



PHOTO: TIM AND DOUG WATTS

RIVER HERRING

Populations of alewife and blueback herring are in serious decline along the Atlantic coast and face numerous threats. These fish—called river herring—play an important ecological role in rivers and coastal waters, providing a crucial source of food to wildlife. By restoring river herring, we can help protect an entire ecosystem.

Signs of Decline

- › **Disappearing Runs**
Over the past two decades, river herring populations along the Atlantic coast have declined by 99 percent or more.
- › **Vanishing Industry**
99 percent drop in how many river herring commercial fishermen have caught over the last 50 years.
- › **Fishing Bans**
Connecticut, Massachusetts, North Carolina and Rhode Island have already banned recreational and commercial fishing for river herring. By 2012, other states will be required to implement similar bans.
- › **Smaller, Younger Fish**
Coastwide decreases in average length and age of river herring.
- › **Species of Concern**
River herring were designated a Species of Concern in 2006 by the National Marine Fisheries Service, which identifies species at risk and in need of protection.

Sources: Atlantic States Marine Fisheries Commission, National Marine Fisheries Service



www.HerringAlliance.org

One Step Forward...



PHOTO: BILL MCIVHA

River Restoration

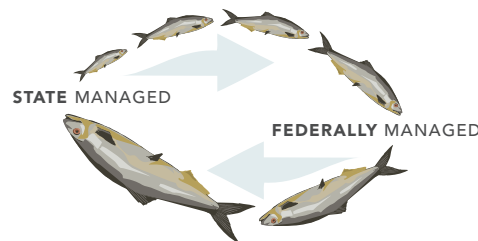
Historically, dams and other impediments, combined with poor water quality, have severely reduced river herring access to their native spawning habitat. Much time, money and manpower have been invested in restoration efforts, improving river conditions. But river herring populations have declined by about 99 percent, and commercial fishing for river herring along the Atlantic coast has netted fewer and fewer fish. More help is needed.

Source: Atlantic States Marine Fisheries Commission.

...Two Steps Back

Management Hot Potato

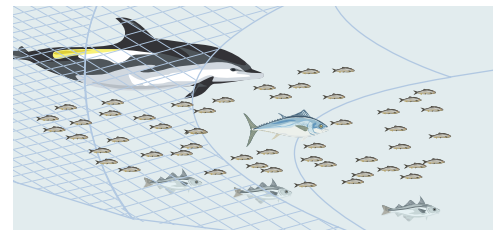
River herring have fallen through the cracks of fisheries management. Federal and state agencies continue to pass responsibility for river herring like a hot potato.



LIFE CYCLE: River herring begin life in ponds, rivers and coastal waters managed by state governments. As juveniles, they move offshore to deeper waters managed by the federal government, where they intermix with other small schooling fish such as Atlantic herring and mackerel. Once mature, river herring retrace their routes to spawn in their home rivers.

What's the Catch?

Evidence shows that river herring bycatch* is significant. Particularly troubling is the number of river herring caught by midwater trawlers that fish for Atlantic herring and mackerel. These vessels, up to 165 feet long, are the largest on the East Coast, with football field-size nets capable of capturing 500,000 pounds of sea life in one tow. Unintended capture of river herring by other fishing boats that use small-mesh nets (for example, those that harvest squid) is also of concern.



*Bycatch: Sea life unintentionally caught and often killed during fishing for another species.

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, mackerel and squid fisheries.

River Herring Fish Facts



ALEWIFE

Alosa pseudoharengus: Range extends from Newfoundland, Canada, to North Carolina.



BLUEBACK HERRING

Alosa aestivalis: Range extends from Nova Scotia, Canada, to Florida.

Maximum Weight: Less than a half-pound

Maximum Size: 14-16 inches

Maximum Age: 8-10 years

Reproductive Maturity: 3-4 years

Spawning Season: March to June

Diet: Zooplankton, small fishes, eggs and larvae of other species

Predators: River otters, seals and other marine mammals, birds (cormorants, ospreys, herons and eagles) and other fishes (bass, trout, cod and tuna)

Gear: Targeted commercially using stationary fishing gear (weirs, pound nets and gill nets); caught recreationally using hook and line, dip nets and seines; caught accidentally by fishing vessels that use small mesh nets

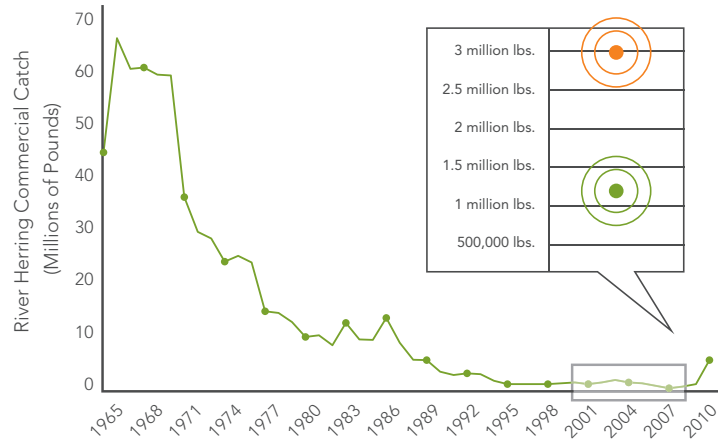
Sources: National Marine Fisheries Service; Froese, R., and D. Pauly (eds.), 2009, FishBase; Atlantic States Marine Fisheries Commission



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SNAPSHOT: LANDINGS VS. ACCIDENTAL CATCH

Commercial catches of river herring have dramatically declined since the 1970s. Now, unwanted catch of river herring by ocean fishing boats exceeds the commercial catch of river herring from all state waters along the Atlantic coast.



Estimated Annual Accidental Catch:
3 million pounds¹
(average 2000-08)

Reported Annual Commercial Catch:
1.2 million pounds²
(average 2000-08)

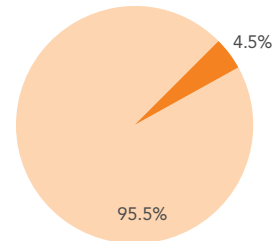
¹ Atlantic States Marine Fisheries Commission; Lessard, R.B., and M.D. Bryan. (2011). At-sea distribution and fishing impact on river herring and shad in the NW Atlantic. Presented to the technical subcommittee at the River Herring Stock Assessment Meeting, Providence, R.I.

² National Marine Fisheries Service Fisheries Statistics Division, 2010; 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.

FISHING FOR MORE DATA

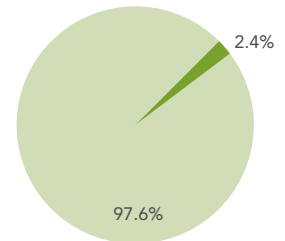
Oversight of the Atlantic mackerel and squid fisheries is poor. From 2004 to 2008, scientific observers were placed on just 4.5 percent of mackerel trips and 2.4 percent of squid trips. This low level of monitoring makes accurate assessment of how much river herring is captured difficult and has probably led to an underestimation of the amount caught by these fishing vessels.

Large catches of river herring—**32,667 to 76,288 fish**—have been recorded in single net tows in the midwater trawl mackerel fishery. One tow has the potential to wipe out a stream's entire river herring population. This accidental catch may pose a significant threat to the survival and recovery of these imperiled species. More oversight and data are needed.



Mackerel Trips

Scientific Observers Present
Scientific Observers Absent



Squid Trips

Scientific Observers Present
Scientific Observers Absent

Steps Toward Solutions

1. Monitoring

Put a comprehensive monitoring program in action, with at-sea observers placed on every mid-water trawl fishing trip in order to allow for accurate estimates of how much river herring is caught.

2. Accountability

Establish firm limits on how much river herring these industrial vessels can catch, and put measures in place to ensure that these limits are not exceeded.

3. Protection

Use information from fishing vessels to stop fishing in trouble areas where river herring are caught in large numbers. This protection will minimize the amount of river herring caught.

Take Action

Get involved at www.HerringAlliance.org/takeaction. Sign up for our email newsletter to get the latest campaign updates. Contact the Herring Alliance with any questions or ideas at 617-728-0300 or info@herringalliance.org.