

A note on landings of pregnant sharks in Cochin Fisheries Harbour, Kerala

T. M. Najmudeen*, P. K. Seetha, M. Radhakrishnan, K. T. S. Sunil, S. Akhildev, Augustine Sipson and P. U. Zacharia
ICAR-Central Marine Fisheries Research Institute, Kochi-682 018, Kerala

E-mail:najmudeentm@yahoo.com

Sharks formed the major bycatch of pelagic longline and gillnet fishery which target high value fishes like tunas until recently. However, owing to the great demand for fresh and dried shark meet in the domestic market and expansion of fishing to distant waters there is targeted fishing for sharks. In India, major portion of the sharks

caught by mechanized longliners and gillnetters are landed in Cochin Fisheries Harbour and Thoothoor fish landing centre. The annual catch of sharks in Kerala during 2017 was estimated at 2936 tonnes, of which 80% was landed in Cochin Fisheries Harbour. Among the 12 shark species landed at Cochin Fisheries harbor, those



Fig. 1. Pups of *C. amblyrhynchoides* collected from the pregnant shark



Fig. 2. Pups of the Scalloped hammerhead *S. lewini*

belonging to the family Carcharhinidae dominated (70%) followed by Sphyrnidae (10%). They consisted of almost all the size groups including pregnant sharks as observed during the onsite processing of some the landed sharks. During such an observation, on 5th May 2018, one female Graceful shark *Carcharhinus amblyrhynchoides* with a total length of 246 cm and weighing 90 kg was landed at Cochin Fisheries Harbour. It was caught by a pelagic longline vessel operated at a location of 20° 48' 00" N; 68° 54' 00" E off Gujarat coast at a depth of 1760 m. The shark auctioned for ₹15000 by the local shark trader was transported to a nearby processing unit. The pregnant female was carrying a pup size of seven, measuring 45-55 cm in total length and weighing 1.5-2.0 kg and similar in appearance to that of the adult counterparts with fully developed fins and colouration. (Fig. 1).

Another female shark landed by the same vessel was a Scalloped hammerhead *Sphyrna lewini* measuring 210 cm in total length and 42 kg in total weight. The pregnant female carried five numbers of well-developed young ones whose total length ranged from 40 to 43 cm and weighing 0.9 to 1.3 kg each. Another incidence

of a pregnant *S. lewini* landing was recorded on 10th October 2018. It was reportedly caught off Ratnagiri (16° 22' 00" N; 72° 11' 00" E) at a depth of 153 m. The shark which measured 260 cm in total length and weighed 88 kg carried six pups with a length rang of 40-47 cm each weighing 1.1 to 1.4 kg. The pups of both *C. amblyrhynchoides* as well as *S. lewini* were sold separately at the landing centre itself, as there was good demand for baby sharks in the domestic market, and the pups fetched higher price than that of the adult sharks.

Non-Detriment Findings for the export of shark and ray species listed in Appendix II of the CITES, which is intended to use as guidance in regulating or allowing international trade of the concerned species and its by-products and to help sustain the exploitation of elasmobranchs along the region for those species harvested from Indian EEZ has been published by ICAR-CMFRI. Knowledge on the life history traits especially on their reproductive parameters such as litter size, breeding season etc. facilitated through proper reporting helps in the formulation of management measures for the sustainable exploitation and conservation of this highly vulnerable group of marine resources.