



# ATLANTIC HERRING

## HISTORY OF A FISHERY

Atlantic herring (*Clupea harengus*) have been caught in New England waters for centuries.

## Changing Markets

Sea herring—a small, nutrient-rich fish—were an important source of food and fertilizer for Native Americans and early colonists. Herring once sustained hundreds of sardine canneries and served as bait for many of the region's fishermen. New England's lobster fishery still uses herring as bait, while a small percentage is exported as food. There is essentially no domestic Atlantic herring available as food in the United States.

**60**  
**PERCENT**

Atlantic herring catch sold as bait for the lobster fishery in 2008

Source: New England Fishery Management Council, *Proposed Atlantic Herring Specifications for the 2010-2012 Fishing Years*, Feb. 16, 2010.



[www.HerringAlliance.org](http://www.HerringAlliance.org)

## Herring Collapse

In the first half of the 20th century, herring were fished primarily with small-scale, low-impact gear such as weirs and purse seines. But in the 1960s, large foreign fleets equipped with massive trawl nets began catching amounts of herring previously unimaginable. By the late 1970s, the offshore population of Atlantic herring had collapsed. This prompted Congress in 1976 to expel foreign vessels from within 200 miles of U.S. coastal waters under the original Magnuson Fishery Conservation and Management Act.

Source: Overholtz, W., December 2006, "Atlantic Herring: Status of Fishery Resources off the Northeastern US," Northeast Fisheries Science Center—Resource Evaluation and Assessment Division.

## Herring Recovery

Herring populations rebounded in the late 1980s, while traditional New England purse seine vessels filled the demand for canning and bait. But beginning in the early 1990s, a new industrial midwater trawl fleet, this one domestic, was encouraged by the government to fish for the growing herring population. Today, these vessels threaten to reverse the herring recovery and harm the balance of marine wildlife in New England. Midwater trawlers, up to 165 feet long, are the largest and most advanced fishing vessels on the East Coast, capable of holding more than 1 million pounds of fish and netting 500,000 pounds of sea life in one tow.

Sources: Northeast Fisheries Science Center Reference Document 96-05h, Report of the 21st Northeast Regional Stock Assessment Workshop, August 1996; Code of Federal Regulations, Title 50, Part 648; Plaintiffs' Motion for Summary Judgment, *Taylor et al. v. Locke et al.*, No. 09-2289 (D.D.C. filed Dec. 2, 2009).

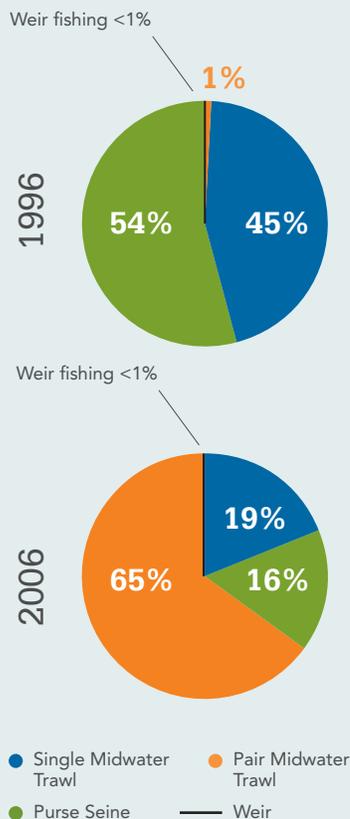


Midwater trawlers fish in pairs, towing massive nets spanning the width of a football field and the height of a five-story building.

The Herring Alliance is a growing coalition of environmental and public interest organizations dedicated to protecting and restoring marine wildlife populations and ecosystems by reforming the Atlantic herring fishery.

## PERCENTAGE OF HERRING LANDINGS BY GEAR TYPE, 1996 AND 2006

The practice of pair trawling in the midwater trawl fishery for Atlantic herring has dominated landings since 2003.



Sources: NEFMC Amendment 1 to the Atlantic Herring FMP, 1995-2005 data, Table 36, p. 277; Stock Assessment and Fishery Evaluation Report 2006: Table 7 Metric Tons of Herring Sold by Gear and Management Area in 2003-2006.

## What Can You Do?

Join the conversation on our website and sign up for our e-mail newsletter to get the latest campaign updates. Contact the Herring Alliance with any questions or ideas at 617-728-0300 or [info@herringalliance.org](mailto:info@herringalliance.org).

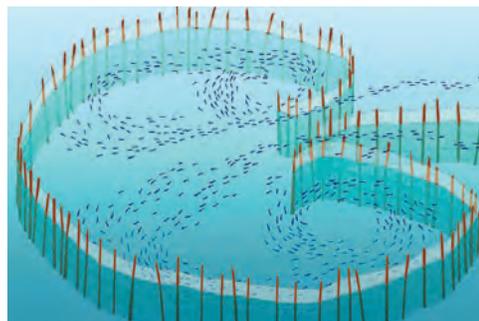


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## Shifting Gears

### FIXED GEAR

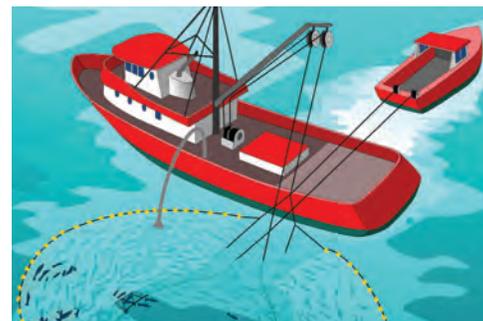
Weirs and stop seines are stationary nets used to trap herring entering coves and bays. Fixed gear, a method passed down from Native Americans, was used to catch herring until the early 1980s. Today, only a few weir operations remain and the catch is negligible.



Sources: New England Fishery Management Council (NEFMC), Amendment 1 to the Atlantic Herring Fishery Management Plan (FMP); NEFMC Amendment 4 to the Atlantic Herring FMP.

### PURSE SEINE

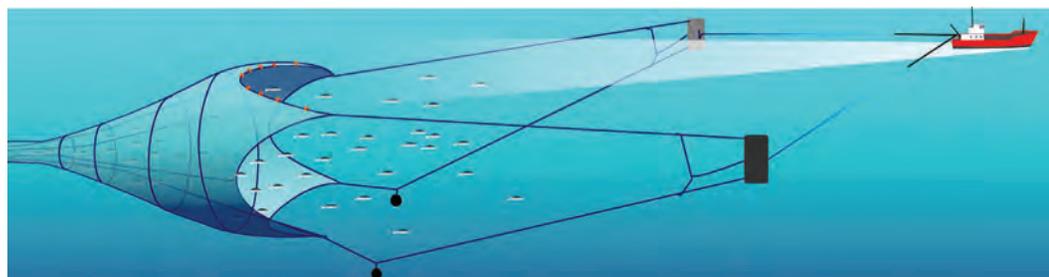
First introduced in the late 1800s, purse seine nets encircle schools of herring when the fish congregate at the surface each night to feed. By the mid-1980s, purse seining had become the primary method of catching herring. Today, purse seines account for only 26 percent of the herring catch.



Source: Shepherd, G., M. Cieri, M. Powers, and W. Overholtz, 2009, Transboundary Resources Assessment Committee: Gulf of Maine/Georges Bank Atlantic Herring Stock Assessment Update, Reference Document 2009/04, NOAA Fisheries, Northeast Fisheries Science Center, Woods Hole, Mass.

### MIDWATER TRAWL

Industrial-scale midwater trawlers tow small-mesh nets through schooled herring. Even more destructive is the increasingly prevalent practice of pair trawling. Two vessels pull a massive net at high speeds between them, catching more fish. By 1998, midwater trawling replaced purse seines as the most common herring gear in New England. Midwater trawling has accounted for 68 percent of all herring caught since 2005.



Source: Shepherd, G., M. Cieri, M. Powers, and W. Overholtz, 2009, Transboundary Resources Assessment Committee: Gulf of Maine/Georges Bank Atlantic Herring Stock Assessment Update, Reference Document 2009/04, NOAA Fisheries, Northeast Fisheries Science Center, Woods Hole, Mass.

## Restoring Balance

### 1. Ecosystem Needs

The ecological consequences of removing large quantities of herring by high impact trawlers are not well-understood. Herring play a crucial role in the ecosystem as food for whales, cod, tuna and seabirds, and managers need to set catch limits that leave enough herring for their predators.

### 2. Bycatch Reduction

Bycatch (the unintended capture of non-target species) in the Atlantic herring fishery is a serious concern. In addition to herring, midwater trawlers kill hundreds of thousands of pounds of other fish and marine mammals. This wastefulness demonstrates the need to reduce bycatch, for example by closing sensitive areas to industrial trawling at certain times of the year.

### 3. More Monitoring

Fishery managers must require at-sea observers on all midwater trawling trips. The entire contents of every net tow must be made available to observers for sampling to ensure accurate accounting of the catch—and bycatch. Monitoring and reducing unnecessary waste is critical to the long-term health of herring populations and the marine ecosystem as a whole.