

AMERICAN SHAD

Stock Status – Concern – Commercial landings remained significantly low in 2009, and were well below the 10-year average. A coastwide stock assessment for American shad was completed in August 2007, which indicated stocks in the Albemarle Sound and tributaries were low, but remained stable, and stock status in other systems of the state was unknown.

Average Commercial Landings and Value - 2000-2009 – 235,212 lbs./\$197,324

2009 Commercial Landings and Value – 167,631 lbs./\$204,142

Average Recreational Landings - 2000-2009 – Unknown, **2009** – Unknown

Status of Fishery Management Plan (FMP) – In North Carolina, American shad are included in the Interjurisdictional FMP, which defers to Atlantic States Marine Fisheries Commission (ASMFC) FMP compliance requirements. An ASMFC FMP for Shad and River Herring was approved in 1985 and Amendment 1 of this plan was approved October 1998. ASMFC completed a coastwide stock assessment for American shad in August of 2007, which indicated stocks in the Albemarle Sound and tributaries were stable, and stock status in other systems of the state was unknown. Although stock status for the Albemarle Sound and tributaries is stable, total mortality is higher than the recommended level, and current abundance is considered to be well below the historical potential for these stocks. The stock assessment further concluded that most stocks along the East Coast are at all time lows and are not recovering. Since the 2007 coastwide stock assessment the ASMFC approved Amendment 3 to the Shad and River Herring FMP in February 2010. This amendment specifically addresses American shad management issues. Amendment 3 requires states and jurisdictions to conduct annual fisheries independent sampling programs to monitor juvenile abundance, adult stock structure, and hatchery evaluations. The amendment also requires dependent sampling programs to include the mandatory reporting of landings, catch, and effort for both commercial and recreational fisheries. States will also be required to annually monitor bycatch and discard of American shad in fisheries that operate in state waters. Nursery and spawning habitat for American shad will be evaluated to assess habitat degradation, barriers to migration, and water quality. Amendment 3 also requires that states submit a sustainable fisheries management plan for all systems that will remain open to commercial or recreational fishing. If states do not have an approved plan in place the commercial or recreational fishery will close by January 1, 2013.

Research and Data Needs – Conduct spawning area surveys and juvenile abundance surveys in all North Carolina river systems; improve and expand methods of monitoring catch and effort data in commercial and recreational fisheries; establish indices of abundance in all North Carolina river systems utilizing dependent and independent data; validate current aging techniques for American shad.

Current Regulations – There is no size limit. The recreational bag limit for shad is a 10-fish aggregate (hickory and American combined) per person, per day.

Harvest Season – The N.C. Marine Fisheries Commission adopted a rule in 1995 establishing a commercial harvest season of January 1-April 14; it is unlawful to take American shad and hickory shad by any method except hook-and-line from April 15-December 31.

Size and Age at Maturity – Males: 12-17.5 inches fork length/3-5 years
Females: 15-19 inches fork length/4-6 years

Historical and Current Maximum Age – 10 years/8 years

Juvenile Abundance Index 2000-2009 – 0.88, **2009** – 0.11 (unvalidated)

Habits and Habitats – American shad are anadromous, spending majority of life in the ocean,

returning to fresh water to spawn. Spawning occurs from March to mid-June, primarily in the high flow portions of rivers where there is sufficient current to suspend and move the eggs. Juveniles spend their first growing season in their natal river and sound systems until the water temperatures decrease, triggering emigration to the ocean. American shad will remain in the ocean until reaching sexual maturity and then return to fresh water to spawn.

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