



Species Profile: River Herring

State management aiding in recovery of depleted river herring stocks
NOAA Fisheries status review finds Endangered Species Act listing unwarranted

Introduction

The Fishery Management Plan (FMP) for Shad and River Herring, approved in 1985, was among the first FMPs to be developed by the Commission. Since that time, the Commission has undertaken three major amendments to the plan. Amendment 2, approved in 2009, ushered in a new management regime for these important forage fish; one that required Atlantic coastal states and jurisdictions to either document the sustainability of their fisheries or prohibit recreational and commercial fishing for river herring.



A 2017 stock assessment update determined that while river herring remain depleted on a coastwide basis, improvements have been observed in several river systems. This update provided significant rationale for NOAA Fisheries' June 2019 status review, which determined that listing river herring under the Endangered Species Act was not warranted at this time. Despite the species' overall low abundance, state management, including dam removals and improvements to fish passage, have helped increase abundance in some locations along the East Coast.

As river herring are migratory species that traverse both state and federal waters, the Commission has also worked closely with the New England and Mid-Atlantic Fishery Management Councils (MAFMC and NEFMC, respectively) to reduce river herring bycatch in small-mesh fisheries. In June 2019, NEFMC established catch caps in the Atlantic herring fishery for

2020-2021 to reduce incidental harvest of river herring, while MAFMC is currently developing Framework 13 to the Atlantic Mackerel, Squid, and Butterfish FMP to set 2020-2021 catch caps for the Atlantic mackerel fishery.

Life History

River herring, which is the collective term for alewife and blueback herring, are anadromous fish that spend the majority of their adult lives at sea, but return to freshwater areas to spawn in the spring. Alewife spawn in rivers, lakes, and tributaries from northeastern Newfoundland to South Carolina, but are most abundant in the Northeast and Mid-Atlantic. Blueback herring prefer to spawn in swift flowing rivers and tributaries from Nova Scotia to northern Florida, but are most numerous in waters from the Chesapeake Bay south.

Mature alewife (ages three to eight) and blueback herring (ages three to six) migrate rapidly downstream after spawning. Juveniles remain in tidal freshwater nursery areas in the spring and early summer, but may also move upstream with the encroachment of saline water. As water temperatures decline in the fall, juveniles move downstream to more saline waters. Little information is available on the life history of juvenile and adult river herring between their emigration from freshwater to the sea and their return to their natal river to spawn.

Commercial and Recreational Fisheries

River herring supported one of the oldest documented fisheries in North America, including significant commercial, recreational and subsistence fisheries throughout their range. During colonial times, in-river stocks of anadromous species like river herring became subject to intensive exploitation as well as habitat degradation related to clear-cutting for timber, damming for mills, and wetland conversion to agricultural lands.

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Species Snapshot

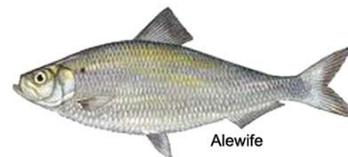
Alewife - *Alosa pseudoharengus*

General Characteristics

- Adults average 10-11" in length; 8-9 oz. in weight
- Range from Nova Scotia to South Carolina
- Primarily feed on plankton
- Congregate in large schools, numbering in the thousands
- Excellent food fish, marketed both fresh and salted

Interesting Facts

- In the US, alewife are known as sawbelly, grayback, bigeye, and freshwater and spring herring. In Canada, they are known as gaspereau or kiack.
- The origin of the name alewife is a reference to the large belly of the fish, which reminded New England fishermen of alehouse wives.
- The Latin name *pseudoharengus* means "false herring."



Blueback Herring - *Alosa aestivalis*

General Characteristics

- Adults average 11" length; 7 oz. in weight
- Range from Nova Scotia to Northern Florida
- Primarily feed on plankton
- Name derived from dark blue/bluish gray coloring on back

Interesting Facts

- Blueback herring are also known as summer herring or black belly.
- Blueback herring have teeth on the roof of their mouths, while alewife do not. The teeth disappear with age.