SPEY FOUNDATION

BRIEFING

Spey Fishery Board

July 2016

www.speyfisheryboard.com

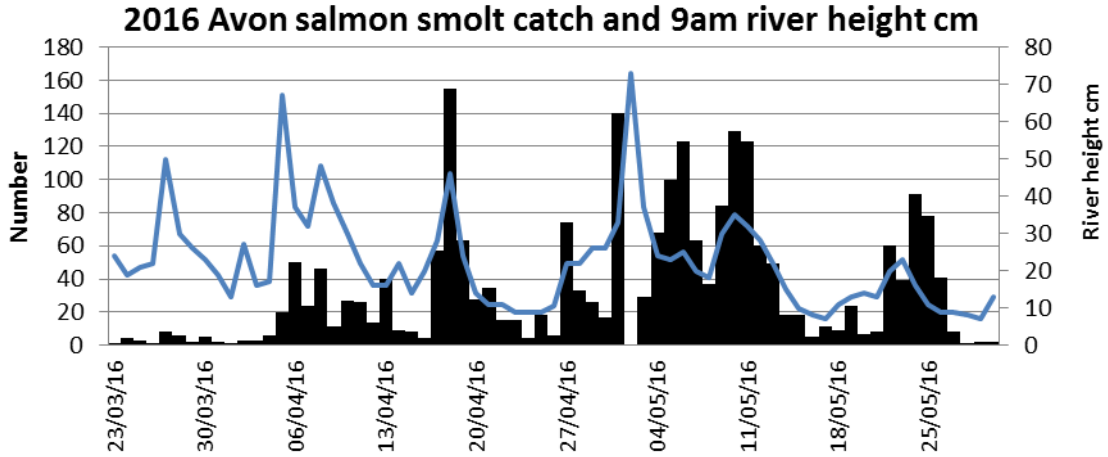
2016 Smolt Trapping Season Results

Smolt trapping has been a key feature of our monitoring in the Spey catchment for over a decade with a much longer history of smolt data available from Spey Dam. During the last three years rotary screw traps have been operated in the lower River Avon and in the upper reaches of the River Fiddich (Dorenell Wind Farm baseline monitoring). In addition a fixed trap was installed in the lower reaches of the Tommore Burn last year to monitor the outputs of the Tommore Burn Project.

Above: *The Tommore trap has generated a lot of interest, as in this example when some Ballindalloch rods visited.*

Right: *Dye marked Fiddich trout smolt*

As the rotary screw traps only sample a proportion of the run, by using mark and recapture techniques, an estimate of the size of the run can be derived. Full analysis of the results are not yet complete but the Avon salmon smolt run in 2016 was of similar magnitude to that recorded in 2015 (58,297 +/- 10,740), although both years were lower than the 107,790+/- 12,815 recorded in 2014. Trap efficiency has decreased from over 12% recapture rate for salmon in 2014 to about 4% in 2016. A similar decline was noted for trout between 2015 and 2016. Reasons for this reduction in trap efficiency are not clear, but it was not due to river levels alone; low trap efficiencies were recorded at all river levels this year. The number of trout captured in the Avon traps in 2016 was higher than in the previous two years. In the Tommore Burn the number of salmon smolts captured was 316, slightly lower than in 2015, although the run commenced earlier this year.



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Salmon out of the Classroom

The pupils who took part in this year's Salmon in the Classroom from Craigellachie, Aberlour and Mosstodloch Primary Schools, were given the opportunity to monitor the salmon in their natural habitat. Following the successful hatch of the salmon fry in their classrooms, the schools planted out their salmon fry in March this year, before returning to the local burn to check on their progress. Spey Foundation Biologist, Brian Shaw explained the lifecycle of the salmon and their changing habitat with assistance from Spey Catchment Initiative Project Officer, Liz Henderson and Seasonal Assistant, Jim Reid. Pupils also enjoyed learning about what other species live in their local burn with invertebrate sampling.

Liz Henderson said, "The pupils really enjoyed finding the fish in their local burn and finding out about what is native to the Speyside area and the ecosystem of the River Spey". She added, "It is really good to see the local schools showing an active interest in their local environment and both teachers and pupils thought that it was fantastic!"

The Spey Foundation are very grateful to Walkers Shortbread for their continued support for our education projects.

Top left: *Biologist, Brian Shaw explains the invertebrate sampling to Craigellachie pupils.* ***Bottom left:*** *Brian Shaw and Jim Reid demonstrate electrofishing.*

Top Right: *A pupil from Aberlour keen to learn how to electrofish.*

Middle: *Aberlour pupils look at the different invertebrates from their local burn.*

Bottom Right: *Pupils from Mosstodloch Primary School are shown the fry caught in their burn .*

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Conservation Limits

In 2015 the Scottish Government introduced a classification system, based on rod catch, for 109 salmon fishery districts in Scotland. The introduction of this new method of assessment (*for Scotland, similar methods are in use in most Atlantic salmon producing countries*) was in response to the Wild Fisheries Review, which recommended the introduction of licences to control the harvesting of wild salmon. This recommendation was subsequently modified following consultation, leading to the introduction of Conservation Limits.

The first round of Conservation Limits assessments were published in late 2015. Fishery districts were placed into one of three categories according to their probability of achieving certain thresholds of compliance:

- Category 1 rivers/districts had achieved at least 80% probability of meeting the conservation limit, therefore existing management measures were considered effective and sustainable.
- Category 2 rivers/districts had reached 60% compliance, therefore measures to reduce exploitation were required, although mandatory catch and release was not.
- Category 3 rivers/districts had achieved less than 60% compliance, exploitation was considered unsustainable and mandatory catch and release was imposed, along with the requirement to produce a conservation plan.

The River Spey was considered to be a Category 1 river, although scrutiny of additional information provided with the final categorisation report showed that the Spey was the lowest ranked of the twenty Category 1 rivers/districts.

The introduction of these plans proved to be highly contentious, but they have been implemented with work progressing on a number of fronts to revise and improve the data available for assessment and the methodology. At present, rod catch data from the previous five years is used to assess compliance. This may not be an appropriate metric for lightly-fished rivers, or suitable for spate rivers in a drought year for example, when a large proportion of the stock may enter after the end of the season.

A liaison group has been established between Marine Scotland (MS) and local biologists to facilitate communications and the development of the conservation regulations. Spey biologist Brian Shaw is a member of this group, which has now met three times since April, making good progress on a number of issues. An example is the methodology used for calculating the wetted area of the accessible habitat in each catchment. The method used by MS in the conservation regulations is map-based, using Ordnance Survey data, which has the merit of universal availability. Following the introduction of this method, our own estimates of wetted area for the Spey catchment have been reviewed , changing little at just over 11 million square metres. The map-based system used in the conservation limits assessment for the Spey had produced a figure of over 15 million square metres, a discrepancy of 24%. This issue was discussed at the latest liaison group meeting, where it was agreed that the map-based system is likely to over-estimate the wetted area, and also produce varying outputs depending on the nature of the river. Further work is required to refine this issue, but it is a good example of all sectors working together to improve the system.

In addition, a number of technical working groups have been established, including representatives from MS, local biologists and others. Groups have been established to progress grilse error, exploitation rates, fish counters and the use of electrofishing data in the conservation regulations. Brian Shaw sits on the grilse error and electrofishing groups.

The introduction of Conservation Regulations has focussed the need to understand the characteristics of our run of fish better. Data on issues such as sex ratio (one of the most fundamental biological characteristics) is limited, and not just on the Spey. Earlier work had concluded that the number of grilse in the river had been underestimated by 42% during the latter part of the season, although that is unlikely to be the case now with the proportion of grilse reducing as an overall proportion of the total stock. In order to update our information on this vital factor, some of the beats on the river are assisting the Spey Foundation by collecting representative samples of scales from fish caught throughout the season.

The Conservation Limits assessment will be reviewed and published annually. A lot of work is ongoing to have as many refinements as possible ready for the 2017 assessment. One key improvement that is now ready is that assessment will be by river, rather than by fishery district. This is a key development which will be welcomed by many.

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Aviemore Community engage in Plans to Reconnect a Side Channel to the Spey

Steady progress is being made with a scheme to reintroduce a flow into a 500 metre stretch of disconnected channel of the River Spey at Aviemore, and a side channel at Delagyle, for the benefit of salmonid habitat. Funded by the Perils in Peril project, Envirocentre Ltd were engaged in the Spring to undertake a hydro morphology assessment at both locations and have proposed designs to introduce culverts which will allow flow down these channels at all river levels.

Stakeholder meetings were held on the 7th June, where the proposals were presented to interested parties. An Agency and Community Consultation event was held in Aviemore, where the local community gave a positive response to the proposed plan.

The team are now finalising the design, with a view to ground works taking place in early autumn.

Above: *Dr Kenny MacDougall from Envirocentre explained the proposed plan to local residents in Aviemore*

River Spey Catchment - the next 5 years

The Spey Catchment Initiative (SCI) recently hosted an all-day seminar event in Boat of Garten which was attended by 51 personnel from a wide range of organisations and interest groups. In the morning there was a series of presentations about water environment issues, with speakers from SEPA, Highland Council, Cairngorms National Park Authority, SAC Consulting and the Spey Fishery Board.

The afternoon was devoted to the new River Spey Catchment Management Plan, which is being redeveloped to reflect the latest national and local targets, objectives and aspirations for the next 5-10 years. The SCI Steering Group ran a series of workshops looking at the Strategic Aims and associated draft objectives and actions that have been proposed for the new plan, including Fisheries Management. The feedback from the workshop will now be collated and incorporated into the new plan, which is due to be launched in the autumn.

Above left: *Spey Catchment Initiative Project Officer, Liz Henderson, gives a presentation at the seminar in Boat of Garten. (Photo courtesy of Anne Elliot , SNH).*
Above right: *SFB Director, Roger Knight facilitates a workshop on Fisheries Management.*

Dates for the Diary

Spey Fishery Board Meetings

To be held at 10:00am at the Craigellachie Hotel, Victoria Street, Craigellachie, AB38 9SR on the following dates:

Thursday 11th August and Friday 18th November 2016

Members of the public are invited to attend as observers, but are requested to give notice to the Board's Administrator, Sally Gross, by telephone on 01340-810841, or by email at **admin@speyfisheryboard.com**

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