

**Common Name:** **Staghorn coral**

**Scientific Name:** *Acropora cervicornis*

**Area of Concern:** Caribbean basin

**Year First Listed as a “Species of Concern”:** 1999

**Brief Species Description:**

This is a branching coral with cylindrical branches ranging from a few centimeters to over two meters in length and height. Staghorn coral occurs in back reef and fore reef environments from 0 to 30 m depth. The upper limit is defined by wave forces and the lower limit is controlled by suspended sediments and light availability. Fore reef zones at intermediate depths (5-25 m) were formerly dominated by extensive single species stands of staghorn coral until the mid 1980s. This coral exhibits the fastest growth of all known western Atlantic corals, with branches increasing in length by 10-20 cm per year. This has been one of the three most important Caribbean corals in terms of its contribution to reef growth and fishery habitat.



Staghorn coral is found throughout the Florida Keys, the Bahamas, and the Caribbean islands. This coral occurs in the western Gulf of Mexico, but is absent from U.S. waters in the Gulf of Mexico, as well as Bermuda and the west coast of South America. The northern limit is on the east coast of Florida, near Boca Raton.

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

**Demographic and Diversity Concerns:**

The dominant mode of reproduction for Staghorn coral is asexual with new colonies forming when branches are broken off of a colony and reattach to the substrate. This life history trait allows rapid population recovery from physical disturbances such as storms. However, it makes recovery from disease or bleaching episodes (where entire colonies or even entire stands are killed) very difficult. Sexual reproduction is via broadcast spawning of gametes into the water column once each year in August or September. Individual colonies are both male and female (simultaneous hermaphrodites) and will release millions of gametes. The coral larvae (planula) live in the plankton for several days until finding a suitable area to settle; unfortunately, very few larvae survive to settle and metamorphose into new colonies. The preponderance of asexual reproduction in this species raises the possibility that genetic diversity in the remnant populations may be very low.

These uncertainties as to recruitment/recovery potential and genetic status are the bases for increased demographic concerns for this species.

**Factors for decline:**

Since 1980, populations have collapsed throughout their range from disease outbreaks, with losses compounded locally by hurricanes, increased predation, bleaching, and other factors. This species is also particularly susceptible to damage from sedimentation and sensitive to temperature and salinity variation. Populations have declined by up to 98% throughout the range, and localized extirpations have occurred.

**Status Reviews/Research Completed or Underway:**

A major first step toward a formal status review was a Caribbean-wide workshop sponsored by NOAA-Fisheries and held in Miami in April 2002. *Acropora* spp. researchers were gathered from throughout the Caribbean region to document population status, trends, threats, and information needs (Bruckner AW. 2002. Proceedings of the Caribbean Acropora Workshop: potential application of the US Endangered Species Act as a Conservation Strategy. NOAA Technical Memorandum NMFS-OPR-24, Silver Spring, MD 199 pp). Research efforts include recovery/recruitment monitoring in the Florida Keys and efforts to culture staghorn coral in both aquarium and field settings for possible restocking.

*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, [Marta.Nammack@noaa.gov](mailto:Marta.Nammack@noaa.gov) or Dr. Margaret Miller NMFS Southeast Science Center, 75 Virginia Beach Dr. Miami FL 33149 (305)361-4561 [margaret.w.miller@noaa.gov](mailto:margaret.w.miller@noaa.gov), 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.*