



"Improving the quality of fishery management in Scotland, by providing appropriate training for people involved in fishery management at all levels, from volunteers to full-time professionals"

## Scottish Branch Newsletter

December 2013

### **National IFM Update** (Paul Coulson)

The IFM has had another busy year with a range of events filling the calendar. Over 600 people have attended our conferences and workshops with a further 100 attending our specialist training courses. The highlights of the year were the European Eel Conference held at Fishmongers Hall, London in June when 200 people from 15 countries attended for 2 days of presentations and events. This was followed up with our Annual Conference, which this year was in Cardiff. 170 people attended over the 3 days and were treated to some excellent presentations, posters and visits. We also held a specialist conference on the impacts of noise and vibration on fish as well as a small streams workshop.

This year also saw us expanding our training catalogue with 2 new courses added. We now have a fish pass design and monitoring course which is designed for people who are engaged in the planning, design and monitoring of fish passes and easements. This is held at the Denver Complex in Norfolk and was very well received, we will be running this course again in spring. Our second new course is on estuarine and

marine fish identification and monitoring. This 5 day course was held in Southampton in early September and was a huge success. We will now be repeating this course in the north of England in April for those who are unable to make it that far south.

2014 looks like being even busier as we already have a number of conferences, workshops and training events in the diary. Our first specialist conference will be the IFM Lamprey Conference on **May 6th and 7th in York**, this will be followed by a fish tagging and telemetry workshop again in York in **July**. Our Annual Conference will be held in Liverpool on **October 6th - 8th**.

We are always looking for speakers and delegates from Scotland so if you are interested in any of the events please visit the main IFM website or email Paul Coulson who will be happy to help.

### **Bailiffs Seminar 2014** (Brian Davidson)

IFM is working with ASFB, local Ayrshire Boards and the Ayrshire Fisheries Trust to plan the 2014 Bailiffs Seminar. The date is **3 & 4 March 2014**, and we are working with the Fenwick Hotel, Fenwick, by

Kilmarnock to begin to finalise arrangements. Final details will be confirmed early in the New Year.

### **IFM Scottish Branch AGM** (Brian Davidson)

As before, this will take place during the course of the bailiff's seminar, and will be held at 18.30, Fenwick Hotel, Fenwick, by Kilmarnock. All members welcome. Further details will be posted in the New Year.

### **Bailiff training examination** (Brian Davidson)

The next bailiff training examination will be held on Monday 3 March, 16.30 – 18.30 at the Fenwick Hotel, by Kilmarnock. We may organise some venues elsewhere in Scotland at the same time, further details will be posted in the New Year.

### **Large Woody Debris and salmon** (Simon McKelvey)

For many years fishery managers have recognised the importance of native trees along riverbanks in providing shade, cover and food for salmon and trout. Salmon and trout evolved in our wooded streams and it is only in the last few centuries that human activity and overgrazing has removed the native tree cover from so many riverbanks in Scotland. One feature of a naturally wooded river is the presence of timber or large woody debris in the river channel. Rivers running through agricultural land or with established fisheries are often missing most of the wood which would normally be there because of removal by farmers and managers. There is a human desire to tidy up rivers and remove dead timber or fallen trees in case they cause flooding, erosion or obstructions.

Fallen trees and dead timber have an important role in the ecology of rivers and are particularly important for salmon and trout. Large woody debris creates hydraulic activity which turns over and cleans gravels. It also helps in the formation of pools, riffles and meanders which give the diverse habitats salmonids need.



*Anchored felled tree on the River Peffery*

Large woody debris retains nutrients in the river, as well as providing cover and shelter for fish. This shelter and cover is especially important for trout and larger salmon parr. From a salmon management perspective the number of smolts produced by a river is the greatest measure of successful management. The number of smolts produced is likely to be much more influenced by the suitability of habitat for large parr than for the younger life history stages. A river can have a vast area of excellent spawning and fry habitat but if there is insufficient cover for large parr then its smolt production will be constrained.

A range of techniques have been developed by the Wild Trout Trust for restoring this essential component of healthy natural rivers.

More information and some excellent demonstration videos can be found on the Wild Trout Trust website. [www.wildtrout.org](http://www.wildtrout.org)

## **Pearls in Peril** (Jason Watts/Jackie Webley)

- **Who we are.....**

'Pearls in Peril' (PIP) is a UK wide LIFE nature project with 22 partners working together to restore river habitats benefiting freshwater pearl mussel and salmonids (salmon and trout). The project was approved in September 2012 and will run until September 2016. A total of 48 actions will be delivered across 21 rivers designated as Special Areas of Conservation (SACs) for freshwater pearl mussel.

- **What have we done so far.....**

In Scotland, small tree enclosures with about 20 native trees in each have been planted along the banks of the Geldie and Clunie Burns, tributaries of the River Dee, with more planting to be done this winter. Through working with land managers a number of SRDP applications have been approved securing 6km of tree planting on the River Spey, 13km on the River Dee and 16ha of native woodland creation on the River South Esk. Together these measures aim to protect the river banks from erosion, intercept silt laden runoff, provide shade and increase woody debris and leaf litter in the river.

River restoration is planned for the Rivers Dee, South Esk and Naver. Sites have been identified where artificial structures such as weirs, bank protection and croys could be removed or reduced in size to re-create river bed habitat for freshwater pearl mussels and salmonids. We have spoken with

numerous landowners, tenants, crofters and fisheries managers to gain support and approval to investigate in river habitat creation. An important element of the project involves raising awareness of freshwater pearl mussel conservation. We are developing a 'Pearls in the Classroom' programme, which has already been implemented in primary schools in Deeside and Angus.



Combating illegal activities is crucial to safeguard mussels in Scotland. The PIP Riverwatcher has visited 16 SACs in Scotland to search for evidence of illegal pearl fishing, pollution and unauthorised in river works. The Riverwatcher has launched a Riverwatch scheme on Harris and has spoken to numerous people within each river catchment raising awareness of wildlife crime affecting freshwater pearl mussel and how to report it.

- **What have we still to do?**

Lots! All the actions combined aim to secure the population of freshwater pearl mussel in the UK.

Follow us on twitter [@mothemussel](https://twitter.com/mothemussel)

## **Beaver Salmonid Working Group (BSWG) (Sean Duggan)**

With beavers poised to return to Scotland pending a final decision from The Scottish Government in 2015, The BSWG are tasked with improving our understanding of beaver-salmonid interactions to predict the likely implications (positive and negative) of beaver activity in Scottish rivers. Our report to the Minister, due in October 2014 will draw on literature and experience from Scandinavia and North America while applying this knowledge in a balanced manner to Scottish salmon and sea trout rivers.

Beaver ecosystem engineering can benefit fish by increasing aquatic habitat availability and complexity. Ponding and associated input of organic material and large woody debris boosts invertebrate numbers and has been shown to increase juvenile salmonid productivity. Although commonly passable, large beaver dams can hinder adult migration during low flow conditions. Inundation of spawning gravel has also been reported over small scales in Canadian Atlantic salmon rivers. The BSWG is working with beaver and fishery experts from the UK and overseas, while monitoring the wild population in Tayside to improve our understanding of these complex interactions.



**New Research** - In order to add to the limited scientific data available on the subject, we are currently carrying out research in Tayside using 100 PIT tagged brown trout to assess passability of newly constructed beaver dams. It is hoped that further work can be carried out during the smolt run in 2014.

In collaboration with SNH, The Game & Wildlife Conservation Trust, and The Salmon & Trout Association, The University of Southampton are shortly to begin a PhD project entitled "Quantifying structural and hydrodynamic properties of beaver dams and their impact on the movement of migratory fish". Using laboratory and field based techniques, this study will inform any future management and mitigation measures by quantifying the ability of salmonids to pass beaver dams.

For any further information please contact Sean Dugan on 01224 294408 or view our [recent workshop proceedings](#).



**Electro-fishing below a beaver dam in Tayside**