



2023

ANNUAL REVIEW

Working to conserve Scotland's wild salmon and native freshwater fish, Fisheries Management Scotland is the representative body for Scotland's District Salmon Fishery Boards, Rivers and Fisheries Trusts and the River Tweed Commission.



Fisheries Management Scotland is a limited company registered in Scotland under no. 587127. Registered office: 11 Rutland Square, Edinburgh, EH1 2AS

Editor: Rob Fletcher
Design: www.bremnerdesign.co.uk

Cover image: Richard Davies and Wildland
Inside cover image: Jonathan Louis



Chairman's introduction

Richard Sankey
Chairman, Fisheries Management Scotland

It is with great pleasure that I introduce our latest annual review. We have tried to provide an overview of the work of the staff team, some examples of the excellent projects undertaken by our members, and a perspective on some important policy developments which have occurred in the last year.

This year you will not find catch graphs at the end of the review. The new approach reflects the timing of publication of the official Scottish Government statistics and the real-time catch data that is now available online. The Scottish Government have also decided to publish preliminary catch statistics in March – a very positive approach in our view. We are exploring means of presenting catch graphs once the official statistics are published.

In 2022, our member organisations across Scotland continued to work tirelessly to address the ongoing pressures facing our wild salmon and freshwater fish, against the backdrop of the climate and biodiversity crises. As a representative body, we are nothing without our members, and I cannot overstate the massive contribution that they make to protecting and restoring Scotland's rivers and fish.

No single organisation can address the current situation alone, and we work closely with a range of partners to help reverse the decline of our aquatic biodiversity. We continue to play an active role in the Missing Salmon Alliance, taking a leading role in the advocacy efforts within the Alliance. By bringing together science, advocacy and action, and supporting our coordinated efforts, the Alliance continues to be a very positive presence.

In order to protect and restore wild salmon, large-scale concerted action is required to restore and provide resilience in our rivers. Public funding is insufficient to deliver this work, and private finance has an important role to play. Support from the Esmée Fairbairn Foundation, arising from our close working relationship with The Rivers Trust, alongside funding from the Missing Salmon Alliance, have allowed us to start recruitment for a Director for Nature Finance. This exciting new role will support our members to

design and deliver innovative green finance schemes within river catchments in Scotland and we are very grateful for this support.

We are pleased to see progress in the development of the Wild Salmon Strategy Implementation Plan and Biodiversity Strategy. While I recognise that strategies do not tend to generate great excitement, the clear statement of Scottish Government priorities for our wild salmon can only help our ongoing efforts to stimulate meaningful and coordinated action on the ground.

Reform of the regulatory system for fish farming continues to be a key priority. We have engaged extensively with SEPA as part of the development of the new sea lice risk assessment framework in the last year, while continuing to push for the delivery of the recommendations of the Salmon Interactions Working Group. The new regulatory system is expected to be in place later this year, the result of many years of hard work by Fisheries Management Scotland, and others who care about the conservation of wild salmon and sea trout.

I would like to thank our directors, who provide their time and expertise freely to support our organisation. They have made a significant contribution to our ongoing success.

It was fantastic to welcome three new staff members in 2022. Leanne Munro joined the Scottish Fisheries Coordination Centre (SFCC) on secondment for the whole of 2022. Sean Robertson and Jenny McNeill joined us in May – Sean as the Manager of the SFCC and Jenny as our Administrator. I would like to end by thanking our staff team, who work tirelessly and very effectively on behalf of our members.



Time to put strategies into action

Alan Wells
Chief Executive, Fisheries Management Scotland

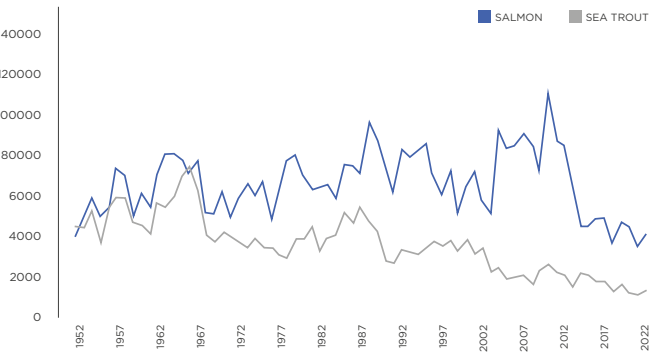
Many people are rightly concerned about the ongoing declines in our wild salmon and sea trout populations. The provisional salmon and sea trout catch statistics for 2022 have now been published and whilst there was a small increase in catches, it is clear that salmon stocks remain at a low ebb. There is no simple solution to the current situation – the pressures which salmon face are complex and multifaceted, and concerted effort is required to address these pressures in the areas that we can control.

The members of Fisheries Management Scotland are at the forefront of efforts to protect, enhance and restore our wild fish and the habitats on which they depend. The range of work being delivered across Scotland is incredibly impressive and the contribution that our members are making is now increasingly recognised by policy makers.

The Missing Salmon Alliance (MSA) is an important mechanism to coordinate action to conserve and restore salmon among like-minded NGOs. We have also seen real value in working with our MSA partners – by combining expertise and coordinating activities on science and advocacy, we are working across the UK to help wild Atlantic salmon survive and thrive in our rivers and seas.

In addition to coordinated action through the MSA, we are also working with partners on a bilateral basis. We are developing a close working relationship with The Rivers Trust, recognising the many synergies between our organisations and respective memberships. We also work closely with the Atlantic Salmon Trust, and the West Coast Tracking Project – in partnership with Marine Scotland – is a great example of productive, coordinated work for the benefit of wild salmon. You can read more about these initiatives on pages 20 and 7 respectively.

Annual Salmon & Sea Trout Catches Scotland 1952 - 2022



Source – Marine Scotland Science © Crown copyright

The Wild Salmon Strategy Implementation Plan was published in February 2023 and sets out over 60 actions to conserve and restore our wild salmon. This was a major priority for Fisheries Management Scotland, and we are pleased to see that the plan reflects a number of priority areas that we and our members have been advocating for. You can read more about the strategy on pages 22-23.

There is now an indisputable body of evidence that biodiversity, both globally and in Scotland, is in real trouble. Our members manage rivers at a catchment-scale and are ideally placed to deliver large-scale nature restoration projects. Many such projects are already well-established, but it is also clear that the resources to deliver this work, and particularly the expertise to access innovative private finance, are not evenly distributed across the fisheries management community.

We have therefore taken the decision to develop our capacity to support this work through the recruitment of a Director for Nature Finance. This exciting new post is funded by the Esmée Fairbairn Foundation and the Missing Salmon Alliance, with support from the Rivers Trust. We have been working closely with NatureScot to support specific funding initiatives on the Spey and Kyle of Sutherland. You can read more about these on page 24.

We are working through the Riverwoods Initiative to support efforts to restore riverside shading through planting native trees and vegetation beside our rivers. This is an issue of particular relevance to fisheries managers, and modelling undertaken by Marine Scotland Science is helping our members to prioritise the parts of rivers most at risk from climate-induced warming. Meanwhile, Russ Jobson from the Tweed Forum is doing a fantastic job supporting FMS members in their efforts to restore native riverside woodland (see pages 26-27).

While it is important to place a focus on the large-scale interventions that are required to improve habitats and increase resilience in the face of climate change, it is equally important to focus on actions to prevent further habitat deterioration. This requires ongoing advocacy, immediate action on the ground, and better regulation, with a renewed focus on using the enforcement mechanisms that are already available.

In February, we published the outputs of our work to map the spatial extent and severity of pressures which can impact our wild salmon. This work was supported by grants from the European Maritime and Fisheries Fund and Scottish Government and could not have been delivered without the expert input of fisheries managers across Scotland.

This project presents the first national summary assessment of the pressures acting on wild Atlantic salmon in Scotland and shows clear regional differences, with considerable variation in the relative importance of specific pressures in different parts of Scotland. Taken together with the Wild Salmon Strategy Implementation Plan, this important project will guide and support fisheries managers and policy makers in their efforts to protect and restore wild salmon.



Riverbank restoration works. Credit: Ayrshire Rivers Trust



Closing the net on fish crime and uninvited guests

Brian Davidson
Director of Communications and Administration,
Fisheries Management Scotland

Fish crime and invasive pink salmon are two of the key priority areas for Fisheries Management Scotland and our members in the year ahead.

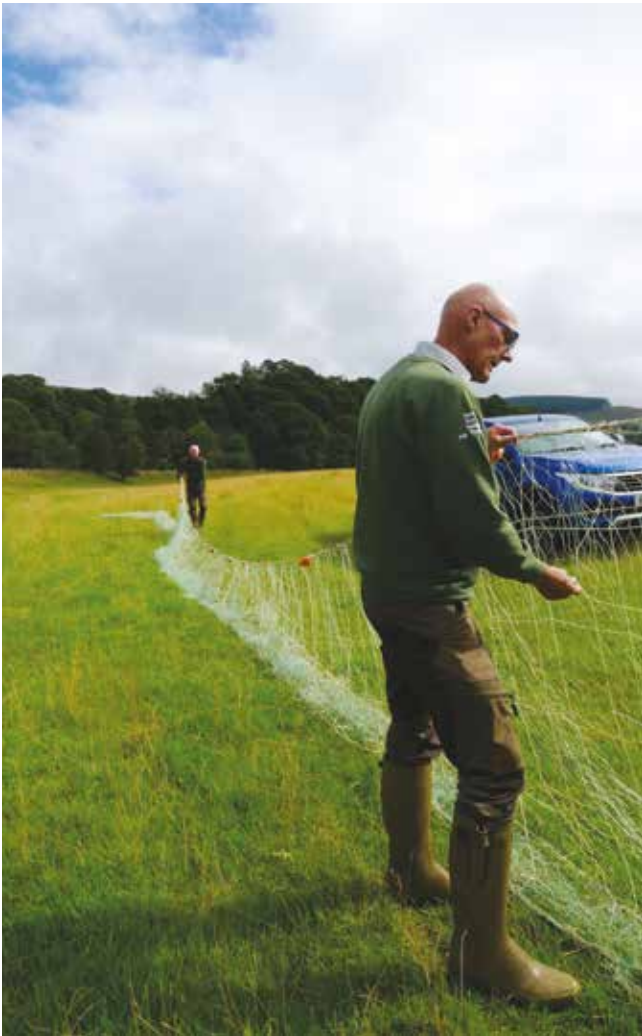
Combating fish crime

Effective enforcement of the fisheries legislation in Scotland is an important part of ensuring that the recovery of wild salmon stocks is not compromised by illegal human exploitation. On page 22 and 23 of this review there is an overview of the Wild Salmon Strategy Implementation Plan and it is fantastic to see that the plan sets out specific actions to deliver effective regulation, deterrents and enforcement in a bid to reduce fish crime. The Scottish Government have committed to review enforcement powers and the penalty regime for salmon poaching and other offences, aiming to increase penalties if necessary.

From our perspective, addressing fish poaching is contingent on three factors – effective partnership working with Police Scotland, the Crown Office and other stakeholders; a fit-for-purpose legislative framework; and a competent and skilled enforcement network.

Through effective partnership working during the past year, we have made substantial progress in ensuring that fish poaching is recognised as a serious wildlife crime and a risk to our wild salmon populations.

In last year’s review, we profiled the newly-launched film series Our Wild Salmon. We are delighted to report that, since then, the Crimes Against Salmon short film is now being used as formal training content for police officers who take up wildlife crime liaison roles in the force. With the support of the Tay and Spey DSFBs, we delivered a further training day on fish crime for Procurator Fiscals from the Crown Office Procurator Fiscal Service (COPFS) Wildlife and Environmental Crime Unit, Police Scotland and Marine Scotland policy staff. This was an extremely valuable opportunity to exchange information and experiences on fisheries enforcement and court procedures between key organisations.



Confiscated gill net used for fish poaching.

We have developed an impact statement for COPFS and others, to help provide context relating to the significance of fish poaching. We are delighted that COPFS has agreed to circulate this to Procurator Fiscals for use in fish poaching cases. Defence lawyers often claim that fish crime is just an attempt by individuals to get “one for the pot” but the impact statement will help support fiscals to counter this claim.

Training for our own enforcement network remains a top priority and – with the Institute of Fisheries Management – we helped to deliver five online exams during the year. It is fully recognised that the exam is

an entry-level assessment and strategic discussions are underway to map out a more comprehensive suite of training and CPD across a broader spectrum of skill sets relevant to enforcement. This will include online resources, films and face-to-face training.

Invasive pink salmon

As we enter another “odd-year” – 2023 – we anticipate the arrival of non-native pink salmon in Scotland’s rivers. We have been working closely with Scottish Government, SEPA, NatureScot and our members to plan ahead for the imminent arrival of these fish. This includes upscaling surveillance, not only through captures and observations, but also by strategic deployment of eDNA sampling to assess their presence/absence in river systems. As you will read on page 32 we have made further updates to the online reporting app, so that information can be reported and displayed in real time on our interactive dashboards. While surveillance is important, assessing effective, practical management options for tackling these non-native invaders is essential, and we are working with our members and the licensing authorities to ensure that local management measures can be deployed on the ground.



Non-native pink salmon. Credit: Jamie McCarthy, Caithness DSFB



Netting for pink salmon on the River Oykel. Credit: Kyle of Sutherland Fisheries



As reported in the introduction to this review, we welcomed three new staff in 2022, including Jenny McNeill, who joined us as our administrative assistant in May 2022.

“I was delighted to join the FMS team in early May 2022 and immediately settled in. My role is very dynamic, from general administration duties, to event management and finance, and no two days are ever the same. As someone who is very new to the fisheries management community, I have thoroughly enjoyed learning about all of the different projects that are carried out by FMS and our membership, and I look forward to continuing to do so for many years to come.”

Jenny McNeill
Administrative Assistant



Managing interactions with aquaculture

Charlotte Middleton
Aquaculture Interactions Manager

It has been another eventful year for managing interactions between wild and farmed fish. 2022 saw further progress towards implementing meaningful regulation for the fish farming industry, our members delivered important monitoring of wild fish health, and we ran a fantastic coordinated effort with our partners in the Atlantic Salmon Trust and Marine Scotland to deliver the West Coast Tracking Project. I have supported our members in their engagement with the fish farming industry and regulators, to highlight the pressing need to deliver better protection for Scotland's wild salmonids. We are extremely grateful to Marine Scotland and Crown Estate Scotland for continuing to fund this essential work.

Over the past 12 months, work has continued on the new regulatory regime for the protection of wild fish from sea lice. Following their consultation in early 2022, SEPA have organised a series of informative workshops for stakeholders to further understand the sea lice risk assessment framework and refine how it will work in practice. Fisheries Management Scotland continue to engage with SEPA on the various elements of the framework, including the role of wild fish monitoring. We expect the framework to be in place later in 2023. Alan was invited to join the Scottish Aquaculture Council, an advisory group to support delivery of Scottish Government commitments on aquaculture. In addition, both Alan and I have contributed to the Scottish Government 'Vision for Sustainable Aquaculture', and we expect this to be published shortly.

Monitoring of sea lice infestation pressure on wild sea trout is an important element of understanding wild-farmed interactions, and our members on the west coast undertook a range of monitoring work in 2022. We are grateful to Marine Scotland and Crown Estate Scotland for supporting this work. The results of this monitoring are being analysed by Marine Scotland Science and feed into adaptive management at a local level, through Environmental Management Plans (EMPs). Supporting our members in their engagement in the EMP process is an

important aspect of my role. It will be vital to ensure that the extensive experience of monitoring for sea lice on wild salmonids within our membership feeds into the new regulatory framework and we are engaging with SEPA to support a more strategic national approach under the developing sea lice risk assessment framework.

We are also exploring how best to incorporate gill health monitoring to develop a better understanding of the prevalence of gill challenges in wild salmonids.

In September, the Aquaculture Stewardship Council (ASC) published a revision to their Salmon Standard, altering their criteria on sea lice management. Despite our strong objections, the revisions significantly lower the bar for salmon farms to be certified in Scotland. The threshold for sea lice on farmed fish has been moved from 0.1 lice per fish to 0.5 lice per fish, and whilst the new approach introduces a stricter deadline for reducing lice numbers, the threshold in Scotland is now significantly higher than in Norway, despite the criteria being designed for the protection of wild salmonids. This recent revision follows an earlier change which allowed freshwater sites farming salmon smolts to be certified (an activity that was previously banned under the standard). In our view these changes undermine the integrity of the scheme and ASC cannot be viewed as a credible means of protecting wild fish.



Salmon farm in the Sound of Shuna.



Coastal fyke net deployed in Argyll.

On a more positive note, 2022 saw another fantastic effort to deliver the second year of the West Coast Tracking Project. This exciting initiative is a partnership between the Atlantic Salmon Trust, Marine Scotland and Fisheries Management Scotland. In year two, the project placed a focus on understanding how wild salmon smolts move through our sea lochs and coastal waters. This will continue to be the focus in 2023 to help inform regulation of marine developments. The West Coast Tracking Project is funded by the Scottish Government and private donations, including from Salmon Scotland. The project requires a huge collaborative effort between the steering group and the project partners who deliver the work on the ground and we extend a huge thank you to all those involved.



Assessing sea trout for sea lice infestation pressure in Lochaber.



Fresh perspectives from the Scottish Fisheries Coordination Centre

Sean Robertson
SFCC Manager

In May of 2022 I joined the Scottish Fisheries Coordination Centre (SFCC) as manager, after being the biologist at the Kyle of Sutherland DSFB. As the previous manager, Sean Dugan, took up a new job, SFCC had a period without a manager in place. However, this did not cause too much disruption, as we had Leanne Munro with us on a full-time secondment for the first half of the year as a data coordinator. Leanne was instrumental to the running of SFCC in the period between managers, and ensured the smooth operation of the organisation during that time.

Training is one of the core activities of SFCC, and we delivered a wide range of courses over the year – including invertebrate surveying, electrofishing, freshwater pearl mussel surveying, habitat surveying, otolith reading, scale reading, an introduction to mapping software (GIS) and an introduction to R, which is a statistical software package. Across all of these courses we had 148 candidates – a very busy and productive year!



Sean smolt trapping in his previous role.

In terms of skills in the sector, we have also been supporting the second round of NatureScot's Working with Rivers scheme, funded by Graduate Career Advantage Scotland (GCAS). This initiative offers funding to employers to take on a graduate for six months, with the aim of the graduate developing skills in river restoration and associated workstreams. As well as offering advice to NatureScot to ensure the process of applying for funding was suitable to employers (composed mostly of DSFBs and Fishery Trusts), SFCC will also be providing training to the successful graduates.

One of SFCC's core strategic objectives is to "facilitate cross-Scotland projects and provide data to inform national policy decisions, and to evidence local management actions", which we have done by providing technical support for Marine Scotland's National Adult Salmon Sampling Project, as well as technical development for the Fisheries Management Planning project, which is jointly funded by Crown Estate Scotland and Marine Scotland. These plans will be presented as storymaps – user-friendly, interactive presentations of map-based information.

In February 2023 our annual biologists' conference was run as a hybrid event. This was our first event since early 2020 with a face-to-face element and it was great to meet our members and to facilitate discussions between them. We would like to thank all our members for their continued support – including Marine Scotland Science and Policy, and SEPA. We would also like to thank members of the management committee and members who have supported and delivered bespoke training on behalf of SFCC.



My time with the SFCC

Leanne Munro
Data Coordinator, Scottish Fisheries Coordination Centre

In January 2022, I joined SFCC as data coordinator for what was originally meant to be a six-month secondment. In the end the secondment period was extended to a full year, albeit on a part-time basis for the last six months of the year.

I was very fortunate to have the support of the Fisheries Management Scotland staff team, the SFCC committee and SFCC members, during a period when I was asked to cover the work of SFCC, as the previous manager – Sean Dugan – had moved on to a new job. I was able to continue to deliver the SFCC's core objectives, including organising key training courses for the membership. These included training in invertebrate surveying, scale reading and electrofishing. Over six in-house courses, 57 candidates successfully completed electrofishing training. I also helped to develop online training resources for the invertebrate surveying and scale reading courses to support in-person training.

A large part of my role involved the design of online/mobile data collection apps. These feature a range of topics – including reporting fish disease, escaped farmed fish and sightings of pink salmon. I also re-designed the app to support the National Adult Salmon Sampling Project. To concisely display the data collected from the apps, I have also created dashboards which can now be viewed on the Fisheries Management Scotland website.

I am very grateful to have received this opportunity to work with such a fantastic team – I never thought that the secondment would pan out the way it did, but it is an experience I have learned a lot from.

Sean, I wish you all the best as manager at SFCC!



SFCC electrofishing training.



Freshwater pearl mussels.



Landscape-scale changes to help save our salmon

Roger Knight
Director, Spey Fishery Board

How the Spey Catchment Initiative is looking at the bigger picture in a bid to improve salmon habitat and river health.

The Atlantic salmon has often been referred to as the “canary of the environment”. Remarkably, stocks have reduced by 75 percent over the last 30 years and this keystone species is now in crisis – not just here in Scotland, but across all of its North Atlantic range. The Spey Catchment Initiative (SCI) was formed in 2010 to take a partnership approach to achieving shared objectives throughout the catchment. It has since become an extraordinarily successful public/private partnership, winning the UK Rivers Prize in 2020. In 2019 there was a step-change in its river restoration projects. Treating each tributary as a sub-catchment, it began instigating substantial projects to make landscape-scale changes across the whole tributary, rather than short sections of burns.

This began on the River Calder, where 29 large wood structures were installed into the river and three large deer-fenced enclosures for tree regeneration and

planting were created, with water gates to enable deer movement that precluded access to those enclosures. All of this was done in conjunction with broader plans for reforestation and land regeneration across two large estates, using Atlantic salmon as an indicator species for project success.

Building on this, the SCI implemented another substantial project in 2022, along 6 km of the headwaters of the River Spey, installing 65 large wood structures in-river and including plans for significant riparian tree planting. Being aware that the management of the surrounding land affects both the rivers and our iconic Atlantic salmon, 2022 saw the SCI adopt an even more holistic approach to catchment management, by including peatland restoration and carbon sequestration within its projects. It also became a Scottish Charitable Incorporated Organisation (SCIO).

If we are to help reverse the plight of Atlantic salmon, we need to make our rivers more sustainable and resilient to the climate and biodiversity emergencies confronting us. That means initiating landscape-scale changes that will make a real difference. And that means thinking BIG!



Installing the large woody structures in the headwaters of the River Spey.



Large woody structures in the headwaters of the River Spey.



The Findhorn Watershed Initiative

Elle Adams
Strategy Lead, Findhorn Watershed Initiative,
Findhorn, Nairn, and Lossie Rivers Trust

The Findhorn Watershed Initiative is a trailblazing vision to restore a mosaic of nature-rich habitats, inspire a culture of nature connection and enable a thriving local nature-based economy.

Galvanised, like many, by the alarming projections of the Scotland River Temperature Monitoring Network, the members of the Findhorn, Nairn and Lossie Rivers Trust have been reflecting deeply on the actions within our powers to protect our river systems and their inhabitants from the twin crises of climate breakdown and biodiversity collapse. We have begun to explore the potential of the river catchment as a natural unit within which to foster an integrated approach to ecological, social, cultural and economic regeneration.

The response that's emerged over the past 12 months takes the form of The Findhorn Watershed Initiative – a trailblazing vision to restore a mosaic of nature-rich habitats, inspire a culture of nature connection and enable a thriving local nature-based economy.

This vision is based on the understanding that nature recovery is as much about connection, care and – ultimately – legacy, as it is about trees in the ground, or water retained in the landscape. The hope for the future health of our ecological systems is fundamentally intertwined with the cultural values and economic system that have the potential to make or break their restoration.

It is clear to us that natural recovery in the Findhorn watershed will unfold over multiple generations, and that to realise Scotland's net zero and nature restoration ambitions at pace and scale will require a huge expansion of the skills base able to deliver them. In order for the changes we initiate now to be truly transformative and lasting, we need to foster the mindsets and skillsets within our watershed, to steward and sustain this process.

As trusted place-based conservation organisations, we believe that rivers trusts are well positioned to enable this kind of approach. Serving as a natural intermediary between landowners, managers, agencies, educational institutions and local communities, the Findhorn, Nairn and Lossie Rivers Trust will seek to nurture people's sense of belonging in their watershed, and facilitate more opportunities for high quality training, green jobs and nature-based enterprise – directly in tandem with our nature restoration efforts.

Where this journey will take us, we don't yet know but – if the significant initial capital granted to us by the Scottish Government's Just Transition Fund and NatureScot's Nature Restoration Fund is any indication, we might be heading in the right direction. We look forward to reporting on our progress this time next year.



A section of the upper Findhorn.



How a mystery disease is impacting the River Forss

Alan Youngson
Flow Country Rivers Trust

The salmon population of one of Scotland's most productive rivers is being adversely affected by drought and disease.

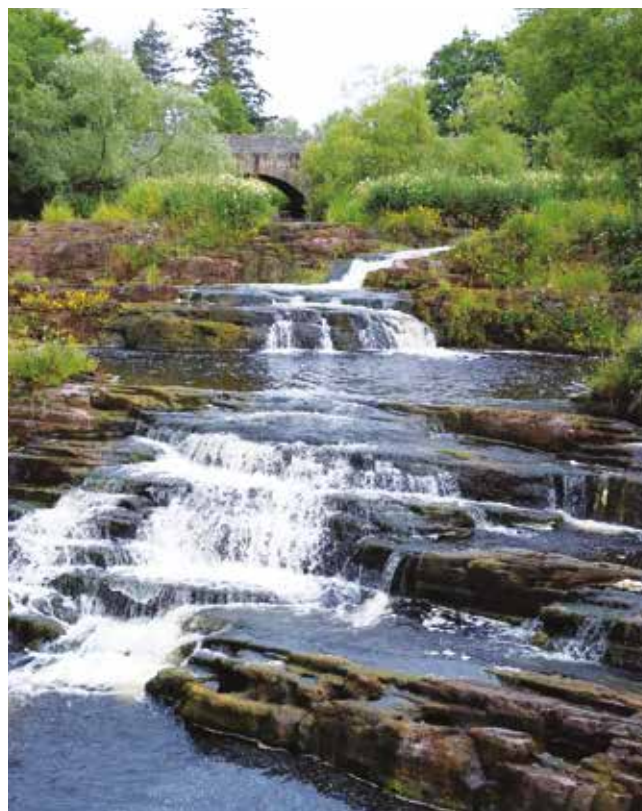
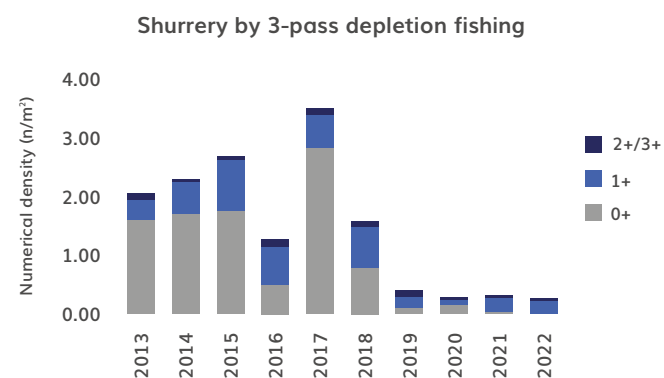
The River Forss is a spate river that rises in the Flow Country in central Caithness and runs northwards for about 35 km to reach the sea at Crosskirk, just west of Thurso. The river runs successively through peatland, rough pasture and farmland. The general topography and hydrochemistry of the catchment is highly suited to the production of young salmon.

Before the recent sequence of summer droughts, the annual rod catch ranged between 200 and 400 salmon. On average, the catch was around 10 adults per hectare of juvenile habitat, making the Forss one of the most productive salmon fisheries in Scotland. More recently, however, the river's salmon population has been devastated by mortalities of potential spawners soon after river entry, due to red skin disease and/or Saprolegnia infection. Large numbers of dead fish have been removed from the river each year.

Electrofishing carried out by the Caithness District Salmon Fishery Board (CDSFB) at key sites since 2013 shows the extent of the collateral damage to the juvenile stock. Until about 2019, fry and parr were extremely abundant. From 2019 onwards, juvenile recruitment fell precipitously. Tragically, salmon fry were more-or-less absent from the river by 2022. This progression is illustrated in the graph that follows which shows data from the monitored site at Shurrery, in the middle part of the main river.

The primary disease agent has not been identified, despite intensive efforts by the Fish Health Inspectorate and others. Consequently, it is not at all clear how a recovery in the river's fortunes may be brought about.

Red skin disease/Saprolegnia is reported in many Scottish rivers. The case of the River Forss may be an extreme one and some additional, local factors – like summer drought and high water temperatures –



Forss Falls in low water.

are probably in play. Even so, the current plight of the river offers a chilling insight into the disease's potential impact on salmon stocks in other places. It is therefore extremely important that we try to learn much more about the disease, while also finding practical ways to mitigate its effects.



Taking the acid test to Galloway

Kenny Galt
Galloway Fisheries Trust

A new project aims to assess the impact of peatland restoration in Galloway – with particular emphasis on water quality – in a bid to reduce acidification in the region's rivers.

Acidification in west Galloway has been well documented. The combination of raised levels of acidic pollutants and a geology with low buffering capacity has resulted in a perfect storm which has had a dramatic impact on fish stocks.

Thanks to the hard work of many individuals and organisations, as well as improvements in air quality, fish populations are showing signs of recovery. However, where large-scale conifer plantations are located, acidification still remains a serious issue, as conifers are particularly effective at scavenging acidic pollutants from the atmosphere.

Degraded peatlands are common within many acidified areas as a result of draining for agriculture and forestry. In addition to the release of carbon, degraded peatlands will impact water quality and further contribute to acidification. In areas where conifer plantations grow on deep peat the results can be particularly damaging.

The Galloway Fisheries Trust is currently working in partnership with Peatland Action to monitor water quality in river headwaters, and assessing the potential impacts of this variable on fish populations. Data are collected using both constant monitoring sondes and spot sampling.

The work focuses on two main areas. The first is monitoring the potential benefits that peatland restoration can bring to water quality. The projects being monitored are still in the very early stages of restoration so monitoring to date has primarily involved the collection of pre-restoration data.

The second part of the work centres around recording an overview of water quality in the headwaters of Galloway rivers, with particular attention to areas of degraded peatland. The water quality overview allows areas with the lowest pH to be identified. These data are then used to highlight areas where peatland restoration would have the most benefit for aquatic ecosystems, support plans for peatland restoration work and feed into forestry restructuring plans. Given the importance placed on the forestry sector by the Scottish Government, peatland restoration provides one of the few realistic opportunities for the reduction of conifers on deep peats in the headwaters of acidified Galloway rivers.



Monitoring pre-peatland restoration water quality on the Dargool Burn (River Bladnoch), potentially the most acidified water course in Galloway. Peatland restoration is currently being undertaken by Forestry and Land Scotland.



The Loch Roag sea trout tracking study

Paul Hopper
Outer Hebrides Fisheries Trust

A novel project looks to use cutting-edge technology to track sea trout movement patterns in the Outer Hebrides, in a bid to alleviate pressure on this enigmatic and threatened species.

At the beginning of 2022, the Outer Hebrides Fisheries Trust (OHFT) partnered with the Institute of Zoology (ZSL) and Dr Adam Piper to deliver the Loch Roag sea trout tracking study – which aligned with the salmon-focused West Coast Tracking Project and utilised some of its key technologies.

Sea trout are an important species throughout the Outer Hebrides, but there are large knowledge gaps relating to their movements in the marine environment. Studies in other countries, alongside a handful conducted in Scotland, suggest that sea trout are spending longer periods of time in coastal areas, where they are more likely to be exposed to local environmental and human-related stressors – notably aquaculture. By understanding sea trout movements in these important habitats, conservation efforts can be applied in targeted locations, where they will be of most benefit.

We're using acoustic telemetry techniques to track individual fish movements, with fixed acoustic listening stations – known as receivers – installed in Loch Roag and some of the adjoining freshwater systems. Additional receivers placed in key freshwater lochs will help determine the patterns of sea trout migration to their spawning grounds, and the timing and survival of sea trout kelts returning to sea. The data generated will provide a better understanding of the key drivers for different patterns of sea trout behaviour, movement and survival – in both freshwater and marine environments around Loch Roag.

The study employs the same tracking technology as the salmon-focused West Coast Tracking Project which is being conducted simultaneously, and both projects will share the data from fish that may have been detected by each other's acoustic receivers.

A total of 126 sea trout were tagged in 2022 and the Trust used a variety of techniques to catch them – including fyke nets, rotary screw traps, seine netting and box traps. The next steps will be to analyse the data downloaded from the receivers and secure funding to continue the project beyond 2023.



The acoustic receiver array deployed in Loch Roag and associated rivers.



A tagged Blackwater River sea trout.



Restoring pearl mussel habitat on the River Shin

Leanne Munro
Kyle of Sutherland Fisheries Trust

A new project seeks to lay the groundwork to restore freshwater pearl mussels to the River Shin, in a bid to mitigate the impact of hydroelectric dams.

A project to restore pearl mussel habitat on the River Shin, as proposed by the Kyle of Sutherland Fisheries Trust, was one of 13 projects that attained third round funding from NatureScot's Biodiversity Challenge Fund – which aims to improve biodiversity and address the impact of climate change on Scotland's most fragile habitats and species.

The River Shin has been impacted by a large hydroelectric scheme since the 1950s. As a consequence, the natural flow regime and the downstream sediment transport have been radically altered. This in turn has significantly impacted the quality and the availability of habitat utilised by rare freshwater pearl mussels as well as spawning salmonids.



Contractors installing large woody structures.

The project was designed by cbec eco-engineering UK and included four areas of gravel augmentation, supported by 11 large wood structures (LWS). The introduced gravel will provide optimal substrate for juvenile pearl mussels to burrow into and also new spawning habitat for Atlantic salmon. The LWS are designed to create more diverse habitat, by providing deep pools around the root plates of the structures and subsequent natural sorting of sediment downstream of their trunks.



Drone image of the installed medial large woody structure and gravel input.



Upstream view of completed site.

The in-stream works were completed at the end of October 2022. As part of the project conditions, the Kyle of Sutherland Fisheries Trust will be carrying out artificial encystment in the summer of 2023, a process which involves settling the pearl mussel larvae on the gills of juvenile salmonids. This will hopefully encourage the freshwater pearl mussel population in the newly created habitats. Additionally, the Trust will be creating a 10-year sediment management plan to monitor the sites and conduct further gravel injections, if and when required.

Although it is still early to gauge the impact of the project, adult Atlantic salmon were spotted spawning on some of the recently laid gravel, which fuels the hope that the project has successfully created and restored a vital habitat for some of Scotland's most fragile species.



The River Beauly oral history project

Ruth Watts
Beauly District Salmon Fishery Board

An oral history project has revealed some under-appreciated changes in – as well as images of – the River Beauly catchment since the dawn of the hydro era in the late 1950s.

Last spring, Louise Senior – an anthropologist who was also our Working-with-Rivers trainee – conducted an Oral History Project for the Beauly Fishery Board.

The purpose was to listen to a range of people who had spent their lives in the Beauly catchment and compile their unique insights and stories. Hosting Louise not only gave us a valuable extra pair of hands to help with our smolt monitoring but also gave us an opportunity to make important space and time for listening.

We wanted to learn about what locals had seen over time, to help inform our understanding of how the river has changed and what processes may be at play that we would otherwise be unaware of. It also gave us an opportunity to collect valuable old photo records and start to appreciate how the fish habitat in the river has changed since the construction of hydro dams in the catchment from the late 1950s.

After advertising for people to take part – and being impressed by the level of interest – Louise designed the project to ensure we complied with Oral History Society best practice. Armed with a TASCAM DR-05X digital recorder, she conducted 13 interviews between April and June 2022. After these had taken place, all were transcribed, word by word to maximise the usefulness of the project. The recordings are stored at the Highland Archive Centre in Inverness and are available online via the Am Baile website here: www.ambaile.org.uk/search/?searchQuery=Beauly+Fishery+Board.

Some of the photos gleaned from this project will be used as supporting information in our hydro-morphology survey reports, detailing the results of walkover surveys, which seek to assess fish habitat in relation to the dams.



Comparing a location on the River Farrar with a photo of the same place taken in 1935.



Louise Senior.

The project, as well as being a local community heritage resource, also encourages proprietors to think more broadly about the river as a whole, and has been really useful in engaging anglers with the wider work we are doing. It has unearthed some surprising facts and highlights how perspectives are shaped by the time in which we live.

Enjoy!



Tackling the thorny issue of fish-eating birds

James Hunt
Biologist for The Tweed Foundation

Although many fisheries scientists agree that there is a strong argument for permitting the lethal control of piscivorous birds, more evidence is required before the legislation is likely to be changed.

Predation of juvenile salmon and trout by fish-eating birds – primarily goosanders and cormorants – is one of the leading concerns for the angling community. The Wild Salmon Assessment of Pressures adds weight to this concern, with expert opinion suggesting that most catchments in Scotland lose 5 to 27% of their salmon numbers due to this pressure.

While the licensing system for minimising economic damage needs a long overdue review, it is clear that government research, in partnership with Boards and Trusts, is also needed to improve the scientific evidence base for the damage to fisheries caused by these birds, as well as to examine current management practices.



A cormorant roost on the middle Tweed.



A group of immature goosanders. Credit: Finlay Wilson

Quantifying damage to a fishery is not easy, either as an economic calculation or as an estimate of juvenile losses. East coast smolt tracking studies have produced a range of smolt survival results but, ultimately, we have not been able to separate predation by birds from other possible causes of mortality, such as predation by large brown trout or the effect of the tagging process.

A recent dietary analysis study covering four Scottish rivers showed that only 15% of the Tweed's piscivorous birds during the smolt run contained salmon in their stomachs, but these samples were only taken at the start and end of the migration period. Following on from the report recommendations, The Tweed Foundation is now independently collecting more targeted samples throughout the year for finer scale analysis.

Central to the licensing system to minimise economic damage to the fishery is the requirement to try to scare piscivorous birds before resorting to lethal control. But does scaring really reduce damage to the fishery? Through work pioneered on the Tweed, in collaboration with Scottish Government and partners, we are now able to catch and track birds, offering us the potential to study local migration patterns in response to scaring.

The Wild Salmon Implementation Plan is very explicit in stating that the bird licensing policy will be reviewed and that the policy will be underpinned by scientific research to improve the knowledge base. With an ambitious target by the end of 2023, we look forward to working with NatureScot and lead partners to achieve these aims.

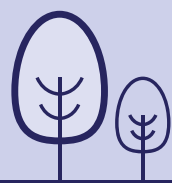


Bones from inside a bird's stomach, ready for analysis.

1,245,722

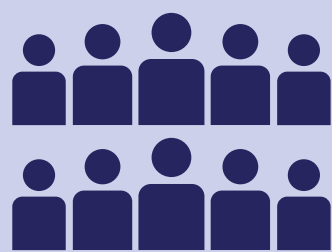


Native trees to help protect fish habitat planted by our members and partners



More than
27,000

Views of 'Our Wild Salmon' films



Worked with **345** schools and reached out to **21,385** pupils to educate them about fish

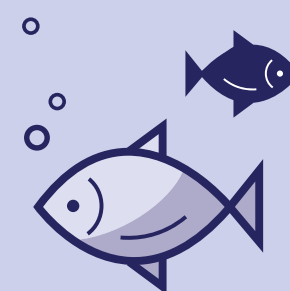
176

Illegal instruments seized by our fisheries enforcement network



20

Secured convictions for fisheries offences



1,431

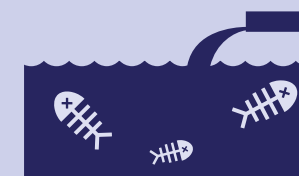
Recorded illegal fishing incidents



187

Offences reported to Police Scotland

408



Pollution incidents and other infringements were reported to SEPA

1,657km

Of riverbank invasive species managed by our members

Our members helped to remove or ease 46 barriers to migratory fish, resulting in **504km** of newly accessible fish habitat

926

Our members responded to 926 local developments, to help protect wild fish. These included developments such as fish farms, wind farms, hydro-power and many other local proposals.



Working together to maximise benefits

Mark Lloyd
Chief Executive



The Rivers Trust movement comprises more than 60 Rivers Trusts in the UK and Ireland, with over 500 staff and an approximate collective turnover of £30m per annum. It is a grassroots network which has developed organically over the past 27 years. Like Scotland's network of Rivers and Fisheries Trusts, each Trust is an independent charity, whose remit covers one or more river catchment boundaries. Their role is to restore their local rivers to good health for the benefit of wildlife and people.

The Rivers Trust is the national umbrella body for this movement, has 54 staff and a forecast annual turnover of over £6m in 2022, up from £2m in 2019. Our job is to support our member Rivers Trusts in delivery of their missions with practical help, sharing best practice and fundraising. We are also responsible for national advocacy in England and Ireland on behalf of the movement and our vision for wild, healthy, natural rivers, valued by all. Afonydd Cymru carries out this role in Wales.

Rivers in the UK and Ireland are suffering from a wide range of problems, all of which interact with each other, but vary from place to place. Despite some local success stories, their health is declining, with only 14% of rivers in England and Wales achieving the standard of Good Ecological Status, and 0% being at Good Chemical Status. River pollution has risen higher up the political agenda over the past two years than it has ever been, and so this is a key moment to develop and implement solutions.

Over the last year, The Rivers Trust and Fisheries Management Scotland have built a stronger collaborative relationship, with the purpose of growing the capacity and impact of our work, and to scale up dramatically the environmental improvements that our members deliver for the rivers of the UK and Ireland.

Rivers Trusts are particularly focused on the delivery of nature-based solutions such as wetlands, restored soils, tree planting, re-naturalising straightened and



Credit: Zena Holloway (www.zenaholloway.com)

dammed rivers and building urban drainage schemes to help our ailing rivers. These projects create more space for nature, more amenity for people, reduce flood risk, conserve water resources, reduce pollution and absorb carbon from the atmosphere. Nature-based projects have the potential to attract a wide range of funding sources because they provide benefits to multiple funders seeking different things from their investment. The Rivers Trust has, with support from the Esmée Fairbairn Foundation, successfully trialled a private finance funding model for delivering these solutions on the River Wyre, which is now being replicated in several locations around the country.

We have also developed our role as advocates for healthy rivers over the past three years and have increased our national visibility significantly, particularly through the publication of maps displaying Environment Agency data on combined sewage overflows in a user-friendly format and the publication of a 'state of our rivers' report. There is now scope to work with Fisheries Management Scotland to expand this work into Scotland.

There are a number of areas where The Rivers Trust and Fisheries Management Scotland will work together more closely. Both organisations hold regular conferences and regional get-togethers, and we have also set up several online Communities of Practice in the past year, which have been really successful in bringing trusts together to co-develop improved operations in specialist areas, such as communications, health & safety, project management, agricultural advice and volunteer coordination. Through the Scottish Fisheries

Coordination Centre, Fisheries Management Scotland have developed extensive training and guidance and have established a bespoke database which holds a wide range of relevant data. Both organisations have developed mapping tools based on the ESRI GIS system and we are exploring synergies in this important area of work.

The Green Finance Institute estimates £15 to £20 billion is required to restore Scotland's biodiversity. It is clear that there needs to be significantly greater investment in nature restoration and nature-based solutions which protect and enhance Scotland's natural capital. The Rivers Trust and Fisheries Management Scotland are strongly of the view that we now have an exciting opportunity to help fill this funding gap and play our part in restoring Scotland's natural environment. As part of a funding application to the Esmée Fairbairn Foundation, The Rivers Trust have secured part-funding for a new post within Fisheries Management Scotland – a Director for Nature Finance. The purpose of this role is to support river managers to attract investment into projects that deliver biodiversity improvement for Scotland's rivers and the post-holder will work closely with relevant staff in the Rivers Trust. We hope that this is the first step in a long and productive working relationship at the heart of the family of Rivers and Fisheries Trusts throughout the British Isles.



Credit: Zena Holloway (www.zenaholloway.com)



The Scottish Wild Salmon Strategy Implementation Plan



Following input from representatives from Government, NGOs, industry and public bodies, Marine Scotland recently launched a nationwide plan to help improve conditions for salmon.

The Scottish Wild Salmon Strategy was published in January 2022 and sets out a collective vision for flourishing populations of wild Atlantic salmon. While the strategy set an overall marker of ambition and direction of travel, it also committed to the preparation of an accompanying implementation plan to establish a range of actions that would drive progress towards a brighter future for Scotland's wild salmon populations.

Both the strategy and plan were developed through close collaboration with a stakeholder advisory group. This included representatives from Government, NGOs, industry and public bodies – bringing a variety of valuable views and expertise to round-table discussions.

The plan was launched on 1 February 2023 by Mairi Gougeon, MSP, Cabinet Secretary for Rural Affairs and Islands, at the opening of the River Tweed salmon fishing season. It sets out over 60 actions that will be taken over the next five years, to help protect and restore wild salmon populations.

These actions aim to safeguard salmon from the wide range of pressures which affect them across their whole lifecycle. However, we have a greater understanding of the pressures – as well as a greater ability to take action – in the freshwater and nearshore coastal environment. Where possible we will take action at river catchment scale, as this allows us to be more efficient and strategic in our approach to protect wild salmon and will generate wider cross-cutting benefits for the natural environment.

The actions within the plan are grouped into five high priority themes for actions, which were first set out in the strategy:

- Improving the condition of rivers and giving salmon free access to cold, clean water.
- Managing exploitation through effective regulation, deterrents and enforcement.
- Understanding and mitigating pressures in the marine and coastal environments.
- Making positive contributions through effective international collaborations.
- Developing a modernised and fit-for-purpose policy framework.

For each action a delivery lead has been identified to take these actions forward. In addition, many of the actions will have partners who will be required to work with the leads. The delivery leads and partners include Scottish Government, SEPA, NatureScot and Fisheries Management Scotland. This is pertinent to that fact that positive outcomes for wild salmon are only possible through coordinated action across all sectors.

District Salmon Fishery Boards, and Fisheries and Rivers Trusts, will be critical delivery partners for many of the actions identified. They are the organisations that are able to deliver action on the ground and improve wild



Mairi Gougeon, Cabinet Secretary for Rural Affairs and Islands, at the opening of the River Tweed salmon fishing season. Credit: River Tweed

salmon habitat across Scotland. We are at a critical point in time, where we must use the best available evidence we have to take proportionate action now.

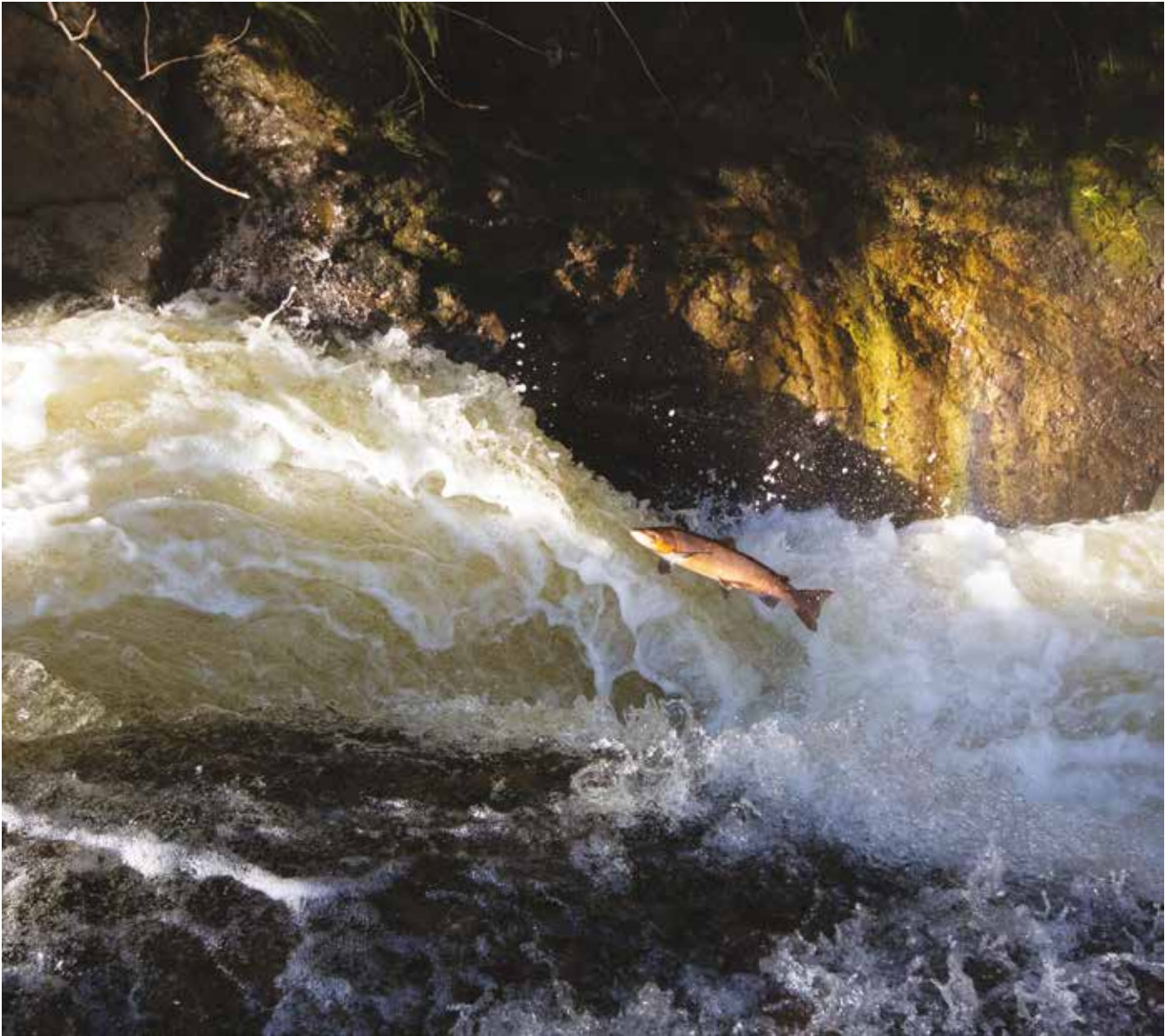
An implementation plan delivery group has been established and – as the plan is intended to be adaptive to new developments – one of the key roles of this group will be to review and shape the programme of work, in light of new evidence and other policy developments, on an ongoing basis.

It is important that we are able to identify where knowledge gaps still exist and how best to fill them. A scientific advisory board will be established to lead this process and will be responsible for harmonising research and monitoring activities across multiple organisations. The science will focus on monitoring populations, estimating the relative impacts of pressures and assessing the efficacy of management actions.

There are many types of actions outlined in the plan, including some which are already ongoing. Restating them in the plan provides a renewed emphasis on the delivery leads to progress them. There are also many new actions set out, which include commissioning new research, reviewing current policies and setting up working groups with clearly defined remits.

Although it is a five-year plan, many of the actions set out will get underway this year. These include, for example, enhancing the forestry grant scheme to improve the support available for riparian planting and revising the current national policy on stocking.

Protecting and restoring wild salmon populations could never be described as an easy task and will only be achieved if all stakeholders work together in a coordinated way and look towards new approaches and partnerships.



Credit: Sean Dugan



NatureScot and FMS – working together to finance nature restoration

Brendan Turvey
NatureScot



NatureScot and Fisheries Management Scotland have been collaborating on a number of projects which aim to attract investment that will improve the health of river catchments and the wildlife that they support.

The need to urgently restore nature, to tackle the twin crises of climate change and biodiversity loss, is now well understood. Our rivers, and the fish they contain, are just one indicator of the challenges we face. Our peatlands, our woodlands and many of our most iconic species are also under threat from climate change.

In July 2022, Fisheries Management Scotland hosted a workshop on the banks of the River Dee, to explore with the Scottish Government and its agencies the opportunities for attracting investment into river catchments from the private sector. The event featured key officials speaking about green finance and restoration of biodiversity in Scotland, and NatureScot were delighted to contribute.

Following the workshop, NatureScot and Fisheries Management Scotland have had extensive engagement and we are very pleased to be working together to bring more finance to nature restoration in Scotland. Currently we're working on two pilot projects to develop new ways of bringing private investment, alongside public funding, to key catchments in Scotland.



Peatland restoration – Forth catchment. Credit: Forth Rivers Trust



River Catchment Biodiversity Improvement Workshop. Credit: Jonathon Muir

On Speyside we're working with the Spey Catchment Initiative to explore the potential for a Landscape Enterprise Network – working with local businesses to invest in nature-based solutions that address business risks. We're also co-funding a scoping study with Scottish Water to help establish this network.

Meanwhile, in the Kyle of Sutherland catchment, we're working with the fisheries trust to explore a similar mechanism, with links to renewable energy developments alongside local businesses, to build on the work of their Riverwoods project officer.

In February 2023 the Scottish Government and NatureScot, working in partnership with the National Lottery Heritage Fund, launched a new support programme, to help scale-up private investment in Scotland's natural capital. Called the Facility for Investment Ready Nature in Scotland (FIRNS), it will offer grants of up to £240,000 to help organisations and partnerships to develop viable business cases and financial models, to attract investment in natural capital projects. The programme also aims to ensure

that investment in, and use of, Scotland's natural capital creates benefits that are shared in line with the just transition principles.

To demonstrate the scale of the appetite to invest in nature, NatureScot has just signed a memorandum of understanding with a group of three companies that have a combined budget to invest £2 billion in nature restoration in Scotland. This illustrates the level of finance available and the opportunity to think on a different scale to previous restoration projects.

On a national level, we're now working with Fisheries Management Scotland to develop a new Scottish catchment and river restoration fund, potentially based on the model we have developed for the Scottish Marine Environment Enhancement Fund. Together, we hope to attract multiple millions of pounds of fresh investment to our river catchments, in a bid to restore nature, and improve the chances of salmon and other species of adapting to climate change.



Restoring Scotland's lost riparian woodlands

Russ Jobson
Senior Project Officer, Tweed Forum



Climate change and the biodiversity crisis, coupled with the longer term loss of the shade once provided by Scotland's native woodlands, mean that summer temperatures in many river headwaters are now approaching lethal levels for wild salmon. We need more riparian woodlands and we need them now.*

Creating more of these habitats is key to improving the resilience of rivers, but their application needs to be both targeted and done at a scale to increase their connectivity. Pioneering riparian improvement projects include those undertaken by Fisheries Management Scotland members – like the River Dee Trust and the Forth Rivers Trust – as well as those developed by the Woodland Trust and Tweed Forum. It is thanks to the recognition of this habitat's importance – and to generous funding from the Fishmongers Company and the Woodland Trust Scotland – that I am employed by Tweed Forum to help deliver more riparian woodland across Scotland, as well as liaise with our Rivers Trust friends south of the border, to increase knowledge transfer.

For clarity, my role is split into the following areas:

- Managing a team of two within the Tweed Forum, to deliver riparian woodland/habitat improvements throughout the Tweed catchment.
- Working with partners throughout Scotland (primarily Fisheries Management Scotland members, but also other ENGOS and interested parties) to upskill, identify, develop and deliver riparian woodland schemes and beneficial habitat improvements.
- To work in concert with the Scottish Wildlife Trust's Riverwood Initiative to create a network of woodland that protects the health of river systems throughout Scotland.

I have now been in the post for two years and, in that time, have had the pleasure of connecting with most of Scotland's fisheries boards and river trusts, hearing about their work and discussing integrated catchment restoration with them. This has included two successful workshops, with over 60 attendees (predominately FMS members) discussing riparian woodland creation, finance, carbon credits and upscaling. I have also been meeting organisations individually, to look at how to progress schemes and projects on a more local level.

Individual organisations I've been working with include:

- Kyle of Sutherland Fisheries Trust: based out of their office periodically, working with Keith Williams and Sean Dugan to identify, develop and deliver riparian woodland options. Scoping of over 250ha has led to 70-100ha of native woodland being planned for 2023/24.. This is alongside 14,000 trees being planted in the 2022-2023 season and the development of a sub-catchment restoration project for future delivery.
- Argyll Fisheries Trust: working with Alan Kettle-White and his team to develop a 30-80ha native/ riparian woodland prospect and aiding an opportunity to scope out numerous riparian woodland creation options throughout identified focus areas within the catchments. The latter should deliver three to eight outline schemes for further development.
- Findhorn Nairn and Lossie Fisheries Trust: working and liaising with Bob Laughton and Elle Adams, as they developed the Findhorn Watershed Initiative. This also included one-to-one briefings with the team and board members about riparian woodland creation, engagement and funding options.
- Liaising with and/or facilitating schemes on the Deveron, Halladale and Border Esk, as well as in Galloway.
- Engaging with other ENGOS, such as Trees for Life – via Paul Greaves, the riparian project officer for Affric Highlands – and liaising with the Beaully and Ness DSFBs and Skye and Lochalsh Rivers Trust, given the project area straddles various catchments and riparian woodland and habitat creation forms its focus.



Removing tree guards. Credit: Sean Dugan



Tree restoration at Dryhope. Credit: Colin McLean



River Tweed at Old Melrose.

- Scottish Wildlife Trust - Riverwoods: working with Mike Thornton, project manager, as this project gathers pace to develop the delivery mechanisms that will present some great opportunities.
- Meanwhile, here at the Tweed Forum we have been delivering 30 ha of riparian woodland and habitat improvement this season and have 100-200 ha more in the pipeline.

More widely, I have spoken at over 17 events to over 300 attendees, discussing the need for more riparian tree cover and why this should be considered a priority, and on the options for engagement and delivery. I also input into wider policy areas that affect our work and landscape, such as deer management, the Forestry grant scheme and the UK Forestry Standard, and have recently been more involved with the green finance sector.

I believe that riparian woodland restoration and creation delivers so much more than the sum of its parts, especially if we can work at scale. With the emerging green finance sector this is a truly exciting time to be involved – many mechanisms for delivery are here, and more will be coming.

**In the context of my work, riparian woodland is defined as native woodland that has a direct effect on a watercourse, but may extend significantly away from the water's edge.*

Celebrating women in science

Over the last two years Fisheries Management Scotland has marked the International Day of Women in Science, on 11 February, by speaking to women across the range of scientific roles in our sector.

Over the course of these events, some of the key women in the fisheries management community have added their personal perspectives of working in aquatic science. Here are some of the highlights.



"My job is to help protect and improve things for salmon and sea trout in the Beaully catchment. This involves a wide range of work, from monitoring juvenile salmonids to working with landowners, SSE, and wider stakeholders. As with any industry, having a diverse workforce is key. It's great to see more women coming into fisheries and bringing their varied skills and perspectives to salmon conservation,"

Ruth Watts, Senior Biologist, Beaully Fishery Board.



"A week after my last exam as an undergraduate I applied for an internship at the Galloway Fisheries Trust and I have now been working in my dream field for seven months. As the world's perspectives on women are constantly changing, I think now is the best time to be working as a woman in science,"

Alyx Rhodes, Intern, Galloway Fisheries Trust



"I've been a biologist with the Clyde River Foundation since 2019 and have loved every minute of it. My career is personally fulfilling, especially through our educational projects – it's such an accomplishment to inspire the next generation of scientists. If you're a woman looking to pursue a career in STEM, I highly recommend it,"

Marissa Wong, Biologist, Clyde River Foundation



"I work for the Scottish Invasive Species Initiative (SISI), which involves the practical management of species such as giant hogweed and American mink. I started out as a volunteer, then worked in seasonal positions for SISI, before arriving where I am today. I'm lucky to work with a supportive and diverse team, and would love to see more women in STEM jobs, especially conservation,"

Elise Cox, SISI Project Officer, Findhorn, Nairn & Lossie Trust



"Where I was brought up, salmon fishing has always been of large cultural and economic importance – my family are employed in the sector. It has got to be one of the most diverse careers available – each day is different and that's what I love about working in this sector,"

Leanne Munro, Kyle of Sutherland Fisheries



"I'm thrilled to work in such an amazing sector, and feel so lucky to be surrounded by like-minded women who share the same appreciation for science and conservation,"

Charlotte Small, Assistant Biologist, Skye and Lochalsh Rivers Trust



"As a woman who has developed a career within the environmental science sector - which was historically male-dominated - I have been fortunate that in every one of my job roles and opportunities I have been managed by or part of a team that includes a woman in a position of leadership and/or authority,"

Eilidh Stirrup, Peatland Project Officer, Lochaber Fisheries Trust



"I've always had an interest in ecology and studied it at university. Various training courses and a PhD on estuarine fish later, I was lucky enough to be around at the development of the Trust network on the west coast and landed the job with WSFT. When I started with the Trust there were very few women in the sector. That's changed over the years, which is encouraging, but there is always room for more,"

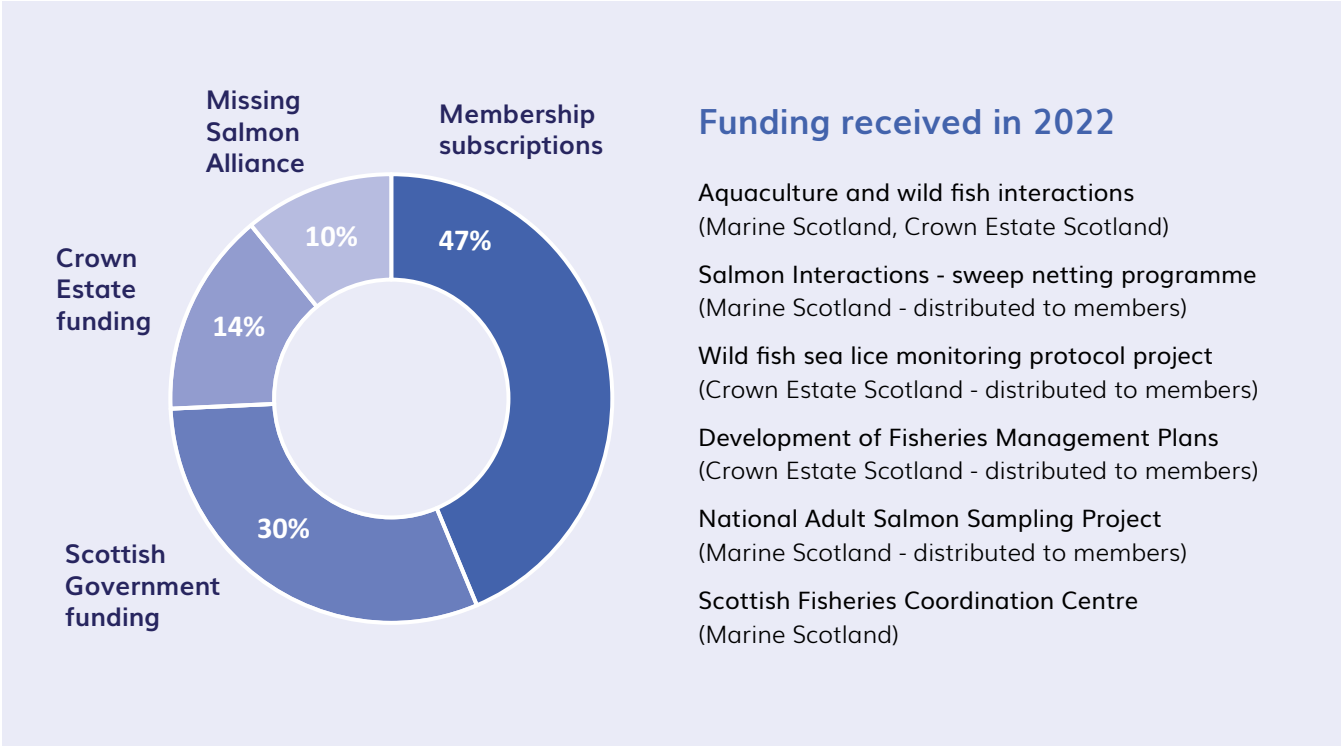
Shona Marshall, Biologist, West Sutherland Fisheries Trust



"Both jobs I do are leadership roles – leading an experienced, knowledgeable, hard-working and above all enthusiastic team. The Trust has a majority of women in management roles, demonstrating that there is no glass ceiling at that level, although both governance boards are still male-dominated,"

Alison Baker, Clerk and Director, Forth District Salmon Fishery Board & Forth Rivers Trust

Our funding



We need your help!

Our wild salmon face a range of pressures and we need to understand when and where these pressures are taking place. Non-native pink salmon, outbreaks of fish disease, seal predation and escaped farmed fish in Scotland's rivers can cause serious problems for our native wild Atlantic salmon and freshwater fish. In order to fully understand

the extent and severity of these issues across Scotland, we need your help to report problems using our online apps.

Please download and use these apps to help us address the range of pressures which our wild salmon and freshwater fish face. Find out more at www.fms.scot/fish-reporting-apps-2/



Report fish disease



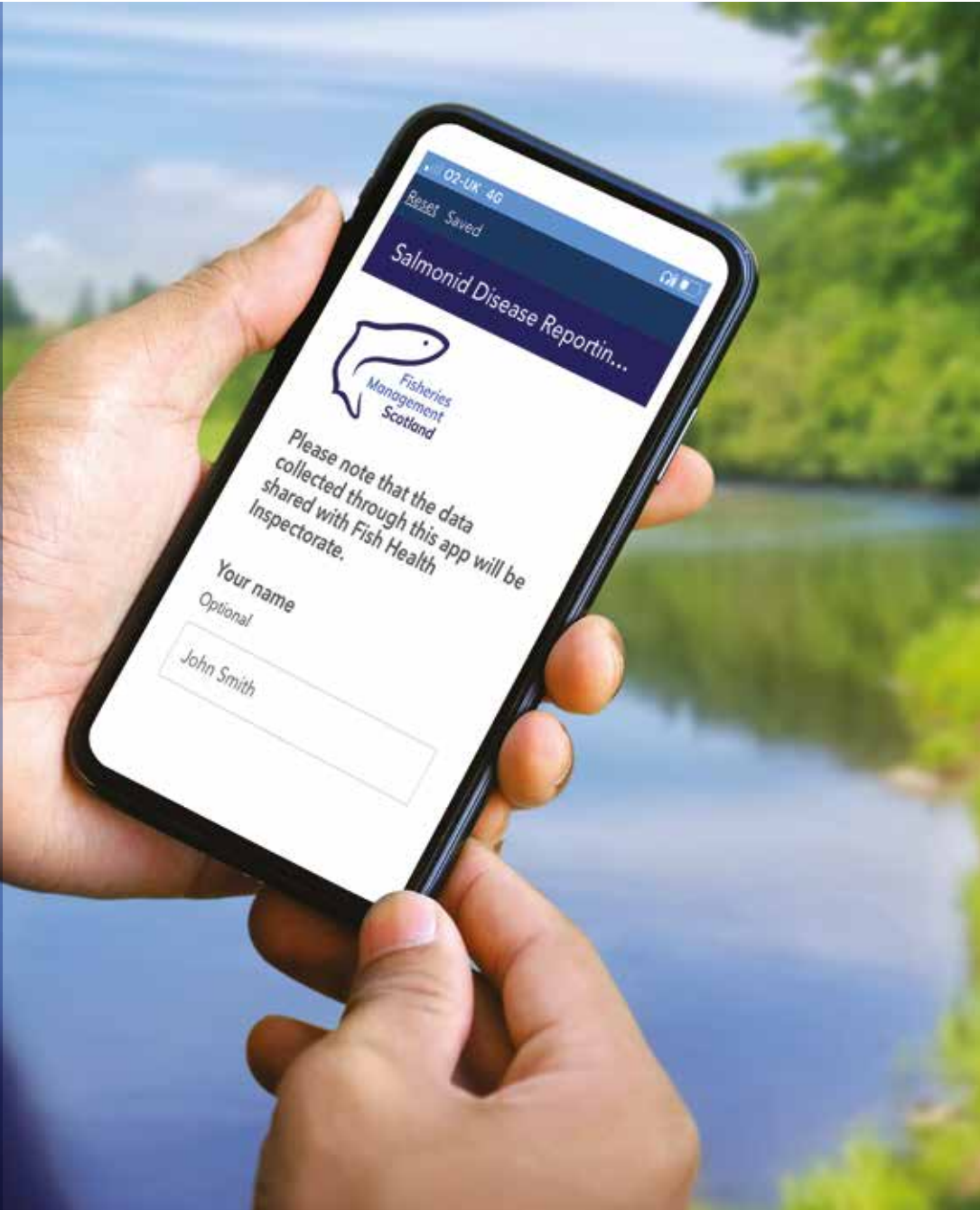
Report pink salmon



Report farmed fish escapes



Report in-river seal sightings



Fisheries Management Scotland Board of Directors

- Richard Sankey - Kyle of Sutherland (Chair)
- Alison Baker - Forth
- Roger Brook - Argyll
- Lorraine Hawkins - Dee
- Alasdair Laing - Findhorn
- Peter Landale - Nith
- Alexa MacAuslan - Northern
- Jamie Ribbens - Galloway
- Alexander Scott - Spey
- Jamie Stewart - Tweed
- David Summers - Tay

Fisheries Management Scotland Staff



Alan Wells
Chief Executive Officer



Brian Davidson
Director of Communications and Administration



Charlotte Middleton
Aquaculture Interactions Manager



Sean Robertson
Scottish Fisheries Coordination Centre Manager



Jenny McNeill
Administrative Assistant



Leanne Munro
Scottish Fisheries Coordination Centre Data Coordinator

Find out more on our apps page
<https://fms.scot/fish-reporting-apps-2/>

Fisheries Management Scotland
11 Rutland Square, Edinburgh, EH1 2AS
Tel: 0131 221 6567
www.fms.scot



Fisheries Management Scotland

11 Rutland Square Edinburgh EH1 2AS

Tel: 0131 221 6567

www.fms.scot



[@fms_scotland](https://twitter.com/fms_scotland)