisheries periodicals are published by Prefectural Fisheries Experimental Stations and the nine Regional Fisheries Research Laboratories, whereas publication of oceanographic journals is fairly evenly divided between the Fishery Agency, universities, professional associations, private companies and metropolitan and private research institutes. Three-quarters of all periodicals appear only annually or irregularly. Information is mainly in the form of original papers, statistics, and news and business reports, while abstracts, reviews and commentaries are featured in only 15% of journals.

Unfortunately, this mass of information remains largely unavailable to researchers unable to read the Japanese language: 80% of Japanese fishery-oceanography periodical literature include no texts or abstracts in a foreign language. Of those that do, 18 periodicals are written entirely in English or another western language, 45 in English and

Japanese, and 20 in Japanese with English abstracts.

Prior to 1980, fisheries information retrieval was almost all handled by the Ministry of Agriculture, Forestry and Fisheries (MAFF), the National Diet (Parliamentary) Library, and the Japan Machinery Federation. In the last two years several other organizations have begun to compile databases and/or provide indexing-abstracting services.

Plans for the establishment of a National Information System for Science and Technology (NIST) are gradually being realized. The core of NIST consists of the Japan Information Center for

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Science and Technology (JICST), which has an online network with branches in nine cities. Previously orientated heavily towards the physical sciences, engineering and medicine, JICST expanded further into life sciences, including fisheries, in 1981. In addition to publication of abstracts and other information, JICST services include literature and patent searches, translation and copying.

A second, nationwide online retrieval network is scheduled to begin operating

in 1983. This will be based on the new MAFF Information and Computer Center located in the Tsukuba Science City near Tokyo and will extend to all research stations affiliated with the Ministry. The Information Center also currently provides literature search and copying services using MAFF, JICST and foreign databases.

Beyond conventional library facilities, research workers in the fields of fisheries and oceanography in Japan have available the following seven main information retrieval services:

1. MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES (Information and Computer Center, 2-1-2 Kanonndai, Yatabe, Tsukuba, Ibaraki 305).
- JAPANESE AGRICULTURAL SCIENCE INDEX (Nihon Nogaku Bunken Kiji Sakuin)

A Japanese-language monthly, giving tables of contents of a selection of 540 domestic periodicals on all aspects of agriculture, forestry and fisheries. Regularly scanned are 51 fisheries journals and up to 12 contents tables printed monthly. Annual index by author, subject, journal name and taxonomy is provided. Approximately 10,000 references are added each year. Storage on magnetic tape began in 1979 and the database will be available for online retrieval in 1983.

● AGRIS/AGRINDEX

The FAO English-language agricultural bibliographic database and printed monthly index. Japan provides 8% (8,000 references) of the annual AGRIS input, about 800 of which concern fisheries. From 1975 to 1981, this international index has built up to 710,000 references with 480,000 stored on tape between 1978 and 1981.

● RECRAS

A retrieval system in the Japanese language for current research in the agricultural sciences at government institutions. It is produced on magnetic tape and also in a printed annual report for

each division. Brief descriptions of each project are given. There were almost 4,000 fisheries-related research projects listed in 1980.

2. NATIONAL DIET LIBRARY (1-10-1 Nagata-cho, Chiyoda-ku, Tokyo 100).

● JAPANESE PERIODICALS INDEX: SCIENCE AND TECHNOLOGY (Nihon Zasshi Kiji Sakuin: Kagaku Gi-jutsu).

A Japanese-language quarterly, giving bibliographic details, arranged by subjects, with an annual author and subject index. Of 1,330 periodicals regularly scanned, 30 are fisheries-related.

3. JAPAN MACHINERY FEDERATION (Nihon Kikai Kogyo Rengokai, 3-5-8 Shibakoen, Minato-ku, Tokyo 105).

● BIBLIOGRAPHY OF MARINE DEVELOPMENT (Kaiyo Kaihatsu Kankei Shiryo Mokuroku).

A monthly publication listing tables of contents of 15 domestic periodicals and 41 foreign periodicals in the original languages.

漁業

● INDEX OF MARITIME INFORMATION (Nikkiren Kaiyo Shiryo Index).

Japanese-language annual index to the bibliography of marine development, listing titles of papers by subject area. Scope ranges from fishery resources and management to pollution, shipbuilding and mining.

● CATALOG OF MARINE DEVELOPMENT PUBLICATIONS, 1969-80. (Kaiyo Kaihatsu Kankei Shiryo Somokuroku), 1981.

This monograph lists, in the original languages, bibliographic details of foreign (mainly U.S.A.) and domestic books, periodicals, government reports, conference proceedings, indexes and catalogs in the same subject areas covered by the Index.

4. JAPAN INFORMATION CENTER FOR SCIENCE AND TECHNOLOGY (CPO Box 1478, Tokyo)

● JICST ABSTRACTS SERIES: AGRO-INDUSTRIES

Begun in 1981 as part of the Association for Science Cooperation in Asia program, this is an English-language quarterly, providing abstracts of papers from 240 domestic journals. To date only five journals are in the fields of fisheries and oceanography.

● JICST CURRENT BIBLIOGRAPHY ON SCIENCE AND TECHNOLOGY: LIFE SCIENCE.

Begun in 1981; this bimonthly publication is also stored on magnetic tape, providing abstracts in the Japanese language. It covers 591 domestic periodicals (12 fisheries) and 326 foreign periodicals (3 marine). There are at present approximately 380 fisheries-related references recorded.

● JICST CURRENT BIBLIOGRAPHY ON SCIENCE AND TECHNOLOGY: CHEMISTRY AND CHEMICAL ENGINEERING

A similar series, dating from 1964, containing several fisheries-related titles, especially in the fields of biochemistry and food processing. This type of data is being included in the Life Science series from 1981.

● JOIS (JICST Online Information System)

Full-scale operation of JOIS began in 1978, utilizing JICST Current Bibliography and Ongoing Research files, and the foreign CA Search (Chemical Abstracts), Medline (Medical database) and Toxline (Toxicology database) files. In 1979, CAB (Commonwealth Agriculture Bureaux), and BIOSIS (Bioscience Information Service) were added, and in 1980, SSIE (Smithsonian Science Information Exchange), MESH (Medical Subject Headings) and Chemline (Toxicology databank). Output from the JICST files are in Japanese, in the form of abstracts or bibliographic details.

5. JAPAN MARINE FISHERY RESOURCE RESEARCH CENTRE (JAMARC, Godo Bldg., Kioicho 3-27, Chiyoda-ku, Tokyo 102).

● CATALOG OF INFORMATION ON FISHERY RESOURCE DEVELOPMENTS (Suisan Shigen Kaihatsu Joho Kensaku Mokuroku).

A computerized databank and three

Japanese-language volumes (May 1980, March and October 1981) of a bibliography of 860 foreign and 4,037 domestic papers dating back to 1966. Mainly dealing with oceanic fisheries resources, stock assessment and management, the database covers 37 foreign and almost 200 domestic periodicals. Future issues are planned for autumn 1982, then annually.

6. MARINE ENVIRONMENTAL SURVEYS LTD. (Kaiyo Kankyo Chosa K.K., Nakagawa Bldg., 3-32-5 Hongo, Bunkyo-ku, Tokyo 113).

● JOURNAL OF OCEANOGRAPHICAL ABSTRACTS (Suisan Kaiyo Kenkyu Joho).

A monthly publication started in August 1981, covering 188 domestic periodicals (20 to 30 each issue) on all aspects of fisheries. Provides Japanese-language abstracts, contents pages of six foreign journals, current research topics, book reviews, news and a special series of research reports in English. The initial series is on pollution in the Seto Inland Sea.

情報

7. FOREIGN INDEXING SERVICES

In addition to the AGRIS database of FAO, Japanese fishery and oceanographical references appear in ASFA (200 references annually), OCEANIC ABSTRACTS (10 Japanese periodicals scanned regularly), and BIOSIS (300,000 Japanese references to early 1982). Japanese fisheries researchers have access to the CAB and AGRICOLA (US Agricultural Online Access) databases through the MAFF Information Centre, and to CAB and BIOSIS through JOIS.

As already stated, 80% of Japanese fisheries information are in the Japanese language exclusively. Thus, retrieval is hampered with respect to foreign scientists.

The new JICST Abstract Series and the Association for Science Cooperation in Asia are welcome steps in the right direction. **A**