

A:2 - Define the extent of problems caused to fishing areas by gravel deposition and map areas of active erosion that are producing gravel by undertaking surveys of main channels and tributaries

Photographic Monitoring of the River Tweed and its Tributaries - Summary Sheet for the Peeblesshire Trout Fishing Association

Summary

- The photographs that have been taken for each Angling Association water provide an invaluable baseline showing the state of our rivers at present.
- The Peeblesshire Trout Fishing Association should continue with its collection of river baseline photographs. Although progress has been made and the start of a baseline of what the Association waters are like at present has been provided, there is considerable space for a greater photographic coverage. Digital photographs can be very easily stored on DVD's so there are no practical limitations on the number that can be taken or stored.
- The TTGI will continue in its attempts to collect, and retake, old photographs.

Progress Report

As most anglers know, habitat quality is vital for both Brown Trout and European Grayling. The depth of water, speed of current, amount of cover and composition of the river bed are all factors that will determine the size and number of adult Trout and Grayling within any stretch of healthy river.

It is for these reasons that the TTGI uses photographs to monitor river habitat. These can help determine the stability of the areas of river fished by the members of the TTGI member Angling Associations. The photographs that have been taken for each Angling Association water will provide an invaluable baseline showing the state of our rivers at present. Many comments are made on how the Tweed has changed, mostly for the worst, over the last 40+ years, however little solid information is available on what the river was like in the past and as such most descriptions of change are purely anecdotal (and sometimes contradictory). The photographs taken of Association waters will provide, for the first time, solid indisputable records that will prove invaluable in not only the long term but possibly the short term as well (especially if there are major floods), and as such provide a significant investment in the future. The value of this work can best be appreciated by thinking of how useful it would have been today if photos like these had been taken 40 years ago.

Areas of concern include:-

- Gravel movement (mobile gravel can fill in deep holes, smother cover and increase water speed)
- Gravel input into the main river and the larger tributaries (increasing gravel inputs increase gravel movements and come from feeder streams in poor condition where banks are being eroded, as well as from larger channels themselves)

- Collapsing banksides (the extent of this is often accelerated by uncontrolled grazing from livestock, even in the main channels this can cause problems with increased levels of silt and gravel entering the river)

As well as providing visual information that can be easily analysed, photographs are cheap, easy to take, can be accurately reproduced and don't require lots of equipment. Digital technology also allows large numbers of photographs to be taken at one time, downloaded and stored simply, accessed quickly and analysed in detail.

Photographic monitoring of river channels was one of the first projects of the TTGI. From the onset of the Initiative volunteers from almost all of the member Angling Associations have been out on their Association waters taking photographs. All volunteers received some simple training so that all photographs could be taken using a standard procedure, with standard recording sheets so that the photographs could be taken again in the future from the exact same spot, even if the river banks change. As the photographs require low water levels so that the main river features can be observed and because many Angling Association waters are large, the taking of photographs is an on-going project with volunteers adding to a photographic database whenever they can.

Listed below is a summary of the photographic database for the Peeblesshire Trout Fishing Association.

- 10 locations on the Peeblesshire Trout Fishing Association stretch of the River Tweed from which 35 photographs have been taken.
- 79 pictures from the Lyne Water
- 25 pictures from the Eddleston Water
- In addition the TTGI has collected an additional 11 old photos (pre 1950) from the River Tweed. These photographs will be retaken (where possible) in the future in an attempt to assess any changes that may have occurred.
- The TTGI aims to set up a database within its web site which will allow the member Angling Associations to access to the photographic records.

Conclusions

The recommendation is that the Peeblesshire Trout Fishing Association continues with its collection of river baseline photographs. Although progress has been made and has started to provide a good baseline of what their Association waters are like at present, there is always space for a greater photographic coverage. The more photographs that are taken the more comparisons can be made in the future and the more accurate the assessment of the changes that have occurred/are occurring. In addition the TTGI will continue in its attempts to collect, and retake, old photographs. There aren't enough old

photographs collected at the moment to make assessments on any large scale changes that may have taken place, however some interesting local changes can clearly be identified from the old pictures of well known parts of the Tweed catchment. These changes will be reported on when more old photographs have been collected.

Appendix 1 – An example of some of the monitoring photographs taken by the Peeblesshire Trout Fishing Association



The River Tweed at Walkerburn – this picture will allow bankside erosion upstream to be recorded



The River Tweed at Haylodge Park – showing water depth and bankside vegetation



This aerial view of Walkerburn gives a good overview of what the River Tweed was once like, although it is unlikely that this photo can be retaken