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Carcharhinus brevipinna, Spinner Shark

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Chondrichthyes	Carcharhiniformes	Carcharhinidae

Taxon Name: Carcharhinus brevipinna (Müller & Henle, 1839)

Synonym(s):

• Carcharias brevipinna

Infra-specific Taxa Assessed:

• Carcharhinus brevipinna (Northwest Atlantic subpopulation)

Common Name(s):

• English: Spinner Shark

Taxonomic Source(s):

Compagno, L.J.V. 1973. Carcharhinidae. In: J.-C. Hureau & T. Monod (ed.), *Check-list of the Fishes of the North-eastern Atlantic and of the Mediterranean (CLOFNAM)*. *Volume 1*, pp. 23-31. Unesco, Paris.

Assessment Information

Red List Category & Criteria:	Near Threatened <u>ver 3.1</u>		
Year Published:	2009		
Date Assessed:	October 1, 2005		

Justification:

This assessment is based on the information published in the 2005 shark status survey (Fowler *et al.* 2005).

The Spinner Shark (*Carcharhinus brevipinna*) is an active, schooling species that often leaps spinning out of the water. This common coastal-pelagic warm-temperate and tropical shark frequently is captured in recreational and commercial fisheries. It is a species that frequents nearshore waters as adults and has inshore nursery areas, making it highly vulnerable to fishing pressure and human-induced habitat alteration.

Previously Published Red List Assessments

2000 – Lower Risk/near threatened (LR/nt)

Geographic Range

Range Description:

The Spinner Shark is cosmopolitan in warm temperate, subtropical and tropical continental and insular shelf waters. It is known from off Cape Cod, Massachusetts (USA), to southern Brazil in the western

Atlantic. It is found from the Mediterranean Sea southward to central Africa in the eastern Atlantic; the species is widespread in the Indian Ocean from South Africa to western Australia, including the Red Sea and Gulf of Oman; and in the western Pacific Ocean it is recorded from throughout the Indo-Australian Archipelago, the China Sea and the north and east coasts of Australia (Compagno in prep. b).

Country Occurrence:

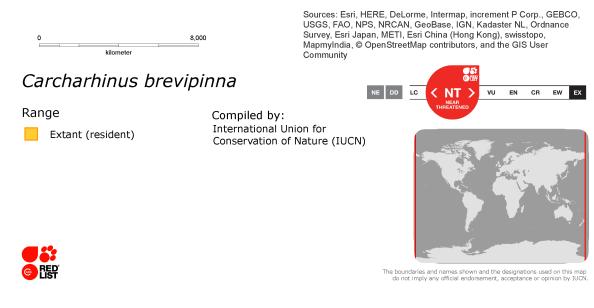
Native: Albania; Algeria; Australia; Belize; Benin; Bosnia and Herzegovina; Brazil; China; Colombia; Costa Rica; Côte d'Ivoire; Croatia; Cyprus; Djibouti; Egypt; Eritrea; France; Gambia; Ghana; Greece; Guatemala; Guinea; Guinea-Bissau; Guyana; Honduras; Iran, Islamic Republic of; Israel; Italy; Liberia; Libya; Mauritania; Mexico; Montenegro; Morocco; Nicaragua; Nigeria; Oman; Pakistan; Panama; Saudi Arabia; Senegal; Serbia (Serbia); Sierra Leone; Slovenia; South Africa; Spain; Sudan; Suriname; Syrian Arab Republic; Taiwan, Province of China; Togo; Tunisia; Turkey; United Arab Emirates; United States (Connecticut, Delaware, Florida, Georgia, Maryland, Massachusetts, New Jersey, North Carolina, Rhode Island, South Carolina, Virginia); Venezuela, Bolivarian Republic of; Yemen

FAO Marine Fishing Areas:

Native: Atlantic - eastern central, Atlantic - southeast, Atlantic - southwest, Atlantic - western central, Indian Ocean - eastern, Indian Ocean - western, Mediterranean and Black Sea - , Pacific - northeast, Pacific - southwest, Pacific - western central

Distribution Map





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Population

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

The Spinner Shark is common in nearshore waters off beaches, in bays and off river mouths and also occurs pelagically offshore. It is common year round in southern areas of the United States and occasionally migrates north in the summer into the Middle Atlantic Bight.

This shark has an unusual habit of leaping from the water, rotating as many as three times and falling back in the water, usually on its back. Spinner Sharks are often found in schools that may include large numbers of individuals (Compagno in prep. b). The species has an 11-15 month gestation period and is placentally viviparous, producing 3-20 pups (usually 7-11). The reproductive cycle is two years (Castro 1993). In the western North Atlantic, ovulation occurs in late June and mating occurs in late June through early July; pups are born in late May-July at 60-75 cm total length (TL). In South Africa newborns of 60-80 cm TL have been reported, with parturition in April-May. Pregnant females have been caught in February-March in southeastern Australia, with parturition occurring in March-April; pup lengths of 66-77 cm TL are reported. Young are also born in the summer off the north-west coast of Africa and in the eastern Mediterranean and Red seas. The Spinner Shark uses nearshore beaches and bays, and higher saline portions of estuaries throughout the south-east United States as nursery grounds, but parturition probably takes place in waters deeper than 5 m.

Compared to many shark species, the Spinner Shark grows at a relatively fast rate, although only one growth study exists for this species, that addressing a north-west Atlantic population. Since other populations differ greatly in many life history characteristics and maximum sizes, the values reported here may not be applicable to those regions. For the northwest Atlantic, neonates born at 60-75 cm TL increase by as much as 30 cm in length by the onset of winter (*circa* six months). One-year olds continue to grow at about 25 cm/year, with the growth rate slowly declining to about 10 cm/year through adolescence. Males mature at ~130 cm TL, or at 4-5 years of age, females at 150-155 cm TL or 7-8 years of age. Maximum recorded age is 11 years (a 208 cm TL female) but the species attains a much larger size (225-250 cm TL). Age at the largest known sizes (assuming a continued 5 cm annual growth) would be 15-20 years, although as the sharks get older, incremental growth should decline, thus age at maximum size may be substantially greater (Branstetter 1987a).

The species is primarily a fish-eater, with diet including 10-pounders (*Elops*), sardines and herring, anchovies, sea catfish, lizardfish, mullets, bluefish, tunas, bonito, croakers, jacks, mojarras, grunts, tongue-soles, stingrays, cuttlefish, squid and octopuses. It frequently uses an unusual method of feeding on schools of small, bony fishes that gives this shark its common name; it swims rapidly upwards through the schools with open mouth, spinning along its long axis and snapping in all directions, and then shoots out of the water after its feeding run. Off Madagascar this species is associated with and probably feeds on migrating schools of scombrids and jacks. As with *C. limbatus*, this shark will congregate to eat trash fish dumped off shrimp trawlers and no doubt participates in feeding frenzies like its smaller relative (Compagno in prep. b).

Systems: Marine

Use and Trade (see Appendix for additional information)

This species is part of recreational fisheries and is targeted by directed commercial fisheries. Spinner Shark meat is sold under the name "Blacktip Shark" because of wide consumer preference for the product. Fins are dried and shipped to the Far East where they are used in shark fin soup. In some areas the hides are likely to be utilised in preparing leather and the livers are used to extract oil.

Threats (see Appendix for additional information)

In the northwest Atlantic this species is part of the recreational fishery and is one of a suite of carcharhinids targeted by the directed commercial fishery operating along the southeast coast from North Carolina to Florida and throughout the Gulf of Mexico. It is a common component of the commercial catch in the north-central Gulf of Mexico, but is less often caught in the fisheries along the eastern seaboard of the United States. As with most carcharhinid species, the Spinner Shark meat is sold under the name "Blacktip Shark" because of wide consumer preference for the product. It is a constituent of the substantial Mexican Gulf of Mexico shark catch. Probably it is represented in the shark catches in most areas within its range, but owing to confusion with the Blacktip Shark, it is likely that the species is not recorded in landings data. Fins are dried and shipped to the Far East where they are used in shark fin soup. In some areas the hides are likely to be utilized in preparing leather and the livers are used to extract oil.

Conservation Actions

There are no conservation measures in place for this species.

Credits

Assessor(s):	Burgess, G.H.
Reviewer(s):	Musick, J.A. & Fowler, S.L. (Shark Red List Authority)

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External Resources

For Images and External Links to Additional Information, please see the Red List website.

Appendix

Habitats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Habitat	Season	Suitability	Major Importance?
9. Marine Neritic -> 9.1. Marine Neritic - Pelagic	-	Suitable	-
12. Marine Intertidal -> 12.2. Marine Intertidal - Sandy Shoreline and/or Beaches, Sand Bars, Spits, Etc	-	Suitable	-

Use and Trade

(http://www.iucnredlist.org/technical-documents/classification-schemes)

End Use	Local	National	International
Food - human	No	Yes	No
Wearing apparel, accessories		Yes	No
Sport hunting/specimen collecting		No	No

Threats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Threat	Timing	Scope	Severity	Impact Score
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.3. Unintentional effects: (subsistence/small scale)	Ongoing	Unknown	Unknown	Unknown
	Stresses:	2. Species Stre	esses -> 2.1. Species	mortality
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.4. Unintentional effects: (large scale)	Ongoing	-	-	-

Research Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Research Needed
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.2. Harvest level trends
3. Monitoring -> 3.3. Trade trends

Additional Data Fields

Population

Population severely fragmented: No

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