



3 THE FISHES OF THE TWEED AND THE EYE

E.2 Baltic Sturgeon *Acipenser sturio*

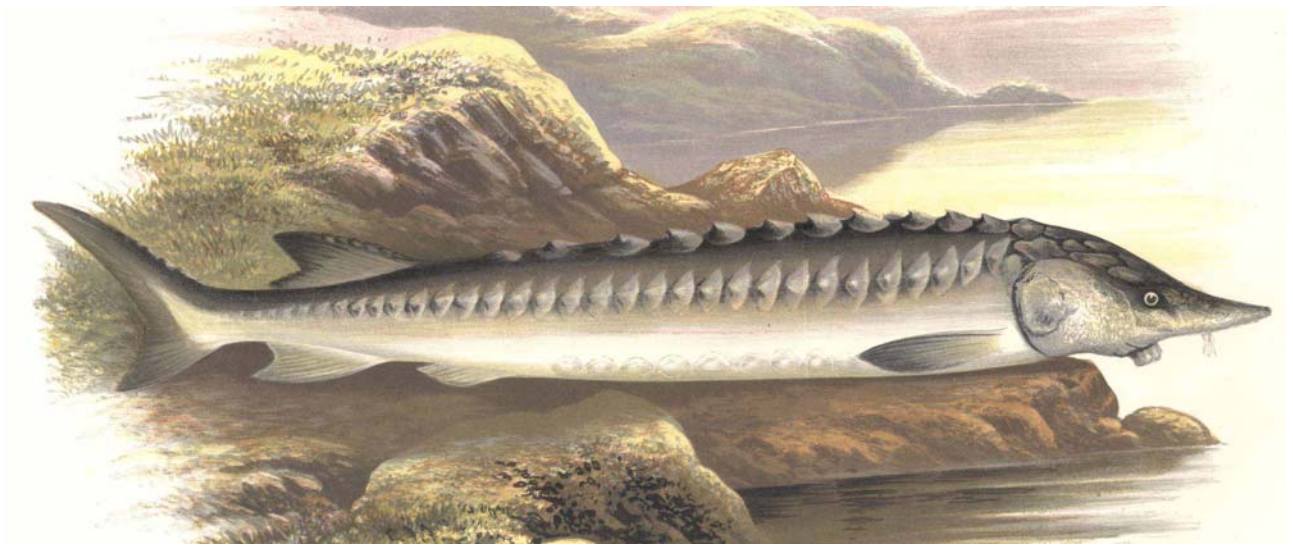


Photo E.2.1: Sturgeon: Taken from British Freshwater Fishes by the Rev. W. Houghton, illustrated by A.F. Lydon, 1879

The Baltic Sturgeon is one of 25 species belonging to the family Acipenseridae, an ancient group of bony fishes with no close living relatives. They have no scales, but have five rows of bony plates along the body and more over the head. Internally, however, they have as much cartilage as bone. The jaws are weak, but the mouth forms a protrusible tube, adapted for bottom feeding. The fleshy snout in front of the mouth which has four fleshy barbels is also an adaptation for this. Many species are marine, but spawn in fresh water in suitable stretches of large rivers or even in still waters. The eggs are adhesive and stick to rocks, logs etc., the young either remaining in these spawning areas or heading directly for the sea. Growth is slow and it can be 15 years in some species for maturity to be reached.



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Sturgeon have long been commercially fished, both for their flesh and for their eggs (Caviar), but their large size and easy capture combined with their slow growth made them vulnerable to over-fishing and many populations have been exploited to extinction. Their use of the lower zones of large rivers also made them vulnerable to pollution and riverine development and many populations have been lost in this way. If they could use smaller rivers, which have been generally less developed than larger, many more populations would have survived.

The Baltic Sturgeon is the only species ever found in British waters: Its original range covered the entire coastline of Europe, from the North Cape of Norway, all round the Atlantic coast, including the Baltic, and into the Mediterranean and Black Seas. Once common, it is now a rare species, with significant breeding restricted to the Gironde in South-western France, the Guadalquivir in Spain and the lower Danube. The young appear to be coastal, favouring silty and sandy areas suitable for bottom feeding. They migrate into rivers in early Spring and spawn in early summer; on gravel beds under several metres of water. As they do not feed in freshwater as adults, many die on their return to the sea. Most young reach 10cms by the end of their first year and then move down to the sea, though some spend two or three years in freshwater. First maturity is at 8 to 12 years old, when the fish are about 1m long.

There are no records of the Sturgeon having ever bred in the British Isles, but it was at one time a fairly frequent catch in coastal nets, as can be seen from the following records of its appearances in the Tweed estuary:

Table E.1.1 Records of Sturgeon caught in the Tweed Estuary.

- 1838** "The Sturgeon. One or more specimens are almost annually taken in our bay or river" (*Johnston, 1838*)
- 1853** A Sturgeon of seven foot in length and 140lbs weight (1.83m, 63.5kg) taken in September at the mouth of the Tweed. (*Bolam, 1919*)
- 1872** August 3rd, a Sturgeon was taken at the Yarrow Fishery on the Tweed estuary: It was 8 ft 6 inches long, 4 ft 4 inches in girth and 15 1/2 stones in weight (2.59m, 98 kg). It was written up in *The Scotsman* of August 10th 1872. (*Hardy, 1872*)

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A charitable trust established by the River Tweed Commission to promote the development of fish stocks in the Tweed River System

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- 1909** A Sturgeon of 7' 10" weighing 160lbs (2.39m, 72.6kg) netted at Sandstell on August 31st (*Bolam, 1919*).
- 1919** "Perhaps about a dozen have been taken in the neighbourhood of the Tweed during the last thirty years". (*Bolam, 1919*)

Sturgeon are not the only giant fish to have been taken in the Tweed estuary: In September 1757, just above the old bridge of Berwick, a six foot long Porbeagle Shark was netted by Salmon fishermen (*Johnston, 1883*).

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