

EMERGING SQUID JIGGING FISHERY ALONG THE PALK BAY COAST OF TAMILNADU

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Squids, in the commercial fish catches, are landed as a by-catch of fishes and prawns in trawl nets or purse seines. Except for a few attempts by the R & D Organisations of our country, there is no specific fishing for this important marine resource, which in terms of unit value, ranks next only to the prawns in the export market. However, the fishermen of Palk Bay region along the Ramnad coast have evolved methods for the specific exploitation of squids, by employing hand operated squid jigs. In this report this squid jigging fishing which is rapidly emerging as a major fishing activity along the Palk Bay is presented.

scribed the method of squid jigging by long jiggers with 5 to 6 hooks arranged in a grapnel fashion. Besides, the local fishermen used to catch the cuttlefishes and squids by an ingenious method which involved erection of an 'Y'-shaped look-out pole, locally known as 'muchan' in the shallow areas of the Bay. Sitting on the cross bars of this structure, they look out for the congregation of squids. Below the 'machan', hooks were kept hidden under the cover of leaves in the water and those squids which approached the leaves for depositing their eggs or for hiding were lifted off with jerking movement of the hooks. This method is not in vogue at present.

vate company engaged in fish processing at Mandapam, introduced the Japan made jigs/fishing lures to the fishermen of Mandapam and Rameswaram. Between 1982 - '83 and 1986, about 2000 hooks were distributed to the fishermen by the company on an agreement that the catch realised by the hooks/jigs should be given to the company.

These jigs, locally known as 'Disco thoondil', are made of bakelite moulding to resemble shrimps which act as squid lures (fig.1). The eyes in the lure are prominent and protrude as in the case of prawns. Brightly coloured feathers are attached on either side of the lure. The lures as such are brightly coloured in different shades ranging from blue, green, orange, pink, red, yellow on the dorsal surface, which slightly diminish in colour on either lateral sides and become white on the ventral surface. In order to maintain the horizontal trolling position, during its operation, a small piece of lead weight is attached in the abdominal region of the lure. Pointed recurved hooks usually numbering from 16 to 18 in two rows are attached in the tail region. The details of commonly used jigs and the hooks

attached in them are given in Table 1. In the Palk Bay region, 105 to 135 mm size jigs are presently used. The cost of these in the local markets ranges from Rs.70/- to Rs.120/-

IMPROVISED JIGS

Based on the Japanese jig pattern, a few wooden models of lures are being prepared locally by carpenters. Generally these lures are made to resemble shrimps. Hooks on the tail portion are tied with nylon ropes in single or two rows. The lures are carved depending on the required size in wood. In Devipattinam and Keelakarai areas, 130 to 135 mm size hooks are predominantly used. The cost of these hooks ranges from Rs.30 to Rs.50 depending on the size and quality of materials used.

BAITED HOOKS/HOOKS IN POLES

In addition to the above, hooks with baits and hooks tied to long poles are also used to catch squids. However, these hooks are used only occasionally along with the trawl net operation.

VESSELS /CRAFTS USED IN JIGGING

Non-mechanised, wooden plank-built boats ranging from 5 to 12m size are used by fishermen for jigging. These vessels are locally known as 'vathai' which costs from Rs.700/- to 5000/- each depending on their size. Some of the fishermen also use catamaran ('thepum') for jigging. These 'thepums' are about 4 to 4.5 m in length with a breadth of 3 to 3.5 m and their cost ranges from Rs.400 to Rs.500/-. Generally only one person goes for jigging onboard the 'thepum'.

The jigs are operated from the boats at depths ranging from 3 to 10 metres upto a distance of 8 k.m. Sandy bottom and areas where sea grasses grow luxuriantly are found to harbour squids and such areas are preferred for exploitation.

AREA OF OPERATION

The squid fishing by jigs is carried out at present in the Palk Bay region from Kollukadu area near Athirapattinam (below point Calimere) to Rameswaram island. Nearly 50 fishing villages are engaged in squid fishing by hooks during the peak seasons. Some of the important centres include:

1. Pudupattinam
2. Ganesapuram
3. Kalumangadu
4. Pasipattinam
5. Thondi
6. Thirupalaikudi
7. Athankarai
8. Manakadu
9. Mandapam
10. Pamban
11. Ariyankundu

METHODS OF JIGGING/TROLLING

Each jig is tied to nylon wire (60 to 80 number) with rope lengths rang-

ing from 6-15 metres and are rolled to wooden frame reel or spindle (Fig.1). After reaching the fishing ground, and usually after spotting a few squids, the jigs are gently thrown towards them and are slowly drawn towards the boat. Attracted by the movement of the shrimp-shaped lure, the squids tend to catch them and in that process get hooked. They are gently removed and lifted up. Even any escape bid by their sudden jet-propelled backward movement is also prevented by the numerous recurved hooks of the jig.

The fishing is done during day time in good sun light for about 6 hours from early morning. Clear sky with mild wind is reported to favour the squid catch. One person can operate 2-3 jigs also.

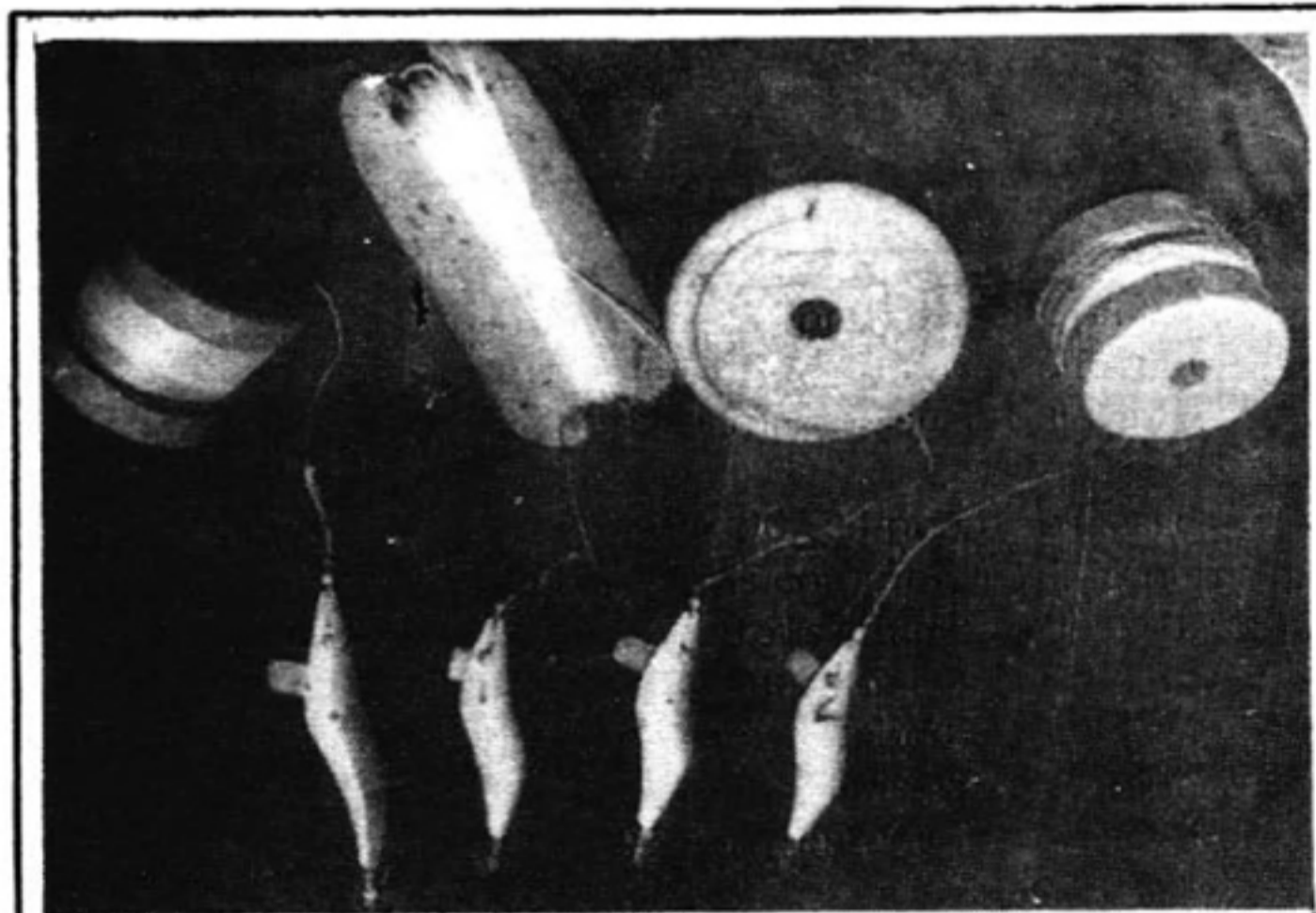
The squid fishing is conducted in this region mainly during two seasons. The first season extends

HISTORICAL ACCOUNT

Much before the development of modern squid jigging the fishermen of Palk Bay region pioneered squid jigging by using special hooks. As early as 1917, James Hornell de-

PRESENT STATUS OF SQUID JIGGING

In 1982-'83, the squid fishery of this region received an impetus when M/s East Bay Fisheries, a pri-



Squid jig ('Disco hook') popularly used in the Palk Bay coast of Tamil Nadu.

Table 1: Sizes and number of hooks in different jigs (The jigs are manufactured by YO-ZURI Co., Ltd. Japan).

Trade Size	Length (mm)	Number of hooks
2.5	75	12 to 14 hooks in 2 rows
3.0	90	
3.5	105	18 hooks in two rows
4.0	120	
4.5	135	
5.0	150	
5.5	165	
6.0	180	
6.5	195	
7.0	210	



Palk Bay squid. (Sepioteuthis lessoniana) caught by 'Disco hook'