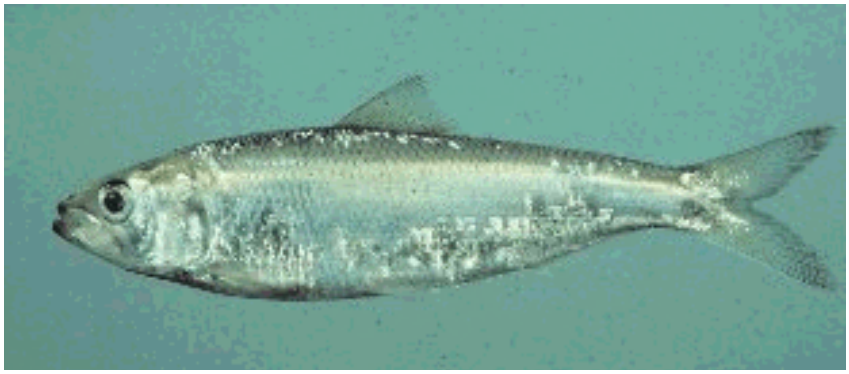
Common Name: **Alabama Shad**



Scientific Name: *Alosa alabamae*
Area of Concern: Western Atlantic: Alabama, Florida, Mississippi, Arkansas, Missouri
Year First Listed as a "Species of Concern": 1997

Species Description:

Alabama shad belong to the family Clupeidae and are closely related to and similar in appearance and life history to their sister species, the American shad (*A. sapidissima*). They also resemble the skipjack herring (*A. chrysochloris*) with which they are sympatric. Diagnostic characters of the Alabama shad are their upper jaw with a distinct median notch, and number of gill rakers on the lower limb of the anterior gill arch (41-48). Alabama shad differ from sympatric cluepeids in that the lower jaw does not protrude beyond the upper jaw, black spots are present along the length of the lower jaw, and the dorsal fin lacks an elongate filament. Adults broadcast spawn at in the spring/early summer when river temperature are between 18 and 22^{o}C over coarse sand and gravel sediments swept by moderate currents. Adults likely do not forage during the spawning run; otherwise they are thought to forage on small fish. Females become larger than males; females range from 360 to 457 mmSL, males from 90 to 419 mmSL. Spawning adults are primarily age-2; repeat spawning is common but the percentage of returning spawners is highly variable among years. Annual fecundity ranges from 40,000 to 250,000 eggs/female. Juveniles remain in fresh water for the first six to eight months of their lives feeding on small fishes and invertebrates. Juvenile growth rate is about 30 mm per month from July to September and then 10 mm per month until December. Juveniles enter the seawater in late summer/early autumn when they are about 50 - 130 mmSL. The Alabama shad is relatively short-lived (up to 4 years).

Rationale for "Species of Concern" Listing:

Demographic and Diversity Concerns:

The Alabama shad is an euryhaline, anadromous species that spawns in medium to large flowing rivers from the Mississippi River drainage to the Suwannee River, FL. The largest remaining population probably occurs in Apalachicola River, FL, below the Jim Woodruff Lock and Dam. Outside of Florida, spawning populations are thought to persist in the following drainages: Choctawhatchee and Conecuh Rivers, AL; Pascagoula River, MS; Ouachita River, AR; Missouri, Gasconade, Osage and Meramec Rivers, MO.

Factors for decline:

Although once abundant enough to support commercial fisheries in Alabama, Kentucky, Indiana and Iowa, *A. alabamae* are now rare through much of their former range. The species is thought to have declined largely because of the many dams blocking access to spawning areas. Other threats to the shad probably include poor water quality, siltation, and commercial and navigational dredging of sand/gravel bars used for spawning.

Last updated 4/13/2004

Status Reviews/Research Completed or Underway:

NMFS supported a preliminary status review in 1998 and is supporting (via Recover Protected Species funds) a study entitled "Status and viability of Alabama shad in the Pascagoula River drainage, and rangewide population genetic structure."

Photo Credit: Dr. Stephen Ross

For further information on this Species of Concern, or on the Species of Concern Program in general, please contact Ms. Marta Nammack, NMFS, Office of Protected Resources, 1315 East West Highway, Silver Spring, MD 20910, (301)713-1401, Marta.Nammack@noaa.gov ; or Dr. Stephania Bolden, NMFS, Southeast Region, Protected Resources Division, 9721 Executive Center Drive N., St. Petersburg, FL 33702, (727)570-5312, Stephania.Bolden@noaa.gov.

References:

Adams, S.B, S.T. Ross and M.L. Warren, Jr. 2000. Literature review, information needs assessment, and research proposal for Gulf sturgeon, Alabama shad and American eel: diadromous fishes of USFS Region 8. USDA Forest Service, Southern Research Station, Cneter for Bottomland Hardwoods Research, Oxford, MS.

Ross, S.T. 2001. The inland fishes of Mississippi. University Press of Mississippi, Jackson.

FAO Species Identification Sheets. 2002. Food and Agriculture Organization of the United Nations. Rome.