322 NOTES

ON THE FEEDING HABITS OF THE SNAKE MACKEREL GEMPYLUS SERPENS (CUVIER), WITH SOME REMARKS ON THE SPECIMENS COLLECTED OFF THE INDIAN COAST

While on a cruise on board the Research Vessel VARVNA two specimens of Gempylus serpens (Cuvier), measuring 537 mm. and 419 mm. in total length were collected at Station No. 1724 (Lat. 07° 02', Long. 77° 32'). These were obtained in the scoop net operated from the vessel to catch the fishes that came to the surface attracted by light. This catch of snake mackerel encouraged us to search for more specimens. At Station No. 1737 (Lat. 09° 46', Long. 75° 25') another specimen of G. serpens was encountered, which was found darting towards a flying fish and catching it by the middle. These areas abound in flying fishes such as Oxyporhampus sp., Exocoetus volitans, E. mento, Cypselurus comatus and Prognicthys gibbifrons. The gut contents of the two specimens of G. serpens were examined and were found to contain large chunks of flying fish.

G. serpens have been previously recorded from the Laccadive sea by Jones (1960). Barnard (1927), Smith (1949), and Beaufort (1951) have described this fish as having only one lateral line and the former two authors classify the gempylids on the basis of the number of lateral lines. In contrast, Matsubara and Iwai* (1952) and Jones (1960) as also the present authors record double lateral lines, whereas Fowler (1936) who mentions only one lateral line for the genus Gempylus, records double lateral line while describing the species G. serpens. In our smaller specimen measuring 419 mm., the upper lateral line extends high along the back to a point well beyond the origin of the second dorsal fin; upto the level of 8th fin ray, while in the larger specimen (537 mm.) it stops much short; below the 27th spine of first dorsal. This apparent shortening of the upper lateral line in a larger specimen, however, is not exhibited by the specimen measuring 580 mm., obtained by Jones (1960). In this the upper lateral line extends upto the origin of soft dorsal. In view of these variations in the number and disposition of the lateral line, observed in the earlier descriptions as well as in the present specimens, it may be pointed out that more specimens should be studied in this respect before accepting the specific significance of the lateral line in the classification of the gempylids.

The authors are grateful to Sri P. C. George for helpful criticisms.

Central Marine Fisheries Research Substation, Ernakulam. M. J. SEBASTIAN, P. VEDAVYASA RAO.

REFERENCES

BARNARD, K. H. 1927. Ann. S. African Mus., 21 (2): 786-790.

DE BEAUFORT, L. F. 1951. Fishes of the Indo Australian Archipelago. IX, 197-199.

FOWLER, H. W. 1936. Bull. Amer. Mus. Nat. Hist., LXX (2).

JONES, S. 1960. /. Mar. biol. Ass. India, 2 (1): 85-88.

MATSUBARA, K. & IWAI, T. 1952. Pacific Sci., 6: 193-212 (quoted by Tucker, D. W. 1956.)

SMITH, J. L. B. 1949. The Sea Fishes of Southern Africa: 310-311.

TUCKER, D. W. 1956. Bull. British Mus. (Nat. Hist)., 4 (3): 73-130.

^{*} As shown in the figure reproduced by Tucker (1956).