



Mess Bohmert.

Plans for the Hydro-Acoustics Course

Training Course in the Use of Acoustics Methods in the
Study of Fish Stocks, with Special Reference to Abundance Estimation

In view of the recent important development in the use of acoustic fish detection methods in the study of fish stocks with particular reference to distribution and abundance studies, and in view of the fact that at present these developments are confined to a small number of countries, ICES in collaboration with the Fish Department of FAO, has decided to organise a Training Course for Fisheries Scientists in the application of such methods in fisheries research. The programme, which has been worked out by a Working Party consisting of Dr. D.H. Cushing, Mr. L.S. Midttun (Murray), Mr. B.B. Parrish, Mr. M. Sherbino (all ICES) and Mr. G.S. Sætersdal (FAO), ^{uk} is outlined below. *Comment*

Time and Location

The Course will be held in Svolvær, Lofoten, Norway from ~~2nd March to 15th March~~ 1969.

Scope

The intention is to train fisheries scientists in the application of acoustic instruments and methods in the study of fish stocks with special reference to distribution and abundance estimation.

Programme

The first five days will be used for lectures and dry training with equipment ashore. The lectures will be broadly based on the subject matter in the forthcoming Training Manual now under preparation by FAO, and will cover the following topics:

1. Physical principles of sound transmission and reflection in water.
2. Description of sonar equipment and its operation (including calibration methods).
3. Description of characteristics of echo-records.
4. Methods of identifying targets giving rise to echo-records. ?
5. Abundance estimation from echo-surveys.
6. Design and operation of echo-surveys.
7. New developments in sonar techniques. !

The next about 6 days will be used for practical training at sea on board the participating research vessels. Instruction will be given in operation of sonar equipment including its calibration. Echo-surveys of the Lofoten grounds will be conducted, and the collected material will be given a further processing especially for abundance estimation by working groups of trainees. More sophisticated equipment such as echo-integrators, sector-scanner and high frequency echo-sounders will be demonstrated. The two last days of the course will be used for discussions.

Language

The Course will be conducted in English, so the participants are expected to have a good knowledge of this language.

Participation

The number of trainees is restricted to not more than 30. Each member country of ICES is invited to send one trainee. FAO shall have at least 5 trainees and the remaining seats will be distributed between ICES and FAO. The ICES countries should therefore nominate also a number two trainee whose participation, however, is uncertain and dependent on available seats. The participants should be scientists working in fisheries research and preferably with some experience in the use of acoustic equipment.

Travel to Svolvær

Most convenient way would be: By air to Bodø and by ship (coastal liner) leaving Bodø at 15.00 (local time) and arriving in Svolvær at 21.00.

Accommodation in Svolvær

Participation will be on national expense. All participants will be booked in the Hotel Lofoten, Svolvær. The price for full pension is believed to be about N.Kr. 60,00 per day.

Nomination of participants

Nominations should be sent to the General Secretary of ICES, Charlottenlund Slot, 2920 Charlottenlund, Denmark, before 1st January 1969, on forms which will be distributed by ICES' Secretariat.