

Freshwater Eels by Tony Yoward



THE EEL HOUSE at New Alresford drawing by Andrew Rutter

A rare type of building “listed” by Maureen Willbourn the Conservation Officer of the Winchester City Council. Built in 1822 it had become derelict and was rebuilt using grant money from Hampshire County Council and Winchester City Council and occasionally open to the public. Located to the west of New Alresford on the foot path which comes out at the bottom of the ‘to Dean’. Sadly they have used a modern window which looks entirely wrong!

We have all seen eel traps at mills and the eels were often extra income for the miller and were caught in large quantities, but have we wondered where the eels originate from?

European freshwater eels make an amazing migration between the river and the sea, breeding in the North Atlantic, the Sargasso Sea, but living its adult life in fresh water rivers some 3 to 4,000 miles away.

During spawning the female is believed carry up to 10 million eggs. The eggs hatch and these minute creatures migrate across the Atlantic towards the coast of the UK, drifting in the warm waters of the Gulf Stream. This journey takes about two years and by the time they arrive they are about 5 cm long. When the larvae reach Europe they change into the "glass eel" stage. These enter the freshwaters during the spring, with the peak of the migration taking place on the increasing spring tides in April and May.

They gather at the large river mouths, such as the Severn Estuary and then head upriver in search of a new freshwater habitat. Their movement upstream is mainly triggered when the river water temperature reaches 10° to 12°C, migrating upstream during the flood tide and changing colour into the familiar dark elvers .

Eels live on or near the bottom of rivers and lakes, migrating slowly upstream. During this period they are commonly referred to as yellow or brown eels due to their colour, feeding mainly on invertebrates, although larger individuals may also eat other fish.

Capable of surviving for periods of time out of water, eels can cross land and damp meadows in their search for water systems and lakes.

Male eels stay in fresh water for between 7 and 12 years, maturing at a length of about 36cm while the females stay between 9 and 16 years, maturing at the slightly larger size of 46cm when they are mature enough to breed.

Mature eels prefer to move seawards when it is dark and large migrations are known to occur on wet, stormy autumn nights especially when the half-moon is on the wane. They change to a blue/silver colour (known as "silver eels") and start their migration downstream to the sea.

On reaching the sea they stop feeding and so have to rely on stored energy alone. Their body undergoes dramatic changes: the eyes start to enlarge in size, the eye pigments change for optimal vision in dim, blue, clear, ocean light, and the sides of their bodies turn silvery, to create a counter-shading pattern to make them difficult to see by predators during their long open ocean migration. This migration will take almost six months before they reach their breeding grounds, spawn and die.

Notes:

Eels are now an endangered species as their numbers have decreased alarmingly (some 90%) during the past 20 years. In fact, eel-ladders as well as fish-ladders are now being built in Somerset.

Freshwater eels are eaten in [Europe](#), a traditional east London food is [jellied eels](#), although their demand has significantly declined since World War II. Fisherman consumed elvers as a cheap dish, but environmental changes have reduced eel populations. They are now considered a delicacy and are priced at up to £700 per kg in the [U.K.](#) In Holland smoked eels are the delicacy.

Eels were always to be found in ponds and the muddy bottom of a river. It was quite a sport to hunt them using these gleaves. You plunged it into the mud and if there was an eel there it was caught between the prongs. I have seen a similar method used in Slipper Mill Pond after it had been emptied. Almost a sack full of eels was captured this way and the precious cargo was sent to Billingsgate.



EEL GLEAVES at a Spalding blacksmiths photo by Ashok Vaidya

When the glass-eels are migrating into the river they shelter near the river bank during the ebb tide to avoid being washed back downstream, and this is when they are more easily caught by elver fishermen. I have seen them being fished with very fine nets in huge numbers on the shoreline of the River Severn. They are delicious just fried.

Eel blood is extremely toxic, causing muscular cramps, which can affect the heart. Only 0.1ml/kg is enough to kill a small mammal such as a rabbit! Eel blood is also toxic to humans and other mammals, but both cooking and the digestive process destroys the toxic protein.

Eels are an important staple food for many different species, including otter, bittern, cormorant and heron, but their blood is poisonous to some. It is always interesting watching a cormorant trying to eat an eel –the eel wraps itself round the cormorant's head and it is usual quite a while before the bird can swallow the eel – it can only swallow it head first!

The current rod caught record for a freshwater eel is believed by many to be the toughest to beat, standing at an amazing 11lb 2oz (5.046 kilos) captured in 1978 from Kingfisher Lake, near Ringwood in Hampshire.

The eel is an elongated fish which has evolved due to the [dorsal](#) and [anal fins](#) having fused with the [caudal](#) or tail fin, to form a single ribbon running along much of the length of the fish.

Eels were believed to have originated from the hairs of dead sailors.

For the technical – Order – Anguilliformes. Family - [Anguillidae](#)

eels are [catadromous](#) - living in fresh water but spawning in the sea.

Tony Yoward Aug.2010