

# Trout and Grayling Newsletter

2015

## Introduction

In this year's newsletter we would like to give you a flavour of the range of work we and some of our partners have been involved with over the year to protect and improve trout and grayling stocks and fisheries.

We aim to:

"conserve and improve wild stocks of trout, sea trout, char and grayling, while enhancing the environment for all types of fisheries for these species" and "to enhance the social and economic benefits derived from these fisheries."

For full details of the Strategy and our previous newsletters please email [trout@environment-agency.gov.uk](mailto:trout@environment-agency.gov.uk). If you would like further information on any of the articles in this newsletter or share your views with us on the Strategy then please email us at the same address.

Sarah Chare, Deputy Director (Fisheries, Biodiversity and Geomorphology) writes:

I am heartened to see all these great examples of river restoration for the benefit of trout and grayling and I have been privileged to visit some of the sites in this last year. They all have the magic ingredients of great partnership working with the Wild Trout Trust, Rivers Trust and others and fantastic landowners and local communities. As we do more of these schemes in more places we will be ensuring a great future for England's trout and grayling fisheries.

## Conserving and improving fish stocks

### Improving the habitat of Dunston Beck, Lincolnshire.

The Dunston Beck is a clear, spring-fed stream rising from Lincolnshire limestone geology to the west of the village, on Dunston Heath. We've worked closely with the Wild Trout Trust (WTT), Lincolnshire Rivers Trust (LRT), local land owners, Dunston Parish Council and local volunteers to improve in-stream habitat and engage the local community

A Wild Trout Trust walk over survey and report commissioned by us in 2014, using rod licence funding, highlighted areas in the Beck for improvement. This report helped engage the community and local land owners leading to a series of community volunteer work parties which have restored over a kilometre of river so far.



Using willow bundles to create a berm and narrow the channel

Several local primary schools have been involved in monitoring the stream and carrying out a Mayfly in the Classroom project and LRT are leading on this. At the recent Dunston Medieval Fayre the

Environment Agency was represented along with WTT and LRT hosting an educational stand. This was well attended and has led to more landowners contacting partners requesting habitat improvement works on their land.



After habitat improvements

The partners are currently working with larger landowners upstream to develop a 'slow the flow' project above the village. There have also been expressions of interest from several local communities on other local limestone becks to engage in similar projects. This is an excellent local partnership working to deliver clear fisheries, environmental and WFD benefits through local people.

Matt Parr  
FBG Lincs and Northants

## **Demonstration day on the River Derwent, Derbyshire**

A practical day hosted by the Wild Trout Trust (WTT) was held to demonstrate the techniques commonly used by the Trust, enabling all angling clubs within the group to deliver future improvements themselves.



Tim Jacklin of WTT explains the methods used

The angling clubs who attended have the fishing rights to a significant percentage of the River Derwent, and improved understanding of rehabilitation measures will be of benefit to the rest of the catchment.

The techniques shown on the day included the introduction of large woody debris, juvenile habitat improvement techniques. There was also some discussion around the effectiveness of stocking.

Hazel Stanworth  
FBG Derbyshire, Notts and Leicester.

## **Demonstration days on the River Biss, Wiltshire**

Two demonstration days were held on the River Biss catchment and involved local landowners, community groups and angling clubs.

The demonstration days improved in-channel and marginal habitat at sites highlighted in the reports, and so helped towards Good Ecological Status.



Straightened section of the River Biss before habitat improvements



The same section as above after a brushwood berm (LHB) was installed and a tree hinged (RHB), creating a more natural meander and hopefully localised scouring of the gravel bed (which is currently hidden under a layer of silt).



A hinged tree, used to create flow variation and refuge habitat for fish

## Demonstration day on Glaisdale Beck, Yorkshire

Glaisdale Beck lies within the River Esk Catchment and is a picturesque rural water body. The Wild Trout Trust (WTT) and Environment Agency held a best practice woody debris and habitat management event on the river in partnership with the North York Moors National Park (NYMNP) and the Esk Rivers Trust.

The event was held over two days with invitees including riparian owners, local residents and volunteers. Each day was aimed to demonstrate how low cost techniques could be deployed to improve habitat without compromising flood risk or land drainage interests.

NYMNP volunteers worked hard over the two days to help with the event and install brash mattresses, flow deflectors and tree kickers.

The brash was positioned in the river and held into place wired to posts driven into the channel bed. This creates a matrix of twigs and branches that trap sediment, allowing for vegetation to establish over time and form a new bank line. The narrowing

of the channel increases the flow of the water between the mattresses or the flow deflectors helping to scour the bed and maintain the channel capacity without compromising flood risk or land drainage. More importantly this also helps to create and vary the flow within the channel and in doing so provides a more varied habitat for invertebrates and fish.



There was a good turn out on both days that saw informed and enlightened discussion about the work.

Duncan Fyfe  
Esk Catchment Co-ordinator, Yorkshire

## **Weir removal and using woody debris to improve Bentley Brook, Derbyshire**

The Environment Agency, in partnership with the Wild Trout Trust (WTT) delivered a programme of habitat restoration measures on the Bentley Brook.

A WFD fisheries walkover survey identified multiple barriers to migration as one of the constraining elements to achieving 'Good Ecological Status' on Bentley Brook. The fish populations in this watercourse are limited by the effects of poor habitat and barriers to migration.

Detailed designs for complete removal or technical fish passage on all of the weirs would have been cost prohibitive. Further detailed assessments were required to investigate low cost solutions.



Remnants of weir acting as barrier to fish passage

We used a time lapse camera to record removal of the weir remnants in 46 seconds.

Other work included fixing woody debris within the channel to promote scour and clean patches of gravel.



Woody debris used to improve habitat



Brown trout caught following the improvements

Dan Johnson  
FBG Staffs, Warwicks and West Midlands.

### **Improving fish passage for the River Wey, Dorset**

The River Wey is a small 10km crystal clear chalk stream with a good head of brown trout but very little opportunity for sea trout or salmon to migrate into the head waters due to three major obstructions to fish passage and 22 minor ones.

We were fortunate to get support from Dorset County Council by way of installation of a new hatch structure that has created the fish pass and the funding has enabled the concrete channel to be lined with baffles to create a depth of water over it at all times.

The section upstream of the weir is farmland and virtually the only section of the river that has not been heavily modified. There are valuable gravel riffles within this section but, unfortunately, but they are compromised by cattle poaching and siltation. The Wild Trout Trust surveyed this section of the river and recommended some modifications to restore this section.

Roger Genge  
FBG Wessex

### **Improving habitat and fish passage for the River Witham, Lincolnshire**

A major project on the upper Witham near Stoke Rochford, Lincolnshire, has been completed by a partnership involving the Wild Trout Trust, Environment Agency and Grantham Angling Association Fly Fishing Section.

Following on from a series of recent projects completed further upstream, the work has created 600 metres of new trout habitat and bypassed an impassable 2-metre high weir. Historically the river channel here had been moved up the valley side, creating a head of water over a weir to drive a ram pump, supplying water to nearby properties (now long since redundant). Over the years the channel, straight, wide and impounded by the weir, had filled with fine sediment and become a very shallow, slow-flowing reach with little habitat value.



Original course of stream being restored

The project has restored the river to approximately its original course along the valley bottom, the meanders created lengthening the river by 200m. The new channel was dug first, then the water diverted, then the spoil used to back-fill the old

channel following a rescue operation for the fish and native crayfish present. 25 gravel riffles were installed which provide ideal spawning habitat for trout and brook lampreys as well as a home for flow-loving invertebrates. A similar number of pools have been formed which will be good habitat for adult trout and several glides with larger rocks for juvenile trout and native crayfish.

Matt Parr  
FBG Lincs and Northants

### Conserving and improving wild trout by reducing stocking

## Upper River Ribble - Manchester Anglers.

From around 2000 / 2001 observations made when talking to trout anglers and while patrolling the river Ribble suggested that brown trout and grayling recruitment was very poor. Few juveniles were being seen or caught, and patrols in the spawning season showed that there were few adult brown trout spawning in the side streams where they should be.

Manchester Anglers were stocking around 800-1000 brown trout seasonally and by talking to anglers it became clear that around 90-95% of catches were being returned. (by these measures the river should be full of trout; it wasn't), This prompted a few questions:

- Where were these stocked fish going
- Were they overwintering
- Why was the river not teeming with trout
- What impact if any was the high stocking rate having on the wild fish population

In 2003 angler catch return log books were issued to Manchester Anglers club members so that catch numbers, locations and returned fish could be recorded.

In 2004 anglers recorded their fishing effort and these completed returns showed that 403 brown trout had been caught with approximately 90% returned.

In 2005 all trout stocked into club waters were fin clipped (had their adipose fin removed) so that identification of stocked and wild fish could be made.

Catch returns for 2005 showed that 454 trout were caught. Of these 222 were fin clipped stocked trout.

In 2006 Manchester Anglers could not stock because of disease issues in the region where stock trout were sourced. Catch returns for this season revealed that 290 trout were caught including just 3 fin clipped stocked trout. (2006 was also a drought year so angling effort was very low).

Manchester Anglers took the decision NOT to stock in 2007 and catch returns for that year were 350 trout caught including 1 fin clipped stocked trout.

Since 2007 MAA catches have returned to the numbers achieved when they were stocking and now anglers report catching plenty of smaller trout from 3" to 8" with some adults up to 3 or 4 lbs.

These fish are now successfully spawning.

The evolution of the Trout and Grayling Strategy and issues arising from the triploid / diploid stocking debate encouraged working with other upper Ribble angling clubs with considerable success.

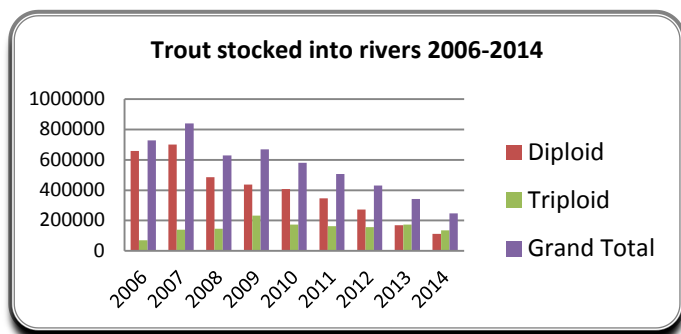
Settle Anglers, after reviewing the evidence obtained from Manchester Anglers' experience of ceasing stocking, decided at their AGM in 2012 to stop stocking.

Neil Handy  
FBG Cumbria & Lancs

## Improving wild trout populations by switching to triploid stocking

One element of the Trout and Grayling Strategy was to discontinue the stocking of fertile farm strain (diploid) brown trout into rivers and other unenclosed waters by 2014. From 1st January 2015, we have only allowed the stocking of non-fertile (female triploid) farm reared brown trout or the progeny of local brood-stock reared under a suitable regime into rivers in England.

would like to receive an electronic (pdf) copy please email [jennifer.yates@environment-agency.gov.uk](mailto:jennifer.yates@environment-agency.gov.uk)



Analysis of the trends in stocking over the last eight years shows that there has been a gradual reduction in trout stocked into rivers. In conjunction with this decrease in diploid stocking there has been an overall increase in the proportion of triploids being stocked.

Any stocked trout that you catch in rivers from 2015 will be triploid.

The Environment Agency works with a variety of partner organisations to improve fish populations. Several examples from this year are highlighted in this newsletter. If you would like further details on any of the projects mentioned, please email [trout@environment-agency.gov.uk](mailto:trout@environment-agency.gov.uk)

Also keep a look out for the Annual Fisheries Report 2014/15 which is soon to be published. This report will contain details of all our fisheries work and how rod licence income is reinvested. If you