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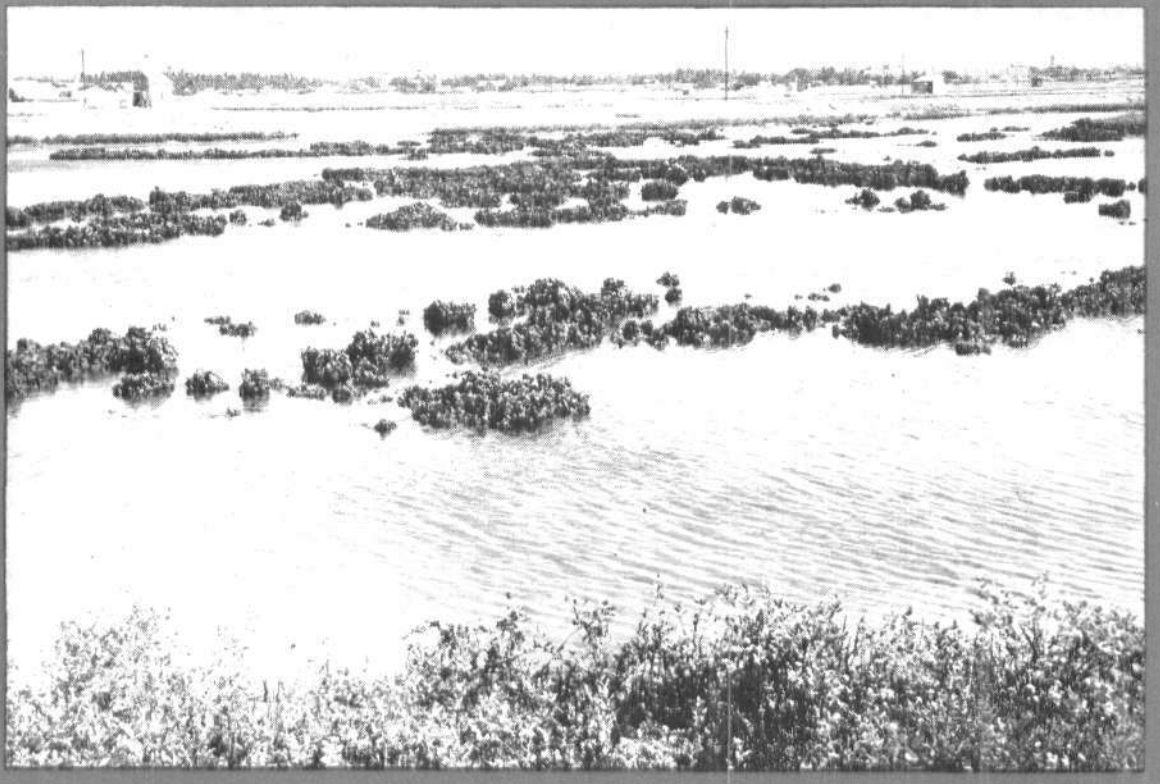

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THE MARINE FISHERIES INFORMATION SERVICE: Technical and Extension Series envisages the rapid dissemination of information on marine and brackish water fishery resources and allied data available with the National Marine Living Resources Data Centre (NMLRDC) and the Research Divisions of the Institute, results of proven researches for transfer of technology to the fish farmers and industry and of other relevant information needed for Research and Development efforts in the marine fisheries sector.

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AN UNUSUAL OCCURRENCE OF OIL SARDINE IN PONDICHERRY ON EAST COAST OF INDIA*

Introduction

The Indian oil sardine, *Sardinella longiceps* Valenciennes which forms 10 to 18% of the total fish landings in India, usually occurs in shoals along the west coast of India. Only stray catches of oil sardine have been reported from the east coast. But there has been no report of its occurrence along the Pondicherry coast on the east coast except for one report in 1847 by Valenciennes from the collection of Dr. Bellenger. The only specimen measuring 15 cm collected at Pondicherry was discoloured and in bad state.

During October–December, 1983 unusual landing of oil sardine in good quantities were noticed in Pondicherry state and the present report gives a brief account of the fishery.

Catch details

Altogether 57 t of oil sardine were landed during this period. The details of catch landed in three zones in the state are given in Table 1.

It is seen from the above table that the maximum landings of oil sardine was observed in November '83, the catches of this fish in October '83 being negligible. The Zone-P_1 contributed more to the total landings than Zone P_2. The landings of oil sardines in December was poor since the fishermen preferred prawn fishing.

Table 1. *Catch details of oil sardine along the Pondicherry coast (in kg)*

Zone	Oct. '83	Nov. '83	Dec. '83
P_1	—	28,353	5,625
P_2	200	14,010	9,850
Total	200	42,363	15,475

The shoals were caught in the gill nets in depths of 6 to 8 meters just one kilometer from the shore. On 25–11–'83 the shoals were sighted very near to the shore at Pillaichavadi (Zone-P_1) which tempted the fishermen to operate the shore seine net. However, only small quantities of oil sardine were caught as the operation of shore-seine was not quick enough to encircle the shoals. Another important feature noticed was that the shoals which remained in 6 to 8 meters depth did not move to deeper areas. This was evidenced by the non-occurrence of oil sardine in the gill net that operated in deeper areas of 20 to 25 meters depth. This enabled the fishermen to choose one of the following two, either fish for oil sardines close to the coast or for other fishes in deeper areas depending upon the price available for them in the market.

The oil sardines were caught by *catamarans* using *kavala valai* and *thattakavala valai*, with the mesh size ranging from 2.5 to 4 cm. However, the fishermen preferred only *kavala valai* which has a mesh size of 3 cm for it was more efficient in catching oil sardines. From the observations made, it was found that the catches from *thattakavala valai* were bigger in size.

Biological Observations

The fishes caught in the *kavalavalai* ranged between 140 and 164 mm with the dominant size around 150 mm. The size range of fishes caught in the *thattakavala valai* was between 154 and 202 mm with majority around 170 mm.

The size range in November was from 144 to 202 mm, while in December the range observed was from 142 to 162 mm. It is presumed that the shoals belonged to the 1st, 2nd and 3rd year groups. Females outnumbered the males and were immature being in first and second stages of maturity.

General observations

The sea around Pondicherry is usually rough and in tubrid condition during the northeast monsoon

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period, especially in the month of November. Further, during this period, under water drift locally called *vannivellam* flowing towards south used to be observed. However, during the period of present observations *sonivellam* alias *thentivellam* (drift flowing towards north) was strong instead of the usual southward drift *(vannivellam)*. This was an unusual feature at this coast during monsoon months especially in November. This feature might have been a cause for the abundance of oil sardine in large quantities along the Pondicherry coast.

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