
Photo 4.1.1 Netting on the beach at Spittal, where there is a recorded history of netting going back around 800 years.

(A) The origins and early days: There can be no doubt that the Salmon of the Tweed will have been an important natural resource from the very earliest times. The annual spawning, bringing large fish into shallow water in the Autumn must have been of major importance for winter food supplies since the start of human settlement in the area after the Ice Age. That the Pictish symbol stone at Roberton on the banks of the Borthwick shows a Salmon can be taken as a sign of the long-standing importance of the Salmon in this area.
Records of Salmon netting can be traced back to the 12th century when Ralph de Flambard, Bishop of Durham from 1099 to 1122 made a grant of the fishings of “Haliwarstelle” (now Hallowstell) and “Eldredene” (now Allerdean) (Watts 1997) : Hallowstell, on Spittal Beach, was still occasionally fished in the 1990’s, giving it a recorded history of around 800 years, though its name shows that it could be much older as it derives from the Old English “haligweres-stell” meaning “the saint’s fishery” relating to the early monastic community of St. Cuthbert on Lindisfarne (Watts 1997). It seems that not all of these estuary stations were always or exclusively net fisheries - In 1670 there is a reference to “Tweedmouth Stell and Gard”, a “stell” being a netting station and a “gard” (also goad, gorde or gore), a fish trap (Watts 1997). Further upriver, no less than 13 mediaeval or earlier “Yairs” (fish traps) owned by the church of Durham have been identified along the southern bank of the Tweed in the 13 miles ( 21 kms) between Tweedmouth and Cornhill, the numbers and revenue of these peaking in the early sixteenth century (Lomas 1992). A list of the known netting stations, their earliest reference and active period according to present knowledge is given in Appendix D1, Table 1.

Duties were levied on Salmon exports from Scotland from the middle of the 15th century and in 1478-9, Berwick exported 971 barrels (of 14 gallon size) of Salmon, next only to Aberdeen with 1234.5 barrels (Nicholson 1974). This represented a considerable increase from 1461-2 when only 13 barrels were exported from Berwick (Scott 1888). Berwick returned to English control in 1483 and the oldest surviving trade regulations of the Guild of Berwick, made in 1509, concern the netting, curing and export of Salmon (Scott 1888). At this time they regulated all the fishings from Hornecliffe downriver and lettings were restricted to Freemen of the town. There was a close time from Michaelmass (29th September) to Candlemass (2nd February) and any breaking of this was to result in the confiscation of both coble and net and a fine of 6 shillings and 9 pence (Scott 1888). Salting of Salmon could only be carried out in Berwick itself - Spittal and Tweedmouth were forbidden areas for this. By 1568 the English crown had a “royalty” of one barrel in twelve, resulting in 60 barrels being sent to Queen Elizabeth I in that year indicating a total production of 720 barrels. In these early days, even before any annual seasons were instituted, Sundays would have been close-times for religious reasons, as shown by an account of 1618, when a traveller passing through Berwick recorded that:
"In the river of Tweed, which runs by Berwick, are taken by fishermen that dwell there, infinite numbers of fresh salmons, so that many households and families are relieved by the profit of that fishing; but (how long since I know not) there was an order that no man or boy whatsoever should fish upon a Sunday. This order continued long amongst them, till some eight or nine weeks before Michælmas last, on a Sunday, the Salmons played in such great abundance in the river that some of the fishermen, contrary to God’s law and their own order, took boats and nets and fished, and caught near three hundred Salmons; but from that time until Michælmas day that I was there, which was nine weeks, and heard report of it, and saw the poor people’s lamentation, they had not seen one Salmon in the river; and some were in despair that they should never see any more, affirming it was God’s judgement upon them for the prophanation of the Sabbath.” (Taylor 1618)

The export of pickled and dried Salmon remained an important business for Berwick until the advent of packing in ice in the early 19th century. The seriousness with which this trade was regarded is shown by the Oath which the packers of the barrels of pickled or dried Salmon had to take:

"You shall swear that you and every one of you for the year following shall walk and truly bear and behave yourselves in all things concerning your charge and duty for packing salmon and gilses and that you shall not, by day or by night pack any salmon or gilses into any barrel or half-barrel, until first the same cask or casks be abled and allowed by the gauger’s marks upon it or them, to be pointed and put on by the Mayor and his brethern. You shall pack no fish privately or openly, by day or by night, neither within the town, nor without the town, until first you have made Mr. Mayor or his deputy in his absence acquainted with the same. You shall not be in Council consenting for the packing of any salmon appertaining to any foreigner which is not free of this Guild, but you shall open and manifest the same to Mr. Mayor. You shall not pack any unclean, rusty, or unpined* salmon, but such as are good, sweet, red, salt, sault, well pined and merchantable fish. You shall misuse no man’s fish in the packing or loping thereof, but to do their duty orderly, honestly, and indifferently, as well as for the buyer as the seller. You shall be at the lawful commandment of the Mayor, and him to obey in his commandments and orders to you and any of you to be given for this year ensuing, you and every of you shall well and truly observe, perform and fulfil to the uttermost of your powers, so help you God by Jesus Christ". (Crossman 1890) (* pined = dried through exposure to the weather)

The Merchants, in turn, had to use on only “sworn packers” - a Mr. Nape was fined 5 shillings at a Head Guild held on the 21st January 1630 for not doing so (Crossman 1890).
The method of pickling salmon was recorded by John Collins in 1682 in a book entitled *Salt and Fishery, Discourse Thereof* as:

The salmon cured at Berwick. As described by Benjamin Watson, Merchant
1 They are commonly caught from Ladyday (March 25th) to Michaelmas (Sept 29th) either in the river Tweed or within three miles or less off at seas against Berwick.
2 Those caught on the upper part of the river. Brought by horseback to lower part. And those on the lower part thereof on boats to Berwick, fresh.
3 Then they are laid in a pav’d yard, where for curing there are ready 2 splitters and 4 washers.

4 The splitters immediately split them beginning at the tail and continuing to the head, close by the back fin, leaving the Chine (belly) of salmon on the under side intact, taking the guts clear out and the gils (gills) out of the head, without defacing the least fin and also take out a small bone from the underside, whereby they get to the blood to wash it away.

5 Afterward the fish is put into a great tub, and washed outside and inside and scraped with a mussuel (mussel) shell or a thin iron like it, and from thence put into another tub of clean water, where they are washed and scraped again, and from thence taken out, and laid upon wooden forms, there to lie and dry for four hours.

6 Thence they are carried into the cellars, where they are opened, or layed into a great vat or pipe, with the skin side downward and covered all over with French salt and the like upon another lay and so up to the top and are there to remain six weeks. In which time tis found by experience, they will be sufficiently salted.

7 Then a dried calves’ skin is to be laid on at the top of the Cask, with Stones upon it to keep them down, upon the removal thereof, after 40 days or thereabouts, there will appear a scum at the top about two inches deep, to be scum’d off or taken away.

8 The fish is to be taken out and washed in the pickle, which being done, there to be carefully laid into barrels and betwixt every lay, so much salt sprinkled of the remaining melted salt in the vats as will keep them from sticking together. And after the barrel is one quarter full, is to be stamped or leaped about by a youth of about 15 years old or thereabouts, being covered with a calves skin, the like at half full, and also when quite full.

9 Then a little salt is to be laid on the top and so to be headed up and then the Cask is to be hooped by the cooper and blown til it be tight.

10 Then a bunghole to be made in the middle of the barrel about which is to be put a ruff or roll of clay to serve as a Tonnell whereby frequently to fill the barrel with the pickle that is left in the vat, which will cause the oyle (oil) to swim, which ought to be frequently scummed off and serves for greasing of wool. And thus after 10 or 12 days to be bounded up as sufficiently cured and fit for exportation.
An early example of Salmon conservation comes from the 1660’s when a penny a barrel was levied on all Salmon exported from Berwick to pay for “the keeping of the kipper and young fry of fish in close and kipper time” as it was noticed that:

“.... many people, that live and reside a good way up in the country, nigh unto the little rivulets, which after a while running do empty themselves into this river of Tweed, that do at mill dams, and other places where fish run up to spawn, kill the same with leisters, and, in the months of April and May, catch the spawn and fry coming down naturally to the sea, to receive growth and strength..... the suffering of which, by many, is conceived to be the cause that this river, these last two years, hath not abounded with fish as formerly..... “ (Crossman 1890)

This can be regarded as an early version of the Tweed assessment - the levy made on the catch of Salmon in order to provide the resources to protect and enhance the stocks that is made by the RTC (it is also the earliest known statement that the Salmon of the Tweed were in decline). At the end of the 18th century, it was reckoned that around 300 men were employed in the Salmon fisheries of Berwick (Fuller 1799) when the fishing began on the 10th of January and ended on the 10th of October. Netting prior to the Tweed Act of 1857 could use three different types of gear: “Wear-shot”, “Stell-nets” and “Ring or Bob-nets”: The first of these is the type still in use, the others were abolished as being “fixed-engines” - the Stell-net was semi-circular in form, anchored in the river at its outer end and when fishermen in a boat at its middle felt fish strike, the anchor was lifted and the net pulled in from both ends. The Ring / Bob-net was a gill net (Scott 1888). It is not known how much use was made of the two fixed net types that were abolished in 1857, but it would seem likely that hanging a gill net across the river or holding a net open for fish were highly effective and the loss of this type of netting could explain some of the marked fall in catches after 1857 - however, the very fact that it was possible to abolish these net types without compensation suggests that they may not have been made much use of and analysis of catches at netting stations immediately before and after 1857 does not show any significant difference.

The change from the export of pickled Salmon to fresh started in 1788 when exports to London began to be packed in ice, and in a few years, pickling became obsolete (Scott, 1888). It appears though, that fish could be exported to London “raw” (unpickled) in the colder months of January, February and March before this time and only had to be pickled for transport.
in the warmer months. Trout, though, could be sent to London alive, in “wells” in boats in the warmer months (Scott, 1888). This live export of trout to London is also noted in the Old Statistical Account for the Parish of Hutton which was written in 1791 (Sinclair 1815). In 1801, 13,189 boxes of Salmon in ice were sent to London from Berwick and in 1806, 6,404. Each box weighed 140 lbs (63.6 kg) but more ice and fewer fish was packed in warmer weather (Scott 1888)

Further upriver the value of the fisheries is shown by donations to Melrose Abbey (Wade 1861): King David I (1124 -53) gave the monks of Melrose the right to fish in the Tweed on both sides at Melrose. Malcolm IV (1153-65) gave them the fishing at The Yair, (the word means a fish-trap) and the existence of an actual structure there is shown by the fact that the same donation included timber from the forest for keeping it in repair) and a net of their own and two of the royal nets at “Berwickstream” (Fawcett & Oram, 2004). In 1286 the local landowner at Mackerstoun gave the monks the fishings between Dalcove and “Brokismouth” with permission to land nets on any part of his ground and to construct a building for the convenience of the fishermen. This fishery was probably taking advantage of the narrowing of the river at the Mackerstoun Trows, as described in the account for the Parish of Roxburgh in the Old Statistical Account (Sinclair 1815) that was written in 1794/95:

“The rock is divided into four slits, which contain the Tweed when not in flood.... These rocks are frequented by great numbers of Salmon, and highly valued by fishers as a fit place for setting their nets. Three or four cartloads of fish are sometimes caught there in a morning”

Fishing in those days could have included more than fresh salmon: When James IV gave a charter to the lands of Elibank in 1511, “the fishing of salmon, le kipper and smoltis” was expressly excluded (Craig-Brown 1886) which indicates that coloured, red, fish (“kippers”) could be a target for netting. The exclusion of smolts along with other classes of Salmon seems to suggest that they too, could be targetted by fishermen with Salmon fishing rights.
(B) The History, Numbers, Catch-records and Locations of Netting Stations:

There are various sources for these:

1) The fish record books of the Berwick Salmon Fishing Company (BSFC) which are now in the Public Record office in Berwick. These give the monthly catches, split down into Salmon, Grilse and Trout for each of the netting stations they owner or operated and are extant from 1840 to when the company went out of business in 1981. In many cases, it seems the company took leases of netting stations owned by others or bought their catches, so some stations either occur for just a few years or for short or interrupted periods. The extent of the records for each station listed in these books is tabulated in Appendix D, Table 1. The longest, largely continuous series are:

Table 4.1.1: Long data series of netting records

<table>
<thead>
<tr>
<th>Name</th>
<th>Records</th>
<th>Missing Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COASTAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tweedmouthstell</td>
<td>1840-1916</td>
<td>1922, 1937-37</td>
</tr>
<tr>
<td>Far Seas</td>
<td>1840-1940</td>
<td></td>
</tr>
<tr>
<td><strong>ESTUARY</strong></td>
<td></td>
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</tr>
<tr>
<td>Sandstell</td>
<td>1842-1981</td>
<td>1936-38, 1944-49</td>
</tr>
<tr>
<td>Crabwater</td>
<td>1854-1981</td>
<td>1922, 1934-37,</td>
</tr>
<tr>
<td>Hallowstell</td>
<td>1840-1974</td>
<td>1916, 1922, 1934-37, 1944</td>
</tr>
<tr>
<td><strong>RIVER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yarrow</td>
<td>1840-1981</td>
<td>1922, 1934-36</td>
</tr>
<tr>
<td>Heughshield</td>
<td>1840-1974</td>
<td>1922, 1934-36</td>
</tr>
<tr>
<td>Low Bells</td>
<td>1840-1981</td>
<td>1920’1922, 1934-36, 1942</td>
</tr>
</tbody>
</table>

2) Registration of fishings with the RTC. These records will go back to the 1830’s, but only the records from 1911 onwards have been analysed so far. It is not clear whether registration with the RTC meant that stations were being actively worked that season or not, so the total number of stations registered each year is not necessarily the number of active stations. It is clear, however, that netting stations could be registered together as a single entry although still working as individual stations. Registration stopped in 1983, being replaced by (3).
3) Annual catch returns made to the RTC for Assessment. Records of these start in 1947 but are no longer complete for the earlier years, and carry on to the present day. Returns were not necessarily made for individual stations, but could be made for a number of nets being worked by the same company. After 1983 therefore, it is not always possible to know what netting stations were active or not if they were part of such a group.

4) Other sources: A few early records have survived from the Holmes Group, a major netting company whose records were given up for paper salvage during WWII.

5) The mapping of netting stations also used local memories and the existence (intact or in ruins) of netting shiels to give locations for stations.

By adding the RTC monthly assessment figures to those of the BSFC, the records of those of their netting stations that continued under other ownership after their closure can be extended forward to recent times. The records of Standstell can be extended back to 1736 with figures published in an article in the journal of the Berwickshire Naturalists’ Club by William Waite (whose family had previously owned the station) in 1831. The extent of records from each of these sources is shown in Appendix D1, Table 1. The maps in Appendix D1 show the locations of stations, worked out from published maps and local knowledge. A database of GPS grid references and photographs of netting stations has also been largely completed.

In assessing catches over the years, it needs to be remembered that though the technology of the net-and-coble has not changed much, some other factors have:

1) While the netting season has been the same (14th February to 14th September) since 1860, it varied in the past:
   - 1808 to 1856: Closed 14th October
   - 1857 to 1859: Closed 30th September
   - 1860 onwards: Closed 14th September

2) The weekly close period, or “Slap”, has changed in more recent times. Before 1952, this started at 18.00 hrs on each Saturday during the season and ended at 06.00 hrs on Monday mornings, a period of 36 hrs per week in which there was no netting. The start was then advanced to 12.00 noon, giving a slap of 42hrs. This was then advanced again in 1988, when the start was set at 18.00 hrs on Friday, giving a slap of 60hrs per week.
The number of netting stations registered with the RTC over the years is shown in Graph 4.1.1, divided into Coastal (incl. river mouth); Estuary (harbour mouth to Whiteadder); Lowermost River (Whiteadder to Till, including stations in the Whiteadder) and Lower River (Till to Teviot, including stations in the Till). While the Coastal and Estuary nets showed great stability of numbers up to the 1980’s, the numbers in the Till and above started declining before the war, with a less steep decline from Till down to Whiteadder. The big changes came in the 1980’s, with the closure of the Berwick Salmon Fishing Company in 1981 and an organised buy-out of in-river netting stations in 1987. Registration by the RTC ceased in 1983, becoming part of the annual return process instead, but a number of stations did not continue on to make returns, suggesting that they had already ceased operation and were only being registered as a matter of form or were part of a group return. A further buy-out of the remaining large stations in the Estuary in 2000 and 2003 has left just five stations in operation – Cheswick and Goswick on the coast, Gardo in the estuary and Paxton Policies and Canny (Norham Boathouse) between the Whiteadder and the Till. Not all the stations that have closed have been brought to definite endings, some simply ceased to operate. Those that have been bought out still exist – fishing rights cannot lapse or be extinguished through lack of use – but they are now restricted to being used for conservation purposes only.
Graph 4.1.1: The numbers of netting stations registered with the RTC 1911-1983 and making individual Annual Returns 1984-2006

The catch records of the net fisheries up to the present day are given in Appendix D.