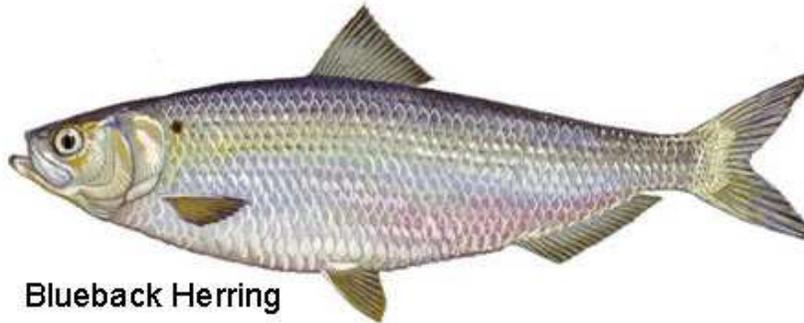


# Maryland FISH FACTS



Alewife



Blueback Herring

## Alewife and Blueback Herring

### *Alosa pseudoharengus* and *Alosa aestivalis*

(A.K.A. - River Herring, Alewives)

#### Key Distinguishing Markings:

- Both alewife and blueback herring are silvery in color and have a series of scutes (modified scales that are spiny and keeled) along their belly.
- However, the dorsal area of alewife are bronze in color whereas blueback herring are deep bluish green.
- Alewife are more strongly compressed, deep, with their body is less elongated.
- Alewife have a much larger eye than blueback herring.
- The most distinguishing characteristic of these species is the color of their peritoneum or the lining of the abdominal cavity.
- An alewife's peritoneum is pale with dusky spots.
- A blueback herring's peritoneum is black to dusky in color.
- Alewife and blueback herring are collectively termed "river herring" since in most instances, they are difficult to distinguish from one another.

#### Size:

- Maximum length of a river herring is approximately 15 inches.

#### Distribution:

- Alewife and blueback herring are relatively small anadromous fish of the family, Clupeidae. They spend their adult

lives at sea and return only to freshwater areas to spawn in the spring.

#### Habitat:

- Alewife spawn in a diversity of habitats that includes large rivers, small streams, ponds, and large lakes over a wide range of substrates such as gravel, sand, detritus, and submerged vegetation. In areas where alewife and blueback herring co-exist, blueback herring will exhibit more of a variety in their spawning sites including shallow areas covered with vegetation, in ricefields, in swampy areas, and in small tributaries upstream from the tidal zone.
- Various studies have determined that river herring are capable of migrating long distances (over 1200 miles) in ocean waters of the Atlantic seaboard, and that patterns of river herring migration may be similar to those of American shad.

#### Spawning:

- Alewife spawn in rivers and tributaries from northeastern Newfoundland to South Carolina, but are most abundant in the mid-Atlantic and northeastern states.
- Blueback herring spawn from Nova Scotia to northern Florida, but are most numerous in warmer waters from Chesapeake Bay south.
- In the mid-Atlantic region, both alewife and blueback herring are found in Chesapeake Bay and in virtually all its' tributaries.
- Alewife spawn from late February through April, whereas blueback herring spawn from late March through mid-May.
- Females from both species usually reach 100% maturity by age 5 and produce from 60,000 - 103,000 eggs
- Males of both species generally mature at an earlier age (ages 3-4) and smaller size than females.
- Mature river herring broadcast their eggs and sperm simultaneously into the water and over the substrate.
- Immediately after spawning, adults migrate rapidly downstream.
- Juveniles will remain in freshwater nursery areas in spring and summer, feeding mainly on zooplankton. As water temperatures decline in the fall, most juveniles move downstream to more saline waters, eventually to the sea; however, some will remain in deeper waters of the Bay and its tributaries for their first winter.
- Little information is available on the life history of subadult and adult river herring after they emigrate to the sea as juveniles, and before they mature and return to freshwater to spawn.

#### Fishing Tips:

- Alewife and blueback herring support important commercial and recreational fisheries throughout their range. Since they are difficult to distinguish from each other, commercial catches refer to a combination of both species.
- The fisheries for both these species have declined dramatically from historic highs.
- Degradation and destruction of spawning habitat, construction of dams restricting their spawning migrations, and increased fishing pressure have all been major contributors to the decline of these stocks.
- River herring are commercially harvested in directed fisheries in rivers and estuaries, and as bycatch in other ocean fisheries.
- The principal gear used in the Chesapeake Bay river herring fishery has been pound nets, although, gill nets, haul seines, and fyke nets have also been employed.
- In the past, the recreational fishery for river herring has been extensive in the tributaries of Chesapeake Bay during the early spring months.
- Although some fish were captured using hook and line, most were harvested using dip nets.
- Recreational catches of river herring have decreased dramatically since the mid-1970s.
- Current management restrictions on river herring, see Maryland's updated [regulation page](#).

#### Fun Facts:

- In 1931, over 25 million pounds of river herring were harvested, ranking them 2nd in quantity and 5th in value of all Chesapeake finfish, and 1st in quantity and 4th in value of all finfish landed in Maryland.
- Alewife and blueback herring, like other alosine species (American shad and hickory shad) lay down spawning marks on their scales so that the number of times an individual fish has spawned in its lifetime is recorded on it's scale. Blueback herring (age 10) have been seen with as many as 5 and 6 spawning marks!
- River herring are considered to be an important forage base for large predators, such as striped bass and bluefish.

#### Alewife

**Family:** Clupeidae (Herrings, shads, sardines, menhadens)

**Order:** Clupeiformes (herrings)

**Class:** Actinopterygii (ray-finned fishes)

#### Blueback Herring

**Family:** Clupeidae (Herrings, shads, sardines, menhadens)

**Order:** Clupeiformes (herrings)

**Class:** Actinopterygii (ray-finned fishes)

For more information on alewife and blueback herring and their management, please contact [Jim Mowrer](#).

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