



# BYCATCH AND MONITORING

Bycatch, the unintended capture of unwanted fish and other animals during fishing, is a growing concern in the Atlantic herring fishery. Hundreds of thousands of pounds of bycatch are caught every year, much of it thrown overboard dead—an alarming fact that demonstrates the need for improved catch monitoring and effective measures to minimize this wasteful practice.

## BYCATCH Why does it matter?

High levels of bycatch pose a serious threat to the recovery and conservation of marine wildlife. Left unaddressed, it can lead to declines in marine populations, impede recovery of depleted species, and disrupt the balance of ocean ecosystems.

*Shown above: Dead whiting bycatch discarded by a midwater trawler, September 2003.*

## Bycatch and Midwater Trawlers

Herring play a vital role in the North Atlantic ecosystem—serving as food for tuna, cod, striped bass, seabirds, dolphins and whales. But herring and their predators are threatened by industrial-scale fishing by midwater trawlers. Up to 165 feet in length, these ships are the largest fishing vessels on the East Coast, capable of netting 500,000 pounds of sea life in one tow. Although these vessels fish for Atlantic herring, the fish, birds and marine mammals that feed on herring schools are also vulnerable to accidental capture, injury or death in the trawlers' massive nets.

Sources: 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)

## Monitoring

### Why Do We Need It?

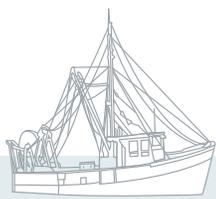
The collection of high-quality data is an integral part of fishery management and is required by federal law. Catch monitoring is carried out by trained observers who are stationed on fishing vessels and on shore where fish are delivered. Observers collect and report information on fishing: the amount and type of catch and bycatch, and fishery interactions with marine mammals and seabirds.

### Too Little, Too Much at Stake

Since 1994, when midwater trawling for Atlantic herring began in New England, the proportion of fishing trips monitored by onboard observers has been extremely low, fluctuating between zero and 20 percent and averaging about 4 percent. This shortage of monitoring makes it difficult for scientists to accurately estimate bycatch and evaluate the impact of trawling on ocean wildlife.

Sources: New England Fishery Management Council (NEFMC), Amendment 1 to the Atlantic Herring Fishery Management Plan (FMP); NEFMC Amendment 5 to the Atlantic Herring FMP, Background Packet: NEFOP Observer Data, Herring Committee Meeting, May 17, 2010

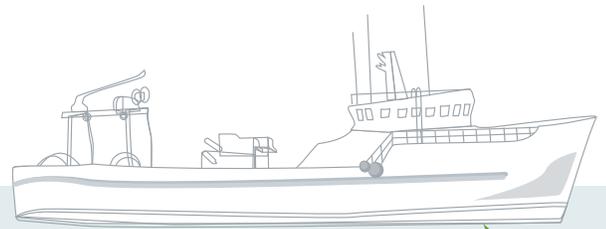
### Percent of Fishing Trips Observed



**New England Groundfish Trawler**  
30% of trips observed



**Alaskan Trawler**  
100% of trips observed



**New England Midwater Trawler**  
4% of trips observed between 1994 and 2009

Sources: NOAA Fisheries, Northeast Multispecies Fishery, Amendment 16, Final Rule; NOAA Fisheries, Alaska Regional Office; NEFMC, Amendment 5 to the Atlantic Herring FMP, Background Packet: NEFOP Observer Data, Herring Committee Meeting, May 17, 2010

**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.**

## Casualties of Trawling



KEITH ELLENBOGEN

**1997**  
2,400 pounds of bluefin tuna caught in one tow



MARSHALL J. LIFF

**2005**  
5 white-sided dolphins caught in one day

**2005-08**

2.5 million river herring caught on average each year



NOAA FISHERIES SERVICE

**2008**  
6 pilot whales caught in one day

**2008**

21,000 pounds of haddock in one net tow



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**2009**  
40 northern gannets entangled in nets

Sources: Maine Department of Marine Resources, 1999, *Using Observers to Monitor Status of Atlantic Herring Spawning Stocks and Groundfish Bycatch in the Gulf of Maine*; NEFOP, Incidental Take Reports; Cieri, M., "Estimates of River Herring and American Shad Removals in the Directed Atlantic Herring Fishery," presented to the Atlantic States Marine Fisheries Commission, Feb. 4, 2010; NOAA Fisheries 2008. NEFOP Data Summary presented to NEFMC November 2008

## What Can You Do?

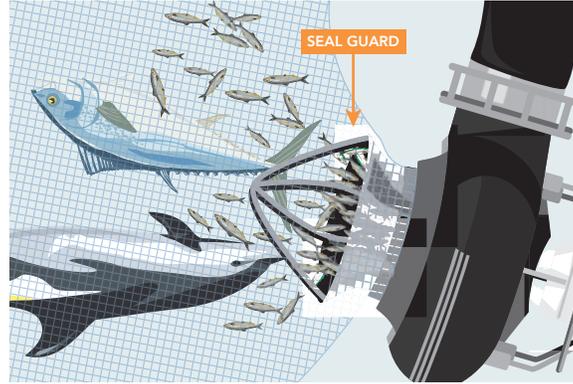
Join the conversation on our website and sign up for our e-mail newsletter to get the latest campaign updates. Contact the Herring Alliance with any questions or ideas at 617.728.0300 or [info@herringalliance.org](mailto:info@herringalliance.org).



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

## MONITORING LOOPHOLES

Troubling loopholes further undermine monitoring and the value of the data currently collected, which means we have much to learn about the amount of bycatch actually taken by these vessels.



### Seal Guards

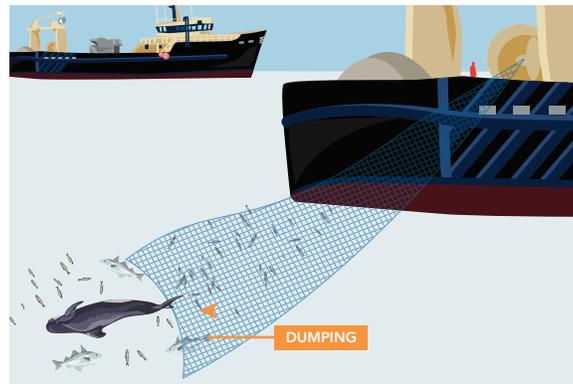
Trawl nets are hooked up to a vacuum that pumps fish on board. But larger animals, such as marine mammals and tuna, can't enter the pump due to the use of cage-like grates. This wildlife often dies and is dumped, unobserved, when pumping stops.



### Presorting of Catch

Pumped catch passes through size-specific sorting grates, which remove unwanted larger fish before they enter the fish hold. While this presorted catch is theoretically set aside for observer analysis, in reality the activity often occurs outside the observer's view and many fish can potentially go overboard without being sampled or counted.

Sources: Northeast Fisheries Observer Training Video, Herring Pair Trawl Trip, 4/24/2008-4/26/2008; Northeast Fisheries Observer Program, Fisheries Observer Program Manual 2010, p. 286



### Dumping Catch

Current rules allow herring vessels to dump their catch at sea if the nets are believed to contain bycatch or otherwise unmarketable fish. In 2009, the observer program concluded that 35 percent of observed net tows were at least partially dumped at sea without sampling, totaling an estimated 2.4 million pounds of marine life.

Source: NEFMC, Final Herring PDT Report, July 15, 2010

## Solutions to Reduce Bycatch

### 1. Monitoring

Require observers on 100 percent of midwater trawl trips, as required in other U.S. fisheries with this size vessel and gear. Observers must also be present on both vessels during pair trawling. Observer data must be made available to the public in a timely manner to ensure accountability.

### 2. Sampling

All catch, regardless of whether it will be kept, must be provided to observers for sampling. Dumping nets before bringing the catch on board and sorting out undesired fish and other wildlife before they are sampled must be prohibited, except in rare cases such as when safety is a concern.

### 3. Protecting

Areas of the ocean where there is a high probability of catching depleted river herring, recovering groundfish, juvenile and spawning Atlantic herring and other sensitive species should be closed to fishing, particularly during critical times of the year and in areas already established to protect groundfish.