West Sutherland Fisheries Trust

Falls of Kirkaig (A. Beynon-Jones)

2017 Annual Review

Contents

THE WEST SUTHERLAND FISHERIES TRUST

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Chairman's Foreword

As the new Chairman I feel strongly that my first duty must be to thank Charles Marsham, our outgoing Chairman, for his long and committed service in the role. Sadly all good things come to an end and so we say farewell both as Chairman but also as Rispond has passed out of Marsham ownership too. Luckily Charles has agreed to stay on as a Trustee to give us the depth of his experience. His stewardship over many years leading up to the current Fisheries Review has ensured that Trust remained constant to its objectives whilst remaining a force to be reckoned with in the wider world. He led us into the Wild fisheries reform and ensured that he handed over the Trust in a strong position.

2016 marks the Trusts 20th Anniversary, and 20 years of work within the area. Over this time we have built up good relationships with businesses and individuals within the area and datasets on the fish populations and their threats, as well as carrying out habitat improvements in many river catchments.

The developments in the Wild Fisheries Reform process still leave the whole position very confused. Luckily, as a precaution, we have approached several businesses in the area both Estates and fish farms to see if we could elicit funds to help us through this period of uncertainty. It is with great gratitude that we have received significant sums, pledged over the next 3 years to help ensure our future. We are not completely secure but are a great deal stronger for these kind donations, especially as all concerned have emphasised that they do not require any services or that the Trust should change in return.

Despite the uncertainties caused by the Wild Fisheries Reform, we continue to be active throughout the area. During 2016 we have been involved in a number of very diverse projects. These ranged from non-native monitoring and eradication work into electrofishing surveys and sweep netting to the study of juvenile freshwater pearl mussel populations and the improvement of habitat in some small burns. We are also involved in a number of education projects with local schools and groups, teaching about the rivers and their inhabitants. All of the work undertaken by the Trust is aimed at conserving and increasing the fish stocks within the area. This is also undertaken in diverse ways, through habitat restoration and protection to identifying potential bottlenecks and problems.

As well as the field work, the Trust sits on a number of groups, ensuring that freshwater and the fish populations are given due attention. These include the Local Biodiversity Action Group, Coigach and Assynt Living Landscape, 2 Area Management Agreements, the District Salmon Fishery Board and a marine Scotland Liaison Group. We also provide advice to SEPA and Marine Scotland Science on the rivers within the area, as well as the Highland Council Roads Department.

Of course, none of this would be possible without the support of a large number of groups and individuals, both financial and physical, and we are very grateful to them all. The Trust has a core volunteer force of 32 intrepid individuals, with others helping on different occasions and on different projects. Without these individuals we wouldn't be able to do much of the work and for that we are extremely grateful. They turn out in all weathers and with a smile on their face so thank you to them.

There are 12 Trustees responsible for the safe running of the Trust. They are all busy men who give their time freely and without whom the Trust would not exist. We would also like to take this opportunity to thank them all for their hard work over the past years.

I would also like to recognise the contribution of Adam and Shona, who, through their hard work and enthusiasm have made sure that the Trust continues to be a successful and valuable organisation. While our future remains uncertain, I remain confident that we have a strong team in place and will continue to look after the fish of west Sutherland for many years to come.

Nick Joy

Summary

The West Sutherland Fisheries Trust had a busy year in 2016, with a range of projects coming together, some being completed and others started. These have all been reported separately in the following pages but this section aims to draw together these projects and set them in the context of the Trusts aims and objectives.

Salmonid population dynamics and management

Required to ensure that the fish populations remain healthy and to improve the management of the stocks, this is undertaken primarily through the analysis of catch statistics and completion of juvenile surveys. Sea trout are further covered through the sweep netting surveys.

From the juvenile surveys (p. 9) it would appear that the salmon and trout populations within most of the rivers are healthy. Catch returns (p. 7) do not support this, with low catches recorded. However, this is likely to have been a function of the weather experienced during the fishing season. Sea trout catches were more variable, although there was a decrease in catch across the area, when compared to 2014. Anecdotal evidence for 2016 would suggest that the catches are variable throughout the area, but that some larger sea trout have been recorded, particularly to the north.

The estuary netting showed that growth rates were good, and slightly higher than last year (p. 17). This year did not see the bumper catches recorded previously, although there were still good numbers taken. There were much fewer recaptures, possibly as a result of no tagging in the trap and a reduced number of nettings in the Polla. Sea lice infestations were variable over the year, and differed between the estuaries. They were relatively low compared to previous years however.

Fish traps are used to assess migratory behaviour and look at the smolt run. A trap was placed in Badna Bay in April, with a temperature recorder incorporated. Fish movement was variable over the period, although fish were present on most days. Both salmon and trout were found throughout the survey period, with a mix of species taken on most days.

Education (p. 22)

Education is an important tool in the conservation and restoration of fish populations. By teaching individuals about the fish and their environment we can raise their awareness of the consequences of their actions and also enlighten individuals as to the diversity of the riverine environment. The Trust provides a range of meetings and activities for local schools, community groups and ghillies. Each activity is geared towards the audience but centres, in most cases, on the diversity and abundance of life within the rivers and sea.

Fish farm interactions

Aquaculture is an important part of the rural economy but is viewed by many as a serious threat to the migratory salmonid populations. As such, the Trust looks at potential interactions, as well as working with the fish farms to address many issues raised. The latter is undertaken through our involvement in the two Area Management Agreements operational within the area.

Habitat

The Trust continues to give advice and assistance on the issues of habitat and stock restoration to managers. This involves determining suitable habitat improvements within the catchments and giving advice on proposed engineering structures or other actions. All of this assistance is aimed at providing a sustainable increase in salmon and trout populations. In all cases however it is up to the proprietors to instigate the work although the Trust will continue to give advice and help where this is requested.

On the issue of biosecurity and non-native species the Trust is more proactive, continuing to promote the importance of biosecurity to the health of the water bodies and of vigilance to stop the spread of non-native species. In the case of non-native species, the Trust is actively involved in the removal of Himalayan Balsam and Japanese Knotweed within the area and the monitoring of mink rafts (p. 11).

Introduction

The **West Sutherland Fisheries Trust** continues to work towards the conservation and restoration of fish populations. Now entering its twenty first year, the information database for the Trust area continues to grow and provide useful data for owners, managers and policy makers. In addition, the Trust retains strong links with a variety of organisations and individuals throughout Scotland, and looks forward to cementing these links in the coming years. These links enable the Trust to move towards the integration of management within the Trust area.

Within the Trust area we are developing projects and practical management tools with a variety of local organisations, including Angling Clubs, the Highland Council Ranger Service, the schools system, estates and community groups. These collaborative projects not only assist the Trust with its work but also further integrate it into the local communities, while taking us into a range of different habitats. It is to be hoped that the Trust will continue to be seen as a valuable resource within the community – both to managers and the general public – providing helpful advice and educational opportunities that can be called upon at any point.

Locally, 2016 could probably be described as a 'normal' year, weather wise. A lovely April/May was followed by a wet July, ending in a dry September/October. This gave enough water in the rivers to keep anglers happy in the main, particularly for the grilse run – although no big flushes to stir things up. For the Biologists, we would have liked a drier July in order to get the sampling cracked. However, we managed to get most of the electrofishing finished by picking away at it on reasonable days although we had a few nettings cancelled.

It was a mixed year for the sweep netting (see page 17). While only 1 netting on the Laxford has to be cancelled for weather, we only managed 3 over the year on the Polla and 4 on the Kyle of Durness. With regards to the Kyle, much of this came down to timing, while the Polla was affected not only by weather but also by the availability of Andrew. It was with some sadness that we have had to say goodbye to Andrew following the sale of the River Polla. He has been a massive supporter of the Trust and this project. We wish him all the best with his new career and look forward to working with the new owner to keep this project going. The trout were in good condition, although primarily post-smolts this year. Anglers had a mixed year, with variable catches of both salmon and trout reported throughout the area.

The mink initiative continues to operate under the management of the Trust and we are extremely grateful to all our volunteers for making this possible. There have been a number of potential sightings around the area, up to and including Scourie. Despite trapping efforts, however, there were no animals caught. The volunteers always rally and increase efforts following sightings and it is to their credit that we remain a relatively mink free area (see page 11). Thanks should also go to the many people who remain vigilant and report potential sightings to the Biologists.

2016 saw a change in the Trust management, with Charles Marsham stepping down as Chair in March. He was replaced by Nick Joy, who has embraced his new role with vigour. While sharing the same aims for the Trust as Charles, he brings with him a new approach. We would like to thank Charles for all of his time and efforts as Chairman, and for the support provided to the Biologists. He will remain as a Trustee.

The Trust would like to take this opportunity to thank the many individuals who have given time and effort to assist with the work programme. Without these committed individuals we would not have the range of information and data currently existing and would therefore not be in the present position of offering advice and guidance to the many owners and managers within the area. In addition, much of the restoration work and biosecurity actions currently in progress would be much further behind.

Partnerships

The Trust continues to maintain a close relationship with partner organisations in the Rivers & Fisheries Trusts of Scotland (RAFTS) and the Scottish Fisheries Co-ordination Centre (SFCC), and national organisations such as Marine Scotland Science (MSS), Scottish Environmental Protection Agency (SEPA) and Scottish Natural Heritage (SNH). This allows the Trust to access a vast wealth of expertise and information as well as enabling the targeting of research to better further our aims.

The Trust also works closely with the local District Salmon Fishery Board in order to assist with the management of the area. By providing advice on local issues, as well as assisting with any statutory consultations that arise, we hope to ensure that the fish and their environment are supported and protected. In particular, we are able to provide advice and guidance on stocking, fish farm applications and the Conservation Limits, as well as the use of habitat improvements within the area.

The Future

The WSFT will continue with its current work, maintaining and developing the many datasets and using the data to inform management decisions. It is hoped that we can enlarge the research programme and enhance the many links currently in existence with individuals and organisations. In order to do this, it is reliant on the generosity, both in terms of time and financial aid, of its many supporters, enabling the Trust to move forward with the development of management policies within the area.

Biosecurity remains an important issue for the Trust, in an area that remains relatively free of invasive non-native species (INNS). We hope to keep it like this, operating to decrease the numbers and potentially make the area free of Himalayan Balsam and Japanese Knotweed (see p. 11). This involves working with a variety of different organisations and individuals as well as an educational role for anglers, walkers and other users. In addition, the importance of volunteers to report sightings and locations cannot be over-emphasised. While we have hopes of eradicating some INNS, and potentially find funding to assist, the presence of rhododendron is a larger problem. It will require a more intense effort from everyone but the results will be worth it as the native vegetation returns and the rivers improve.

The Trust will continue to assist community groups and land managers with practical fisheries management and advice. It is hoped that restoration programmes, as laid out in the Catchment Management Plans, will be developed and progressed. The Trust is always available for discussion and should be contacted if you have any queries or suggestions.

The Trust would also like to further develop the educational aspects of our remit through talks, demonstrations and small “hands on” projects. As in previous years this is likely to involve the Ranger Service and schools, although it is hoped that other groups and individuals will also access this service. Shona is a Science and Engineering Ambassador and therefore can also be accessed through the STEMpoint network. This has the potential to extend our educational remit, and information about the Trust, beyond the local area.

The WSFT will continue to investigate the marine environment through the use of the netting of post smolts within estuaries (see p. 17). This will provide information on the smolt runs, usage of estuaries by sea trout, growth rates, marine mortalities and feeding potential. It is also hoped to develop this work further, looking at the relationships between trout and the environment. Discussions for this work are underway with a variety of organisations and it is hoped that funding can be found to progress the work.

Following the completion of the Wild Fisheries Review in 2014 there have been a number of proposed changes to fisheries management, some enacted, which will have a bearing on fishing within the area and the future role of the Trust. There is a more detailed summary on Page 23, but this remains a case of ‘watch this space’! The Trust would like to maintain its independent role within the new structures, although maintaining a close working relationship, feeling that this would give the best benefit to the fish and the area. However until more detail is provided we will continue to remain open minded about the future.

The emphasis will continue to be the wellbeing of native wild fish in the West Sutherland area and the Trust will represent them where required and defend their interests where it is felt that these are being ignored. The WSFT and its representatives feel that all populations are important, irrespective of size, and that their protection and enhancement are vital to the survival of these magnificent species.

Catches within the West Sutherland area

While catch statistics are generally used to determine the trends in salmonid populations, it must be recognised that there are a number of potential inaccuracies and inconsistencies inherent within this method. These include the following:

- The numbers of fish noted within the tables relate only to those fish recorded within the books. If anglers fail to report all or part of their catch then the figures will be an under-estimate of the total.
- Angling effort varies between years and is not recorded. A change in effort, either number of anglers, experience or time spent fishing, will be reflected in changes in the catch statistics.
- Weather and river conditions affect the number of fish within the systems and their catchability. Thus a low catch in a dry year may not reflect a poor adult run, simply the timing of the run and the ability of the angler to catch fish.

This leads to the view that the relationship between catches and stocks is complex. Catch records do not reflect the number or quality of fish in the system, but rather the angler ability to catch them under the conditions experienced at that time. Catch figures are therefore most valuable when it comes to expressing long-term trends.

2015

The official catch statistics for salmon and sea trout in Scotland have been published (http://www.gov.scot/Topics/marine/Publications/stats/SalmonSeaTroutCatches/2015) and are summarised below for the West Sutherland area (Table 1). These statistics are frequently used to indicate long term trends in populations, by region. By extracting the data relevant to the WSFT area, we can gain a greater understanding of the situation, as represented within this area. The areas used by the Scottish Government, and therefore within this report, are an amalgamation of several rivers, by the old District Salmon Fisheries Boards (Fig. 1). This is due to the confidential nature of the information and the requirement of the Scottish Executive to mask the catches from individual systems.

Table 1 The number of wild fish caught by rod and line, by Fishery Board

Fishery Board		Salmon & Grilse	Sea Trout
Hope & Grudie	2015	371	766
	(2014)	(375)	(888)
	5 yr. ave.	*503.0*	*884.4*
Inchard – Kirkaig	2015	491	323
	(2014)	(415)	(451)
	5 yr. ave.	*546.4*	*429.0*

Fig. 1 Map showing the location of the WSFT area and the 2 areas described in the table (pale grey = Hope & Grudie; darker grey = Inchard – Kirkaig)

Total salmon catches within the area showed a slight increase on the 2014 catches, with the Inchard – Kirkaig area having a reasonable increase, compared to a slight decline to the north. These figures remain in the bottom third of historic catches, but are above those seen in the poor years of the last 3 decades.

The proportion of salmon released within the area during 2015 declined from previous levels to 79 %. This is disappointing to see, given the increasing trend of previous years.

The differences in the proportion of fish caught and released, 75% in Inchard – Kirkaig and 84% in Hope & Grudie has increased. decrease in the proportion of fish released in the Inchard - Kirkaig area during 2015 is particularly disappointing, exceptionally so given the sharp nature of the decline (75% release compared to 83%). There was also a decline in the proportion released in the Hope & Grudie area, although of a smaller overall percentage. This follows a similar decline in release rates in this area during 2014. While it is known that released fish can be re-captured on several occasions, thus

influencing the suitability of catch returns to estimate adult runs, it is important at this time of low marine survival to release an increasing number of fish in order to increase the spawning stock. Remember, the fish in the freezer or on the table cannot breed!

Sea trout catches within the area have shown a decrease in both areas on the 2014 figures. This was similar for both areas. Catch and release remains high within the area, with the greatest proportion of released fish once again being seen in the Inchard – Kirkaig area. However the difference is slight and the overall total of 94% of fish released is encouraging. It is to be hoped that this will continue to increase until numbers have recovered.

An analysis of the trend in fish catches for the WSFT area since 1952 (Fig. 2) indicates that 2015 was a poor year for both salmon and sea trout, being within the bottom 30% since 1952. However the catches remain similar to those seen in the 1970's.

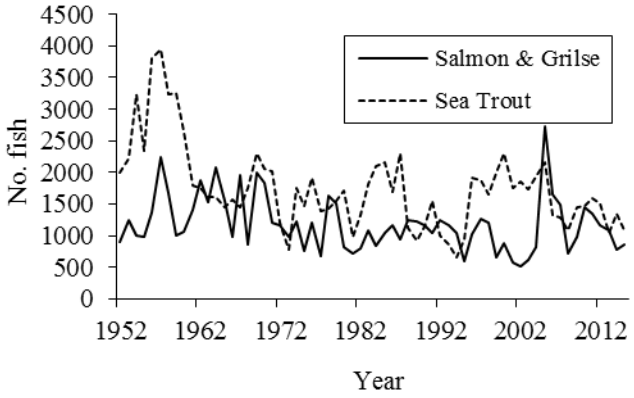


Fig. 2 Rod and line catches within the West Sutherland area, 1952 – 2015

2016

Catch data for the 2016 season are being compiled and will be produced by Marine Scotland Science in 2017. However, some information is available from angler logs and fishing books. Reports indicate a mixed season throughout the area, with a north – west split in many cases. Good catches of both species were being reported from the northern rivers while some of the western ones reported a good spring followed by a poor summer season. This was the pattern for both species. However, larger sea trout than normal have been reported from several systems. This coincides with the estuary netting (p. 17), where a good numbers of bait fish were found in the Polla. The new SG Conservation Limits were implemented for the 2016 season, with large parts of the area being subject to mandatory catch and release or an increase in the proportion released.

Catch and release continues to be an important fisheries management technique within the area and has been adopted by a number of estates. It is to be hoped that this continues to be used, and hopefully increased, by the various estates and their angling clients, adding as it does to efforts throughout the area to improve the situation for fish populations through biosecurity, removal of non-native species and habitat improvements amongst others.

The new conservation limits for the area have been produced, with many more rivers being moved out of mandatory catch and release and in to a category of increased return. It is to be hoped that all anglers will support the measures and will return all fish if possible. While sea trout are not affected by this legislation, the low levels of catches would suggest that catch and release is of equal importance to this species.

All information on the fish populations within lochs and rivers is important when undertaking fisheries management. Any further information that can be provided will be gratefully received, particularly on the brown trout lochs within the area.

A survey of juvenile abundance

Electrofishing surveys are designed to assess the juvenile populations within a system. The equipment operates by creating an electrical field within the water that at first attracts and subsequently stuns them for a brief period, at which point the fish can be netted out and examined under anaesthetic. The Trust has a rolling programme of surveys, with most sites visited every 2 years, while a small number may be sampled annually. When possible all sites are revisited, although some may not be accessed due to time and flow constraints, while others may be added. In 2016 most sites were repeat surveys.

The average densities of fish within each catchment are summarised (Table 2). This allows comparison between the catchments, although it should be noted that temporal changes in density throughout the summer months, and habitat differences between catchments are not considered in this table. The timing of sampling is important, with fish moving within the tributaries as a result of water height and temperature, food availability and size. Thus sampling after a spate may give a low density as a result of washout, whilst drought may decrease density as fish move into deeper water to avoid predation or desiccation, or may increase density as a result of concentration in severe cases. Similarly, densities will be greater shortly after hatching, reducing with time as the fish grow and require a larger territory for survival.

Table 2 Average densities of salmonids per catchment surveyed

	Average density ($100m^2$)			
Catchment	**Salmon fry**	**Salmon parr**	**Trout fry**	**Trout parr**
Garvie	4.61	5.43	7.89	6.36
Polly	16.26	11.53	7.32	2.83
Gleann Leireag	0	0	10.82	10.78
Nam Brac	0	0	70.53	8.90
Claise na Fearna	3.30	11.48	8.10	6.11
Bad na Baighe	5.19	9.42	2.51	9.54
Loch Na Thull	62.40	36.63	17.07	7.84
Achriesgill	2.24	1.79	5.40	2.87
Oldshoremore	8.89	8.49	4.44	3.15
West Sutherland area average	**14.70**	**12.11**	**14.90**	**6.49**

There is a good distribution of salmonid species throughout the west Sutherland area with trout present in every system surveyed. Where salmon access was possible salmon were also recorded in each catchment surveyed. The area average trout and salmon fry densities are similar, while the area average salmon parr density dominates trout parr.

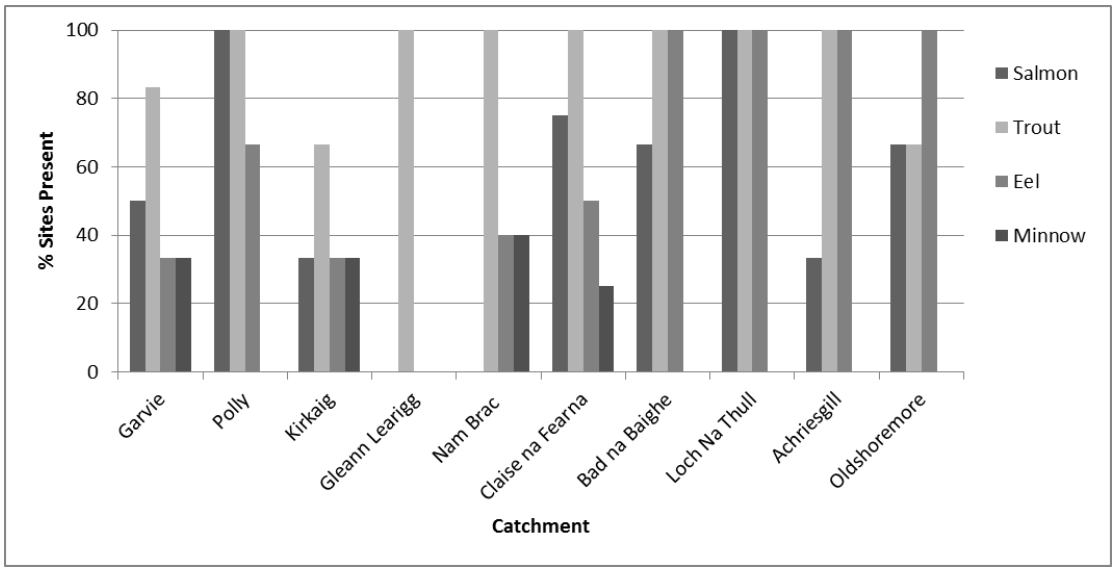
Discussion

Minimum density estimates are underestimates of the total fish population, particularly when fishing efficiency is reduced as a result of fish being lost in stones or weeds, or if the water flow is high, or conductivity is especially low. In 2016, salmonid fry and parr were recorded in every catchment, and populations appear to be healthy, despite being small in some catchments.

Salmonid fry densities are naturally higher than parr in all freshwater catchments as a result of density dependent mortality combined with migration as the parr grow and move into new feeding territories. Whilst this is reflected in the surveys within the west Sutherland catchments, there are some catchments where there are more parr than fry present. This is likely to reflect either a poor spawning year or the habitat surveyed. Given the good number of fry observed in some catchments, habitat is likely to be the main factor.

The historical data shows peaks and troughs in salmonid populations which reflect natural cycles as a result of ecosystem dynamics. The peaks following the troughs, particularly in recent years in the case of salmon, show that there is no major cause for concern in regard to freshwater habitat in terms of instream characteristics; the habitat is being used to the optimum given the abundance of spawning

adults. However, there is a severe lack of bankside cover across most of the catchments within the West Sutherland area; a habitat feature which is of vital importance to parr and adult trout, and is likely to be attributable to the consistently low densities of trout parr in spite of the refuge of nearby lochs within many of the systems. Strategic planting of mixed broadleaf trees within riparian zones would undoubtedly improve fish cover, food availability, and bankside stability; this is particularly vital in areas susceptible to dramatic landslips. Flooding is a natural occurrence, but a lack of structural bankside stability afforded through the root systems of complex bankside vegetation speeds up the process of erosion, and can have catastrophic consequences, as was seen within tributaries of the Hope and Polla systems following the heavy flooding in August 2014. The knock-on effects of this have undoubtedly had a negative impact on juvenile salmonid populations through rapid changes to stream courses and redd washouts.



Species composition and distribution per catchment

Electrofishing in action (K. Dunbar)

Biosecurity Management

Following the creation of the Biosecurity Plan in 2009/10 the Trust has moved forward with some of the actions. These include awareness raising, monitoring and removal of different species.

Awareness Raising

Undertaken at the Ghillies Seminar, Trust Meetings, the DSFB meetings, the Highland Field Sports Fair, the Assynt Fishing Feis, Scourie Gala and Assynt Highland Games, as well as on Facebook and Twitter, issues of Biosecurity and the presence of Invasive Non-Native Species were raised regularly. In particular, the need to disinfect equipment between catchments and the need for added awareness and reporting with regards to non-natives within the area were highlighted.

Biosecurity is an important issue within Sutherland as there are few non-native species present compared to many other areas within the UK. This can make people blasé to the risks posed and the need for care and vigilance. It is important to prevent the spread of non-native species into the area and it is incumbent on all residents and water users to play their part. Gardens, ponds, fishing tackle and water sports equipment are all routes of infection and ones that should be easy to block if care is taken.

American Mink

Mink have been spotted throughout the area for a number of years. A network of rafts and tunnels was established and this is monitored by volunteers and Trust staff. Thankfully, despite the discovery of tracks on a couple of the rafts, and sightings by members of the public, subsequent trapping failed to capture any mink. This would suggest that the population is currently small, possibly comprising of roaming males. However, with these sightings, and the capture of mink at Ullapool, it is important to keep an eye out for them and report any sightings so they can be reacted upon.

The volunteer network remains in place and the WSFT is extremely grateful for all assistance being given. Without the time and commitment donated by these individuals we would be less able to protect this area against invasive species. If you would be able to look after a mink raft then please contact the Biologist and we'll get you set up. Any mink sightings, or potential sightings, should be reported to the Biologist. This information will then be passed on to the relevant volunteers.

Himalayan Balsam & Japanese Knotweed

Once again we received a grant from the Water Environment Fund to treat Himalayan Balsam and Japanese Knotweed.

2016 therefore saw the Biologists and their intrepid volunteers once again descending on Nedd and Clashnessie to remove any Balsam plants spotted within the river corridors. It is getting increasingly difficult to find these plants, although there are occasional eruptions in places previously considered clear. Thanks go to all those who gave up their time in order to improve the habitat in a small part of Sutherland. This area has been treated since 2010 and it is encouraging to see the success of the work, which we have to hope will continue. While the seed bank will still remain in the soil and the area will have to be monitored for a more extended period, it is good to know that we're having an impact.

Japanese Knotweed is also present, although in small patches. In 2015 it was decided to assess some of the known populations, and put out requests for records of others. Treatment of some of the populations was then started. In 2016 these stands were re-visited and it was great to see the success of the 2015 treatments. However more treatment will be required to remove all the little plants that remain. In addition, treatment was also started on a number of other stands within the area. These plants appear to have a persistent seed, or root, bank and there will remain a need for vigilance in all areas.

Plans for 2017

2017 will see the continuation of the work detailed above. We will continue to push the issue of biosecurity and the need for everyone to play their part in the prevention of the spread of non-native species. At the same time, we will be monitoring the area for the presence of non-native species and reacting to any sightings – either our own or those reported by members of the public.

It is hoped that additional funding can be found to continue with the eradication of Himalayan Balsam and Japanese Knotweed from the area. There is a real possibility of full eradication and this can only be good for the area.

Mink will also form a major part of the work programme. The Trust and our team of volunteers will continue to monitor rafts and respond to sightings. The Trust will continue to act as a contact point for any new sightings or the collection of carcasses. The latter will be passed to Aberdeen University for further analysis as part of an on-going project.

It is hoped that the removal of Rhododendron within the area will be progressed. A time consuming and expensive operation, this will require the action of the different estates and the sourcing of funding and knowledgeable contractors. It won't happen quickly but it is a long term aim for the area.

Treatment against *Gyrodactylus salaris* (Official Scottish Government Guidelines)

1. Drying to a minimum temperature of 20°C for at least two days
2. Heating to above 60°C for at least one hour
3. Deep freezing for at least one day
4. Immersion of materials in a solution of, or addition of one of the following chemicals to water to the concentration indicated:

• Virkon* 1%
• Wescodyne* 1%
• Sodium chloride 3%
• Sodium hydroxide 0.2%

The Check, Clean and Dry Campaign

Principles

- Non-native species could be spread in any water or material. If you are visiting a water body there is a real risk that you could spread harmful organisms unless you follow good biosecurity practice.

- Biosecurity means taking steps to make sure that good hygiene practices are in place to reduce and minimise the risk of spreading invasive non-native species. A good biosecurity routine is always essential, even if invasive non-native species are not always apparent.

Check, Clean, Dry disinfection procedure

- Check - All clothing and equipment should be thoroughly inspected and any visible debris (mud, plant or animal matter) should be removed and left at the water body where it was found. Particular attention must be paid to the seams and seals of boots and waders. Any pockets of pooled water should be emptied.

- Clean - Equipment should be hosed down or pressure-washed on site. If facilities are not available equipment should be carefully contained, e.g. in plastic bags, until they can be found. Washings should be left at the water body where the equipment was used, or contained and not allowed to enter any other watercourse or drainage system (i.e. do not put them down the drain or sink). Where possible, clean equipment should be dipped in disinfectant solution (e.g. Virkon) to kill diseases, but note this is unlikely to kill non-native species.

- Dry - Thoroughly drying is the best method for disinfecting clothing and equipment. Boots and nets should be hung-up to dry. Equipment should be thoroughly dry for 48 hours before it is used elsewhere. Some non-native species can survive for as many as 15 days in damp conditions and up to 2 days in dry conditions, so the drying process must be thorough.

Further details from: https://secure.fera.defra.gov.uk/nonnativespecies/checkcleandry/

Dragonfly larva (S. Marshall)

Ready for the crowds at the Highland Field Sports Fair (S. Marshall)

Checking for mussels (J. Tebbutt)

A good catch from the burn (A. Beynon-Jones)

Skunk cabbage – an unwanted immigrant (S. Marshall)

A day in the office (S. Marshall)

A summary of 20 years in the WSFT

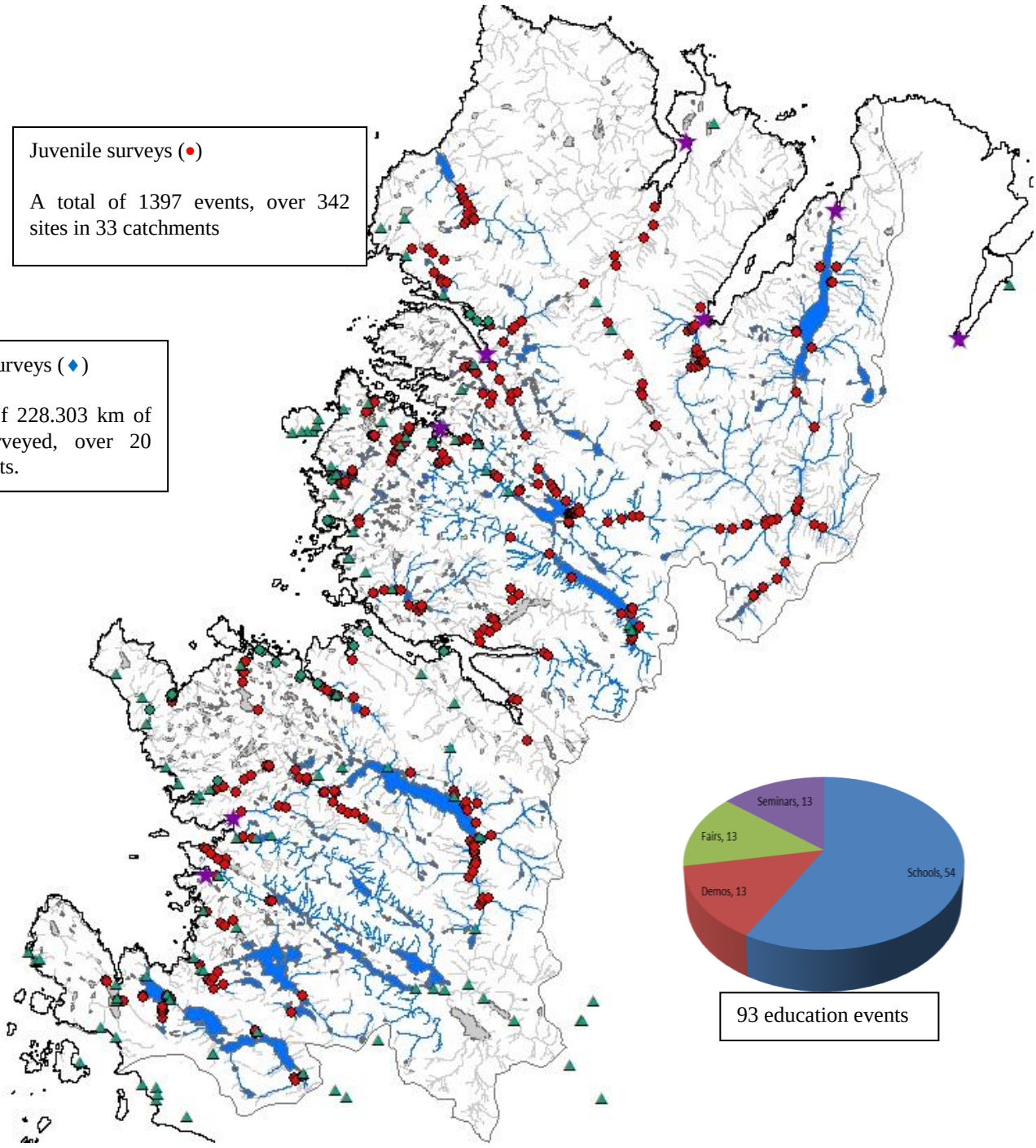
This gives a brief summary of some of the field work undertaken by the WSFT over the past 20 years. Further details are available from the Biologist.

Juvenile surveys (●)

A total of 1397 events, over 342 sites in 33 catchments

Habitat surveys (♦)

A total of 228.303 km of river surveyed, over 20 catchments.



93 education events

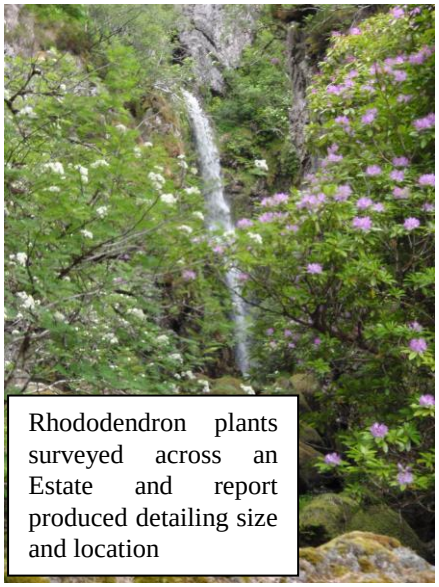
INNS (■)

2 populations of Himalayan Balsam and 6 populations of Japanese Knotweed treated (●); 105 mink rafts checked by 32 volunteers and WSFT (▲)

Sweep netting (★)

A total of 6493 sea trout examined, of which 4507 were tagged and 320 recaptured (a 7% recapture rate).

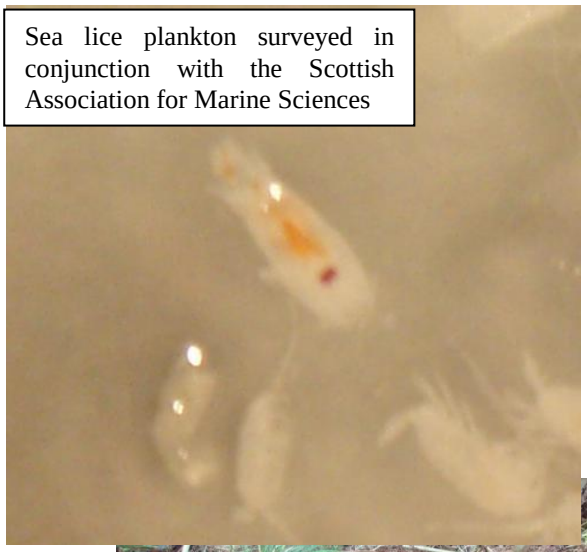
Oldest recapture – J77 was recaptured 8 years after tagging as a 3 year old smolt, and again the following year;
Most travelled - G33 was captured in the River Hope 6 weeks after being tagged in the Laxford estuary;
Most recaptured in one year - I20 was taken 3 times in the Polla in 2010.

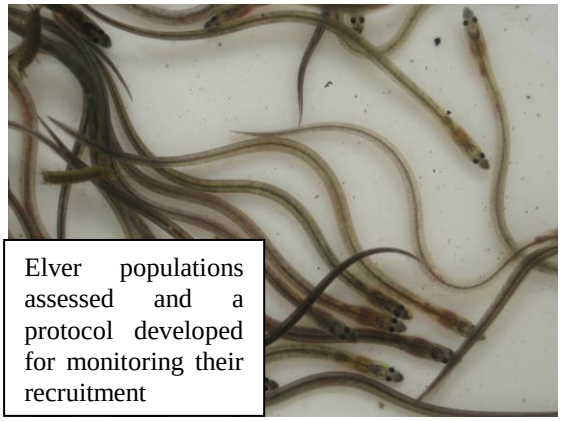


Rhododendron plants surveyed across an Estate and report produced detailing size and location

Marine fish populations monitored to assess sea trout feeding potential

Sea lice plankton surveyed in conjunction with the Scottish Association for Marine Sciences





Elver populations assessed and a protocol developed for monitoring their recruitment

Woodland monitored for the effects of deer grazing

Kick sampling in action…. (S. Marshall)

Getting deep… (S. Barnes)

Here's looking at you, looking at me… (S. Marshall)

In the clink… (A. Beynon-Jones)

Hide here and they'll never notice us! (S. Marshall)

A palmate newt (J. Tebbutt)

Monitoring of sea trout post-smolts

Introduction

Started in 1997, this project was originally designed to give an indication of the migrations and growth of sea trout within the area. The individual tagging of fish, combined with the measurements taken at capture, gave a baseline from which to assess these parameters following re-capture by nets or rod and line. In addition to these data, the numbers of sea lice were also assessed. This has now progressed, such that sea lice counts are the most important part of the project, with the tagging of fish giving additional information.

Materials & Methods

Three estuaries, Laxford Bay, Kyle of Durness and the Polla estuary, were sampled monthly where possible from April to September. A total of 326 fish were individually measured and scale samples taken, of which 152 were tagged using a visible implant tag behind the eye. The fish were also examined for the presence of sea lice, which were counted and staged.

Results and Discussion

The fish caught were of varied age and length, reflecting a mixed population structure. The age structure in the three estuaries was similar, with the Laxford returning a greater number of mature fish. While this is similar to the findings in 2015, it is contrary to that seen previously where the Polla returned the greater number of mature fish and the Laxford returned post-smolts. The predominant smolt age in the rivers is 2 years (S2), although there were a number of S3's also present. S1's were also observed in small numbers in all of the estuaries. The length distribution of fish within the estuaries was also similar, with post-smolts dominating each estuary. Few larger fish were seen in 2016, possibly reflecting the reduced number of nettings in the Polla.

The majority of the fish examined were from the 2016 smolt run. While a May smolt run is normal for the Sutherland area, there were a number of smolts taken in the March and April samples from the Laxford indicating that some smolts may have run earlier.

The presence of post-smolts at all sites throughout the year indicates a heavy usage of estuaries by this group, presumably for feeding and shelter. That the sea trout populations are relatively static can be inferred from the information on recaptures, where all of the tagged fish recaptured during 2016 were taken in the same location as originally tagged.

The average length of the post-smolts appears to reduce with time reflecting the movement of fish within the estuaries for feeding and shelter. During 2016 there was evidence of good feeding at sea, both from the condition index and from the presence of small fish within the sweeps. Indeed, the October sweep in the Polla was comprised primarily of large numbers of sprat.

Average growth rates within the Laxford were 12.85 mm, and 17.98 g per month. This is higher than that seen in 2015.

There were 6 recaptures during 2016, all within the Laxford estuary netting. Of the recaptured trout, 1 was originally tagged in 2015, with the rest in 2016. All fish were taken in the area of original tagging. This pattern is common to the sampling programme over the past 19 years and demonstrates that the majority of sea trout do not stray far from their home rivers. One fish was reported as tagged by an angler in the River Laxford. Unfortunately no tag details were recorded.

Figure 3 shows that the specific growth rates (SGR) in the Laxford, while lower than that observed in 2015, is still within the upper range observed during the past 20 years. The good condition was evident from the appearance of the fish in the net. The results from this analysis demonstrate the complexity of trout population dynamics and the interactions with external factors, such as food supply and temperature.

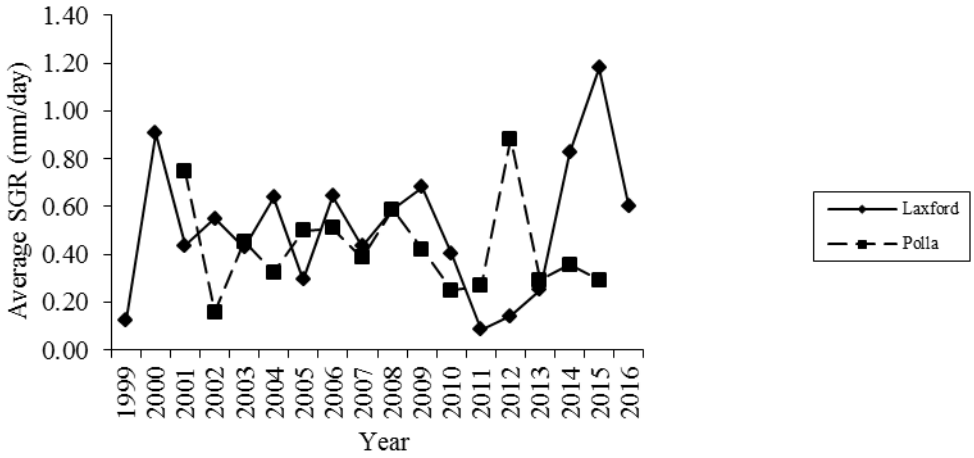


Fig. 3 Showing the average SGR for fish within the Laxford and Polla estuaries, by year

Sea Lice Infestations

Sea lice were present to a varying degree in all estuaries, with lice found during all sampling occasions in both the Polla and Kyle of Durness. Lice were found in the Laxford during July only, comprising of mobile stages. The Polla samples demonstrated a mixture of lice stages over the year, although only Chalimus were present in May and no Chalimus in October. As with the Polla, the Kyle of Durness sea trout also carried a mixture of lice stages although there were a greater number of adults and gravids than seen in the Polla. Total lice numbers were exceptionally low in the Laxford but much higher in the other two systems. The greatest numbers of lice were found in the Kyle of Durness in July. However, the total lice number per sample is dependent on sample size and the use of abundance and intensity data give a better assessment of the situation.

Laxford

Lice were only present on one occasion within the Laxford, and in low numbers on one fish. All three lice were mobiles. There were no *Caligus* found within the survey.

The neighbouring cages have been fallow since May, when the broodstock were removed and therefore no comparisons are possible.

Polla

The abundance of lice shows a peak during October. However this is misleading as it is made up of a single fish. However there was a general increase in numbers between May and June. The May sample was made up of Chalimus, with some evidence of maturation following. Gravid lice were present in each of the remaining months, with very few chalimus present in June and none in October. *Caligus* were present on a small number of fish during June and October, always at low numbers (1 – 5).

The neighbouring cages were restocked with S1 fish in February. Numbers of *Lepeophtheirus* were low throughout the season, although *Caligus* numbers increased through the summer. This is in direct contrast with the findings within the wild population.

Kyle of Durness

The abundance of lice was higher than that found in other parts of the area. This was further highlighted by the fact that the majority of the fish examined were found to have lice present, as seen from the median values. There was a mix of stages present, with potential maturation observed within the population. *Caligus* were present in July and September, but in low numbers.

A risk assessment of the lice numbers present within the wild trout

Taranger, G.L., Karlsen, Ø., Bannister, R.J., Glover, K. A., Husa, V., Karlsbakk, E., Kvamme, O., Boxaspen, K. K., Bjørn, P. A., Finstad, B., Madhun, A. S., Morton, C. & Svåsand, T. ((2014). Risk assessment of the environmental impact of Norwegian Atlantic salmon farming. *ICES J. Mar. Sci. dor 10. 1093/icesjms/fsu132* gives a method to assess the increased mortality risk to salmonid populations based on the number of lice present per gram of fish. This is based on physiological effects determined from laboratory experiments taken from literature, and the use of sentinel cages within fjords.

The data are treated differently depending on fish size and give a potential increased risk of mortality to each fish, with increasing risk as the number of lice increase. Thus, 0.1 – 0.2 lice/g will give a 20% increased risk of mortality to a salmonid of < 150g. In order to determine the likely population effect, the proportion of fish within the population appearing in each band is calculated and a population risk determined. Fig. 4 gives the results by year for each estuary, with the banding indicating whether the risk is low (green), moderate (yellow) or high (red). Within the green zone it can be taken that there is minimal risk to the population, while the yellow and red zones show potentially population altering impacts.

From this, it can be seen that the potential risks within the Polla estuary are low throughout the study period, with the exception of 2006, when increased lice levels were observed. This is a positive reflection on the situation within the estuary, not perhaps seen in previous analyses based solely on lice abundance. It may, however, be more reflective of the rod catches, which have remained steady or increasing with time.

In contrast, the Laxford analysis would indicate that sea lice populations are creating a potential population changing effect on a regular basis. While there is a biannual effect observed, primarily giving a moderate effect, on 2 years, 2011 and 2013, this was identified as high. This is perhaps a better reflection of the impression drawn from the previous analyses of the abundance data, but serves to highlight the population changes observed with the rod catches. In 2016, however, a risk of 0 was calculated for the Laxford population. While a low level of risk was expected, given the trends of the previous years, this is unusual for the estuary.

Sampling within the Kyle of Durness has been more restricted than the other 2 estuaries, but results would indicate that there is a low risk to the population arising from the lice burdens within the population. The exception to this was in 2005, where a high potential risk was recorded. Catch records, again, mirror to some extent the potential risk to the population identified.

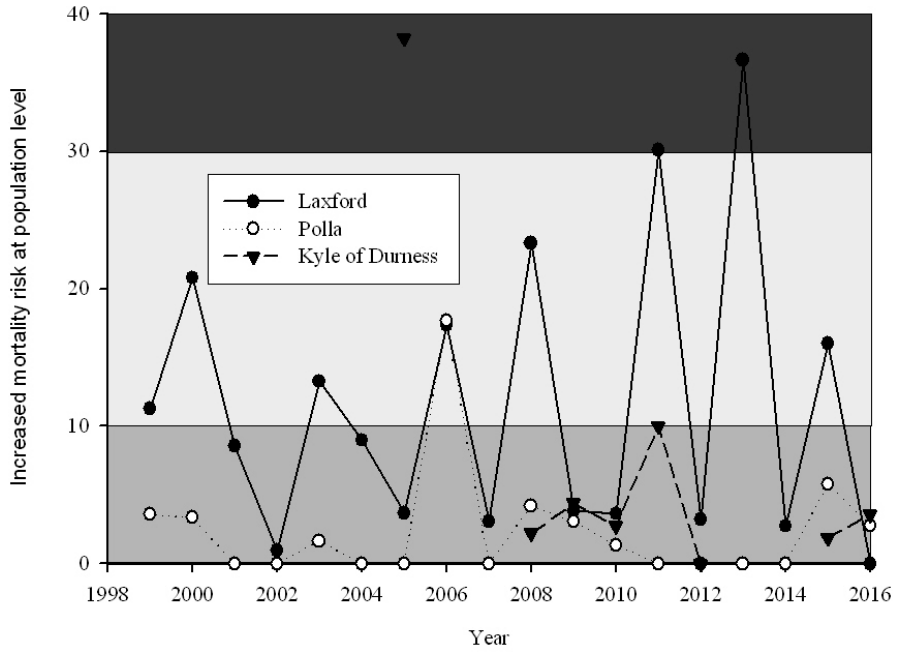


Fig. 4 Showing the increased mortality risk at population level created by sea lice

The full report of this project can be downloaded from the website or obtained by contacting the Biologist. Videos of the sweep netting process are also available to view on the website, Facebook or Youtube (https://www.youtube.com/user/WSFTrust).

Sea lice stages and species

Lepeophtheirus salmonis—the salmon louse

Within this study, all *L. salmonis* are counted by stage. Not all stages are used, but for the purposes of this study they are split into:

Chalimus—Hard to see on the fish, these tiny organisms are anchored on the fish, often around the dorsal on sea trout.

Mobile—Free moving pre-adult stages, roaming over the fish skin.

Adult—Moving freely over the fish attracting (female) or seeking (male) mates.

Gravid females—Lice carrying egg strings.

Caligus elongatus

Also affecting salmon, *Caligus* can be found on a number of other species, such as herring and mackerel. It is much smaller that *L. salmonis* and faster moving. It will jump hosts more readily. *Caligus* are counted as a species within this study, and not to individual stages.

The Bad na Baighe Smolt Trap

A smolt trap was deployed in Bad na Baighe from 14.4.16 to 26.5.16. A temperature recorder was placed in the trap, set to record hourly for the duration of the project.

While there were slightly fewer fish passing through the trap during 2016 than 2015, the difference is very small. As with previous years, the lead net was overtopped on several occasions, permitting fish to evade the trap.

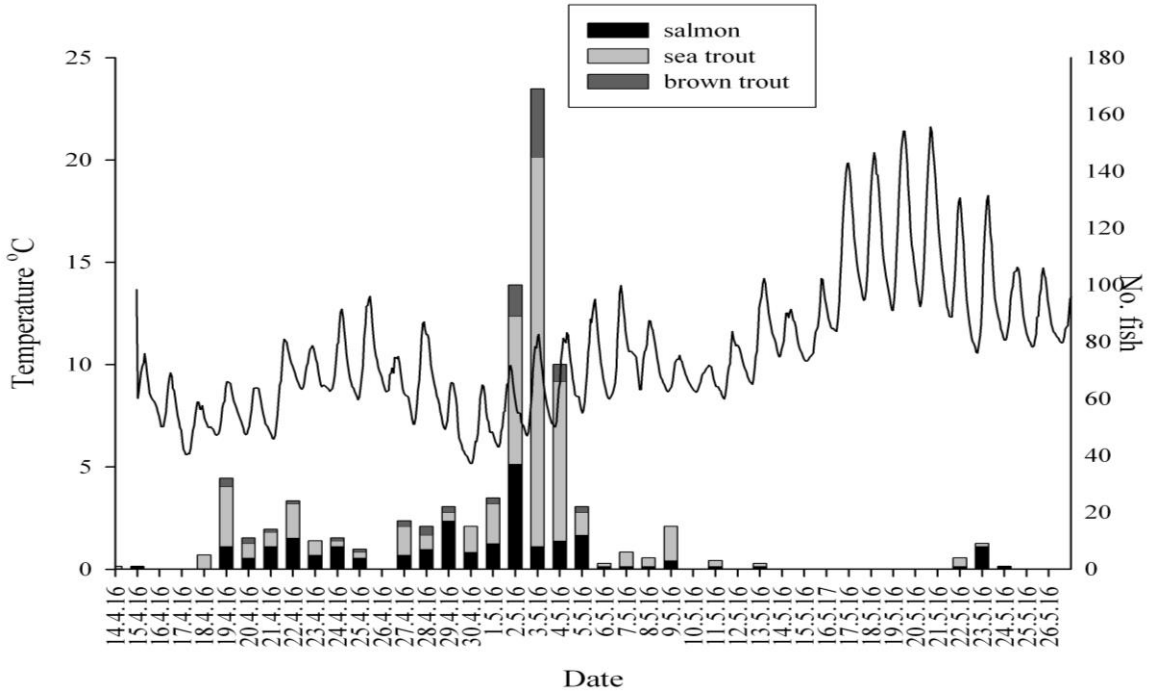


Fig. 5 Showing the temperature regime within the river (line) and no of fish caught on each day (bar)

Water temperature remained relatively static until about 11.5.16, with diurnal fluctuations dominating (Fig. 5). At this point there was a rise in river temperature, coupled with an increase in the diurnal fluctuations. Salmonids require a temperature of about 7°C before starting to move, and this temperature was exceeded for most of the study period.

Similar numbers of salmon and sea trout passed through the trap during April, while sea trout dominated in May (Fig. 5). Most of the sea trout passed through the trap over a 3 day period. During 2016, more sea trout than salmon passed through the trap. This was similar to the situation in 2015 and reflects the type of fishery within the system. Few brown trout were seen to move downstream into the trap. From electrofishing studies we know that salmon are present in small, but significant, numbers and this is reflected within these results.

All sea trout were examined for tags and a small number of the fish were tagged at the trap prior to release. Only 2 of the recaptured trout were connected to Badna Bay, one taken in the trap and the other in the estuary netting (see p. 17). This formed 29% of the total recaptures within the Laxford estuary, and indicates that a significant number of the fish taken in the estuary sweep netting come from the Bad na Baighe catchment rather than the Laxford, highlighting the relationship between the two systems, which share a common estuary. It would be interesting to know more about trout usage of the estuary and the relationship between the 2 populations, a subject for further work should funding become available.

Education

Education forms a large part of our remit and the WSFT are particularly keen to get involved with schools and colleges within the area, as well as giving talks and demonstration to adult groups. It is considered to be an important link between the Trust, the general public, nature groups and the local community. It is a medium whereby scientific research data can be available to those interested in it.

Ghillies Seminar

This annual event provides a forum for the Ghillies within the area, giving them an opportunity to meet and discuss what's happening in their rivers as well as question some experts in the fields of fisheries management and salmonid biology. A platform for those working in the field to discuss issues that affects them directly, it is also a two-way process not only moving information to the workers, but also taking suggestions and ideas to the scientists and policy makers.

This year's seminar was loosely based on the Wild Fisheries Reform and other legislation affecting fisheries management. Starting with a discussion on the area and the development of the Conservation Limits, and how they will affect the fisheries, the model was explained and suggestions for its improvement made. Charles Allen (Marine Scotland Science Fish Health) then talked us through the importance of biosecurity and the potential for spread of disease and non-native species. Duncan Pepper (Angling Guide) then took over, going over the methods for catch and release, recording the catch and basic fish handling skills. The meeting finished with Alan Wells (Scottish Government) talking about the Wild Fisheries Review and taking questions on the proposed legislation.

There was keen participation and a genuine desire to address issues particular to this area, with feedback forms enabling future events to be tailored specifically to the audience. The meeting was well received and the notes can be found on the Trust website.

Field Trips and Demonstrations

During 2016 the Trust worked with 5 of the 6 Primary schools within the area, as well as Ullapool Primary, who joined as part of a transition project. We undertook a range of different field days, introducing the children to the river and its inhabitants. This was undertaken with a range of other organisations, including the HC Ranger Service, John Muir Trust, Flows for the Future and CALL. Children of all ages were introduced to the fish, invertebrates and mussels of the area, learning how they live, why they are important and how to help look after them.

We don't only work with schools however, and 2016 saw us out in the midges with Assynt Wildlife Watch exploring the burns and learning about the wildlife. In addition, we had a Public day, demonstrating electrofishing and discussing the species and their threats.

What is it then?

The school field days were partly funded by the Postcode Local Trust and Scottish Natural Heritage as part of Pearl in Peril and without whose assistance they could not have taken place.

Highland Field Sports Fair
The Trust was once again sharing a stall with the Cromarty Firth Fisheries Trust, Findhorn, Nairn & Lossie Fisheries Trust and the Ness & Beauly Fisheries Trust. We duly turned up in a sodden field in August, armed to the teeth with display boards, leaflets, competitions, etc. Up in the main arena, we had a busy 2 days talking to a large number of people about the Trust, the area and fish conservation and protection. 'Fred' also proved popular as a number of people tried to 'feed the fish' – including other Biologists!

Thanks have to go to those who donated prizes and equipment, or stood in the field selling squares for 'Find the Fish'. Congratulations to all the winners, I hope you enjoy your prizes. Hopefully we will be there again in 2017 and hope to see a number of you then.

Assynt Fishing Fèis
Organised and run by Stewart Yates of Assynt Fly Fishing, this event yet again saw the studio at Glencanisp Lodge taken over by all things fishy. A fun experience for all ages, with casting tuition, fly tying instruction, electrofishing demonstration, games and discussions, rounded off with some excellent muffins. During this, the fishing competition was running out on the loch.

Congratulations to Stewart for organising such a good event and to all the competition winners. See you in 2017.

Other Open Events
The Trust also participated in the Highland Environment Fair (HEF), Assynt Highland Games and Scourie Gala, having a stall at each. We also gave a talk at the HEF, introducing the sweep netting programme to the audience and highlighting the importance of volunteers to the Trusts activities. These events gave us another chance to talk to members of the public and promote the work of the Trust. Thanks must go the individuals who assisted on the day, manning the stall, putting up tents and organising the merchandise. These events are good fun to do and help in the promotion of the Trust and its works.

The stall set out at Moy

Wild Fisheries Reform

In 2014 the Scottish Government commissioned the completion of a Wild Fisheries Review. After extensive consultation, the Review was published, containing 53 recommendations. These covered a wide gamut of issues, from management structure through finance and sustainability to open access. These recommendations are being considered by the Scottish Government, in consultation with the public, with the aim of producing new legislation. It is assumed that this will pass before Parliament in 2017.

As a result of the review, some fisheries management actions were introduced during 2015, to run continuously from there.

Salmon conservation regulations

This policy was introduced for the 2016 season. It implemented a variety of measures, including:

- A ban on the taking of any salmon, by rod or net, before 1 April;
- A ban on fishing outwith estuary limits for a period of 3 years.

The classification of rivers based on a model of population estimates, exploitation rates and biological recruitment. (Further information can be found at: http://www.gov.scot/Topics/marine/Salmon-Trout-Coarse/fishreform/licence/status)

The categories denote the conservation measures required such that, for West Sutherland during 2017:

Category 1 – (River Hope, Daill River, Grudie River, River Dionard, Rhiconich River, River Laxford, Gleann Dubh River and River Kirkaig) where the conservation limit has been met on 4 of the last 5 years, exploitation is sustainable and therefore no additional management action is required.

Category 2 – (River Inver, River Polly and River Oscaig) where the conservation limit has been met on 3 out of the past 5 years, meaning that management action is necessary to reduce exploitation. While mandatory catch and release will not be required in the first instance, this will be reviewed annually.

Category 3 – (Strath Shinary River and Duartmore Burn) where the conservation limit has not been met on 3 out of the past 5 years, meaning that exploitation is unsustainable and management actions are required to reduce exploitation for 1 year i.e. mandatory catch and release (all methods).

All systems not listed above have insufficient data and therefore will be classed as Category 3.

In addition to the measures introduced above, all rivers will be required to complete a Conservation Plan, to a template to be advised by marine Scotland Science.

The Future

The Scottish Government is proposing radical changes to Fisheries Management in Scotland, with new legislation resulting in a new structure. This will be based to a large extent on the recommendations of the Wild Fisheries Review. While the consultation process has started, there are currently no firm indications of the form the legislation will take. However it would appear, following a Press release in February 2017, that there will be no significant change implemented. It has been suggested that the Scottish Government would like to see some modernisation to proceed within the District Salmon Fishery Boards, but this will not be legislated for.

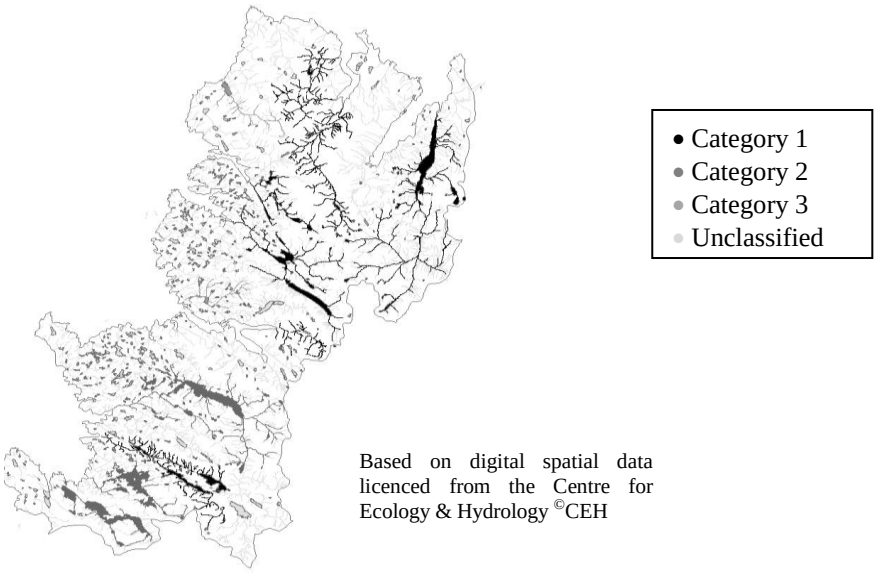
The developing legislation is still likely to have consequences for the Trust and will be followed closely. As independent charities, the Fisheries Trusts and Foundations are outwith the legislative controls, but any incoming legislation will affect our work and how it is carried out.

The WSFT will continue to work closely with the Board, while maintaining our independent outlook. The Trustees and staff feel that this is the most suitable form for this area, giving a counterbalance of views. This will enable the two organisations to operate to the benefit of the fish species within the area.

There will be a requirement for Fisheries management Plans to be developed for each area of the country. Unlike the current plan (available on the website), this is likely to be more focussed on the national priorities, with a template to be provided by the Scottish Government.

One thing that has happened is the progression of the Association of District Salmon Fishery Boards into a Fisheries Management Scotland. With a new constitution, membership of this organisation is now open the Trust network and will enable a single point of contact in all discussions and negotiations with Scottish Government. As of April 2017, RAFTS will no longer have any staff and will be retained only until the organisation has fulfilled its legal requirements with regards to Grants already received.

Again, this change is likely to have an impact on the funding potential of the Trust, with several work streams currently funded through grants obtained via RAFTS. As such, we remain ever vigilant to the need to secure funds and keep the Trust on a sound financial footing.



Based on digital spatial data licenced from the Centre for Ecology & Hydrology ©CEH

Acknowledgements

The Trust would not be able to function without the assistance of an army of volunteers, many of whom give up substantial amounts of time to the Trust. Similarly, we would like to acknowledge those who support us financially and without whose help we would not be able to operate. Grateful thanks also for the assistance of the various estates. In particular, sincere thanks must be expressed to Reay Forest Estate and Scourie Estate for their donation of accommodation.

A number of other individuals have assisted the Trust with its work programme, some listed below. Apologies to those not mentioned by name, but our grateful thanks all the same.

Catches and Scale Reading

The WSFT acknowledges the assistance of hotels, estates and anglers in compiling catch records and collecting scale samples.

Monitoring of sea trout post-smolts

This work would not be capable of completion without the assistance of the Reay Forest Estate and Rispond Estate. Also to the army of volunteers, in particular Ross Barnes, John Craig, Dave Debour, Andrew Marsham and Rex Onions for their help in all weather and conditions.

Funding for this work comes from a variety of sources. The North & West District Salmon Fishery Board, estates, individuals and the Trust add value to a grant from the Scottish Government, received through RAFTS as part of the Managing Interactions with Aquaculture Project. The work of RAFTS in the securing of this, and other, funding must also be gratefully acknowledged.

Education

The Ghillies Seminar was partly funded by the District Salmon Fishery Board and the kind donations by our speakers of time and travel.

Biosecurity Planning

Mink rafts were provided by the Scottish Mink Initiative and monitored by various estates and individuals. Funding to oversee this process has been provided by SNH.

The following Charitable Trusts, Foundations, Estates and organisations have kindly donated funds or provided grant funding towards the West Sutherland Fisheries Trust. Our sincere thanks to all listed, and to the many individuals who will remain anonymous but have donated time and money to the Trust and its activities. Without all of this support we would not be able to operate.

Trusts & Organisations
Assynt Angling Club
Assynt Angling Company Ltd
Brackloch Trust
Edinburgh Sutherland Association
Heritage Lottery Fund
Highland Field Sports Fair
North & West District Salmon Fishery Board
Postcode Local Trust
Scottish Environmental Protection Agency
Scottish Government
Scottish Natural Heritage
Westminster Foundation

Business (incl. Fish Farms)
Loch Duart Ltd
Mid Fearn Cottages
Scottish Sea Farms
Wester Ross Fisheries

Estates
John Muir Trust
Rhiconich Estate
Reay Forest Estate
Rispond Estate
Scourie Estate

INCOME AND EXPENDITURE ACCOUNT
for the period 1.4.16 to 31.3.17

INCOME		£
District Fishery Board		13000
Fish Farms		20300
Trust Donations		6500
Grants		19759
General Donations		9640
Membership		798
Other		2624
		72621
LESS: EXPENDITURE		
Wages, Salaries, Pension & PAYE	52729	
Plant running costs	2069	
Consumables	2862	
Insurance	1614	
Telephone	927	
Professional fees	5413	
Miscellaneous expenses	4977	
		70591
SURPLUS/DEFICT OF INCOME OVER EXPENDITURE		**2030**

West Sutherland Fisheries Trust - Membership

Help us in our struggle to restore and maintain the trout and salmon stocks within the west Sutherland area by joining the West Sutherland Fisheries Trust for as little as £10 a year. We are already carrying out research into the salmonid life cycle in local river systems and are maintaining close links with biologists working throughout Scotland to ensure that results are co-ordinated and therefore give as complete a picture as possible. However, as a Charitable Trust (Charity No. SC24426) we are in constant need of financial support.

Contributions: Yearly Membership £25.00: Junior £10.00

Any additional contributions you feel able to make would enable us to be more active within the area. In return you will get the satisfaction of knowing that you are contributing to the effort to save our salmon and trout, a local contact point for exchanging views and information, 2 newsletters a year and an Annual Review to keep you informed about what we are achieving.

Please complete the following form and return to: Gardeners Cottage, Scourie, Sutherland, IV27 4SX

West Sutherland Fisheries Trust

Name: _____ Address: _____

_____

_____

_____

E-mail:_____

Contribution: £ _____ Annual □ Junior □

I want the West Sutherland Fisheries Trust (A Scottish Registered Charity No. SC24426) to reclaim Tax* on any donation/membership subscription paid from the date of this declaration.

Signature ……. Date ……/……/……

Notes

1. You must pay an amount of income tax/capital gains tax, at least equal to the tax that the charity reclaims on your donation in the tax year (currently 28p for each £1 you give). Remember to notify us if this no longer applies.
2. If you pay tax at the higher rate you can claim further tax relief on your self-assessment tax return.
3. If in the future your circumstances change and you no longer pay tax on your income and capital gains equal to the tax that the charity reclaims you can cancel this declaration at any time by notifying us.

✂----------

Banker's Order
(Annual Membership)

To the Manager of_____

Address _____

Please pay to the Royal Bank of Scotland, 11 Argyle Street, Ullapool, IV26 2UD (Account No. 00145607, Sort Code 83-28-01) the sum of £_____ on:- _____ and annually thereafter on the same date.

West Sutherland Fisheries Trust

Signed: _____ Name: _____

Address:_____

_____

Account No: _____ Sort Code: _____

SPONSOR A SEA TROUT

According to catch statistics, sea trout, *Salmo trutta*, stocks in the north and west of Scotland have been declining since the 1950's and are now at extremely low levels. There have been several theories suggested for this decline, including oceanographic changes, commercial overfishing of prey species such as sandeels, increased predation by seals, sea lice and freshwater habitat degradation through acidification and overgrazing.

Freshwater populations are examined through the use of electrofishing and trapping of juveniles and returned adults, while the habitat can be examined by physically walking the river banks. Marine survival is more difficult to assess and it is proposed to do this through the trapping and tagging of post-smolts in the estuaries. This will provide further information on the growth rate, movements and marine survival of the species and will help in the investigation into the declining catch records. The more fish that we tag the better the data acquired.

Many of the returns will come from anglers, and it is hoped that everyone fishing within the area will be made aware of the programme. All tagged fish will be adipose clipped and the tag placed in the clear area behind the eye. If fishing in the area please record this number, the length from the snout to the fork of the tail and the location caught. Contact the biologist.

For a sum of £2 you can sponsor a sea trout. You will receive a certificate detailing the number of 'your' trout, where and when it was caught, its length, weight and age. In addition you will be informed of any further details should it be recaptured. If you would like to sponsor a sea trout please complete the attached form and send it, with your payment, to:

West Sutherland Fisheries Trust, Gardeners Cottage, Scourie, by Lairg, Sutherland, IV27 4SX.

✂----------

I would like to sponsor a sea trout and have enclosed a cheque/postal order for £2 made payable to West Sutherland Fisheries Trust.

Name: ……

Address: … ……

… ……

… ……

… ……Post code …….

☐I would like to make a donation to the Fisheries Trust and enclose the sum of £…….
☐I would like further information about the Fisheries Trust

Gorm Track to Ben Stack

Clive Halnan, professional artist (http://clivehalnan.co.uk), has kindly donated some money from the sale of his picture 'Gorm Track to Ben Stack' to the Trust. The picture is available as a limited edition run of 125 prints, and is also available as a card.

They can be purchased from the Trust by contacting the Biologist or directly from the artist (info@clivehalnan.co.uk).