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Present status of shark fishery as indicated by the commercial catch unloaded at Pitipana Negombo, South West coast of Sri Lanka

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The history of the shark fishery is not well documented. Although the shark fishery in Sri Lanka has existed for many years, sharks are among the least known component of the Sri Lankan large pelagic catches. Population parameters of sharks too, remain a much-neglected subject in Sri Lanka. Although the need for studies on sharks is great, the knowledge on sharks landed in Sri Lanka is still meager. The purpose of the present study was to study the present states of the fishery.

The shark catches in the commercial fisheries were monitored twice a month at the main fish- landing site at Negombo, during the period May 2006 to April 2007. The collection of data and other relevant information were carried out from 4.45 am to 7.30 am. The study revealed the occurrence of 16 species of pelagic and demersal sharks belonging to 2 orders, namely Lamniformes and Carcharhiniformes. The most diverse order among them was Carcharhiniformes. It comprised 2 families, 5 genera and 12 species. The above two families, namely, Carcharhinidae and Sphyrnidae reported 7 species of Carcharhinus namely, *C. falciformis, C. brevipinna, C. limbatus, C. melanopterus, C. longimanus, C. albimarginatus, C. sorrah* and 2 Sphyrna species, *S. lewini* and *S.zygaena.* The other genus comprised one genus each, *Prionace glauca, Triaenodon obesus* and *Galeocerdo cuvier.*

The second most diverse order in the catches was Lamniformes with two families, two genera and four species. The families were Lamnidae and Alopiidae. There were two Alopias species; *A. pelagicus* and *A. vulpinus* and t*wo Isurus species; I. oxyrinchus* and *I. paucus.*

Over 64.05 % of the sharks landed belonged to the order Carcharhinidae with *Carcharhinus falciformis* (55.03%) being the most dominant species and it has dominated the catch almost through out the year.

The values for L_∞ and K estimated for the stock of *Carcharhinus falciformis* were 199.93cm and 0.250/yr respectively. The instantaneous total mortality coefficient (Z) was 0.26; the natural mortality coefficient (M) was 0.02 and the fishing mortality coefficient (F) was 0.24.

The values for L_∞ and K estimated for the stock of *Alopias vulpinus* were 208.77cm and 0.400/yr respectively. The Z was 1.49; the M was 0.02 and the F was 1.47.

The estimated exploitation rate (E) for *C. falciformis* and *A. vulpinus* were 0.92 and 0.99 respectively. As the present level of exploitation seems to be high, it is suggested that management measures are needed to sustain the stock.

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