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ABSTRACT

Carcharhinus Limbatus is a commercially important elasmobranch species. Carcharhinus Limbatus was earlier abundantly found in warm temperate, subtropical and tropical water. Earlier found abundantly this particular species has now being entered into the IUCN red data list as Near Threatened Species. This has happen because of over exploitation of Carcharhinus Limbatus for extraction of oil from its liver. Carcharhinus Limbatus is locally known as blacktipped shark. It is often spotted near inshores, near river mouths, bays, mangrove swamps and estuarine waters. The identifying feature of the shark species Carcharhinus Limbatus is that the tip of the 1st and 2nd dorsal fins, pectoral fins, upper and lower lobes of caudal fin is distinctly blacktipped. Carcharhinus Limbatus is found in Mediterranean sea, Indian ocean some parts of Atlantic and Pacific ocean. The earliest classification of Carcharhinus Limbatus was done by Francis Day who placed the species in Order Plagiostomata and Family Carchariidae which is perfect but crude. Latest classification by FAO has placed it in Order Carcharhiniformes and Family Carcharhinidae, this classification is universally accepted and is very precise. Many countries are now implementing strict conservation strategies to protect Carcharhinus Limbatus from being getting extinct.

INTRODUCTION

The fishes are jawed, aquatic, poikilotherm, oviparous or ovoviviparous, streamlined vertebrates with gill for respiration and fins for locomotion. They exhibit enormous diversity as far as their number, size, morphology, habitats, biology, behavior etc are concerned. (S. K. Gupta et al., 2006)

Fishes are aquatic and jaw – bearing vertebrates. They belong to the Super Class Pisces which is sorted into two distinct evolutionary lines: - Cartilaginous fishes or Chondrichthyes (Gr. Chondros, cartilage + ichthys, fish) and bony fishes or Osteichthyes (Gr. Osteon, bone). The Chondrichthyes are also called as elasmobranchs. (Kotpal, 2003)

The elasmobranchs are ecologically and economically very important category of fishes. They are basically targeted for commercial fishery. Of the various shark species which comes under the elasmobranchs one of the most important among them is the Carcharhinus Limbatus. This shark species which was earlier abundantly found in warm temperate, subtropical and tropical waters is now entered into the IUCN Red List of Threatened Species as Near Threatened Species. (www.iucnredlist.org)

The Carcharhinus Limbatus frequently enters the inshore waters as adults as they are having inshore nursery areas, and this makes them highly vulnerable to fishing pressure and human – induced habitat alteration. The Carcharhinus Limbatus is placently viviparous and produces 4 to 11 offsprings after an 11 -12 months gestation. Implantation occurs during 10 – 11th week of gestation and young ones are born in early June. The neonate occupies specific nursery grounds in shallow coastal waters. The neonate increase by 25 – 30 cm during first six months and grows slowly to adulthood. The Carcharhinus Limbatus eats bony fishes, shrimp, crabs and cephalopods. (www.iucnredlist.org)

Local names

Blackfin shark, blacktipped shark, Small blacktip shark, Spotfin ground shark. (Fabrizio Serena, 2005)

Habitat and Ecology

Carcharhinus Limbatus basically lives in inshore and offshore waters, but is not a truly pelagic species. They are often spotted near the shores around river mouths, bays, mangrove swamps and estuarine waters. They never venture into freshwaters. They are found in deep waters and also in the vicinity of coral reefs. (Fabrizio Serena, 2005)
**Characteristic features of Carcharhinus Limbatus**

*Carcharhinus Limbatus* has a sloping nape grading smoothly into a high back. The snout is moderately long and pointed with small anterior nasal flaps. The first dorsal fin is large, falcate and erect with a pointed apex and short free rear tip and is also much larger than second dorsal or anal fins. The first dorsal fin originates over as slightly anterior of pectorals. Second dorsal fin large and high, with a short free tip and originates over or slightly anterior to the anal fin. Interdorsal ridge is absent. Pectoral fins are long, semifalcate and narrow - tipped. The tips of the first and second dorsal fins, pectoral fins, upper and lower lobes of caudal fin distinctly black – tipped. Pelvic fins sometimes black tipped but anal fin usually completely white, including tip, a conspicuous white band on each flank. *(Day F., 1888)*

**Distribution**

*Carcharhinus Limbatus* is widely spread in warm temperate, subtropical and tropical waters. In the Atlantic Ocean it is observed from Massachusetts to Brazil, covering the Gulf of Mexico. It is found in the entire Mediterranean Sea. It occurs all around the periphery of the Indian Ocean, from South Africa, Madagascar to the entire Arabian Peninsula and the entire Indian subcontinent to Southeast Asia. In the Pacific Ocean it is found from Southern China to Northern Australia including the countries Philippines and Indonesia. It also occurs along the coastal area of California to Peru. It has also been reported at a number of Pacific islands such as New Caledonia, Tahiti and Hawaii. *(www.iucnredlist.org)*

**Economic Importance**

*Carcharhinus Limbatus* meat is consumed basically by the local people. Whereas, the fins are dried and used in preparing shark – fin soup. In some countries the *Carcharhinus Limbatus* hides are used for preparing leather. The livers from *Carcharhinus Limbatus* are used to extract oil which is a rich source of vitamin A & D and is of great medicinal importance.

*(S. K. Gupta et al. 2006)*

**Systematic Position**

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<td>Limbatus</td>
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*(Fabrizio Serena, 2005) (Day F., 1888)*

**About Order**

The oldest classification done by Francis Day had placed *Carcharhinus Limbatus* under the order Plagiostomata. Elasmobranchii fishes having body more or less cylindrical or depressed and have five to seven gill openings which may be lateral or inferior.

Jaws are distinct from the skull. Such elasmobranchs are placed in the Order Plagiostomata. *(Day F., 1888)* According to the latest Taxonomical classification by FAO and IUCN *Carcharhinus Limbatus* comes under the order Carcharhiniformes. The Carcharhiniformes shows presence of nictitating eyelids, mouth behind front of eyes, 5 pairs of gill slits, anal fin present and both dorsal fins are without spines. *(Fabrizio Serena, 2005)* The latest classification exhibit more precision while the oldest classification is accurate but slightly crude.

**CONCLUSIONS**

*Carcharhinus Limbatus* is economically and ecologically important species. It has wide range of distribution from the entire Indian ocean, Mediterranean sea and also in some parts of Atlantic and Pacific ocean. It's over exploitation has made it a Near Threatened Species as indicated by IUCN. Some countries have implemented strict conservation strategies in order to protect the species from being getting extinct but the same has to be implemented universally by all the countries where this species is found. Also the Taxonomical classification done by Francis Day is much older but with the available resources and information he had placed *Carcharhinus Limbatus* in Order Plagiostomata which was accurate but crude. The latest classification done by FAO has placed *Carcharhinus Limbatus* into the Order Carcharhiniformes is perfect and universally accepted till date.

**References**


www.iucnredlist.org/details/161526/0

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