Annual Review 2022

Fisheries Management Scotland

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

Image - Sean Dugan

Fisheries Management Scotland's core costs are funded by our members. We are extremely grateful for additional financial support received from Marine Scotland and Crown Estate Scotland which has supported our work in managing interactions with aquaculture, in addition to supporting work undertaken by our members.

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Editor: Rob Fletcher

Working for positive change

Richard Sankey
Chairman
Fisheries Management Scotland

In last year's review, I expressed hope that 2021 would be more positive. Despite the continuing pandemic, I am delighted to say that a huge amount of constructive work was delivered by Fisheries Management Scotland and our member network, as you will see in the following pages.

Our collaboration with like-minded national conservation bodies, through the Missing Salmon Alliance, goes from strength to strength. The Alliance is a powerful, unified voice which is driving action by combining expertise and coordinating activities – including fundraising, research, advocacy and management.

The installation of Joseph Rosanno's Salmon School art installation at COP26 last year signifies how we can reach a global audience if we work together. Through our effective advocacy and communications work, we are now seeing the Scottish Government focus on the wild salmon crisis. Whilst there is much to be done in a practical sense, the Wild Salmon Strategy will now provide an accountable framework on which we can press for action.

I hope that readers will watch our newly-launched series of six films, *Our Wild Salmon*. These document the challenges facing wild salmon and outline what Fisheries Management Scotland and our members are doing to address these issues. Whilst the climate and biodiversity crises may seem insurmountable, these films provide hope for the future.

I am grateful to our board of directors, who provide their time and expertise freely to ensure we are an effective organisation. I would also like to thank our staff, who continue to punch well above their weight.

We are delighted to have welcomed Charlotte Middleton to help manage the interactions between farmed and wild salmonids. Sean Dugan, who has managed the Scottish Fisheries Co-ordination Centre for the last nine years, has now moved on and we wish him all the best in his new role.

Finally, I re-emphasise that we cannot be complacent and we must continue to advocate hard for long-term change to improve the prospects of our rivers and fish. I am confident that we have a solid foundation on which to achieve change for the better.

Advocacy and action

Dr Alan Wells
Chief Executive Officer
Fisheries Management Scotland

2021 was another busy year for Fisheries Management Scotland and this annual review will give you a sense of some of the positive work that has been undertaken for the benefit of our rivers and wild fish. Despite the shadow of the ongoing global pandemic, the fisheries management community has delivered a huge amount of positive work across Scotland.

Our board and staff are very conscious that the declines in Atlantic salmon and sea trout populations, and the resulting impact on fisheries, are hitting some rivers very hard. We share the concerns of anglers, fishery owners and ghillies about the current situation.

Our job is to ensure that we optimise the number and quality of healthy, naturally produced salmon smolts leaving Scotland's rivers and coastal areas. Whilst this might sound simple, it requires concerted and coordinated action. Our focus is on highlighting the issues that salmon face, supporting our members in their efforts to improve the situation, and advocating for positive change in those areas that we cannot directly control.

The wild salmon crisis is now recognised at the highest levels of the Scottish Government. In January the Scottish Wild Salmon Strategy was published. This acknowledges the range of issues that our wild salmon face and recognises the urgent need to act now. We are clear that this cannot be another report that sits on the shelf gathering dust, and work is now underway to progress key areas – including managing predation pressure. Delivery will require concerted cross-cutting effort across Government and Agencies.

There is now a growing body of evidence which points to a continuing decline of biodiversity in Scotland and we need to recognise the impact of a wide range of current policies on our biodiversity, and the urgent need to develop more sustainable practices. This will require a reset and a clear focus on delivery of environmental protection. We need our regulators to regulate effectively and place a much stronger focus on compliance and enforcement.

2021 saw the long-awaited publication of the Scottish Government's response to the Salmon Interactions Working

In 2021, our members reported 150 pollution incidents to SEPA

Group, and a consultation has just closed on proposals for a sea lice risk assessment framework. You can read more about these positive developments on pages 6-7.

The Wild Salmonid Support Fund was launched in 2021. This fund is managed by Foundation Scotland, and was established to prioritise investment by the salmon farming sector for the benefit of wild salmon and sea trout populations in Scottish rivers. We welcome this investment, which respects our independence with regard to policy, planning processes and future operational matters. This is a principle that we are looking to replicate with other sectors, on the basis that those who benefit from their use of the natural environment should contribute to its ongoing management.

In January 2021, Fisheries Management Scotland joined the Missing Salmon Alliance. This is a fantastic initiative which sees conservation-focused organisations come together to drive action by combining expertise, coordinating activities and advocating effective management solutions. You can read more about the activities of the Alliance on pages 16-17.

Since the publication of our last annual review, Polly Burns and Sean Dugan have moved on to pastures new. Polly has joined the Marine Stewardship Council and we wish her well in a new and exciting role. Charlotte Middleton has now taken up the mantle as Aquaculture Interactions Manager and is doing a fantastic job on behalf of our members. Sean joined the Scottish Fisheries Coordination Centre nine years ago and joined the Fisheries Management Scotland team in 2017. It has been an absolute pleasure to work with Sean and we are glad that he will remain within the fisheries management community in his new role with the Kyle of Sutherland Fisheries Trust.

I would like to finish by paying tribute to our members. I am regularly blown away by their dedication, professionalism and willingness to go the extra mile to protect, enhance and restore our wild fish. These fantastic efforts sometimes take place against a backdrop of negativity and occasionally open hostility. I hope you will take the time to watch our new film series – Our Wild Salmon – and understand the efforts that the fisheries management community are making to improve the situation for our rivers in the face of huge challenges. I urge you to support these efforts in any way that you can.

Meeting Mairi Gougeon, Cabinet Secretary for Rural Affairs and Islands with the Dee DSFB.

Communication, enforcement and unwelcome visitors

Brian Davidson
Director of Communications & Administration
Fisheries Management Scotland

Our members seized 83 illegal instruments, issued 165 cautions and reported 33 offences to Police Scotland, resulting in 6 successful convictions

The International Year of the Salmon 2019 (IYS) now seems a long way off, but it enabled Fisheries Management Scotland to secure funding to produce a series of six films which highlight the pressures faced by Atlantic salmon. This has been an interesting creative process and following several pandemic-induced delays, we completed all filming and post-production in January 2022.

The films are a powerful tool to demonstrate the steps that the fisheries management community is taking to address the wild salmon crisis and influence change for the better. We are grateful to NASCO, IYS and the European Union for supporting this project, our members who contributed time and expertise and the Castabroad Collective for filming and post-production. Craig Somerville from Castabroad reflects further on the project in his article on pages 18-19.

During 2021, we reviewed and redesigned the Fisheries Management Scotland website. Our aim was to make available a wide range of information about what we and our members do to protect, conserve and enhance our freshwater fish and habitats. The new site will help us better articulate the role that the fisheries management community plays in protecting and restoring our native freshwater habitats, fish and fisheries.

As predicted, non-native Pink salmon appeared again in our rivers in considerable numbers during 2021. A total of 169 Pink salmon were officially recorded, but this is certainly an underestimate, as many more were observed in Scotland's rivers. Working with Scottish Government, NatureScot, SEPA and our members, we co-ordinated a national data collection exercise to allow systematic reporting of these fish. Our efforts were improved significantly with a web-based recording tool and this will be refined further and deployed for future reporting needs. Given the numbers of fish and the importance of practical management actions, we worked closely with Marine Scotland and NatureScot to facilitate our members' efforts to capture these invasive non-native fish under licence.

Four rivers undertook specific, targeted capture efforts – the Oykel, Thurso, Spey and Dee

– using nets, spearguns and electrofishing equipment. On all other rivers clear guidance was issued to ensure that any fish captured were removed and dispatched. We published a report which provides an overview of the situation in Scotland during 2021. Alan Youngson provides a perspective on the River Thurso experience with Pink salmon in his article on page 13.

Action on fisheries enforcement continued apace, with very positive engagement with the Crown Office Procurator Fiscal Service (COPFS). We are now working with COPFS to deliver targeted training and liaison with our fisheries enforcement teams for Wildlife & Environmental Crime Unit staff. This training will be delivered during 2022 with a view to helping improve the understanding of fish crime and ultimately improve case success.

During 2021, we capitalised on Operation Wingspan, a year-long wildlife crime initiative, to catalyse practical action between DSFBs and Police Scotland through joint patrols to deter and detect fisheries offences. There were a number of good examples of collaborative working and a number of notable successful outcomes. Working with the Ayrshire Rivers Trust and some of the DSFB representatives, a training evening was delivered in Ayrshire to inform the local police team on fish poaching techniques and to promote future joint working.

Finally, whilst the pandemic continued to require us to deliver training in a safe and socially distanced way, this has been an opportunity to shift completely to online training and deliver substantially more enforcement training and examinations than was previously possible. We worked with IFM's Scottish branch to deliver five bailiff examinations during 2021, with the prospect of further enforcement modules being made available in 2022. We are also planning the delivery of further films with Castabroad Media to support training in the current year.

Filming for the 'Our Wild Salmon' project at a Police Training Day in Ayrshire ©Craig Somerville

Managing interactions with aquaculture: one year on

Charlotte Middleton
Aquaculture Interactions Manager
Fisheries Management Scotland

Our members responded to 412 proposed developments, including 57 responses to fish farms, with a view to protecting wild fish

Working to manage wild-farmed interactions is an important part of our role to protect and restore wild fish populations. I joined Fisheries Management Scotland in May 2021, and the role continues to be funded by Marine Scotland and Crown Estate Scotland. We are very grateful for this important support. Since I joined, I have been working to support our members in their work to protect wild salmonids and their engagement with the fish farming industry, and regulators, to develop a common understanding of managing and monitoring interactions between wild and farmed fish.

Over the past six months, there has been substantial progress in shaping the new regulatory system which will underpin the fish farming industry in Scotland. Fisheries Management Scotland and our members have closely engaged with these important processes. In October 2021, the Scottish Government responded to the recommendations made by the Salmon Interactions Working Group (SIWG), announcing that SEPA will become the lead body responsible for managing the risk to wild salmonids from sea lice from fish farms. At the same time, Marine Scotland published a national assessment of the influence of farmed salmon escapes on the genetic integrity of wild Scottish Atlantic salmon. This important project demonstrated that signs of genetic introgression were concentrated in areas of marine aquaculture production and freshwater smolt rearing.

In December, SEPA launched a consultation on a new framework to manage sea lice interactions between farmed and wild fish. We engaged with SEPA throughout its development. Whilst we welcome the underlying principles, fisheries managers are firmly of the view that it must encompass all farms – new and existing – and we need the regulatory system to protect both sea trout and salmon. Over the next 12 months, our priority remains the implementation of the SIWG recommendations, and we also anticipate the publication of a new Aquaculture Vision.

An important part of my role is supporting our members in engaging with the planning process for proposed fish

farming sites and expansions of existing ones. Our focus is to ensure that the current system is as protective of wild fish as possible, until the reformed regulatory system is in place.

I have also supported members in engaging in the delivery of Environmental Management Plans (EMPs). These are a condition of planning designed to support ongoing adaptive management for fish farms in recognition of the deficiencies of the current system for the protection of wild salmonid populations. Wild fish monitoring, associated with EMPs, is undertaken by west coast Fisheries Trusts. Although we will continue to work with members and operators to ensure that there is a consistent and robust approach across different regions and companies, we remain of the view that EMPs are not appropriate for the new regulatory system, as they are not sufficiently robust or enforceable to protect our wild salmon and sea trout.

The West Coast Tracking Project launched in spring 2021. This three-year project is jointly managed by Fisheries Management Scotland, Atlantic Salmon Trust and Marine Scotland, and funded by the Scottish Government and private donations, including from Atlantic Salmon Trust and Salmon Scotland. The delivery of this vital work requires a massive, coordinated effort between our members and the Atlantic Salmon Trust.

In 2021, over 1,200 salmon across ten rivers were tagged, and more than 200 acoustic tracking devices were deployed in strategic locations across the west coast. Preliminary results have given us an indication of the marine dispersal patterns of smolts and crucial information on smolt movement and speed of travel through sea lochs. The project will continue in 2022 to build on the data collected so far, to better understand how our wild salmon smolts use the coastal marine environment. This will inform the planning process for marine developments such as fish farms and renewables.

Sweep netting to assess sea lice infestation on wild sea trout ©Craig Somerville

Scottish Fisheries Coordination Centre

Sean Dugan
Manager
Scottish Fisheries Coordination Centre

Leanne Munro
Data Coordinator
Scottish Fisheries Coordination Centre

Our members worked with 118 schools & engaged 5,209 pupils

The role of the Scottish Fisheries Coordination Centre (SFCC) is to support the evidence-based fisheries management undertaken by our members. We would like to thank all our members for their continued support, including Marine Scotland Science and Policy and SEPA's fisheries team. In particular we would like to thank members of the management committee and those who have supported and delivered bespoke training on behalf of SFCC.

Ensuring the availability and delivery of high quality training is an important part of SFCC's role. During 2021, SFCC's electrofishing training programme was updated and delivered safely across Scotland to 48 participants. We also delivered four mapping training days for members, and a drone river survey user group has been convened to bring together the expertise of our members in this developing area.

We supported Marine Scotland's first national adult salmon sampling project, through which fisheries managers provided over 300 samples from 17 rivers. The data collected will be used to help understand changes in local age structures and to inform national and international stock assessments. Scale reading resulted in the identification of some remarkable salmon, including a survivor returning to the River Gruinard to spawn for a third time and a River Oykel fish that had spent four years in freshwater before emigrating to sea.

Our annual biologists' meeting was held in February 2022 and presentations are available on the Fisheries Management Scotland website. The meeting included updates from a range of SFCC members, and presentations on pink salmon, sea trout, impacts of fish farming, riverbank woodland restoration, and efforts to understand Atlantic salmon at sea.

We expect the project to map pressures on Atlantic salmon in Scotland to be completed soon. This important project will help to inform the Wild Salmon Strategy implementation plan, in addition to contributing to catchment-scale fisheries management plans.

In January 2022, Leanne Munro joined SFCC on a six-

month secondment from Kyle of Sutherland Fisheries Trust. This secondment was intended as an early-career development opportunity for a staff member from the SFCC member network, with a focus on exploring new fisheries data collection technologies and helping to develop smartphone-based data collection tools. However, Leanne's role has now expanded to also help provide a smooth transition in advance of the new SFCC Manager joining Fisheries Management Scotland.

Leanne helped to develop an inventory of data collection protocols, bringing together all relevant approaches for fisheries managers in one place. Included in this list is a rapid invertebrate monitoring protocol developed by Buglife, with a view to deploying this alongside existing electrofishing surveys. Field training in invertebrate monitoring was delivered in partnership with Buglife at the end of April in Aviemore.

Dragonfly larva ©Leanne Munro

SFCC continues to utilise new technology to support our members' field data collection. In recent months web-based data collection tools have been trialled, allowing data to be collected on the riverbank via smartphones or tablets. There are many potential applications for this technology, including the reporting of invasive species, riparian tree planting, redd counting, and recording of predators, poaching and pollution incidents. Please do not hesitate to contact SFCC to find out more.

Planting trees on Sean's last day ©Craig Somerville

A personal note from Sean

After nine years with SFCC, I am now moving on to a new role as climate resilience and habitats officer with Kyle of Sutherland Fisheries Trust. It has been a privilege to work with the SFCC members across Scotland, whose friendship and support is gratefully acknowledged. I would also like to thank colleagues at Marine Scotland Science who welcomed me into the Freshwater Fisheries Laboratory.

Member focus

Giant hogweed – our part in its downfall

Bob Laughton, Director
Findhorn, Nairn and Lossie Rivers Trust

Invasive non-native plants are a significant threat to our countryside, our native wildlife, our economy and, in some cases, to our health. One of the main culprits, giant hogweed, was imported into the UK in the 19th century and has become widespread along the Findhorn, Nairn and Lossie.

In 2012, using funding from the SEPA Water Framework Directive, we teamed up with volunteers on the Mosset Burn and started the "Monday Night is Hogweed Night" project.

With additional support from Landfill Tax, Postcode Lottery, community funds and landowners, the programme expanded, but the real game-changer arrived in 2018 with the Scottish Invasive Species Initiative (SISI), funded by the National Lottery Heritage Fund and NatureScot. Working with local volunteers and community groups has been central to the initiative, but it also funded dedicated contractors to tackle severely infested areas.

We've learned some key lessons, giant hogweed seeds last in the soil for many years, so stopping these seeds forming is a key priority. Spraying with Roundup is our first line of attack but chopping the plant just before it forms seeds also works well and one of our farmers used pigs with great success. It is important to co-ordinate control by starting at the top of the infestation and working downstream and it takes about five years before you start to see a difference in the very dense areas - so be persistent.

After ten years giant hogweed along the Mosset has been greatly reduced and INNS plants along 65km of riverbank on the Findhorn, Nairn and Lossie are now under co-ordinated control. However, there is no room for complacency, there are still large areas to tackle and, if control stops, INNS plants will quickly re-establish.

In 2021, our members managed invasive non-native species across 615km of river

SISI seasonal project officer, Mirella Toth, briefing a group of volunteers before tackling giant hogweed along the River Nairn. Volunteers have played an important part in the INNS control programme, with 99 volunteers contributing 970 hours of their time over the last 10 years.

Member focus

Scotland's forgotten fish: the eel

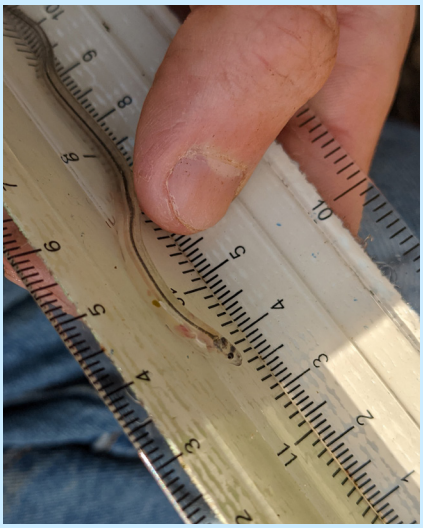
Jack Wootton – Aquatic Ecologist
Forth Rivers Trust

The Scottish Eel Management Plan is fairly simple: neither recreational nor commercial fishing are permitted. The Scottish eel fishery was not a large-scale industry and this ban only prevented a few very small-scale fisheries from operating. This seemed like a progressive step in protecting a species that is at <10% of its safe biological limits. However, while closing fisheries was deemed the only action necessary, one of the much larger issues – river barriers – has still not been addressed.

River barriers – including weirs, dams, hydro systems and sluice gates – are identified as having significant impacts on freshwater species. These barriers are often mitigated by the installation of passes that allow fish to navigate barriers and reach upstream habitat. However, on many occasions the design of these passes don't factor in eels and other non-salmonid fish. This is a wasted opportunity due to narrowed conservation targets rather than ecosystem-style approaches. There are still a huge number of barriers impacting our Scottish rivers, and with each barrier easement project we should be thinking of how to improve passage for all species. Barrier removal should always be the first option, which then offers passage for all species.

A great deal of the barrier easement work that we carry out as part of the Forgotten Fish Project is focused on retrofitting eel access to existing fish passes. Multi-species passes should be the norm, if barrier removal is not possible.

Our members engaged 789 volunteers



The work of the Forgotten Fish Project - Forth Rivers Trust

Member focus

An integrated approach to river restoration

Stuart Brabbs
Ayrshire Rivers Trust

SEPA has now finalised Scotland's third River Basin Management Plan. It will come as no surprise to river managers that there are many problems yet to be resolved and we remain some way off the aim of all rivers achieving good ecological status by 2027.

Agricultural grant schemes and subsidies, and SEPA's regulatory policies, should better align to deliver adequate protection and improvements to the freshwater environment. I'm not yet convinced they do.

Despite the wild salmon crisis, it isn't just salmon that face difficulties. The newly launched Nature Restoration Fund will support efforts to restore biodiversity while reducing predicted impacts of climate change. Accepting that the obvious marine survival challenges for salmon can't be addressed by local managers, restoring and protecting high quality river habitat is key to ensuring sustainable fish stocks. As the Scottish Wild Salmon Strategy recognises, we must make every effort to maximise freshwater productivity. This may require a step change in attitude by regulators, river and land managers and anglers. Damaging practices and pollution incidents still arise and, in some cases, the resulting damage may persist for many years. We need our regulators to regulate effectively and for landowners, and other users of the water environment, to do their part to fully comply. It appears we are some way off both but – encouragingly – progress is being made.

Rivers Trusts and DSFBs are ideally placed to design and deliver creative solutions that will have lasting benefits for wildlife, fish and humanity. Our ability to change outcomes will depend on our willingness to adapt and accept more modern and integrated management approaches. After all, poorly informed historic practices have led us to where we are now and no one is satisfied with that.

Habitat improvement works - Ayrshire Rivers Trust

Member focus

Pink salmon return in force

Alan Youngson
The Flow Country Rivers Trust

Pink salmon have been an occasional feature in Scotland's rivers in the past, straying southwards from populations in the rivers of north Norway, where they have become established, and arctic Russia, where they were originally introduced. Pinks have a fixed 2-year life-cycle and the adult fish mostly appear in odd-numbered years. In 2017, pink salmon appeared in Scottish rivers in more substantial numbers than before but, two years later, only a few were seen. In 2021, substantial numbers appeared once again.

In retrospect, this was unsurprising given the pinks' determined southwards advance the same year along the coasts of mid- and southern Norway. Excellent talks on these events by Jaakko Erkinaro of Finland and Tor Atle Mo of Norway can be accessed on the Fisheries Management Scotland website.

The River Thurso appears to have been the Scottish epicentre of the 2021 pink invasion. The river was very low and it was possible to follow the fishes' activity closely and provide a fairly precise account of events. The special efforts of Jamie McCarthy and Geordie Doull of the river staff were key.

Only six pink salmon were caught by anglers on the River Thurso – mostly in July and all in the lowermost beats. Overall, about 80 fish were removed from the river by electrofishing or netting. The remaining fish began spawning around 10th August and spawning activity petered out at the beginning of September. About 80 redds were constructed in the lower river. The expected mass die-off of spawners did not occur and it is assumed that they died later at sea. Overall, the total number of invaders was estimated at 200 to 250.

It is very likely that pink salmon will become a more prominent feature of Scottish rivers in coming years and we will need to find out more about their impacts on these new settings.

A sexually mature male pink salmon; River Thurso. Note the obvious hump, the spotted tail, the black mouth-parts and the well-developed teeth.

Member focus

Salmon restoration on the River Garry

Dr David Summers
Director, Tay DSFB and Tay Rivers Trust

In 2017, some flow was restored to the upper River Garry, a river that had been affected by water extraction for hydro power by SSE. A central element of the restoration plan agreed with SEPA and SSE was to stock parts of the river with salmon eggs to create a run of adults and test their ability to ascend falls on the lower river. This has been done with eggs from reconditioned local salmon kelts from the board's hatchery. Intensely monitored, it is set to be one of the most definitive investigations of the role of a hatchery in salmon restoration.

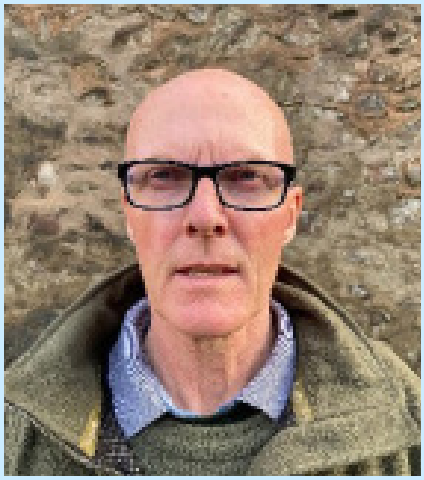
So far, juvenile densities have progressively increased at nearly all survey sites in the stocked areas. While more variable, they have generally increased at unstocked sites too. Growth rates have decreased at stocked sites, indicating that these areas have now reached the normal equilibrium expected in Highland rivers.

DNA samples from around 700 juveniles are analysed annually by University of Highlands and Islands (UHI) to identify stocked and wild juveniles. Full results will be published in due course by UHI, but preliminary results show that in 2018, 2019 and 2020, all the fry in the stocked part of the Garry were of hatchery origin. Wild juveniles were found downstream of the stocked areas, with some overlap from stocked fish dispersing from upstream. Therefore, at least some adults can pass the waterfalls and, in time, wild fish will hopefully fully colonise the restored section of the river. One interesting byproduct of genetic "tagging" of families of fry is that some stocked and wild fish have moved a surprising distance between the fry and parr stages. This has significant implications for how spawning and juvenile habitats need to be distributed in rivers.

Electrofishing on the River Garry ©Anne Woodcock

This project, funded by SSE, will hopefully continue for several more years.

Our members worked to remove 11 barriers to fish migration in 2021.



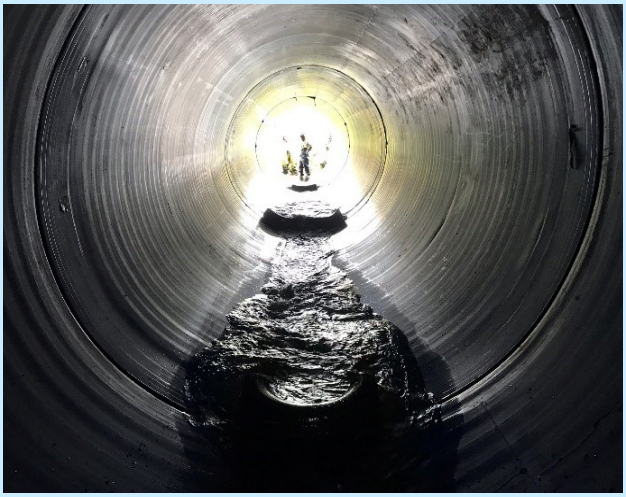
Member focus

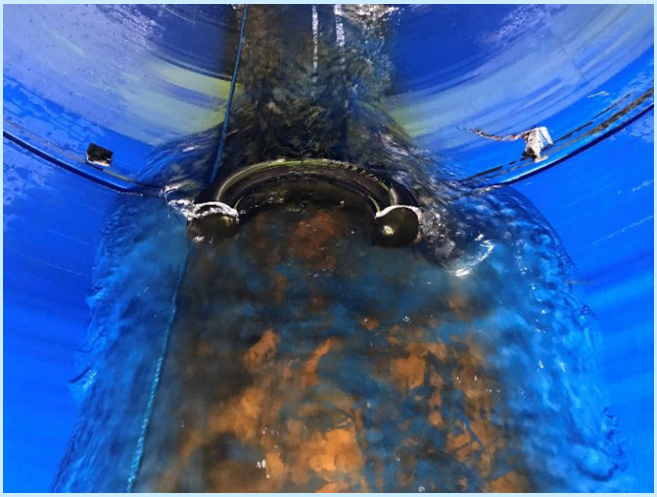
Light at the end of the tunnel

Jim Henderson
Director, Nith DSFB

In 2018, Community Windpower Limited completed construction of the Sanquhar 1 wind farm near to the town of Sanquhar in southwest Scotland. Nith District Salmon Fishery Board (NDSFB) had conducted all necessary fish surveys associated with the wind farm, but the results obtained during the completion surveys revealed that a culvert installed as a consequence of the wind farm was presenting a barrier to migration for trout. The 2m plastic culvert pipe was seated on bedrock in such a way that the discharge was elevated above the normal water levels. The pipe was only submerged in high flows, when the velocity was so great that fish would struggle to migrate through the culvert. Ultimately, these fish passage issues should not arise, but as a result of the surveys conducted by the NDSFB, we were able to identify and address the issue.

NDSFB were commissioned to make the culvert passable to migrating trout. The challenge was to devise and retrofit a solution which could be installed within the culvert. Having considered many options, I came up with the idea of cutting car tyres in half and bolting them to the floor of the plastic culvert pipe. The rubber tyres were sufficiently flexible to fit the curvature of the pipe with the open-ended C shapes facing upstream to arrest the flow. The rubber structures created small dams within which riverine substrate has held. The water has pooled allowing fish to rest during their migration through the pipe. At the discharge end of the culvert, I was able to manipulate some of the large boulders to create a pool which has resulted in reducing the distance that fish have to travel through the culvert. During 2021, NDSFB returned to the site and electro-fished upstream of the culvert pipe. I am pleased to report that we gained positive results and once again have trout in the upper parts of the tributary. Success!





Retrofitted fish pass solutions in culverts in the Nith catchment ©Nith DSFB

The Missing Salmon Alliance

Peter Landale
Ambassador
Missing Salmon Alliance

The Missing Salmon Alliance is a group of conservation-focused organisations which have come together to drive action by combining expertise and coordinating activities including fundraising, research, advocacy and management actions. Our goal is to help wild Atlantic salmon survive and thrive in our rivers and seas.

Our wild salmon populations are at crisis point, and it is vital that we work in a coordinated manner across the UK. As the representative body for Scotland's District Salmon Fishery Boards and Fisheries Trusts, Fisheries Management Scotland has a key role to play, in partnership with the members of the Alliance. Our members, working with a range of key stakeholders, have a long track record of delivering essential work to protect and enhance salmon in Scotland, but through the Missing Salmon Alliance our collective capacity to address the pressures which wild salmon face will be significantly enhanced.

Our wild salmon face many challenges, but the impact of climate change is a significant factor and we must focus on building resilience to widespread climate-induced effects. The United Nations Climate Change Summit (COP26), which was hosted in Glasgow in the autumn of 2021, presented us with a unique opportunity to advocate for change.

Salmon School is an extraordinarily beautiful art installation by renowned artist Joseph Rossano, comprising over 350 salmon sculpted from mirrored glass. The Missing Salmon Alliance joined forces with leading salmon conservationists from around the world to bring this work to COP26, to inspire delegates to be bold in reaching their goals.

In the lead up to COP26 the Clyde River Foundation, Missing Salmon Alliance and Salmon School developed and launched a youth-based citizen science project on the River Clyde in collaboration with the Smithsonian Institution, Washington DC. Pupils from 26 primary schools in the River Clyde catchment learnt about the lifecycle of salmon and collected eDNA samples to help inform them about the range of species living in their local rivers, including Atlantic salmon.

Salmon were lost from the

Our members planted 1,116,937 native trees beside rivers

THE MISSING SALMON ALLIANCE

River Clyde during the industrial revolution. In recent decades, the river has been cleaned up and salmon have returned – a real success story that shows us what is possible if we create the right conditions for salmon – free access to cold, clean water.

Building on this momentum, Salmon School is now displayed at Balmoral Castle as part of an exhibition to mark The Queen's Platinum Jubilee. The artwork is forming part of an exhibition entitled "Life at Balmoral" which runs from April 1 to August 2 – celebrating all life at Balmoral "from the River to the Royals". The installation will then be displayed at St Margaret's Church in Braemar, from August 15.

The Missing Salmon Alliance will build on the work already being undertaken by its members and increase its impact through sharing information, agreeing priorities, avoiding duplication of effort, presenting coordinated arguments and coordinating action to halt and reverse the decline of wild Atlantic salmon. The aim is to increase the scale of funding available and make efficient use of resources by being more focused and more accountable, with the goal of building an evidence-base to persuade national and international decision-makers to regulate activities that adversely impact wild salmon.

Projects currently underway include work to identify and prioritise pressures facing Atlantic salmon, tracking initiatives to understand how our salmon utilise the marine environment, work to address the impacts of aquaculture and develop a regulatory system that is fit-for-purpose, and projects to restore habitat and increase resilience in the face of climate change. One key priority is to facilitate delivery of targeted riparian woodland creation across Scotland and the Missing Salmon Alliance is working through the Riverwoods/ Trees for Water initiatives to support and ensure delivery of this important work.

It is clear that the scale of the task that faces us is enormous. The Missing Salmon Alliance is therefore exploring options to increase the resources available for our crucial work. We are investigating opportunities arising from responsible investment in natural capital which may support the catchment-scale work that is required to address the wild salmon crisis.

More information can be found at www.missingsalmonalliance.org.

Salmon School installed at COP26 in Glasgow

Assembling the 'Our Wild Salmon' series

Craig Somerville
Filmmaker
The Castabroad Collective

The general awareness of the pressures faced by our wild salmon has been ramping up over the last few years, thanks to many forms of media across Scotland and the UK.

This is great, but we don't need yet another awareness campaign that paints a grim picture. Tangible solutions are required before the window to make a difference closes.

These solutions have to come from the right people and organisations, make sense, and engage people with the power to make change. These can range from a family member looking to make informed choices about the sustainability of the seafood they buy in the supermarket, to fisheries managers who know their rivers and lochs, to top level politicians with the ability to protect wild salmon.

During the International Year of the Salmon, my team at Castabroad were asked by FMS and NASCO - with financial support from the European Union and the European Commission - to create a film series that not only highlighted some of the main pressures faced by wild salmon in Scotland, but also offered the public and the politicians a clear reason to act. It was a project that the whole team were very excited to be part of.

Being professionally involved in salmon conservation, I thought I was in touch with what was going on out there to help our wild salmon, but little did I know how much activity was not being effectively shared. Researching the series gave me a great opportunity to learn more, and then use my camera to share this.

The best bit for me was getting out to meet the incredibly hard working – often unsung – heroes of Scotland's waterways. Their work often involved highlighting the local

The Fisheries Management Scotland team ©Craig Somerville

pressures wild salmon faced in their own catchments – pressures that tended to be echoed in other parts of the country.

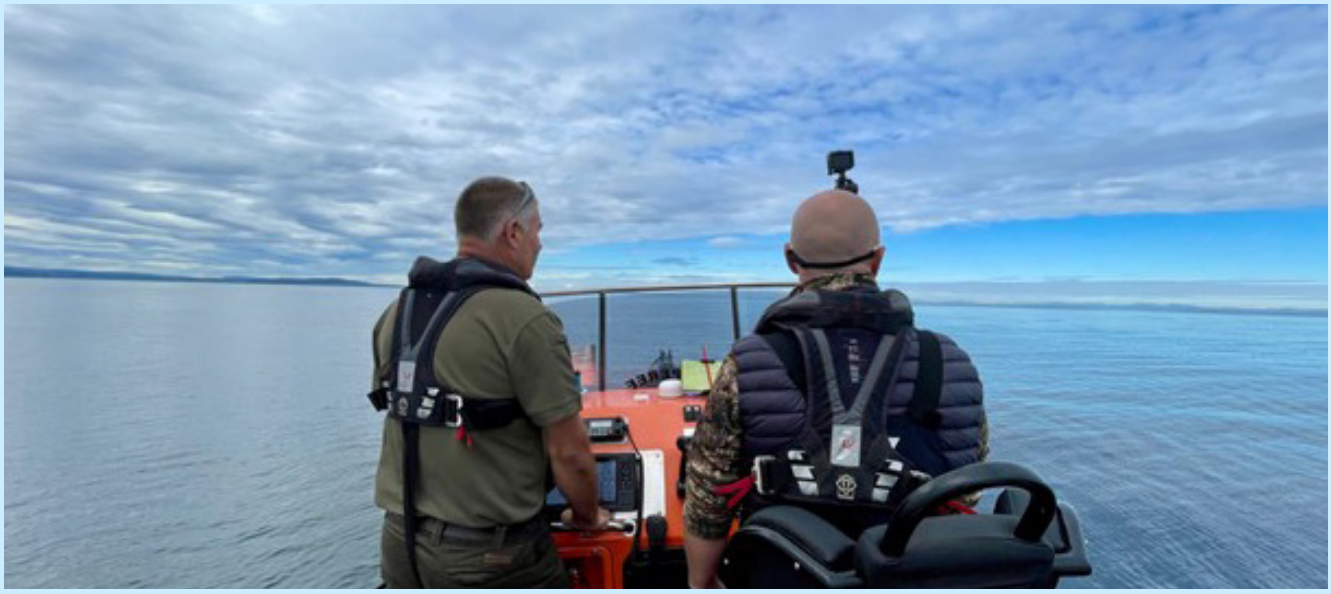
Each episode of the resulting "Our Wild Salmon" series focuses on a particular pressure faced by salmon, and there is also a feature film offering an overview. Looking ahead there's potential to revisit these films, and even extend the series, to ensure the vital work of Scotland's fisheries managers reaches a wide audience.

There were two pandemics we all dealt with during this project: Covid-19, and one of miscommunication. Helping to communicate the huge efforts by our river managers, and

Jamie Ribbens - Galloway Fisheries Trust ©Craig Somerville

now share these with the audience made this series all the more satisfying to film. The hope is now, with a little help from this series, we can ensure key actions are taken, not just to conserve our wild salmon, but also to help them thrive once again.

Thank you to everybody who helped make this series possible. There are far too many of you to mention individually here.



Boat patrols with the Spey Fishery Board ©Craig Somerville

The Scottish Wild Salmon Strategy

Marine Scotland
Salmonandrecreationalfisheries@gov.scot

The Scottish Wild Salmon Strategy, which was published in January 2022, is a significant landmark in the collective efforts to address the serious decline in the numbers of Atlantic salmon returning to our rivers over recent decades.

Developed with significant input from stakeholders under the difficult circumstances of the Covid-19 pandemic, the strategy aims to bring salmon populations in Scotland back from crisis point. Its high level vision is to achieve a situation in which Scotland's wild Atlantic salmon populations are flourishing and are an example of nature's recovery. Marine Scotland aims to help achieve this through the application of best practice science and management.

Work on implementing the strategy will be centred on the achievement of three interlinked objectives:

• Scotland's rivers have healthy, self-sustaining populations of wild Atlantic salmon that achieve good conservation status.

• Wild salmon management is evidence-based and underpinned by integrated data gathering, research and dissemination.

• The environmental and socio-economic benefits arising from healthy wild Atlantic salmon populations are identified and maximised through partnerships between the public, private and charitable sectors.

In recognition of the complex habitat requirements and the wide range of pressures that Atlantic salmon can encounter throughout their lifecycle, five priority themes for action lie at the heart of the strategy:

1. Improving the condition of rivers and giving salmon free access to cold, clean water.

2. Managing exploitation through effective regulation, deterrents, and enforcement.

3. Understanding and mitigating pressures in the marine and coastal environment.

4. Making a positive contribution through international collaborations.

5. Developing a modernised and fit for purpose policy framework.

Each theme is matched

with an illustrative set of actions which will combine – and later be added to in a detailed implementation plan – to achieve the vision and objectives. Crucially, any action taken will be underpinned by the evidence gathered through coordinated scientific research and monitoring.

While the focus is on Atlantic salmon, the combined efforts to revive Scotland's salmon populations will also aid the protection and recovery of many other species and habitats. In this regard, the strategy does not exist in isolation but forms part of a range of steps that the Scottish Government is taking to ensure Scotland urgently plays its full part in tackling the twin global crises of climate change and nature loss.

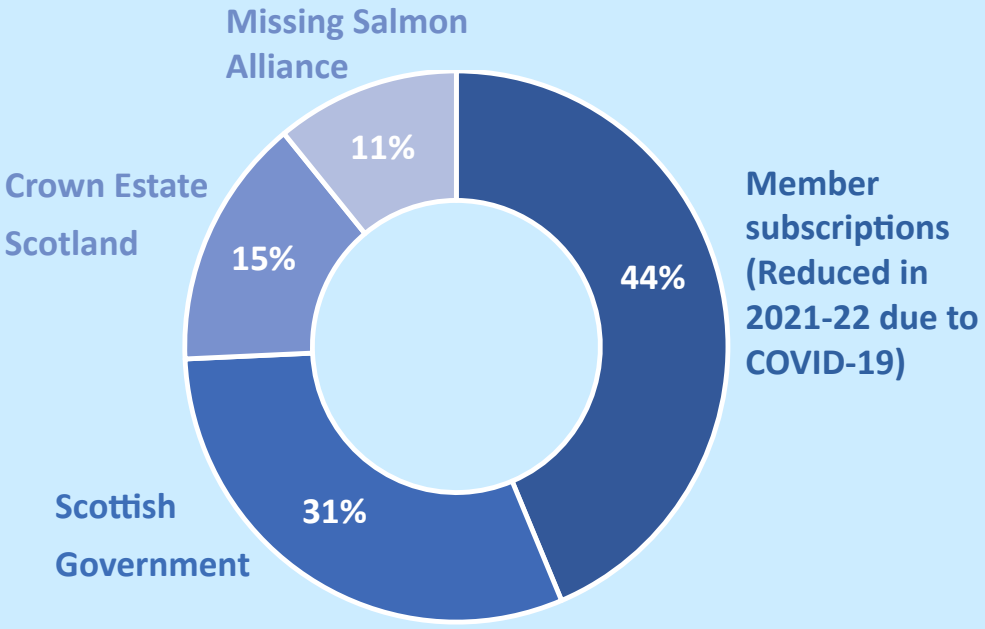
Central to this is the Scottish Government's focus on delivering the Shared Policy Programme, established under the Bute House Agreement between the Scottish Government and the Scottish Green Party. This ambitious programme sets out the policy positions and commitments that both parties agree should be delivered. This includes a new Natural Environment Bill that will put in place key legislative changes to restore and protect nature. This new legislation will follow on from a new Biodiversity Strategy, which is currently being developed for publication later in 2022.

While the Scottish Government is committed to supporting the implementation of the Wild Salmon Strategy it is clear that the vision and objectives cannot be achieved by government acting alone. There is little doubt that success will require all of us to be as connected as the aquatic world in which salmon inhabit. Thankfully, there are many examples of strong partnerships already working across public, private, and charitable bodies that serve as a model on which to build. We will therefore establish an ongoing cross-government and stakeholder group to advise on and support implementation, and have set a milestone of publishing a detailed implementation plan by the end of 2022. Nevertheless, a number of ongoing and new initiatives will proceed during the course of this year as part of this process.

Nobody should underestimate the scale of the task ahead but – through the strength of our partnerships and shared efforts – a positive future can be secured for Atlantic salmon in Scotland.

©Angus Blackburn

Our funding



As a representative body, the funding for our core activities comes from our members - Scotland's District Salmon Fishery Boards and Rivers and Fisheries Trusts. Grant funding for specific projects is received from Marine Scotland and Crown Estate Scotland, and we also receive funding through the Missing Salmon Alliance. The graphic above is provisional, subject to approval of our annual accounts for 2021-22. We receive no funding from industry.

The strength of Fisheries Management Scotland comes from our members, who work collectively to conserve Scotland's wild salmon and native freshwater fish and the environment on which they depend. In addition to the income highlighted above, during the 2021-22 financial year approximately £540k was distributed directly to our members in 2021 - this arises from Scottish Government and Crown Estate Scotland grant funding (see below).

The majority of our expenditure relates to our staff, who are dedicated to advocating for our iconic migratory and freshwater fish and the freshwater environment. Our latest accounts can be viewed at www.fms.scot

The Fisheries Management Scotland office at 11 Rutland Square

Funding received in 2021

- Aquaculture and wild fish interaction (Marine Scotland)
- Salmon Interactions - Sweep netting programme (Marine Scotland - distributed to members)
- Wild fish sea lice monitoring protocol project (Crown Estate Scotland - distributed to members)
- National Electrofishing Programme for Scotland (NEPS) (Marine Scotland, Crown Estate Scotland - distributed to members)
- National Adult Salmon Sampling Project (Marine Scotland - distributed to members)
- Scottish Fisheries Coordination Centre (Marine Scotland)

2021 catches*

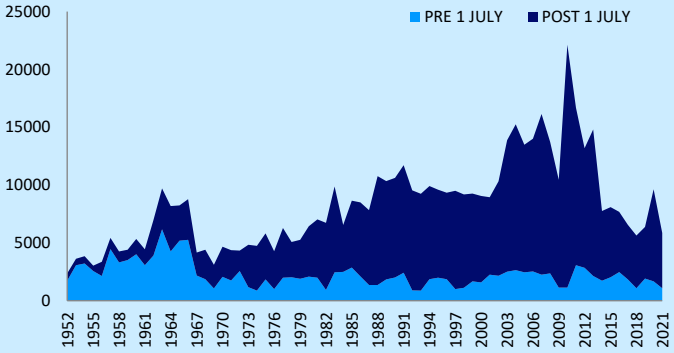
Covid restrictions on travel persisted in the early part of 2021, and this will have undoubtedly affected angling effort and catch. Extremely dry conditions between late spring and early autumn further compounded this situation. Where water conditions allowed, moderate to good catches were reported in some rivers before summer got underway. The serious water scarcity issues experienced during 2021, and predicted to become more frequent in future, emphasised the crucial importance of working to ensure that our rivers are resilient to these conditions and that human activities are appropriately regulated.

©Craig Somerville

TWEED

Jamie Stewart
Director, The Tweed Foundation

As with the 2020 season, the early months of 2021 were negatively impacted by Covid restrictions. These were followed by a period of very little rain in the catchment after May, leading to low water conditions which prevailed until late September, reducing fish catches. The RTC continues to be concerned by the killing of spring salmon by a netting station located in the Tweed Estuary. Anglers must return all spring fish and proprietors are urged to adopt catch-and-release policy across the season. All hen fish caught after 14 September should be returned.



Tweed rod catch statistics 1952-2021
Source: River Tweed Commission
Season: 1 Feb – 30 Nov

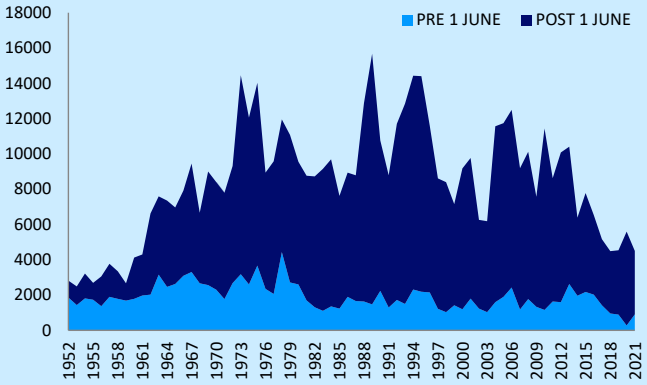
Salmon rod catch - 5,862 10 yr average - 9,636
Sea trout rod catch - 1,328; 10 yr average - 1,853
Largest salmon: 34lb; Largest sea trout: n/a

TAY*

David Summers
Director, Tay DSFB and Tay Rivers Trust

Covid-related restrictions and near impossible angling conditions practically wrote off the first six weeks. While some beats did fish well in April, there was no repeat of the strong late spring run of 2020. Heatwaves seriously affected fishing in July and September, meaning the only period of reasonable conditions, and good catches, was a short spell in early August. The low summer flows again caused problems for fish in some tributaries, particularly the River Ericht.

*Provisional figures



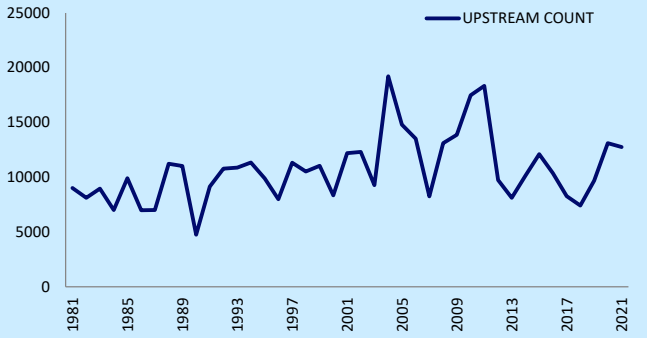
Salmon rod catch - 4,505; 10 yr average - 6,619
Largest salmon: 29lb

Tay rod catch statistics 1952-2021
Source: Tay DSFB
Season: 15 Jan – 15 Oct

LOGIE FISH COUNTER (NORTH ESK)

Craig Macintyre
Esks Rivers Director

Unfortunately, catch data for 2021 for the North or South Esk are not available at the time of writing, but those local anglers permitted to fish during Covid restrictions were welcomed by one of the best spring runs seen in recent years. We then had one of the driest summers on record, which meant that good fishing opportunities were hard to come by, and catches suffered. The salmon population looks healthy, however, as the counter figures for the last two years were the strongest since 2011 – with 12,768 recorded in 2021.

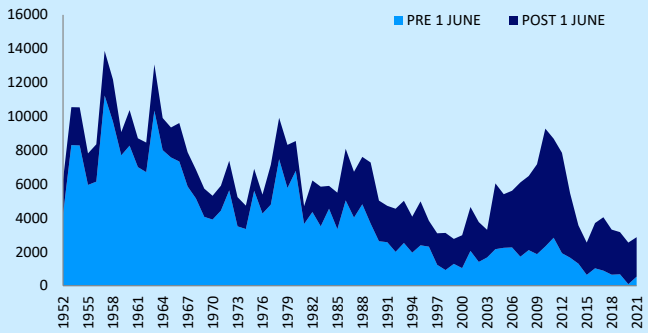


Logie Fish Counter Upstream Counts 1981-2021
Source – Marine Scotland Science © Crown copyright.
Season: 16 Feb – 31 Oct

DEE

Lorraine Hawkins
River Dee Director

Salmon catches were low, like the previous five years, and spring catches have been in particularly steep decline, regardless of Covid, since 2010. A poor autumn run had a disproportionate impact on the lower river. The board and trust continue to invest in large-scale habitat restoration which will bring short- to long-term benefits. This includes tree planting, the introduction of large wood structures to river channels, floodplain restoration, buffer strip creation, nutrient addition trials, INNS control and predator management. The catch and release policy is now in its 27th year.



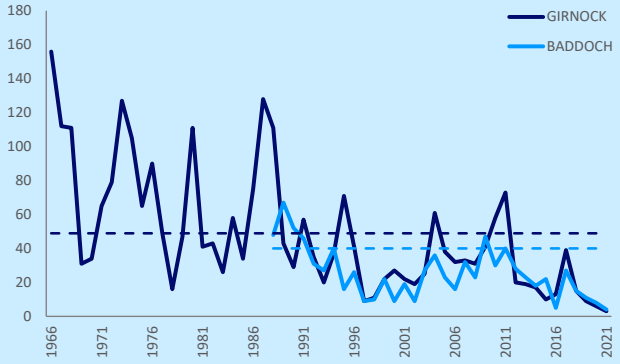
Dee rod catch statistics 1952-2021
Source: Dee DSFB
Season: 1 Feb – 15 Oct

Salmon rod catch - 2,871; 10 yr average - 4,356
Sea trout rod catch - 613*; 10 yr average - 1,133
Largest salmon: 30lb; Largest sea trout: n/a
*2020 figure

GIRNOCK & BADDOCH FISH TRAPS (RIVER DEE)

Freshwater Fisheries Laboratory – Marine Scotland Science

MSS operates two traps on upper tributaries of the Aberdeenshire River Dee that are dominated by early-running multi-sea-winter spring salmon, the stock component that has been of most concern in recent decades. Female numbers are plotted below, as they control egg deposition and thus subsequent freshwater production. It is estimated that around 49 and 40 females would be required to fully saturate habitat in the Girnock and Baddoch respectively. In 2021 three females were caught in the Girnock trap and four in the Baddoch trap. These were the lowest returns on record and represent only 6% and 10% of the numbers required to maximise emigrant production from the two catchments. Further information on the Girnock and Baddoch traps can be found at the following webpages: https://www.gov.scot/publications/salmon-and-recreational-fisheries-monitoring-traps/



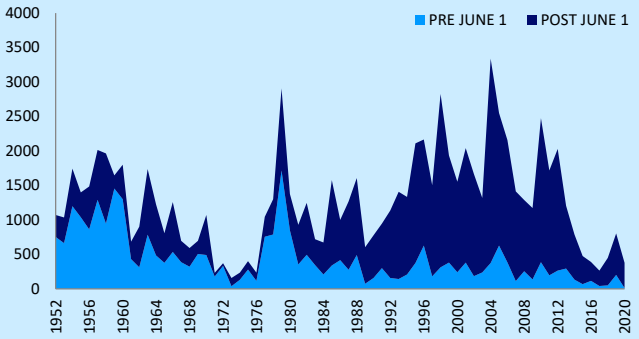
Girnock & Baddoch female upstream burn trap counts 1966-2021
Source – Marine Scotland Science © Crown copyright.
Number of adult females returning to the Girnock and Baddoch traps on Deeside. Horizontal lines denote the number of female salmon required to maximise emigrant production (smax) at each site.

DON*

Lorraine Hawkins
River Don Director

The final 2021 figures are not in at the time of writing, but the total catch will likely be around 350-400 salmon, continuing the trend for very low catches since 2014, with no significant autumn run, once again. The board continues to work on easing barriers to migration and is making progress with habitat restoration, including tree planting. Volunteers continue to tackle giant hogweed and carry out 'green' bank repairs. Smolt tracking took place again in 2021 to help identify losses in the lower river.

*2020 figures



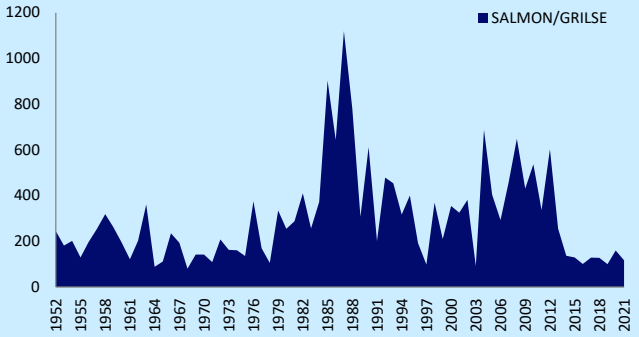
Salmon rod catch - 377; 10 yr average - 845
Sea trout rod catch - 138; 10 yr average - 174
Largest salmon: 25lb; Largest sea trout: 6lb

Don rod catch statistics 1952-2020
Source: Don DSFB
Season: 11 Feb – 31 Oct

YTHAN

Mark Andrew
Ythan DSFB

The season was affected by low water conditions, which kept most of the salmon in the lower reaches of the river until late September / early October, when fish came up past the old bridge in Ellon and new fresh fish joined them, providing reasonable sport up as far as Methlick. Sea trout numbers in the estuary kept up well and the finnock catch, which is popular in all stretches of the river, held up extremely well – right through from February to October.



Salmon rod catch - 117; 10 yr average - 179
Sea trout rod catch - 1,643; 10 yr average - 1,501
Largest salmon: n/a; Largest sea trout: 8.5lb

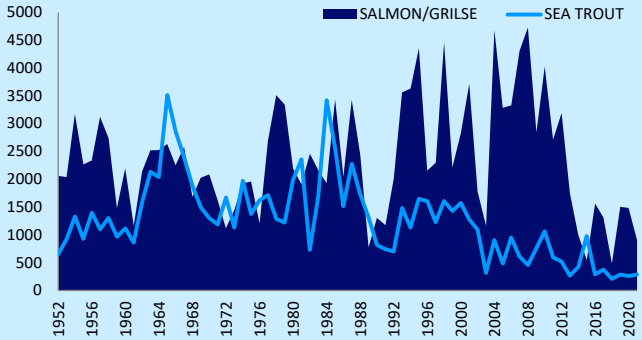
Ythan rod catch statistics 1952-2021
Source: Ythan DSFB
Season: 11 Feb – 31 Oct

©Desmond Dugan

DEVERON

Richard Miller
Director, Deveron DSFB & Deveron, Bogie & Isla Rivers Charitable Trust

The 2021 season was challenging, due to a combination of poor sea survival of salmon and unfavourable angling conditions. The easing of Covid-19 restrictions resulted in an estimated 54% increase in rod effort from 2020, but this did not translate into an upturn in catches. The Deveron has been given Category 2 status for the 2022 season. An acoustic (sonar) fish counter and PIT tag detector system will shortly be installed on the river in collaboration with the Atlantic Salmon Trust and Marine Scotland Science.



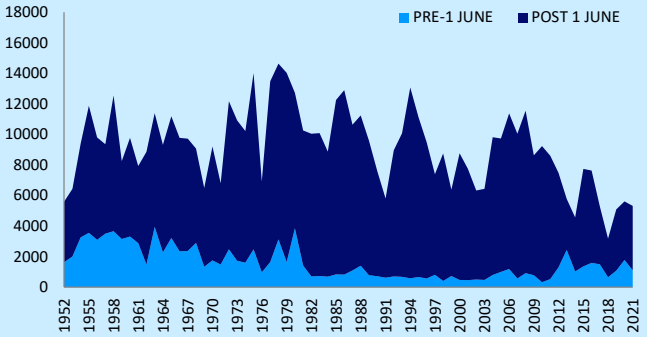
Salmon rod catch - 902; 10 yr average - 1,413
Sea trout rod catch - 288; 10 yr average - 372
Largest salmon: 23lb; Largest sea trout: 7lb

Deveron rod catch statistics 1952-2021
Source: Deveron DSFB
Season: 11 Feb-31 Oct

SPEY

Roger Knight
Director, Spey Fishery Board

Covid-related travel restrictions limited angling opportunities to locals only until 26 April, while some beats remained closed until June. Despite this, the declared rod catch was very healthy. The board remains concerned by the significant water abstraction in the upper catchment at Spey Dam, where substantial volumes are diverted to Fort William, severely impacting the upper Spey's salmon population. We will continue to work closely with GFG Alliance and SEPA and look forward to improvements to the dam's fish pass being implemented during 2022.



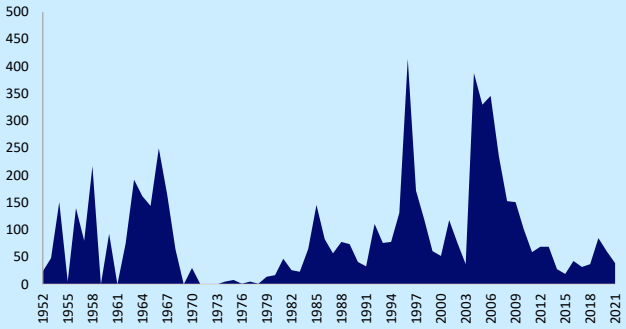
Salmon rod catch - 5,318; 10 yr average - 5,766
Sea trout rod catch - 1,219; 10 yr average - 1,679
Largest salmon: 24lb; Largest sea trout: 10lb

Spey rod catch statistics 1952-2021
Source: Spey DSFB
Season: 11 Feb-30 Sept

LOSSIE

Valerie Wardlaw
Administrator, Lossie DSFB

A dry summer kept fishing effort low, with little angling activity, but the total sea trout catch was better than the 10-year average. Water levels were good for migration to spawning grounds in the autumn and numerous fish were seen at this time. The Cloddach Bridge apron continues to be a concern for obstructing fish passage in low water. INNS plant control was undertaken to the outskirts of Elgin. Abstraction by Scottish Water from the Lossie during drought conditions has been tabled in the event of continuing water scarcity.



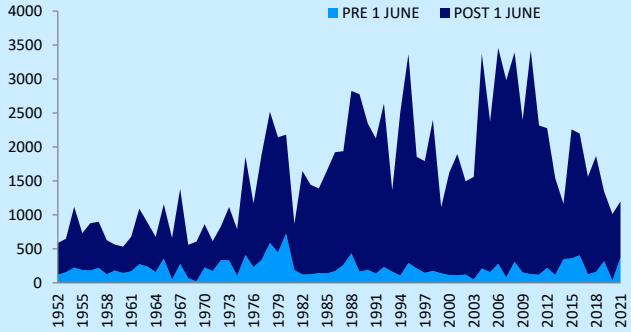
Salmon rod catch - 39; 10 yr average - 63
Sea trout rod catch - 105; 10 yr average - 81
Largest salmon: 10lb; Largest sea trout: 5lb

Lossie rod catch statistics 1952-2021
Source: Lossie DSFB
Season: 1 Apr – 31 Oct

FINDHORN

Valerie Wardlaw
Administrator, Findhorn DSFB

Good water levels in the spring resulted in 173 quality salmon caught and no issues with disease. From July generally low water levels resulted in an average catch, with low grilse numbers, although numerous fish were seen in the river. Findhorn Bay was full of finnock due to abundant sprats and sandeels. Reduction of giant hogweed and Japanese knotweed densities took place upstream of the A96 and a number of unauthorised river works are currently under investigation by SEPA.



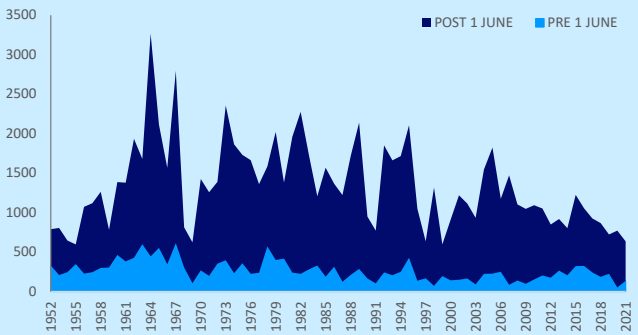
Salmon rod catch - 1,198; 10 yr average - 1,759
Sea trout rod catch - 134; 10 yr average - 112
Largest salmon: 27lb; Largest sea trout: 5lb

Findhorn rod catch statistics 1952-2021
Source: Findhorn DSFB
Season: 11 Feb – 30 Sep

NESS

Brian Shaw
Director, Ness DSFB

2021 was a poor season for all but the low water beats, with only 1999 being worse in recent times. The multi-sea winter catch was below all but the Covid-restricted season of 2020, while the grilse catch was well down on even 2020. On a brighter note, conservation measures continue to be well respected across the catchment and the Upper Garry Restoration Project stocked the headwaters for the fourth year – the first returns of these fish as multi-sea winter salmon are expected this year.



Salmon rod catch - 634; 10 yr average - 877
Sea trout rod catch - n/a; 10 yr average - n/a
Largest salmon: 27lb; Largest sea trout: n/a

Ness rod catch statistics 1952-2021
Source: Ness DSFB
Season: 1 Feb-30 Sept

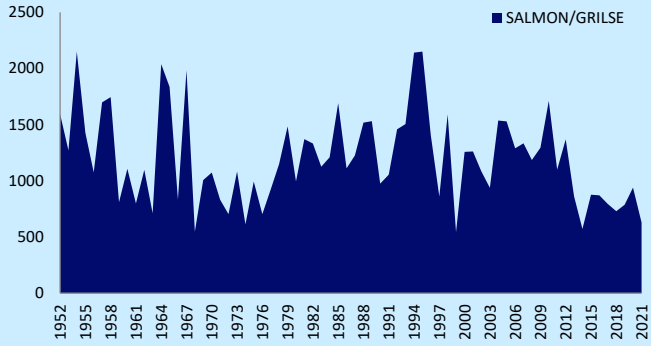
BEAULY*

Ruth Watts
Senior Biologist, Beauly DSFB

2021 started with good water, and strong runs of spring salmon. From June onwards, drought conditions prevailed, with a lack of summer salmon, along with a mediocre grilse run. The estimated salmon count at Kilmorack was 3,572 and 2,919 at Aigas. Downstream smolt passage at both dams appears to be improving, with better flow management and smolt run timing monitoring. Three fish lifts per day were in operation (up from two in previous years) to improve adult fish passage. Water temperature reached 21.7°C at one site and work is underway to encourage riparian tree planting in the upper catchment.

*Provisional figures

Salmon rod catch - 629; 10 yr average - 845
Sea trout rod catch - 246; 10 yr average - 535
Largest salmon: 24lb; Largest sea trout: 6lb



Beauly rod catch statistics 1952-2021
Source: Beauly DSFB
Season: 11 Feb – 15 Oct

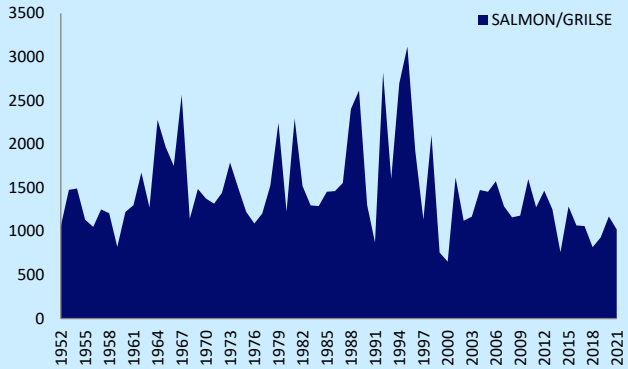
CONON*

Ben Seaman
Fisheries Biologist, Cromarty Firth Fishery Board

The full catch returns were not received at the time of writing, but good numbers of fish were caught until the end of July. This was followed by six weeks with little rain, in which fish were seen but reluctant to take. The last week of the season saw a rise in water followed by improved catches. An adult fish trap on the River Blackwater supports a long-term mitigation stocking programme. The 2021 catch was above the 5-year average, with 861 fish caught. Only 242 of these were hens. 16% of the hen fish were 2+SW, making up for the shortfall in grilse.

*Provisional figures

Salmon rod catch - 1,021; 10 yr average - n/a
Sea trout rod catch - n/a; 10 yr average - n/a
Largest salmon: 20lb; Largest sea trout: 6lb



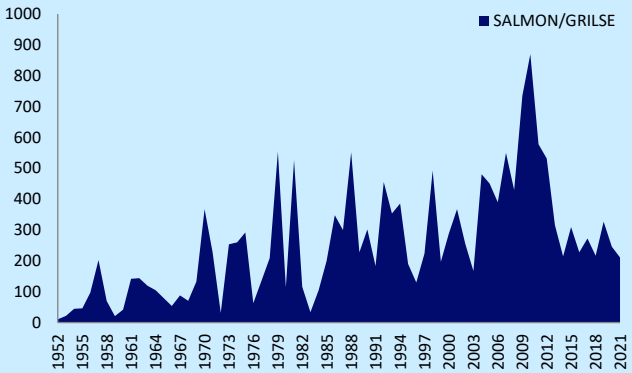
Conon rod catch statistics 1952-2021
Source: Cromarty Firth Fishery Board
Season: 11 Feb – 30 Sep

ALNESS

Ben Seaman
Fisheries Biologist, Cromarty Firth Fishery Board

Moderate catches were observed in spring, while fishing was poor during the extremely dry summer. The last month of the season saw a rise in water, followed by improved catches throughout the river. For a third successive year, reports of adult salmon exhibiting signs of red skin disease were received. Despite extensive testing of affected fish in 2020, the cause of the infection remains unknown. Electrofishing in September indicated that numbers of fry and parr were above the predicted benchmark at all the survey sites.

Salmon rod catch - 211; 10 yr average - n/a
Sea trout rod catch - 34; 10 yr average - n/a
Largest salmon: 18lb; Largest sea trout: n/a

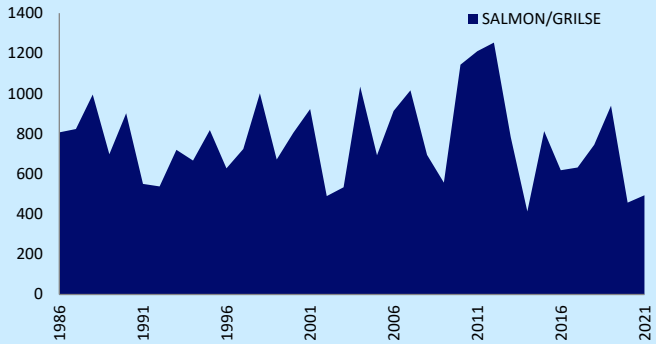


Alness rod catch statistics 1952-2021
Source: Cromarty Firth Fishery Board
Season: 11 Feb – 30 Sep

CARRON (EAST COAST)

Keith Williams
Director, Kyle of Sutherland DSFB

The Kyle of Sutherland's first salmon of the season was caught in the middle of February from the Cornhill beat. Covid restrictions reduced fishing pressure somewhat for a spell but, overall, the spring season was reasonably productive. Late spring and the month of June were unseasonably cold at times. Summer catches were curtailed by a long dry spell, prior to some rainfall in August and September producing better results. Considerably more salmon than grilse featured in the catches.



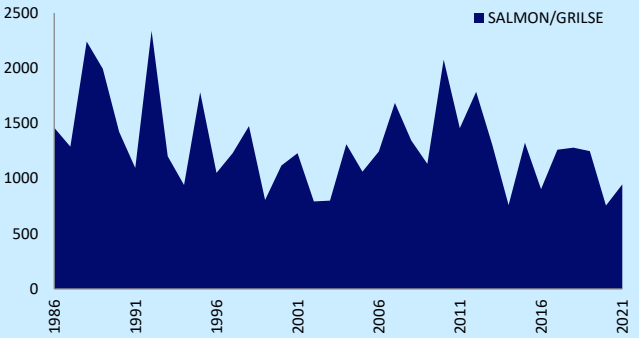
Salmon rod catch - 494; 10 yr average - n/a
Sea trout rod catch - 26; 10 yr average - n/a
Largest salmon: n/a; Largest sea trout: n/a

Carron rod catch statistics 1986-2021
Source: Kyle of Sutherland DSFB
Season: 11 Jan – 30 Sep

OYKEL

Keith Williams
Director, Kyle of Sutherland DSFB

Spring fishing effort was again reduced as a result of Covid restrictions. Conditions were difficult at times with low water a feature of April. The summer months were dogged by dry spells, although grilse in particular ran hard during infrequent small rises in river levels. The Oykel tends to benefit more from small rises in the summer compared to other Kyle of Sutherland rivers, due to the upper reaches of the catchment being very close to the west coast. Some good catches were recorded in July throughout the catchment, when the river benefitted from good spates.



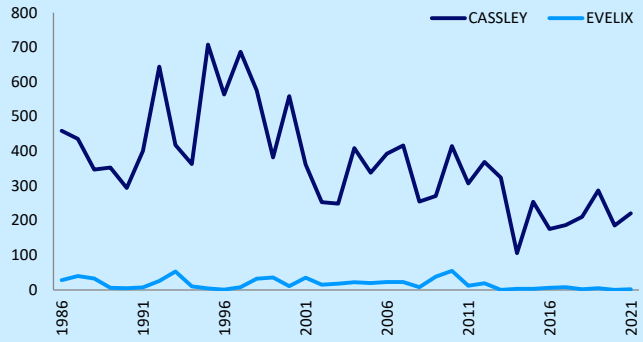
Salmon rod catch - 946; 10 yr average - n/a
Sea trout rod catch - 71; 10 yr average - n/a
Largest salmon: n/a; Largest sea trout: n/a

Oykel rod catch statistics 1986-2021
Source: Kyle of Sutherland DSFB
Season: 11 Jan – 30 Sep

CASSLEY & EVELIX

Keith Williams
Director, Kyle of Sutherland DSFB

In common with neighbouring rivers, the spring fishing season was characterised by extremes of weather. At times the Cassley became very low, with insufficient water being available to operate the fish pass at Duchally Dam. During the smolt run, fish were tagged to assess their ability to migrate past the dam at Duchally. Rainfall and lower water temperatures in September gave a late boost to catches on the Cassley, particularly in the upper reaches of the system. Two salmon were also caught on the Evelix in September.



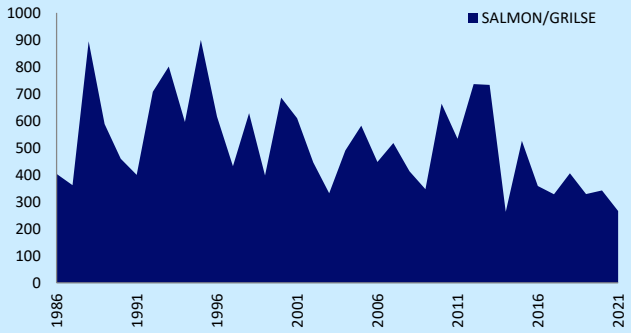
Salmon rod catch - 223; 10 yr average - n/a
Sea trout rod catch - 5; 10 yr average - n/a
Largest salmon: n/a; Largest sea trout: n/a

River name rod catch statistics 1986-2021
Source: Kyle of Sutherland DSFB
Season: 11 Jan – 30 Sep

SHIN

Keith Williams
Director, Kyle of Sutherland DSFB

The compensation flow from the hydroelectric dam allowed fishing to continue, despite the long summer drought spell and high temperatures that plagued neighbouring rivers. Although fresh fish were entering the river throughout the summer months, the consensus was that the fish were difficult to tempt. Cooler temperatures and higher rainfall in September resulted in the highest monthly catch total of the season. No reliable fish counter data from SSE is available due to technical issues. Over 4,000 smolts were transported past the dams as part of ongoing mitigation measures.



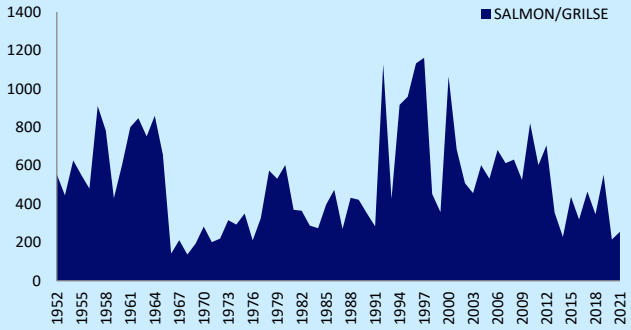
Salmon rod catch - 266; 10 yr average - n/a
Sea trout rod catch - 4; 10 yr average - n/a
Largest salmon: n/a; Largest sea trout: n/a

Shin rod catch statistics 1986-2021
Source: Kyle of Sutherland DSFB
Season: 11 Jan – 30 Sep

BRORA

Neil Wright
Clerk, Brora DSFB

There was a reasonable start to the season, but low water and high temperatures then resulted in fewer fish being caught. A spate in late September brought a lot of fish into the system and catches finally improved. The board's whole-river survey and review were completed, and the board is now planning to increase riparian tree planting in the upper catchment – to provide shade and reduce water temperature – along with some peatland restoration. The report identified very good numbers of juvenile fish – the work proposed is to protect the river for the future.



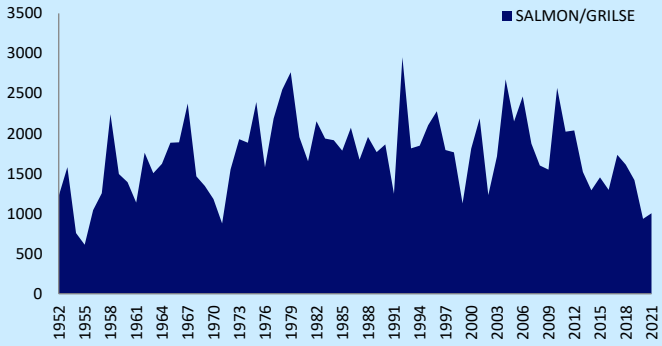
Salmon rod catch - 255; 10 yr average - n/a
Sea trout rod catch - n/a; 10 yr average - n/a
Largest salmon: n/a; Largest sea trout: n/a

Brora rod catch statistics 1952-2021
Source: Brora DSFB
Season: 1 Feb – 15 Oct

HELMSDALE

Michael Wigan
Manager, Helmsdale DSFB

The river was only lightly fished in the first eight weeks of the season due to Covid restrictions, while there was very little rain from June to late September, so catches were reduced in this period too. Despite this, the overall number of fish running the river appeared to be normal. On a less positive note, electro-fishing showed poor fry survival, owing to the very cold spring delaying the hatch of aquatic invertebrates. Parr numbers were, however, good. Catch and release was encouraged and very few fish were killed for consumption.



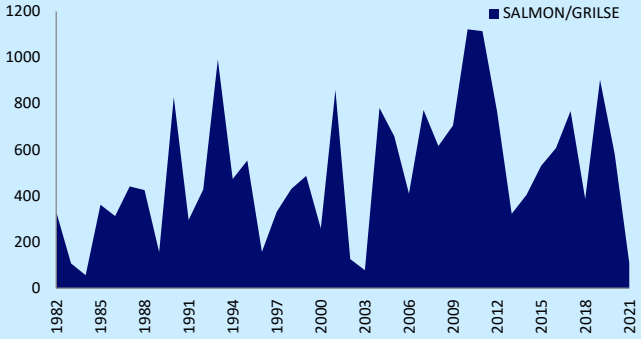
Salmon rod catch - 1,007; 10 yr average - 1,511
Sea trout rod catch - n/a; 10 yr average - n/a
Largest salmon: 24lb; Largest sea trout: 6lb

Helmsdale rod catch statistics 1952-2021
Source: Helmsdale DSFB
Season: 11 Jan-30 Sept

WICK

John Mackay
Secretary, Wick Angling Club

Wick River suffered an extreme drought in 2021, with not a drop of rain from April to October – the fourth dry year in a row. Some fish came in with the high tides in July and August, but they seem to have gone back to the sea and very few fish were observed on the spawning redds. We now expect a few lean years. At the AGM we altered our rules to ensure that more fish will survive to spawn.



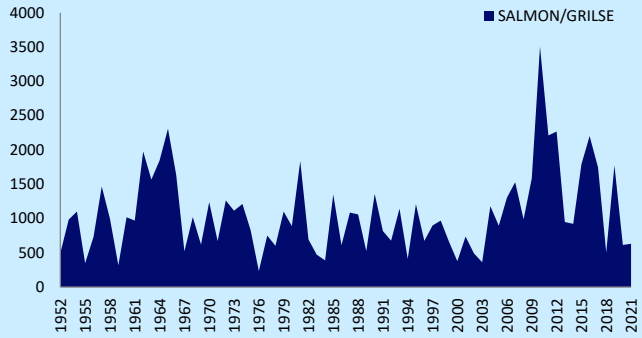
Salmon rod catch - 109; 10 yr average - 538
Sea trout rod catch - 0; 10 yr average - 1
Largest salmon: 13lb; Largest sea trout: n/a

Wick rod catch statistics 1982-2021
Source: River Wick
Season: 11 Feb – 12 Oct

THURSO

Tim Hawes
Thurso River Manager

There was no meaningful rain between the end of May and the end of September – nearly half the year's catch was made in the last six days of the season. The fishing in March and April was limited by Covid restrictions, the end of April and May saw a reasonable number of fish caught, as rods were able to stay in the hotel. July saw an unwelcome run of pink salmon enter the lower beats. When the drought broke, good numbers of fish were seen running the river. Walking the redds in November showed an excellent stock of fish.



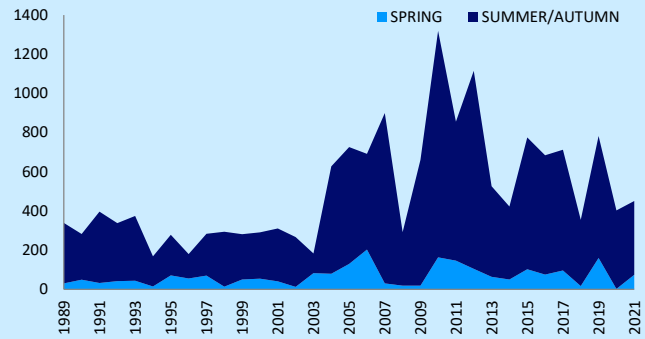
Salmon rod catch - 633; 10 yr average - 1,341
Sea trout rod catch - n/a; 10 yr average - n/a
Largest salmon: 22lb; Largest sea trout: n/a

Thurso rod catch statistics 1952-2021
Source: Thurso River Management
Season: 11 Jan – 5 Oct

HALLADALE

Reuben Sweeting
Halladale River Manager

A late but respectable spring run was helped by favourable conditions through May, before the water ran out and drought gripped the north. Due to the increased water temperatures experienced through the summer, fishing effort in the areas most affected was stopped to minimise stress to fish. Rain finally arrived towards the end of September, doubling the rod catch in a couple of weeks. The return rate of 96% represents the highest to date and we are fortunate that anglers have become so supportive of our conservation efforts.



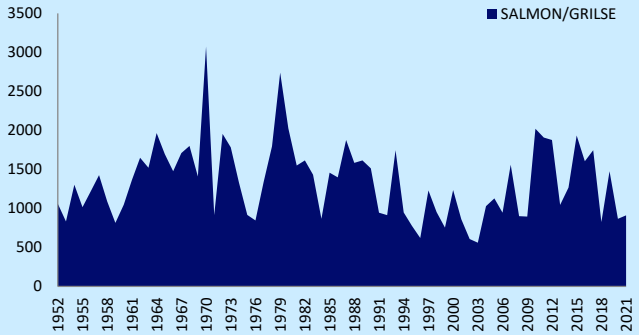
Salmon rod catch - 451; 10 yr average - 624
Sea trout rod catch - 26; 10 yr average - 14
Largest salmon: 20lb; Largest sea trout: 4.5lb

Halladale rod catch statistics 1989-2021
Source: Halladale Partnership
Season: 12 Jan-30 Sept

NAVER

Andy Coyne
Head bailiff, River Naver

We had a very slow start, but numbers picked up well in April/ May. Summer fishing was largely lost to severe drought, with almost the entire summer run stuck in the tidal reaches until late July. A couple of lucky thunderstorms at the end of July and early August moved the fish upriver and provided some very brief spells of good fishing. The stocks appear healthy enough and with better angling conditions the catch could have exceeded the 10-year average. Observations of spawning were hampered by continual high water after the fishing season ended.



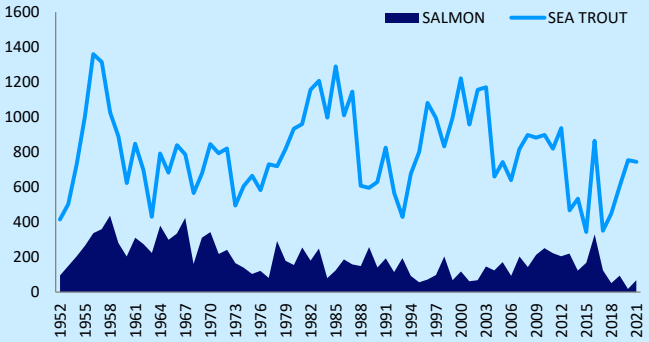
Salmon rod catch - 911; 10 yr average - 1,355
Sea trout rod catch - 129; 10 yr average - 233
Largest salmon: 29.5lb; Largest sea trout: 4lb

Naver rod catch statistics 1952-2021
Source: Naver Management
Season: 12 Jan – 30 Sep

HOPE

Lana Richardson
Wildland Ltd

There was an encouraging number of fish seen during the 2021 season, with steady numbers of fish running throughout the summer, whenever water levels were sufficient. Our main concern was low water throughout the summer, which forced fish to remain in and around the estuary for longer than ideal. We enforce a strict catch and release policy on Atlantic salmon and sea trout. Our rod day numbers are relatively low, allowing fish to migrate upstream undisturbed.



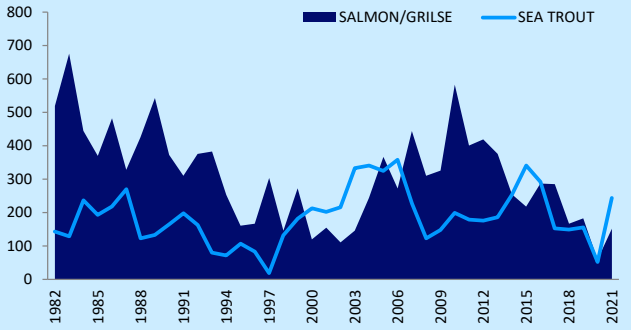
Salmon rod catch - 67; 5 yr average - 108
Sea trout rod catch - 744; 5 yr average - 637
Largest salmon: 10lb; Largest sea trout: 10lb

Hope rod catch statistics 1952-2021
Source: Wildland Ltd., Marine Scotland Science © Crown Copyright
Season: 11 Feb – 30 Sept

DIONARD

Kathryn Bontoft
George Goldsmith's

Larger salmon were caught in September and were more plentiful. The main runs of grilse continue to come in July and early August. The sea trout catches, particularly on Loch Dionard, were numerous, while the weights were of superb quality. Continued cooperation from anglers in releasing all catches has proved to be beneficial in the increased return of good quality sea trout on Loch Dionard.



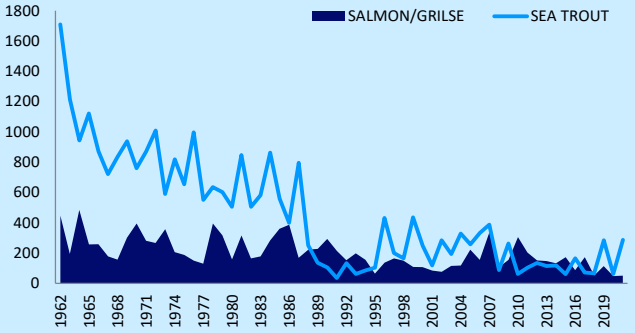
Salmon rod catch - 152; 10 yr average - n/a
Sea trout rod catch - 244; 10 yr average - n/a
Largest salmon: 15lb; Largest sea trout: 10lb

Dionard rod catch statistics 1982-2021
Source: River Dionard
Season: 1 Feb – 15 Oct

LAXFORD

Shona Marshall
Biologist, West Sutherland Fisheries Trust

The river is no longer fished commercially, and effort was therefore significantly reduced. Salmon catches were similar to 2020, when fishing was also reduced. Sea trout catches were similar to those seen in 2019. The estate has recently instigated a long-term restoration project in conjunction with the Atlantic Salmon Trust. Project Laxford aims to monitor and improve the riparian habitat for the benefit of the river, including the fish populations.



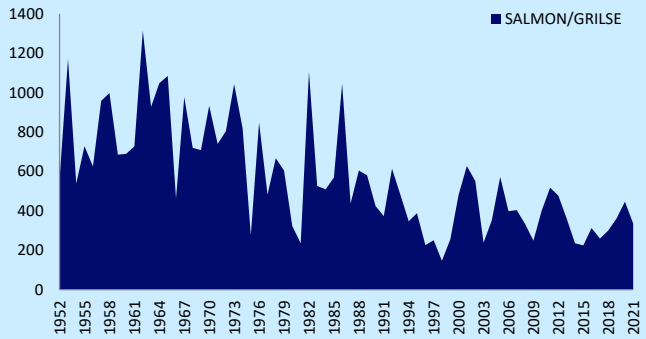
Salmon rod catch - 51; 10 yr average - 113
Sea trout rod catch - 288; 10 yr average - 137
Largest salmon: 16lb; Largest sea trout: 2lb

Laxford rod catch statistics 1962-2021
Source: West Sutherland Fisheries Trust
Season: 1 Mar – 30 Sep

GRIMERSTA

Jason Laing
Grimersta Estate Manager

Like many fisheries, Grimersta suffered serious drought conditions for much of the summer. While we were fortunate that fish were able to run the river even at its lowest, many fish chose not to and those that did ended up confined to lower pools and lochs. Rain finally came in September and the water levels stayed high until the end of the season. The final tally of 336 salmon is very respectable, given the conditions faced for much of the season, but sea trout numbers were very poor again.



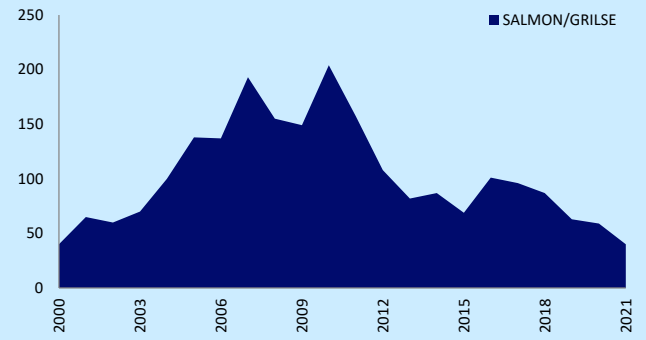
Salmon rod catch - 336; 10 yr average - 331
Sea trout rod catch - 88; 10 yr average - 188
Largest salmon: 16lb; Largest sea trout: 3.5lb

Grimersta rod catch statistics 1952-2021
Source: Western Isles DSFB
Season: 11 Feb – 15 Oct

SNIZORT

Danny Doherty
Ghillie, Snizort River

The toughest part of the 2021 season was the sheer lack of rain and we only had one spate between March and August. But in the last three weeks of the season catches started to pick up, as we finally got good rainfall. The unprecedented dry weather during the season made it difficult to accurately assess the number of returning fish compared to previous years, as fish could not get into the system for long parts of the season. During the close season, tree planting on the Lon Dubh spawning burn took place to help improve habitat.



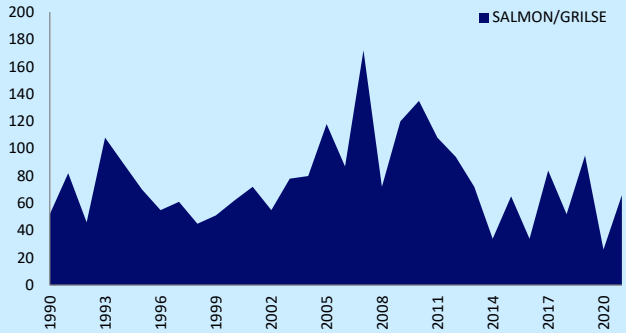
Salmon rod catch - 40; 5 yr average - 70
Sea trout rod catch - 42; 5 yr average - 41
Largest salmon: 13lb; Largest sea trout: 6.5lb

Snizort rod catch statistics 2000-2021
Source:Snizort River
Season: 11 Feb – 15 Oct

LITTLE GRUINARD

Iain Allison
Eilean Darach Estates

Fishing was fairly poor, with much of the season suffering from a shortage of water, while the fish ran the river very quickly once the rains finally arrived. Most of the fish were in good condition, with few sea lice, although one or two finnock had over 30 lice on them, which was a concern. Here's hoping this season will see better fishing conditions.



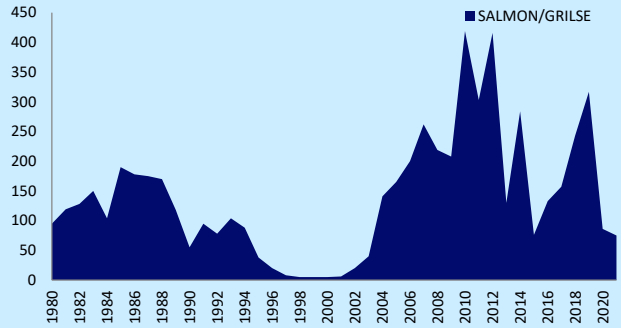
Salmon rod catch - 66; 10 yr average - 60
Sea trout rod catch - 2; 10 yr average - 4
Largest salmon: 20lb; Largest sea trout: 3lb

Little Gruinard rod catch statistics 1990-2021
Source: Little Gruinard Management
Season: 11 Feb – 30 Sep

CARRON (WEST COAST)

Bob Kindness
Carron River Manager

The season was a poor one, due to the lack of water throughout the summer, and there was almost no fishing effort until the last month of the season, when some coloured fish were caught. The usual problems are still present, with winter spates potentially washing out redds and a very large population of seals in the outer part of the sea loch. The stocking programme continues and, as demonstrated by recent DNA analysis, makes a substantial contribution to the fishery without having a negative effect on the genetic integrity of the native wild salmon.



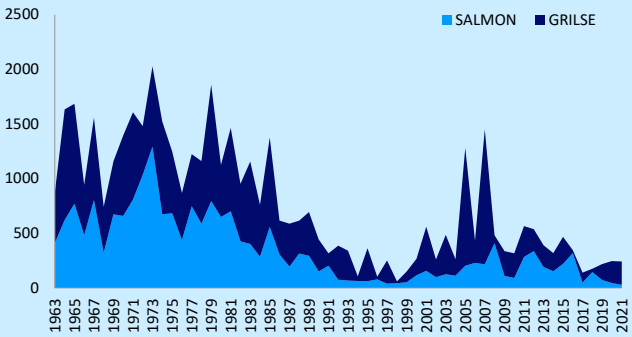
Salmon rod catch - 75; 10 yr average - 192
Sea trout rod catch - 13; 10 yr average - 71
Largest salmon: 15lb; Largest sea trout: 2lb

Carron (West Coast) rod catch statistics 1980-2021
Source: River Carron Management
Season: 15 Feb – 31 Oct

LOCHY

Jon Gibb
Lochy River Manager

The vast majority of the fish were caught in the last two weeks of the season when the rain eventually came. Despite the dry conditions, runs of both MSW salmon and 1SW grilse were reasonably encouraging compared with recent years. Multiple restoration projects continue in the catchment, including the new smolt-to-adult supplementation programme (SOS), which has led to excellent densities of wild-born fry in the tributary where it is being trialled. In spite of the Lochy's Grade 2 status, local and visiting anglers returned all fish.



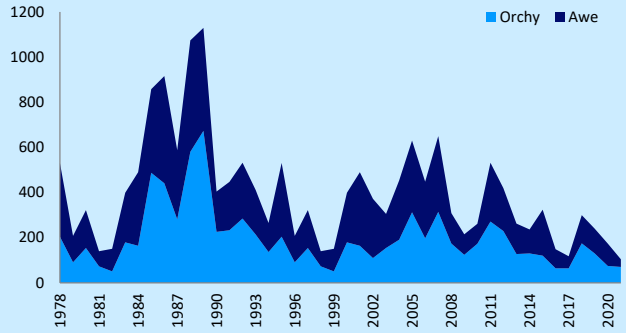
Salmon rod catch - 241; 10 yr average - 308
Sea trout rod catch - 61; 10 yr average - 164
Largest salmon: 26lb; Largest sea trout: 5lb

Lochy rod catch statistics 1963-2021
Source: Lochy Association
Season: 1 April – 15 Oct

AWE & ORCHY

Roger Brook
Chairman, Argyll DSFB

Neither the Awe nor the Orchy did well and a relatively dry early season will have been a factor. By late season, when the rains came, the majority of fish had run through the Awe and only the Orchy benefitted – although Orchy catches were only 60% of their 10-year average. The indications are that there was a poor run of salmon, but the fish counter at the Awe Barrage proved to be inaccurate again, so could not be used to test this theory.



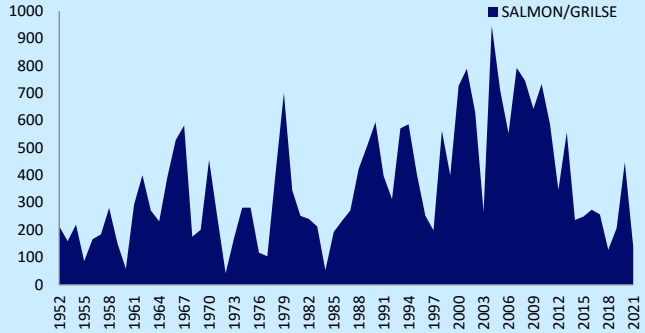
Salmon rod catch - 104 ; 10 yr average - 233
Sea trout rod catch - 7; 10 yr average - n/a
Largest salmon: n/a; Largest sea trout: n/a

Awe & Orchy rod catch statistics 1978-2021
Source: Argyll DSFB
Season: 11 Feb – 31 Oct

AYR

Stuart Brabbs
Ayrshire Rivers Trust

As ever, catch reporting was erratic and incomplete. What is certain is that the season was plagued by severe drought, but with effective fish passes in the Nethermills Dams, salmon and sea trout could – and did – enter the river, even in low flows. An incredible run of salmon was observed as the first spate subsided in September. Many of these fish were coloured, confirming that they had been lying in the lower river for some time. The river was polluted by cementitious products in May. Some fish were killed, but the contractors responsible later agreed to ease two barriers. Work continues on the upper river to improve habitat.



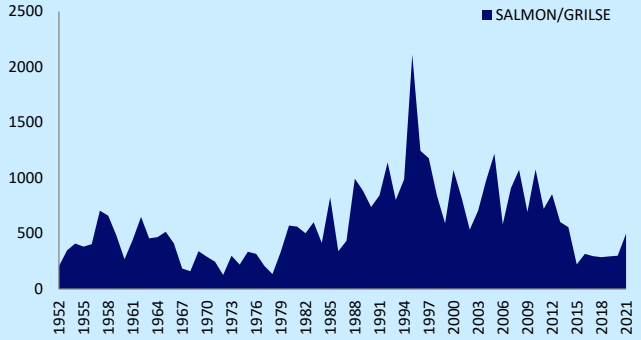
Salmon rod catch - 140; 10 yr average - 280
Sea trout rod catch - 4; 10 yr average - 22
Largest salmon: n/a Largest sea trout: n/a

Ayr rod catch statistics 1952-2021
Source: Ayrshire Rivers Trust
Season: 15 Feb – 31 Oct

DOON

David Cosh
Doon DSFB

Despite drought conditions, it was our best season since the crash in 2015, perhaps because of the compensation flow from Loch Doon. It is the first year since 2015 that fish have held up in the lower beats, most of which had a much better season as a result. There was a slightly higher ratio of salmon to grilse than usual, but still no run in the autumn, which was historically the best time on the Doon, although a few salmon were seen going over the Mount Charles Weir in December.



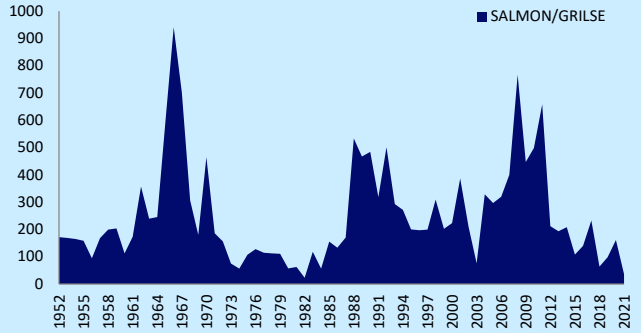
Salmon rod catch - 498; 10 yr average - 413
Sea trout rod catch - 20; 10 yr average - n/a
Largest salmon: 20lb; Largest sea trout: 3lb

Doon rod catch statistics 1952-2021
Source: Doon DSFB
Season: 11 Feb – 31 Oct

GIRVAN*

Stuart Brabbs
Ayrshire Rivers Trust

An error led to catch return requests only being issued a few weeks ago and consequently most beats were still to submit their data at the time of writing. Regardless, we aren't expecting catch returns to be good. 2021 will go down as one of the driest years on record in Ayrshire and with that one of the poorest angling seasons for many, many years. Only when the rain came in September was there any real opportunity for sport and reports from lower beats indicated that few salmon appeared to run the river.
*Provisional data



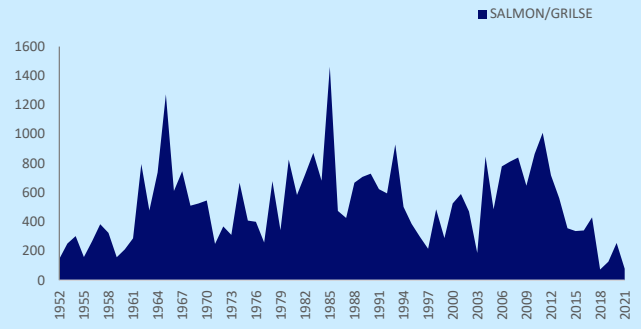
Salmon rod catch - 36; 10 yr average - n/a
Sea trout rod catch - 2; 10 yr average - n/a
Largest salmon: n/a; Largest sea trout: n/a

Girvan rod catch statistics 1952-2021
Source: Ayrshire Rivers Trust
Season: 15 Feb – 31 Oct

STINCHAR*

Stuart Brabbs
Ayrshire Rivers Trust

Although the catch returns are incomplete at the time of writing, it was certainly a poor season, due to the prolonged drought. Most beats stopped fishing in April and many anglers didn't pick their rods up even when the rain came in late August and September. With warm water and low flows prevailing all summer, concerns over the survival of the few early-run fish are justified. There's no doubt the number of salmon returning from the sea has reduced, but the biologists continue to find good juvenile numbers most years.
*Provisional data



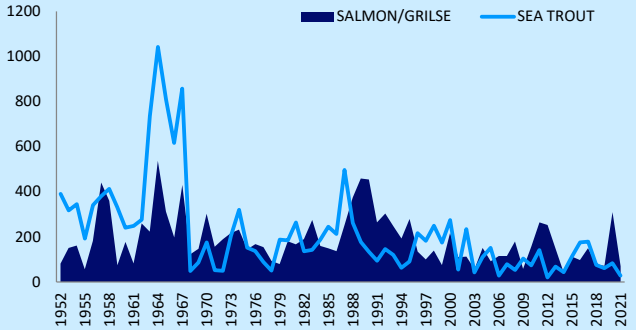
Salmon rod catch - 79; 10 yr average - n/a
Sea trout rod catch - 12; 10 yr average - n/a
Largest salmon: n/a; Largest sea trout: n/a

Stinchar rod catch statistics 1952-2021
Source: Ayrshire Rivers Trust
Season: 15 Feb – 31 Oct

LUCE

Jamie Ribbens
Galloway Fisheries Trust

The first fish was caught in August and nearly all of the season's catch was recorded in October, when the river finally rose. Over the last two years Galloway Fisheries Trust has been completing a significant habitat enhancement project in the headwaters. Funded by NatureScot it involves fencing, native tree planting and the addition of woody debris to the channels, to improve fish habitats and help the river become more resilient to climate change. In the lower catchment, the Trust has been working with Dunragit AC to reduce diffuse pollution and improve sea trout habitats on the Piltanton Burn.



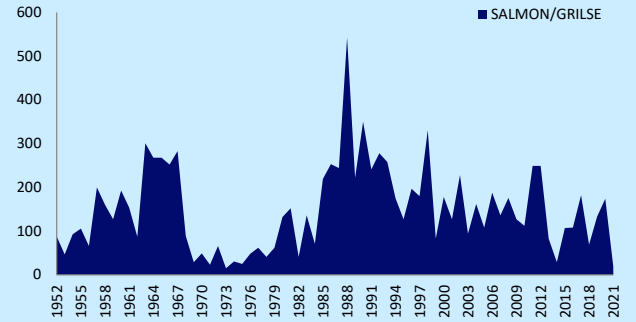
Salmon rod catch - 69; 10 yr average - n/a
Sea trout rod catch - 28; 10 yr average - n/a
Largest salmon: 18lb; Largest sea trout: 5lb

Luce rod catch statistics 1952-2021
Source: Galloway Fisheries Trust
Season: 11 Feb – 31 Oct

BLADNOCH

Colin Richardson
Chairman, Bladnoch DSFB

The 2021 season had the worst catches on record, due to a severe drought. Even when the water came, in October, there was still a lack of fish. High water temperatures in the lower river and ongoing acidification in the headwaters are both concerning. The DSFB and Galloway Fisheries Trust have fenced off 2km of burns from livestock and native trees have been planted to cool waters. Conifer forest restructuring and a large peatland restoration project will allow wild salmon to repopulate some areas where they had been lost.



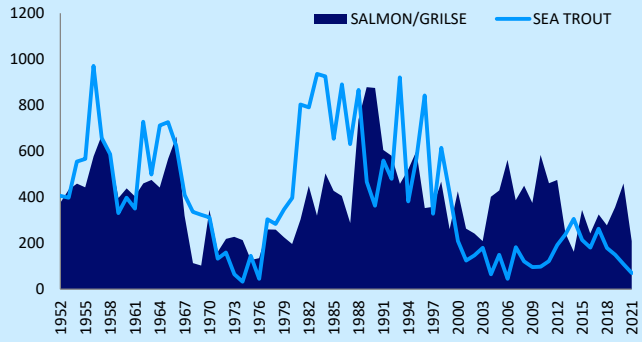
Salmon rod catch - 19; 10 yr average - 133
Sea trout rod catch - 0; 10 yr average - n/a
Largest salmon: n/a; Largest sea trout: n/a

Bladnoch rod catch statistics 1952-2021
Source: Galloway Fisheries Trust
Season: 11 Feb – 31 Oct

CREE

Jamie Hyslop
Chairman, Cree DSFB

No rain fell from May until August, limiting angling effort. However, significant numbers of salmon were visible in the tidal reaches, and when the rain arrived catches of more than 50 salmon in a week were recorded. Sea trout numbers were low. Environmental improvements by the River Cree Hatchery and Habitat Trust continue. The hatchery is planting out fry in areas identified as having very low/nil wild fish populations. Poor water quality, due to intensive commercial forestry plantations, continues to pose the single biggest challenge for the reproduction of wild migratory fish in the catchment.



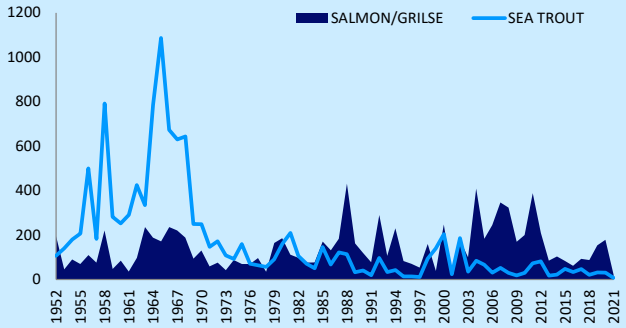
Salmon rod catch - 209; 10 yr average - n/a
Sea trout rod catch - 70; 10 yr average - n/a
Largest salmon: 16lb; Largest sea trout: 3lb

Cree rod catch statistics 1952-2021
Source: Cree DSFB
Season: 1 Mar – 14 Oct

URR

Will Marshall – Secretary, Dalbeattie Angling Association
Kenny Irving – Chairman, Castle Douglas Angling Association

No water during summer months meant this was the worst year on record, possibly not helped by dolphin numbers in the firth. There was a run of fish in late August and September, but only the odd salmon was caught in October and none in November. Sea trout were even more scarce. Angler visits on Dalbeattie water dropped from 762 to 198 and visits per fish rose from 8 to 22. Gravel movement is still a concern, not helped by landowners not being allowed to remove it. A Crown Estate grant was obtained to remove invasive hogweed.



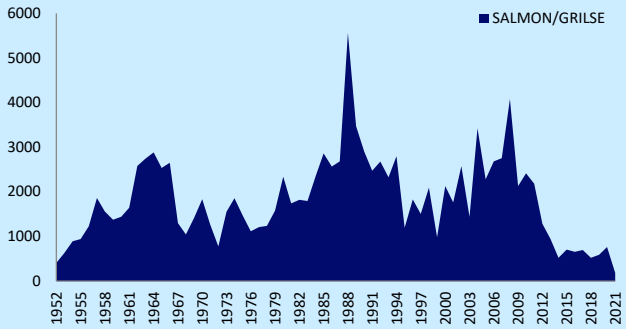
Salmon rod catch - 23; 10 yr average - 67
Sea trout rod catch - 8; 10 yr average - 28
Largest salmon: 13lb; Largest sea trout: 2lb

Urr rod catch statistics 1952-2021
Source: Dalbeatiie & Castle Douglas AA
Season: 25 Feb – 30 Nov

NITH

Jim Henderson
Fishery Director, Nith DSFB

Fishing was impacted by the drought conditions prevailing over much of the season, but many fish were visible in the estuary and lower river. When the weather broke, fishing was productive, but the fish ascended the river with a sense of urgency. We participated in the West Coast Smolt Tracking Project, tagging 180 salmon smolts in the spring of 2021. Fifty of these were part of the Nith smolt tracking project, which focuses on their time in the river. Results are due shortly.



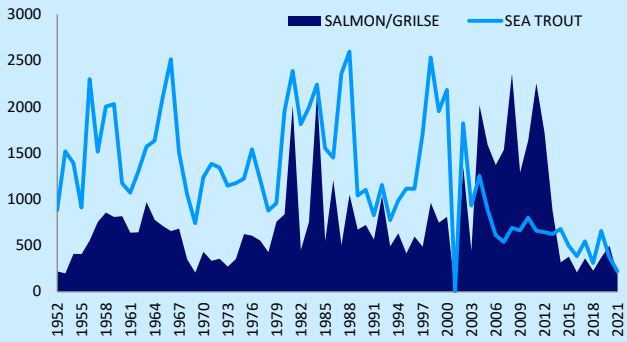
Salmon rod catch - 181; 10 yr average - 905
Sea trout rod catch - 418; 10 yr average - 934
Largest salmon: 18lb; Largest sea trout: 7lb

Nith rod catch statistics 1952-2021
Source: Nith DSFB
Season: 25 Feb – 30 Nov

ANNAN

Mary Colville
Clerk, Annan DSFB

Covid restrictions, a cold dry spring, a prolonged dry summer and an autumn dominated by floods meant that very few anglers ventured out – a combination that led to the lowest catch on record. However, when the river was fishable keen anglers were rewarded with some exceptional fish and specimen brown trout. When the rains finally came the river was too big for anglers, but fish quickly made their way to their spawning grounds. Concerns include the high water temperatures in the summer and the river's biggest flood ever in October. The river's first pink salmon was also recorded.

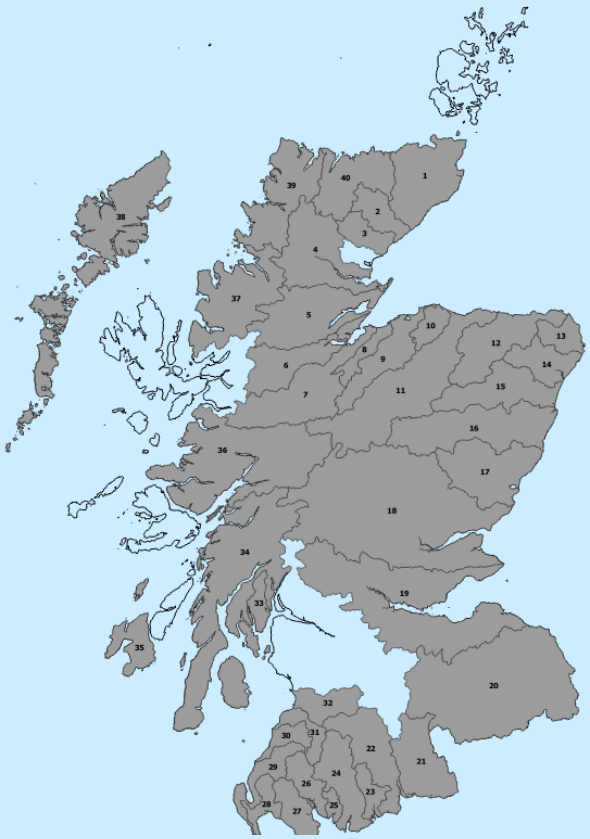


Salmon rod catch - 183; 10 yr average - 513
Sea trout rod catch - 220; 10 yr average - 487
Largest salmon: 25lb; Largest sea trout: 6lb

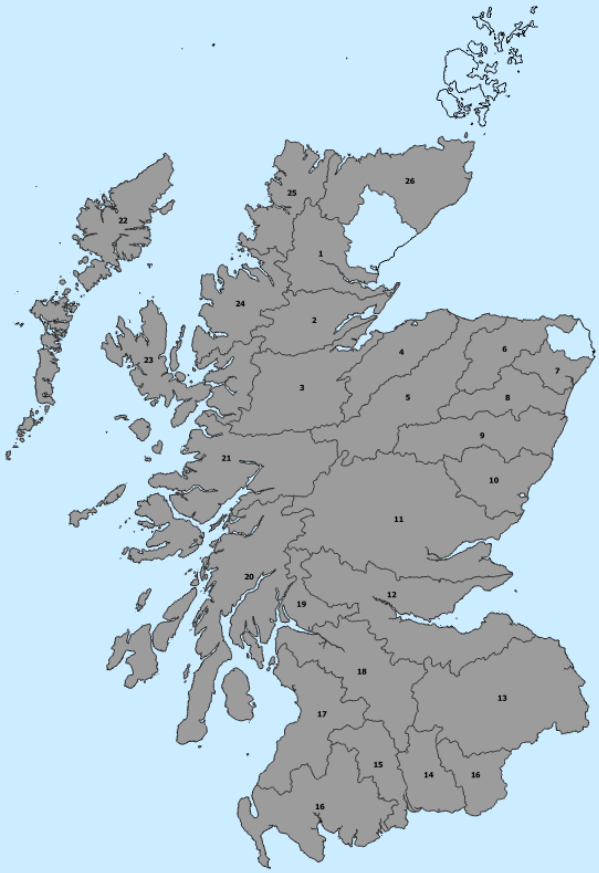
Annan rod catch statistics 1952-2021
Source: Annan DSFB
Season: 25 Feb – 15 Nov

District Salmon Fishery Boards

1. Caithness
2. Helmsdale
3. Brora
4. Kyle of Sutherland
5. Cromarty
6. Beauly
7. Ness
8. Nairn
9. Findhorn
10. Lossie
11. Spey
12. Deveron
13. Ugie
14. Ythan
15. Don
16. Dee (Aberdeenshire)
17. Esk
18. Tay
19. Forth
20. Tweed
21. Annan
22. Nith
23. Urr
24. Dee (Kirkcudbright)
25. Fleet (Kirkcudbright)
26. Cree
27. Bladnoch
28. Luce
29. Stinchar
30. Girvan
31. Doon
32. Ayr
33. Eachaig
34. Argyll
35. Laggan & Sorn
36. Lochaber
37. Wester Ross
38. Western Isles
39. North & West
40. Northern



Projection: British National Grid.



Projection: British National Grid. GIS Ref: gji1197

Rivers & Fisheries Trusts

1. Kyle of Sutherland Fisheries Trust
2. Cromarty Firth Fisheries Trust
3. Ness & Beauly Fisheries Trust
4. Findhorn, Nairn & Lossie Fisheries Trust
5. Spey Foundation
6. Deveron, Bogie & Isla Rivers Charitable Trust
7. River Ythan Trust
8. River Don Trust
9. River Dee Trust
10. The Esk Rivers Fisheries Trust
11. Tay Rivers Trust
12. Forth Rivers Trust
13. Tweed Foundation
14. River Annan Trust
15. Nith Catchment Fisheries Trust
16. Galloway Fisheries Trust
17. Ayrshire Rivers Trust
18. Clyde River Foundation
19. Loch Lomond Fisheries Trust
20. Argyll Fisheries Trust
21. Lochaber Fisheries Trust
22. Outer Hebrides Fisheries Trust
23. Skye & Lochalsh Fisheries Trust
24. Wester Ross Fisheries Trust
25. West Sutherland Fisheries Trust
26. Flow Countries Rivers Trust

Fisheries Management Scotland Directors

Richard Sankey – Kyle of Sutherland (Chairman)
Alison Baker – Forth
Roger Brook – Argyll
Chris Conroy – Ness (Until Oct 21)
Lorraine Hawkins – Dee
Alasdair Laing – Findhorn
Peter Landale – Nith
Alexa MacAuslan – Northern (From Nov 21)
Jock Miller – Beauly (from Apr 22)
Mary Nicholson – Galloway (Until Nov 21)
Jamie Ribbens – Galloway (From Nov 22)
Alexander Scott – Spey
David Summers – Tay
Bill Whyte – Wester Ross (Until Nov 21)
Hugh Younger – Tweed

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