

Anguilla rostrata – American Eel (Native)

What is it?

American eels have snake-like bodies and are often thought to be scale-less fishes. American eels have scales that are very small and embedded, making them nearly impossible to see. These fish are native, nocturnal, and prey upon a variety of aquatic organisms including fish, fish eggs, crayfish, insects, frogs, and more



Photo by Josh Leisen

American eels are a catadromous fish that can be found in marine, brackish, and freshwaters in North and South America at different life stages. Catadromous fishes are fishes that travel from freshwater rivers to marine waters to spawn. The opposite of catadromous fishes are anadromous fishes, which travel from marine waters, upriver to spawn in freshwater.

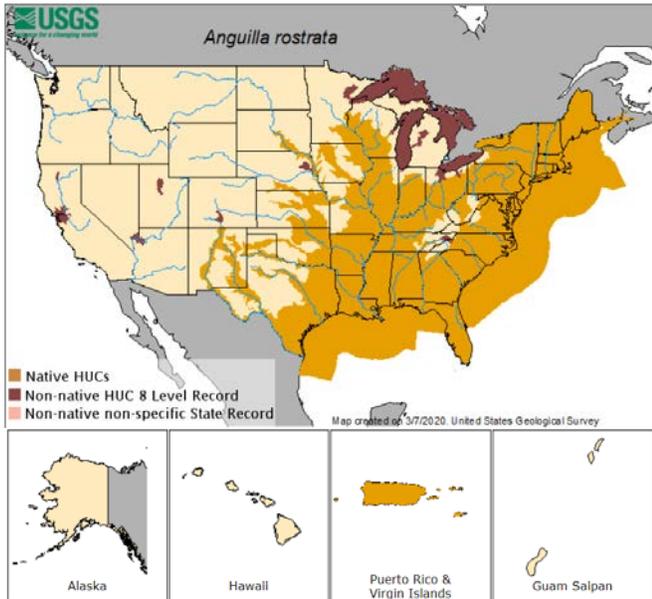


Photo by Barnegat Bay Partnership



Where is it found?

American eels are found in the Atlantic Ocean and its adjacent streams in North and South American, including the Great Lakes, Mississippi River, and Gulf basins. This fish is native and relatively common in the Upper Raritan region. As eels are nocturnal, they are often hiding beneath undercut banks, fallen trees, and vegetation during the day. See the extent of their range in the USGS map below.



American eel migration routes from Sargasso Sea

SOURCE:
U.S. Fish and
Wildlife Service



Where does it spawn?



American eels spawn in the Sargasso Sea, located between Bermuda and the West Indies. In early spring, mature adults travel from freshwater rivers, downstream to the ocean at night until they reach the Sargasso Sea. Here, they spawn and ultimately die. The eggs then drift North with the current eventually hatching and going through different physical stages from leptocephali (transparent and mostly flat) to elvers (small eels). The elvers travel upstream into rivers where they feed and grow for 5 – 20 years until reaching sexual maturity.

Eels & Water Quality

Though eels are relatively common, not much research has been done on their actual environmental tolerance levels. They can be found in a variety of habitats but are seen most commonly in permanent rivers and streams. Their temperature tolerance ranges from 17° to 28° C and they can tolerate dissolved oxygen levels as low as 6 ppm.

Protect it!

According to the IUCN Red List, American Eels are endangered globally. Dams are a significant barrier to eel migration to and from the Sargasso Sea. The continued removal of dams in our region will have a positive impact on American Eel populations. Eel passages have been created and improved on dams in recent years to help to increase their success and survival, but removing dams proves to be the best option for these and other migratory fishes. Increased demand in Asian markets has also led to a decline in American Eel populations. Poaching of juvenile eels is a common issue.

Whenever you are fishing, be a responsible angler and never move fishes from one waterbody to another! Do not release bait fish or other live bait into any waterbody.



For information on New Jersey freshwater fish science and management please visit:

<https://www.nj.gov/dep/fgw/fshresmgt.htm>

How to report Invasives

If you catch a potential dangerous invasive fish in New Jersey, please report the fish to the New Jersey Division of Fish and Wildlife Bureau of Freshwater Fisheries

Report invasive fish to NJDFW:

(908) 236-2118

For photo identification confirmation of a species email:

njfwfish@dep.nj.gov