



Juvenile. Photo credit: US Geological Survey.

KEY INFORMATION

Area of Concern

Western Atlantic: South Atlantic and the Gulf of Mexico.

Year Identified as “Species of Concern”
1997

Factors for Decline

- Recreational fishing
- Commercial fishing
- Bycatch

Conservation Designations

IUCN: Critically Endangered
American Fisheries Society: Endangered

Brief Species Description:

Speckled hind derive their name from the multitude of tiny white spots that cover their reddish-brown head, body, and fins. Juvenile specimens tend to have yellow body color with white spots (Ross 1988). Adults inhabit offshore rocky habitat in depths of 80 to 1300 feet (25 to 400 m) but are most common between 200 and 400 feet (60 and 120 m) in many areas of the Western Atlantic (Figure 1). Bullock and Smith (1991) indicate most commercial catches are taken from depths of 164 ft (50 m) or more. Preferred habitats include high- and low-profile hard bottoms. Juveniles occur in shallower water (SAFMC 2005, Ziskin 2008). Speckled hind are protogynous hermaphrodites (change sex from female to male); females mature at 4 or 5 years of age and 18 to 24 inches (45-60 cm) length. Spawning occurs from May to October in spawning aggregations (SAFMC 2005). Maximum size is about 43 inches (110 cm) and maximum weight is 66 pounds (30 kg). Maximum age is at least 25 years (Matheson and Huntsman 1984, Ziskin 2008). Prey items include fishes, crabs, shrimps, lobsters, and mollusks, including squids.

Rationale for “Species of Concern” Listing:

Demographic and Genetic Diversity Concerns:

The stock has not been assessed and population size is unknown. Available information suggests there has been a decline mean size, mean age, and percentage of males in the South Atlantic (Ziskin 2008) (Figure 2).

Factors for Decline:

Speckled hind are caught as bycatch from the deepwater snapper/grouper fisheries off the coast of North Carolina through Texas and are directly targeted in commercial and recreational fisheries by hook and line (SAFMC 2005). Since there is only a one fish per vessel trip limit for commercial and recreational fisheries in the South Atlantic, the major threat to the speckled hind is direct mortality as a result of fishing or bycatch release mortality (due to barotraumas - pressure change injury) when caught incidentally to co-occurring snapper grouper species.

Status Reviews/Research Underway: The program recently funded a project to gather basic life history data regarding growth and reproduction that is necessary for conservation of this species.

Data Deficiencies: None identified.



Existing Protections and Conservation Actions:

Both recreational and commercial fisheries for speckled hind are currently regulated in the south Atlantic; with a one fish per vessel trip limit. In the South Atlantic, speckled hind is undergoing **overfishing** but the **overfished** status is unknown. In the Gulf of Mexico, status is unknown, but there is a one fish per vessel trip limit for the recreational fishery. Possession limits for the commercial fishery exist. In early 2009, the National Marine Fishery Service established 8 marine protected areas to conserve 529 nautical square miles of area for deepwater species including speckled hind.

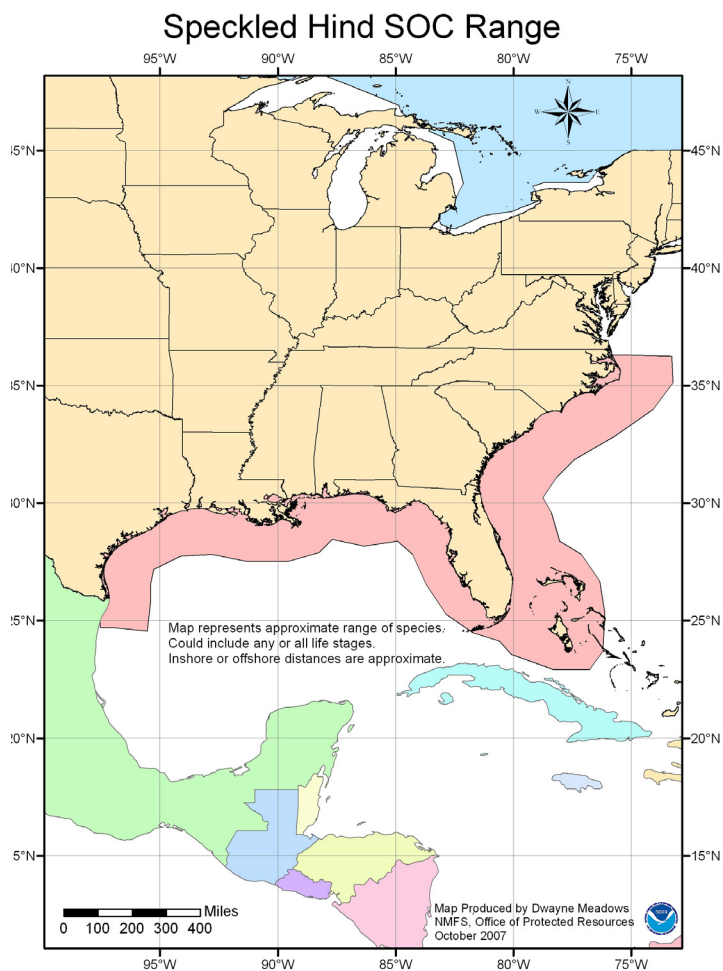


Figure 1. Range of the speckled hind species of concern.

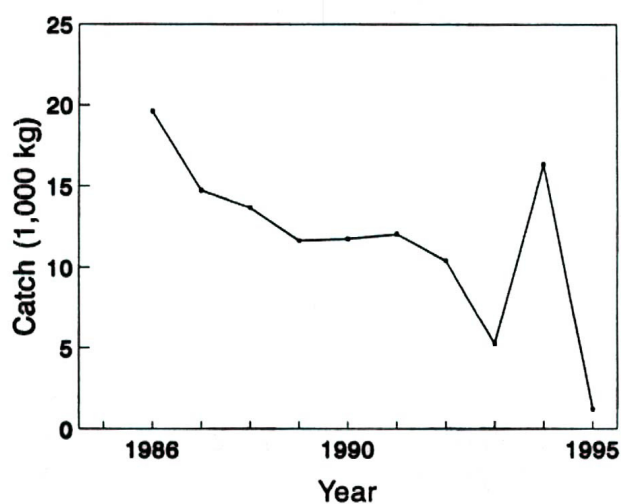


Figure 2. Speckled hind catch (kg), all fisheries combined (Parker and Mays 1998).

References:

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Species of Concern

NOAA National Marine Fisheries Service

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- SAFMC (South Atlantic Fishery Management Council). 2005. Stock Assessment and Fishery Evaluation report for the snapper grouper fishery of the south Atlantic.
- Ziskin, G.L. 2008. Age, growth, and reproduction of speckled hind, *Epinephelus drummondhayi*, off the Atlantic coast of the Southeast United States. Masters Thesis, The College of Charleston, 120 pp.

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; or <http://www.nmfs.noaa.gov/pr/species/concern/>, Dr. Stephania Bolden, NMFS, Southeast Region, Protected Resources Division, 263 13th Avenue South, St. Petersburg, FL 33701, (727) 824-5312, Stephania.Bolden@noaa.gov.