



Photo credit: NMFS.

**KEY INFORMATION**

**Areas of Concern**

Central Oregon to central Baja California and Guadalupe Island, Mexico.

**Year Identified as “Species of Concern”**  
2004

**Factors for Decline**

- Overfishing
- Bycatch

**Conservation Designations**

IUCN: Not Evaluated  
American Fisheries Society: Vulnerable

**Brief Species Description:**

The cowcod is one of the largest rockfish species, reaching almost 39 inches (1 m) in total length and may live up to 55 years (Butler et al. 2003). It is an ambush predator of the deep shelf and upper slope, living in depths of 65 to 1600 feet (20 to 500 m). Females mature at 13 inches (32cm). Southern California has been recognized as the center of distribution of the species since the 1880s (Figure1). Oil platforms have become somewhat important artificial habitats for this species (Love and York 2006). Like other species of their genus, cowcod are internal fertilizers. Reproduction occurs in winter an early spring, and larvae spend about 100 days as plankton. They eat fish, octopus, and squid. Juvenile cowcod eat small shrimp and crabs.

**Rationale for “Species of Concern” Listing:**

**Demographic and Genetic Diversity Concerns:**

Peak catch was in 1976 and was about 194 mt (biomass was ~1665 mt). In 1998 catch was 19 mt (biomass was ~238 mt). The species is estimated to be at 4 to 7% of its unfished biomass in 2000. They cannot be caught and released due to swimbladder damage and mortality. They were declared overfished in 2000. At current population levels, it will take on the order of 75 to 100+ years to recover the species (with a modest 2-4 mt of harvest/bycatch per year).

**Factors for Decline:**

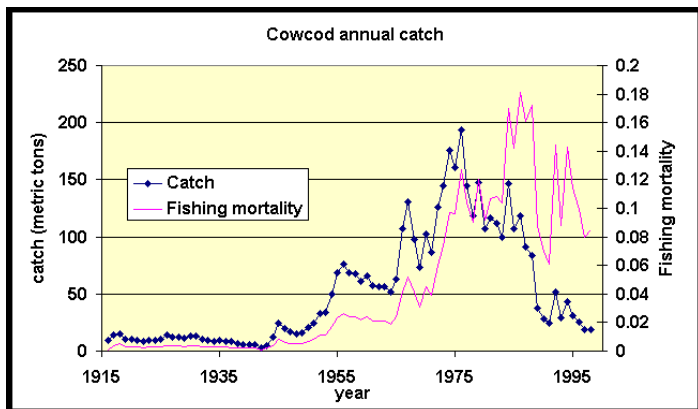
Cowcod have been overfished in the commercial rockfish fishery and are also **bycatch** in other commercial fisheries. An **overfished** declaration was made under the Magnuson-Stevens Act; the Pacific Fisheries Management Council adopted a Draft Rebuilding Plan for public review at their June '02 meeting.

**Status Reviews/Research Underway:**

None.

**Data Deficiencies:**

A dedicated survey effort is need to obtain good biomass estimates.





# Species of Concern

NOAA National Marine Fisheries Service

## Existing Protections and Conservation Actions:

California Fish & Game has closed 5,100 square nautical miles off southern California to all bottomfishing as a cowcod conservation area, and prohibited all cowcod catch. There are stringent catch regulations.

## References:

Butler, J.L., L.D. Jacobson, J.T. Barnes, and H.G. Moser. 2003. Biology and population dynamics of cowcod (*Sebastes laevis*) in the southern California Bight. *Fishery Bulletin* (Seattle) 101:260-280.

Love, M.S. and A. York. 2006. The relationships between fish assemblages and the amount of bottom horizontal beam exposed at California oil platforms: fish habitat preferences at man-made platforms and (by inference) at natural reefs. *Fishery Bulletin* (Seattle) 104:542-549.

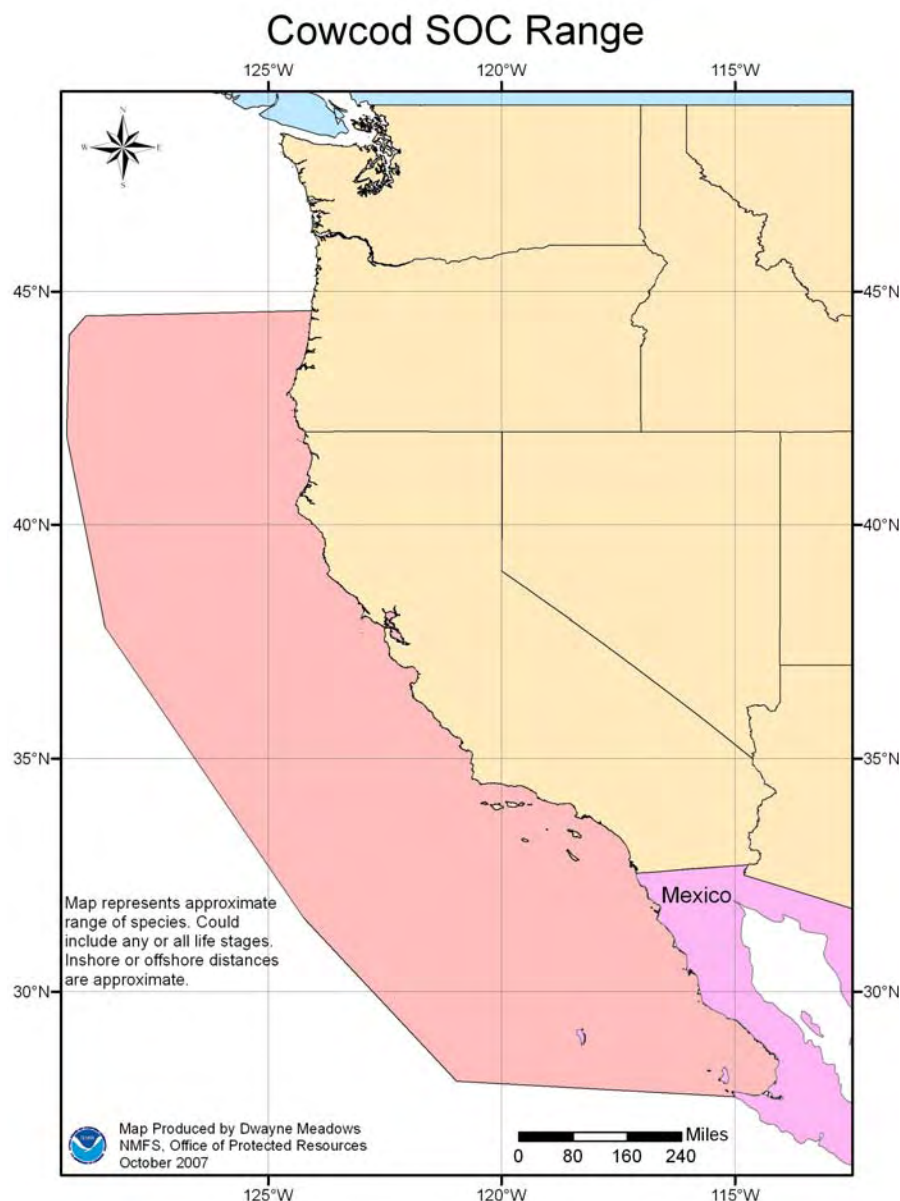


Figure 1. Range of the cowcod species of concern.

## Point(s) of contact for questions or further information:

For further information on this Species of Concern, or on the Species of Concern Program in general, please contact NMFS, Office of Protected Resources, 1315 East West Highway, Silver Spring, MD 20910, (301) 713-1401, [soc.list@noaa.gov](mailto:soc.list@noaa.gov); <http://www.nmfs.noaa.gov/pr/species/concern/>, or Dr. Scott Rumsey, NMFS, Northwest Region, Protected Resources Division, 1201 NE Lloyd Blvd, #1100, Portland, OR 97232, (503) 872-2791, [Scott.Rumsey@noaa.gov](mailto:Scott.Rumsey@noaa.gov).