



## Annual Report 2018



- Top Left Cover Photo:** *Visiting angler Willie Mair with a spring salmon at Beaufort Pool, Delfur, April 2018. (Photo: Mark Melville, Head Ghillie, Delfur Fishings).*
- Top Centre Cover Photo:** *Delfur Head Ghillie Mark Melville holding visiting angler Joanna Pickup's 20lb salmon at Hollenbush Pool, Delfur. (Photo: Joanna Pickup).*
- Top Right Cover Photo:** *Visiting angler Mark Aitchison with a fine 20lb salmon at Broom Pool, Delfur. (Photo: Mark Melville, Head Ghillie, Delfur Fishings)*
- Bottom Cover Photo:** *The River Spey at Rothes & Aikenway, October 2018. (Photo: Roger Knight)*



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# Annual Report 2018

by

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and

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**January 2019**

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## Spey Fishery Board

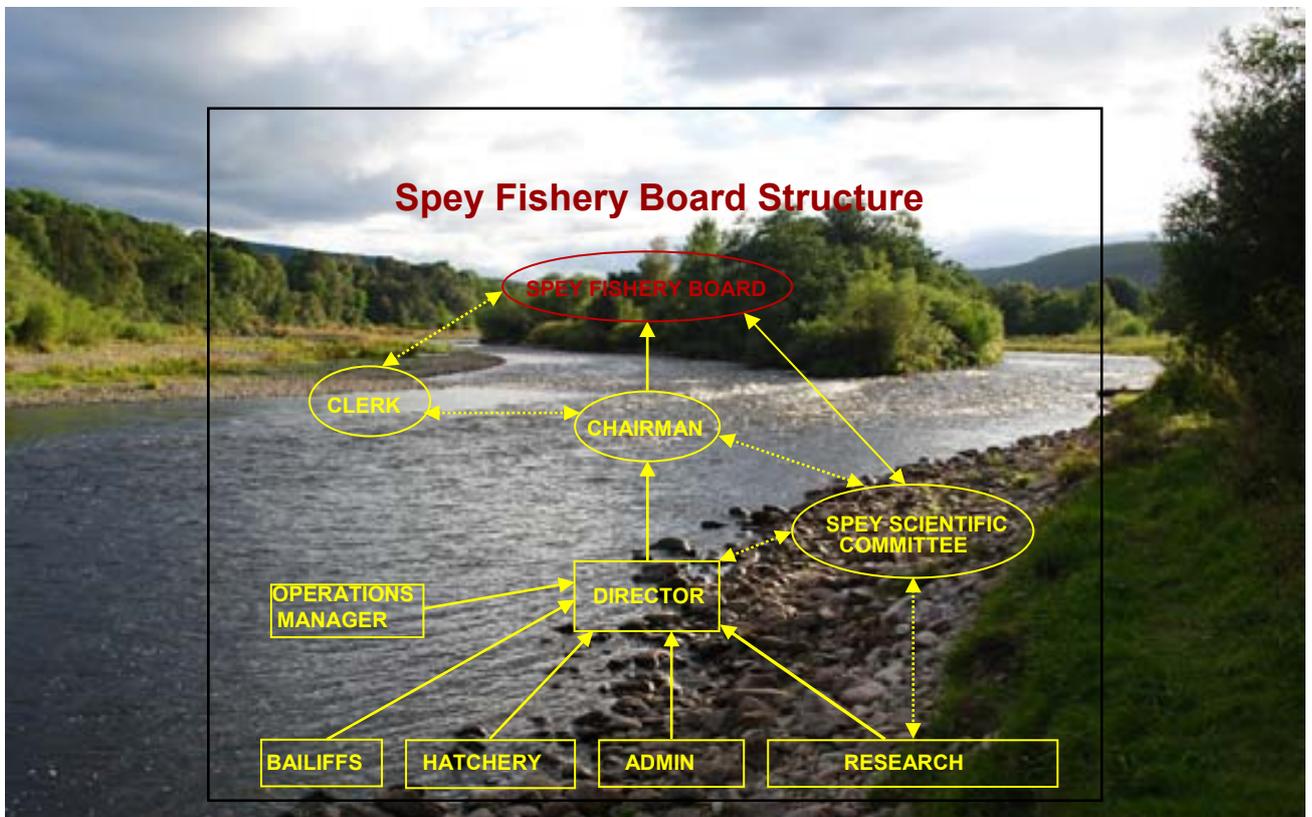
- Chairman:** *Brian Doran*, Mandatory for Craigellachie Fishings
- Proprietors:** *William Mountain*, Delfur Fishings  
*Oliver Russell*, Mandatory for Ballindalloch Trustees  
*Angus Gordon Lennox*, Gordon Castle Fishings & Mandatory for the Brae Water Trust  
*Alan Williams*, Carron Fishings  
*Peter Millar*, Orton Estate  
*Dr. Catherine Wills*, Knockando, Phones and Lower Pitchroy  
*Toby Metcalfe FRICS*, Mandatory for Crown Estate Commissioners  
*Peter Graham FRICS*, Mandatory for Rothes & Aikenway and Laggan Fishings
- Co-optees:** *Grant Mortimer*, Strathspey Angling Improvement Association  
*Craig Mackay*, River Spey Anglers Association
- Invitees:** *Jennifer Heatley*, Scottish Natural Heritage  
*Richard Fyfe*, Scottish Environment Protection Agency  
*Graeme Henderson*, Scottish Environment Protection Agency  
*Alistair Galloway*, Scottish Environment Protection Agency
- Clerk:** *William Cowie*, R. & R. Urquhart

## Spey Scientific Committee

- Chairman:** *Peter Graham FRICS*, Mandatory for Rothes & Aikenway and Laggan Fishings
- Members:** *Dr Alastair Stephen*, Scottish & Southern Energy  
*Prof. Eric Verspoor*, University of the Highlands & Islands  
*Dr Ronald Campbell*, Tweed Foundation  
*Brian Doran*, Mandatory for Craigellachie Fishings & SFB Chairman  
*Steve Brand*, Head Ghillie, Ballindalloch Castle  
*Simon Crozier*, Ghillie, Castle Grant Fishings  
*Roger Knight*, SFB Director  
*Brian Shaw*, SFB Biologist

## Spey Fishery Board Staff

<b>Director:</b>	<b>Roger Knight</b>
<b>Office Administrator:</b>	<b>Sally Gross</b> (Part-Time and until March 2018) <b>Joanna Walker</b> (Part-Time and since April 2018)
<b>Hatchery Manager:</b>	<b>Jimmy Woods</b>
<b>Operations Manager:</b>	<b>Duncan Ferguson</b>
<b>Head Bailiff:</b>	<b>Richard Whyte</b>
<b>Bailiffs:</b>	<b>Jason Hysert</b> <b>Alistair Grant</b>
<b>Research:</b>	<b>Brian Shaw</b> (Biologist) <b>Steve Burns</b> (Assistant Biologist) <b>Jim Reid</b> (Assistant Biologist - Seasonal) <b>Carrie Smith</b> (Assistant Biologist - Seasonal)
<b>Spey Catchment Initiative:</b>	<b>Penny Lawson</b> (Project Officer)
<b>Scottish Invasive Species Initiative</b>	<b>James Symonds</b> (Project Officer)
<b>Spey Foundation:</b>	<b>Euan Connell</b> (Assistant Biologist - Seasonal)



*Figure 1: The Spey Fishery Board Structure*

## Chairman's Foreword 2018

The decline in numbers of returning adult Salmon continued into 2018 with only 3,178 Salmon and Grilse being caught. Sea trout numbers appeared to show some resilience with 1,830 being caught, however, this may have been due to increased angling effort. With the unusually hot summer causing extremely low water conditions, many anglers abandoned daytime fishing for Salmon, preferring to go out late in the evening looking for a Sea Trout. Many anglers were rewarded with several fish, including some tipping the scales into double figures!

Spey anglers continued to support the Board's conservation policy with 98% of Salmon and Grilse and 88% of Sea Trout being returned.

History will record 2018 as the worst season on record and this has caused considerable disquiet, frustration and unrest in many sections of the angling community. Many anglers abandoned plans to come North having read of the very low numbers of fish being caught. The Ghillies had an extremely tough time trying to maintain a cheerful and positive attitude towards the rods they are charged with looking after.

Taking care of disappointed and often unhappy fishers is not a particularly pleasant task and the Ghillies are to be commended for the way they handled the most difficult season they have ever experienced.

Many anglers and even proprietors were very concerned at the lack of fish and a great deal of criticism was levelled at the Board who were accused by many of mismanaging the river.

I do not believe that is the case.

Numbers of returning fish have been declining for several years now, not only on the Spey, but on every other river in Scotland, Ireland, Norway, Russia, Iceland, Canada and, in fact, anywhere else with a migratory population. Surely they are not all mismanaging their rivers?

30 years ago 25-30% of Smolts going to sea returned as spawning adults. Today that figure is somewhere between 0 and 2%!!

This loss is almost certainly due, at least in part, to increased mortality in the marine environment. Predation, both in-river and at sea, will also be playing a part, as will climate change. The marine environment is outside of the control, or even influence, of river managers. Surely then, we should be focusing our energies on identifying the causes of this increased mortality in the marine environment rather than criticising District Salmon Fishery Boards and those who advise them.

My colleagues on the Spey Board, Roger Knight our Director, Brian Shaw our Biologist and all our staff have worked tirelessly and selflessly throughout this year to make sure that the river we are charged with protecting and conserving is in the best possible condition to support both juvenile and adult Salmon and Sea Trout. It was disappointing, therefore, that so much abuse was directed at them from so many quarters.

I think it is appropriate at this point to highlight some of the work that your Board has been involved in since my last report; Having opened-up a 500 metre side channel at Aviemore in 2017 we opened-up another side channel at Delagyle during 2018 with funding provided by Speyside Distillery, topped up by SNH.

Brian Shaw has worked closely with Tamdhu Distillery to facilitate the installation of an Alaskan Steep Fish Pass at the 4.5 metre high distillery weir on the Knockando Burn. This has opened up approximately 5 miles of additional spawning and provided access to migratory fish to an area previously denied to them for over a century. Through the Spey Catchment initiative we have assisted the Tomintoul and Glenlivet Landscape Partnership with the removal of three barriers to migratory fish passage in the Tomintoul Area. These

barriers have been eased and fish passage restored. Also, through our partnership organisation, the Spey Catchment Initiative, we have completed riparian enhancement programmes and have plans for 2019 for further such programmes which will see a diffuse pollution problem averted and water quality improved.

Brian Shaw has been working with Diageo to install a replacement fish pass at the upper distillery weir at Mortlach, by Dufftown. The lower Mortlach weir had a Denil fish pass installed in 2006 and although the upper weir had a pass installed at the same time, the upper pass has never worked effectively. The current works, which will be completed soon, will see this problem resolved. Roger Knight comments in more detail on these and other initiatives later in this report.

I understand that it is not always obvious how the type of work outlined above can help to improve the numbers of adult fish returning to the Spey, and therefore available for anglers to catch, but I can assure you that it does and more effectively than stocking with millions of fry. Our hatchery operation is tightly controlled by legislation and exists to provide juvenile fish for mitigation or restoration stocking which can be effective. There is absolutely no evidence that large scale enhancement stocking has improved the rod catch on any river.

I accept, however, that this debate will go on regardless!

Science does show that large scale stocking over long periods can have an adverse effect on the wild fish population.

Despite the terrible season we experienced in 2018, I believe that we can be positive about the future. The projects detailed above and others being planned on the Spey and elsewhere will have a positive effect. The Missing Salmon tagging project being promoted by the Atlantic Trust and supported by your Board will provide much useful data on the behaviour of smolts going down-river to sea and on their journey to the feeding grounds

in the Atlantic. If you would like to support this important project financially, please contact Roger Knight at our offices.

We are working with our local MSP to raise awareness amongst Scottish politicians of the plight of the Atlantic salmon and to encourage the Scottish Government to take a leading role in garnering international support to find solutions. This project is being planned alongside Fisheries Management Scotland, on whose Board we are represented, and the Scottish Government.

In line with legislation, the Board will be holding a Triennial election in February 2019. At this time all existing Board members will resign and, if they wish, offer themselves up for re-election. Nominations have also been invited from all eligible proprietors. The election will take place at the Board's next scheduled meeting on February 8th 2019. Following the election of the new Board, the members will elect a new Chairman.

The Board has recently received the resignation of Alan Williams who has served the Spey Board with distinction for many years. Alan joined the Spey Board in 2004 and succeeded Colin Whittle as Chairman in 2005. Alan held this position until I took over from him in 2014. Alan also served the wider river management community as Chairman of the Association of Salmon Fishery Boards for a number of years.

Alan's knowledge and understanding of the many complex issues surrounding river management, together with his unfailing commitment and enthusiasm, made him an extremely effective Chairman. His understanding of the impact of water abstraction, together with his determination, led to Scottish and Southern Energy withdrawing their application for further abstraction, probably the most significant achievement of recent years. Although sometimes robust in argument, Alan had a great sense of fairness and was always willing to debate the issues. He will be a great loss to the Board and we wish him well for the future.

On a personal note, I am very grateful for the support and guidance he has given me during my term of office.

I would also like to thank all other members of my Board for their contribution to the management of the river, particularly as we faced critical issues such as Wild Fisheries Reform which took up so much of our time. I believe the Spey played a major part in persuading the Government to modify their position on the state of river management in Scotland.

My term as Chairman comes to an end at the Triennial election in February. I have been privileged to be Chairman for 5 years now, a role which I have enjoyed immensely. I could not have discharged my responsibilities as Chairman

without the help and support of our Director, Roger Knight, our Biologist, Brian Shaw, and all other members of our staff. I extend my sincere thanks to them all.

My colleagues on the Board have also given me their unflinching support, without which I could not have fulfilled my duties during a very challenging period in river management in Scotland.

I thank each and every one of them and wish them and the new Board well for the future.

I wish you all tight lines in 2019!

**Brian Doran**

**Chairman**

## Part 1

### Statutory Remit of the Spey Fishery Board

#### 1.1 Constitution

The Spey District Salmon Fishery Board (SFB) was established under the 1860s Salmon Fisheries legislation as subsequently amended and stated in the Salmon Act 1986 and the Salmon Conservation (Scotland) Act 2001. This legislation was later streamlined into the Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003, which has subsequently and recently been amended by the Aquaculture and Fisheries (Scotland) Act 2013. The SFB is empowered under the legislation to take such acts as it considers expedient for the protection, enhancement and conservation of Atlantic Salmon and Sea Trout stocks and their fisheries (Table 1). The SFB is responsible for the Spey Fishery District (Figure 2), which includes 52 rod fisheries within the mainstem of the Spey and its tributaries. The District covers 107 miles of Mainstem River, approximately 560 miles of main tributaries and 20 miles of coastline in the Moray Firth, from Lossiemouth to the west of the Spey estuary to Cowhythe Head in the east. The District extends 3 nautical miles out to sea.

The SFB has put in place measures to ensure it is in full compliance with the latest legislation.

Furthermore, since November 2013 and in addition to its annual public meetings, the Board has conducted the major part of all of its quarterly meetings in Open Session to enable members of the public to attend.

#### 1.2 Complaints Procedure

Section 24 of the Aquaculture and Fisheries (Scotland) Act 2013 amended the 2003 Act to place a number of new duties on DSFBs relating to openness and accountability. Under section 46D these new duties require a DSFB to: *'maintain, and keep under review, proper arrangements for dealing with complaints made to the board about the way in which the board have carried out, or propose to carry out, their functions under this Act or any other enactment'*

The SFB has published its complaints procedure on its website. Full details can be found at: <http://www.speyfisheryboard.com/spey-fishery-board-complaints-procedure/>

Two complaints were received by the SFB during 2018, relating to the appointment of Mandatories at the 2016 Triennial Election and the conduct of that Election. These complaints were investigated and determined to be unfounded. The outcome was communicated in writing to the complainant.

#### Table 1. Statutory Responsibilities of the Spey Fishery Board

1. Provide fisheries protection;
2. Set Salmon rod fishery season (11<sup>th</sup> February – 30<sup>th</sup> September);
3. Set Sea Trout rod fishery season (15<sup>th</sup> March – 30<sup>th</sup> September);
4. Police weekly rod fishery close times (midnight Saturday – midnight Sunday);
5. Police the purchase and sale of illegally-caught or unseasonable fish;
6. Ensure fish passage over obstructions to migration;
7. Protect juvenile fish and spawning redds;
8. Regulate the movement and/or introduction of adults, juveniles and ova.

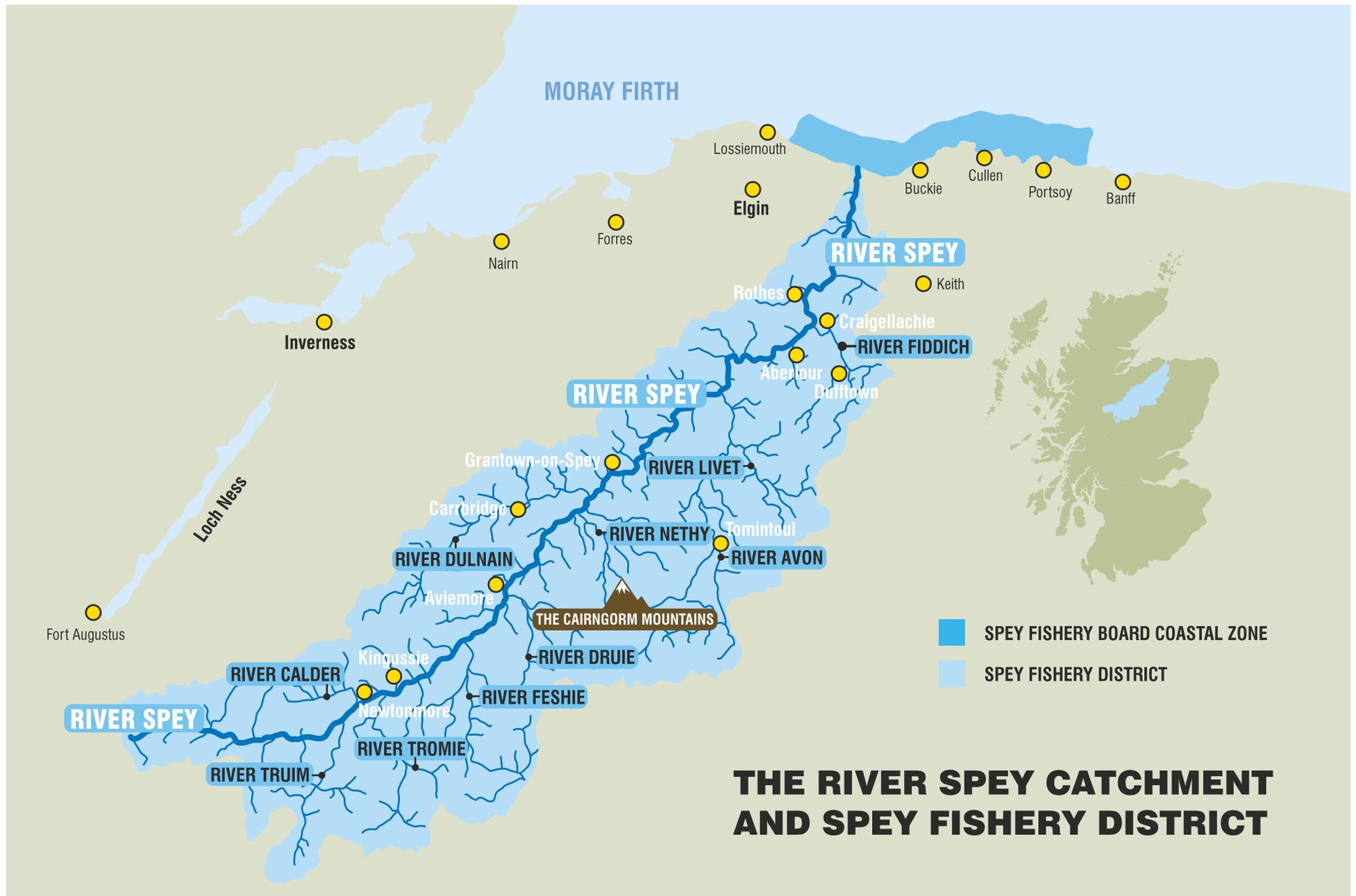


Figure 2: The River Spey Catchment and Spey Fishery District

### 1.3 Wild Fisheries Reform (WFR): Progress During 2018

Last year we reported that in early February 2017, the Scottish Government's Cabinet had agreed a new approach to WFR, following the consultation process which had taken place over the previous three years. It announced it had decided to focus on protecting the rights of anglers by making clear that rod licences and a new wild fisheries levy would no longer be taken forward; nor would the criminalisation of freshwater fishing without permission. More substantially, the Scottish Government had also decided it would no longer pursue the overhaul of the structure and remit of District Salmon Fishery Boards; it would focus instead on a Wild Fisheries Bill which would encourage, empower and support the voluntary mergers of Boards and the development of Fishery Management Plans to trial any such changes with Boards.

During 2018, the Scottish Government's Marine Scotland established a £200,000 'Wild Fisheries Governance Fund' to support the voluntary merger of District Salmon Fishery Boards (DSFBs) and/or the creation of new DSFBs in catchment areas where none currently exist.

Marine Scotland (MS), in collaboration with Fisheries Management Scotland, also continued to develop a Fishery Management Plan template which will facilitate a consistent approach to be taken by local DSFBs and Trusts across Scotland. It will also inform the development/review of the National Wild Fisheries Strategy and allow Scottish Ministers to identify, quantify and prioritise action to mitigate effects on damage to wild fish and fisheries in Scotland. To facilitate this, a national juvenile electro-fishing project across 27 regions, under contract from MS, commenced in July 2018. This has provided vital data for a future juvenile assessment to complement the Scottish Government's existing adult model, as provided by the Conservation Regulations (see section 1.4).

The SFB was subsequently one of six DSFBs/Trusts to trial the population of a new online mapping-based pressures tool during November 2018, facilitated again through MS funding. It focussed on forty pressures across twelve priority themes that may affect fisheries and is due to be rolled-out nationally in 2019. Once finalised, this will enable individual DSFBs to illustrate the severity and status of each of these pressures across their catchment areas. This, in turn, will provide a national and local picture which will inform future Scottish Government policy thinking.

The twelve pressures include: Exploitation; Predation; Fish Health; Genetic Introgression; Invasive Non-Native Species; Habitat – Water Quality; Habitat – Water Quantity; Habitat – Thermal; Habitat – Instream; Habitat – Riparian; Barriers to Migration; Coastal and Marine. Further details on these twelve pressures and how they will be assessed can be found at:

<https://www2.gov.scot/Resource/0054/00542437.pdf>

### 1.4 Conservation Limits and the Categorisation of Rivers According to Conservation Status

2018 was the third season in which the Scottish Government Conservation Regulations applied. The basis of the regulations is compliance with modelled egg deposition targets (conservation limits), based on adult catches and factors such as river flows, fish size, and age, released rates, wetted areas, fecundity, etc. For the Conservation Regulations rivers were assigned into one of three categories:

**Category 1:** Districts which had exceeded the conservation limit in four of the previous five years (80%+ compliance). In these rivers exploitation is sustainable therefore no additional management action is currently required.

**Category 2:** Districts which had achieved the conservation limit in three of the previous five years (60 to 80% compliance). For rivers in these categories, management action to reduce exploitation is required.

**Category 3:** Districts where the conservation limit had been achieved in fewer than three of the previous five years (less than 60% compliance). In these rivers exploitation was considered unsustainable therefore mandatory catch and release was required.

The Spey has been classed as a Category 1 river since the inception of the process and for the 2018 season it was classed as 89% compliance, and for 2019 at 88.7%, one of 48 rivers in the top category.

The major changes for the 2019 assessment as the introduction of river specific egg targets. In the case of the Spey this is now 2.83 eggs/m<sup>2</sup>, lower than the previous national default value of 5.45, but higher than many other rivers, including the

Tweed. The exploitation rates for the Spey are now based on earlier tagging work, and consequently is higher than the values assigned to many other rivers, including neighbouring. After a period when the system has “evolved” rather rapidly it the Government has, quite sensibly, stated that it intends to let the system settle, consequently there will no further changes to the process for two years.

Following criticism that the conservation regulation process was too focussed on angler exploitation the Government have developed a fishery management template which allows local Boards and Trusts to consider the impact of a range of pressures affecting their catchments, as described in section 1.3. It is anticipated that the new national fishery management template should provide a comprehensive overview of factors affecting fisheries which is presently lacking and thereby enable the targeting of effective action at a national level, other than rod exploitation.



**Above:** *The River Spey in March 2018. The River has been awarded Category 1 status under the Scottish Government’s classification scheme. (Photo: Mark Melville, Head Ghillie, Delfur Fishings).*

## **1.5 Fisheries Management Scotland**

Fisheries Management Scotland (FMS) represents Scotland's network of District Salmon Fishery Boards, the River Tweed Commission and Rivers and Fisheries Trusts. FMS maintains a regular dialogue with Government and Agencies to ensure the interests of its members and Scotland's wild freshwater fisheries are represented clearly.

Although still a relatively new organisation, FMS has made sound progress in developing its vision and objectives of being the pre-eminent, representative fisheries management body in Scotland, recognised as such by local fishery management, Governments and other agencies. It achieves this by promoting and ensuring the best fisheries management for the protection, conservation and development of Scotland's wild salmon and freshwater fish, along with their fisheries and environment. FMS also provides value to and represents the interests of its member organisations by enabling and supporting local fisheries management. It also works to ensure that its members are recognised by all relevant stakeholders as the foremost, professional and positive influence on all matters relating to the evidence-based management of fish and fisheries. The SFB's Chairman, Brian Doran, has been a member of the FMS Board throughout 2018.

## **1.6 EU Water Framework Directive**

The European Union (EU) Water Framework Directive (WFD) came into force in December 2000 and was transposed into Scottish law through the Water Environment & Water Services Act 2003. Under the aegis of the Scottish Environment Protection Agency (SEPA), the Act aims to establish a process of River Basin Management Planning to achieve "Good Ecological Status" of freshwater, groundwater and coastal water bodies by 2027. For Heavily Modified Water Bodies (e.g.

those impacted by water diversion for the production of hydro electricity), such as parts of the River Spey, the aim is to achieve "Good Ecological Potential".

SEPA divided Scotland into eight sub-basins, where catchments of similar types are grouped and managed collectively. The Spey is included in the North East sub-basin, which also includes the Rivers Deveron, Ythan, Don and Dee and is part of the North East Area Advisory Group. The first River Basin Management Plan (RBMP) concluded in 2015. The second RBMP runs from 2015 - 2021 and the third and final Plan will be implemented between 2021 - 2027.

We have reported previously that, significantly, SEPA re-classified Spey Dam at the end of 2015 as a barrier to fish passage, with a consequential down-grading of the water bodies above the Dam to "poor" status. This is covered in more detail in section 1.8 of this Report. This re-classification of Spey Dam has remained throughout 2018. The SFB will continue to work closely with SEPA throughout 2019 on the implementation of the WFD.

## 1.7 Water Abstraction Update



*Above: The view down-river from the top of Spey Dam near Laggan, which is operated by the Gupta Family Group (GFG) Alliance, August 2018. (Photo: Roger Knight)*

### 1.7.1 GFG Alliance: Spey Dam

One of the greatest threats to the River Spey and its fish is that of increased water abstraction. The SFB remains concerned by the significantly high levels of water abstraction, particularly in the upper catchment by Liberty House Group and Simec as part of the GFG Alliance, which is licensed to divert substantial volumes of water from Spey Dam, some twelve miles from the source of the Spey, to Fort William. The impact of the abstraction and its associated infrastructure on the upper Spey salmon population is severe; in recent years the Board's electro-fishing monitoring above the dam has found either no salmon fry present, or very low densities of salmon fry present at any of the ten sites visited. This was subsequently and

independently verified by SEPA and led to the designation of Spey Dam by SEPA as a barrier to fish passage. The Board's monitoring during 2018 continued to show low numbers of salmon fry present at most sites electro-fished above Spey Dam, indicating that a few fish had ascended the Dam's fish pass and limited spawning had taken place.

The Board remains concerned about the efficacy of the fish pass at Spey Dam and also maintains that the water flows emanating from the Dam are insufficient to allow adult salmon to ascend up to and above it to spawn, or to allow salmon smolts to descend below it. The Board is also worried about

the effectiveness of the screens at the off-take (which are in place to prevent juvenile fish from exiting the River Spey and its catchment and gaining access to Loch Laggan) and concerned by the water flow speeds through the off-take and down the Crunachden Cut. The heck on the River Markie, which enters the reservoir immediately above Spey Dam, also remains an issue as it appears to completely block access to migratory fish. Furthermore, the Board would like to see the restoration of the River Mashie, much of the flow from which is also diverted to Fort William.

Two years ago we reported that Spey Dam had been sold to Liberty House Group and Simec, owned by the Gupta Family Group (GFG) Alliance, as part of the purchase of the aluminium smelter at Fort William. Since then, senior representatives of the SFB have held regular meetings with representatives of GFG to raise awareness of our concerns amongst the new owners. These meetings have seen a much more positive relationship develop with the new owners than previously existed. They have also led to GFG commissioning a technical assessment of the fish pass at Spey Dam, which went out to international tender in late 2018 and considered ways to better understand the movement of smolts from the upper Spey through the reservoir. To facilitate the latter, a number of fish tagging projects have been proposed and these will continue to be carefully considered during 2019.

The SFB has also continued to press the Scottish Environment Protection Agency (SEPA), as the regulator of water quality and quantity, to address the Board's concerns. SEPA's designation of Spey Dam as a barrier to fish passage ensured its re-classification to "Poor" under the EU's Water Framework Directive (WFD), with a consequential impact on the water bodies above Spey Dam, which are now also classified as "Poor" (see section 1.6). Significant remedial action will need to be taken in order for this area to achieve the

requirements of the WFD by 2027. The SFB will continue to work with SEPA and GFG throughout 2019 to ensure these are achieved and that the issues regarding Spey Dam may be satisfactorily resolved.

### **1.7.2 Scottish & Southern Energy: Tummel CAR Licence Scheme**

Scottish & Southern Energy (SSE) divert water from Loch An-t Seilich at the top of the River Tromie and from the River Truim, both important upper Spey Salmon spawning tributaries, into the River Tay catchment as part of the Tummel CAR (Controlled Activities Regulations) Licence Scheme. Water from Loch An-t Seilich (River Tromie), and from Loch Cuaich, which is also impounded by SSE, is piped to a power station on the River Cuaich (a tributary of the River Truim) before being channelled to Loch Ericht near Dalwhinnie. This Spey water from Loch An't Seilich and Loch Cuaich, together with water from the off-take above Dalwhinnie at the top of the Truim and from the Allt An't Sluie (another tributary of the Truim just below Dalwhinnie) then travels through Loch Rannoch and on to Loch Tummel, passing through six further power stations at Rannoch, Gaur, Tummel, Errochty, Clunie and Pitlochry, before being discharged into the Tay system.

SSE had proposed to re-water the River Garry (in the Tay catchment, the flow from which is diverted to generate hydro-electricity) under the WFD. In so doing, they had proposed to take additional water from the Tromie (Loch An't Seilich) and the Truim to make up for a minor drop in renewable energy that would come from re-watering the River Garry (because the water used would only go through three power-generating stations, rather than six). These proposals were withdrawn in October 2014 after eight years of staunch objection from the SFB. In January 2017, SSE began re-watering the upper River Garry without taking any additional water from the Spey catchment.

Whilst the SFB had objected to some of SSE's proposals, there had been positive proposals as well, such as the re-watering of the Allt Bhran and the Cuaich. The whole flow from the Allt Bhran, which is the most significant tributary of the River Tromie, is currently diverted into the Tromie Dam

at Loch An-t Seilich, thereby denying access to it by migratory fish. However, the restoration of a flow down the lower section of the Allt Bhran provides a significant river restoration opportunity and the SFB is keen to continue to pursue this in 2019.



**Above:** The impoundment on the Allt Bhran, from which the whole flow of this tributary of the River Tromie is diverted in to Loch An-t Seilich, thereby denying access to it by migratory fish. The restoration of a flow down the lower section of the Allt Bhran provides a significant river restoration opportunity which the SFB is keen to pursue in 2019. (Photo: Roger Knight).

## 1.8 Angling, Canoeing and Access

A major issue highlighted by the economic survey commissioned by the Spey Catchment Management Plan was the potential conflict between angling and canoeing. This situation was complicated by the introduction of the Land Reform (Scotland) Act 2003 and the launch of the Scottish Outdoor Access Code in 2005. The Code encourages reasonable and responsible access to rivers and river banks, and has been promoted within the Spey catchment by the Moray Council, Highland Council, SNH and the Cairngorms National Park Authority.

To aid the resolution of any issues, core representatives of the Spey Users' Group (SUG), including the SFB, Scottish Canoe Association and Access Officers from the three Local Authorities, meet each year. However, 2018 was generally another settled year for paddling and angling relations, with only a few incidents reported to the SFB. The principle concerns remain though, in relation to the significant numbers of paddlers between the Ballindalloch and Knockando areas of the River, which are acknowledged to be the busiest paddler sections of the River.

## Part 2

### Fisheries and Conservation

#### 2.1 Salmon and Grilse Catches

In common with almost all Scottish rivers, 2018 was a particularly difficult season for anglers on the River Spey. A prolonged, cold winter which lasted until April, followed by a rapid and sustained rise in temperatures in May and June, accompanied by a significant drop in water levels, made fishing conditions particularly challenging. Indeed, the River Spey dropped to levels last seen during the drought of 1976 and reported rod catches amounted to **3,178** Salmon and Grilse caught, which was the lowest since records began in 1952 (Figure 5).

A slow start to the season produced an early spring catch (between 11<sup>th</sup> February and 30<sup>th</sup> April) of 373 fish, which was a notable reduction on the 783 caught for the same period last year. 285 fish were caught in May (c.f. 720 fish in May 2017) and 448 in June (c.f. 1,174 in June 2017). This brought the catch for February – June to a total of 1,106, which

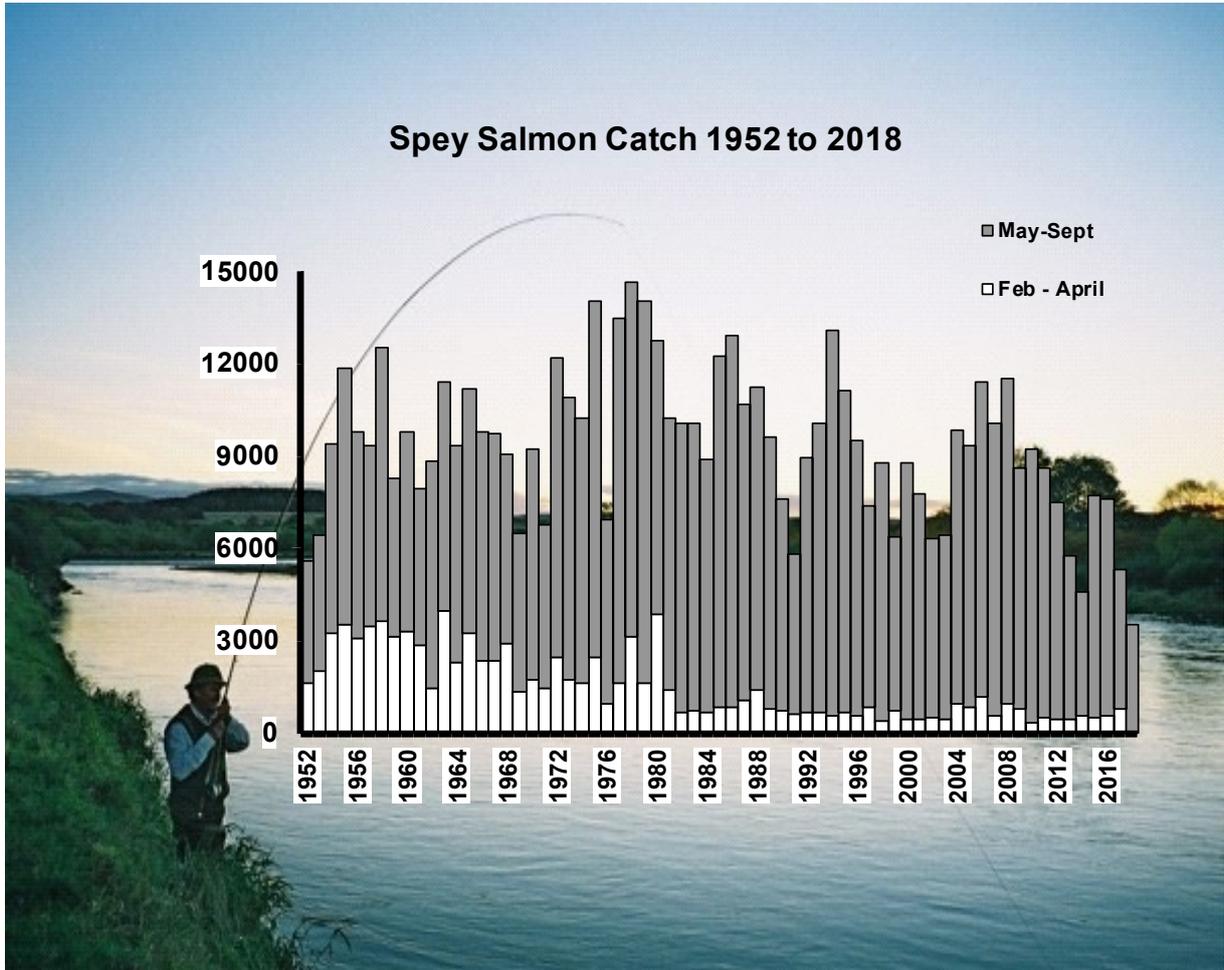
was 1,571 fish less than the 2,677 caught during the same period in 2017.

A further 340 salmon & grilse were caught in July, less than half of the 815 caught in July 2017 and catches rose slightly in August to 584, although they were still much lower than would be expected for that time of year. Rainfall in September, which was the first meaningful precipitation since April, brought some relief from the sustained drought conditions and catches rose significantly to 1,148. Whilst this was better than the 841 caught for the same period last year (Figure 6), it completed what for many anglers and ghillies had been a particularly demanding season.

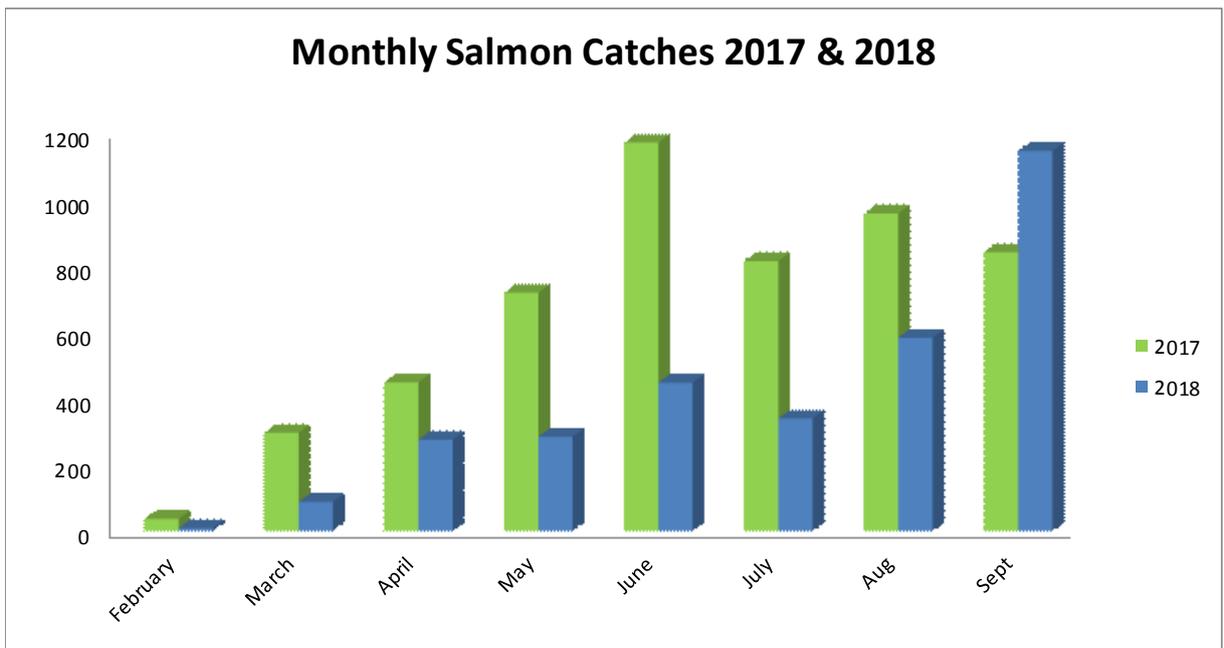
Further details regarding catches by river area (lower, middle and upper) are available on the Board's website and can be found at the following link: <http://www.speyfisheryboard.com/spey-fishery-board-publications/>



**Above:** Local angler Rachel Graham at Easter Elchies in August 2018, with one of the 3,178 salmon & grilse caught on the River Spey during the season. (Photo: Peter Graham)



**Figure 5:** Annual declared rod catch of wild Salmon and Grilse from the River Spey, 1952-2018. The 2002-2018 catches are from returns made to the SFB by proprietors.



**Figure 6:** Declared monthly rod catch of wild Salmon and Grilse from the River Spey in 2017 and 2018, calculated from returns made to the SFB.

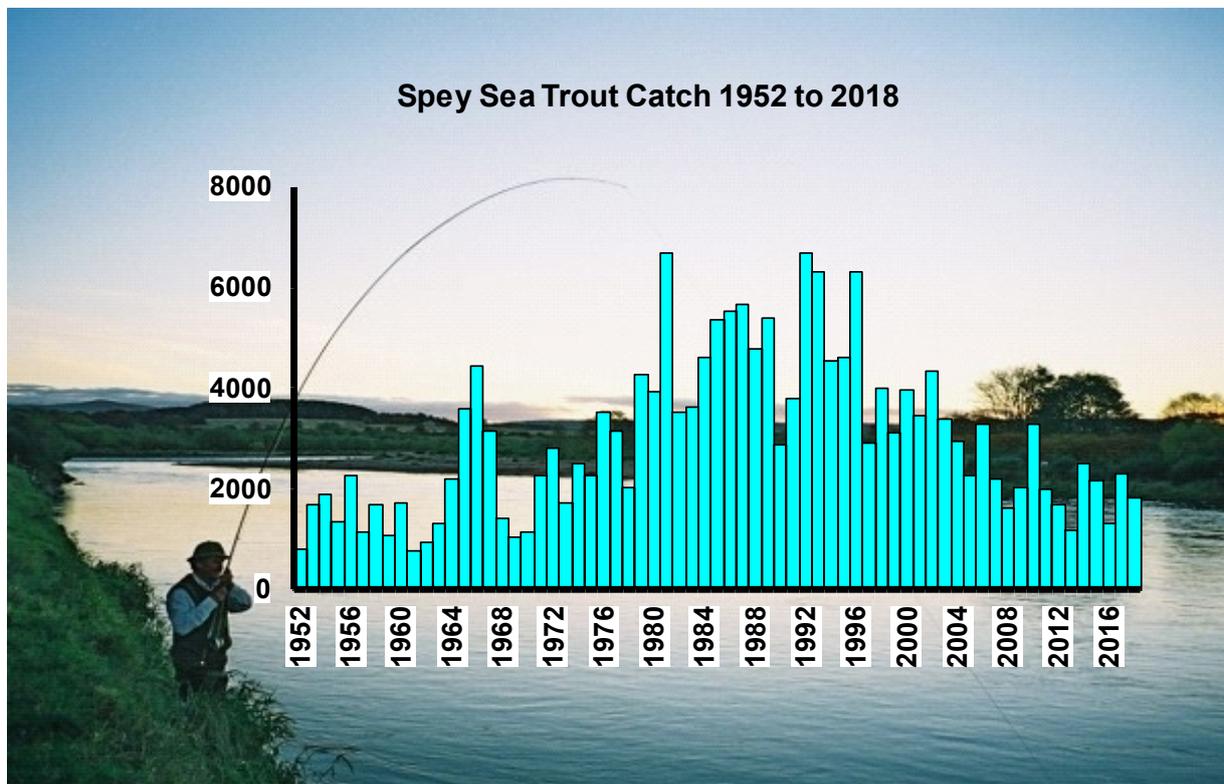
## 2.2 Sea Trout Catches

The 2018 declared rod catch for Sea Trout was **1,830**, (Figure 7), which was a slightly lower than the 2,293 caught in 2017, but higher than the 1,318 caught in 2016. In common with many previous years (with the exception of 2014), monthly catches during 2018 showed that June was the most prolific

month for Sea Trout. 531 Sea Trout were caught in June 2018, which accounted for 29% of the annual catch. July was once again the second highest month, with 422 caught (23%). Overall therefore, just over half (52%) of Sea Trout caught were recorded in these two months.



**Above:** A Sea Trout caught by Edwin White at Lower Pitchroy, Knockando, in June 2018. A total of 1,830 Sea Trout were caught on the River Spey during 2018. (Photo: Edwin White)



**Figure 7.** Annual declared rod catch of Sea Trout from the River Spey, 1952-2018. The 2002-2018 catches are from returns made to the SFB.

### 2.3 Salmon Conservation Policy

As part of its long term commitment to the protection of Salmon stocks, the SFB launched a Salmon Conservation Policy in 2003. The policy aimed to achieve the release of at least 50% of Salmon and Grilse and to protect the depleted stocks of multi-sea winter Salmon in February-June. It has now achieved a level far higher than that originally anticipated. Most of the larger fish arrive in the river in the early months and these are the fish which have the potential to make the most significant contribution to successful spawning. Furthermore, a high proportion of these fish are female, and therefore contribute an important part to the river's spawning stock. Studies by the former Spey Research Trust (the fore-runner to the Spey Foundation) have also shown that these fish are particularly vulnerable to capture and re-capture having been released.

Throughout the 2018 season on the River Spey, **98%** of salmon and grilse caught were released (Figure 8). For a voluntary policy to achieve such a significant release rate is highly commendable and we are grateful to all proprietors, ghillies and anglers for their support for the policy. In total, **3,100** Salmon and Grilse were released to spawn in 2018. The SFB would also like to draw attention to the Conservation of Salmon (Annual Close Times and Catch and Release) (Scotland)

Regulations, which came into force in January 2015 and which make it illegal to kill wild Atlantic salmon caught before 1<sup>st</sup> April each year.

### 2.4 Sea Trout Conservation Policy

Sea Trout are the sea-running form of Brown Trout. The majority of Sea Trout are female and Sea Trout and Brown Trout interbreed. Under fisheries legislation, Sea Trout have the same legal status as Salmon and District Salmon Fishery Boards are also responsible for their conservation, protection and enhancement. Catch statistics show that the Spey Sea Trout rod fishery has historically been one of the largest in Scotland, although catches have declined in recent years and the SFB has maintained a precautionary approach.

2018 saw the rate of catch and release for Sea Trout rise to **88%**, up from 82% last year (see Figure 9).

When it reviewed the Conservation Policy during 2018, the Board decided that in line with its precautionary approach, the voluntary policy overall was working well and should remain unchanged for 2019. The Conservation Policy for 2019 is illustrated in Figure 10 and the SFB will continue to monitor the situation throughout the forthcoming year.

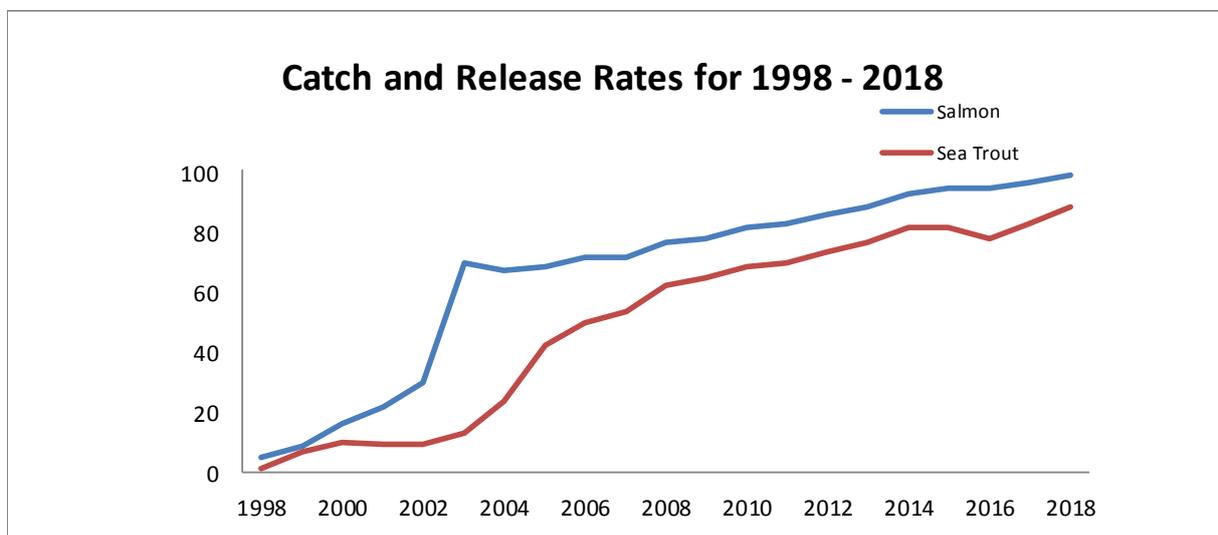


Figure 8: Catch and Release Rates for the River Spey 1998-2018.

Scottish legislation requires that all salmon caught before the 1st April must be released. In order to protect the integrity of the Spey stock and to maximise their spawning potential, the Spey Fishery Board's policy is that all fish caught up to and including the 31<sup>st</sup> May should be released alive. From the 1<sup>st</sup> June the policy set out below will apply.

## SEA TROUT

 Release all finnock of 16oz / 35cm / 14" or less

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 Release all Sea Trout of 3lb / 50cm / 20" or above

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 Retain only 1 Sea Trout of takeable size per calendar day. Anglers are also encouraged to release their first fish and keep the second that is of takeable size

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 Release all stale or coloured fish

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 Release all unseasonable fish (smolts, kelts, over-wintered finnock)

## SALMON

 Each angler must return the 1st, 3rd, 5th etc... cock fish caught

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 All hen salmon and hen grilse must be released

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 Throughout the season all stale or unseasonable fish must be released e.g. gravid, kelts

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 Escaped farmed salmon must be retained

Figure 10: The Spey Fishery Board's Conservation Policy for 201. N.B. Since January 2015, it has been illegal to kill wild Atlantic salmon caught before 1<sup>st</sup> April.

## Part 3

# Management Report

### 3.1 Spey Catchment Initiative



Throughout 2018, the Spey Fishery Board has continued to be the driving force behind the Spey Catchment Initiative (SCI), as well as providing it with substantial administrative and management support. This is a highly effective demonstration of a public/private partnership and it is managed by the Spey Fishery Board. The SCI exists as a result of support from the organisations illustrated above.

Since its inception in 2010, the SCI has enjoyed considerable success delivering a range of multiple-benefit projects, which in turn have enabled the SFB to secure significant fishery habitat enhancements. These have included river restoration and bankside improvement works, in-river habitat enhancements and obstacle removal, riverside amenity works to improve access and enjoyment of the River Spey for local communities.

A new River Spey Catchment Management Plan was published in 2016, replacing the original plan which dated back to 2003. The 2016 Plan sets out a broad strategic framework for the wise and sustainable use of the water resource for the following five years, as well as for the protection

and enhancement of the water quality and natural heritage throughout the whole River Spey catchment. It summarises in one document all the key issues, pressures and opportunities that currently exist as they relate to the local environment and provides a wealth of information on flood management, water quality, economic development, protected species and habitats, fisheries, forestry and woodland. The new Plan, together with a comprehensive Business Plan, was successfully used to extend the SCI for a further five years and to stimulate funding. The Spey Catchment Management Plan is available on line to view or download at:

<http://www.speyfisheryboard.com/wp-content/uploads/2016/12/SCI-2016-Catchment-Management-Plan.pdf>

#### 3.1.1 Tomintoul & Glenlivet Landscape Partnership (TGLP)

In 2017 the Heritage Lottery Fund approved £3.6 million of grants towards a multi-faceted regeneration project in the Tomintoul and Glenlivet area. This included £420,000 worth of activities associated with improving the water environment which had been developed by the SCI Project

Officer. This is split into four discrete projects: improving fish passage where there are currently barriers; enhancing the condition of water margins in the area; flood resilience-building measures for the Avon; and increasing recreational angling participation through improved fishing access.

Work on these projects began in 2017 and was reported in last year's Annual Report, including the establishment of over 100 metres of willow spiling and creation of an artificial log jam at Mains

of Auchriachan, which has also become a demonstration farm for such works.

Further implementation work continued during 2018 which saw the SFB and SCI become actively involved with the successful easing of three barriers to fish passage, ensuring that migratory fish may once again ascend to spawning territories to which they have hitherto been denied access.



**Above:** A series of "before and after" photographs of the three barriers to fish passage that have been eased by the Spey Catchment Initiative, on behalf of TGLP. (Photos: Penny Lawson, SCI Project Officer)

### 3.1.2 Delagyle Backwater Channel

Plans to install culverts to reintroduce flows to two backwater channels at Delagyle and Aviemore were developed by the SCI in 2016. Practical implementation on the Aviemore channel was completed in 2017 and reported in last year's Annual Report, whilst work on the Delagyle channel was completed in 2018. This was undertaken mainly with generous funding by the Speyburn Distillery to open-up Spey Burns to wildlife, together with additional finance from Scottish Natural Heritage.

The artificially-disconnected backwater of the River Spey at Delagyle had been cut-off from the

main channel many years ago by the installation of upstream bank protection, probably to improve access for fishing. At most water levels the channel contained only a small, intermittent flow with pools of standing water, except in spate events when the banks of the Spey were overtopped. By installing a culvert to re-connect the backwater to the main river and restoring a continual flow at a wide range of water levels, approximately 200m of restored channel has been created. This is now providing a valuable high-water refuge for juvenile fish and additional good quality habitat for salmonid spawning, as well as endangered fresh water pearl mussel populations.



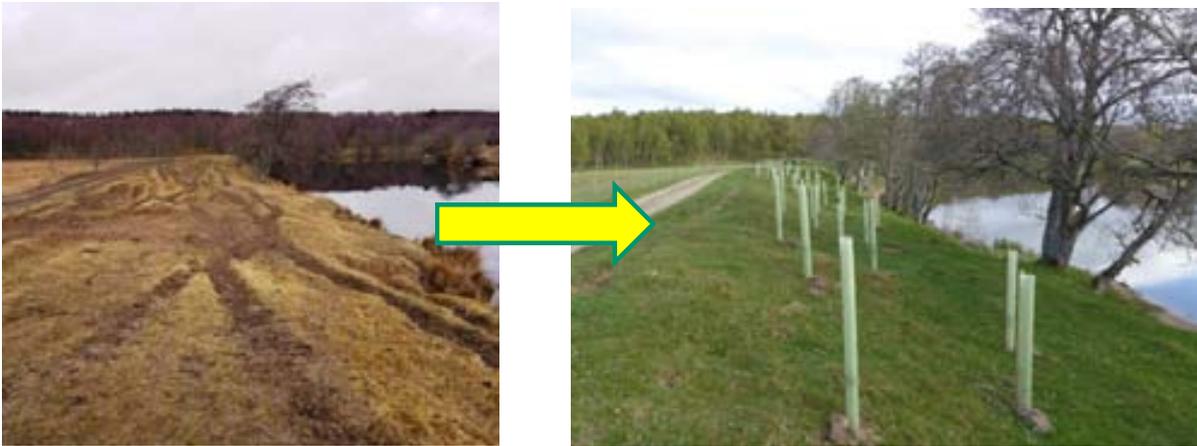
**Above:** A series of “before and after” photographs of the works undertaken by the Spey Catchment Initiative to re-open the backwater channel at Delagyle during 2018. (Photos: Brian Shaw).

### 3.1.3 Riparian Enhancement at Kinchurdy

Almost 2Km of riparian habitat at Kinchurdy, near Aviemore, has been improved during 2018. The river banks had been poached by livestock, causing them to collapse into the river and generate a diffuse pollution problem.

The SCI, with financial support from LEADER via the Cairngorms National Park Authority, match-funded by Seafeld Estates, began by fencing-off

660m and planting trees to stabilise the banks and improve the habitat for fish and other wildlife species. This was followed by extending the project to cover an additional 1,270m and will be extended again during 2019 by a further 2.5Km. This has been another prime example of successful public/private partnership in action and has resulted in a significant diffuse pollution problem being overcome.



**Above:** “Before and After” photos of the SCI’s riparian enhancement at Kinchurdy, near Aviemore. Livestock had poached the riverbanks, causing them to collapse into the river and generate a diffuse pollution problem. By fencing-off the area and planting trees to stabilise the river banks and improve the habitat, a significant diffuse pollution problem has also been resolved.  
(Photos: Penny Lawson, SCI Project Officer)

### 3.1.4 Fochabers Burn

When the Fochabers Burn experienced a 1-in-50 year flood event in 2009, there was extensive de-stabilization of the river bed, which resulted in huge volumes of sediment being released. The Burn has continued to take a long time to settle down from this event and the sediment movements within it since the 2009 flood have been extraordinary.

The Spey Catchment Initiative held a meeting in Fochabers in September 2018 to discuss the complex issues surrounding the local Burn. It was attended by representatives of SEPA, SNH, Forestry Commission Scotland, the Spey Fishery Board and local community interest groups. SEPA's Hydro-Morphologist, Alastair Matheson,

provided an overview of the issues affecting the burn and the other agencies were also able to outline their perspectives. Crucially it provided an opportunity for many local people with an interest in the burn to learn more about it and to get a better understanding of the interventions that had been made over the years, some of which have had an adverse effect on the burn, rather than a positive impact. It was also agreed that the Spey Catchment Initiative, as a partnership organisation, would henceforth take the lead in coordinating and facilitating actions undertaken for the management of the burn.

The SCI and the SFB will continue to explore restorative options for this Burn during 2019.



**Above:** *The sediment movements and changes within the Fochabers Burn since the 2009 flood event have been extraordinary. This picture illustrates the way a former weir has been under-cut and is now in need of stabilising. The SCI will continue to explore restorative options for the Fochabers Burn throughout 2019. (Photo: Penny Lawson, SCI Project Officer).*

## 3.2 Spey Fishery Board Habitat Enhancement

### 3.2.1 Tamdhu Distillery Weir

The Board's Biologist, Brian Shaw, and SEPA worked closely with the Tamdhu Distillery in 2018 to install an Alaskan Steep Fish Pass at the Distillery's off-take weir on the Knockando Burn. The 4.5 metre weir on this Burn had been impassable to migratory fish for over a century, but is now accessible to them once more and fish have been observed to be ascending the pass.

The SFB is particularly grateful to the Tamdhu Distillery for its significant investment in this project which has opened-up 8 Km (5 miles) of the Knockando Burn to additional spawning. The SFB will continue to work with Tamdhu Distillery in 2019 to install a counter at the top of the fish pass, so that we may get a better understanding of the numbers of fish ascending it.



**Above:** *The Alaskan Steep Fish Pass which was installed on the 4.5 metre-high off-take weir by the Tamdhu Distillery in 2018, in close collaboration with the SFB and SEPA. This has enabled migratory fish to ascend the weir for the first time in over a century and, in so doing, has opened-up 8 Km (5 miles) of burn to additional spawning which has hitherto been inaccessible.*

(Photo: Brian Shaw).

**TAMDHU**  
SPEYSIDE SINGLE MALT  
SCOTCH WHISKY

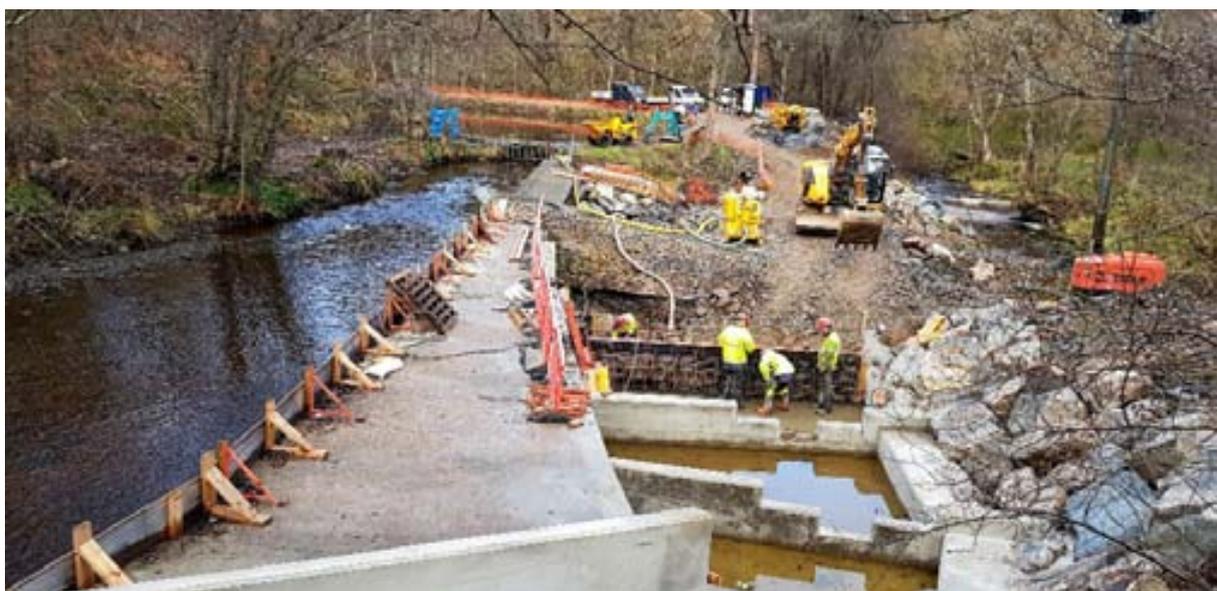


**Above:** *The team involved in the Tamdhu Distillery Fish Pass Project. From left to right: Lisa Forsyth, SEPA; Brian Shaw, SFB; Andrew Hall, Knockando Estate; Sandy McIntyre, Tamdhu Distillery. (Photo courtesy of Tandhu Distillery).*

### 3.2.2 Mortlach Distillery Upper Weir

The SFB has worked closely with Diageo to replace the fish pass at the upper weir at the Mortlach Distillery near Dufftown. The previous fish pass had been installed as part of the CASS Life Project in 2006, alongside another one a little lower down-stream. The upper pass, however, had not proved to be successful and it was

decided to replace it with one closer to the right bank, which is expected to provide a more effective solution for migratory fish passage. The Board is grateful to Diageo for their support for this project, and to SEPA for helping to facilitate the works.



**Above:** *A replacement fish pass being installed at Mortlach, Dufftown. (Photo: Brian Shaw).*

### 3.3. Salmon Stocking on the Spey

Historically, stocking has often been the first choice strategy adopted by organisations such as fishery boards to try to improve fish numbers. Hatcheries have been operated on the Spey periodically since the late 1800's, when a large-scale hatchery at Gordon Castle reared up to one million fish, although it was discontinued in 1914 after 22 years of operation. In the late 1960's, the fishery board established a hatchery at Knockando, prior to the construction of the current facility at Glenlivet in 2001. Various drivers have prompted the establishment of hatcheries on the Spey, including declining catches or stock components, or UDN-associated mortalities.

More recently, the SFB has convened a Stocking Sub-Group to review the Board's stocking policy annually. It makes recommendations, initially to the Spey Scientific Committee, which then makes recommendations to the Board. These may then result in a number of refinements and changes.

It is generally considered that there are four different types of stocking:

- **Reintroduction:** with the aim of re-establishing populations in areas from where they have been lost, e.g. salmon stocking in the Thames where there was historically a thriving salmon population.
- **Restoration:** where the aim is to restore populations at low ebb back to previous abundance.
- **Enhancement:** where the aim is to increase stocks and subsequently catches in the catchment above natural carrying capacities.
- **Mitigation:** compensatory stocking to maintain production in areas no longer accessible to migratory fish due to e.g. man-made obstacles.

Back in 2003, the number of salmon stocked on the Spey had been increased three-fold as part of a programme aimed at increasing salmon catches by 8%, using a combination of catch and release, habitat improvements and stocking. The stocking expansion was based on a combination of enhancement and mitigation stocking. The enhancement element focussed on stocking suitable habitat above impassable waterfalls, in effect expanding the range of salmon within the Spey catchment, and in "under-utilised" areas. Meanwhile, mitigation stocking upstream of man-made obstacles was also increased.

In recent years the focus has been on mitigation stocking. Whilst this is generally considered acceptable, providing best practice is followed, it is now illegal to stock above impassable waterfalls following implementation of the Wildlife and Natural Environment Act (the WANE Act), which makes it an offence under the Habitats Directive to move a species out-with its natural range. The opportunities for mitigation stocking on the Spey are limited; it is estimated that the proportion of the catchment rendered inaccessible by man to migratory fish is less than 1%, a figure that is slowly reducing as more and more barriers are removed. Hence, we are now in a situation where we have a relatively small hatchery operation, focused on mitigation stocking, mainly in small tributaries in the middle and lower catchment. The Board considers that there may be further opportunities for mitigation or restoration stocking above Spey Dam in due course.

The identification of areas perceived to be under-utilised can be difficult and may lead to incorrect conclusions being drawn. There are areas of the Spey catchment which are likely to have always supported only low densities of fish, such as high altitude areas and those with granite geology that support only low productivity.

So to try to improve fish populations in these areas by stocking is unlikely to be productive. Salmon do use these areas in the Spey - we have a strong population of salmon spawning at over 500m (1640ft) altitude, up to over 600m (2130ft) - but these should be viewed as highly specialised and adapted fish that spawn early, hatch late and concentrate their growth in the relatively short summer. Highly adapted populations such as these are particularly susceptible to disruption, be that climate or habitat change, or the introduction of stocked fish from out-with that particular area.

A more sustainable strategy, that will benefit the whole river, is to conserve stocks to ensure there are adequate fish available to spawn, and to ensure that the habitat in the nursery areas is as good as possible, so as to promote enhanced survival through the parr and ultimately smolt stages of the salmon life cycle.

### **3.3.1 Stocking Policy**

In 2013, the SFB had decided to retain the operation of the hatchery, at broadly similar levels to the current production, for the next five years. Since then, however, the Spey Scientific Committee and the Board, with its Stocking Sub-Group, have also had to consider the stocking policy and requirement for each year. To enable this for 2019, another comprehensive programme of electro-fishing was undertaken by the Board during 2018 (see section 4), initially to monitor its stocking in 2017 and to confirm the stocking locations for 2018 (see Table 2).

In the summer of 2018 the Board also received an offer by Tulchan Club Scotland to reopen their hatchery in order to rear juvenile salmon to the smolt stage, rather than the fed fry or “autumn parr” stage, which is the Board’s current practice. This is practised on the West Ranga River in Iceland and the Board’s Chairman and Biologist visited Iceland in June 2018 to become acquainted with this operation there and see if it might be applicable to the River Spey.

The Board then considered the Tulchan offer in detail at an Extraordinary Meeting on 16<sup>th</sup> July 2018 and subsequently decided it could not proceed with it, for both scientific and regulatory reasons. The latter principally relate to the River Spey’s status as a Special Area of Conservation (SAC) for Atlantic salmon. This requires the Board, as the Competent Authority for the stocking of juvenile salmon into the River Spey catchment, to complete a Habitats Regulations Appraisal, and subsequently an Appropriate Assessment, to determine whether such stocking of juvenile fish would adversely impact upon the integrity of the River Spey’s SAC Status.

The Board received comprehensive presentations on the scientific aspects by the Board’s Biologist, Brian Shaw, and on the Regulatory aspects by the Director, Roger Knight. These were subsequently published on the Board’s website, together with the papers the Board had considered and the report on the visit to Iceland. These can be found at <https://www.speyfisheryboard.com/spey-fishery-board-publications/>

The Board held a meeting of proprietors and ghillies on the evening of 19<sup>th</sup> July 2018 to explain the decision it had reached. This meeting was also attended by some members of the public. Given that the Board had determined that it was unable to proceed with the Tulchan proposal, it also announced at this meeting a Spey Action Plan to explain what it would be doing henceforth. This is explained in section 3.5.

The Board reconvened its Stocking Sub-Group on 15<sup>th</sup> August, which considered the results from this year’s electro-fishing. This Sub-Group confirmed its recommendations to the Board for the 2018 stocking locations, but decided to revert to the Board for a policy determination for its stocking policy for 2019, after which it would re-convene to discuss how that policy might be put into practice.

When the Board met on 17<sup>th</sup> August 2018, it carefully considered the scientific advice regarding the use of hatcheries and balanced this against the commercial interests of all stakeholders along the river. These include not only the livelihoods of those directly employed on the river, but also the many local businesses that depend upon angling tourism to sustain them.

The Board then determined that it would fully embrace its hatchery operation and implement a carefully considered stocking plan, accompanied by some development at Sandbank, which would see production there increase to 1,000,000 salmon eggs, which was double the number that had been produced over the last year. The Board then instructed its Stocking Sub-Group to decide how to implement this, before then applying to the Scottish Government's Marine Scotland Science (MSS) for a licence to collect broodstock from the River and its tributaries to achieve it. It also endorsed the Sub-Group's recommendations for the 2018 stocking programme, which were completed in September 2018 (Table 2)

The Stocking Sub-Group subsequently decided to maintain a policy of mitigation stocking above man-made barriers, but to increase the stocking densities from the low levels hitherto practised.

Thereafter, the Board submitted a comprehensive application for a licence from the Scottish Government to catch 352 fish and to hold them as broodstock outside the Salmon net fishing season. By the nature of the SAC-designation of the River Spey and the Board's position as a Competent Authority for the stocking-out of broodstock progeny, this application also required a Habitats Regulations Appraisal and Appropriate Assessment. The licence application was submitted to MSS, who in turn consult Scottish Natural Heritage (SNH).

The response we received from Marine Scotland Science followed advice from SNH, which was based upon their comprehensive Habitat

Regulations Appraisal and subsequent advice regarding an Appropriate Assessment. This advice was far more forthright than we had seen before from SNH, who advised that it was not necessary to remove broodstock and stock-out reared fish to ensure that the conservation objectives of the SAC were met; nor was stocking required for the conservation management of the site. MSS subsequently rejected the Board's application to take 352 broodstock fish, on the basis that the low catch this year indicated a low run of fish returning to the Spey. This, in turn, caused concern that the removal of more broodstock fish than we had taken in recent years may constitute a greater risk to the viability of the population as a whole. MSS suggested, however, that if the Board were to apply for a licence to take 200 broodstock fish, as it had done the previous year, it would give MSS more confidence that the Habitat Regulations objectives could be met.

The Board therefore submitted another application to take 200 broodstock fish from the River Spey and its tributaries, together with its suggested stocking locations for their progeny in 2019. The Board was granted a licence from the Scottish Government for the collection of 200 broodstock fish and this began in mid-October. The numbers of eggs subsequently laid down in Sandbank Hatchery are detailed in Table 3.

For several years the Board has also been conducting stocking of the Tommore Burn at Ballindalloch, with assistance from Ghillies and local volunteers. Stocking of this Burn has been carefully monitored and the results of this are reported separately in section 4. The Board is grateful to all who took part in this, and particularly to Ballindalloch Castle's Head Ghillie, Steve Brand, for coordinating this. This has highlighted the value of public engagement in our work.

The SFB Stocking Policy remains progressive and will continue to be subject to review in light of new legislation, our ongoing monitoring and advances in scientific research.

Burn	Site details		Stocking 2018		
	Area (M <sup>2</sup> )	Quality	No. 0+ parr required	Hatchery Source	Stocking Density
<b>Burn of Brown</b>	19,700	Good	<b>35,000</b>	Avon	1.8
<b>Tommore Burn Plus</b>	8,800	Good	<b>25,000 + 50,000</b>	Avon	
<b>Corrie Burn/Dullan Water</b>	46,000	Good	<b>70,000</b>	Fiddich & Dullan	1.5
<b>Roths Burn</b>	10,000	Good	<b>40,000</b>	Lower Spey	4.0
<b>Back Burn</b>	17,500	Moderate	<b>15,000</b>	Lower Spey	0.9
<b>Broad Burn</b>	7,900	Good	<b>15,000</b>	Lower Spey	1.9
<b>Ringorm Burn</b>		Good	<b>20,000</b>	Lower Spey	
<b>Knockando Burn</b>	25,000	Good	<b>60,000</b>	Middle Spey	2.4
<b>Calder</b>	90,000	Good	<b>31,000</b>	Upper Spey	0.34
<b>Inverton Burn</b>	9350	Good	<b>20,000</b>	Upper Spey	2.1
<b>Milton Burn</b>		Good	<b>10,000</b>		
<b>Batten Burn</b>	8,750	Good	<b>35,000</b>	Dulnain	4.0
<b>Total</b>			<b>426,000</b>		

Table 2: Spey Fishery Board Stocking numbers, locations and densities for 2018. All fish stocked as 0+ parr in September.



Above: the SFB's Sandbank Hatchery in Glenlivet. (Photo: Roger Knight).

Table 3: Eggs laid down in Sandbank hatchery for stocking in 2019

Source	Number Females	Eggs laid down in hatchery
Avon	19	121,110
Fiddich	14	78185
Dulnain	6	33,295
Lower Spey	14	70,730
Middle Spey	10	64,000
<b>Total</b>	<b>63</b>	<b>367,320</b>

### 3.4 Pollution Incidents

There was one significant pollution incident during 2018, which occurred during the summer at the Milton Burn at Aviemore and was exacerbated by the low water conditions at the time. The details

were reported to the Scottish Environment Protection Agency as the regulator of such issues, for appropriate action to be taken.

### 3.5 Spey Action Plan

As reported in section 3.4, the Board held an Extraordinary General Meeting on 16<sup>th</sup> July 2016 to discuss a proposal to rear juvenile salmon to smolt stage. The Board determined that it would not be able to proceed with this for both scientific and regulatory reasons. It also determined that it needed an Action Plan to explain and clarify the actions that it was and would be undertaking to address the decline in the numbers of adult salmon returning to the river.

The Spey Action Plan that resulted from this is based upon six strategic priorities:

(I) The engagement of professional Public Relations services to lobby Scottish Government for the promotion of salmon angling and maintenance of the local economy;

(ii) The development and implementation of a scientific strategy to prioritise and enhance the provision of evidence-based advice to the Board for its management of the fishery;

(iii) Enhanced protection of Atlantic salmon from predation;

(iv) The development of our knowledge of smolt migration, both within the river and through the marine environment;

(V) A continued programme of riparian and in-river habitat enhancement projects to improve the spawning and juvenile habitats for Atlantic salmon;

(vi) And maximising the quantity and quality of water resources throughout the Spey catchment.

This Action Plan was presented to the meeting of proprietors and ghillies on 19<sup>th</sup> July 2018 and was published on the Board's website. Full details of it can be found at <https://www.speyfisheryboard.com/spey-fishery-board-meeting-papers-16th-july-2018/>

Since then, however, the Action Plan has been revised and re-drafted and this will be considered by the Board when it meets in February 2019.

### 3.6 Control of Invasive Non-Native Species: The Scottish Invasive Species Initiative (SISI)

In 2018 the Spey Fishery Board welcomed the start of the Scottish Invasive Species Initiative (SISI), a 4-year project seeking to reduce the number of Invasive Non-Native Species (INNS) across the North of Scotland. The SISI project is led by Scottish Natural Heritage, working in partnership with the Salmon Fishery Boards across the region and is funded by the Heritage Lottery Fund.

SISI aims to tackle INNS directly through contractor control and dedicated staff, as well as working with **local organisations** and **volunteers** to provide a long-term control solution for some of the most problematic INNS present in the region.

#### 3.6.1 Giant Hogweed

Giant hogweed (*Heracleum mantegazzianum*) was introduced into gardens as an ornamental plant in the 1800's and has spread throughout our river systems creating huge stands in the lower river. These plants out-compete native flora and have a devastating effect on the biodiversity of the areas they colonise.

It also presents a significant risk to human health, as the plant produces a phytotoxic sap which, when it comes in to contact with the skin, can cause severe blisters that can reoccur for many years when exposed to sunlight.

The main source of the plants on the River Spey is the Mulben Burn, which enters the main stem at Boat o'Brig, although there are one or two isolated stands further upstream.

Thanks to funding from SISI, Diageo and Crown Estate Scotland and through a combination of contractor, staff and volunteer effort, 2018 saw the most extensive control of Giant Hogweed ever



completed on the river, with over 95% of plants treated to the A96 bridge at Fochabers and considerable control below that to the river mouth.



**Above Left:** *Giant Hogweed plants in flower at access to the Black Hut, Lower Spey. Flowering stems were cut down and younger plants sprayed with Herbicide.*

**Above Right:** *A Giant Hogweed infestation post treatment at the Black Hut, Lower Spey.*  
(Photos: James Symonds).

### 3.6.2 Japanese Knotweed

Japanese knotweed (*Fallopia japonica*) is present on the Spey as far up as Ballindalloch, but it is not until the Fiddich joins the main stem at Craigellachie that it is present in higher density. The plant can re-grow from very small fragments of root or stem meaning **it should not be cut or trimmed** until the stems have fully died back in late winter.

In the autumn of 2018, using a combination of direct stem injection and foliar spraying, SFB staff and volunteers started at Ballindalloch and worked to Craigellachie treating the known stands, whilst contractors treated the River Fiddich and the Rothes burn, as well as the left bank of the Delfur beat to Boat O'Brig. A huge task remains, as this treatment will need to be followed-up in 2019 and the plants increase in density significantly downstream of the bridge. **If you are aware of any stands of Japanese Knotweed above Craigellachie please contact James Symonds, the SISI project officer, with details.**

### 3.6.3 White Butterbur

White butterbur (*Petasites albus*), known locally as the "Spey Hyacinth", is a rhizomatous plant favouring deciduous, riparian woodland. In areas

where White butterbur is well established, biodiversity is dramatically reduced, as is bank stability, leading to increased bank erosion and subsequent sedimentation of the aquatic habitat.

It is known that control can be achieved through application of systemic herbicides, such as glyphosate, but the extent of the White butterbur problem is such that huge quantities of herbicide would need to be applied across a large area in order to control the species. This could have damaging effects on the environment and so there is a need to research alternative methods of control to alleviate reliance on herbicide application. Under the SISI project, the Spey is taking the lead in researching other potentially-viable control methods.

In 2018 the SISI Project Officer, with help from volunteers, set up two trial sites on the banks of the Fiddich to ascertain what other control methods could compliment herbicide use.

The results will feed-in to a small-scale control programme by contractors on the Fiddich catchment in 2019, so 'real world' effectiveness and scalability can be established.



**Above Left:** *White Butterbur now dominates most of the Riparian Woodland on the river Fiddich.*  
**Above Right:** *White Butterbur control site being treated by volunteers using strimming, digging and herbicide application.* (Photos:James Symonds).

### 3.6.4 American Mink

Following the Scottish Mink Initiative and the ongoing vigilance of the Spey Ghillies and Game Keepers, American Mink numbers on the Spey appear to remain relatively low. Indeed only 6 animals reported sighted during 2018 along the whole main stem. There appears to be an isolated population on the Fiddich, with 5 captures at Dufftown early in 2018 and a large number still present along the coast, with 8 captures around Lossiemouth.

These animals will travel long distances to find new territories, so maintaining a robust monitoring network of rafts on the river remains a high priority.

### 3.6.5 Drone Survey

The lower Spey is an extremely dynamic environment, with mobile gravels and a wide riparian corridor. This has created a braided river channel, with an abundance of islands and side channels that create a myriad of opportunities for INNS to colonise and spread.

The nature of the lower Spey makes it difficult to survey on foot and so the full extent of INNS on the lower river was hitherto unknown. Thanks to funding from Crown Estate Scotland, in 2018 we were able to employ a professional drone company to fully map the lower Spey using a fixed wing drone. As the camera points straight down, unlike a conventional drone, this created a geo-referenceable image of the lower river.

The results were astonishing; the resolution was so high that we are able to see individual Giant Hogweed plants in flower as well as stands of Japanese Knotweed. This will allow us to better plan our approach to INNS management on the lower river and, by repeating the survey in a few years time, monitor our effectiveness at treating these plants.

This survey was picked up by the BBC and they visited the Spey to do a television piece for Landward, highlighting the problems that exist on our rivers in Scotland and giving valuable publicity for the excellent work that we are doing on the Spey and across the country.

### 3.6.6 Volunteering – Individual, Community and Corporate

The SISI project is reliant on volunteers. If you would like to help conserve the Spey, in any capacity, then please get in touch with James Symonds at:

[J.Symonds@SpeyFisheryBoard.com](mailto:J.Symonds@SpeyFisheryBoard.com)

This could simply involve reporting sighting of INNS along the river, monitoring a mink raft or coming out and treating invasive plants on work parties. If you have a **community** or **corporate group** that would like to get involved this can be accommodated and fun/team-building activities such as bushcraft can be integrated in to the session, so please do get in touch.



**Above:** A section of the lower Spey shown from the drone survey, Giant Hogweed flowers are clearly identifiable on the river banks and are visible in white.

(Photo: James Symonds)

### 3.7 Control of Ranunculus

*Ranunculus sp.*, or water crowfoot, is an invasive aquatic plant species which is non-native to the River Spey. It was accidentally introduced to the river over 40 years ago near Grantown-on-Spey and much of the River downstream of Grantown is now badly affected by this plant.

In the past the chemical Midstream, which contained the active and toxic ingredient Diquat, was used to control Ranunculus. As a result of EC legislation, we are no longer able to use this chemical and so the plant is spreading and in some areas has previously choked the flow of the river. The extensive mats of Ranunculus often accumulate sand and gravel underneath, choking

the underlying substrate beneath it. This affects the Freshwater Pearl Mussel and Salmon fry habitat. Alternative methods of control, such as manual cutting and removal or hand pulling, are not considered practical as they are costly, labour-

intensive and pose considerable health and safety issues for individuals working in a fast-flowing river.

A Scottish Natural Heritage (SNH) Position Paper in 2010 clearly explained how Ranunculus is detrimental to two of the four species (Atlantic Salmon and Freshwater Pearl Mussel) for which the River Spey is designated a Special Area of Conservation (SAC).

We reported last year on the correspondence that we had had with two Scottish Government Ministers, the responses from whom led the SFB to conclude that it was clear that the Scottish Government was not going to take any proactive or effective action on this issue.

We also reported last year that, having taken legal advice, the SFB had subsequently submitted a formal complaint to the Secretary-General of the European Commission in July 2017.

In late December 2017, the SFB had received an interim response from the European Commission, in which it indicated that *Ranunculus fluitans* was native to the United Kingdom and suggested that this was an individual case and so did not point to a systemic or consistent failure by the UK authorities. It also invited the submission of further scientific evidence in order to give further consideration to our complaint. The SFB responded to this early in 2018 and provided some of the extensive scientific evidence in order to enable the European Commission to pursue its enquiry.

We received a reply in late April from the Head of Environmental Enforcement at the European Commission. He informed us that the Commission had concluded, after reviewing the additional observations and evidence, that they did not

provide any new elements to lead them to reconsider their previous position and they must therefore close the SFB's file. The Commission also highlighted that the responsibilities of the Habitats Directive could not be invoked in relation to one or two particular species in a particular river, if it did not scientifically show how the conservation status of those particular species affected the status UK-wide. Our complaint was formally closed by the European Commission on 25<sup>th</sup> April 2018.

The Board subsequently decided to monitor *Ranunculus fluitans* through the Scottish Government's 12 pressures (see section 1.3), which it has identified as part of its Fishery Management Planning template and to utilise this to provide further evidence to the Scottish Government of the impact of this invasive plant.



**Above:** *Ranunculus fluitans* in the River Spey. The SFB's formal complaint to the European Commission about the Scottish Government's handling of this issue was rejected in 2018. (Photo Roger Knight).

### 3.8 Sawbill Ducks and Cormorants

The SFB has continued to coordinate a combined application to Scottish Natural Heritage for a sawbill licence to run from October until the following April/May, rather than from January until April/May as had previously been the case before 2015. This application is to shoot a licensed number of Goosanders, Mergansers and Cormorants as part of a broader programme of shooting to scare. The application is submitted on behalf of the Spey, Conon, Ness, Beauly, Kyle of Sutherland, Findhorn, Nairn, Lossie and Deveron Rivers. Although one application is submitted, separate licences (if granted) are issued to provide individual quotas for each river involved, following analysis by Scottish Government agencies of the respective supporting bird count data.

The application for 2017/2018 was successful and a licence was issued, with the Spey being granted a quota of 33 Goosanders, 6 Mergansers and 2 Cormorants which could be shot between 1<sup>st</sup> October 2017 and 31<sup>st</sup> May 2018. The latter date is significant because we need to provide additional protection to Salmon stocks during the annual smolt run. Carcasses of birds shot were also collected where possible for submission to the

Marine Scotland Science laboratory in Pitlochry for the analysis of stomach contents.

Throughout 2018 the SFB continued counting Goosanders, Mergansers and Cormorants, with counts carried out from Boat o'Garten to Spey Bay in late March and early May, early October and mid-December. We had also conducted a count in mid-December 2017 and the data collated, together with that collated during the count in early October 2017, contributed to our 2018/2019 Licence Application, which was submitted in early July 2018. In general, counts in October have shown the highest concentrations of sawbill ducks on the Spey, which have then gradually declined over the winter and into spring. By May, the male birds have generally departed for Scandinavia, leaving the females to remain on their nests.

Our 2018/2019 licence application was again successful and the Board has been granted a licence to shoot 26 Goosanders, 2 Mergansers and 3 Cormorants between 1<sup>st</sup> October 2018 and 31<sup>st</sup> May 2019. The slight reduction in the quota from previous licences and reflects the lower bird counts in October 2017. However, the October 2018 count produced the highest number of birds so far, with 451 Goosanders counted, which will be submitted with our next licence application.



**Above:** *The numbers of piscivorous birds such as Goosanders (pictured left, photo courtesy of [www.mullbirds.com](http://www.mullbirds.com)), Mergansers and Cormorants (pictured right, photo courtesy of [www.naturephoto-cz.com](http://www.naturephoto-cz.com)) are controlled on the River Spey under licence from the Scottish Government.*

2018 also saw Scottish Natural Heritage (SNH), as the licensing authority for piscivorous bird control, begin a review of their licensing procedures. A Sub-Group of a larger Sawbill Management Group, which is chaired by the SFB's Director, saw representatives of SNH, Marine Scotland Science, Marine Scotland (Policy), the Centre for Ecology and Hydrology, Fisheries Management Scotland and the Rivers Spey, Tweed and Dee convene in Pitlochry in early November 2018. A number of quick wins, particularly regarding the application form and the information required therein, were identified and are expected to be implemented in time for the submission of the next application in the summer of 2019. The Sub-Group also discussed the potential for using counts on main rivers as indexes for licensed quotas on tributaries and neighbouring rivers, as well as nominal quotas for rivers whose Boards or Trusts lack resources to conduct counts themselves. The SFB looks forward to continuing to participate in this review process during 2019 and we shall report next year on any new developments.

### **3.9 Moray Firth Seal Management Plan**

2018 saw the continuation of the Moray Firth Seal Management Plan, which the SFB has coordinated since October 2013. This Plan licences the SFB and other Fishery Boards (and previously salmon netting stations) around the Moray Firth to shoot Common/Harbour and Grey seals which have entered the rivers to predate on its Salmon and Sea Trout. It was first implemented in 2005, with the aim of protecting Salmon and Sea Trout stocks, whilst also maintaining the conservation status of the Dornoch Firth Special Protection Area (SPA) for common seals. The scheme introduced the novel approach of managing seals and Salmon over a large geographical area, the training of Nominated Marksmen to an agreed standard and the accurate reporting of all seals shot.

The Moray Firth Seal Management Plan includes the Scottish Government's Marine Scotland, the

Sea Mammal Research Unit (SMRU) from St Andrew's University, Scottish Natural Heritage, all of the District Salmon Fishery Boards from the River Deveron around the Moray Firth to the River Helmsdale, and a limited number of salmon net fisheries which have been active in the region. Overall, it provides for seal management for 16 rivers and 5 netting stations throughout the Moray Firth region.

In late 2016, the SFB had submitted a Licence Application for the period 1<sup>st</sup> February 2017 until 31<sup>st</sup> January 2018. This application had been successful and a licence was issued which permitted the shooting of 18 Grey Seals and 0 Common Seals. This remains a significant reduction from the 45 Grey Seals and 6 Common Seals which had been licensed to be shot throughout the Plan area in recent years.

The reason we are currently unable to control Common/Harbour seals is that their numbers throughout the Moray Firth have significantly declined in recent years. As a result, the Potential Biological Removal (PBR) figure has been set at only four. The PBR determines the number of animals which may be removed without causing a detrimental impact on the population status and has to include all anthropogenic takes, including accidental mortality by shipping and boats. Marine Scotland have previously told us that they are therefore unwilling to grant us any licence to control Common/Harbour seals, but would re-consider our case if supplementary information, particularly in the form of high-resolution photographs, could be submitted. This might help to clarify whether any future problems were being caused by a single predatory animal which could be clearly identified, or whether it was a group of different animals. We reported last year that that SFB has subsequently invested in appropriate photographic equipment to collate high-resolution photographs of Common/Harbour seals entering the river so as to provide the appropriate evidence for future applications to remove them.

We reported last year that the 2018/2019 Moray Firth Seal Management Plan licence had been issued at the end of January 2018 and, this time, had been issued for only nine months of the year, rather than the twelve that we had expected. So it was valid from 1<sup>st</sup> February until 31<sup>st</sup> October 2018 only. We also reported our intention to appeal this licence and to challenge it on the basis that: Atlantic salmon enter our rivers throughout the year, rather than just the months when the angling season is open; and District Salmon Fishery Boards have a statutory duty to conserve, protect and enhance Atlantic salmon and sea trout populations throughout the whole year, rather than just for part of it. The SFB's appeal was submitted on

14<sup>th</sup> February 2018 and Marine Scotland composed a panel a week later to consider our representations. This appeal was successful and Marine Scotland subsequently reinstated our twelve-month licence.

More research and evidence is needed, particularly regarding the development of effective Acoustic Deterrent Devices, for an effective and sustainable seal management strategy to be devised. The SFB will continue to work closely with the Scottish Government, its advisers and other District Salmon Fishery Boards throughout 2019 to refine the approach necessary for the effective deterrence of seals from salmon rivers.



**Above:** Grey seals are licensed to be managed by fishery managers under the Moray Firth Seal Management Plan, but Common/Harbour seals (**See Below**) have declined in numbers and remain outside the Plan's licence. More research and evidence is needed to provide an effective and sustainable seal management strategy. (Grey seal photo above courtesy of [www.visitwales.com](http://www.visitwales.com) and Common/Harbour seal photo below courtesy of [www.wildlifeanimalz.blogspot.com](http://www.wildlifeanimalz.blogspot.com)).



### 3.10 Fishery Protection

A Government-sponsored survey conducted in 2003 showed that Salmon and Sea Trout angling on the Spey contributes at least £11.8 million each year to the local economy and supports 367 full-time-equivalent jobs. Poaching therefore not only causes serious environmental damage, but also has a significant impact upon the local economy and causes damage to the rural community.

Throughout 2018, the Board's Water Bailiffs continued to work tirelessly to protect the River and its tributaries from illegal fishing. The SFB has also continued to work closely with Police Scotland, with whom we have been fortunate to enjoy close links, in order to control the poaching of these valuable fish.

Coastal patrols between the Boar's Head stretch of coastline and Cowhythe Head, using our commercially-coded 6.4 metre Rigid-hulled Inflatable Boat (RIB), were also continued from April-September 2017. This RIB was a significant investment for the Board, but it enables us to conduct patrols along the 20 miles of coastline over which

we have jurisdiction. Furthermore, our jurisdiction extends 3 nautical miles out to sea. Numerous patrols were completed during 2018 to deter illegal netting and were it not for these patrols being undertaken, the level of illegal netting along our coastline would likely become prolific. One illegal net was seized this year which contained a dead seal. This highlights the truly indiscriminate nature of these illegal nets.

The SFB was also contracted in 2018 to undertake a patrol for the Deveron DSFB and has, in previous years, also conducted patrols on behalf of other DSFBs. Some of these patrols were used to enforce the weekly "slap" time at mixed stock net fisheries (prior to the moratorium on netting out-with estuary limits and when leaders had to be removed) and yielded evidence which was later submitted in court for successful prosecutions. These contracted patrols have also continued to enhance our already close ties with other regional DSFBs and illustrated the value of pooling resources to tackle shared problems.



**Above:** The SFB's 6.4 metre Rigid-hulled Inflatable Boat (RIB) used to patrol the 20 miles of coastline for which the Board is responsible. The SFB also patrols some of the coastlines of other District Salmon Fishery Boards when contracted to do so. (Photo: Roger Knight).

Poaching incidents to which the Board responded during 2018 were numerous, but mainly small-scale and involved predominantly overseas visitors who had no knowledge of fisheries law.

The SFB will continue to work closely with Police Scotland and our colleagues in other District Salmon Fishery Boards throughout 2019 in the effective enforcement of fisheries law.



**Above:** An illegal gill net retrieved from the Moray coast in July 2018 by our Head Water Bailiff, Richard Whyte, who coxswain's the SFB's Rigid-hulled Inflatable Patrol Boat. This gill net contained a dead seal and illustrates the truly indiscriminate nature of these illegal nets. (Photo: Richard Whyte).

### 3.11 Administration and Staffing

The SFB said farewell to its Administrator, Sally Gross, at the end of March 2018 after six years in post. We are most grateful to Sally for her tireless work in maintaining the Board's administration and we wish her and husband Steve every happiness in their retirement.

In April 2018 we welcomed Mrs Joanna Walker as the Board's new Administrator, in succession to Sally Gross. Joanna has settled-in well to her new role and we wish her every success for the future.

We reported last year the departure of Liz Henderson, who has been employed by the SFB as the Spey Catchment Initiative's Project Officer, and the appointment of Mrs Penny Lawson to replace her. Penny joined the Initiative (as an SFB employee) from the Cairngorms National Park Authority and has had a busy but highly successful first year in post. We wish her every success for the future.

## Part 4

### Spey Scientific Report

#### 4.1 Juvenile surveys 2018

In addition to the routine, annual, juvenile surveys of the Spey catchment the scientific team had a very busy summer completing 30 new sites for the Scottish National Electrofishing programme (<https://www2.gov.scot/Resource/0053/00538332.pdf>) and a diverse range of contract work. The main purpose of the routine surveys is the collection of monitoring data against which the health of juvenile stocks throughout the catchment are assessed. The 2018 routine monitoring plan focussed on the Dulnain/Nethy/Druie tributaries along with the annual survey of the Spey mainstem. In addition approximately 50% of the salmon fry index sites in the Avon mainstem were resurveyed to monitor the recovery of the stock following the deprivations of Storm Frank two years previously. Due to the workload the programme of routine, density based surveys, in the tributaries was scaled back. In total 111 salmon fry index surveys (timed) were completed along with 106 density surveys. The findings of the 2018 programme were designed to be directly comparable with the results of the previous three yearly survey rounds (2012 and 2015). The summer of 2018 was exceptionally warm and dry, consequently very few days were lost due to wet weather. There were, however, several non-survey

days due to high water temperatures with no survey work undertaken if the temperature was likely to exceed 20oC.

#### 4.2 Salmon Fry Index surveys

During the summer, 54 salmon fry index sites were completed along the Spey mainstem, from Garmouth to above Spey Dam. Not all the annual sites were surveyed due to access issues or low water concerns. In addition to the mainstem salmon fry index sites were completed in the Dulnain, Nethy and Druie sub-catchments along with a few opportunistic sites in Tromie.

Salmon fry index surveys do not provide an absolute value for fish densities in at any site but when changes to variables such as time of year, survey team and location are minimised the results from this type of survey are very good for establishing trends, particularly in large watercourses where density based surveys are impracticable. As there is no national standard for salmon fry index surveys a Spey salmon fry index classification, along with a similar index for salmon parr, has been developed based on the five year average of the 2012 to 2016 surveys. This five year period covered a range of values therefore classification was fixed so that future surveys can be assessed against this five year average.

**Table 1: Spey Salmon Fry Index.**

<b>Breakpoint (salmon fry/min)</b>	<b>Class</b>	<b>Breakpoint (salmon parr/min)</b>
0	<b>Absent</b>	0
<5.00	<b>Very low</b>	<1.0
5.1 to <11.0	<b>Low</b>	>1.0 to 2.0
11.0 to <17.3	<b>Moderate</b>	>2.0 to 3.9
17.4 to 28.0	<b>Good</b>	4.0 to 6.9
>28.1	<b>Excellent</b>	>7.0

The Spey mainstem salmon fry index and the salmon parr counts for the period 2012 to 2018 are shown on the next page. The un-surveyed sites of 2018 had minimal impact on the mean values when compared to previous years and

there was no change in the overall rankings. The mean salmon fry count in 2018 was the second best in the sequence whilst the mean parr count was the highest.

Opinions on the potential impact of the low water that prevailed throughout the summer of 2018 on the results vary. It could be argued that the amount of fry habitat increases during low water conditions

and could in fact result in lower counts, if the fry spread out to take advantage of the additional habitat.

**Table 2: Spey mainstem salmon fry index, and parr counts 2012 to**

Site code	Location	Salmon								Salmon						
		2012	2013	2014	2015	2016	2017	2018		2012	2013	2014	2015	2016	2017	2018
S007R1	Gordon Castle	24.7	22.7	16.3	27.3	5.7	46.3	9.7		1.0	4.3	2.3	1.0	3.3	0.0	1.7
S012R1	Gordon Castle	11.3	17.0	17.3	20.3	10.7	14.7	44.3		1.0	0.3	0.0	0.7	0.3	0.0	0.0
S017L2	Gordon Castle	31.7	52.7	24.7	20.0	13.0	32.0	31.0		0.7	2.3	0.7	2.3	5.0	0.3	8.3
S019L2	Gordon Castle	13.3	57.7	28.7	34.7	17.3	59.3	33.3		1.3	1.0	4.0	3.0	3.7	0.7	3.0
S025L1	Gordon Castle	7.7	26.0	23.0	26.0	20.7	24.0	22.3		0.0	2.7	1.3	0.3	0.7	0.0	0.7
S029L1	Orton Water	6.3	41.0	15.0	31.7	15.7	29.0	28.3		0.0	4.7	7.7	0.7	4.3	0.0	0.0
S032L1	Orton Water	9.0	44.0	17.7	28.3	14.7	36.3	42.7		0.0	1.7	4.0	0.7	4.3	4.0	13.0
S034R1	Delfur	19.7	12.0	55.0	27.0	5.0	27.7	24.7		1.7	2.0	4.0	0.0	6.3	0.0	0.7
S040L1	Delfur	6.7	14.0	13.3	22.0	4.7	50.3	22.7		0.0	0.0	3.7	1.7	8.3	0.0	3.0
S040L2	Delfur		90.0	66.0	29.0	15.7	52.7	61.3			2.7	1.0	0.0	0.0	0.0	1.3
S042L1	Rothies	7.7	44.0	10.3	14.7	12.0	31.7	6.0		1.3	7.0	1.7	2.0	7.0	0.7	2.0
S047L1	Rothies	6.3	9.3	9.0	18.3	4.7	21.7			0.0	12.0	14.0	1.3	12.7	1.3	
S050R1	Armdilly	13.7	29.7	28.3	16.0	13.3	31.0			0.0	3.0	0.0	1.7	3.7	0.3	
S052L1	Armdilly	15.7	15.7	19.7	23.7	9.3	21.3			0.3	0.0	3.0	2.0	6.3	0.0	
S056L1	East Elchies	17.7	34.7	43.7	39.7	16.0	50.3			0.3	0.0	1.0	0.3	3.7	0.0	
S059R1	Craigellachie	36.7	28.3	33.3	23.0	17.3	45.7	24.7		0.7	4.0	2.0	0.3	2.0	0.7	3.3
S060R1	Craigellachie	13.0	12.3	23.0	11.7	17.7	20.3	15.3		0.3	0.0	3.0	0.0	2.7	0.3	0.3
S061R1	Craigellachie	20.3	12.3	22.0	10.0	4.7	16.0			1.0	6.7	9.7	0.7	8.0	3.3	
S062L1	Macallan						32.3									4.3
S066R1	Aberlour	10.0	15.3	27.7	17.0	11.0	31.3	15.7		2.0	35.7	19.7	1.3	18.7	14.3	17.0
S068R1	Kinermory	3.3	7.3							0.7	3.0					
S068L1	Wester Elchies		15.7	12.0	9.3	3.3	38.7	1.3			13.7	15.7	3.7	12.3	5.3	11.3
S071R1	Delagyle	7.0	6.3							3.0	2.3					
S072L2	Wester Elchies		19.3	7.3	28.3	3.0	22.7	18.3			5.7	3.3	2.3	3.3	0.3	4.3
S074L1	Laggan	7.0	5.3	9.0	13.7	2.0	18.0	8.3		1.0	8.3	4.3	0.7	4.7	6.0	2.3
S077L1	Laggan	36.7	10.0	31.3	27.7	7.7	32.0	18.3		0.7	3.3	1.3	0.0	7.7	2.0	3.7
S079R1	Carron	15.7	31.0	16.3	18.3	11.7	27.0	9.3		1.7	2.0	6.3	1.3	3.0	6.0	3.3
S082L1	Knockando	8.3	9.3	17.7	15.0	8.7	18.7	5.7		2.3	12.7	13.0	3.3	7.7	8.3	7.7
S087L1	Phones		3.7	6.0	4.7	0.7	7.0	3.3			5.3	6.3	0.0	3.7	5.3	2.3
S093R1	Lower Pitchroy	21.3	25.7	20.3	41.7	16.7	40.7	25.3		4.7	9.7	9.7	1.7	11.7	10.3	17.0
S096R1	Ballindalloch	11.0	20.0	49.0	37.0	20.3	52.0	30.0		1.7	2.3	11.0	2.3	6.0	8.7	4.3
S104L2	Ballindalloch	20.3	61.3	40.7	43.0	25.0	54.7	45.0		1.3	5.0	4.7	2.3	3.0	8.3	2.7
S105L2	Tulchan D	35.0	65.7	33.7	45.7	33.3	39.0			0.0	2.0	1.0	1.3	1.7	8.0	
S112L1	Tulchan C	10.3	35.0	11.3	31.3	14.7	28.7			4.0	8.0	7.7	5.3	10.3	9.0	
S119L1	Tulchan B	28.0	30.7	10.0	27.7	12.7	31.0			2.7	10.7	4.0	3.7	8.3	9.3	
S124R1	Tulchan A	13.0	38.0	14.7	18.7	11.7	33.7			2.3	1.7	1.3	2.7	5.0	5.7	
S131L1	Castle Grant 3	29.0	40.0	21.0	34.3	24.0	35.3	29.3		10.0	7.0	6.7	3.0	5.0	5.3	11.0
S135L1	Castle Grant 2	17.7	44.0	36.3	20.0	10.0	32.3	49.3		0.7	0.7	1.0	1.3	4.7	0.7	2.3
S141L1	Castle Grant 1	3.7	8.0	9.3	17.0	24.3	19.7	18.3		1.0	0.0	2.0	1.3	1.3	2.7	1.3
S147L1	SAIA	11.0	17.3	16.0	45.3	24.7	42.3	4.3		1.0	7.7	13.0	6.0	6.7	8.7	8.7
S149L1	SAIA	12.0	10.3	14.7	21.7	23.7	23.0	6.7		1.3	8.3	11.3	5.0	5.3	2.3	8.7
S163L1	Abernethy AA	33.7	73.3	59.3	28.0	28.3	68.3	106.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
S177L1	Abernethy AA	23.0	53.0	24.0	31.0	24.3	45.3	46.3		0.0	1.7	0.3	0.7	1.0	0.3	2.3
S183L1	Kincurdy	5.7	45.0	21.0	29.7	17.3	38.0	50.3		0.0	0.0	0.0	1.7	0.0	2.0	2.0
S195L1	Aviemore AA	14.0	36.0	13.7	11.0	14.3	17.7	51.3		0.0	0.0	0.0	0.7	0.7	0.0	0.0
S209L1	Kinrara	19.0	28.3	13.3	19.3	12.3	27.0	41.7		0.0	0.7	0.0	0.7	0.0	0.0	1.7
S212R1	Kinrara	16.0								0.0						
S215L1	Dalraddy	24.3	63.3	47.7	24.0	21.3	24.3	81.7		1.0	0.0	0.0	0.3	1.0	0.0	0.0
S243R1	Badenoch Ruthven	8.7	14.3	17.7		36.7	56.0	25.0		0.0	1.3	0.0		0.0	1.7	1.3
S254R1	Badenoch Golf	6.0	8.0	18.3	10.7	12.0	18.7	28.0		1.0	4.0	0.0	1.3	1.7	2.7	6.7
S258L1	Badenoch Calder	12.7	11.0	19.3	5.7	38.3	37.0	42.3		0.7	1.3	4.7	4.0	5.7	4.3	14.0
S260L1	Badenoch AA				20.7	22.7	23.7	16.3					1.3	4.0	2.3	8.7
S264R1	Truim	22.0	4.3	5.3						4.7	4.0	2.3				
S282R1	Laggan	19.7	17.7	18.7	26.0	20.7	30.0	36.0		1.0	3.3	0.3	0.3	2.7	3.3	7.0
S287L1	Laggan	12.3	21.3	14.7	5.0	29.7	25.3	24.0		2.0	5.0	2.3	3.0	9.3	3.7	8.7
S290L1	Below Spey Dam	18.0	25.0	5.7	8.0	17.0	8.0	18.7		4.7	11.3	7.0	7.0	10.3	2.3	18.0
S298R1	Glenshirra	0.0	0.0	0.0	0.3	0.0	0.0	2.3		0.7	3.7	1.3	0.0	3.3	0.0	0.7
S305R1	Garvamore	3.3	3.7	0.0	2.7	0.0	0.3	11.3		0.3	5.7	1.0	0.0	1.3	0.7	5.6
S305R2	Garva Bridge	1.3	1.3	0.0	1.0	0.0	1.0	2.3		1.3	4.0	0.7	0.0	1.7	0.3	1.7
S311L1	Upper Spey	4.0	0.0	0.0	0.0	0.0	1.0	9.7		0.0	0.7	0.0	0.0	0.3	0.0	0.0
S312L1	Upper Spey	4.7	0.0	0.0	0.3	0.0	2.7	3.3		1.3	4.7	0.7	0.0	1.7	0.0	1.7
S315L1	Upper Spey	5.7	0.0	0.0	8.0	0.0	2.0	6.3		0.0	3.3	0.7	0.0	1.3	0.0	0.3
S317L1	Upper Spey	7.0	0.0	0.0	1.0	0.0	6.7	12.7		0.3	2.0	0.3	0.0	0.3	0.3	2.0
S318L1	Upper Spey	3.0	0.0	0.0	0.3	0.3	1.3	3.0		1.0	1.0	0.0	0.0	0.7	0.0	1.0
S319R1	Upper Spey	0.7	0.0	0.0	0.0	0.7	1.3	3.0		0.3	4.7	1.3	0.0	1.0	0.7	2.7
S324L1	Upper Spey				0.0	2.0	0.7	2.0					0.0	0.0	0.0	0.7
S326L1	Upper Spey	5.7	0.0	0.0	0.0	0.7	0.0	13.0		0.3	0.7	0.0	0.0	0.3	0.3	0.3
S328R1	Upper Spey	0.0	*							0.3						
Mean		13.6	23.6	18.8	19.2	13.0	27.0	24.5		1.2	4.3	3.8	1.4	4.2	2.6	

Of interest were the unusually low salmon fry counts at the two sites at Grantown (S147/S149). A potential explanation is poor dispersal of salmon fry from the main spawning sites due to the

complete absence of high flows in the late spring and summer. The high fry count at Broomhill Bridge (S163), which is a major spawning location, adds weight to this explanation.

**Table 3: River Avon Salmon Fry Index**

Avon		Salmon fry/minute				Salmon parr/minute			
Site code	Location	2015	2016	2017	2018	2015	2016	2017	2018
TA01L1	Balfinloch Castle								
TA05L1	Golf Course	3.3	1.0	17.0	20.7	28.3	10.3	1.7	17.8
TA11L1	Haugh Pool	4.3	6.7	14.0	17.0	12.3	3.0	2.7	15.3
TA15L1	Upstream Black Burn								
TA21R1	Little Dalvachie	22.3	5.3	18.7	18.0	15.7	2.0	4.0	7.0
TA24R1	Dell footbridge								
TA29L1	Upstream Fodletter Bridge	26.3	1.0	18.0	22.7	18.0	3.3	4.0	5.3
TA34L1	Lochy mouth								
TA38L1	Dalvrecht-Conglass confluence								
TA41R1	At "S" bend Kynadrochit	23.7	5.7	17.7	11.7	1.7	0.0	2.0	11.8
TA49R1	Below Fordmouth Farm								
TA56R1	Upstream Delavoor Bridge	14.0	1.3	12.7	20.3	16.7	4.0	5.3	11.3
TA60R1	Muckle Ferrie confluence								
TA65R1	Heathery Island far channel	4.0	1.3	7.0	12.7	4.0	2.7	2.0	1.7
TA70R1	Opposite side channel								
TA76R1	Upstream Bulg confluence	7.3	1.0	3.3	13.0	3.7	3.0	2.7	4.0
TAB1L1	Upstream Allt Loin								
TAB4L1	Downstream Allt Loin Sheag	11.0	1.3	9.0	10.3	1.7	1.7	3.7	16.3
TAB9L1	Glenarvon Estate								
TA94L1	Glenarvon Estate, below sandbank	2.7	1.3	1.0	3.3	4.3	3.3	2.0	4.7
TA99L1	Fairdouran								
TA101L1	Glenarvon Estate	1.0	0.7	1.7	2.3	0.0	0.0	0.0	2.3
Mean		17.8	2.9	16.8	20.1	9.4	3.0	3.0	9.0

Monitoring of the River Avon in 2016 revealed the magnitude of the impact of Storm Frank on the juvenile population of that important tributary. Subsequent monitoring in 2017/18 has documented the recovery of the juvenile stocks, which are now back to 2013 levels.

The 2018 salmon fry counts were the best in the series and the second highest for parr. Of interest was the greater improvement in the upper middle counts, this was also noted in the Dulnain surveys. Results from sites not surveyed in 2018 omitted for clarity.

**Table 4: River Dulnain Salmon Fry Index**

Dulnain	Location	Salmon fry/min		Salmon parr/min	
		2015	2018	2015	2018
TSD02	Upstream railway line	15.3	26.7	7.3	17.3
TSD05	Upstream Dulnain Bridge	35.3	28.3	4.3	10.7
TSD09	Balnain bridge 15M U/S	38.3	28.0	2.0	5.0
TSD18	Wester Gallovie farm	43.3	102.7	0.7	5.0
TSD21	Duthil Church	74.7	118.0	3.0	1.0
TSD26	Lochanhully	13.3	19.0	3.7	41.7
TSD30	Allt Beag footbridge	15.7	27.0	4.3	19.3
TSD34	Feith Mhor	8.7	51.0	2.7	13.3
TSD41	Inverlaidnan Bridge	5.7	15.0	2.3	10.7
TSD45	200m upstream Dalnahaiteinch	14.3	49.3	1.7	14.3
TSD48	40m d/s watergate	7.7	19.0	2.0	6.3
TSD52	600m d/s Eil	8.0	6.3	2.0	13.7
TSD55	At Kinrara gate u/s Eil	3.0	11.0	0.0	14.3
TSD67	Upstream Feithlinn confluence				
TSD73	Suspension Bridge	0.3	21.3	2.7	1.7
TSD88	Pitmain Bothy	0.0	7.7	1.3	0.0
Mean		18.8	35.2	2.5	11.6

The Dulnain was the star performer in 2018, particularly in comparison with previous years, for both fry and parr.

The blue colour is reserved for sites where more than 100 fry/min, or 33.3 parr/min are captured, a rare accolade. In the Dulnain in 2018 three successive sites below Carrbridge attained the blue riband. At the Lochanhully site the parr count was the highest recorded at any site in the Spey catchment; 125 salmon parr in three minutes.

As in the River Avon the greatest increase in the counts were noted in the middle and upper sites. Ranking the salmon fry index results from each area highlights the good counts from the Dulnain but also that the Spey (below Spey Dam) drops from 2<sup>nd</sup> in the fry table to 6<sup>th</sup> in the parr table. The tributaries generally support higher numbers of older parr, but are there other explanations for this, predation perhaps?

**Table 5: Salmon Fry Index: Fry and Parr**

Salmon fry index 2018	Number surveys	Mean sal fry/min	Salmon fry index 2018	Number surveys	Mean sal parr/min
Dulnain	15	35.2	Dulnain	15	11.6
Spey downstream Spey Dam	43	29.2	Avon	11	9.0
Avon	11	20.1	Drue/Am Beanaidh	11	8.4
Tromie	3	19.8	Tromie	3	6.3
Nethy	5	19.4	Nethy	5	5.9
Calder	5	17.2	Spey downstream Spey Dam	43	5.1
Drue/Am Beanaidh	11	16.2	Calder	5	3.1
Spey upstream Spey Dam	11	6.3	Spey upstream Spey Dam	11	1.5

### 4.3 National Electrofishing Programme Scotland (NEPS)

During 2018, the first national electrofishing programme covering the whole of Scotland was introduced. This programme was designed by Marine Scotland scientists and funded by the Scottish Government with additional funding from SNH and SEPA. The programme was ambitious with 30 sites scheduled for surveying across 27 regions of Scotland. All 30 sites were surveyed in the Spey catchment, 10 of which were fully-quantitative (fished three times in succession) and the other 20 fished once. Only the smaller streams were surveyed; a weakness in a large river system such as the Spey, although irreconcilable, at present, when density based surveys are required.

The locations for each of the NEPS survey locations were selected using “a stratified, unequal probability, generalised random tessellation stratified (GRTS) sample”. This means that the site locations were randomly selected but weighted according to where the greatest densities were expected.

The Spey has been intensively surveyed over the years but even so, this programme took us into virgin corners of the catchment. The only new (un-surveyed) burn was the Allt Bheithachan, a

tributary of the Avon, which it joins downstream of Inchrory. This was one of these chemically rich burns draining limestone geology, a feature of that area. It supported high densities of trout and salmon, although the steepness of the terrain suggests it will only be accessible for a short distance.

The mean altitude of the 30 Spey survey sites was 334.5m(1100ft). This aspect alone sets the Spey apart from virtually every other salmon river in Scotland. In addition to the juvenile density data, scale samples were collected from all parr and DNA taken from, up to, 30 salmon parr at the fully-quantitative sites. Water samples were collected from each site for analysis. The ultimate aim of this programme is to incorporate juvenile densities into the Conservation Regulations, in a twin track assessment alongside the adult catch data. It is going to be very interesting to see what Marine Scotland scientists conclude from this programme, although it will be April 2019 before the findings are available.

What was clear from this survey, and the other monitoring over the summer, was that 2018 had been a good year for the juvenile stock, both in terms of density and growth. The summer of 2018 was a memorable one and it seems to have suited our upland rivers quite well.



**Above:** NEPS survey site in the upper River Livet. 215 parr were caught in this 24.4m long site, with salmon outnumbering trout by almost 4 to 1. (Photo: Brian Shaw, SFB Biologist).

## 4.4 Smolt Traps

Smolt traps were deployed in three locations in 2018; in the upper Fiddich, for the fifth successive year, for the second successive year in the River Dulnain, and the fourth year in the Tommore Burn.

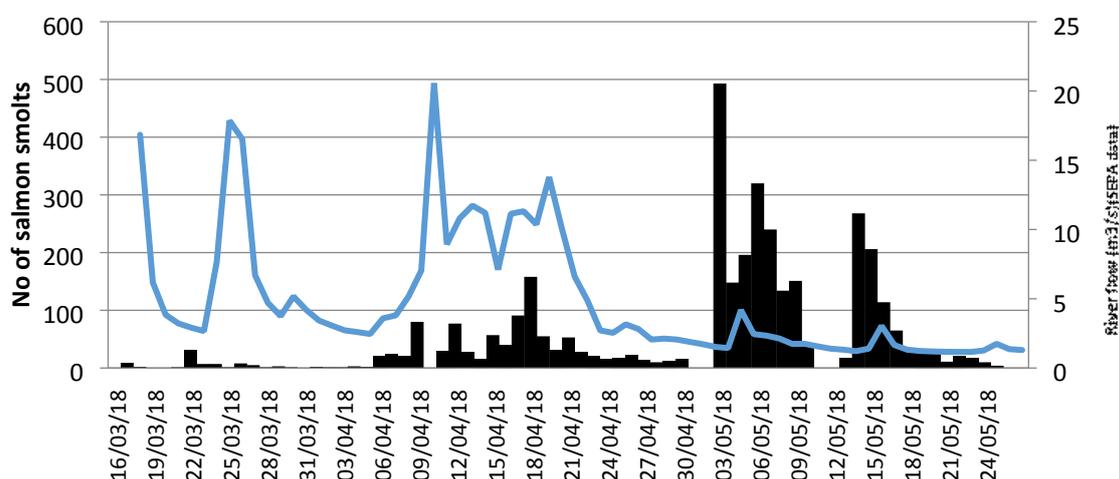
The Tommore Burn trap is a “Wolf” style complete capture trap with all fish caught processed and released downstream. In the Dulnain, and Fiddich, rotary screw smolt traps, were operated. These sample only part of the run, therefore mark and recapture techniques (*described in the American Fisheries Society Salmonid Field Protocols Handbook*), were used to generate estimates of the smolt run in these tributaries. This involved a number of individual trials where marked smolts were transported 1km back upstream and released.

The Easter Gallovie site in the Dulnain is a proven good site with excellent access and effective operation over a range of river levels. In 2018 the flow in the Dulnain was stable, although on the low side, but there were no big spate events to affect the results. The trap location was 7.5km upstream of the confluence with the Spey, therefore, the productive lower reaches and good tributaries such as the Auchnahannet Burn were not sampled. The catch (pre smolts and smolts) in the Dulnain trap in 2018 was 3,564 salmon (3,399 in

2017), with an additional 163 parr which were too small to smolt in 2018. The trout catch consisted of 502 trout (pre smolts and smolts) compared to 564 the previous year. Trap efficiency in 2018 was 14.8% for salmon (18.5% in 2017) based on 836 marked fish and 13.5% for trout (6.7%) based on 156 marked fish. Some fin-clipped salmon smolts were noted, 17 in total, these were from fish stocked in the Batten Burn.

The graph below shows the salmon smolt catch related to river level. A small rise on the 3<sup>rd</sup> May triggered the main run, although earlier and bigger rises had produced only small catches. This suggests the smolts were not ready to run at that time, indeed the run was 10 days later than in 2017, a consequence of the long hard winter, but eventually the trap catch outnumbered that of the previous year. The salmon smolts were slightly smaller on average in 2018, 110mm compared with 112mm. There was a greater size difference in the salmon parr, 58.9mm c/w 65.2mm, which could affect future smolt ages. Based on the figures above the salmon smolt run was estimated at 23,865+/-3,910 (18,302+/-2,754 in 2017). This equates to 4.9 (range 5.7 to 4.1) salmon smolts per 100m<sup>2</sup> wetted area, a typical value for the Highlands. The wetted area of the Dulnain upstream of the smolt trap is 485,065m<sup>2</sup>, of which 36% lies above the 350m contour.

**Dulnain salmon smolt catch and midnight river flow**





**Above:** *The Rotary Screw Trap deployed on the River Dulnain in 2018. (Photo: Brian Shaw).*

Flow patterns were similar in the Tommore Burn. The smolts tend to run earlier in the Tommore than in the Dulnain, this is possibly due to the greater reliance on additional flow to allow movement out of smaller burns. The salmon smolt catch in 2018 was the highest seen in the Tommore trap. 537 salmon smolts, more than double the 2017 catch, were trapped. The smolts emanating from the trap have all been two or three year olds, with the proportion of three year olds increasing.

As in 2017, the 2018 electrofishing monitoring in the Tommore Burn found that parr densities were

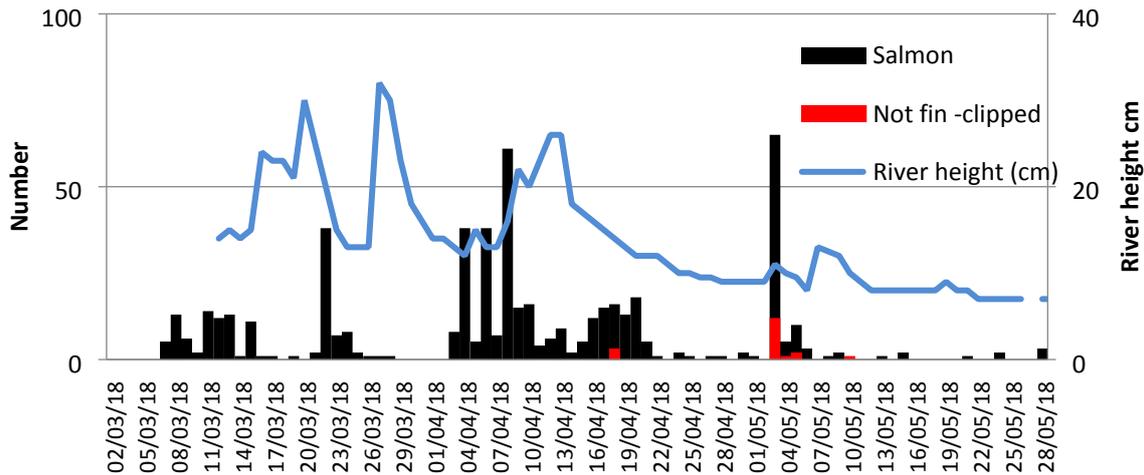
approximately double those recorded in previous years. It is therefore anticipated that the smolt production in 2019 should be similar to that of 2018.

In the Fiddich the actual catch of smolts was the second highest at that site although the run estimate was the third highest. Even though the Fiddich is the highest altitude smolt trapping location it produces large smolts, the average size in 2018 was 125mm.



**Above:** *The "Wolf-Style" smolt trap in operation on the Tommore Burn. (Photo: Brian Shaw).*

**Tommore salmon presmolt/smolt catch and 9am river level (cm)**



### 4.5 Education

Three local schools participated in the ever popular “Salmon go to School” project in 2018. The local river or burn is often a prominent feature of the landscape and for primary school pupils this project provides a great opportunity to experience, in a hands-on, and memorable way, what lives in these streams.

In 2018 Tomintoul, Glenlivet and Knockando Primary schools participated in the project with included an illustrated talk from John Trodden, a retired Head Teacher of Millbank Primary School Buckie, and committee member of the River Spey Anglers Association. Each class with also provided with a mini hatchery where they took responsibility for looking after 250 salmon eggs during the incubation and hatching process.

Once hatched the pupils transported the salmon alevins to the local stream for release. The project was concluded with an electrofishing demonstration at the release point in June, under the supervision of Steve Burns, SFB Assistant Biologist, where the pupils got a chance to handle, measure and identify, the fish species present. This outing also included bug-hunting, a fun but educational, introduction to water quality.

The Spey Fishery Board and the Spey Foundation are grateful to John Trodden for his volunteer input into this project, his professionalism and experience enriched the project for all.

The Spey Fishery Board and the Spey Foundation are also most grateful to Walkers Shortbread for their continued and generous support of the Board’s and Foundation’s educational projects.





**Above:** local volunteer John Trodden from the RSAA, together with the SFB's Assistant Biologist Steve Burns and pupils from Knockando Primary School releasing salmon alevins into the Knockando Burn. (Photo: Brian Shaw).



**Above:** Local volunteer John Trodden "Bug Hunting" with pupils from Glenlivet School. (Photo: Alison Woodcock, Glenlivet Primary School).

## Part 5

### Publicity

#### 5.1 Media Coverage

The Board has continued to receive media coverage during 2018 and its “Salmon Goes to School” project has continued to remain popular with the press. There was, however, a sensationalist and factually-incorrect article in The Sunday Times in November 2018. This related to the effectiveness of the Board’s hatchery operation and its operating costs. The Board responded robustly to this with a letter which was subsequently published two weeks later.

#### 5.2 Opening Ceremony

The SFB coordinated another successful annual Opening Ceremony at Aberlour on 11<sup>th</sup> February 2018. The Lord Lieutenant of Moray, Lt.-Col. Grenville Johnson CVO, OBE, TD, OStJ was our Guest of Honour, who opened the river for the start of the 2018 fishing season. The Board would like to sincerely thank the sponsors for this event, particularly Aberlour Distillery, Walkers Shortbread and Bespoke Catering of Aberlour. The Board was also grateful for the assistance provided by the River Spey Anglers Association, who also participated in the event.

#### 5.3 Briefings

Three comprehensive Briefings were published during 2018, with paper copies displayed at ghillies’ huts and other distribution via the Board’s website. They are available at the following web address:

<http://www.speyfisheryboard.com/spey-fishery-board-publications/>

#### 5.4 Website

Weekly updates of catches have continued to be made available on the Board’s website throughout the season. The Board is most grateful to Dr

Malcolm Newbould for his time and dedication in maintaining this, particularly during such a challenging season as that in 2018. However, more information and fishing reports from beats (including anecdotes and particularly photographs) would be greatly appreciated. Full details of this, as well as full details about the Board and Foundation and a wealth of research reports, can be found at <http://www.speyfisheryboard.com/>

News items are also regularly published and The “Blog” on the Board’s website has also been maintained. to enable swift publication of regular accounts of the Biologists’ work and the research that is being undertaken. This, in turn, is linked to social media including Facebook and Twitter. It has continued to be well-received and its popularity grows year-on-year. There continues to be the facility whereby visitors to the “Blog” may leave comments or ask questions, but whilst this does not imply that the Board’s website is a salmon forum, it has helped to make our work even more transparent.

#### 5.5 Public Meeting

The Board held their annual local Public Meeting at the Fleming Hall in Aberlour again on 29<sup>th</sup> November 2018. This was attended by approximately 30 proprietors, ghillies and local anglers. The Board’s Director, Roger Knight, presented an update on the work of the Board over the last year and outlined the progress being made to tackle the major issues currently affecting the river. The Board’s Biologist, Brian Shaw, also presented the results of our scientific monitoring throughout the catchment during the year and the state of the river regarding juvenile fish populations.

**SPEY DISTRICT FISHERY BOARD**  
**INCOME AND EXPENDITURE**  
**ACCOUNT**  
**FOR THE YEAR ENDED 30**  
**SEPTEMBER 2018**

	£	<u>2018</u> £	£	<u>2017</u> £
<b>Income</b>				
Fishery accessments		414,480		410,963
<b>Other income and Interest receivable</b>				
Recharges to the Spey Foundation		0	23,559	
Spey Catchment Initiative	111,062		32,400	
Scottish Invasive Species Initiative	32,170		0	
Other operating income	69,218		1,685	
Interest received	0		31	
Electro Fishing	0		5,000	
Inver House allocation	0		10,000	
		<u>212,450</u>		<u>72,675</u>
		<u>626,930</u>		<u>483,638</u>
<b>OVERHEADS</b>				
Personnel Costs		347,517		326,417
Direct Expenses		75,749		58,415
General expenses		51,803		49,421
Financial Costs		646		962
Spey Catchment Initiative		111,062		32,400
Scottish Invasive Species Initiative		<u>32,170</u>		<u>0</u>
		<u>618,947</u>		<u>467,615</u>
<b>PROFIT FOR YEAR</b>		<u><b>7,983</b></u>		<u><b>16,023</b></u>

**SPEY DISTRICT**  
**FISHERY BOARD**  
**BALANCE SHEET**  
**AS AT 30 SEPTEMBER**  
**2018**

	<u>2018</u> £	<u>2017</u> £
<b>FIXED ASSETS</b>		
Tangible assets	29,350	24,191
<b>CURRENT ASSETS</b>		
Debtors	69,504	50,077
Bank - Current Account	<u>355,029</u>	<u>290,429</u>
	<u>424,533</u>	<u>340,506</u>
<b>CURRENT LIABILITIES</b>	<u>(94,391)</u>	<u>(13,188)</u>
<b>NET CURRENT ASSETS</b>	<u>330,142</u>	<u>327,318</u>
<b>NET ASSETS</b>	<u>359,492</u>	<u>351,509</u>
<b>REPRESENTED BY:</b>		
Capital accounts	38,569	38,569
Current accounts	290,923	282,940
Inver House Designated fund balance	<u>30,000</u>	<u>30,000</u>
Surplus as at 30 September 2018	<u>359,492</u>	<u>351,509</u>

1. The above figures must be considered as draft until approved by the Board's Annual General Meeting.
2. These are abbreviated accounts. A copy of the Board's full Financial Statements, together with explanatory notes, will be published on its website ([www.speyfisheryboard.com](http://www.speyfisheryboard.com)), once they have been approved at the Annual General Meeting.

**Top Left Cover Photo:** *The SFB's Rotary Screw Trap in operation on the River Dulnain. (Photo: Brian Shaw, SFB Biologist).*

**Top Centre Cover Photo:** *Keeping a captured fish in water whilst photographing it, prior to its release. (Photo: Mark Melville, Head Ghillie, Delfur Fishings).*

**Top Right Cover Photo:** *A close-up of Willie Mair's spring salmon at Beaufort, Delfur, as it is released back into the River to spawn (Photo: Mark Melville, Head Ghillie, Delfur Fishings).*

**Bottom Cover Photo:** *The Telford Bridge, River Spey, at Craigellachie. (Photo: Roger Knight).*

