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DOLPHIN FISHES*

Dolphins are the true mammals of the seas. But this name finds a convenient place among fishes too when the fishes belonging to the family, Coryphaenidae are popularly termed dolphin fishes. Not only these mammals and fishes live in the same area but also have a similarity in shape and in the habit of jumping above water, presumably sufficient reasons for assigning such a name to these fishes.

The 'dolphins' or the dolphin fishes as they are called by some authors are larger pelagic species of the high seas living in tropical and temperate waters. These fishes possess the combination of various unique characters viz., extension of dorsal fin from nape almost to caudal fin, origin of anal fin from mid-ventral point of body and extending to caudal without spiny rays and the different nature of colouration in juvenile, middle-aged and fully formed specimens. Adult male fishes have a squarish head with a bony crust whereas in females the head is somewhat rounded. These combination of characters probably induced the earlier workers to identify several species in the family. It was found later that the bony crust on the head and corresponding elevation develop with increasing age giving a totally different shape at various stages. Hence

Weber and Beaufort (1931. *Fishes of the Indo-Australian Archipelago*, VI, Leiden) established a single species in this family viz., *Coryphaena hippurus* from the Indo-Australian Archipelago. Later, one more species, *Coryphaena equiselis* was described under Coryphaenidae from the eastern Indian ocean and western central Pacific (Fischer, W and P.J.P. Whitehead 1974. *Species identification sheets for fishery purposes*, F.A.O., Rome). But along the Persian Gulf region the presence of only *C. hippurus* has been reported.

The common dolphin fish, *C. hippurus* Linnaeus (Fig. 1) attains a maximum of 2 m in length with an average of 90-100 cm. *C. equiselis* Linnaeus (Fig. 2) otherwise called 'pampano dolphin' is a smaller variety with a maximum length of 75 cm., the commercial size being 30-50 cm. Except for the size and the difference in the number of rays in the dorsal fin, this species is not distinguishable from the other. *C. equiselis* possesses 48-55 fin rays in the dorsal fin, whereas *C. hippurus* accounts for a higher number viz., 55-65.

The dolphin fishes live singly or in shoals and are reported to follow ships and congregate below

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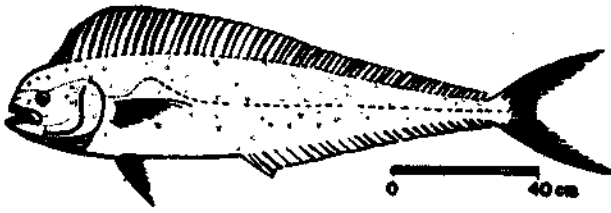


Fig. 1 *Coryphaena hippurus* Linnaeus

floating objects. They are fast swimmers attaining a speed of upto 56 km per hour. Detailed investigations on the biological characteristics of these species appear to be scanty. They are highly carnivorous with voracious feeding habits, mainly feeding on flying fishes. Besides flying fishes they also feed on sardines, anchovies, crustaceans and squids. More than 30 species of fishes belonging to 19 families were reported to have been taken from the stomach of dolphin fishes (Maurice and Robert Burton 1975. *Encyclopaedia of fishes, American Museum of Natural History*).

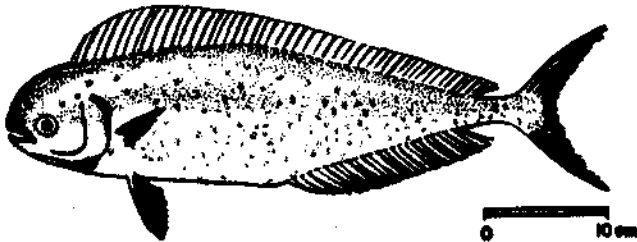


Fig. 2 *Coryphaena equiselis* Linnaeus

An interesting instance of behaviour pattern of juvenile dolphin fishes was noted by Dr. Earl S. Herald, the noted American ichthyologist. He collected many small fishes swimming around a ship lying off Philippines attracted by light during night. On examination these were found to be the very young 'pampano dolphins'. On pursuing the subject he observed that very few of the common dolphin fish came to the light but were seen swimming in the same place during the day time.

The dolphin fishes breed in the coastal waters as the water temperature rises. The growth of young fishes are very rapid as observed in the case of 52 captive dolphin fishes at the Marine Aquarium, Florida where juveniles with a length of 45 cm weighing 670 g were grown to size of 125 cm in length and weight of 16.7 kg within a period of seven months. It is believed that life span is short perhaps three years only. These fishes are excellent table fishes and are marketed mostly in fresh conditions.

The trend of dolphin fish landings along the Indian coast during the period, 1969-'78 show considerable fluctuations (Fig. 3). Of an estimated average catch of 225 tonnes of dolphin fishes, Andhra Pradesh contributed the maximum followed by Tamilnadu and Kerala.

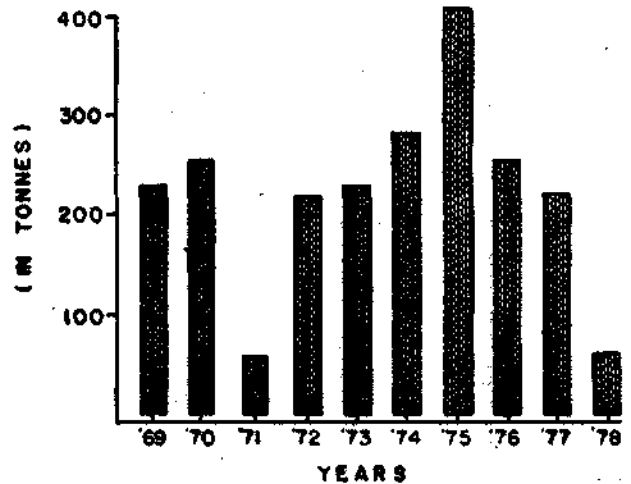


Fig. 3 Annual landings of dolphin fishes in India from 1969 to 1978

Though predominantly caught by trolling lines, they are also landed by purse-seiners and floating traps in some countries. In India they are caught mainly by hooks and lines and gill nets along the inshore waters. There is considerable scope to increase the catch of dolphin fishes by increasing the present level of exploitation.

