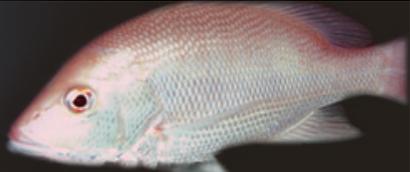


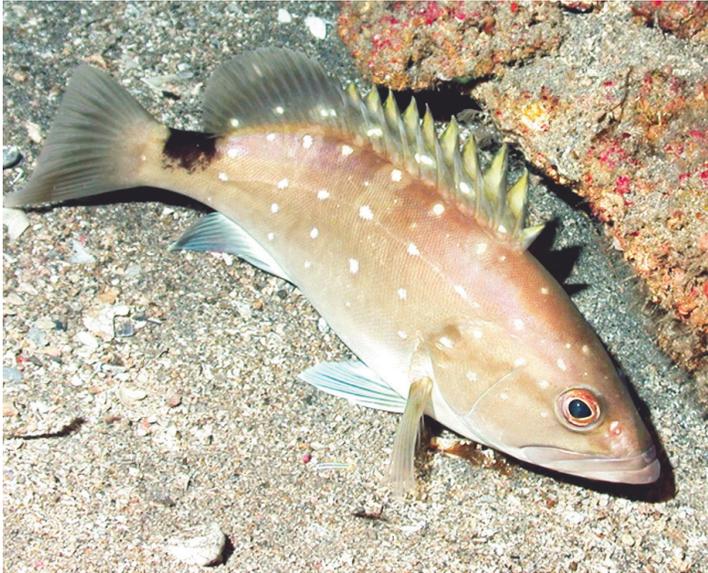


THE
PEW
ENVIRONMENT GROUP



SOUTH ATLANTIC FISH CONSERVATION CAMPAIGN

www.PewEnvironment.org/SouthAtlanticFish



NOAA

SNOWY GROUPER

Signs of decline

- Just 10 percent of a healthy reproductive snowy grouper population remains.
- Population levels began to decline as early as 1965.
- The species has been fished at unsustainable levels since the mid-1970s.
- Snowy grouper are on the internationally recognized Red List of Threatened Species published by the International Union for Conservation of Nature, the oldest and largest global network of scientists, environmental groups and governments.

Status: Vulnerable to extinction

The issues

MISSING MALES

The percentage of male snowy grouper in some areas has plummeted from between 7 and 23 percent in the 1970s and 1980s to 1 percent in the 1990s. Snowy grouper, like some other groupers, are protogynous hermaphrodites—species that begin life as females. As they age, internal or external triggers cause some to become males. When smaller and younger snowy grouper are caught, they haven't had time to reach the size or age to become males. Fewer males mean fewer breeders to replenish the population.

SHRINKING FISH

The average length of snowy grouper caught in the longline fishery has steadily dropped from about 26 to 32 inches in the early 1980s to about 20 to 24 inches in the mid-1990s and are smaller today. Because it can take five or more years for females to grow and mature, many fish are caught before having a chance to spawn. The older snowy grouper—the most prolific spawners—have been caught before they can contribute the most to repopulating the species.



NOAA

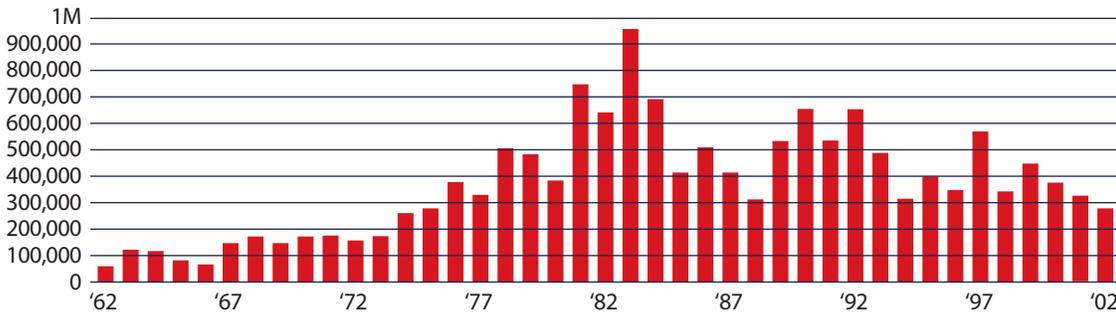
NOWHERE TO HIDE

In the late 1990s, fishermen discovered a “virgin reef” east of Cape Fear, North Carolina, harboring larger-sized snowy grouper populations. But the bounty disappeared as fishermen exploited them in less than three months, according to fishery researchers. Scientists say this example illustrates the problem of a slow-growing, long-lived species. It simply cannot replenish itself fast enough to offset fishing pressures.

THE ANNUAL CATCH

The snowy grouper catch rose steadily through the 1970s, peaking in 1983, when more than 930,000 pounds were taken from the Atlantic.

■ Total reported catch (in pounds)



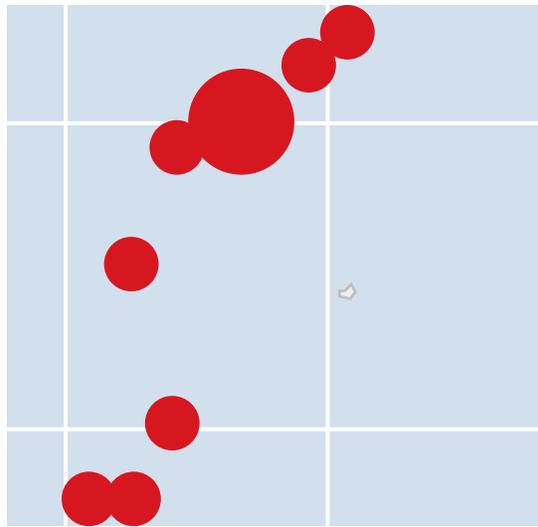
What's being done

Fishery managers limited fishing of snowy grouper in 1993, but the species didn't recover. In recent years, the South Atlantic Fishery Management Council tightened limits on commercial catches, implemented gear restrictions and limited recreational fishermen to one snowy grouper per person per day.

But it's still not enough.

Chronic overfishing continues to decimate the fish, and managers are considering additional restrictions.

The council is required by law to end overfishing in its jurisdiction three to 200 miles off North Carolina, South Carolina, Georgia and Florida's east coast. The federal Magnuson-Stevens Fishery Conservation and Management Act requires the council to set science-based limits on numbers of fish caught annually and end overfishing of all species by deadlines in 2010 and 2011.



HOTSPOTS

Snowy grouper live among the ridges, terraces and precipitous cliffs along the outer continental shelf of the U.S. south Atlantic Ocean. Young fish like waters closer to shore, but adults prefer the ocean bottom and are typically found at depths of 300 to 650 feet deep. Most are caught near rocky edges, cliffs and in swift currents.

2008 SNAPSHOT

Commercial: **95,742**

Recreational: **15,010**

FISH FACTS

- **Maximum weight:** 70 pounds.
- **Maximum size:** 52 inches.
- **Maximum age:** 29 years.
- **Average age at maturity:** 3 to 6 years old.
- **Spawning season:** April to September.
- **What snowy grouper eat:** swimming crab, crustaceans such as blue crab, fish and squid.
- **What eats full-grown snowy grouper:** sharks.
- **How do snowy grouper hunt?** They, like most groupers, are territorial and wait to ambush their prey.
- **How snowy grouper are caught:** commercially, longlines and electric reels. recreationally, hand and electric reels.
- **What's up with the spots?** Their coloration varies with the size of the fish. Smaller fish are dark brown overall with coin-size pearly white spots on the sides. Larger ones sometimes lose the white spots and become dark brown with a slight coppery tint.

WHAT YOU CAN DO TO HELP

- **Visit our Web site to learn more** and join our e-alert network at www.PewEnvironment.org/SouthAtlanticFish. We'll let you know when important fishing policy changes are coming up and how you can help by signing petitions and contacting decision makers to show your support for healthy, sustainable fisheries.
- **Sign up for our monthly update** to learn about new research and proposed actions that will affect your local fisheries. Send an e-mail with the words "monthly update" in the subject line to fishinfo@pewtrusts.org.
- **For more information**, please contact Holly Binns at fishinfo@pewtrusts.org or call 850-322-7845.

THE PEW SOUTH ATLANTIC FISH CONSERVATION CAMPAIGN

Pew is leading efforts to work with the South Atlantic Fishery Management Council and the National Marine Fisheries Service to establish science-based annual catch limits by 2010 for species undergoing overfishing and by 2011 for all other species.

The campaign works to bring scientific expertise to bear on fishery management plans and seeks common ground with fishermen to find solutions that balance human and environmental needs and raise awareness about overfishing and potential remedies.

The Pew Environment Group is the conservation arm of The Pew Charitable Trusts.