



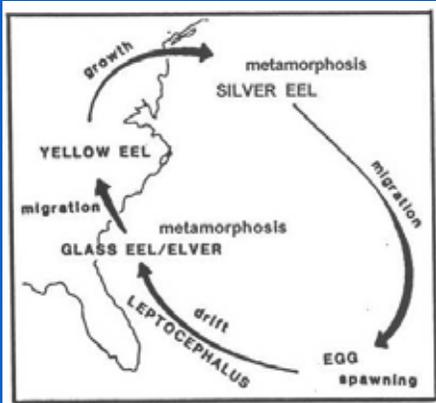
American eel monitoring project



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American eel life cycle:

American eel undertake the longest migration of any Delaware fish, coming to Delaware from the Sargasso Sea in the Atlantic Ocean as glass eels then returning to the ocean as mature adults or silver eels to spawn and die. American eels reside in Delaware waters from 4 to 20 years before leaving to spawn. The diagram below (from the US Fish & Wildlife Service) gives an idea of the scale of the American eel's life journey.



The American eel in Delaware

Although many Delawareans may find them unappealing, American eel (*Anguilla rostrata*) support a major fishery in Delaware. American eels are mostly sold live for bait and exported as a food fish. A total of 137,489 lbs. of American eel were landed in Delaware by commercial eelers in 2004, making it third in both pounds landed and value among all Delaware fish that year. Delaware is usually among the top three states in American eel landings. Coastwide American eel landings have dropped significantly from their peak in the 1970s, prompting concern that the eel population is in decline. This population decline led the Atlantic States Marine Fisheries Commission to pass an American eel management plan in 2000 that requires all Atlantic states to monitor glass eels entering state waters and gather population information (lengths, weights, and ages) from commercially-caught eels.

Glass eel monitoring

Young-of-the-year American eels, called glass eels because they lack pigment and are thus transparent (see photo), enter Delaware waters from the ocean during January through May. Glass eels are attracted to fresh water flow and find areas in which the fresh



water flow is in close proximity to the ocean particularly attractive. One such area is the Millsboro Pond spillway on Indian River. The Division has monitored glass eels at this spot for six weeks annually since 2000 and glass eel catches are often very high there. The six week annual total has ranged from 85,000 in 2003 to 340,000 in 2001, and the daily catch has been as high as 60,000.

For more information on the American eel monitoring project, please contact:

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Eel population structure monitoring

Eels large enough to be caught in commercial eel gear (mostly traps called eel pots) are called yellow eels for the characteristic yellowish tinge to their pigmentation. A representative sample of these eels is collected from commercial eelers by the Division. These eels are then measured, weighed, and aged (see photo). The resulting data are used to estimate the population structure of commercially caught American eels.

