Cromarty Firth Fishery Board Annual Report 2016/17 year ending May 2017

Frequent rainfall and high flows in July brought reasonable numbers of grilse into the regions rivers, although the runs slowed markedly later in the season. There then followed a period of very low rainfall particularly at the crucial time for broodstock collection on the Blackwater during November.

The trend for an increase in the numbers of multi-sea winter salmon and a reduction in late running grilse continued again in 2016.

Catch and counter data

Coastal bag nets in the Cromarty region did not operate in 2016 because of Scottish Government salmon conservation regulation.

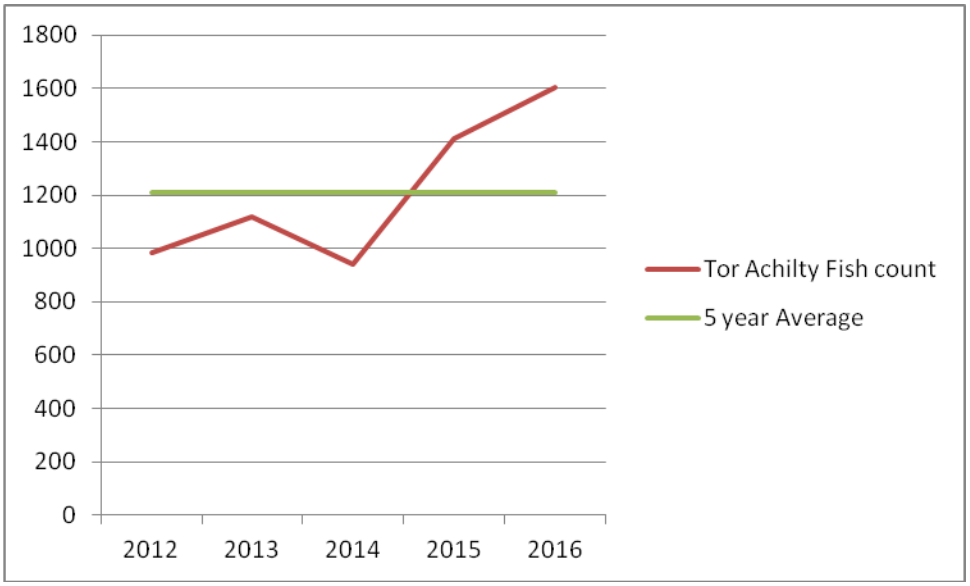
The net and coble fishery took 2 salmon, 33 grilse and 4 sea trout. The total salmon and grilse catch of 35 compares with the 2015 catch of 27 and the 5-year average of 39.

The rod fishery on the Alness reported a total catch of 256 salmon and grilse with 83% of these being returned. This compares with the 2015 catch of 336 and a 5-year average of 360.

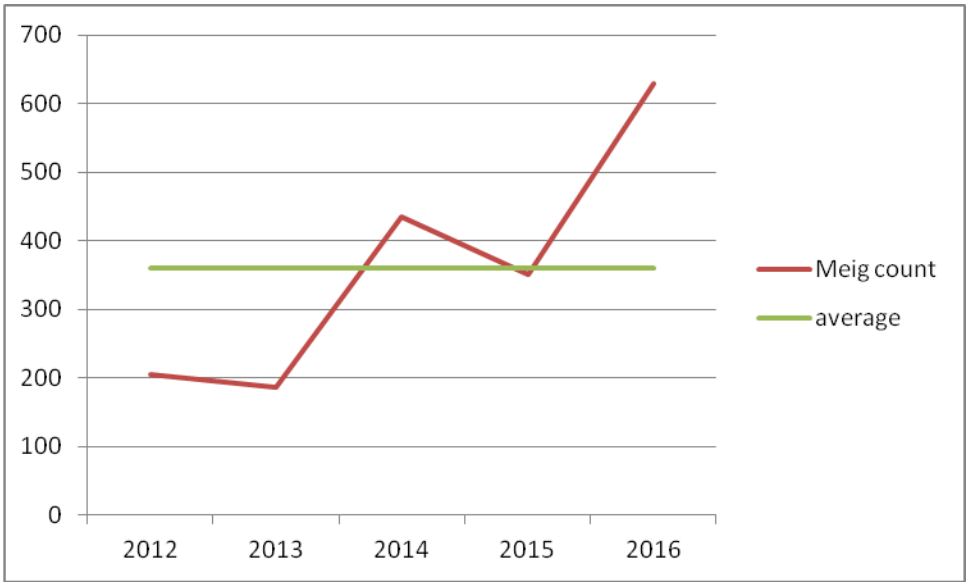
The rod fishery on the Conon reported 1,077 salmon and grilse with 85% of these returned. This compares with the 2015 catch of 1,301 and a 5-year average of 1,179

Fish counts at SSE Dams

The 2016 count of fish through Tor Achilty Dam at 1,603 was the highest since 1979. This compares with the 2015 count of 1,411 and the 5- year average of 1,211.

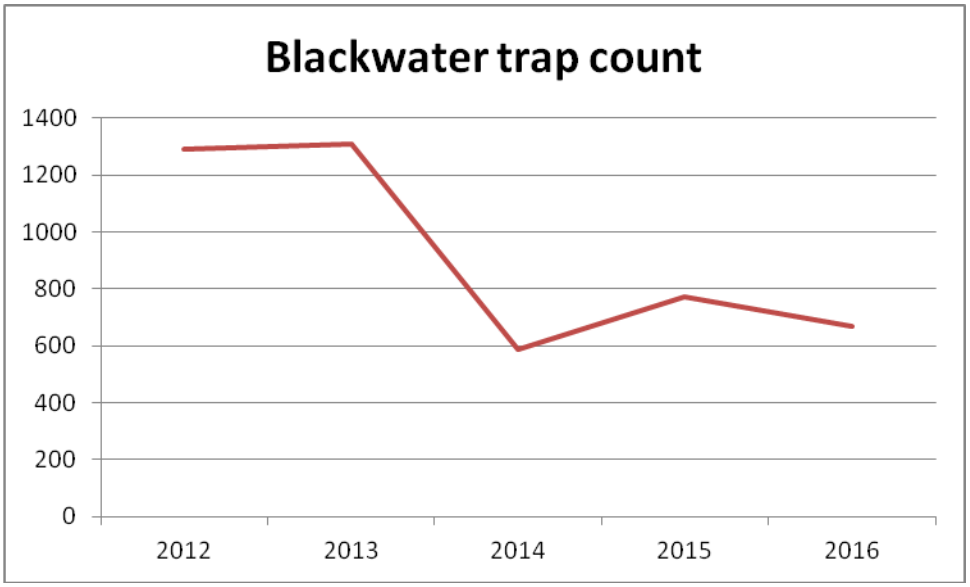


The 2016 count through Meig dam was 629 compared with 342 in 2015 and a 5-year average of 274.



Count of fish caught at Blackwater fish trap

The count of salmon and grilse caught at the Loch na Croic trap was 669 compared with 770 in 2015 and a 5-year average of 925 .



Bailiffing

Bailiffs removed 30 persons from the rivers within the board's area for fishing by rod and line without permission and made one arrest. Seven coastal boat patrols of the board's area were carried out
Working with Police Scotland's local wildlife crime officer; local hotels, sea food merchants and restaurants were visited as part of a campaign to highlight the changes in legislation regarding the carcass tagging of wild salmon.

Rikki Golabek passed the Institute of Fishery Management Certificate examinations he sat earlier in the year.

Hatchery Replacement

After the demolition of the old hatchery building, work started on the construction of the new building in June.

On the 14th of December Lord Nickson officially opened the new hatchery at Contin which has been named in his honour in recognition of the enormous contribution he has made and continues to make to salmon conservation in the Cromarty Firth region.

The opening was attended by Board members, local anglers, Board and SSE staff. Lord Nickson took the opportunity to emphasise the importance of the close working partnership between the Cromarty Firth Fishery Board and SSE. He also was able to thank the SSE engineers for their achievement in completing such a complex project in the very limited time period between the demolition of the old hatchery in June and the start of broodstock collection in November

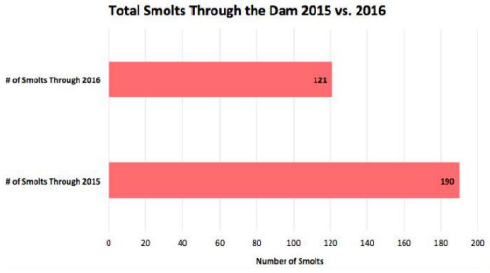
Despite there clearly being a large number of salmon throughout the summer at Loch na Croic the extreme drought through the trapping period discouraged fish from moving upstream into the trap. We were supplied with 3 freshets by SSE during the trapping period, which were timed to coincide with what little rainfall there was. They did result in some fish entering the trap but many dropped back and spawned downstream. Some of the grilse were so small this year that they passed through the screens at Loch na Croic and will have spawned in the Blackwater up to the falls at Silver Bridge. A total of 670 fish were caught at Loch na Croic producing 970,000 eggs. This allowed for stocking the Blackwater with the rest of the Conon tributaries being well stocked by natural spawning this year.

Projects / research works

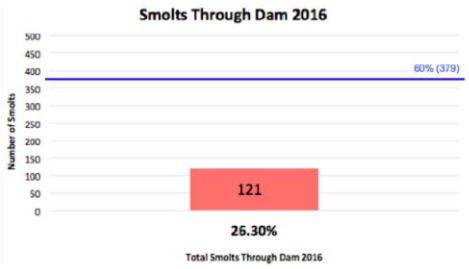
Meig smolt project

Further smolt trapping and tagging work took place on the Meig this spring to assess the effectiveness of fish passage at Meig Dam. PIT tags were inserted into smolts at a trap at the head of Loch Meig and the individual fish were recorded by a decoder as they passed through Meig Dam. After the disappointing smolt escapement last year an experimental pump was installed at Meig Dam to create a flow of water to guide smolts towards the entrance to the fish lift.

Graph 1



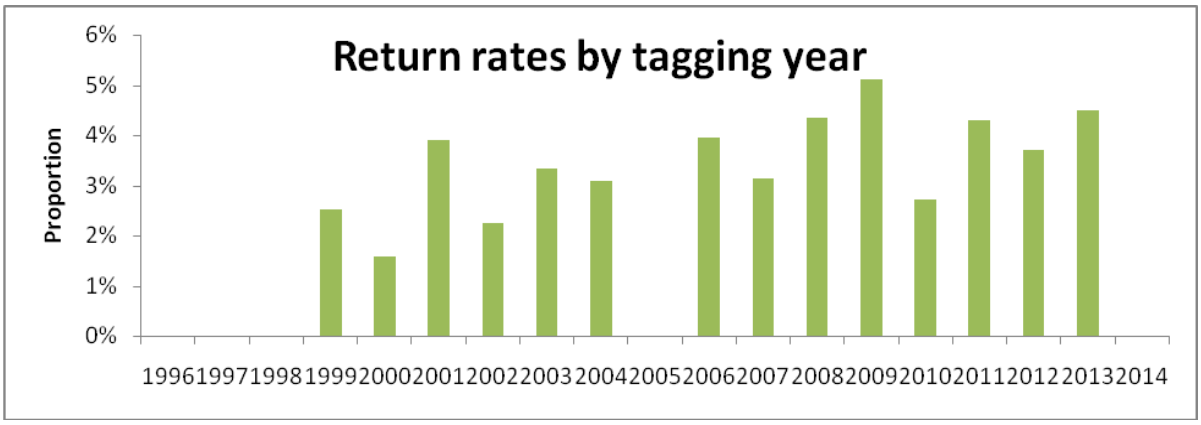
Graph 2



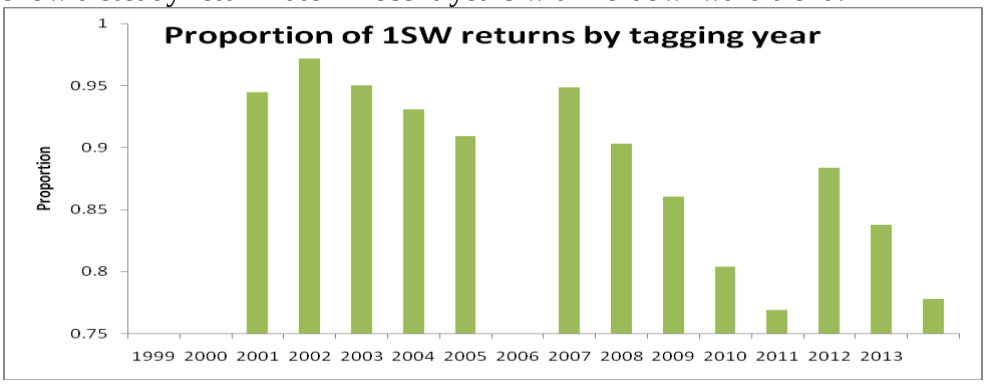
Unfortunately the results in 2016 were worse than in 2015 with only 26% of tagged smolts finding their way out of Meig reservoir compared with 30% in 2015. Of these 43% found the entrance to the fish lift whilst the pump was running compared with 57% when it was switched off.

Marine Scotland Science collaboration

We are working with Marine Scotland Science to integrate more than 15 years of PIT tag data from the River Bran with other data sets so that the Conon can be included in a network of index rivers for Scotland.



Initial analysis of return rates through Tor Achilty (not including returns from rod catch) show a steady return rate in recent years with no downward trend.

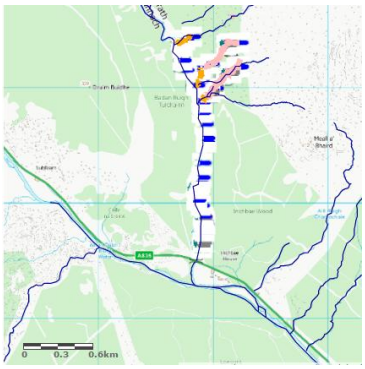


A clear trend over the last 10 years has been the reduction in the proportion of grilse in the returns and an increase in the proportion of multi-sea winter fish. This mirrors the trends in both rod catch and trap catch on the Blackwater.

Bankside restoration progress

Native trees are an important part of the river habitat which supports our fish stocks. They provide a significant nutrient input which supports the invertebrates salmon and trout feed on. Their roots stabilise banks and provide shelter for fish. The shading effect of native trees helps to reduce peaks of summer temperature, which in upland streams can threaten fish survival.

Work is complete on the development of a new App to record forestry pressures on rivers. The App has been developed with the Forestry Commission and Scottish Fishery Coordination Centre and tested on the River Blackwater and its tributaries. The App allows accurate collection of data in the field onto a tablet or smart phone which is then stored and uploaded into GIS maps.



output from App

Strath Rannoch tree growth

We have had further meetings with the Forestry Commission, Woodland Trust and local estates to find opportunities to restore riverside woodland habitats across the region

Acoustic smolt tracking project

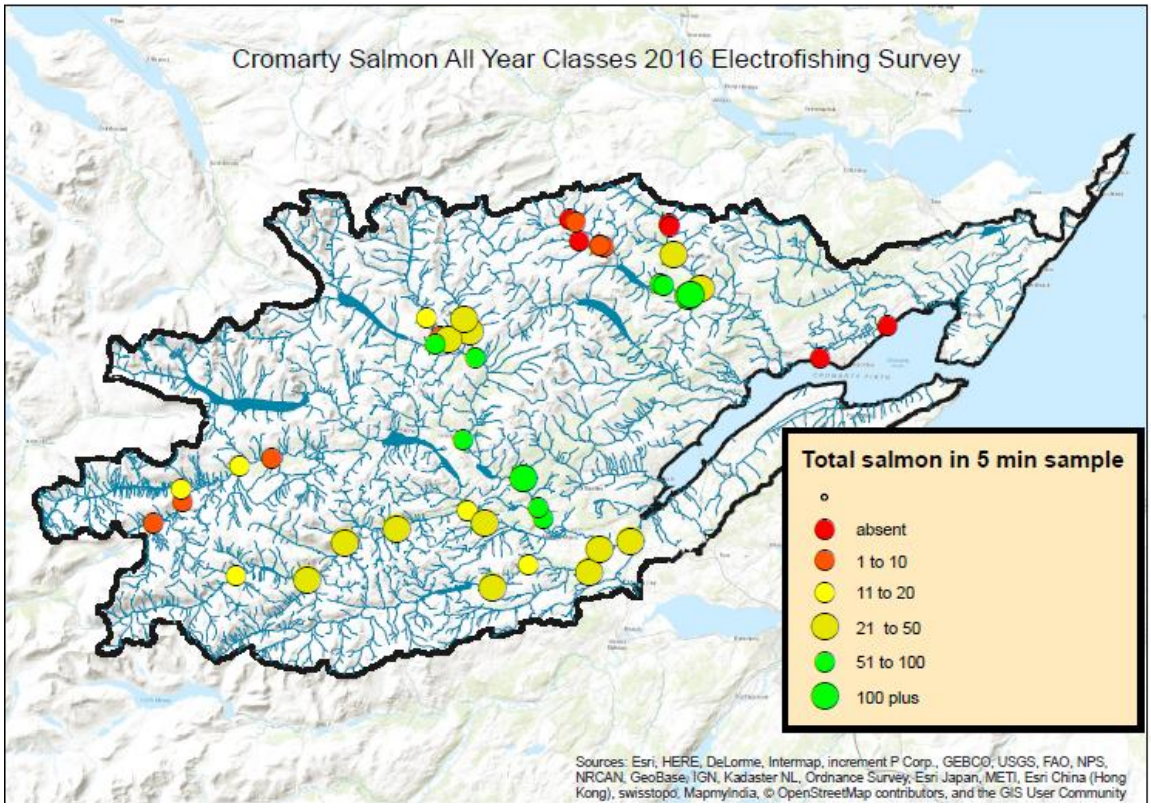
A collaborative project with SSE, Glasgow University and Aberdeen University took place this spring to look at the behaviour and survival of smolts as they migrate to sea through the Cromarty Firth. Salmon smolts from the Bran trap were tagged with acoustic tags and a network of listening bouys were deployed in the Cromarty Firth and Inner Moray Firth. The bouys have now been recovered and their data downloaded for analysis.

Nutrient Research

Board staff worked with research teams from Glasgow University and Marine Scotland Science to complete three weeks of electro-fishing, invertebrate and algal sampling. The results of this field work will be used to assess the effects of nutrient restoration.

Electro-fishing surveys

The data from the 2016 electro-fishing surveys has been entered into the SFCC database and GIS has been used to map the distribution and abundance of fish stocks in the Conon and Alness catchments. A report will be written up and made available on the website.



Invasive Species Projects

Mink Project

The Trust continues to support the work of the Scottish Mink Initiative. This involves maintaining a network of volunteers who operate mink tracking pads and traps. There have been a number of sightings in the region. After each sighting traps were quickly deployed and four mink were captured.

Invasive Plant Species

With funding through RAFTS and SEPA the Trust continued to manage the control of Non- Native Invasive plant species along the banks of the regions rivers this year.

Giant hogweed was sprayed in two catchments and its density has been considerably reduced.

Regrowth of Rhododendron along the banks of the Orrin was sprayed and native trees are now growing well to replace it.

A mixture of stem injection and spraying was used to treat Japanese knotweed in six catchments.

Cromarty Junior Angling Project

With a £3770 grant from the SSE Fairburn Community Fund the Moray Firth Trout Initiative (MFTI) and Cromarty Fisheries delivered a hugely successful junior angling project this spring. The aim of the project was to increase junior participation in community angling in the Marybank and Strathconon area.

Marybank Primary practising their fly casting lesson with Allan Liddle

Children from three local primary schools were given the opportunity to "experience angling" at Tarvie Lochs trout fishery where they got to try angling in a safe and controlled environment with a qualified instructor. The excellent and professional instruction was provided by SGAIC Instructors, David Mateer and Allan Liddle. The children received instruction in fly fishing, spinning and bait fishing before being let loose to test their skills on the wild and stocked trout. The children also learnt more about the ecology of their local river with an invertebrate kick sampling session and an electrofishing demonstration in the local burn. Throughout all sessions they were reminded how important it is to be a responsible and sustainable angler. As part of the project an extensive resource of angling and safety equipment was purchased to ensure the children were properly equipped for their first days fishing. This equipment is now a resource for future junior angling activities and will be available to other Fisheries Trusts and Angling Clubs around the Moray Firth.

Sorting the invertebrates collected from the kick sample.

Over the 3 days, 48 pupils from the Marybank Strathconon and Tarradale Primary Schools had a fantastic time at Tarvie Lochs. All 3 schools managed to catch and land some stocked trout and even some wild brown trout were caught on the fly. The children were clearly inspired by the experience and at the end of each session there was a lot of enthusiasm from them all to continue angling. To maintain the momentum generated by the angling days a list of children interested in taking the sport forward was collected and information about local angling clubs and places to fish distributed to them. Hopefully we will see an increased uptake of junior memberships at some of the local clubs.

Website

The website has been further developed this year and has allowed us to make public the activities of the Board and Trust.
The site is at www.cromarty.dsfb.org.uk and gives access to important strategic documents such as the Fishery Management and Biosecurity plans as well as regular news updates, monthly reports and dam counts.

Proposed programme of works 2017 / 18

Bran PIT tagging of salmon smolts (1000 smolts joint project with MSS /SSE)

Meig PIT tagging of salmon smolts (smolt escapement at Meig dam SSE funded)

Blackwater PIT tagging of salmon smolts (MSS SARF funded project)

Nutrient restoration research (Glasgow University / MSS)

Acoustic tracking of salmon smolts through hydro and non hydro lochs (Glasgow University / SSE)

Schools angling project (Funded by SSE Fairburn Windfarm and support from Trout quest)

Schools education project (10 schools already agreed)

Allt Graad electro-fishing survey (RWE Npower)

RLI development of genetic tool for stock assessment (dependent on funding)

sawbilled duck counts

Scope construction of temporary smolt trap on River Meig

Investigate feasibility of fish counter installation at Alness weir

Tree planting (Forestry Commission Scotland to supply trees and materials)

Production of Conservation Plan and Fishery Management Plans

Marine Scotland Adult Salmon Tracking Project

Contribution to Wild Fishery Reform Stakeholder Reference and National Strategy Groups

Contribution to Wild Fishery Reform Technical Working Groups

Contribution to Board of Fishery Management Scotland

Good governance compliance

Meetings
The annual meeting of the Board and qualified proprietors was held on 17th June 2016 at Torr Achilty. This meeting was publicised by means of invitation to members. No members of the public chose to attend. The minutes from this meeting can be viewed at www.cromarty.dsfb.org.uk

The annual public meeting was held on 9th October 2015 at Torr Achilty. This meeting was publicised by means of an advert in the Ross-shire Journal which was published on 7th October 2016. No members of the public chose to attend. The minutes from this meeting can be viewed at www.cromarty.dsfb.org.uk

Annual Report and Accounts
This annual report will be published at www.cromarty.dsfb.org.uk

The accounts will be published at www.cromarty.dsfb.org.uk. The accounts for 2015/16 were published at www.cromarty.dsfb.org.uk and a copy sent to Scottish Government.

Complaints
The Board has set up and maintains a complaints procedure which can be viewed at www.cromarty.dsfb.org.uk. There have been no complaints received to date.

Members' interests
The register of members interests can be viewed at www.cromarty.dsfb.org.uk . We will include a standing item at each Board meeting inviting Board members to declare new/amend existing interests and all such instances are recorded in the minutes of these meetings.

Appendix I

CKD Galbraith
Reay House
17 Old Edinburgh Road
Inverness
IV2 3HF

Email cromartytag@hotmail.co.uk

Website www.cromarty.dsfb.org.uk

10/5/2016

Dear Angler

Please find the enclosed card logsheet. We are also posting the tags to you directly rather than through your club to save them any extra administration. Instructions for the scheme remain similar to last year's.

- Each angler will receive a total of four tags for the 2017 season and a logsheet which records their tag details. As tags are unique to each member they must not be swapped between anglers. The tags and logsheet should be carried at all times when fishing for salmon in the Cromarty Firth region as they effectively constitute part of the permit issued to members. Tags and logsheets will be inspected by Water Bailiffs.
- If a salmon is killed, it must be tagged immediately after capture and the logsheet filled in. Pass the thin end of a tag through the gills of the fish and out through the mouth. Lock the end in the slot provided at the other end of the tag. Ensure that it is firmly locked in place by gently pulling the tag from both sides of the locking slot at the same time. The tag is now tamper-proof and cannot be removed without breaking it**. DO NOT** practice on the tags you have been given as once they have been locked in place they cannot be re-used. Only one salmon can be tagged per day.
- Only four tags will be issued to each angler therefore members are **STRONGLY** advised that if they wish to fish on a catch and release basis then they have at least one unused tag remaining in case they catch a fish that is badly hooked or damaged. If an angler has no tags remaining then all fish **MUST** be released irrespective of condition.
- At the end of the season, please either return your logsheet to your angling club along with your annual return or email details of tags used and fish captured to cromartytag@hotmail.co.uk . There is no need to return unused tags as these cannot be used after the end of the 2017 season or by anyone else.
- We would be grateful for scales from any salmon or sea trout which are retained and bailiffs will have scale packets to collect them.

Wishing you an enjoyable and successful angling season

Simon Mckelvey

Director Cromarty Firth DSFB

Conservation Policy 2017

Salmon are classified as an endangered species throughout Europe. If they were mammals or birds they would be protected and fishing would not be allowed. There is therefore an incentive for anglers to act responsibly. Spring fish are sufficiently scarce for it to be foolish to kill any of them. The long term trend of grilse returning from sea appears to be declining and so the numbers killed should be minimized. Sea trout over 1½lbs are particularly valuable so should be released.

ENFORCEMENT

- Proprietors and clubs are urged to make compliance with this policy a condition of their leases and permits

SALMON UP TO 30TH JUNE

- All salmon and grilse to be returned i.e. 100% Catch and Release.

SALMON AFTER 30TH JUNE

- All fish over 30" / 75cm long (about 10lbs) to be released.
- A maximum of one fish (i.e. salmon/grilse under 30"/75cm about 10lbs) per angler per week may be killed.
- **Up to** a maximum of 4 fish (salmon/grilse under 30"/75cm about 10lbs) may be killed per angler per season in the Cromarty Firth rivers.

SEA TROUT

- A maximum of one sea trout over 1½lbs per angler per week may be killed but it would be preferable to kill only smaller fish.

GENERAL

- All coloured fish must be released
- Use barbless hooks
- Do not use treble hooks
- The board is concerned that fish caught by worming may be more difficult to release unharmed. Where worming is permitted only circle hooks may be used
- An angler's first ever fish may be retained if desired
- When releasing fish, try to keep the fish in the water at all times and use knotless mesh landing nets.

FIN CLIPPED FISH

If an angler catches a fish that has had the adipose fin removed, please retain it and inform Simon McKelvey (07887 845648). These fish will have been PIT tagged and the information contained in these tags is important to the operation of our stocking programme. The fish simply needs to be scanned to retrieve the tag number. The angler keeps the fish, will be given a £5 reward and, in due course, the life history of the fish.

GYRODACTYLUS

Proprietors or their appointed nominees are being urged to ensure that anglers fishing their waters have completed and signed a declaration regarding sterilizing fishing equipment.

Equipment can be sterilized by using one of the following precautions:

- Dry equipment at a minimum of 20 degrees C for at least 2 days.
- Heat for at least 1 hour at a temperature of over 60 degrees C.
- Deep freeze for at least 1 day.
- Immerse in a solution suitable for killing Gs for a minimum of 10 minutes. Suitable solutions include; Virkon (1%), Wescodyne (1%), sodium chloride (3%) and sodium hydroxide (0.2%).