Overview 2017

Frome, Piddle and West Dorset Fisheries Association: Supporting river management research

By Dominic Stubbing

See also: riverfrome.com
**Initiatives**

**Poaching**
Poaching is every fishery’s most thorny issue and we have worked as a group alongside the relevant authorities since our formation in the 1960s. Mostly in the supply of information, but also in helping prioritise, as these issues cover a large geographical area including Poole harbour.

**Pollution**
From the outset of our group fighting pollution has been a main activity. Working with authorities by supplying information or with polluters themselves to reduce a particular problem and we continue to target these problems.

**Over-abstraction**
Some years after our formation over-abstraction grew to become a big problem and as a result it became the first concerted campaign we fought. After some years considerable progress was made with the water authorities who made reductions in some abstractions and invested large sums into stream support systems in venerable areas.

**Commercial netting**
In supporting the Atlantic Salmon Trust, Salmon and Trout Association and South West Fisheries Association for more than two decades a range of success in re prioritising the value of salmon towards its recreational value has come about. This has resulted in a mixed success in reductions of netting activities around the UK. As a result some degree of pressure has been removed from sea migrations of our salmon.

**Migration barrier alleviation**
There have been large numbers of barriers in our area which have been impassable. Over the last decade 9 have had fish passes installed. Instigated with a small donation from us and a lot of organisational drive. This proves to be very cost effective as huge amounts of habitat are made available to returning migrant fish.

**River habitat management**
Back in the nineties concepts of river rehabilitation were brought over from the US and tried on parts of the River Piddle by the Game and Wildlife Conservation Trust. This was supported by us and led into a new era of river management. Habitat became the interest for change. The Wild Trout Trust was founded and it helped our local initiatives and the Westcountry Rivers Trust has led on a catchment scale.

Specific habitat projects have been delivered by us around our rivers. Some in areas in need of specific improvement and others around other projects like fish passes.

Habitat improvement can be creating a natural channel in its physical sense. However, fencing to protect rivers from livestock grazing improves biotic regeneration. Whilst this
is important swans which have no natural predator, and are protection by legislation, have been increasing in numbers and they graze and destroy large areas of weed.

**Stocking policies**
Stocking of brown trout is the most common fish stocking activity. For many decades this has been using fertile farmed strains. Now this has been restricted by the Trout and Grayling Strategy to sterile (triploid) brown trout or wild trout breeding programmes. We have over the past years pushed for decent research to underwrite this strategy. Where there are weaknesses we have sought alternative thinking on the subject.

**Diffuse pollution**
This has been a growing problem over the recent decades. Long have we sought to work with farmers to make changes to practice on venerable fields to protect them from excessive run off. Now this approach is being pooled with other concerned organisations in the Dorset Rivers Initiative and Poole Harbour Initiative. Changes in practice are driven at UK and EU level and our concerns will be voiced at this level to further change.

**Invasive non native species**
This is the subject for which we have to take great consideration in the future. This is due to the fast global movement of goods, due to modern aviation and the internet. Great problems have arisen like *Himalayan balsam* and the American signal crayfish.

In the future we need to protect our native fish, animals and plants from INNS. We can take interest in the protection of our rivers actually helping on native species like removing non natives like *Himalayan balsam* and reintroducing like native crayfish.

**Flooding**
Flooding effects fish mostly at their spawning stages, i.e. redd wash out, however, we have major concerns about property. The problems seen are often linked to the problems causing diffuse pollution and this remains a key focus for us. We take active concerns over development through the planning authorities and this can be for a variety of issues. We also work closely with EA land drainage department to observe problems, harmonise in channel work and weed management.

**Monitoring**
From as far back as 1960s the River Frome has been lucky enough to have been home to the Freshwater Biological Association river lab at East Stoke. As a consequence many studies by a range of organisations have been conducted on the local rivers and can be found at their library, if not the through internet. From a fisheries point of view the most important long standing monitoring is of the salmon counter, currently run by the Game & Wildlife Conservation Trust. Since the 1980s we have complimented this by instigating redd counts just after the winter spawning.
A case study of the rivers Frome and Piddle, Dorset, UK: One of river management’s best concentration of science.

Summary
Please see this list of Frome and Piddle catchment’s ‘key/landmark’ publications; an example of broad and deep scientific input to the UK’s rivers. The work covers modern conservation and the subjects that it encompasses. This ranges from the geographical impacts to the water quality, which nurtures aquatic weed, and so its invertebrates, fish, birds and mammals of influence.

It is in part due to the strength in place of the Freshwater Biological Association. Overall, this history is a result of decades of collaboration between freshwater scientists, river managers and owners and it is a ‘case study’ to the world (especially developing countries) of how to scientifically manage a country’s aquatic resource, environmentally and for everyone’s benefit. It’s an incredible legacy:

A diagram showing the relationship flow for the subjects:

SUBJECTS SHOWN IN ASSOCIATED COLOURED CAPITALS BELOW

WATER USE

Over-abstraction
Effluent

LAND USE

RIVPACs
http://www.fba.org.uk/river-invertebrate-classification-tool-riet-and-rivpac

River bank protection and rehabilitation


Swan grazing

Watercress farming

STOCK MANAGEMENT
Trout stocking
https://doi.org/10.1111/j.0022-1112.2004.0559.e.x


Salmon re-stocking
https://www.researchgate.net/publication/269407960_Re-introduction_of_Atlantic_salmon_Salmo_salar_L_to_the_Tadnoll_Brook_Dorset

FLOW OF LIFE

Geological influence

Nutrients


Sediments


**WEED MANAGEMENT**

**Instream weed and shade**


**Macro-invertebrates**


**Fish populations**


**Brown trout**


**Sea trout**


**Adult salmon**


**Salmon spawning**

**Smolts**


**Grayling**

**Pike**


**Dace**

**Roach**

**Eels**
Walker, A. M., Godard, M. J. and Davison, P. (2014), The home range and behaviour of yellow-stage European eel *Anguilla anguilla* in an estuarine environment. *Aquatic*
Small fish species


SALINE INFLUENCE

Salt water species


Fish eating birds


Poole Harbour inc. Otters

R & D GUIDANCE

Electric fishing

Fish tagging


**Guides**

Please check the left column of our riverfrome.com home page for river management guides.

**Further reading**

Students and enthusiasts please use references at the back of these key papers for further reading.