



## Tagging Salmon

Salmon are tagged near the bottom of the river. Some of them will be caught and reported upriver by anglers, the information gathered from the tagging scheme give scientists information. It is important that the first method of capture is not the same as the recapture as animals learn from experience. In this case the first method is netting and the re-capture method is angling.

The Netting.



As the boat take the front end of the net out (the "*fore*" net)

The other end of the net (the "*hint*" net) is towed slowly downstream along the shore





With the net fully out, the rope of the fore is brought ashore

The two ends of the net are gradually brought together. The larger corks mark the entrance to

the bag ("*bosom*") of the net



Any fish in the net are not secure until the lead line (along the bottom of the net) is brought ashore, trapping the fish in the bosom

Larger fish have to be carefully handled when transferring to the holding tub prior to tagging





This photograph shows the bankside set-up for tagging:

The right most tub in the photograph (sometimes two) is ordinary river water, for holding fish taken out of the nets until they are tagged.

The next tub along has the anaesthetic in it. The fish are examined for wounds, diseases and parasites while in this tub to minimise the time that they are out of water on the measuring board.

The fish are tagged and measured on the measuring board, which is always wetted before a fish is laid on it. In bright sunlight, a wet cloth is put over the fish's eyes to prevent them being damaged (fish have no eyelids to protect them from bright light). A scale sample is also taken while they are on this board.

The leftmost tub in the photograph is for recovery. Fish are usually removed from this before they are fully recovered so they are still partly anaesthetised during the carrying back to the river and make their full recovery when back in their natural environment.

The holding and recovery tubs both have two aerators in them, the anaesthetic tub a single one. The aerator is run off the battery of the vehicle seen at the top of the photograph, it puts oxygen into the water.



The data recorded from each fish caught are: its length; the number of Sea-lice; any damage marks

(scratches, flesh-wounds etc.) and the condition of its vent, to see if it is affected by the "Red Vent" condition. A scale sample is also taken for reading, to give its age and other information.

However, not all the fish caught are tagged. If they have been damaged in some way, by seals or other marine mammals or by nets, then their data is recorded as above, but they are released untagged. This is to ensure that all the fish tagged are equally healthy; equally likely to reach the anglers upstream,

and equally likely to be caught.



The tagging is with Floy or "T-bar" tags inserted under and towards the front of the dorsal fin, the standard method for Salmon and Trout.



The tags have a number and the name of the Tweed Foundation on them. Traditional tagging like this has become much more efficient in recent years with the use of the Internet and mobile phones as it is now much easier for anyone catching a tagged fish to report it. One Sea-trout tagged at Paxton on the 19th September 2007 was caught on the 22nd May 2008 in a net set on a beach on the island of Sylt, on the Danish-German border and reported within 24hrs through the Internet.



The tags are inserted with a tagging gun. This has a hollow needle into which a tag is set and is then pushed down into the fish by a wire inside the needle.

Tags are inserted at the base of the dorsal fin, towards its front.



There are some possible ways that the data can be wrong.

1. Tagged fish not being reported when captured
2. Tags falling off fish
3. Tagged fish dying in the river
4. Tagging fish leaving the river



A tagged fish (No. 000176) recaptured by an angler upriver; this fish

was tagged at Paxton on 23rd August 2014 and caught about 12kms

upriver a month later on 27th September.

Note how quickly the fish has turned from silver to brown in colour - it had two Sea-lice on it when tagged, so was definitely then fresh in from the sea.