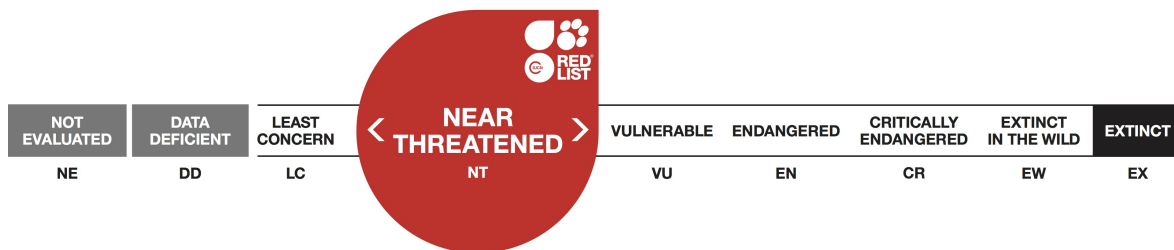


Mustelus canis, Dusky Smoothhound

Assessment by: Conrath, C.



View on www.iucnredlist.org

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Chondrichthyes	Carcharhiniformes	Triakidae

Taxon Name: *Mustelus canis* (Mitchill, 1815)

Synonym(s):

- *Squalus canis*

Common Name(s):

- English: Dusky Smoothhound

Assessment Information

Red List Category & Criteria: Near Threatened [ver 3.1](#)

Year Published: 2005

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 Dusky Smoothhound (*Mustelus canis*) is a demersal coastal shark found in many areas of the western Atlantic. An abundant species seasonally in many areas of the northwest Atlantic, in recent years they have become commercially important in this region. Recent rapid increases in directed gillnet fishing has caused a decline in some stocks of large females. There is currently no management plan or protection for this species.

Previously Published Red List Assessments

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

Geographic Range

Range Description:

Dusky Smoothhounds are found in the western Atlantic from Massachusetts to Florida, USA, in the northern Gulf of Mexico including Cuba, Jamaica, Barbados, Bermuda, Bahamas and southern Brazil to northern Argentina (Compagno 1984b). There are probably several discrete populations separated by large areas geographically with little movement between different populations (Bigelow and Schroeder 1948). Dusky smoothhounds are primarily demersal sharks that inhabit continental and insular shelves and upper slopes and are typically found in inshore waters down to 200 m depth (Compagno 1984b).

Country Occurrence:

Native: Argentina; Bahamas; Barbados; Bermuda; Brazil; Cuba; Jamaica; Mexico; United States

(Connecticut, Delaware, Florida, Georgia, Maryland, Massachusetts, New Jersey, North Carolina, South Carolina, Virginia); Uruguay; Venezuela, Bolivarian Republic of

FAO Marine Fishing Areas:

Native: Atlantic - northwest, Atlantic - southwest, Atlantic - western central

Distribution Map

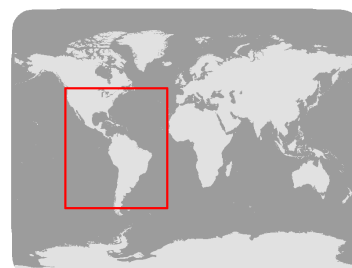


Mustelus canis

Range

Extant (resident)

Compiled by:
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Conservation of Nature (IUCN)



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.



Population

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

The maximum reported size of Dusky Smoothhound is about 150 cm total length (TL) (Compagno 1984b). Data on longevity of the species is sparse in the literature. Dusky Smoothhounds are viviparous sharks that form a yolk-sac placenta and have litters ranging in size from 4-20, but averaging 10-20 per litter. The north Atlantic population has a yearly seasonal reproductive cycle with the mating season occurring from mid to late summer. The gestation period is about 10 months with parturition occurring from early May to the middle of July (Bigelow and Schroeder 1948). Female Dusky Smoothhounds reach maturity at about 102 cm and males reach maturity about 84 cm (Conrath unpubl.). Rountree and Able (1996) suggest that Mid-Atlantic Bight estuaries may serve as critical nursery grounds for this species. They report the size at birth to be around 28-39 cm. The north Atlantic population undergoes a seasonal migration responding to changes in the water temperature. This population winters between Chesapeake Bay and South Carolina. In early spring Dusky Smoothhounds begin migrating to their summer grounds between Delaware Bay and Cape Cod, remaining there until late autumn before migrating south again (Bigelow and Schroeder 1948, Castro 1983). Dusky smoothhounds possess low, flattened teeth specialised for crushing crustacean prey. Their diet consists primarily of large crustaceans but also includes squid, small bony fish (menhaden, stickleback, wrasses, porgies, sculpins and puffers), gastropods, bivalves, marine annelid worms and occasionally garbage (Bigelow and Schroeder 1948). Gelsichter *et al.* (1999) found that adult dusky smoothhounds captured in Virginia waters had a diet dominated by crustaceans, especially by rock crabs, lady crabs and blue crabs, but also included other crustaceans, molluscs, teleosts, horseshoe crabs and polychaetes.

Systems: Marine

Threats (see Appendix for additional information)

Historically this species has not been utilized in fisheries, except for collection to use in classroom exercises (Bigelow and Schroeder 1948). Compagno reports that this species is fished off Cuba, Venezuela, Brazil and possibly other locations in the Caribbean, using longline gear and bottom-trawls and is utilised as a food resource (Compagno 1984b). Recently a gillnet fishery for dusky smoothhounds has started on the eastern shore of Virginia and North Carolina. Total landings of Dusky Smoothhounds in Virginia waters remained fairly low (less than 25,000 lbs or 11 t) until 1993 when landings exceeded 220,000 pounds (100 t). Total landings remained around this level for two more years but decreased to around 140,000 pounds (63.5 t) in 1996 (Virginia Marine Resources Commission unpubl.). In North Carolina Dusky Smoothhound landings have only been reported separately from Spiny Dogfish (*Squalus acanthias*) landings since 1995. In 1995 total landings reached 2,182,577 lb (990 t) but dropped in 1996 to 463,047 pounds (210 t) (North Carolina Division of Marine Fisheries unpubl.).

Conservation Actions

No demographic modelling has been done to predict how the North Atlantic population of Dusky Smoothhounds will respond to this recent increase in fishing pressure and what management measures will be most appropriate. Currently there is no management for this species.

Credits

Assessor(s): Conrath, C.

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

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External Resources

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Appendix

Habitats

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

Habitat	Season	Suitability	Major Importance?
9. Marine Neritic -> 9.1. Marine Neritic - Pelagic	-	Suitable	-

Use and Trade

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

End Use	Local	National	International
Food - human	Yes	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 -> 5.4.2. Intentional use: (large scale)	Ongoing	-	-	-
5. Biological resource use -> 5.4. Fishing & harvesting aquatic resources -> 5.4.4. Unintentional effects: (large scale)	Ongoing	-	-	-

Additional Data Fields

Population
Population severely fragmented: No

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