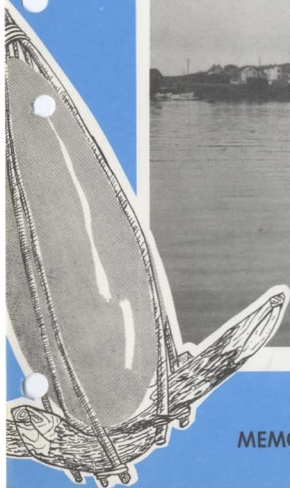


D E C K S
A W A S H

A FISHERIES EXTENSION PROGRAMME



MEMORIAL UNIVERSITY EXTENSION SERVICE

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Japanese Squid Jigging Method

In 1964 a somewhat novel method of catching squid was introduced to Newfoundland by the provincial Fisheries Development Authority working in co-operation with the Industrial Development Service of the Canada Department of Fisheries and the North Eastern Fish Industries Ltd. at Harbour Grace.

The method developed by Japanese fishermen is used in Japan to take squid in offshore waters and it was for this reason that provincial authorities became interested in the methods and techniques used.

It has now been established that even in years when squids are scarce in inshore waters there are large numbers of them in our offshore waters that, for reasons yet unknown, do not move inshore. These large populations stretch all the way from Fortune Bay around the east coast as far north as the Funk Islands and beyond. If,

therefore, ways can be found to exploit this plentiful squid resource it could result in substantial earnings for fishermen. It would also insure a continuous supply of bait during years when there are no squids in inshore areas.

Description of Equipment

On the last page of this newsletter are photographs which will give you some idea of equipment methods used.

The equipment consists of drum type haulers, wooden chutes with pulleys, plastic Korean jiggers and a light attraction system.

The drums used by the Japanese are constructed entirely of light metal. The heads of the drums are solid metal disks into which are fitted eight spokes spaced a few inches apart giving the overall impression of a slatted drum. These drums are fitted to the rail of the boat by special clamps attached to the ends of the drum. The drums are operated by hand cranks which are fitted with dog clutches that can be disengaged allowing the drum to free wheel when the fishing line is being lowered in the water.

Wooden chutes are attached to the rail of the boat projecting at about a twenty degree angle approximately three feet over the water. In the ends of these chutes free running plastic pulleys are installed. The main fishing line is made of monofilament which has a breaking strength of well over fifty pounds. On the fishing end of this line a fairly heavy lead weight is used which, together with the weight of the jigger, serve to carry the line out quite rapidly when the hand winch clutch is released. The plastic Korean jiggers (see photo) are attached to the line about eighteen inches apart (note rings in each end of the jigger for this purpose).

The line having been wound on the drum is passed out over the pulley in the end of the chute and the fishing operation begins. In this way twenty or thirty jiggers are used at the same time.

Reaction of Fishermen and Cost of Equipment

On our programme of January 24 we showed a fifteen minute film of an actual fishing operation using four of these devices.

This fishing operation took place in an inshore area near Harbour Grace and resulted in 4,000 lbs. of squid being taken in just under two hours fishing time. Several of the devices were also used by fishermen in the Conception Bay area during the latter part of the 1964 fishing season. These fishermen were impressed with the efficiency of this new method and it is expected that many more fishermen will be using it in 1965.

The original price quoted by North Eastern Fish Industries Ltd. for this equipment was approximately \$70.00. Since that time, however, there has been an increase in factory prices and our latest information is that the price will be in the vicinity of one hundred dollars per unit.

If you would like to have more information regarding prices to fishermen we suggest that you write to North Eastern Fish Industries Ltd. at Harbour Grace. Our information indicates that this is the only source in the province from which this equipment can be obtained at the present time.

During the coming season experimental squid fishing will be carried out in offshore areas using this method, and we hope to be able to give you information on this during our next series of programmes.

Guest

Dr. Hubert Squires of the Fisheries Research Board of Canada was a guest on this programme and gave some information on what the Fisheries Research Board has been able to find out about squid populations and movements.

At the present time there is very little information available to indicate the spawning areas of the squid that frequent our shores. It is assumed, however, that they spawn in very deep ocean areas. Boats used for research purposes in the southern Grand Banks area often take squid as early in the year as the month of May. It has also been found that there is a relationship between finding squid in the Grand Banks and getting them inshore later on in the season.

If squid are found on the southern Grand Banks in the early season their appearance inshore later in the season can be predicted with a good deal of accuracy.

This information is now available from the Fisheries Research Board each season and if made use of can be of very great benefit to both processors and fishermen in making plans for the squid fishery.

Dr. Squires, who has been doing squid research for several years, showed some slides of other species of squid found in our offshore waters. One of these species is the arctic squid which occur in very large numbers in Northern Newfoundland and Labrador waters. Other species, while interesting from a scientific viewpoint, do not play a great role in our fisheries at the present time.



(Above)
Squid jigging devices mounted on the rail of a boat, being operated by a hand crank.

(Right)
Part of the Light Attraction system used in conjunction with the Japanese squid jigging devices.

(Below)
This picture shows the traditional Newfoundland jigger at the top and the Korean jigger used by the Japanese fishermen.

