

TURRIFF ANGLING ASSOCIATION

The River Idoch (or Burn of Monquhitter)

Advisory Visit Report Undertaken on behalf of **The Wild Trout Trust**
And
The Deveron, Bogie and Isla Rivers Trust

By Ron Holloway MIFM
On 19th May 2002



Idloch Town Water, Turriff

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Idloch Town Water at Turriff

Advisory Visit 19th May 2002-

This Advisory Visit was undertaken by Ron Holloway (R H Associates) on behalf of the Wild Trout Trust (WTT) and The Deveron, Bogie & Isla Rivers Trust, in the company of Mr D McGregor, (Chairman of Turriff Anglers) and two members of Turriff Parish Council, Robert Shields of the Rivers Trust and the Project Manager of the Rivers Trust.

Objective of the Visit:

The objective of this Advisory visit was to look at the Tributary of the Deveron called the Idloch and to pinpoint and identify the limiting factors that may be controlling salmonid survival and holding capacity within the area of the river inspected and to suggest any action which could be undertaken to remedy the identified problems that will then attract trout, sea trout and salmon to once more use the river which will provide good angling opportunities for local residents and visitors to the town. An improved river would be a valuable and attractive asset to the town of Turriff.

Background:

After much discussion about who actually owned the river and the fishing rights of the Idloch which is a significant tributary of the River Deveron, an area which runs through the Turriff Golf Course and the town Showground was chosen as the Advisory Visit Site to be studied. This tributary has been severely dredged over the years and even over straightened in several places. The area from the confluence with the Deveron upstream to the town Showground has excellent substrate of well sorted gravels, all of which are suitable spawning for brown trout, sea trout and salmon. Spoil from past dredging operations has raised the river banks and formed a flood protection berm. The river, however, still overtops and floods the surrounding land during annual flood events. Erosion here is minimal as adjacent land uses do not involve grazing livestock. The substrates, although not over impacted with silt and fines, do hold some silt. The silt and sediment loads emanate from intensive agricultural land use within the higher catchment and from some very misguided recent river bed dredging and river straightening operations higher upstream. The

invertebrate populations appear to be quite abundant but it is suggested that a more in-depth invertebrate count be taken to positively identify species, quantities etc. The present invertebrate populations however, indicate that the water quality is good. Historically this tributary had excellent runs of seatrout and held a good resident population of brown trout with a reasonable run of back end salmon. Anecdotal evidence suggests that fishing for the salmonids was excellent fifty years ago but fish numbers in fishing returns have declined dramatically since those days.

Suggested Actions:

Site One – (Picture One)

This reach below the old railway bridge has been dredged into a trapezoidal shaped channel and although the quality of the substrate is good and there are a couple of riffles for juvenile fish, the reach is too canal like. There is little, if any, adult fish cover or holding capacity. It is suggested that an alternating series of triangular deflectors are installed which will create a meandering effect and gently energise the flows to create scour pools just below each structure.



Picture One – Meanders.

These structures as illustrated to function correctly need to be triangular and constructed with substantial rocks able to withstand high flows and yet to be positioned so that they are only 4 to 6 inches above water level at mean base flow heights. The shape of these constructions will also continue to direct the current towards the centre of the river at all flow heights. To further improve adult fish holding capacity a number of randomly placed singles and clusters of rocks should be positioned along the reach.

Site Two (Picture Two)

Looking downstream from the footbridge, this again is a featureless stretch which offers little, or no, adult fish cover. Swimup fry habitat is fine along the stream margins but that is all. The remedies suggested are similar to that in Site One and the structures placed as illustrated in the overdrawn picture



Picture Two – Deflectors

Again, singles and clusters of instream rocks should be placed randomly along this stretch above and below the main structure. The effect of these will further energise flows and naturally create more adult holding habitat and help to keep the river bed cleaner.

Site Three (Picture Three)

Here, upstream of the footbridge is another ideal spot to instal a channel deflector and it is advised to instal them as in picture three below.



Picture Three – Scour Pool

Again, some randomly placed rocks up and downstream of this construction will help to improve habitat and break up the featureless surface of the river along this stretch.

Site Four (Picture Four)

Here is an ideal illustration of the size, shape and placement of boulders to construct a good flow deflector – this idea can be used beneficially at sites throughout the entire river system.



Picture Four – Rock Deflectors

Site Five (Picture Five)

At this site, just the use of randomly placed rocks would break up this featureless river bed and the resultant broken water would afford habitat for young of the year and fingerling salmonids.



Picture Five – Random Rocks

The subsequent re-energised flow would not only help to keep silt deposits on the move but also create areas of viable clean spawning gravels for resident brown trout.

Site Six (Picture Six)

This site provides an excellent opportunity to create some meanders within the stretch that were lost in the dredging operations. It is recommended that an alternating series of triangular rock deflectors, as illustrated in the picture, would encourage the river to develop some natural meanders. It is important to remember that all these deflectors should be set at the right levels – i.e. 4 to 6 inches out of water at mean base flow heights.



Picture Six – Meanders

Again, some random rocks can be placed along this stretch to improve holding habitat.

Site Seven (Picture Seven)

This partially fenced, canal like, stretch needs to be fenced off completely as illustrated in picture seven, furthermore some instream placement of boulders to break up the featureless aspect of the stretch would provide juvenile and fingerling holding habitat. The bankside vegetation should be allowed to grow and in high summer would almost cover the water surface which would help control water temperatures and release terrestrial insects into the water.



Picture Seven – Fencing

Comments:

Of all the sites visited, there were no places which, with a little help, could not be improved habitatwise. In my opinion, the river has much potential and with the implementation of the suggested structures and methods that are of solely naturally occurring rock, I am confident that the salmonid holding potential will be improved within a couple of years.

If electro fishing surveys have not been done on this stretch, a survey should be undertaken as soon as possible before any structural work is contemplated. Further,

ongoing monitoring is essential to measure the effectiveness of the structural work. Regular invertebrate surveys are also a valuable management tool as an indicator of water quality. I am confident that with the enthusiasm and co-operation shown by the Turriff Anglers and the Rivers Trust together with the Parish Council, further support and possible help could come in via SEPA and SNH etc.

When all the plans have been drawn up and the implemental costs assessed, it is suggested that the Wild Trout Trust be approached for them to consider offering some funding assistance, particularly as the benefactors of this scheme will be the residents of Turriff and visitors to the town. A well designed and sited interpretation board will also offer good PR for all the participating partners in the scheme.

Consideration could also be given to approaching the company that operates the sewage works which discharges effluent just below the confluence of this tributary and the main Deveron, because it could be argued that the effects of this discharge does deter migratory fish from entering this very important spawning tributary.