



THÜNEN

FISH CAPTURE COMMITTEE

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by

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BELGIUM

(R. Fonteyne)

Work was continued on the study of technical parameters of trawling gear. The forces acting upon warps and bridles of a bottom trawl were measured in relation to speed. The effect of different riggings on the net opening of semi-pelagic trawls for cod and pelagic pair trawls for herring were studied by means of a netsonde.

A new semi-pelagic trawl fishing with the warps passing through the boom sheaves was tested. At the same time newly designed cambered and slotted otter boards were used.

In view of energy saving, trials with gill nets fishing for cod on wrecks were continued. The comparative fuel consumption study between rectangular and oval polyvalent otter boards was finished. Data were collected on the reduction of fuel consumption by the application of a nozzle on a 1000 hp beam trawler.

With the aim to increase the catch rate in the daytime shrimp fishery, experiments were carried out with an electrified otter trawl.

The studies on netting materials mainly concerned the effect of sediments on mesh dimensions and the change of mesh size in relation to the drying time of the netting.

In Belgium the use of polyethylene netting yarns has slightly increased detrimental to polyamide. For the moment 45% of the yarns are made of polyethylene, 55% are made of polyamide. ISO standards are still applied by the Fisheries Research Station only.

Future work

- Further study of the catchability in relation to the technical parameters of high opening beam trawls, semi-pelagic and pelagic nets.
- testing of semi-pelagic trawls with a low hydrodynamic resistance.
- Study of the geometric configuration of otter trawls by means of a new developed spread meter.
- Further studies on the stability of mesh size.
- Comparative study on different mesh gauges.
- Further experiments on the application of electrical fishing.
- Continuation of the fuel saving studies.

DENMARK

No report received

CANADA

(P.J.G. Carrothers)

Federal Fisheries Research has commissioned two, new, research stern trawlers for the Atlantic and has retired the old research side trawler A.T. Cameron. The Newfoundland Branch reports that they continue to search for a trawl design that will adequately sample all flatfish species of age one to four. The Yankee 36 shrimp trawl appears to be a highly selective for pre-recruit yellowtail and plaice and is too small to operate effectively with large stern trawlers. Work with a Yankee 41-5 shrimp trawl was hampered by vessel problems but will continue in 1984. Hydroacoustics has been used successfully to evaluate and monitor capelin abundance and attempts are being made to develop acoustic survey techniques for redfish. The hardware and software supporting