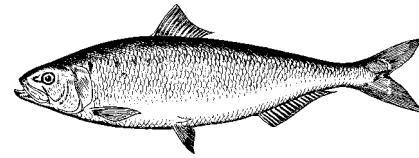


Alewife (*Alosa pseudoharengus*)

General Information

Although an anadromous species, land-locked populations of alewives are found in a number of lakes throughout the state. Anadromous runs are evident in most of the state's major river systems. One of the few commercially netted species in the state and an important forage species.



Native Range

Land-locked alewives are mostly located in the northeast US. Range extends from Nova Scotia to North Carolina and into the Great Lakes. (Royce 96; Norden 1967; Bochenek 1981)

Habitat Description

Lake: Occupy all strata of a land-locked waterbody during the course of the year. However, the majority of time is spent in the limnetic zone. Move into the littoral areas in late spring and summer for spawning and move in deeper water in the fall. Have a preference for the warmer waters. Also move into shallow areas at night and return to deeper waters during the day. Move in large schools. Attracted to light.

River: River populations are anadromous. Found in river systems during the spring migration (April - June). Will move further upstream than its close cousin the American shad.

Optimum Habitat Requirements

Dissolved Oxygen	
Temperature	11°-19° Adults 17°-19° young
pH	
Turbidity	
Current	

Diet

Fry	zooplankton
Juveniles	insect larvae, zooplankton, some fish larvae
Adults	insect larvae, zooplankton
Notes: mainly planktivores, become more omnivorous with increase in size. Mainly filter feeders.	

Growth (mm)

Age	I	II	III	IV	V	VI	VII
Male	95	127	135				
Female	102	128	142				

Notes: Growth data taken from Lake Hopatcong 1979 - 1980, Bochenek 1981. Landlocked alewives have a shorter life expectancy and poorer growth rate than its anadromous counterparts. Females grow faster. Growth slows significantly after the onset of sexual maturity.

Reproduction

Time of Year	June	Age Males Mature	II - III
Temperature Range	10° - 26.7°	Age Females Mature	II - III
Water Depth	150 - 300mm	Nest	None
Substrate	vegetation, sand, gravel	Egg Type	Non-adhesive
Time of Day	Night	Parental Care	None
Critical pH		Days to Hatching	4 - 6
Vegetation	Not critical	Stable Water Level	Critical

Notes: Each female deposits 60,000-100,000 eggs. Females move into spawning areas first. Spawn in groups of two or three. Spawn in tributaries and shallow littoral zones. Will spawn in moderate currents if a more adequate spawning area is unavailable. Diet, growth and reproduction information taken from Norton 1967; Brown 1972; Janssen 1976; Crowder 1983; Janssen 1978; Ney 1982 and Bochenek 1981. Literature search and data summary provided by David Chosid, Rutgers University.