

Conservation



European Eel

Latin: *Anguilla anguilla*

Irish: Eascann



The journey a young eel makes from the Sargasso Sea to Ireland.

Eels

By David Crestin

The European eel is found along the coasts of the eastern Atlantic Ocean from Greenland right down to Morocco on the northwest coast of Africa. The American eel (*Anguilla rostrata*) lives in similar habitats in North America, from Newfoundland south to the Gulf of Mexico and several of the Caribbean Islands. Both species are extremely useful fishes as food for both humans and other fishes. As human food, however, it is much more important in Scandinavia and mainland Europe than in North America.

The life cycle of the eel is perhaps one of the most unusual and interesting of all fishes. In Europe and North America each autumn, adult eels

between six and thirty years old travel downstream from rivers and streams and leave estuaries to enter the ocean. Once they enter ocean water their reproductive organs start to fully mature while they swim across the Atlantic Ocean to where they were born in the Sargasso Sea, south of Bermuda. For an eel from Ireland, that's more than 3,000 miles. When they reach the Sargasso Sea, the females cast their eggs and the males their sperm in huge numbers directly into the ocean water. The number of eggs from a female eel ranges from five million to twenty million, depending upon her size, which varies a great deal. Females, on average are between 24 inches and 36 inches long, with some up to 48 inches long. Generally they are larger than males, which are mostly shorter than 24 inches.

After the eels shed their eggs and sperm they will die and are either eaten or

Saving the Eels!

There is such concern about eel stocks in Ireland that the Government have banned the fishing of eels. It is hoped this measure, together with improving water quality in eel habitats, safeguarding their upstream routes and researching how they are affected by hydropower plants, will help increase the stocks again.



begin to decompose and sink into deep ocean waters. They have done their job. Adult eels swim across the ocean and spawn only once in their lives. But this process gives rise to a most fantastic fish story, for the baby eels that emerge from the eggs must somehow find their way across the Atlantic Ocean to enter Ireland's rivers and streams as their parents had done for thousands, if not millions, of generations.

From larvae to elvers to eels!

After an eel egg hatches, the baby, or larva, is only 5 or 6 millimetres long. It is flat and transparent, like clear glass. While each can flip and flop about in the ocean water, their main movement results from drifting in the Gulf Stream right across the ocean. It takes larvae between seven and eleven months to make the trip to Ireland. All during the trip, they are feeding on tiny plants and animals called plankton, and growing until when about two or so inches long their flat bodies become round and their skin takes on colour from yellow to dark brown as they reach coastal waters in spring. It is during the spring and summer that the young elvers enter fresh water where they will grow for years before starting their own spawning migration process.



Counting elvers stocks.

Courtesy of David Crestin

David Crestin helps count elver stocks as a volunteer with the Harwich Conservation Trust in Massachusetts, USA. (www.harwichconservationtrust.org)

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