



Photo credit: NOAA.

#### KEY INFORMATION

##### Areas of Concern

Western Atlantic: Gulf of Mexico and South Atlantic.

**Year Identified as “Species of Concern”**  
1997

##### Factors for Decline

- Recreational fishing
- Bycatch (especially from long-line gear)

##### Conservation Designations

IUCN: Near Threatened – Globally except the U.S. population in the Northwestern Atlantic and Gulf of Mexico was ranked as Vulnerable.

American Fisheries Society: Vulnerable

#### Current Status:

##### **Demographic and Genetic Diversity Concerns:**

Reviews of catch and landings data for the large coastal shark assemblage in the western Atlantic (including dusky and other requiem sharks) found that by 1986 the abundance of many of the large coastal species had probably declined by 50 to 75% from 1970s levels -- even prior to the expansion of the commercial shark fishery in 1986. In 2006, NMFS completed a stock assessment that found the species was at 20 percent of virgin biomass (Cortes et al. 2006). Recent demographic analyses of *C. obscurus* in the western Atlantic have generated estimates of the annual rate of population increase of 2.8% (Cortes 1996) and 5.57% (Sminkey 1996). Both of these estimates assume no fishing mortality and a two-year reproductive cycle. Current studies indicate that the reproductive cycle might be three years, not two (Musick 1995). Given this, and the fact that these sharks are caught as **bycatch**, population increase rates may be even lower than this. With life history traits such as slow growth and late maturity, the dusky shark is susceptible to overfishing.

##### **Existing Protections and Conservation Actions:**

Dusky shark, as part of the large coastal shark management unit, was identified as **overfished** in 1993 when the Shark Fishery Management Plan was implemented. Commercial and recreational



## Species of Concern

NOAA National Marine Fisheries Service

fishing has been prohibited since 1998 but over 2000 were caught recreationally in 2003. A time/area closure was implemented in off North Carolina in 2005.

### Factors for Decline:

Currently the principal threat is from recreational fisheries. Commercial fisheries contributed to decline, but possession was outlawed in 1998. Dusky sharks are taken as bycatch in directed tuna, swordfish, and shark longline fisheries, and in tuna and swordfish gill net fisheries.

### Brief Species Description:

The dusky shark is also known as the bronze whaler or black whaler. It is a large, fairly slender shark with a low ridge between the dorsal fins. The rounded snout is shorter or equal to the width of the mouth. The first dorsal fin originates over or near the free rear tips of the pectoral fins. The color is bronzy gray to blue gray above with white ventrally. This species prefers warm temperate to tropical waters. It occurs from the surf zone to well offshore, and from the surface to depths of 1300 feet (400 m; Compagno 1984). Long migrations associated with temperature change occur in this species (northward in summer and southward in fall). The dusky shark is not commonly found in **estuaries** due to its avoidance of low salinity (Compagno 1984; Musick *et al.* 1993). The average size is about 11.8 feet (360 cm) TL and about 400 pounds (180 kg). Males attain sexual maturity at 9.15 feet (279 cm) TL (about 19 years); females mature at 9.3 feet (284 cm) TL (about 21 years). This long lived shark, maximum age about 40 years, is viviparous (placental live bearer) with litter sizes ranging from 6 to 14. Young are born at 33 to 39 inches (85-100cm). They reproduce every 3 years, either between June and July or December and January. Their diet includes bony fishes, cartilaginous fishes, and squid.

In the western Atlantic, its distribution extends from southern New England to the Caribbean and Gulf of Mexico to southern Brazil. However, its distribution off Central America is poorly known. Its occurrence is uncertain in the eastern North Atlantic, but it has been recorded around oceanic islands off western Africa. These records and others from tropical insular areas may be misidentifications of a sibling species (*C. galapagensis*) (J. Musick, pers. comm.). In the western Indian Ocean, it occurs off South Africa, Mozambique, Madagascar, and possibly in the Red Sea. It is found in the waters of Japan, China, Vietnam, Australia, and New Caledonia in the western Pacific. In the eastern Pacific, the dusky extends from southern California to Gulf of California, Revillagigedo Islands, and possibly Chile.

### Contact Information

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