

# ATLANTIC WOLFFISH

CONSERVATION LAW FOUNDATION



WWW.CLF.ORG CLF FACT SHEET

For a thriving New England



A pair of Atlantic wolffish share a cave beneath a rocky outcropping. (Photo: Jonathan Bird)

## Related Work: Protecting New England's Special Ocean Places

The biological richness and productivity of New England's ocean is illustrated in the diversity of ocean and coastal habitats found in the Gulf of Maine, Georges Bank, southern New England and the Outer Continental Shelf. For over a decade, the Conservation Law Foundation has studied the vital component that ocean habitat provides for ocean wildlife and New England's commercial and recreational fishermen. Several ecological areas in New England's ocean are consistently noted as the most important for ocean wildlife and serve as reservoirs of productive fish populations and as refuge for rare, threatened or endangered species.

**In the deep ocean waters off New England's coast live one of our region's most unique and threatened fish species: the Atlantic wolffish. Commercial fishing practices and modern fishing gear have decimated wolffish populations and destroyed the underwater habitat that the wolffish and other critical fish species call home.**

## Atlantic Wolffish: Fearsome Fish That Deserve Protection

Today, the Atlantic wolffish is facing extinction in the United States and the federal government has not done enough to protect it. While the federal government designated the Atlantic wolffish as a Species of Concern in 2004, in 2009, the National Marine Fisheries Service (NMFS) declined CLF's petition for the wolffish to be listed as an endangered species under the Endangered Species Act, claiming that such protection was not warranted at this time. While the most recent amendment to the fishery management plan that regulates catches of Atlantic wolffish and other bottom-dwelling fish species implemented a total ban on the possession of Atlantic wolffish, the threat of extinction for this species is still very real.

## Habitat Loss from Modern Fishing Practices Threatening Wolffish Survival

The most recent scientific research shows that wolffish numbers in the United States have dropped precipitously over the last decade. Although wolffish are not targeted commercially, they are still caught unintentionally in nets as by-catch. According to NMFS, over 1,200 metric tons of wolffish were caught in 1983. In 2009, the last year for which data is available, U.S. landings

declined 97 percent to only 31.6 metric tons.

The other primary threat to the Atlantic wolffish is destructive modern fishing practices like otter trawling. Otter trawling uses enormous nets that are dragged through the ocean and along the seafloor, picking up or disturbing everything in their path. This gear is indiscriminate in the species it catches and highly destructive to fragile rocky bottom areas through which it drags. One scientist estimated that virtually every inch of the seafloor in the ocean waters off New England's coast was impacted by such gear between 1984 and 1990.

Because wolffish live on the rocky seafloor and depend on its diverse features to hunt for prey and protect their young, the impact of trawling and dredging in these habitats is cataclysmic. So, even when the wolffish is not being caught as by-catch, damaging fishing gear can significantly limit the fish's reproductive success and survival.

# ATLANTIC WOLFFISH

## About CLF

Since 1966, Conservation Law Foundation has used the law, science, policymaking, and the business market to find pragmatic, innovative solutions to New England's toughest environmental problems.

### CLF MAINE

47 Portland Street, Suite 4  
Portland, ME 04101  
P: 207.210.6439  
F: 207.729.7733

### CLF MASSACHUSETTS

62 Summer Street  
Boston, MA 02110  
P: 617.350.0990  
F: 617.350.4030

### CLF NEW HAMPSHIRE

27 North Main Street  
Concord, NH 03301  
P: 603.225.3060  
F: 603.225.3059

### CLF RHODE ISLAND

55 Dorrance Street  
Providence, RI 02903  
P: 401.351.1102  
F: 401.351.1130

### CLF VERMONT

15 East State Street, Suite 4  
Montpelier, VT 05602  
P: 802.223.5992  
F: 802.223.0060

100% PCW



## SPECIES SPOTLIGHT: THE ATLANTIC WOLFFISH



[Photo: Jonathan Bird]

Atlantic wolffish have long, eel-like tails, but they get their name from their large head and mouth full of sharp and wayward canine-looking teeth. Reaching up to six feet in length, Atlantic wolffish range in color from slate blue, to olive green, to purplish brown, and they can live to be up to 20 years old. Using their canines, molars and hard bony palate, wolffish can crush whole clams, scallops, lobsters, sea urchins and green crabs.

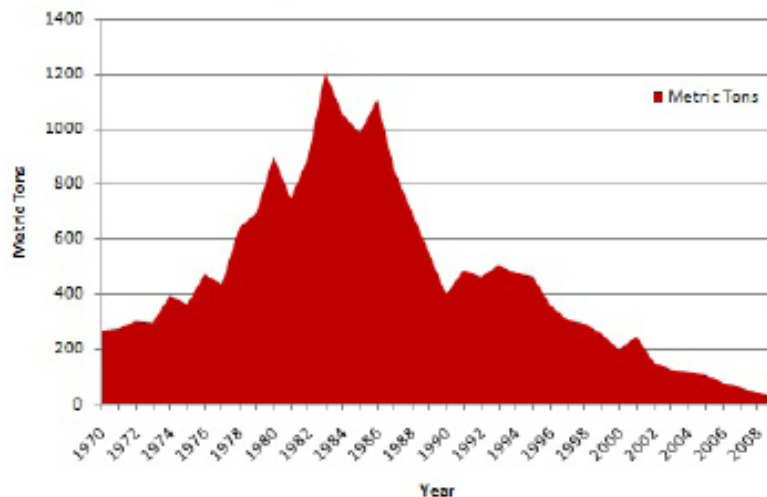
Atlantic wolffish are generally a sedentary fish and require specific habitat that allows them to hide and catch prey, defend their eggs and remain safe from predators. This means the wolffish prefer rocky outcroppings and broken terrain with nooks and small caves. They generally live about 250 to 400 feet down in ice-cold water. The wolffish have evolved natural antifreeze to keep their blood flowing smoothly.

Atlantic wolffish also breed uniquely: while most fish broadcast millions of eggs into the water to be fertilized by males and then abandoned, Atlantic wolffish pair up during spawning season and fertilize their eggs internally, similar to how mammals mate. Male wolffish then stay with the eggs in a nest and protect the eggs and larvae for upwards of 4 months before the brood gains independence.

Atlantic wolffish also play an important role in regulating the population size of prey species like sea urchins and green crabs. Limiting these populations is crucial - if left unchecked, these two species could have widespread negative impacts on the Gulf of Maine ecosystem.

Historically, Atlantic wolffish were found in U.S. waters throughout the Gulf of Maine and as far south as New Jersey. Sadly, this range has greatly diminished, largely due to years of habitat destruction. Currently, wolffish are concentrated in three areas of refuge in the Gulf of Maine, Georges Bank and Great South Channel.

### U.S. Landings of Atlantic Wolffish from 1970-2009



Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division, Silver Spring, MD