

ON THE OCCURRENCE OF SMALL-SIZED MACKERELS  
[*RASTRELLIGER CANAGURTA* (CUVIER)] OFF RATNAGIRI  
COAST

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P. C. GEORGE AND G. G. ANNIGERI

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YOUNG mackerels below 10 cm. in length were not so far reported or studied from the Kanara or Konkan Coast except for an isolated record from Karwar (Pradhan, 1956) and hence this report on their occurrence from this zone should be of considerable interest. Small-sized specimens were so far recorded only from Calicut (Bhimachar and George, 1952), Vizhingam (Balakrishnan, 1957), Madras (Rao and Basheeruddin, 1953 and Kuthalingam, 1956) and Waltair Coast (Rao and Rao, 1957).

Small-sized mackerels ranging in size from 62 and 112 mm. in length were observed in the cast-net catches on 24-9-1959 from Pawas fishing village, near Ratnagiri, during routine collection of fishery survey and catch statistics data. The catches were made from a depth of about eight fathoms and one kilogram of the material contained two hundred and eight specimens. The total catch of young mackerels weighed about four kilograms and these occurred along with moderate catches of *Anchoviella tri*. The dominant sizes, observed in the sample analysed, were the 78 and 88 mm. groups. There was no fishing during the subsequent days for about a week due to stormy weather conditions and hence further catches were not available for study.

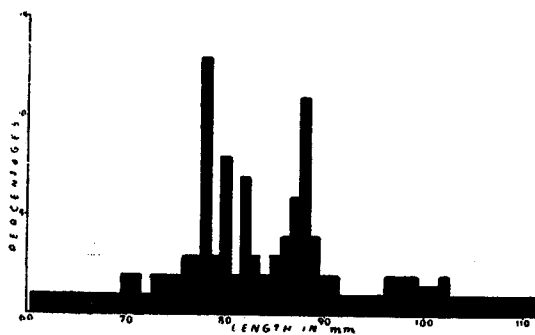


FIG. 1

The food of these small-sized mackerels, as revealed in the analysis made of their gut contents, consisted of diatoms, dinophyids, copepods and penæid protozoae. The stomach inclusions did not show "fish larvæ as staple food", as has been reported from Waltair (Rao and Rao, 1957) and the feeding intensity was also found to be appreciably high.

The main season of spawning of the Indian mackerel on the Konkan Coast, according to Pradhan (1956), is from May to September. A subsidiary spawning season was observed on the Mangalore Coast during January and February by George *et al.* (1959). The occurrence of small-sized mackerels during September indicates that these were spawned a few months earlier and adds strength to the contention that the Indian mackerel may have a prolonged spawning season, or a subsidiary season along this coast or both.

A detailed study of the ecology of the juvenile mackerels with special reference to feeding relationship is in progress and will be published elsewhere.

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P. C. GEORGE.  
G. G. ANNIGERI.

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