



Massachusetts Division of Fisheries & Wildlife

American Eel *Anguilla rostrata*

State Status: **None**
Federal Status: **None**

SPECIES DESCRIPTION: The American Eel can be identified by its elongate, snakelike body, single small gill openings, true jaws, and pectoral fins. The dorsal fin begins far behind the pectorals in the American Eel, which distinguishes it from the Conger Eel, *Conger oceanicus*, which is found in Massachusetts marine waters. Color varies in eels: at sea, larval eels are nearly transparent and colorless and, as they first assume adult shape, retain their transparency and are called "glass eels." Upon reaching freshwater, the larvae gradually develop pigment to become bronze-black above and silver-white below as adults. Female American Eels may grow to over 4 feet in length and weigh up to 16.5 pounds. A 52-inch female, weighing 7 pounds 8 ounces, and with a girth of 7.5 inches, was taken on hook and line from Santuit Pond, Mashpee. Males are much smaller than females, usually 12 to 14 inches; any American Eel over 16 inches is undoubtedly a female.

The American Eel is a catadromous fish that spawns in the open ocean south of Bermuda. Young eels migrate to the coast; some remain in the estuaries, but many thousands migrate hundreds of miles up rivers. They live in fresh or brackish water for 7 to 20 years, consuming invertebrates, fishes, and carrion. When mature, they stop feeding and migrate back to the sea to spawn and die.

DISTRIBUTION AND ABUNDANCE: American Eels are common along the Massachusetts coast, as well as in ponds, rivers, and streams that are connected to the ocean. Though American Eels are still common, a range-wide study by Alex Haro (Conti Anadromous Fish Research Center) and colleagues shows declines in populations between 1984 and 1995.

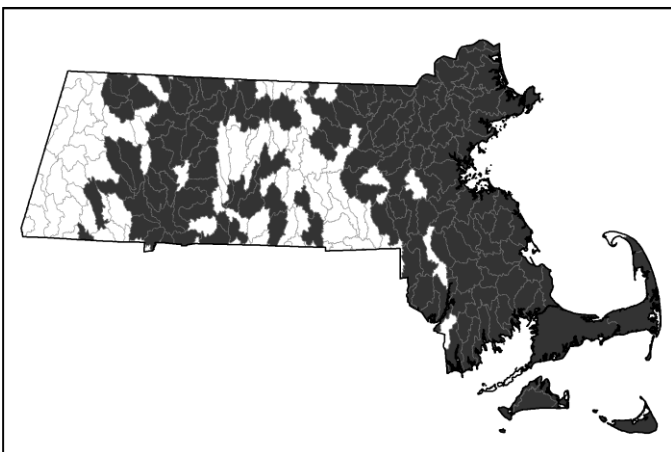
HABITAT DESCRIPTION: Eels appear to be habitat generalists, surviving in a wide range of lentic and lotic environments.

THREATS: Water pollution, dams which hinder migration, and possibly over-fishing (particularly of the youngest "glass eels") are the major threats to this species. It is not clear why eel stocks appear to have fallen dramatically in the past few decades, so further monitoring and research will be required to insure that populations can be sustained.

REFERENCE:

This species description was adapted, with permission, from:

Karsten E. Hartel, David B. Halliwell, and Alan E. Launer.
2002. *Inland Fishes of Massachusetts*. Massachusetts Audubon Society, Lincoln, Massachusetts.



Data from DFW Fisheries Surveys and Harvard Museum of Comparative Zoology

Updated 2015

A Species of Greatest Conservation Need in the Massachusetts State Wildlife Action Plan

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