

AMERICAN EEL

(06/08 ARCHIVE - NCDMF)

Stock Status — *Unknown* — The Atlantic States Marine Fisheries Commission (ASMFC) benchmark stock assessment was reviewed in February 2006. The management board accepted the stock assessment as complete; however, after considering the peer review advisory report the board did not approve this document for management purposes. The status of the stock is still unknown.

Average Commercial Landings and Value 1998-2007 – 90,342 lbs./\$153,129

2007 Commercial Landings and Value – 34,486 lbs./\$67,247

Average Recreational Landings 1998-2007 – unknown, **2007** – unknown

Status of Fisheries Management Plan (FMP) - In North Carolina, American eel is currently included in the Interjurisdictional FMP, which defers to ASMFC FMP compliance requirements. The ASMFC initially approved a FMP in 1999, with the most recent review approved November 2006. ASMFC approved Addendum 1 to this FMP in February 2006. This addendum requires states to establish a mandatory trip-level catch and effort monitoring program, including the documentation of the number of units fished and unit soak time. State compliance to Addendum 1 started in January 2007. In January 2007, the Management Board initiated the development of a draft Addendum with the goal of increasing the escapement of silver eels to the spawning grounds. The draft Addendum has been reviewed by the Technical Committee and has been forwarded to the Board for their review and action.

Research and Data Needs – There is the need to acquire a solid understanding of the species distribution and abundance, commercial and recreational harvest, and a reliable stock assessment method. However, additional funding and personnel are a priority before these research needs can be adequately met.

Current Regulations – recreational: 6-inch total length (TL)/50 eels/person/day; commercial: 6-inch TL; mesh size restrictions on eel pots; bait limit of 50 eels/day; seasonal closures

Harvest Season – year round

Size and Age at Maturity – males: 12 inches TL/4 – 8 years; females: 18 inches TL/7 -12 years

Historical and Current Maximum Age – 43 years

Juvenile Abundance Index Average 2004-2006 – 19.77, **2007** – 19.57

Habits and Habitats – The American eel is a catadromous species requiring multiple habitats including: ocean, estuaries, and fresh water streams, rivers, and lakes. This catadromous life cycle requires a migration back to the Sargasso Sea to spawn, while spending the majority of its life in brackish and freshwater. Larvae develop at sea and change from glass eels into elvers in nearshore ocean waters and estuaries. Elvers either remain in the estuary or migrate upstream. At approximately 2 years of age individuals are classified as the yellow eel stage and resemble the adult form. This stage lasts from approximately 5 to 20 years. Yellow eels also inhabit estuaries and fresh water tributaries where they feed on invertebrates and smaller fish. They prefer areas with soft bottom and vegetation. The mature silver eel life stage occurs at the time of downstream migration, leaving the estuary for the open ocean to spawn then die. Seaward migration occurs in late summer and fall.

For more information, see [DMF Species Leads page](#).