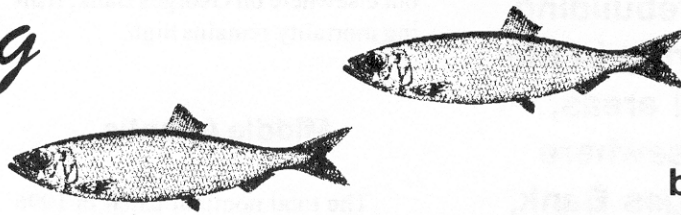


# River Herring



by J. Kocik

The term "river herring" is applied collectively to alewife, *Alosa pseudoharengus*, and blueback herring, *Alosa aestivalis*. The coastal range of the blueback herring is from Nova Scotia to Florida; the coastal range of the alewife extends from Labrador to South Carolina. In coastal rivers where ranges overlap, fisheries for these species are typically mixed. Both species are anadromous and undertake upriver spawning migrations during spring. Alewives may live as long as 10 years and reach a length of 36 cm (14 in.). Blueback herring live for about 7 or 8 years and reach a maximum length of about 32 cm (13 in.).

Alewives spawn in spring when water temperatures are between 16°C and 19° C; blueback herring spawn later in spring, when water temperatures are about 5° C warmer. Fecundity and age at maturity for both species are similar. Between 60,000 and 300,000 eggs are produced per female; most individuals are sexually mature at age 4. River herring have supported one of the oldest documented fisheries in North America. It was exclusively a U.S. inshore fishery until the late 1960s, when distant-water fleets began fishing for river herring off the Mid-Atlantic coast. The principal fishing gears used to catch river herring are fish weirs, pound nets, and gill nets. Recreational fishing is insignificant. The U.S. nominal catch averaged 24,800 mt annually between 1963 and 1969. Landings subsequently declined to an average of 4,000 to 5,000 mt until the mid-1980s; and more recently, to an average of about 500 mt from 1994-1996. The 1996 total (464 mt) nearly matched the record low of 423 mt in 1994. Maine, North Carolina and Virginia typically account for more than 90



River herring

NOAA Fisheries  
NEFSC photo by Brenda Figuerido

**“The dramatic decline in landings since the mid-1960s reflects substantial declines in resource abundance since that time.”**

percent of total landings from the Gulf of Maine through the Middle Atlantic.

In response to the observed decline in nominal catch and apparent resource conditions, the Atlantic States Marine Fisheries Commission has prepared a comprehensive coastwide management plan for shad and river herring, to facilitate cooperative management and restoration efforts between the states. However, recovery has not been consistent. Several river herring populations along the east coast are still being exploited at higher than optimal levels and a great deal of historic spawning habitat remains unavailable. The dramatic decline in landings since the mid-1960s reflects substantial declines in resource abundance since that time.

**For further information**

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*Gulf of Maine - Middle Atlantic River Herring*

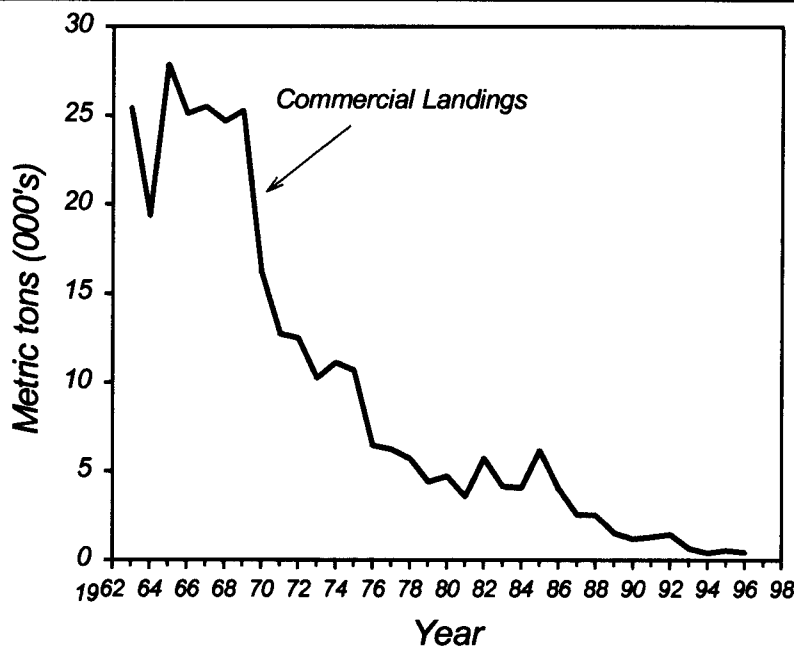


Table 34.1 Recreational catches and commercial landings (thousand metric tons)

Category	Year										
	1977-86 Average	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
U.S. recreational	-	-	-	-	-	-	-	-	-	-	-
Commercial											
United States	4.9	2.5	2.5	1.5	1.2	1.3	1.5	0.7	0.4	0.6	0.4
Canada	-	-	-	-	-	-	-	-	-	-	-
Other	1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total nominal catch	5.9	2.5	2.5	1.5	1.2	1.3	1.5	0.7	0.4	0.6	0.4

*Summary Status*

Long-term potential catch	=	Unknown
SSB for long-term potential catch	=	Unknown
Importance of recreational fishery	=	Minor
Management and	=	Interstate FMP for Shad River Herring
Status of exploitation	=	Varies by stock
Age at 50% maturity	=	2 to 4 years (varies by latitude)
Size at 50% maturity	=	28 cm (11.0 in.)
Assessment level	=	Index
Overfishing definition	=	None
Fishing mortality rate corresponding to overfishing definition	=	N/A

**M = Variable    F<sub>0.1</sub> = Variable    F<sub>max</sub> = Variable    F<sub>1996</sub> = Variable**