NITH CATCHMENT FISHERY TRUST

ANNUAL REPORT

JANUARY TO DECEMBER 2017

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Nith Catchment Fishery Trust (NCFT) is a Scottish registered Charity which was formed in late 2009 to conserve and enhance all native freshwater fish and their habitats located within the inland and coastal waters of the River Nith catchment and the jurisdictional area of the Nith District Salmon Fishery Board.

The aims of the Nith Catchment Fishery Trust are:

- To advance environmental protection and improvement by conserving and enhancing all species of freshwater fish and their environs within the River Nith catchment, for public benefit.

- To advance the education of the general public through raising awareness of aquatic ecosystems including their fauna, flora and economic activity within the River Nith catchment.

DUMFRIES AND GALLOWAY ANGLING ASSOCIATION

Cover photo: Nith Young Anglers Club at Drum Loch, Dalswinton

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Chairman's Foreword

The year of 2017 for the fisheries world was one of uncertainty. We started the year with thoughts of amalgamation with our neighbouring river, the Annan. Discussions had taken place with representatives of the Annan and our river, and plans for managing both rivers were advancing in accordance with the Scottish Government's Wild Fisheries Reform. An announcement from the Government in the early spring of 2017 changed all proposed plans and most of the reform process was abandoned. Managing fisheries into the future was to be continued by the traditional bodies of both Boards and Trusts. I always questioned the value of diluting our efforts in a larger Fishery Management Organisation, however we are back to business as usual with our own Nith Board and Trust.

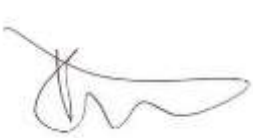
Conservation of our fish stocks seemed to be taking a priority over other aspects of managing our rivers. During 2016 we had been assigned a category 3 conservation status by the Scottish Government, and all salmon had to be returned. This was elevated to a category 2 status for the 2017 season whereby fishers could take a salmon if they choose to do so but restraint was required. I am pleased to report that our Nith fishers saw sense and returned most of their catch achieving in excess of the 80% Catch & Release target requested by our river management. We look forward to the 2018 season with our, again elevated, category 1 status.

Whilst we continue to manage fewer fish in our rivers, of equal concern to us all, is the fact that fewer people are on the banks of our rivers fishing. We have taken steps to address this through the efforts of our Trust and their "Fishing for the Future" project. This project has been successful in giving young people the chance to experience fishing at various venues throughout the Nith catchment in a safe and enjoyable environment. Having seen the project in action, I am confident that we have recruited new Nith anglers for the future.

When numbers of fish are as low as they are currently, accurate information is key to all that we do in managing them for the future. In a bid to gain this information we are embarking on an exciting new venture to have fish counting facilities positioned in our rivers to enable accurate counting of the fish that pass them. It is hoped that information gained from these will aid future management decisions.

From an uncertain start to 2017 we head towards 2018 with a more certain future for our Board and Trust and look forward to a busier year on our river with our category 1 status.

Tight lines to all who fish our rivers!



E.P.K. Weatherall
Chairman
Nith Catchment Fishery Trust

Biologist's Comments

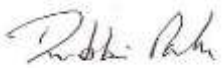
In 2017, we saw a change in emphasis for our Trust. Funding streams have altered and this has led to a change in priorities. In addition to the key work of supporting the Fishery Board and supplying the relevant data for management decisions to be made, the focus for the Trust has been the "Fishing for the Future" project. This project has given many young people the opportunity to experience fishing throughout the Nith catchment and hopefully recruited them to the ranks of Nith anglers for future seasons to come.

It is exciting to be working on our newly excavated pond at Blackwood which will be a valuable resource for the Trust as a venue to conduct aquatic research and general environmental education. The pond will be used by our aspiring young anglers and has already been enjoyed by some Rural Skills groups who have assisted with restoration works.

With the reduction in salmonid populations in all Scottish rivers, the importance of measuring their performance has never been greater and our reliance on statistics, is required in all aspects of the work of the Trust. Some examples of this are the need to prove how many predators are on our river in order to obtain predator licences. We need to know how many adult salmon are running our rivers. We need to know how many fry and parr are in our tributaries. How many smolts go to sea. All anglers and netsmen have to provide an annual return of salmon and sea trout captured. We have asked anglers how long are they fishing for before they catch a fish. We record how many alien species are present in our catchment. All of the above numbers are a measure of the health and vitality of our river and used for comparisons with others.

I look forward to having the ability to accurately count the number of adult salmon running our rivers with the Boards proposals to install fish counters, but we must remember that the runs of adult fish are only one side of the population equation. The ultimate measure for our spawning tributaries is the number of smolts that are produced each year. Whilst we know, from previous research projects conducted, that the proportion of smolts which make it back to our rivers as adults is very small due to pressures on them in the marine environment, we want to send as many smolts to sea as we can. I look forward to potentially counting smolts on some parts of our catchment.

I am pleased to report that on our staffs fishing day during 2017 I caught my first fly caught salmon so I am enthused for the coming season.



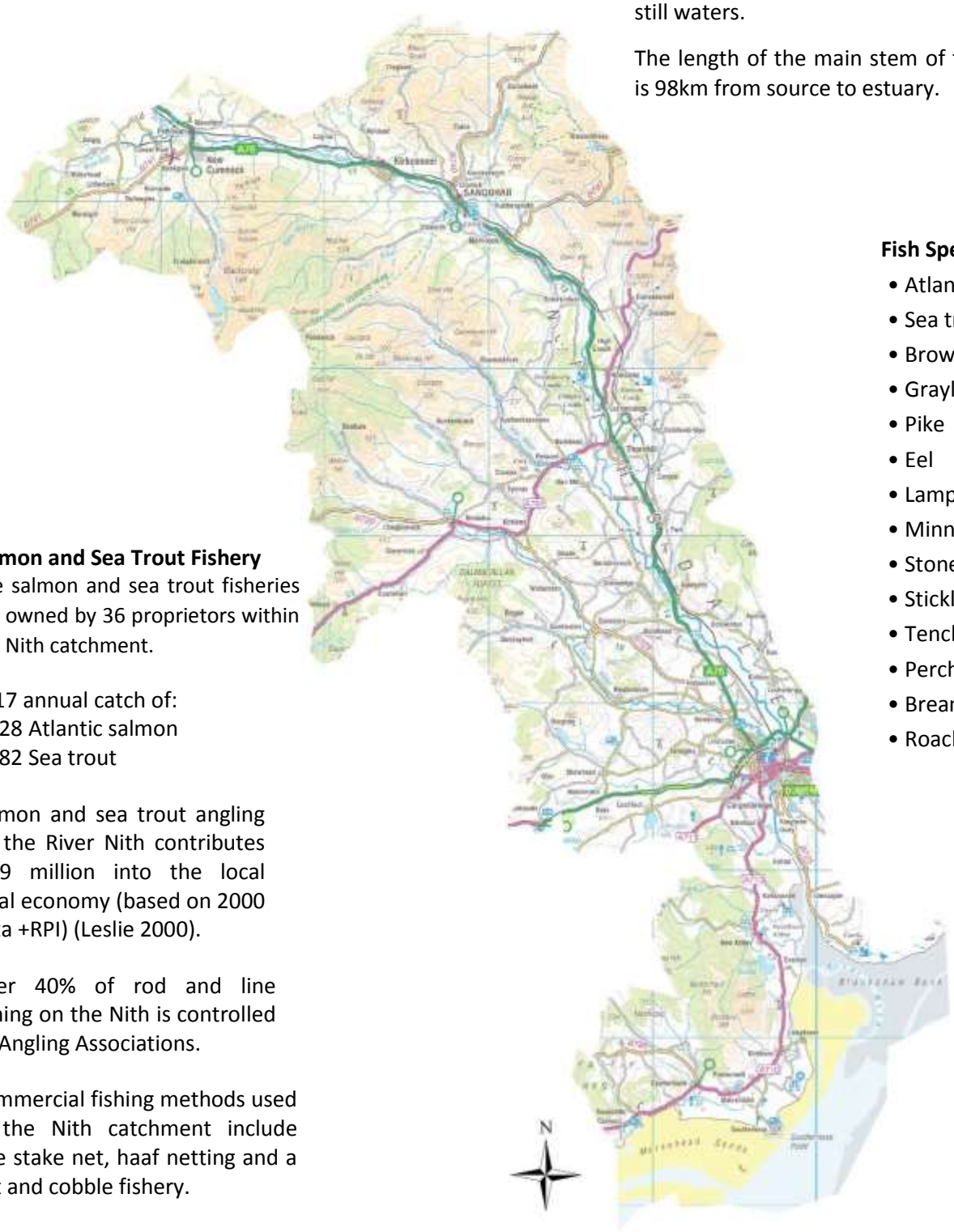
Debbie Parke
Operations Manager/Biologist
Nith Catchment Fishery Trust

The River Nith Catchment

Vital Statistics

The total catchment area is 1596km^2 which includes the main stem River Nith, its tributaries, coastal burns and connected still waters.

The length of the main stem of the River Nith is 98km from source to estuary.



Fish Species Present

- Atlantic salmon
- Sea trout
- Brown trout
- Grayling
- Pike
- Eel
- Lamprey
- Minnow
- Stone loach
- Stickleback
- Tench
- Perch
- Bream
- Roach

Salmon and Sea Trout Fishery

The salmon and sea trout fisheries are owned by 36 proprietors within the Nith catchment.

2017 annual catch of:
- 828 Atlantic salmon
- 982 Sea trout

Salmon and sea trout angling on the River Nith contributes £2.9 million into the local rural economy (based on 2000 data +RPI) (Leslie 2000).

Over 40% of rod and line fishing on the Nith is controlled by Angling Associations.

Commercial fishing methods used in the Nith catchment include one stake net, haaf netting and a net and cobble fishery.

Other Fisheries

The Nith also has healthy brown trout and grayling fisheries which are owned by landowners throughout the catchment. There are also a number of still water trout and coarse fisheries within the catchment. Sea fishing is popular at the quay at Glencaple and off the coast.

Overview of Fisheries Management work carried out during 2017 (Board and Trust)

Enforcement

- Bailiff team comprised 1 full time and 3 volunteer warranted water bailiffs
- 19 incidents dealt with by enforcement staff – 4 incidents of damage to spawning beds, 3 individuals cautioned, 11 coastal incidents (nets/boats), 2 incidents of gaffing on a spawning tributary, 1 incident of illegal culvert.
- Advised Police Scotland on Enforcement issues
- National Bailiff Development Group meetings attended
- Attended National Bailiffs conference
- Presented at National Bailiffs Conference
- Met with Chief Constable Police Scotland
- Chaired Crime Enforcement Working Group for Scottish Government
- Marked legal exam papers
- Contacted MSP's, Lord Advocate, Marine Scotland and Cabinet Secretary regarding coastal netting issues
- Working with Marine Scotland Compliance on netting
- Advised the Luce, Cree, Dee Kirkcudbright and Urr Fishery Boards.

Exploitation

- Catch and release 89% for salmon and grilse and 83% for sea trout by rod and line and 70% for salmon and 12% for sea trout by nets during 2017.
- Assisted Scottish Government with categorization
- Assisted D&G Common Good with fisheries management
- Altered Nith Angling code to reflect Scottish Government policies
- Conservation promoted through education projects, outreach programs and distribution of conservation codes
- Nith Conservation working group met
- Issued carcass tags to Haaf Netters
- Presentation on Catch and Release to Burgh Anglers
- Attended Annual Biologist's meeting
- Angler Diaries issued
- Ran Nith Sea Trout Experience

Engineering and Forestry

- Consulted on multiple engineering projects
- Inspected flood damage on Nith prior to repairs
- Seven electrofishing surveys carried out in connection with engineering works taking place throughout the catchment
- 15 fish rescues throughout the catchment.
- Consulted on Lochfoot to Brighouse gas pipeline, SWS Overhead Powerline, Crawick Viaduct works, Bridge repairs for Buccleuch Estate, SEPA Laggan Burn and Upper Nith Flood projects, East Ayrshire Flood Project, East Ayrshire Water Mains replacement, Directional Drilling for Scottish Water at Kirkconnel and Durisdeer.
- Attended all Open Cast Coal Mine TWG's
- Managed Upper Nith river restoration project and Laggan Burn Restoration Project.

Fish stocks and monitoring

- 2016 catch data collected and reported on website
- NCFT/NDSFB conducted electrofishing at 150 sites throughout the catchment
- 10 annual electrofishing sites surveyed
- Provided electrofishing data to SFCC
- Applied and obtained planning permission and CAR license for Crawick Fish Counter.
- Met and Liaised with Buccleuch Estates and all residents for Crawick Fish Counter
- Adult fish sampling conducted and fecundity estimate taken.

Planning and consultation

- Planning lists checked on a monthly basis and responses made where appropriate.

Renewables

- Three surveys carried out in connection with renewables taking place throughout the catchment.

Habitat • All habitat schemes checked and water gates repaired • Problem trees removed throughout catchment • Native trees re-planted in habitat schemes	**Access** • 1 fish barrier reported to SEPA - Laggan Burn
Water Quality • Twelve pollution incidents attended and reported to SEPA • Three invertebrate surveys completed	**Marine survival** • Acoustic monitoring station installed and maintained in Nith for Marine Scotland tracking project.
Governance • All Health and Safety at work Policies updated • Liaised with D&G Assessors • All appropriate licensing requirements in place • Various meetings attended - see page 19 for full list of meetings/events attended • Staff training carried out • Fishery Catch Returns compiled	**Predation** • Licenses applied for and gained to prevent serious damage to wild stocks of salmon/sea trout by cormorants, goosanders and seals. • License returns completed • 14 mink trapped
Biosecurity • Crayfish refuge traps monitored and Lochfoot Burn monitored for crayfish spread. • Japanese knotweed treated • All Nith Giant hogweed treated • Rainbow trout survey on Cairn Water completed	**Hatchery** • 121,000 fry stocked • Post stocking electrofishing surveys carried out • Brood stock captured for fry production for 2017/18
Outreach • Nith Sea Trout Experience – four weeks of free fishing to promote sea trout fishing on the River Nith. BBQ event for participants held at Dalswinton Fishing Hut. • Various shows and fairs attended - See Outreach and Education page for full list of meetings/events attended • Presentations given to other organisations. • PR via website, social media, TV and newspapers.	

"Vieille Alliance" – French group visiting the hatchery

Fisheries Management

Conservation Regulations 2017

All Scottish salmon rivers are now assigned a Conservation Categorisation grading from 1 to 3. The definition of these Categorisations is provided in the box below. From an initial grading of 3 in 2016, the River Nith was assigned a Categorisation of 2 in 2017 and is now graded as Category 1 for the 2018 fishing season.

Category (Grade) 1	At least an 80% mean probability of conservation limits (CL) being met in the last 5 years. Exploitation is sustainable and therefore no additional management action is currently required.
Category (Grade) 2	60-80% mean probability of CL being met in the last 5 years. Management action is necessary to reduce exploitation; mandatory catch and release will not be required in the first instance, but this will be reviewed annually. Where a Board does not exist, assistance in plan formulation will be offered to those responsible for local management.
Category (Grade) 3	Less than 60% mean probability of CL being met in the last 5 years. Exploitation is unsustainable and mandatory catch and release (all methods) for 1 year will be required. Management action is necessary to reduce exploitation.

Alongside the Governments Regulations, each individual Fishery Board and Trust have recommended conservation guidelines for their specific catchment area. These individual catchment area conservation plans take account of the type of fishing which is exercised locally and the run timing of genetically distinct strains of fish i.e. spring salmon.

An additional layer of regulations is applied by individual owners to their specific beat or stretch of river. For example, some beats only allow fly fishing or fishing with barbless lures, etc. All of the above measures enable all who enjoy fishing to assist in the sustainable future of the resource and consequently, the sport of fishing.

Fish Counter

The Nith District Salmon Fishery Board are currently working on plans to have a series of fish counters placed within the Nith catchment and the first place identified to install a fish counter has been the Crawick Water. This is one of our major fish spawning tributaries and due to its size, makes a very good place to start. Planning consents and a CAR licence from SEPA have been granted.

Salmon form the Crawick Water

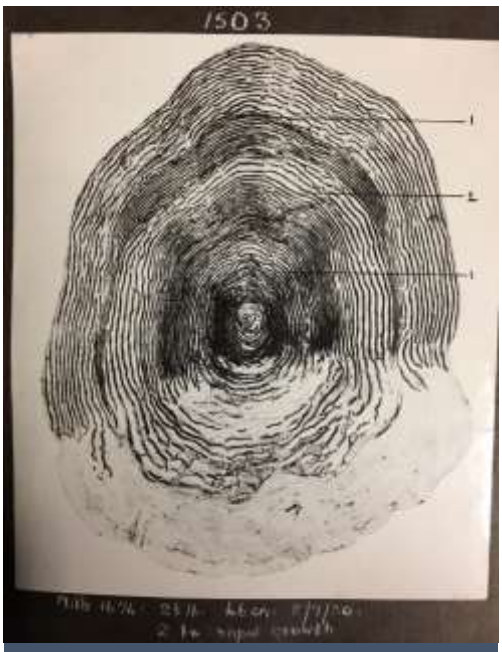
The Trust is very interested in this work as the installation of a counter on the Crawick Water would mean that we could start to get an idea of the actual number of salmon and sea trout that are entering this sub-catchment of the Nith to spawn. In conjunction with this data, we could then run smolt traps which would provide us with an estimate of output generated by the Crawick Water. In addition to this, and probably a few years down the line, the introduction of PIT tagging of smolts on their way out of the system would enable us to gain an understanding of how many adult salmon are surviving the marine phase and returning to the river.

Ultimately, the greater our knowledge is,, of the River Nith salmon populations, enables us to make better management decisions that will help protect them and ensure that Atlantic salmon still run the Nith for future generations to enjoy.

Fisheries Management

Scale Reading

The Trust Biologist recently attended at the Scottish Fishery Coordination Centre (SFCC) scale reading course, held at the Marine Laboratory at Faskally. Whilst our Trust has been reading fish scales for many years now this is a topic which, by its nature, is subjective and the reader benefits from opinions from their peers. The intention is for Nith scales to be read using our own equipment which will include taking photographic images, then uploading the images onto the system which the (SFCC) has in place. Once on the system the images can be read by a number of trained scale readers.



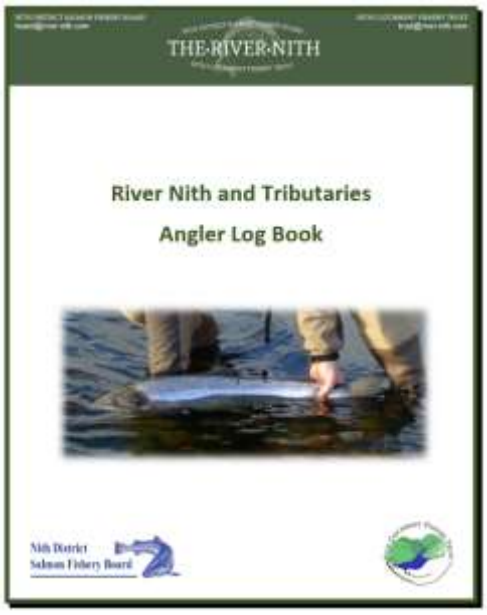
River Nith Grilse Scale 08.07.1930
2.5lb 46cm 2.1+ rapid growth

The Trust would be interested in receiving scales of any unusual fish that anglers or netsmen catch on the Nith. These may be very large or especially small but it gives us a chance to look into that fishes life history. Whilst at the scale reading course we read Nith scales from the Marine Laboratory archive which included a very small salmon captured in 1936. Anyone taking scales should only do so if they are confident that in do so the fish is uninjured and is able to be returned to the water and the following procedure should be adhered to - http://www.sfcc.co.uk/members-area/scale-reading-learning-resources.html

Nith Angler Diaries

Over the course of recent fishing seasons, much has been said about reduced numbers of fish in our rivers. To begin with, many anglers theorised that this phenomenon was specific to the River Nith but with the passage of time these theories were proven to be inaccurate and the reduction in fish numbers is generic to all rivers in Britain and the surrounding countries. The reduction in numbers of fish has led to a reduced catch of salmon and sea trout but in addition and more worryingly a reduction in anglers on our river banks. This has had a serious knock on impact on the economy of rural Nithsdale.

Both the Fishery Board and Trust are very concerned about the reduction of fish being captured in the Nith but how much of this reduction is now due to reduced fishing effort? In an attempt to answer this question we have issued a section of the angling fraternity with angler diaries to record details of their individual fishing trips to the river and the success or otherwise of those trips. By recording this information, managers hope to put some science to an otherwise "unknown" in statistics associated with fish and fishing on the River Nith. The issuing of angler diaries will continue for a number of seasons to build a comprehensive picture which will contribute to managing our stocks of fish.



It is worth noting that the figures below include hours fished for salmon and sea trout by all methods as we were unable to separate this information out from the data received. This also includes both the Nith and the Cairn. However it does start to give us some data that can be used as a comparison in the future.

Results from 2017's Angler Diaries

No. of logbooks issued:	20
No. of logbooks completed and returned:	9
Total days fished (6 hour day)	157 days

Catch Per Unit Effort i.e. fish caught per day	
Salmon	0.41
Sea trout	0.20
Brown trout	0.52
Grayling	0.11

Thank you to everyone that took part in this and returned data to us.

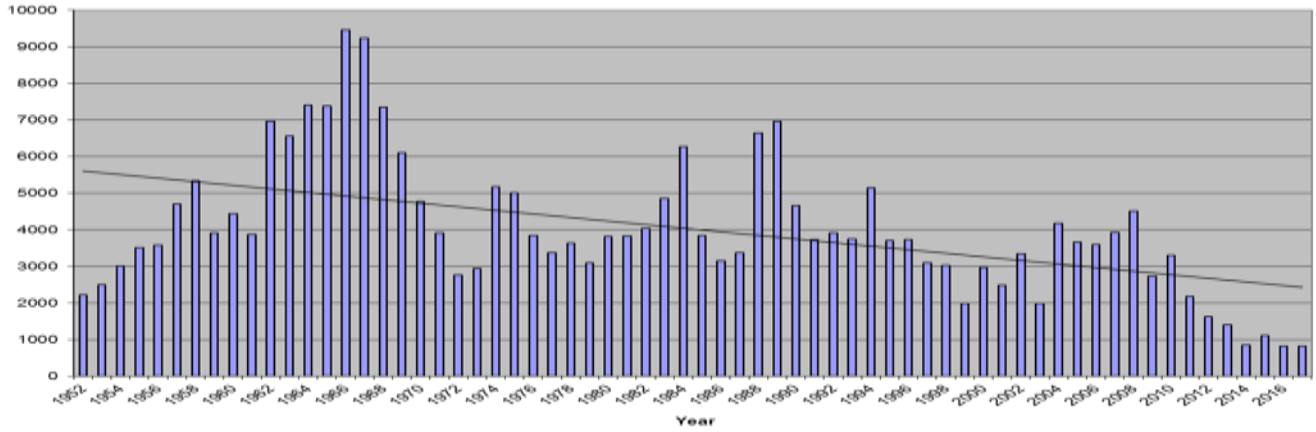
STOCK ASSESSMENT

Salmon and Sea trout catch data for 2017

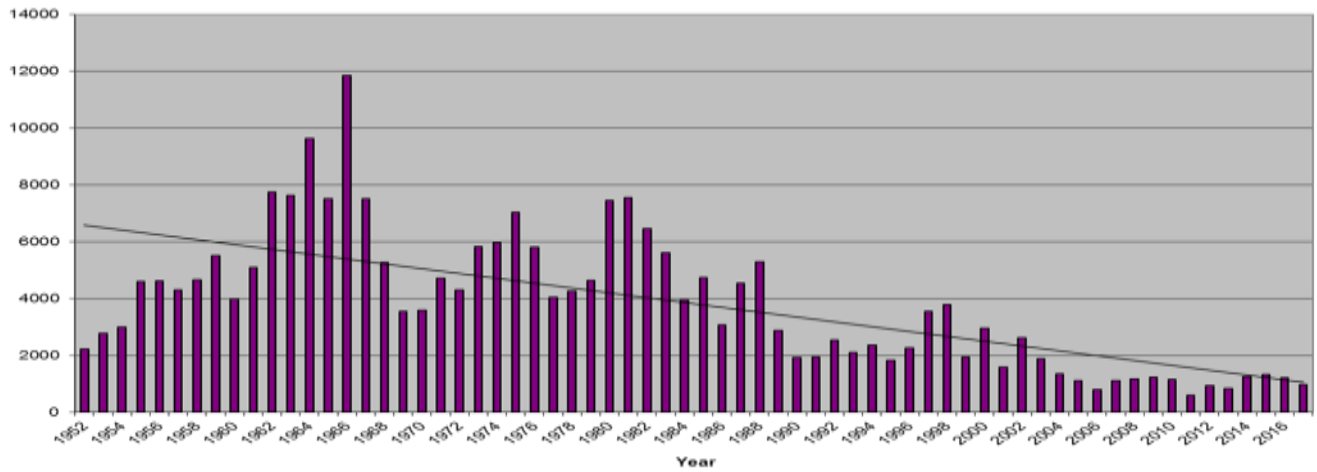
It was with disappointment that we received the final reported catches for 2017 with salmon figures only slightly better than those reported for 2016 whilst the number of sea trout reported was lower. Prior to the catch data being returned to us at the end of the season, we had received a number of positive reports from anglers up and down the river suggesting an improvement in the number of salmon running the river in 2017. These figures are not encouraging and support the general ongoing downwards trend being seen on the River Nith over the last decade. Sea trout numbers over the last two decades have been similarly depressed and for this reason, the Board and Trust still recommend that all salmon and sea trout are returned where possible.

	Salmon and Grilse				Sea trout and Herling			
Year	Rods	Nets	Total	10 year average	Rods	Nets	Total	10 year average
2008	3764 (35%)	740 (0%)	4504	3268	961 (52%)	217 (7%)	1178	1658
2009	2095 (36%)	644 (0%)	2739	3342	1104 (49%)	136 (10%)	1240	1588
2010	2336 (43%)	970 (0%)	3306	3375	850 (44%)	303 (0%)	1153	1408
2011	1637 (40%)	545 (0%)	2182	3344	515 (46%)	94 (0%)	609	1310
2012	1283 (40%)	352 (0%)	1635	3173	782 (55%)	163 (1%)	945	1142
2013	940 (59%)	465 (0%)	1405	3114	671 (62%)	170 (8%)	841	1038
2014	520 (64%)	331 (1%)	851	2781	1119 (87%)	132 (8%)	1251	1026
2015	702 (63%)	417 (0.5%)	1119	2527	1063 (80%)	283 (4%)	1346	1044
2016	655 (100%)	163 (100%)	818	2248	866 (78%)	348 (40%)	1214	1089
2017	695 (89%)	133 (70%)	828	1939	768 (83%)	214 (12%)	982	1076

Salmon caught by all methods 1952 - 2017



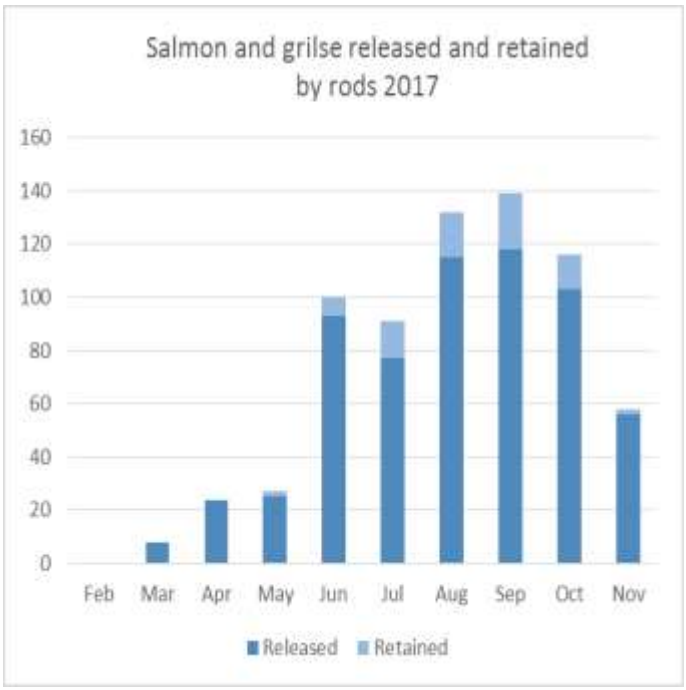
Sea trout caught by all methods 1952 - 2017

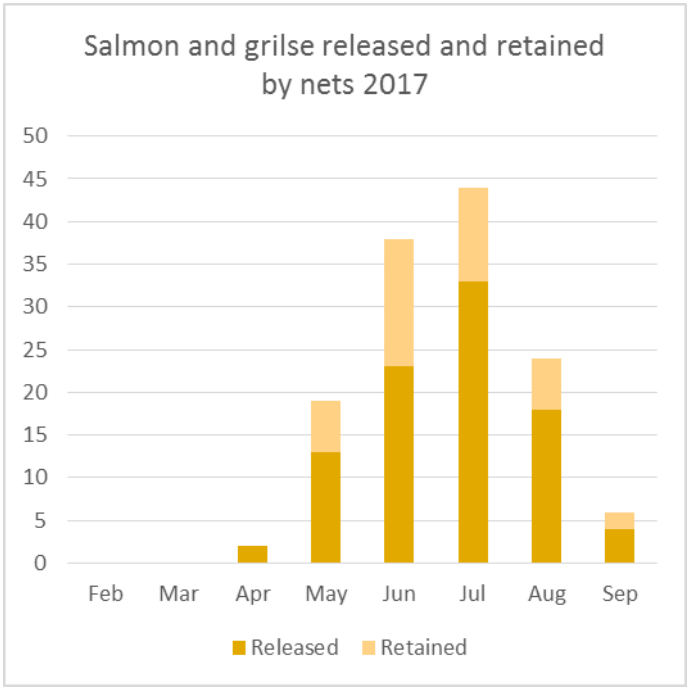


STOCK ASSESSMENT

Salmon and grilse run in 2017

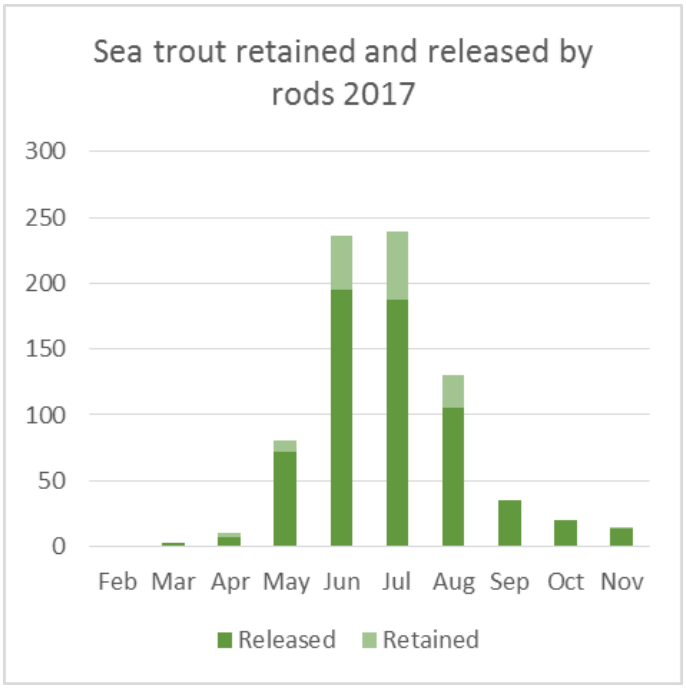
Using the catch data that is returned every year by salmon Fishing proprietors we are able to develop a picture of when the fish where coming in the system and being caught. In 2017, it can be seen that there was a decent run of fish in June but that the main run entered the system between August and October with most salmon being caught in September. This earlier run of fish is becoming a regular feature on the River Nith with the main run coming to an end in October. It was encouraging to see that all of the fisheries took on board the recommendations made by the Nith DSFB to aim for 80% C&R rates. The total C&R rate was 89% for the Rods and 70% for the nets, which is a large increase on previous C&R rates.

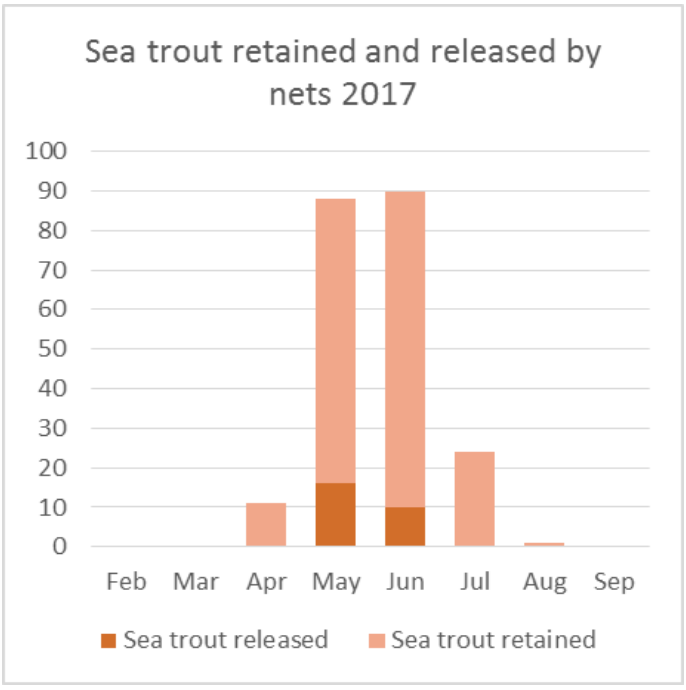




Sea trout run in 2017

The charts below show the number of sea trout retained or released on a monthly basis by both nets and rods. Here it is possible to see that the main runs of sea trout took place in the estuary in May and June whilst in the river it was a bit later in June and July. Catch and release rates for sea trout were 83% for rod anglers but disappointingly only 12% for the net fishery. This is concerning as sea trout populations are also on the decline, albeit at a slower rate than that of salmon.





STOCK ASSESSMENT

Juvenile salmonid surveys 2017

On an annual basis the Trust monitors many different sites throughout the catchment. We are monitoring to see if fish are present and if so, at what densities and diversity of species. The importance of this work cannot be overestimated. Fisheries managers rely on the results of monitoring to assist them in making future management decisions and hopefully, will be used to feed into the Conservation Limits modelling process in the future.

In 2017, over 150 sites were surveyed by fully trained staff using single run, semi-quantitative survey protocols developed by the Scottish Fisheries Coordination Centre. The densities of fry and parr were then classified using the SFCC national classification scheme. This classification scheme categorises the data according to five categories derived using data from over 1600 Scottish sites.

In order that we can compare year to year performance we have selected 10 sites throughout the catchment. These sites are located on the main stream River Nith and its tributaries. The ten sites will be sampled every year and it is anticipated that over time, long term trends will be established. The intention here is to detect any issues specific to individual areas of our catchment and enable managers to address those issues timeously.

Following electrofishing surveys conducted during 2017, there are now four years' worth of data from these ten sites and it is possible to start to see short-term trends. These results are displayed in the following table and graphs.

Electrofishing results for the Ten Annual sites in 2017

Watercourse	Site code	Location	Salmon fry (/100m²)	Salmon parr (/100m²)	Trout fry (/100m²)	Trout parr (/100m²)	Other species
Nith	1	Downstream of Nith Lodge, New Cumnock	131	26	5	9	SL
Nith	2	Downstream of Boig Road Bridge, New Cumnock	34	1	1	0	SL, M
Nith	3	Upstream of Guildhall Bridge, Kirkconnel	44	0	5	0	SL, M
Nith	4	At Auldgirth New Bridge	15	0	0	2	SL, E
Afton	5	Upstream of Blackcraig Bridge	245	49	0	4	-
Crawick Water	6	Downstream of Spango Bridge	110	5	1	0	-
Mennock Water	7	Upstream of confluence with Glenim Burn	223	0	58	9	-
Scaur Water	8	Downstream or Bridge at Glenwhargen	28	15	17	0	-
Cample Water	9	Downstream of bridge at Kirkbog Farm	136	0	13	0	SL, M, E
Dalwhat Water	10	Upstream of Bailwood Plantation	39	8	5	1	-
		Average of all sites:	*100*	*10*	*11*	*2*	

Key to other species: E – Eel, M – Minnow, SL - Stone Loach, L – Lamprey, SB – Stickleback, G – Grayling, F – Flounder, P – Pike.

Key to classification of salmonids per 100m²

absent	very poor	poor	moderate	good	excellent

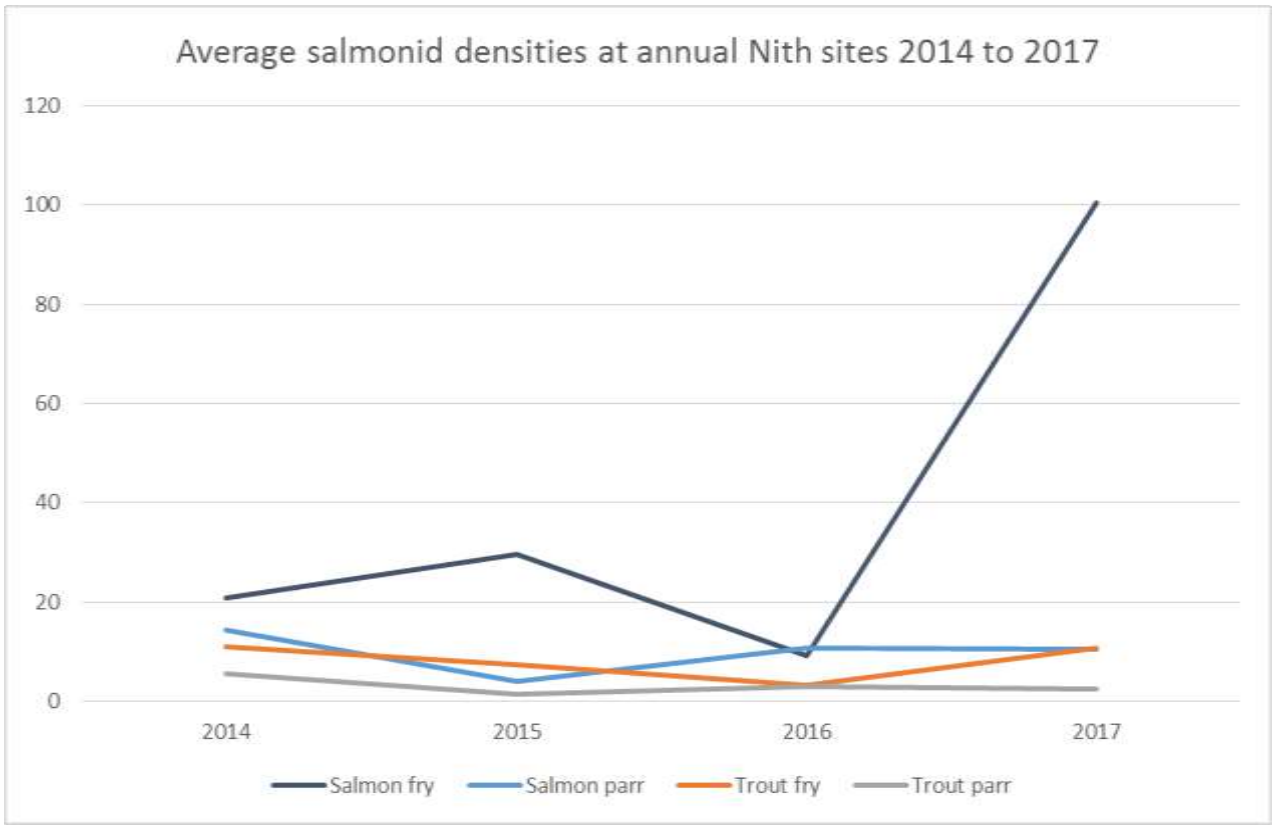
As can be seen in the associated table and graphs, there was an increase in the number of salmon fry found at all sites. This is encouraging and one theory is that the mild weather and limited flooding events experienced during the 2016/17 winter period resulted in improved egg and fry survival rate. All of the sites surveyed are selected for their good fry habitat, specifically salmon fry.

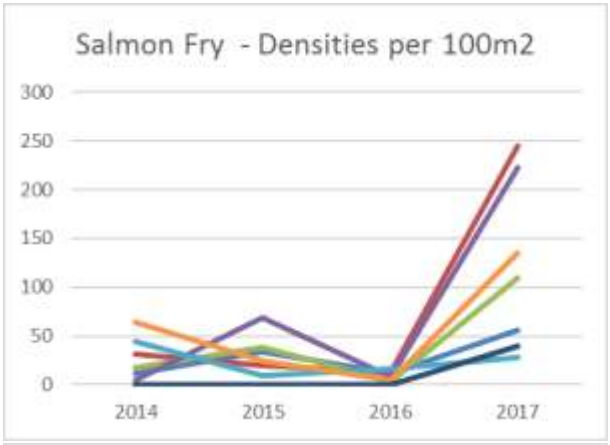
Of particular note:

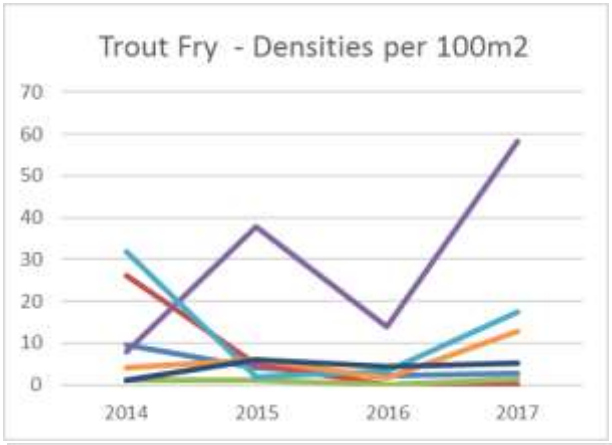
- It was encouraging to see the increase on fry numbers on the Cample Water as it had been noted in last year's report that there had been a consistent downturn in fry numbers for the last three years.
- Salmon fry and parr densities appear to fluctuate in the Crawick Water at the selected site. The majority of the Crawick Water contains excellent parr habitat but fry habitat is limited due to the presence of large substrate. This may go towards explaining these fluctuations.
- The Mennock is predominantly a sea trout river and this is reflected in the number of trout fry present.
- The supressed salmon fry densities observed in 2016 appear to have been due to flood damage from the frequent strong flooding episodes experienced in the winter of 2015/16.

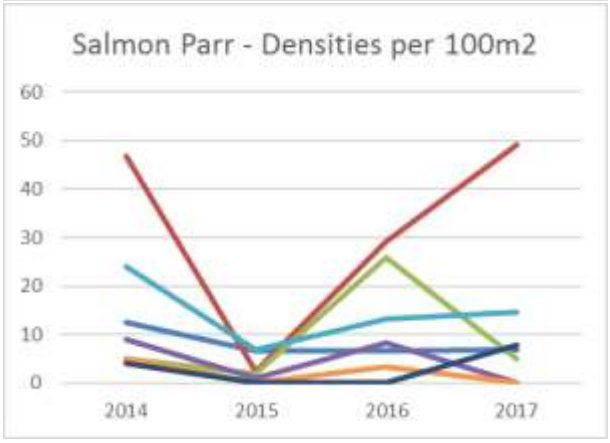
Stock Assessment

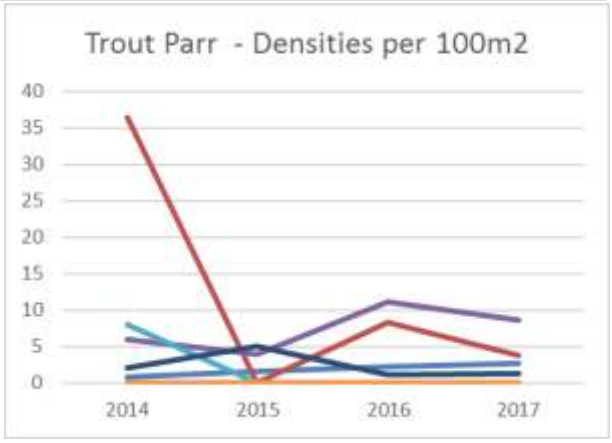
Juvenile salmonid surveys 2017 – Fish densities at Annual Health Check sites

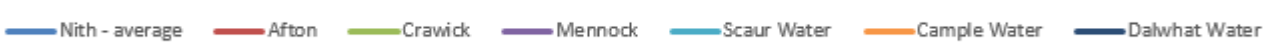












PROTECTION

Fish rescues

A very important part of the work of our Trust is to assess the health of our aquatic environment and our populations of fish. Prior knowledge of where those populations are in the catchment is important when it comes to protecting them from known dangers. In an ideal world we would separate development from the aquatic environment completely and thus avoid the effects of incidents of pollution however this is often not possible due to the nature of some development projects. Pipeline laying, open cast coal mining, cable line construction, forestry operations and road construction are only a few examples of industries that have the potential to harm our fish populations.

Fish rescue on the Bogrie Lane (Gas Pipeline)

When it is not possible to avoid construction from being in close proximity to fish we create that separation by temporarily removing the fish to a place of safety until the danger has past and the construction task is complete. Fish recues often involve the Trust removing fish by means of electrofishing prior to invasive instream construction machinery entering the watercourse. By adopting these measures we are able to assist with the mitigation of impacts on the fish community of our rivers.

Predation

The Trust holds a wealth of data about the River Nith, its stocks of fish and many physical features relating to the catchment that have the potential to influence those fish. This information is used to support the work of the Board in making management decisions to benefit those species that they are statutorily charged with the welfare of i.e. salmon and sea trout. An example of this process of the two organisations working together is when the Board applies to the Scottish Government for a licence to control avian predators such as cormorants and goosanders.

Cormorant

Before granting a licence to shoot a protected species the Scottish Government must be satisfied of a number of criteria including:

- Is this action necessary
- Have alternative non-lethal methods been attempted
- Will the removal of a specific number of birds place that species in jeopardy
- What will the benefit of removal of some birds be to the fish population
- Will the licence be exercised in a responsible manner

In order to fulfil all of the criteria above there has to be an auditable paper trail of facts and figures which serves to justify the actions taken. Some of the data used in this process is the catch figures where we can clearly see that there has been a decrease in the number of salmon and sea trout in our rivers. The Fishery Board conducts whole river bird counts twice during the year to ensure that we have accurate data on bird populations in the Nith catchment. This information is vital when applying for a licence to shoot a protected species. In addition the Trust calculates the potential loss of smolts to the River Nith catchment if the known population of predatory birds is left to predate on our stocks of fish. This calculation is worked out on information gained from analysis of gut contents of birds shot previously under licence on the River Nith.

All in all this is a lengthy time consuming process which is necessary for the Board to fulfil if it is to continue to gain a licence to shoot limited numbers of predatory birds. The Board, supported by the Trust, considers that this is an important aspect of its management of salmon and sea trout in the River Nith.

HABITAT AND WATER QUALITY

Reinstatement of Dalgig Burn

The Nith Trust has been involved with the Dalgig Burn, a tributary of the River Nith which flows through the surface coal mine at Greenburn near New Cumnock. That involvement has included assisting with aquatic surveys and analysing data gained from those surveys to enable an assessment of the impacts from the mine to be made. During early survey work on the Dalgig Burn an impassable barrier to salmonids was identified. The barrier was a former, now redundant, hydroelectric dam dating back to the 1950s.

Consultation with the mining company Kier and a desire to extract coal under the Dalgig Burn course resulted in the Burn being temporarily diverted for a number of years. The coal has now been extracted and Kier have reinstated and re-routed the Dalgig Burn through its new course, minus the impassable fish barrier. Grass has been planted on the banks of the new channel but the important bioengineering work of planting for stability and habitat for fish has fell to the Trust to complete. Using willow whips of native Nith providence, the Trust assisted by Board staff have strategically planted the banks to gain fish cover in future years, create shade for fish, a medium on which terrestrial invertebrates can thrive and thus feed fish and in addition provided bank stability to the new channel. The Trust will continue to survey the Dalgig channel to monitor its recovery as a spawning habitat.

Planting willow on Dalgig Burn

Pollution investigation

Fish are the primary species of most importance to the Nith Catchment Fishery Trust but not to the exclusion of others. When considering the health of a watercourse it is important to look at other aquatic species to gain a comprehensive assessment. The Trust Biologist is trained in the collection of invertebrate samples, their storage and identification. This is a useful skill and one which benefits the Nith by providing an alternative index to fish when assessing water quality.

Stonefly Nymph

So how does looking at aquatic bugs and beasties tell us about the health of the water? The multitude of aquatic invertebrates in our watercourses all have a different tolerance level to pollution and consequently a corresponding score in biological terms. The presence of “high” scoring invertebrates suggests clean water of high quality. Conversely the absence of these species suggests a problem may have occurred and further investigation is necessary.

EDUCATION

Fishing for the Future project

The Trust ran the Fishing for the Future outdoor education sessions again during 2017 and invited seven schools to take part. The schools included St. Michael's Primary, Dunscore Primary, Duncow Primary, Georgetown Primary, Sanquhar Academy, Wallace Hall Academy and St. Joseph's College.

Dunscore Primary School visiting the hatchery

Sanquhar Academy dissecting a rainbow trout

Duncow Primary learning about Marine life

Learning about the freshwater phase of a salmons life

7 schools

175 children

39 sessions

St. Michael's Primary cooking their own trout

Exploring the Shore

Getting hooked on fishing!

EDUCATION

Nith Young Anglers Club

In a bid to encourage new anglers into the sport, the Trust has organised an angling club specifically for Young Anglers on the River Nith. This is called the Nith Young Anglers Club and has proved to be extremely successful. We take a group of up to 20 youngsters out fishing once a month. Where and what we fish for changes every time and we provide professional angling instruction from Borderlines and all of the equipment required so that the children can learn different methods of fishing. One of the keys to our success is that we encourage the whole family to become involved and take up the sport. Of the 20 young anglers that started in February 2017, we now have 13 anglers who are hooked on fishing and keen to continue!

Dumfries and Galloway Angling Association have generously donated our Young Anglers with 2018 season tickets to fish the River Nith. Fingers crossed they will catch some salmon and sea trout. None of this would be possible without all of the fisheries that have allowed us to us their facilities (DGAA Drum Loch, Buccleuch Estate, Blackwood Estate, Dunscore Coarse Fishery, Dalswinton Estate and Friars Carse Hotel), those that donated equipment and prizes to the Club and the financial support from the Nith District Salmon Fishery Board, Holywood Trust, D&G Council's Nithsdale Area Committee, the Misses Robinson Trust and the kind donations from anglers. A huge thank you to all.

EDUCATION AND HABITAT

Blackwood Pond

With the success of the Nith Young Anglers Club, came the realisation that we really needed a place where we could bring schools and youngsters to learn how to fish and that would provide a backup for days when we couldn't access the river. Richard Gladwin, owner of a pond at Blackwood which is very conveniently located right next to our offices, has kindly offered us the use of the pond. However, the pond was badly over-grown and, in its current state, was unfishable. During the Autumn of 2017, the Board and Trust staff started to clear around the pond, removing a lot of trees and scrub that surrounded the pond and then brought in a digger to clear the weeds. Pupils' from St. Joseph's College Rural Skills class have assisted us in replacing some of the rotten sleepers along the edge of the pond and cutting back Rhododendrons to clear the island and banks of the pond. It is really starting to take shape now and in 2018, we plan to stock the pond and aim to have children fishing on it in the Spring.

Before | During | After

Habitat Enhancement

An important part of the work of the Trust is to look after the habitat of the riparian zones of the tributaries of the Nith. Many of these areas have been fenced off previously to allow the bankside vegetation to thrive with the consequent benefits that are derived by a flourishing diverse bankside growth. These areas support biodiversity in general but specifically support populations of fish in often marginal aquatic habitats. The work involves the initial fencing works then planting with the appropriate riparian species. Maintenance of these areas can on occasions be onerous with repairs to fences and continued replanting of trees until they become established.

Sanquhar Academy Rural Skills Group planting trees on the Crawick Water

The Trust is currently maintaining its habitat scheme on the Crawick Water, an important spawning tributary of the River Nith. To assist the Trust with this task the pupils of Sanquhar Academy Rural Skills class, have agreed to provide some input on this project. In return the Trust provides knowledge and skills to the pupils giving them the opportunity to practically utilise the theories taught. A mutually beneficial project for all associated which will benefit the Crawick Water and the fish residing within.

EDUCATION AND OUTREACH

The Nith Catchment Fishery Trust attended and ran a number of events throughout 2017 to raise awareness of the aquatic environment and demonstrate the work of the Trust. Below is a summary of some of the events, meetings, conferences and training courses attended by Trust staff and volunteers during 2017:

Tench Fishing at Morton Pond

Events attended
Burgh River Opening Ceremony
D&G Environment Day
Galloway Country Fair
Wallace Hall Science Careers Day
Nith Sea Trout Experience
AST Smolt Conference
Holywood Trust Christmas gathering
Wallace Hall Biology Day
Estonian FLAG visit to the River Nith
Wallace Hall Careers Day

Invertebrate sampling at Sanquhar

Sea fishing at Carsethorn

Meetings and conferences attended
NCFT Directors meetings x4
NCFT Annual General Meeting
Fisheries Local Action Group meetings x2
Burgh Anglers AGM
NDSFB Board meetings x4
NDSFB Qualified Proprietors Meeting
NDSFB Annual Public Meeting
FMS Members meeting
FMS AGM
Funding meetings x2
Friars Carse Fishings meeting
SFCC Biologist's meeting
FMS conference
Fisheries Management Plan meeting
Meeting with Walter Crozier x2
Borderlines meeting

Estonian FLAG group visit Nith

River survey at Dunscore

Training completed
Scale reading course

Education sessions and Presentations given
High school field trips and sessions x12
Primary school field trips and sessions x36
Hosted Angling Days at Dock Park x1

Young Anglers filming

Galloway Country Fair

Trout fishing at Drum Loch