Common Name: Atlantic white marlin



Photograph by Seined Chow at www.fishbase.org

<u>Scientific Name</u>: *Tetrapturus albidus* <u>Area of Concern</u>: Western Atlantic <u>Year First Listed as a "Species of Concern"</u>: 2004

Species Description:

White marlin are large, elongated fish with a prolonged upper jaw that forms a spear which is round in cross-section. They have two dorsal fins: the first is long and low posteriorly, the second is small. White marlin are found in offshore waters throughout the tropical and temperate Atlantic Ocean and adjacent seas. Unlike blue marlin and sailfish, white marlin occur only in the Atlantic Ocean. They are dark blue to chocolate-brown in color dorsally, brownish-silvery-white laterally, and silvery white ventrally. White marlin usually do not have bars or spots on the body, but the dorsal fin membrane is usually covered with blue-black small black spots. They are distinguished from the sympatric blue marlin (*Makaira nigricans*) by their rounded first dorsal fin. Although generally considered to be a rare and solitary species relative to other similar fish, white marlin occur in small groups consisting of several individuals. White marlin preferred habitat is deep blue water over 100m with salinity around 35 ppt and a surface temperature of about 22°C. The species is usually found above the thermocline and is distributed seasonally; migrating to high latitudes in the warm season. Prey items include a variety of fishes, crustaceans, and cephalopods.

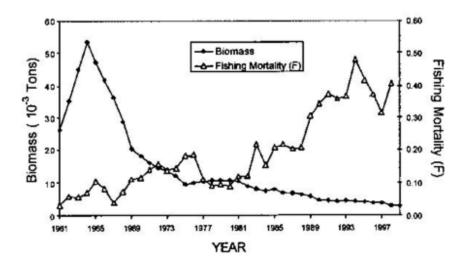
Rationale for "Species of Concern" Listing:

Demographic and Diversity Concerns:

The estimated relative biomass (B2001/Bmsy) of Atlantic whitemarlin is approximately 12 percent of Bmsy (range 0.06 - 0.25) and is believed to be declining. The estimated fishing mortality rate (F2000/Fmsy) is approximately 8.28 (range 4.5 - 15.8). In recent years, the stock has declined by an average of six percent a year. ICCAT projections indicated that the intent of recent international management recommendations have, in the short term, some potential for stabilizing the stock biomass near current levels. The projections also indicated that lower catch levels would provide greater potential for increasing stock biomass.

Factors for decline:

White marlin are mostly caught as bycatch in international longline fisheries. Total reported landings of white marlin peaked in 1965 at almost 5,000 metric tons (Figure 1). Landed individuals, when recorded, are easily misidentified due to the removal of fins, tails, spines, and head, in addition to the carcass being frozen for easier transportation. Seventy to ninety percent of Atlantic white marlin landings are reported from longline fisheries that target tunas and swordfishes.



Biomass and fishing mortality vs. time for Atlantic white marlin.

Status Review/Research Completed or Underway:

NMFS conducted a <u>status review</u> of the Atlantic white marlin in 2002 and determined that listing white marlin as either threatened or endangered under the ESA was not warranted. Information presented in the status review revealed that the white marlin population has declined and therefore NMFS placed the white marlin on the Candidate Species list in 2002. White marlin is now considered to be a species of concern (rather than a candidate species). NMFS will re-evaluate the need for ESA protection of the Atlantic white marlin in 2007.

<u>Further Information</u> The petition process

For further information on this Species of Concern, or on the Species of Concern Program in general, please contact Ms. Marta Nammack, NMFS, Office of Protected Resources, 1315 East West Highway, Silver Spring, MD 20910, (301)713-1401, <u>Marta Nammack@noaa.gov</u>; or Jennifer Jacukiewicz, NMFS, Southeast Region, Protected Resources Division, 9721 Executive Center Drive N., St. Petersburg, FL 33702, (727)570-5312, Jennifer Jacukiewicz@noaa.gov.

References:

- Fischer, W. 1978. FAO Species Identification Sheets for Fishery Purposes, Volume 3: Western Central Atlantic (fishing area 31). Vol. 3. Rome, FAO.
- Jones, C.D., E.D. Prince, G.P. Scott, and M.I. Farber. 1998. Stock production models of blue marlin and white marlin in the Atlantic Ocean: a case history. Fishery Stock Assessment Models. Lowell Wakefield Fisheries Symposium Series No. 15: 99-120.
- Mooney-Seus, M.L. and G.S. Stone. 1997. The forgotten giants: giant ocean fishes of the Atlantic and the Pacific Ocean Wildlife Campaign, Washington, USA. New England Aquarium, Boston. 64 p.
- Robins, C.R., G.C. Ray and J. Douglass. 1986. A field guide to Atlantic coast fishes of North America. Houghton Mifflin Company, Boston, U.S.A. 354 p.
- White marlin status review. 2002. Atlantic White Marlin Status Review Document. Report to National Marine Fisheries Service, Southeast Regional Office. 49 pp.