LARGE SCALE MOVEMENTS OF CARANX SEXFASCIATUS QUOY & GAIMARD INTO THE INSHORE AREAS OF MADRAS

DURING the routine observations on the fishery along the Madras coast the authors visited the Mullikuppam landing centre in Madras City and observed the shore seine catches landed on 12th December, 1968. In Madras shore seines are operated within a distance of 1 km. from the shore at a depth of 4 to 8 metres during the anchovy fishery season, extending from November to May. While the catches in most of the nets on that day were anchovies, a huge quantity of Caranx sexfasciatus was observed in a haul which consisted of 925 fish weighing a total of nearly 3 tons. Enquiries with an elderly fisherman on the spot revealed that although the fish occur in large quantities in shore seine during this season in certain years no such huge catches were witnessed anytime in the past. A perusal of the data collected by the survey staff of this area confirms the above view. It is also seen from the survey data that large-sized C. sexfasciatus are caught usually by either hook and line or by gill nets in deeper waters. Heavy catches of C. sexfasciatus in shore seines were also reported intermittently from two other neighbouring centres in Madras city and in certain fishing villages within 30 km. south of Madras, the last such catch observed within the above area being on 3.3.69. A huge haul of the species was observed by one of us further south at Pondicherry by the end of March 69. However, no report of the occurrence of the species north of Madras is available.

The fork length was taken for a hundred fishes in the field and the size range was 540 mm. to 690 mm. The weight of a few fish was measured in the laboratory and the average weight was estimated to be 4 kgs. per fish. Because of such a heavy catch in a single haul the price of the fish dropped as low as Rs. 3 per fish which would otherwise fetch a price of not less than Rs. 2 per kg. Food and gonad condition studies revealed some interesting information. The stomach of the fish examined in December were full and contained nothing but anchovies while those examined in March were gorged with juveniles of various types of fish in addition to anchovies. As already mentioned the anchovy fisheries exist from November to May. From February to May juveniles belonging to various groups of fish form a good proportion in the shore seine catches. Thus the food of the fish appears to be anchovies and other smaller fishes, the former being the favourite item. All the fishes

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examined were completely spent. The gonads of the male were long and shrunken. The ovaries were asymmetrical the left being larger than the right, and kidney-shaped. The two ovaries were fused near the middle and were bloodshot. From the above observations it looks quite likely that the movement of the fish towards inshore areas is mainly for feeding after spawning.

Large-sized C. sexfasciatus are commonly caught in offshore region by hooks and line. The unusual occurrence of the species in large shoals near the shore is of some interest.

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