

A d m i n i s t r a t i v e R e p o r t

1967

Denmark

(K.P. Andersen)



Selectivity

Plaice. On the nursery grounds along the east coast of Jutland some experiments have been carried out using cod-ends with 90 mm and 110 mm meshes.

Herring and Sprat. Mesh selection experiments were carried out in different months in order to establish the relation between condition factor $\left(\frac{W}{L^3}\right)$ and selection factor.

*Jan 4
Länge*

Ireland

(David de G. Griffith)

A survey of ports in Areas VIa, VIIa, VIIb, c and VIIg-k showed that of 189 nets of four categories carried by 158 boats, 112 (59.3%) were made of polyethylene, 67 (35.4%) of polyamide, and 10 (5.3%) of other materials.

These figures break down as follows:- Bottom trawls 98(71.5%) polyethylene, 31(22.6%) polyamide, 8(5.9%) others.

Danish seines: 14(77.8%) polyethylene, 4(22.2%) polyamide.

Paired midwater trawl (herring): 32(100%) polyamide.

Ring nets (herring): 2(100%) cotton.

Netherlands

(J.G. de Wit)

Tank experiments on the diurnal behaviour of several flat-fish species have been started.

A new type of tickler chain has been developed especially for catching soles during day-time. Due to weather conditions and gear damage no significant results have been obtained.

Tagging experiments have been started to study the influence of the different sense organs on migration and feeding behaviour.

Experiments on the shrimp trawl with an interior sieve webbing have been continued. At the same time work has been started on a washer separating consumable shrimps from undersized ones and flatfish. The undersized shrimps and flatfish are returned to the sea in undamaged condition. The quality of the consumable shrimps improved.

Efforts have been made to improve the output of an acoustical link net-sonde.

U.S.S.R.

In 1967 investigations were carried out on the process of fishing gear making (cutting and joining of webbing, attaching webbing to lines). Preliminary terminological standards on gear and net materials were worked up.

The data earlier obtained from experiments with selectivity of gear used in the North Atlantic were summarised. Equivalent sizes of meshes in gear made of capron were compared with those in gear made of manila. The data obtained show that the mean selection factor of trawls of double capron as to cod is 4.1, to haddock 3.6 and to redfish 3.1 and that for double manila trawls it is 3.5, 3.1 and 2.6 respectively.

If the mean factor for trawls made of double manila is taken as unit that for capron trawls will with an equal size of mesh, be 1.171 for cod, 1.161 for haddock and 1.192 for redfish and at an average 1.176 times higher than for manila materials.

Studies in fish behaviour included those on optical and acoustic signaling, mainly of freshwater fish, as well as on their hemoreception and orientation in a flow of water.

Low frequency canals, generation and perception of electrical fields were investigated for some freshwater and sea fish (Raja clavata, Uranoscopus scaber, Atherina mochon pontica, and others).

The mechanism and peculiarities of the movement of fish in a zone with a photogradient were studied in tanks. The spreading of information caused by fright in fish shoals was investigated.