

## Fisheries Management Scotland Consultation Response

### Scottish Government Consultation on salmon assessment for the 2018 fishing season



13 October 2017

#### Introduction

Thank you for the opportunity to comment on the proposed 2018 conservation assessments. Fisheries Management Scotland are the representative body for the DSFBs, the River Tweed Commission and the Rivers and Fisheries Trusts in Scotland. Many of our members will make individual responses to Marine Scotland and therefore we have tried to capture the key themes that our members have highlighted to us, rather than focussing on specific local issues.

#### General Comments

Fisheries Management Scotland supports the principle of ensuring that any exploitation of salmon is sustainable. We also recognise the significant and challenging work that Marine Scotland Science have undertaken to develop the models which underpin the Conservation regulations and we welcome the opportunities we have had to engage with this process through the Salmon Liaison Group. We also recognise the comparatively limited amount of data available in Scotland and in particular the lack of a coherent network of fish counters and information on angling effort. However, if managers and anglers are to have faith in the current system it is vital that these data gaps are filled with some urgency. This will require ongoing investment in infrastructure where counters can be installed, and alternative approaches such as building juvenile assessment data or snorkel surveys into the model.

In terms of the current approach, we note that it considers salmon, for conservation purposes, as a single stock. We think that there is merit in an aspiration for the process to look at tailored conservation limits for distinct sub-stocks of fish. This would enable action to be targeted at those stocks at most risk. Such an approach would require further inputs in terms of data, however we would like to see an aspiration to move to assessing separate stock components within rivers where local data will support this.

Given the number of rivers that have fallen into category three, resulting in mandatory catch and release, there are a large number of anglers and fishery owners who feel that a disproportionate focus has been placed on controlling the activities of anglers, whilst other pressures on fish have received much less attention, or indeed have been actively supported by the Scottish Government.

It is important to recognise that DSFBs powers are limited, and the majority of pressures that Atlantic salmon and sea trout face are out with the direct control of fisheries managers. There is a need for a step-change in efforts across the Scottish Government and its Agencies to support local fisheries managers in ensuring the protection and improvement of these iconic species. Some of our priorities for increased effort include:

- Changes to the current regulatory regime for salmon farming in Scotland are urgently required, to ensure that regulation meets the needs of both wild fish and the industry. It is important that the regulatory system recognises that fish farming occurs within a shared space, and that the needs of wild fish are fully considered in decision making. As things stand, the Fish Health Inspectorate can only consider the health and welfare of the fish within the cages, and not the potential impacts on wild fish. SEPA, when considering applications to increase biomass at a site, do not consider the impact of increased levels of sea lice on wild fish.
- An increase in ambition to ease fish passage through regulatory intervention by SEPA – fish passage is recognised as one of the three main priorities of RBMP2 and the challenges faced by smolts in their

downstream migration, particularly in relation to hydro schemes (large-scale and run-of-river), are now well-understood.

- Related to the above, we are working to ensure that the decision to reintroduce beavers to Scotland does not negatively impact upstream or downstream migration of our native salmonids, particularly in relation to the current status of stocks – it is crucial that the developing management plan allows fisheries managers to take quick and effective action to ensure fish passage, and that such management actions are fully funded.
- A greater emphasis on the needs of migratory fish when licensing new activities such as offshore renewables –coastal movements of salmonid fish are poorly understood, and we do not consider that the licensing process has provided sufficient safeguards for migratory fish.
- Acidification impacts on streams resulting from forestry remains an issue for salmon and sea trout.
- Mitigation of predation pressure at key points in the salmon’s life cycle (seals and piscivorous birds such as mergansers, goosanders and cormorants) – we would like to see efforts focussed on a greater number of options to keep seals out of rivers through developing scaring technology, greater ability to remove problem seals when they do enter rivers and options for proportionate, effective and strategic control of piscivorous birds at river catchment level. We are also working with SASA and SNH to understand better the options for scaring piscivorous birds away from rivers during the smolt migration in the spring.

### **Comments about the model**

Several of our members have commented about the way that lochs are treated within the model and have questioned whether the wetted area used in the model should include lochs. We note from the accompanying guidance that due to uncertainties over how salmon use loch areas, the rivers are assessed with and without loch areas included. Those grade 3 rivers that would have achieved a higher category without loch areas being included are awarded grade 2. However, the same approach does not appear to be taken in the circumstance that a river falls into grade 2. We seek clarity as to why this approach has been adopted and suggest that a consistent approach is adopted for those rivers which site close to the boundary between grade 2 and grade 1.

Related to wetted area is the need to ensure that habitat assessments are taken into account when calculating the estimated egg requirement for the catchment. This will help validate and provide some ground-truthing to the outputs of the model. A simple system of habitat scoring is used in other jurisdictions (e.g. Norway) and we consider that this would markedly improve estimates of egg requirements. The Scottish Government committed to setting up a specific working group to examine this further. We believe that work should start on this with some urgency.

Several of our members have raised concerns about the use of rod catch as the primary driver for the assessment. In particular, the concern has been expressed that this approach risks ‘penalising’ those rivers which are lightly fished, sometimes as part of an overall conservation strategy. We understand that Marine Scotland Science is considering how effort data might be collected and we would like to discuss how this process might be accelerated in order that such data might be brought into the model.

The introduction of the latitudinal effect on exploitation rate within the model would appear to have had a significant impact on estimated stock levels, reducing stock levels in the north with increases for some southern rivers. However, it would appear unrealistic to think that the gradient of this effect can be as steep as suggested (ranging from 21-46% for the Helmsdale at 58°N to 5-7% for the Kirkcudbrightshire Dee at 55°N). Clearly, if such a gradient did exist, it would not stop at the Scottish border and therefore it is important that data from the rest of the UK is examined. It is also important to understand whether this effect is a real phenomenon, rather than a consequence of the counters and rivers driving the effect. For example, we understand that only one beat on the Kirkcudbrightshire Dee is fished for salmon. Again, we emphasise the

need for ongoing investment in counter infrastructure to ensure that the model outputs are as accurate as possible.

We are aware of a number of examples where locally-available catch data has not been used in the calculation. We are not clear as to why these discrepancies arise, but we would emphasise the importance of ensuring that the most relevant data is included in the model. We have encouraged our members to highlight such instances to Marine Scotland, and we hope that any new data can be incorporated as soon as possible.

A number of our members would welcome the opportunity to further edit the salmon distribution map to improve the area of salmon habitat that is entered into the model. In some cases, support in this process would be beneficial.

Whilst we recognise the challenges of bringing juvenile data into the model, many of our members feel that juvenile data provides a better measure than rod catch of the health of the river. We understand that it may be possible to trial this approach during 2018 with a view to incorporating such data in future, and we would strongly encourage this work to be taken forward as soon as possible. It may also be possible to use such data in a number of key catchments to ground truth the model outputs. Whilst it is not possible to measure egg deposition in rivers directly, electrofishing data would give an indication of the previous year's recruitment.

With regard to the correction factor applied to the data we would like to explore further the extent to which the correction factors are driven by relative differences between count and catch. We are particularly concerned about deriving relationships from rivers where catches late in the season comprise largely of fish that were counted moving upstream in earlier months rather than in the same month as caught. This will lead to problems in rivers where the monthly distribution of entrants differs from the monthly distribution of counts on those few rivers which happen to have counters, for example rivers that only produce later running fish.

#### **Comments about the underlying policy**

A number of our members have commented that swings between categories in different years are particularly difficult to manage at a local level. For the layperson, such swings might suggest huge changes in the calculated expected number of fish returning to rivers. We recognise that these changes are a function of changes to the model, many of which have been made in response to concerns put forward in previous years. The faith that anglers have in the system is vital, particularly given the points raised above with regard to the wide range of pressures that are faced by Atlantic salmon. A possible solution, which we would like to consider further with our membership, would be to focus on reviewing particular areas in which there are concerns about the accuracy of the model outputs in advance of the 2019 season, whilst allowing a degree of stability in those areas in which stakeholders are broadly content that the current categorisation reflects the situation on the ground.

We are aware of concerns, where rivers have been categorised as Grade 3, and sometime where gradings have fallen from grade 1 to grade 2, that it is becoming increasingly difficult to let fishing on the river. This has resulted in loss of anglers, and therefore income, and we are aware that in some cases this has made the salmon assessment unaffordable. District Salmon Fishery Boards (DSFBs) are primarily funded by the Assessment raised annually on each fishery's rateable value, which in turn is largely derived from fish catch. Throughout the Wild Fisheries Reform process, we have consistently argued that the current management system is underfunded. It is vital that the fisheries management sector is adequately funded, particularly where investment may be required to improve the conservation status of the river. It is also vital that we find a way to fund angling promotion and development, at a local level, in order to reverse the current declines in anglers. In this regard, we would like to see tailored support to angling clubs and associations to help

ensure the angler numbers are maintained and improved in those areas where categories may be having an impact. We believe that the money currently provided to Fishpal as a support package for clubs, if applied in a locally appropriate and tailored way, could be very beneficial.

### **Conclusion**

Fisheries Management Scotland supports the underlying principle of ensuring that any exploitation of salmon is sustainable. We welcome the opportunities that we have had to comment on the process to date and will continue to contribute positively in future. However, it is vital that demonstrable action is taken by Scottish Government and Agencies to address the range of potential pressures on salmon stocks as it is unfair and disproportionate to focus on fisheries exploitation in isolation.