# *Tay District Salmon Fisheries Board*



## *Annual Report*
## *2015 / 16*

# *ANNUAL REPORT 2015 / 16*


| CONTENTS | PAGE |
|---|---|
| | |
| | |
| Tay District Salmon Fisheries Board Members and Staff | 2 |
| Chairman's Report | 3 |
| 2016 Report | 6 |
| Fish Counter Results 2016 | 22 |
| Duncan Glass BEM | 25 |
| What Happened to the 2016 Autumn Run? | 26 |
| Scottish Government Wild Fisheries Reform | 29 |
| Scottish Government Salmon Conservation Regulations | 31 |
| River Tummel Smolt Tagging Project | 33 |
| Aquaculture and Fisheries (Scotland) Act 2013 | 35 |
| Minutes of the Annual Meeting of Proprietors 2015 | 37 |
| Report of the Auditors to the Proprietors of Salmon Fisheries in the Tay District | 41 |
| Tay Salmon Catch Graphs 1952 – 2016 | 47 |
| Board Members Attendance 2015 | 48 |
| Acknowledgements | 48 |

## *TAY DISTRICT SALMON FISHERIES BOARD*

**Chairman**

William Jack (Mandatory for Viscount Stormont)

**Members Elected by Upper Proprietors**

S. Furniss (Mandatory for Dunkeld House Hotel)
C. Mercer Nairne
A. Riddell
G. Coates (Mandatory for Taymount Timeshare)

**Members Elected by Lower Proprietors**

D. Godfrey (Mandatory for Tay Salmon Fishing Company Ltd)
Councillor A. Munro (Mandatory for Perth and Kinross Council)

**Co-opted Members**

*Representatives of Salmon Anglers*

D. Brown
C. O'Dea (Tay Ghillies Association)
S. Mannion
I. McLaren
J. Wood

**Honorary Member**

J. Apthorp

**Observers**

G. Clark (Scottish Natural Heritage)
B. Roxburgh (Scottish Environment Protection Agency)

**Board Staff**

Tay District Salmon Fisheries Board, Site 6, Cromwellpark, Almondbank, Perth, PH1 3LW

| | |
|---|---|
| **Clerk** | **Telephone** |
| Inga McGown | 01738 583733, mobile 07786 361784 |
| | Email: ingamcgown@btconnect.com |
| **Fisheries Director** | |
| Dr David Summers | 01738 583733, mobile 07974 360787 |
| | Email: d-summers@btconnect.com |
| **Operations Manager** | |
| Michael Brown | 01738 583733, mobile 07748 968919 |
| | Email: mjabbrown@btconnect.com |
| **Bailiff staff** | |
| Craig Duncan | 07748 338667 |
| David Ross | 07974 360789 |
| Ron Whytock | 07967 709457 |
| Ross Pirie | 07971 695115 |
| **Kelt Reconditioning Unit** | |
| Steve Keay | 01738 583755 |
| **Website** | www.tdsfb.org |

## CHAIRMAN'S REPORT 2016

The 2016 season started well. Good numbers of spring fish were evident throughout the system and the numbers through the various counters were well above average. This strong run continued until the end of July and then rapidly fizzled out. There were very few grilse and an almost complete absence of late summer salmon. This experience was replicated in almost all rivers in Scotland and, as far as our river was concerned, looked very like the run pattern of the 1950s.

Let us hope this is not the case and that the coming season sees a big improvement.

2016 was not all gloom. SSE and SEPA have made considerable progress towards agreeing how and when water should be restored to the upper River Garry, a tributary of the Tay, which has been completely dry for over sixty years. Should this be re-watered, it will provide over 500,000 square metres of additional potential spawning habitat and will be the most important contribution to the Tay system that any of us has seen.

During the year, Michael Brown joined the Board staff as Operations Manager. He brings an almost unique experience as both a Biologist and a Ghillie, combining his scientific training with a good practical knowledge of the needs of the river and of those who use it.

Earlier this year, the Tay Foundation purchased two rotary screw traps which are operated by Board staff. The purpose of this is to trap smolts above the Pitlochry Dam, PIT tag them and, by means of an electronic detector at the base of the dam ladder, start to gain better information on the impact of the hydro system on smolt descent and gain a much more accurate assessment of marine survival.

Once again, I have to report that a great deal of time during the year has been taken up on the wild fisheries review. The Tay itself was categorised as level one, i.e. existing conservation measures were sufficient. However, the rivers Earn and Eden were classified as level three, requiring 100% catch and release throughout the season. After considerable lobbying by both the River Earn Improvement Association and the Eden Angling Association, as well as scientific challenge by the Board, I am pleased to report that both these rivers have been re-categorised as level 2, meaning, that if satisfactory conservation measures can be put in place, then the 100% catch and release requirements can be lifted for 2017.

I wish to thank the Board for their support throughout the year and to thank all staff employed by the Board for their efforts. I would once again draw attention to the work done

by our River Director, Dr David Summers, whose input, on our behalf, to the wild fisheries review, has been invaluable.

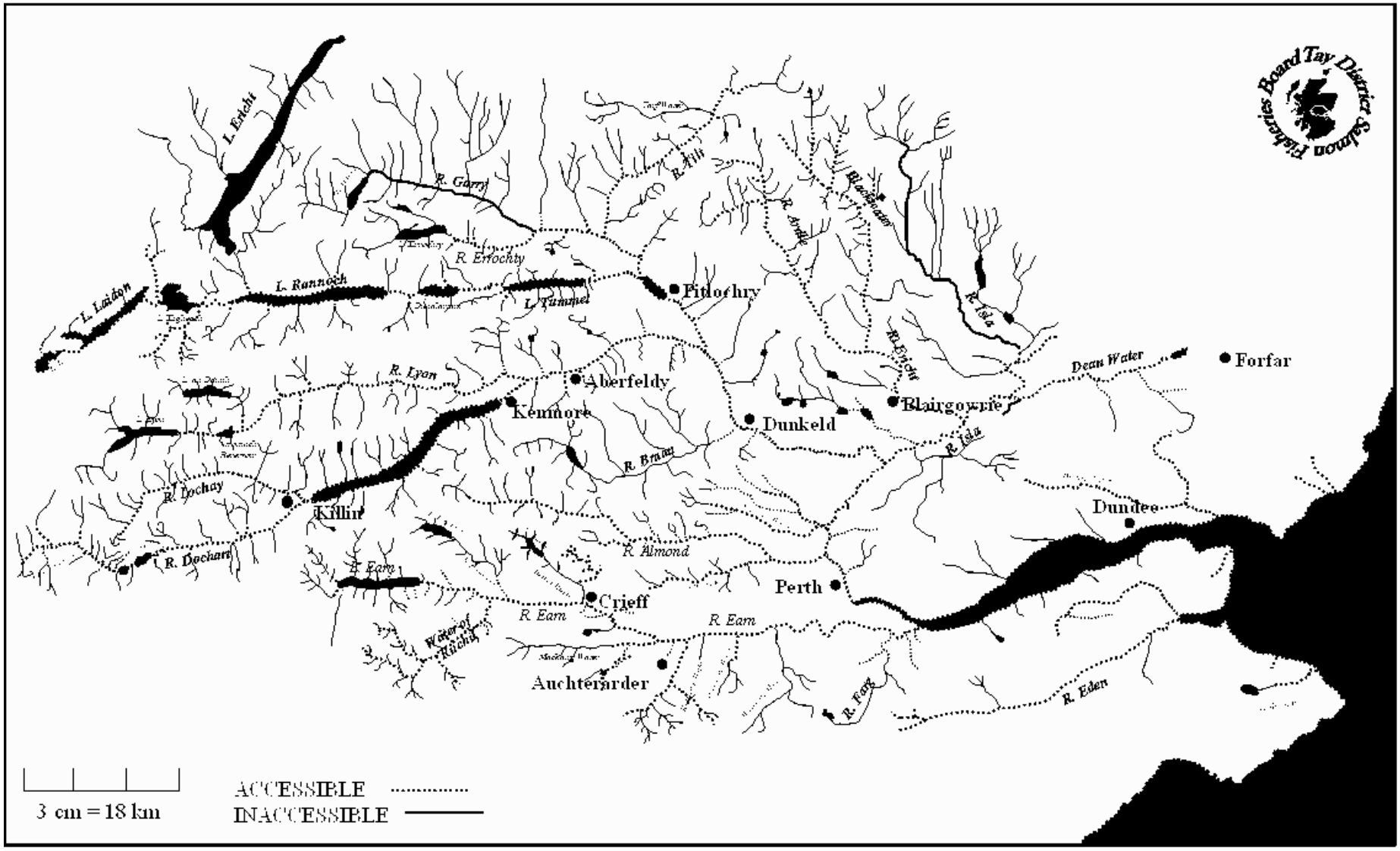
I wish you all a safe and successful 2017 season.

Yours sincerely



W H JACK
Chairman

## Salmon Distribution within the Tay District



## 2016 REPORT

The 2016 Tay salmon season opened on Friday 15 January. Although there had been relentless rain throughout the winter and major flooding in early January, by great fortune the few days immediately before opening day saw a return to drier wintry weather. This allowed the river to drop back and clear for a sunny opening day morning. Four springers were caught on the day. The largest landed was a 24 pounder at Findynate. However, the Redford Trophy for the largest Tay fish of opening day was eventually awarded to Gail O'Dea for a 14 pounder from Taymount's Linn Pool. After a circulating photograph revealed the 24 pounder appeared to have been hooked on the outside of the jaw. While a few more springers were caught on the second day of the season, catches seemed to dry up over the following week despite continued good water, which was a cause of some slight concern. However, with about a week of January to go, the rain returned once again and the river remained high and unsettled until about ten days into February. Very little could be caught therefore. Only 18 fish were reported on the Fishtay website in January compared to a five year average of 38. The hotspot during this period was the Linn Pool on Stobhall/Taymount.

While February started badly, the fishing picked up in the second week, when colder drier weather set in. From then on, the river was generally fishable. For some of the time the nights were frosty and snow fell inland. Given the loss of the first week or so, the fact that 159 fish were reported on Fishtay for the month against a five year average of 109 was a welcome relief from the initial concerns in January. The largest catches were made in the area from Stanley up to the Linn Pool.

Fishing conditions were generally reasonable throughout March. For most of time, the river ran between about three and five feet with only a few quick lifts, one at the start, one in the middle and one near end of month. Temperatures were generally fairly average, although some days were cool. 322 salmon were reported on Fishtay compared to a five year average of 343, but that average reflects some good Marches in the last few years. The best of the catches were spread from Stanley up to the Islamouth area, with Islamouth gaining the highest score. Middle Tay beats also started to pick up and some fish were caught on Loch Tay too.

April commenced with a rise in level, but the remainder of the month was mainly dry and the Tay fell from about five feet to less than one foot by the end. It also turned cool, with some snow even down to low levels at the end of the month. The total catch is again likely to have been very good, with 531 salmon reported on Fishtay against an average of 428. The catches were now better spread, with the middle river, the Tummel and Loch Tay all getting their share. However, the conditions favoured low water beats like Murthly 2 and Islamouth. The latter did very well with water on the low side for attracting fish into the Isla.

May saw a rise at the start of the month but the river then fell away until the 22nd when there was another rise. Thereafter it turned dry again. May proved to be another good month with 647 salmon reported on the Fishtay website against an average of 597. The focus for catches was mainly in the middle Tay area, the Tummel and the Isla, although the top beat was Islamouth with 98. That was the beat's best May for at least five years.

Like May, June was mainly a low water month. In the first half, the Tay was generally well under a foot on the Ballathie gauge. On the 16th, the Tay rose to about two feet and the second half saw levels slightly higher but still only at around one foot on average. These water levels helped some beats and hindered others, as might be expected. Islamouth was, once again, the main beneficiary recording an excellent 109. Overall, it was another good month with the main concentration of catches occurring from Stobhall/Taymount upstream, including the middle Tay area. The Isla also continued to see sport but, by then, the Tummel and Loch Tay had cooled off. Although the 506 fish reported on Fishtay was slightly less than the five year average of 526, it should be noted that, in the period 2011 – 15, four of the Junes were among the best since official records started in 1952.

July was a wetter month than June, though by no means a "wet" month. At the start, levels were slightly higher than they had been in June but, with several small to moderate rises over the month, the base level rose by about a foot by the month's end. 565 fish were reported on Fishtay compared to a recent average of 530, although it should be remembered that recently Julys have been poorer compared to what they were a decade and more ago.

While August commenced with quite low water, there were several modest rises early on and the base level rose to around three feet, peaking on the 12th. Thereafter, it was generally dry, often warm, and the level had fallen well back by the end of the month, although some small daily fluctuations did not always help the fishing. August saw a marked change in the catches however. Only 693 fish were reported on Fishtay compared to a recent average of 954. This was the start of a trend that set in for the autumn and seemed in part to have been due to a poorer grilse run.

September started off with quite low water but a good spate on 10th saw the river rise up to 6 feet, the first of four similar rises through the month. It was hoped initially that, with water, good runs of fresh fish would appear. However, that didn't really happen. Almost all beats, but not all, struggled compared to what they would expect. 742 fish were reported on the Fishtay website against a five year average of 1341. September was the most disappointing month of the year.

The final fortnight or so of the Tay salmon season was set up with a spate of nearly 6 feet on 29 September. Thereafter, levels fell away gradually, and the river stood at just over a foot on 13 October. On the 14th, rain returned and, on the last day, the river ran five feet up, but fortunately not coloured enough to wipe out fishing. While the Tay closed on the 15th, further rain saw the Earn peak on the 18th, but thereafter there was no appreciable rain there and the Earn closed on 31 October with quite low water. While the Eden saw a small rise on the 24th, it was a similar situation there too. Overall, October proved another disappointing month but not as bad in proportion as September. 578 fish were reported on the Fishtay website against a five year average of 1361. However, that 1361 includes several years of a trial season extension. 679 were reported in 2015 when there was no extension.

What bald figures cannot convey is that, in the autumn, the great majority of the fish caught were to some extent coloured and more of them appear to have been MSW than might be typical. After August, there was an unusual lack of fresh run fish. Indeed, such were the catches of coloured fish in some beats late on, that summer catches perhaps did not do justice to the numbers of fish that

must have entered the river at that time. The lack of fresh autumn fish was obviously a great disappointment after good spring catches and good spring fish counts (see pages 22 – 24), but it transpires the Tay was not alone. This appears to have been a widespread problem. This issue is considered in more detail on page 26.

**Catch and release – spring salmon**

In 2015 and 2016, the Board continued to recommend a policy of 100% catch-and-release of salmon up to the end of May. At the time of writing, the latest figures available are only for the 2015 season. These show an increase in compliance from 90% to nearly 97% from 2014 to 2015 (Table 1). This increase must reflect the introduction in 2015 of national mandatory catch and release to 31 March.

| Year | Number released | Number killed | Total caught | % released |
|---|---|---|---|---|
| 1998 | 41 | 540 | 581 | 7 |
| 1999 | 108 | 831 | 939 | 12 |
| 2000 | 193 | 637 | 830 | 23 |
| 2001 | 415 | 739 | 1154 | 36 |
| 2002 | 271 | 524 | 795 | 34 |
| 2003 | 199 | 281 | 480 | 42 |
| 2004 | 301 | 684 | 985 | 31 |
| 2005 | 446 | 669 | 1115 | 40 |
| 2006 | 739 | 854 | 1593 | 46 |
| 2007 | 349 | 339 | 688 | 51 |
| 2008 | 861 | 247 | 1108 | 78 |
| 2009 | 667 | 179 | 846 | 80 |
| 2010 | 689 | 55 | 744 | 93 |
| 2011 | 953 | 118 | 1071 | 89 |
| 2012 | 946 | 82 | 1028 | 92 |
| 2013 | 1391 | 161 | 1552 | 90 |
| 2014 | 1279 | 141 | 1420 | 90 |
| 2015 | 1101 | 38 | 1139 | 96.7 |

***Table 1.*** *Numbers and percentages of rod-caught Tay district salmon released and killed before 30 April. Data from Marine Scotland's Statistical Bulletins of Scottish Salmon and Sea Trout Catches.*

Although very few spring salmon were killed in the Tay district in 2015, more were still killed compared to any other district in Scotland, but once again, this will partly reflect the fact that the Tay produced the highest catch of spring salmon in Scotland in 2015 (Figure 1).

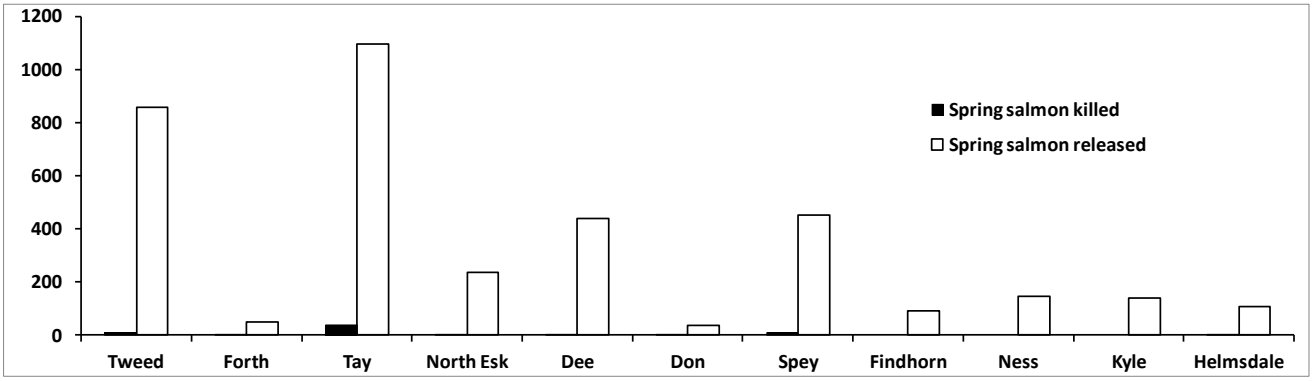



***Figure 1.*** *Numbers of salmon killed and released by anglers to 30 April 2015 on Scotland's major spring salmon rivers. Data from Marine Scotland Science.*

**Catch and release – summer**

In addition to continuing the spring salmon policy, in 2015 and 2016, the Board continued the policy that, after May, all female fish should be released and no more than one male fish should be kept per day, which should be clean and, where possible, weigh less than 10 pounds (i.e. clean male grilse). While 2016 data are not yet available, 2015 data show that the catch and release rate, post-spring, generally continues to edge upwards (Figure 2). It should be noted that the apparent reduction in October 2015, reflects the fact the previous four years included trial season extension fish. However, once the 2016 figures are available, it may be that the percentage released in the autumn will be even higher owing to the relative lack of fresh run fish in autumn 2016.

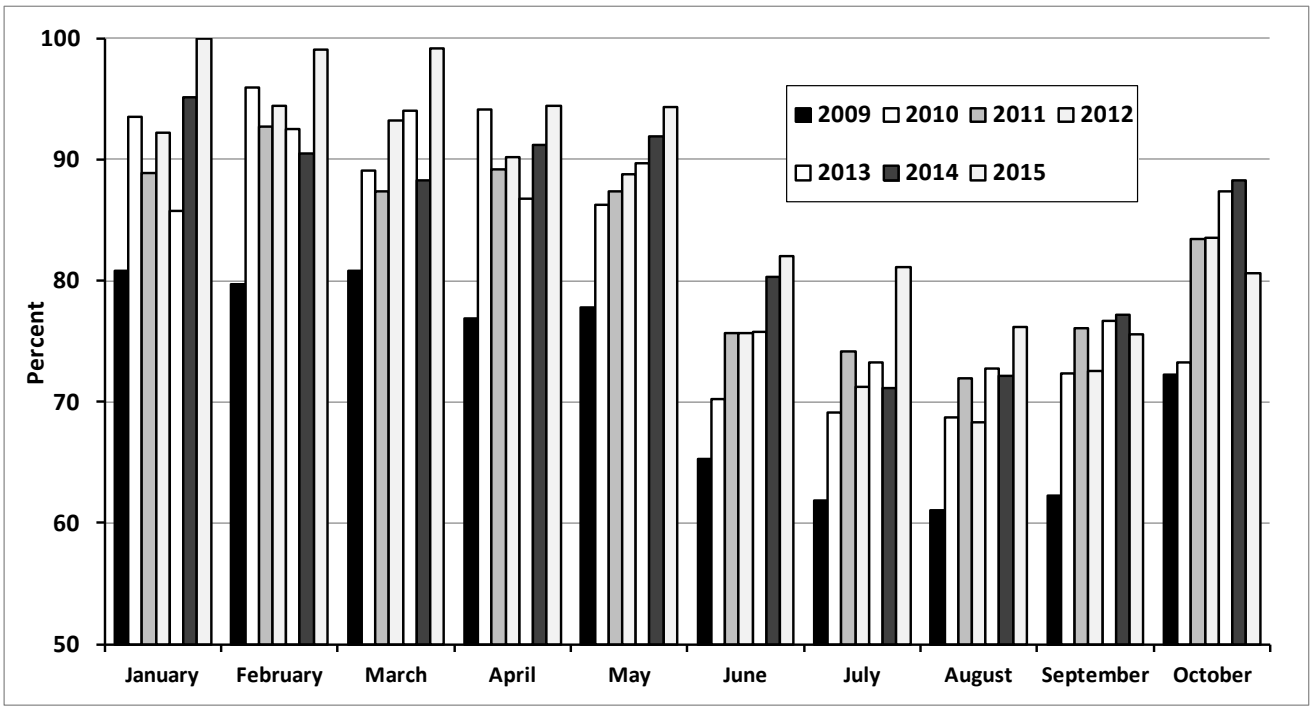



***Figure 2.*** *Percentage of the Tay district salmon and grilse catch released by month in each year from 2009 to 2015. The data used in this graph are Crown copyright, used with the permission of Marine Scotland Science. Marine Scotland is not responsible for interpretation of these data by third parties.*

**Catch and release rates in different parts of the district**

While the statistics shown above are based on long standing Scottish Government catch returns, the Board has also collected catch statistics in the last few years. This has been particularly valuable in providing a breakdown of catches within the district, which was not available formerly.

It can be seen that, in 2015, the most recent year for which we have data, the highest rates of retention of fish up to end April continues to be in the River Dochart (Figure 3). However, in terms of absolute numbers, the largest numbers of spring salmon killed in 2015 were actually on the lower Tay with Loch Tay behind it (Figure 4). As for the rest of the season, the lower Tay was also where most fish were killed (Figure 5).

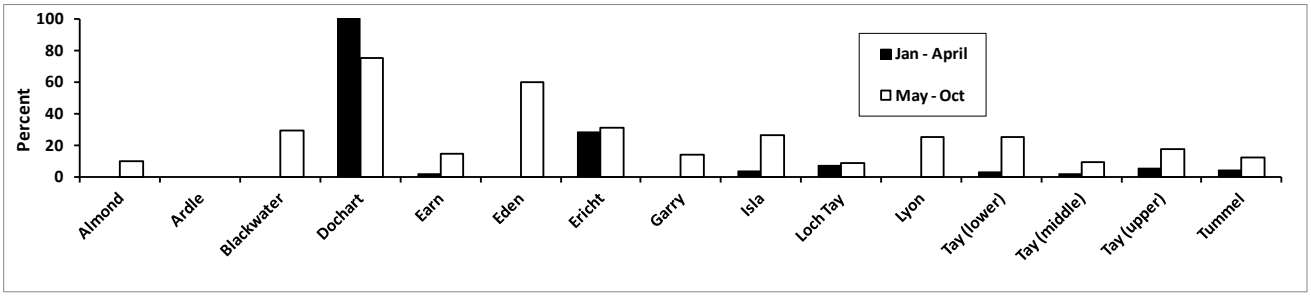



***Figure 3.*** *Percentages of salmon retained in different parts of the Tay district during the periods January – April 2015 and May – October 2015. Note, some of the smaller tributaries did not produce any spring fish and are blank therefore.*

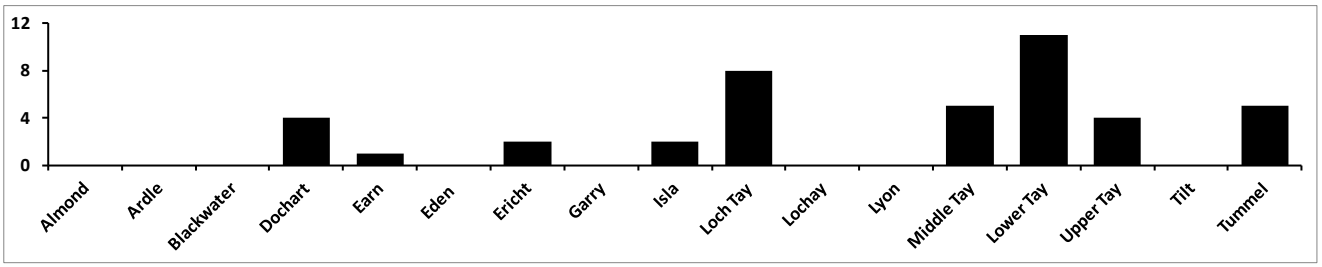



***Figure 4.*** *Numbers of reported retained salmon from different parts of the Tay district, Jan – April 2015.*

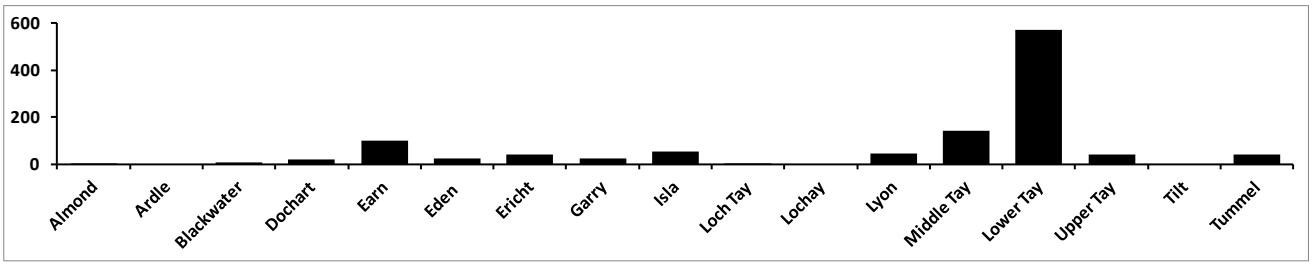



***Figure 5.*** *Numbers of reported retained salmon from different parts of the Tay district, May – October 2015.*

**Sea trout conservation**

In 2009, the Board first recommended that, following a long decline in their numbers, all sea trout should be released without exception. This policy has been maintained thereafter. Since the introduction of the policy, the great majority of the catch has been released (Figure 6). 2015 saw a continued recovery in the catch following a very poor year in 2013.

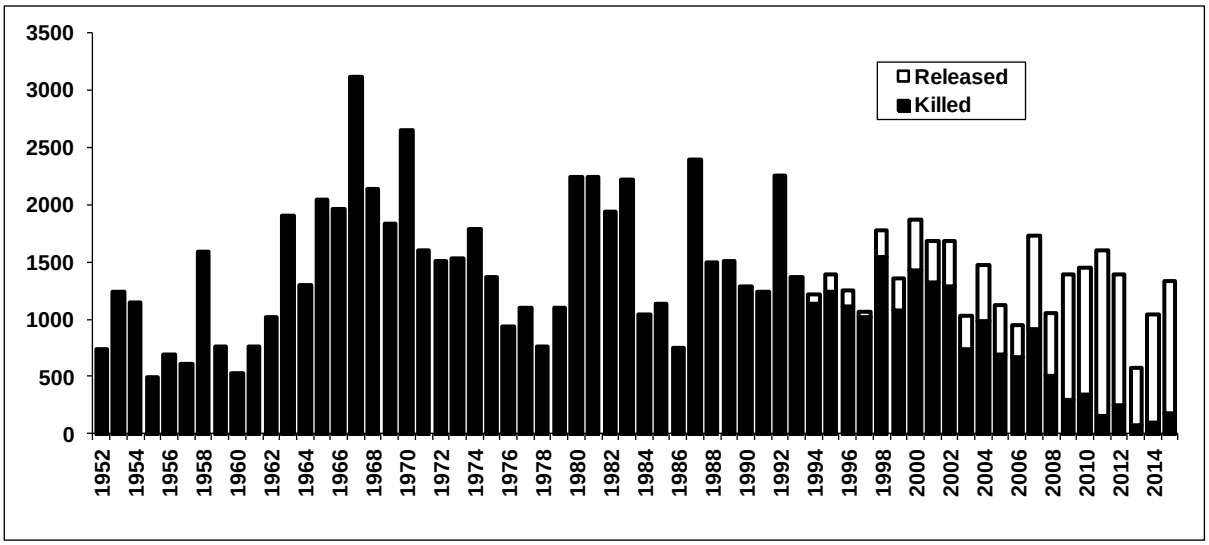



***Figure 6.*** *Tay District rod & line catch of sea trout, 1952 – 2015. (Data obtained from Marine Scotland's Statistical Bulletins of Scottish Salmon and Sea Trout Catches)*

One issue which has been suggested as a potential problem in interpreting sea trout catches relates to the release of coloured sea trout. It has been suggested that, in the past, when anglers caught and released very coloured sea trout in the autumn, these sometimes went unrecorded. As a requirement for returns to include released fish was introduced in 1994, recent returns may include fish that might not have been recorded in the past and present day sea trout catches may appear inflated. To test this, catch data reported to Marine Scotland have been analysed. Figure 7 shows the percentages of the annual sea trout catch that were caught in September and October for the period 1952 to 2015. While there have been spells when the percentages appear lower than over the last ten years or so, the data are not very convincing and suggest this has not been a big issue.

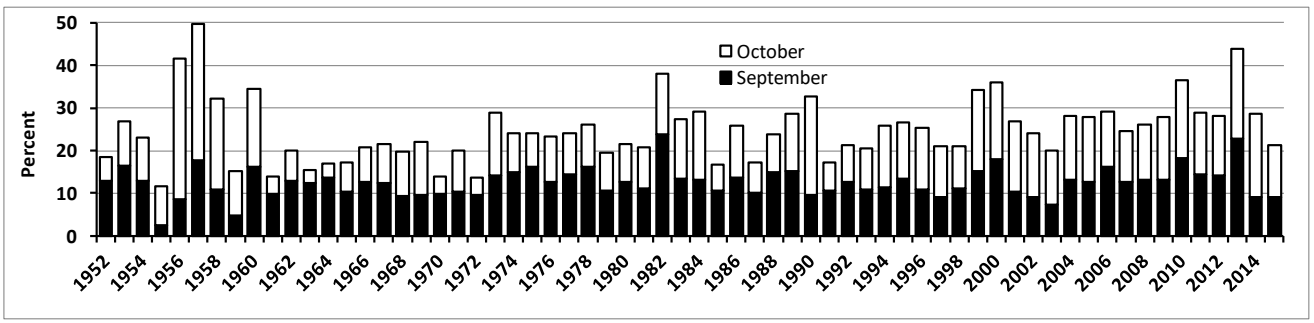



***Figure 7****. Percentages of the reported annual sea trout rod catch caught in the months of September and October, 1952 – 2015. The data used in this graph are Crown copyright, used with the permission of Marine Scotland Science. Marine Scotland is not responsible for interpretation of these data by third parties.*

**Mandatory Spring Catch and Release Regulations**

2016 was the second year of regulations introduced by Scottish Ministers requiring the mandatory release of all salmon caught up to the end of March. As shown in Table 1, the measures had a significant impact on the overall spring release rate in 2015. In 2016, while it is felt that awareness was better throughout than it had initially been in 2015, bailiffs still made regular patrols to maintain awareness. Once again, no examples of non compliance are known to have occurred. The measures were introduced for a period of five years, but will be reviewed annually by Scottish Ministers.

**Staff Changes**

There were two changes to Board staff in 2016. In February, a new Operations Manager, Michael Brown, was appointed. Prior to joining the Board, Michael worked as a ghillie at Taymount and previously at Cargill. However, he also has a degree in aquaculture and worked as a biologist with the West Sutherland Fisheries Trust before working his way back to Tayside where he grew up. Michael has therefore a good skills mix for his new position which combines both a biologist and head bailiff role.

In August one of the bailiff team, resigned. As of end 2016, this post has not been replaced.

**Enforcement**

2016 proved to be a quiet year in terms of enforcement. Unusually, no cases initiated by board staff were sent to the Procurator Fiscal. However, bailiff staff still received assistance from time to time from Police Scotland and once again, the Board wishes to express its thanks to Police Scotland, particularly local offices, who are always extremely helpful. Bailiff staff also attended Partnership Against Wildlife Crime (PAW) meetings with Fife Police.

**Health and Safety at Work**

Health and safety at work is a major consideration for the Board. The Board's staff are frequently required to work in situations where potential hazards are present. Therefore the Board is insistent that health and safety provision is of the highest standard. A review of the Board's Health and Safety Policy was conducted in 2016 by health and safety consultants Greens of Haddington. Their last review was conducted in 2013.

Greens' audit considered that the "standard of health and safety management was generally good" but noted some areas where further actions might be required. A list of 17 actions was produced, varying in levels of urgency. The Board has reviewed these actions and a plan has been put in place to deal with these. Most of the actions have already been completed. The board's health and safety policy was also revised.

At the time of writing, no incidents have been reported to the HSE under RIDDOR in 2016.

**Staff training**

The Board promotes the continuous professional development of its staff and in 2016 a number of staff participated in various training initiatives. Three staff members went on an electrofishing team leader course at UHI, two attended a course on illegal nets organized by the River Tweed Commission, one undertook the Institute of Fisheries Management Certificate in bailiffing and two undertook other courses organized by the Institute of Fisheries Management.

**Tay Ghillies Association Monthly Prize**

During 2016 the Tay Ghillies Association once again ran a fish of the month award to encourage good catch and release practice on the Tay. Each month the winner received two personalised crystal whisky glasses and was entered into a fish of the year competition for a crystal engraved decanter.

**TDSFB Annual Public Meeting 2016**

The Board held its third Annual Public Meeting on 31 March 2016. The meeting was held in the Birnam Institute and attracted a good attendance of both proprietors and anglers. Presentations on the work of the Board were given by the Chairman and the Fisheries Director with questions and answers following. The minutes of the meeting can be found at www.tdsfb.org/reports.html.

Another public meeting will be held at a similar time in 2017. The exact date will be publicised in due course.

**Hatchery report 2015/16**

As described in recent *Annual Reports*, the Board's stocking activities are now centered around the Kelt Reconditioning Project. This entails the keeping and feeding in captivity of salmon kelts following stripping. Such fish can live in captivity for several years on average, producing eggs each winter. However, as such fish do not live indefinitely there is a requirement to top up with new broodstock each autumn. As explained in last year's *Annual Report*, adverse weather conditions greatly hampered broodstock collection in 2014 and this had a bit of a knock on effect to the number of reconditioned eggs produced in 2015/16. Fortunately, conditions at the start of the broodstock collection in the autumn of 2015 were much more favourable and some 312,000 eggs were obtained from spring salmon. Unfortunately, however, none were obtained from the Ruchill Water as conditions changed for the worse at the time fish were expected there. This all meant the total number of eggs / fry / parr stocked out in 2016 amounted to just over 600,000 which is still well below the target hoped for.

In spring 2016, most stock went out either as eyed ova or unfed fry. These were stocked out into areas close to where the broodstock were originally sourced, i.e. either the same tributary or smaller tributaries close to the source area.

A significant part of the stocking effort at the present time is geared to pump priming a population of spring salmon in the upper River Garry above Struan Weir in advance of anticipated flow restoration. Eggs and fry from reconditioned kelts originally taken in the Tilt, Errochty and Garry below Struan, were stocked there in 2016. Eggs and fry from new broodstock caught in the Tilt, lower Garry and Errochty in autumn 2015 were stocked back into those same tributaries. It was felt that this may have been more worthwhile than usual in the spring of 2016 because both the Tilt and the Garry appeared to be significantly damaged by the flooding from "Storm Frank" on 30 December 2015. The eggs in the hatchery may therefore have been something of an "insurance policy".

Some 18,141 fed on parr were stocked out in October 2016. All were adipose fin clipped in order to allow identification either as older parr caught by electrofishing in summer 2017 or as returning adults. These were part of continuing trials to help determine whether the practice of feeding-on increases survival compared to stocking out as eyed ova or unfed fry. This year, these parr were introduced into sections of the upper reaches of the rivers Lochay and Lyon and also into the main stem of the lower Tay at Catholes. While these trials have been conducted for some years in upper tributaries, this is the first time stocking such fish has been tried in the main stem of the river. Catholes was chosen because it is unusually shallow for the main stem Tay, meaning it is potentially good as habitat for salmon parr but crucially shallow enough to be electrofished in the summer of 2017. That will hopefully show how well these fish have survived and grown. Almost everywhere else on the main stem of the Tay, the river is simply just too deep to have any chance of doing this.

The following numbers were released in different areas in 2016.

| Tributary stocked | Number stocked | Stage stocked | Broodstock type |
|---|---|---|---|
| River Garry (upper) | 214,863 | Eyed ova / unfed fry | Reconditioned kelts |
| River Tilt | 85,550 | Eyed ova / unfed fry | New broodstock |
| Fillan tribs. (Auchreoch, Clifton and Auchtertyre burns) | 78,073 | Eyed ova / unfed fry | New broodstock |
| River Garry (below Struan) | 74,093 | Eyed ova / unfed fry | New broodstock |
| Errochty Water | 50,745 | Eyed ova / unfed fry | New broodstock |
| Allt Dubh Choirein (Earn) | 40,000 | Eyed ova / unfed fry | Reconditioned kelts |
| Cononish | 35,961 | Eyed ova / unfed fry | Reconditioned kelts |
| Lyon tributaries | 19,919 | Eyed ova / unfed fry | New broodstock |
| River Tay (Catholes) | 10,140 | Parr | Reconditioned kelts) |
| River Lyon (main stem) | 4,041 | Parr | New broodstock |
| River Lochay | 3,960 | Parr | Reconditioned kelts |
| **Total** | **617,345** | | |

In April 2016, some mortalities started to occur among the adult broodstock being reconditioned, but only among those new fish brought in during autumn 2016. Tests conducted by Marine Scotland Science identified bacterial kidney disease (BKD). This is a bacterial disease which is known to sometimes affect adult salmon in the wild and tends to manifest in spring when water is warming. The fish may have come in with the bacteria, which they would have picked up either in the river or at sea, since only new fish were infected. As BKD is a "notifiable" disease a "designation notice" was

placed on the hatchery from 26 May, meaning that no fish could be moved in or out. Fortunately, all of the unfed fry had been stocked out by then. The parr being fed on were also tested but the tests were all fortunately negative. On 13 September Marine Scotland gave the hatchery the all clear and lifted the notice, so the restrictions did not actually impinge on the stocking out of autumn parr. However, the loss of adult broodstock taken into the hatchery in autumn 2015 has been a set-back to the programme.

**Supply of eggs to University of Southampton**

We were contacted by a PhD student at the University of Southampton who is investigating potential differences in the permeability of salmon eggs to dissolved oxygen, specifically to understand whether different populations of salmon may be better or less adapted to silty rivers. A very small number of unfertilized eggs and milt were provided from fish from the rivers Fillan and Tilt to be compared with samples from other rivers. Fortunately, the eggs survived delivery by courier and were successfully fertilized after arrival.

**Salmon in the Classroom**

Salmon in the classroom is a joint project which is now headed by the Tay Foundation, although delivery is largely conducted by other partners which include Perth and Kinross Council Ranger Services, Loch Lomond and Trossachs National Park Ranger Services, Atholl Estates Ranger Services and the Tay District Salmon Fisheries Board.

In 2016, salmon eggs were provided from the Board's hatchery at Almondbank to four local primary schools: Killin, Rattray, St Madoes and Stanley. The number of schools supplied this year decreased because of the departure of some ranger staff with long experience of the project. Hopefully, numbers will be increased again in future.

In the spring, most of the participating classes visited the Board's hatchery and were given talks and demonstrations on the salmon life cycle and its conservation, the process of the hatchery and the fisheries on the River Tay. Later in the year, Board staff performed electrofishing demonstrations in the streams where the alevins or fry had been released by the pupils. Schools were also invited to submit a project record to a competition. The project received financial support from Vaillant Group which particularly enabled transport to be available for site visits.

**Replacement Smolt Screens at Stronuich Dam, River Lyon**

At Stronuich Dam on the upper River Lyon, a set of mesh screens was installed each spring by SSE to prevent salmon smolts entering the abstraction tunnel between Stronuich Dam and Lochay Power Station at Killin. These screens consisted of large heavy panels of one inch by half inch steel mesh. These screens frequently clogged and had to be periodically lifted out with a crane for manual cleaning. Owing to this and corrosion of the mesh, the whole array was removed during the summer of 2016 and replaced with a new set of screens made of flat vertical bars with a 12 millimetre spacing. Unlike mesh, these screens can be cleaned by raking *in situ* and will be kept in place

throughout the whole year. Replacement of the screens was a significant undertaking which required largely dewatering the Stronuich Headpond, which caused some river flow management issues for a time. However, this necessary work was completed successfully.

**Millhole / Dowie Burn Fish Kill**

In autumn 2016, a pollution event occurred in the upper reaches of the Dowie (Millhole Burn), a burn which flows into the lower part of the Kercock beat. SEPA reported a fish kill over a considerable length of the stream. Board staff surveyed this burn some years ago and found a dense juvenile trout (possibly sea trout) population and some juvenile salmon. A very large log jam was also cleared from its mouth to improve salmon access at the time. It is therefore disappointing when we do such work that events like this still occur. It is understood that SEPA are investigating the case.

**Restoration of Flow to the River Garry**

Following some years when this issue did not appear to be progressing very much, in 2016, SSE, SEPA and the Board have had a series of meetings to progress the re-watering of the River Garry. These meetings have been productive and SEPA has issued a variation to the SSE licence to promote necessary works, monitoring, and investigations. This will lead to another variation to the licence in 2017 which will establish the specific flow and operating regime to achieve the necessary improvements in the River Garry. More positive details will hopefully be revealed shortly.

**Proposed Hydro on the Allt Dubh Choirein (Ruchill Water)**

In late 2015, SEPA advertised an application for a hydro scheme on the upper reaches of the Ruchill Water, the Allt Dubh Choirein (pronounced locally “Doocherin”). Unlike the vast majority of recent hydro applications, practically the entire length of watercourse that would be affected by abstraction (approximately 5.5 km) is accessible or partly accessible to salmon and sea trout. It is an area that is likely to be important for the Earn’s earliest running fish. As the Board was not confident that the mitigation measures proposed for late summer and autumn would ensure that fish would have a decent opportunity to ascend the affected area and successfully spawn and also because the proposed summer low flow might impact on the availability of juvenile habitat, an objection to the application was submitted.

SEPA then proposed to allow the proposal but only on the basis that from August to November, the proportion of flow that could be abstracted would be significantly curtailed. In practice no more than 25% of the flow could ever be abstracted at the intake point. As such a flow regime might be sufficient to ensure the successful ascent of sea trout and salmon in autumn and allow spawning in November, our objection was withdrawn on the basis that post scheme monitoring should be required and the licence reviewed if problems occur.

**Proposed Upper River Lyon Salmon Genetics Project**

Previous research, paid for jointly by the Tay Foundation, SSE and the Board has indicated that the stretch of the upper Lyon between Stronuich and Lubreoch dams may be quite hostile to the production of juvenile salmon. It has long been hypothesised that the survival of juvenile salmon, from egg to parr at least, may be lower in the section of river between the two dams than it is downstream of Stronuich Dam. This project seeks to test this hypothesis.

By obtaining DNA from fin clips from juvenile salmon, it is possible to reconstruct the numbers of adult salmon that give rise to the juvenile population in a given area. By comparing the number of adults with the numbers of juveniles actually present, and doing this both above and below the dam, it should be possible to identify relative differences in survival above and below the dam. It should also be possible to determine whether juvenile salmon hatched above Stronuich can actually succeed in dispersing through the reservoir and colonise the river below, or whether all the juveniles present below Stronuich are hatched below the dam. In this joint project, it is intended that TDSFB staff will collect the samples on behalf of the Tay Foundation before the end of 2016. The genetic analysis work will be conducted by the Rivers and Lochs Institute of the University of the Highlands and Islands in Inverness.

**SEPA Hydro Reviews**

In addition to the well publicized River Garry, there are a number of other waterbodies in the Tay catchment that are considered to be at less than "good ecological potential" because of hydro abstraction. Under the EU Water Framework Directive these have also to be considered for flow restoration by SEPA. However, most of these waterbodies are relatively small and have limited potential value to salmon because of the presence of impassable natural waterfalls. SEPA have started to consider these other waterbodies but it is not clear yet which will be considered for some form of flow restoration and which may not. However, the one other river in addition to the Garry where the Board thinks improvements to flows might have a significant beneficial effect on salmon is the River Lochay. Early discussions have now taken place regarding this waterbody and it is hoped that in the course of 2017 ideas for improving that river will begin to crystalise.

**Winter Flooding**

The winter of 2015/16 saw the largest floods in a decade. While, in mid November, the water level at Ballathie peaked twice at more than 10 feet, a flood on 5 December ("Storm Desmond") saw the Tay reach its highest level since December 2006. During that same flood, SEPA's gauging station at Killiecrankie on the River Garry peaked at 15.33 feet, the highest recorded level since the station was commissioned in 1990.

During the latter half of December, the Tay at Ballathie never fell below 8 feet, but "Storm Frank" on 30 December, saw the Tay rise to over 19.7 feet at Ballathie. While the Tay's flow was not near its record, some rivers did break records. For example, SEPA's gauge on the Dochart at Killin registered a record height of 9.24 feet, breaking a previous height of 8.95 feet in 1993. The gauge at Comrie

Bridge on the River Lyon, close to its confluence with the Tay, recorded a peak level of 12.47 feet which beat the previous record set in December 2006. However, the gauges further upsteam at Camusvrachan and Moar did not have such high flows as in 2006, indicating that during “Storm Frank”, rainfall in the lower half of the Lyon catchment must have been more intense than in 2006. That is not to say that rainfall in the west of the catchment necessarily was lower this time, there may just have been more storage available in the Lyon dams this time. The River Tilt rose to within about 4 inches of its previous record and the Garry at Killecrankie rose to within 1.6 feet of its Storm Desmond record. The Ericht at Craighall peaked just inches below its previous record and the Isla at Wester Cardean peaked about a foot under its previous record. This meant that, when the gauging station at Balbrogie on the River Isla peaked at around 14.4 feet on 30 December, it was also close to its previous record.

The worst effects of Storm Frank occurred in catchments just to the north east of the Tay, the Dee bearing the worst of it. Further south, the effects were less marked. The levels on the River Almond and the River Braan, for example, peaked well below their records, therefore levels in the lower Tay were not quite as high as they could have been.

But that was not the end of it. The first few days of January saw even more rain, especially in the east. That, plus the fact that the high Tay prevented the Isla from draining, caused the Isla to rise again, creating a new record of 15.4 feet at Balbrogie on 4 January. However, because this last major flood was mainly from the east, the Tay did fall quite rapidly in advance of Opening Day, particularly above the Isla confluence. Incredibly, the water level at Dunkeld on Opening Day proved to be the most benign for several years. But that was not to last. The last week of January and the first week or so of February were again wet with another peak at Ballathie of “only” a little over 12 feet.

Not surprisingly, in the wake of the floods, there was significant damage to the banks and beds of a number of tributaries of the Tay. Areas that looked highly scoured included the Tilt and Garry. In the middle reaches of the latter, the entire channel was shifted in places. It has been a matter of concern that in some of these places salmon redds and juvenile salmon may have been impacted.





*On several occasions, flows were so high the Perth Flood defences were activated***.**






*On the lower Isla, record water levels occurred in early January*.

**Fishpal-Malloch Trophy**

For the first time since the Tay Foundation reinstated the Malloch Trophy in 2009, the trophy for the largest salmon caught and released on the fly in Scotland was awarded for a fish caught in the Tay district. The salmon, estimated at 34 pounds, was caught by Tom Buchanan on the North Chesthill beat of the River Lyon in April 2015. It was caught on a 2.5 inch monkey fly of Tom's own design and tying. Tom was presented with the Fishpal-Malloch Trophy by Fisheries Minister Dr Aileen McLeod MSP at the Opening Day Breakfast at the Hilton Dunkeld Hotel on 15 January 2016.



*Tom Buchanan receiving the Fishpal-Malloch Trophy for 2015 from Dr Aileen McLeod MSP, Minister for Environment, Climate Change & Land Reform.*



*Hamish Rae, keeper at South Chesthill, being presented with a certificate by Mark Cockburn, Director of Fishpal Ltd*.

**Annual Bailiffs' Conference**

The bailiff staff attended the Annual Bailiff's Conference in March 2016. This year it was hosted by the Nith Board in Dumfries and supported by the Association of Salmon Fishery Boards and the Institute of Fisheries Management.

**Association of Salmon Fishery Boards – now Fisheries Management Scotland**

The Association of Salmon Fishery Boards (ASFB) has for many years represented Scotland's district salmon fishery boards at a national level. For a number of years, another organization, Rivers and Fisheries Trusts of Scotland (RAFTS), has represented fisheries trusts. However, it has been decided that in 2017 RAFTS will be effectively wound up. It has been agreed that in effect the ASFB will change into a new organization called Fisheries Management Scotland, which will continue to be the membership organization of DSFBs but fisheries trusts will also be able to join. DSFBs will continue to have the greater level of control over the new organization, occupying six of the nine seats on the management committee. The DSFBs will contribute the great majority of FMS's funding. In 2017, as the second highest contributor, TDSFB's contribution to FMS will be £14,496.

At this time of potential political challenge, FMS is required to play a vital role for DSFBs in the immediate future.

**Visit from the Atlantic Salmon Conservation Schools Network**

The Atlantic Salmon Conservation Schools Network is an international network of schools studying salmon that was established by David Ritchie, a biology teacher at Perth High School. The network includes schools from Canada, Finland, France, Germany, Greenland, Scotland and the USA, all from places having an interest in salmon. With funding from the Erasmus+ programme, around 50 pupils and teachers from these various countries spent a week based in Perth learning about salmon and visiting beats on the Tay and other places, including the Board's hatchery. Being in early November, they were able to witness first hand the stripping of salmon eggs and actual fertilization taking place.

**Revamp of the Board's website**

The Board's website, www.tdsfb.org was designed almost ten years ago and was looking somewhat dated. Recently, the website has been given a full facelift by Board member Claire Mercer Nairne, with further refinements continuing. The website is now much more modern looking and mobile phone / tablet friendly.

**Opening Day celebrations at Dunkeld**

In 2016, the Board once again lent its support to the opening day celebration organised by the Dunkeld and Birnam Tourist Association, the Hilton Dunkeld House Hotel and Perthshire Chamber of Commerce. The invited guest of honour this year was Dr Aileen McLeod MSP, the then Minister for

Environment, Climate Change & Land Reform. Following the Opening Day breakfast at the Dunkeld Hilton House Hotel, Dr McLeod gave an address that covered issues such as proposed national conservation measures and Wild Fisheries Reform. Then, with Board Chairman, Bill Jack, she led the procession down to the river and performed the traditional opening ceremony by blessing the boat with a quaich of whisky before making the first cast of the year.







*Dr Aileen McLeod MSP, Minister for Environment, Climate Change & Land Reform addressing the Opening Day Breakfast (above left). Bill Jack, the Board's Chairman, addresses the gathering before setting off for the river (above centre). Dr McLeod blesses the boat (above right) and Dr McLeod makes the first cast of the 2016 season (below)*



## Pitlochry Dam

The total count for 2016 (5,321), proved to be the second best count in the last ten years, the fourth best count since the 1970s/early 80s (Figure 8). The increased count was principally caused by particularly high counts in May and June (Figure 9). The total count to the end of June was the highest since 1978 and only beaten before that in 1952, 1953, 1954 and 1973. Of course, back then, there were nets, no catch and release and no stocking of the upper Garry, so these comparisons are not completely valid. Nevertheless they are obviously encouraging.

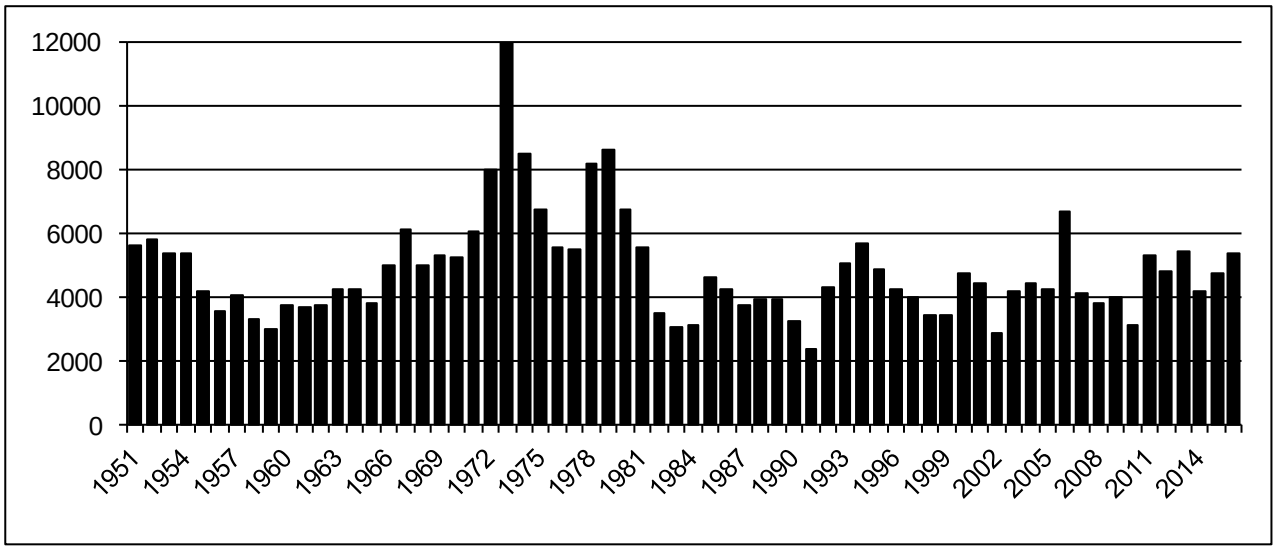



***Figure 8.*** *Annual net upstream counts (that is down counts are subtracted from up-counts on a daily basis) through Pitlochry Dam fish ladder, 1951 – 2016. (Data courtesy of SSE)*

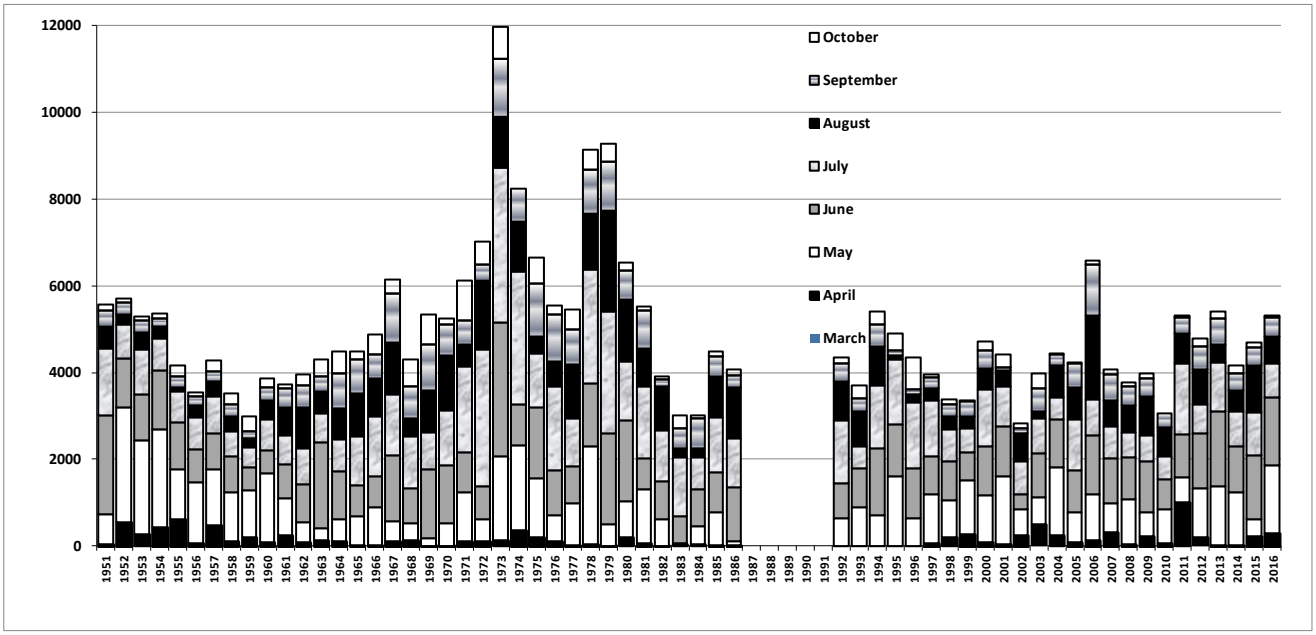



***Figure 9.*** *Monthly net upstream counts, Pitlochry Dam, 1951 to 2016. (Data courtesy of the late Michael Gardner, David Stewart, Ross Gardiner and SSE)*

**Clunie Dam**

The total count at Clunie Dam on the River Tummel in 2016 was again amongst the highest historically recorded, though a bit below the best years (Figure 10). There was nothing particularly unusual about the monthly distribution of the counts either (Figure 11). Counts at this dam typically start a bit later than at Pitlochry since Clunie is further upstream.

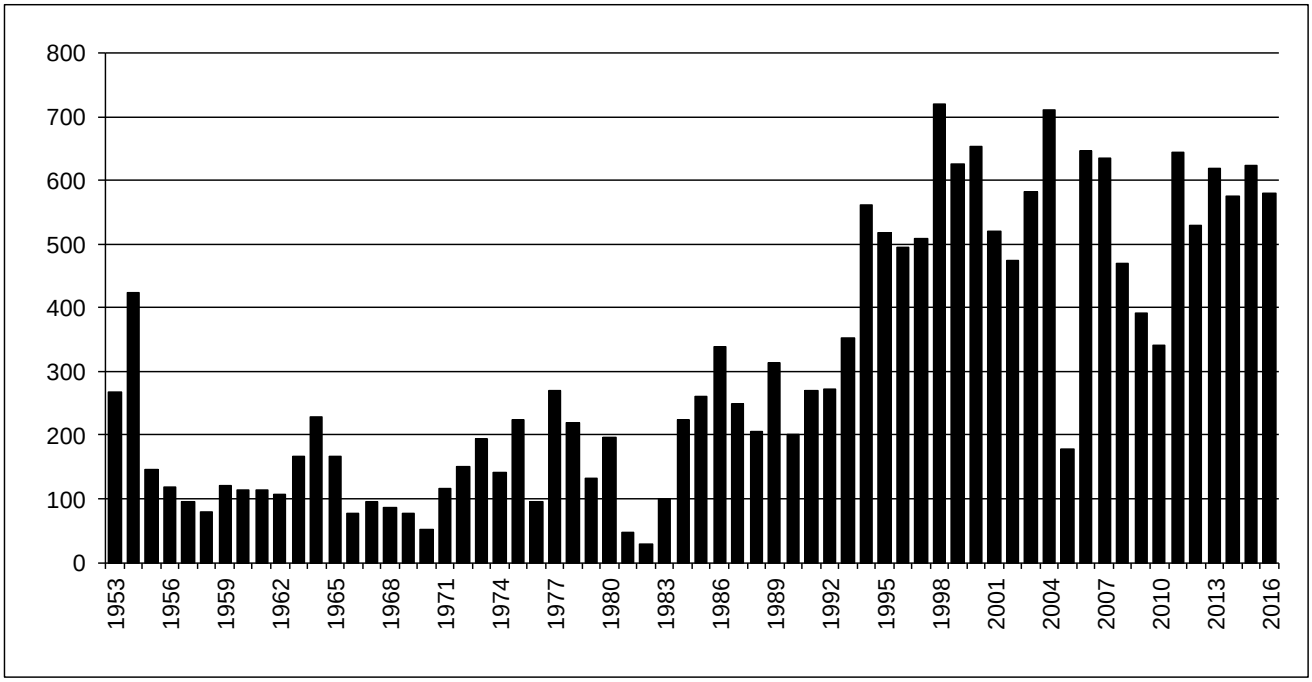



***Figure 10.*** *Net annual upstream counts through Clunie Dam fish ladder, 1953 to 2016. (Note: there was a malfunction in 2005). (Data courtesy of SSE)*

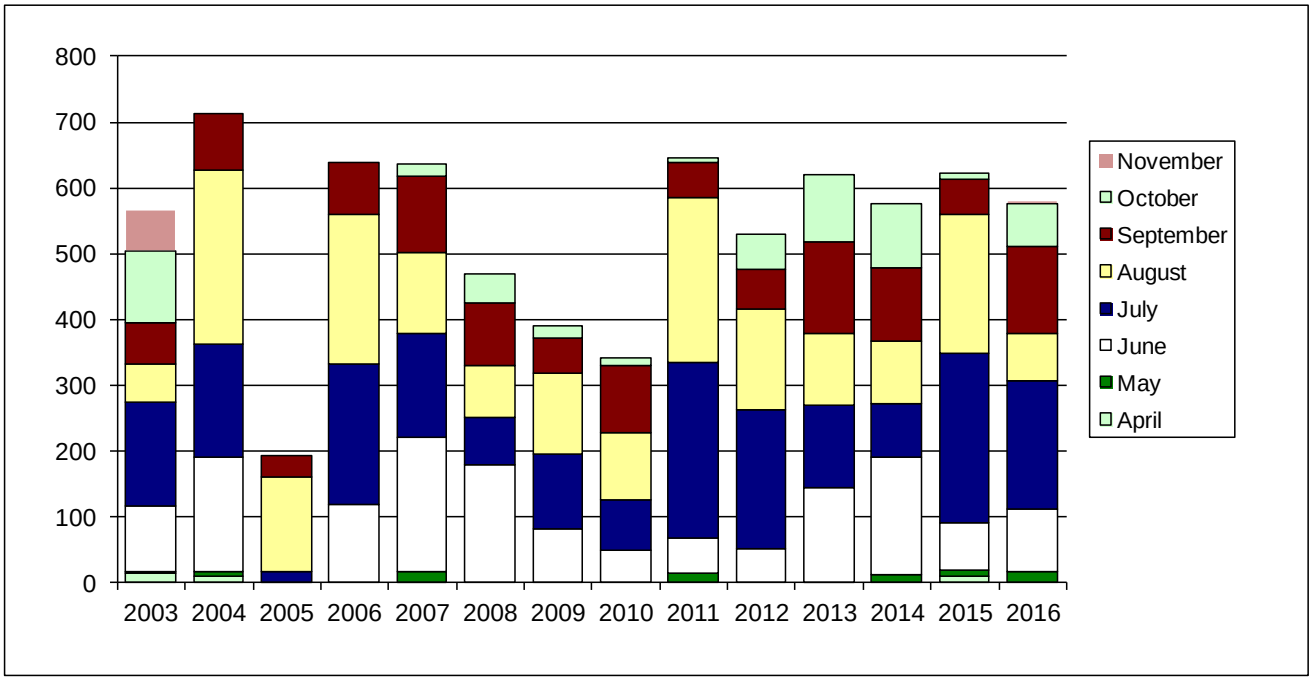



***Figure 11.*** *Monthly net upstream counts, Clunie Dam fish ladder, 2003 – 2016. (Data courtesy of SSE)*

**Lochay Falls**

The Lochay Falls are a naturally insurmountable barrier to salmon on the lower reaches of the River Lochay near Killin. As compensation for the loss of former spawning areas on the Lyon, the North of Scotland Hydro Electric Board installed a Borland fish lift to allow salmon access to the Lochay. SSE now operate a fish counter on the upstream exit of the fish pass. The 2016 count was the highest since 1996, another in a cluster of recent better years (Figure 12). Again, as with Clunie, the monthly distribution of counts was not unusual compared to other years, with fish ascending continuously from late spring to autumn (Figure 13).

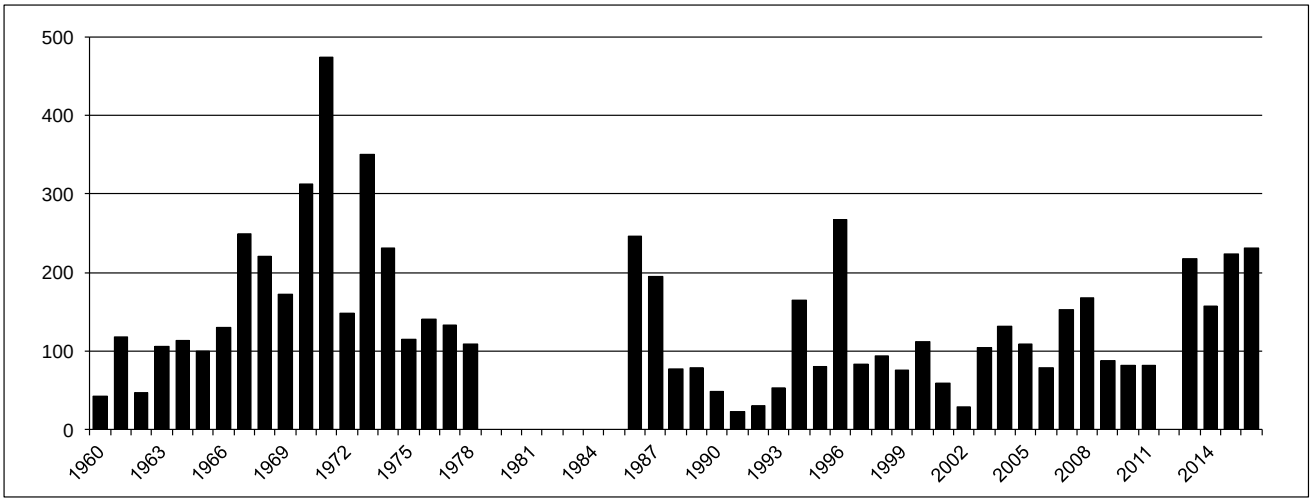



***Figure 12.*** *Net annual upstream counts through Lochay Falls Fish Pass, 1960 to 2016. (Note: there was a malfunction in 2012). (Data courtesy of SSE)*

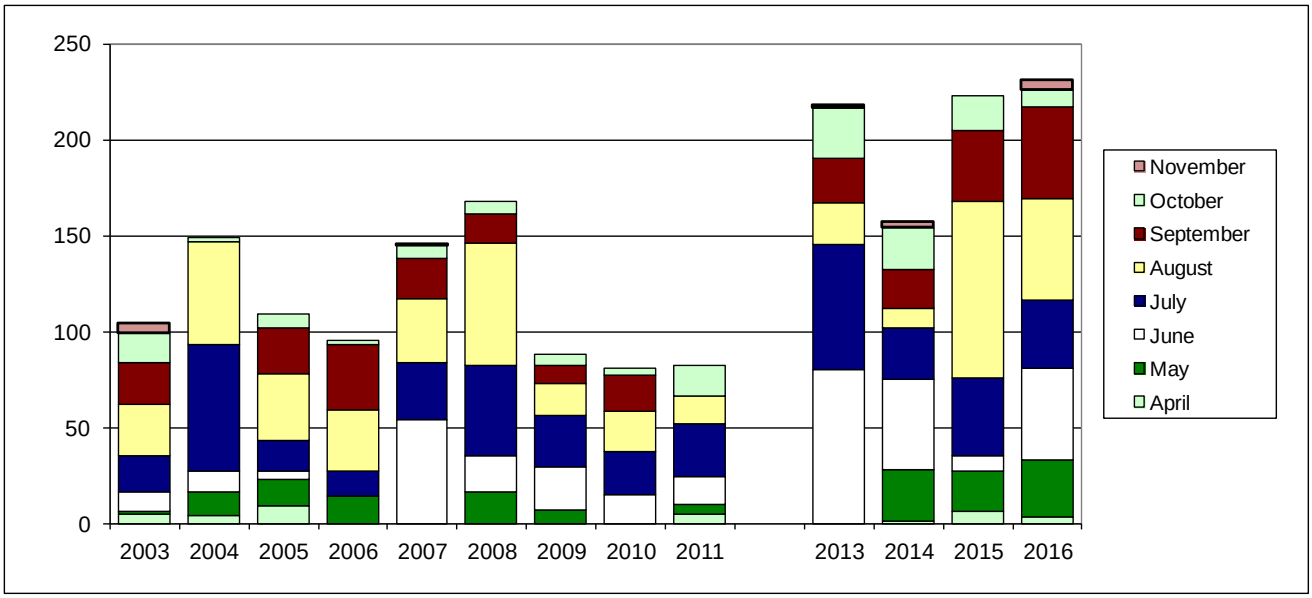



***Figure 13.*** *Monthly net upstream counts, Lochay Falls Fish Pass, 2003 – 2016. (Data courtesy of SSE)*

**Duncan Glass BEM**

2016 saw the passing of one of the most influential people on the Tay in recent years, Duncan Glass BEM. Duncan died peacefully in hospital on 22 February 2016

Born in 1931, Duncan had a lifelong love of fishing, kindled from a childhood at Dysart on the Firth of Forth. From an early age Duncan mastered boats, the sea and fishing for "podlies" (saithe), cod and lobsters. As well as becoming established as a successful businessman, Duncan started fishing the Tay in the 1950s. Duncan had the magic touch as a salmon catcher, which combined with a drive to be the best at whatever he did, meant that he became one of the towering figures during the glory days of the Tay. While he fished on many Tay beats, Islamouth being a favourite, and on other rivers, he came to concentrate on the Burnbane beat which he managed for many years, in fact right up until 2015.

From the late 90s, Duncan's boundless energies focussed on giving back to the river. Having seen catches decline he was determined to see things put right again. Duncan was a driving force behind the formation of the Tay Ghillies Association and was the power that sustained it for more than a decade before he could no longer continue as secretary / treasurer. Duncan was directly or indirectly responsible for raising certainly well over £100,000 through grants, Tay Ghillies fun days and other fund raising events which supported everything from hatchery work to clearing burns. In 2002 he also became a member of the Board and later a trustee of the Tay Foundation. Without Duncan's dogged determination a hatchery might never have been built.

Duncan's achievements were recognised firstly when he was presented with the inaugural Tay Salmon Conservation Award in 2006. In 2013 he was awarded the British Empire Medal for voluntary service to salmon conservation on the River Tay.



*Duncan Glass receiving the Ballathie Trophy, the first Tay Salmon Conservation Award, in 2006 from Mrs Morag Milligan and Sir Max Hastings.*

Through all Duncan's fishing exploits and larger than life adventures, his wife Jane of almost 60 years was always by his side. Jane was his constant fishing companion, usually playing the fish. They did everything together. The Board's sincere condolences go to Jane, Lesley, Donald, grand-daughters Jane and Jennifer, all taught to fish by Duncan, and their families. The Tay lost a true champion and will be a poorer place for his passing.

## WHAT HAPPENED TO THE 2016 AUTUMN RUN?

While the spring of 2016 was again encouraging, the autumn of 2016 was one of disappointment. Figure 14, which shows the number of reported salmon caught on the lower Tay between 1 September and 15 October since 1986, puts this into perspective. While the 2016 figures are only provisional, it is likely that autumn 2016 will have been the poorest. However, because most of the fish caught in autumn 2016 were coloured and silver fish were lacking, even these figures may to some extent mask what really happened.

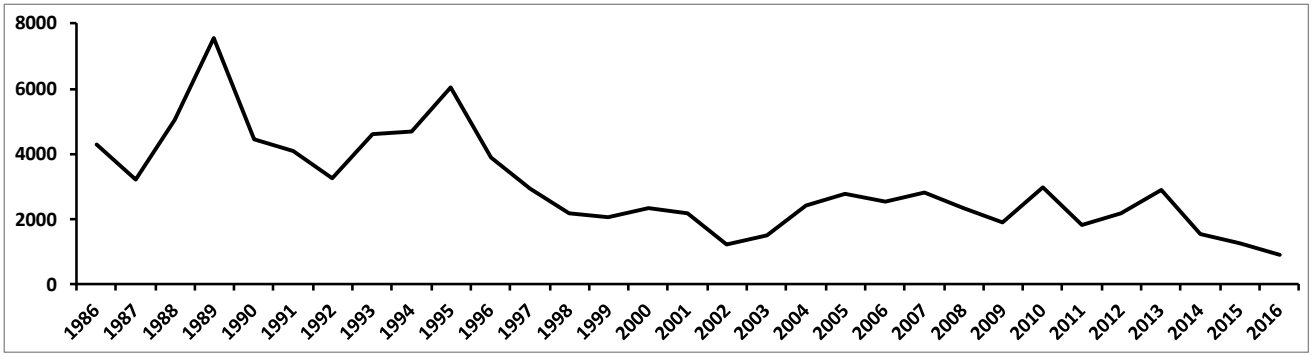



***Figure 14.*** *Reported catches of salmon from the lower Tay between 1 September and 15 October, 1986 – 2016. (Data to 2015 were either reported to government or directly to TDSFB, while 2016 provisional numbers are only those reported by participating beats on the* www.fishtay.co.uk *website)*

However, this poor autumn run was not just restricted to the Tay. It appears to have affected all rivers with true autumn runs. But while clearly alarming, such an event is not a complete surprise. A similar situation has existed at least once in the past.

Figure 15 presents Tay district rod catches for the months of August, September and October from 1952, when the Government started collecting such statistics, until 2015. Autumn catches were much lower in the 1950s. Of course, angling effort on many Tay beats may have been lower in the 1950s, but there were big net fisheries operating in the estuary and along the coast. 2016 was the first year when there were no such fisheries operating at all.

The lack of fresh autumn fish in the 1950s was also a national phenomenon. In 1956, G.P.R. Balfour-Kinnear wrote in *Trout & Salmon* "the Spey does not have any appreciable autumn run, and the autumn runs on the Tay and the Dee are also negligible….these rivers are not…worth fishing after the summer." But in the late 1970s, John Ashley-Cooper wrote of the Tay, the "autumn run, or perhaps the late summer run would be a truer designation, has increased beyond all recognition during the past twenty years. At any time from mid-August onwards the lower river starts to stock up with fish…..By mid September their number runs into thousands, and this increase continues up to the end of the season….." Of the Tweed, he said it still had "the genuine autumn run, so much renowned in our grandfathers' days…….the autumn fish, approaching extinction as they were in the 1940s, have been steadily increasing in numbers over the past twenty years".

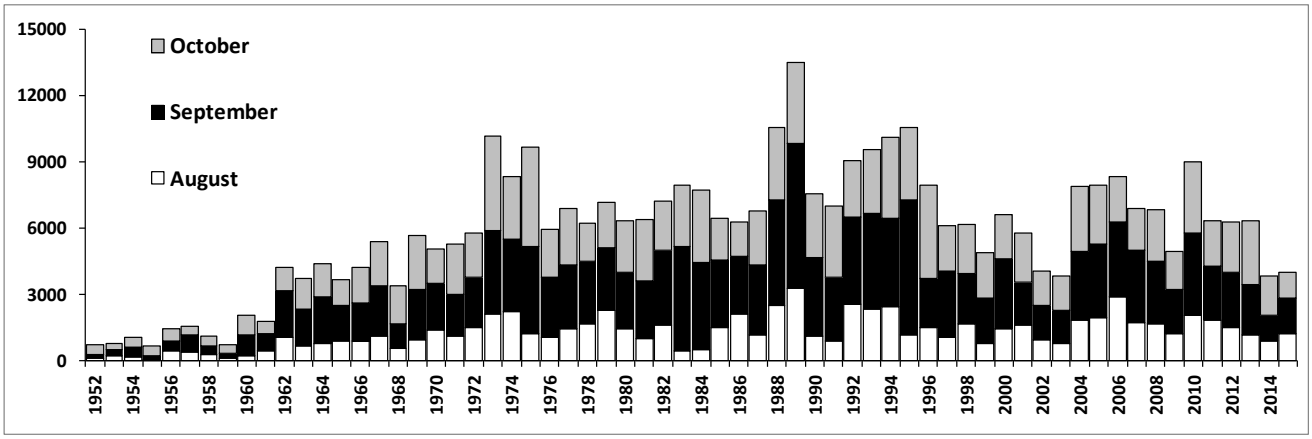



***Figure 15.*** *Reported rod catches of salmon in August, September and October, Tay district, 1952 – 2015. (Data were either reported to Government or directly to TDSFB).*

That autumn fish actually declined in the early 20th century before recovering decades later, is confirmed by catch data and writers. Richard Waddington stated in 1947 that "autumn fishing proper, for fish that have run into the river during September and October, is virtually non-existent in the rivers of the north-east of Scotland today. In the Dee and the Spey even the odd autumn fish is a rarity now. In the Don there is still a very small run, a mere shadow of its former self……"

Catch data from the Stobhall and Taymount beats go back to the 1920s/30s. While not quite long enough to go back to the better days of autumn fishing, they do confirm low autumn catches in the few decades before Government statistics started in 1952. However, the average fish caught in September on Stobhall in the 1930s weighed 18 pounds. Average weights fell progressively thereafter, reaching a mere 9.3 pounds in the early 2000s. In the early part of that period, most of the fish caught in the late autumn, which may well have been coloured, were larger "salmon" with relatively few grilse. The proportion of grilse increased over time and they became the majority by the 1970s, albeit many of these large late grilse would have been thought of as "salmon" by anglers.

That previous "episode" when autumn grilse were particularly scarce might be said, very approximately, to have occurred from the 1920s to the 1950s, although, when grilse recovered strongly in the 1960s, it was in August that the strongest runs occurred initially, becoming progressively later through the 1970s into the 1980s. But, when there was that lack of later running fish, spring salmon were at their most abundant, not just on the Tay, but elsewhere too. So, what was going on then? Are we witnessing something similar happening again?

There is obviously a limit to what relevant information is available from that period. But what can be said, is that the period from approximately the 1920s to the 1940s/50s was a period when sea temperatures increased across the areas where salmon are known to feed, i.e. from the Norwegian Sea across to West Greenland. It is also well known that other biological changes occurred that were readily observed. For example, the cod population expanded massively at West Greenland and pilot whales penetrated further and further up the west Greenland coast year on year before World War 2. Herring were abundant in the Norwegian Sea. In the western English Channel, colder water plankton species disappeared in the 1920s, only to switch back again in the 1960s. In the North Sea,

the productivity of gadoids, that is fish of the cod family, particularly haddock, was lower in the decades before 1960 than it became in the 60s, 70s and early 80s before falling again. However, one gadoid mostly associated with the west and south west of the British Isles, hake, declined in the North Sea after the 1950s, only to increase again in the last few years.

So, what similarities might there be between the earlier episode and the present time? Temperature data show we are, once again, in a period of increased sea temperatures both around the British Isles and to the north of us, in fact all the way to ice, which is in retreat. The extent of Arctic sea ice in October 2016 was the lowest of any October since satellite recording began in 1979. This has had clear biological consequences too. For example, in recent years mackerel have moved much further north than ever recorded. Herring are once again much more widespread in the Norwegian Sea. The increase in hake in the North Sea has already been mentioned.

Of course, it is not to say that we are necessarily seeing an exact repeat of an event that took place in the first half of the 20th century. Ocean climate may be changing, but it is affected by many complex factors and these might not be operating in the same way as occurred in the 1920s. A new feature of the present appears to be a large "blob" of cooling water still far to the west of the British Isles that some speculate may be a consequence of reducing Gulf Stream water moving north. What if this cool zone continues to expand and reach areas of importance for salmon? This may create a wholly new set of biological circumstances, either good or bad.

But why might the changes in the ocean environment affect different types of salmon differently and perhaps even cause switches between autumn and spring salmon? The exact mechanisms behind this still involve much speculation. What is probably not true is that former autumn fish merely just "decide" in some physiological way to come back as springers instead. A more likely mechanism is that fish with a genetic propensity for autumn return suffer a great level of mortality at sea under some as yet poorly understood conditions, while spring salmon do better. It has been suggested that, because spring salmon spend longer at sea, they are more able to reach more distant feeding grounds at a time when warmer conditions prevail. Furthermore, if such differential marine mortality drives in a particular direction for long enough, one type of fish might conceivably expand its spawning range within a river further suppressing others. It has also been suggested that during such conditions pre-grilse might, owing to reduced growth and condition, not mature as grilse but remain at sea for longer, if they survive. There may be truth in this too, but probably only in so far that "early" grilse come back as spring salmon but not as autumn salmon.

So, in conclusion, at this moment we cannot know what will happen. There are lots of possibles but, as yet, few answers. Will this be the start of a new 50 year episode or will it just be a blip which changes to something else in a year or two? After all, things were very different only a few years ago. Or, might there be a big increase in spring salmon? As has been described elsewhere in this report, there have been some signs of improvement in spring salmon on the Tay. However, this has really only been in the actual spring months. In the 20th century spring salmon episode, "winter" springers were abundant, but these still seem to be at lowest ebb. Therefore, time will tell.

## SCOTTISH GOVERNMENT WILD FISHERIES REFORM

As mentioned in the last two *Annual Reports*, Scottish Ministers engaged Andrew Thin in 2014 to conduct a "Wild Fisheries Review". When that review reported in October 2014, it recommended, among other things, the replacement of district salmon fishery boards with a new form of all fish species management structure. In May 2015, Scottish Ministers produced their response to those proposals, that response taking the form of a consultation. The Board's response to that was summarized in last year's *Annual Report.* That Government response also indicated that a draft Bill would be produced before the end of that parliamentary session (spring 2016). Then, in February 2016, Scottish Ministers published their promised *Draft Provisions for a Wild Fisheries (Scotland) Bill/Draft Wild Fisheries Strategy: a consultation.*

In response to this last consultation, the Board expressed significant concerns over some of the proposals. While most of the points the Board raised related to smaller issues of a technical nature, some of the more substantial concerns were as follows:

- The Board did not consider the overall strategy, as described, to be quite correct.
- Rather than being set up through some form of application process, new "Fisheries Management Organisations" should be formed out of the existing DSFB network.
- While the Board agreed with a continuation of the principle of a salmon levy, such levies should be reserved for salmon management and only to be spent in the same districts as they are raised. It would be essential that salmon levies are kept affordable.
- While not against the principle of a levy on fishing for species other than salmon and sea trout, the Board did not consider such a levy would in practice be worth the effort. Most such rights will have an extremely low value and will be problematic and costly to value.
- While the consultation did not ask for any specific opinions on "rod licences", the Board cautioned that there would be significant pitfalls with such an approach and any proposals to introduce them should be resisted. For example, a rod licence would entail a significant cost of administration and significant costs in terms of enforcement. It is also essentially a "poll tax". While many anglers may not grudge paying a rod licence, it will be a barrier for newcomers, occasional anglers and visiting tourists.

It seemed quite clear that funding the aspirations of the Wild Fisheries Review, or Wild Fisheries Reform as it has become known, will be a major problem. There had earlier been an indication that it might have been the intention of Scottish Ministers to introduce a Bill to the Scottish Parliament either in the autumn of 2016 or early in 2017. However, in the event, no Bill was included in the Programme for Government for 2016/17. This is perhaps unsurprising. However, the Programme for Government document did say that "we will introduce a Bill during this Parliamentary session to underpin new management structures and establish the foundations for a more secure and sustainable future for wild fisheries." It is not clear when this might be.

However, while it might not be clear when any legislation might be introduced, other initiatives have been trying to flesh out some of the technical issues that have arisen. For example, a "Stakeholder Reference Group" has been set up by Marine Scotland and meets regularly. This

group's membership includes a range of fisheries interests, including the Association of Salmon Fishery Boards. Details of the group and minutes of its meetings can be found at www.gov.scot/Topics/marine/Salmon-Trout-Coarse/fishreform/refgroup. These give a flavour of the issues being discussed and direction of travel. The process has, of course, thrown up a number of more technical issues and these are being considered by a number of *ad hoc* technical working groups. These consider issues such as regulatory enforcement, training and continuous professional development, change management and transitional matters, fisheries management plans, promotion and development. There is also a Wild Fisheries Strategy Development Group and a Marine Scotland and Local Biologist Liaison Group. More details can be found at www.gov.scot/Topics/marine/Salmon-Trout-Coarse/fishreform.

## SCOTTISH GOVERNMENT SALMON CONSERVATION REGULATIONS

Last year's *Annual Report* described how, after several consultations and iterations, by the end of 2015 the Scottish Government intended to bring forward a new salmon conservation system for Scotland. By comparing estimated stock levels over a five year period with a "conservation limit", rivers would be classified into one of three categories. Category 1 rivers would require no additional management action, category 2 rivers would require some (unspecified) management action to reduce exploitation including a requirement to produce a "conservation plan" and, for category 3 rivers, a conservation plan and mandatory catch and release would be required (reviewed annually). As the rivers Earn and Eden were in category 3 this caused considerable concern.

There would also be a three year prohibition of killing salmon out-with estuary limits to be followed by a review, i.e. there would be no coastal netting for three years. Net fisheries within rivers and estuaries could continue if the conservation status allowed, but the fish would have to be fitted with individually numbered carcass tags.

While the Board welcomed the general principles of this approach to conservation, especially in the light of previous proposals, the Board had major concerns over the accuracy of the categorization methodology. It was felt there was potential for some rivers to be wrongly classified as category 3. The Board made representation to this effect to Scottish Ministers and, in conjunction with the River Earn Improvement Association, also did so to some local politicians. Strong representation was particularly made by the REIA and proprietors and angling clubs in the Earn and Eden catchments. The issue was even given an airing on the local STV news and a primetime Friday evening slot on BBC Scotland's *Landward* programme.

On 19 January, Scottish Ministers announced that following the consultation, they would continue to press ahead with the regulations. The only significant change from the original proposals was that there would be a requirement for a "conservation plan" for all rivers. The conservation plan would "summarise the options for the conservation, restoration, enhancement and management of wild salmon stocks taking into account the best scientific evidence available. It would include detail of existing and future local initiatives to address the current assessment of the fishery district; and identify (and where possible quantify) other factors that might have a material impact….".

Some small changes were made to the compliance methodology and a few rivers changed their categories, but none locally. Scottish Ministers had also been in contact with Fishpal Ltd "who have experience in marketing fishing on a catch and release basis" to promote the angling opportunities of angling clubs. This would apparently be "something we [Scottish Ministers] will be closely monitoring once the Regulations are in force." Scottish Ministers also said that they would be considering the viability of a similar scheme being introduced for sea trout in 2017 and they would also be establishing a working group on baits and lures to consider the options around national and/or local measures.

The draft Order to bring in these proposals was laid in the Scottish Parliament on 23 February 2016 and was referred to the Rural Affairs, Climate Change and Environment Committee. The Order was

considered by the committee on 9 March. Alex Fergusson MSP sought to have the Order annulled. In the event, after an interesting debate, the regulations were passed by one vote. The debate can be found at www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=10429&mode=pdf.

The Regulations took effect on 1 April 2016.

Fortunately, Marine Scotland acknowledged that more work was required to improve the categorization methodology. In addition to doing more work themselves, a Local Biologist Liaison Group was established to feed information into the process directly from river biologists.

On 1 September 2016, Marine Scotland published another round of categorizations for the forthcoming 2017 season. A number of changes had been made to the methodology, trying to make it account for differences in flows from year to year and trying to relate catches on rivers with fish counters to fish counts on a monthly rather than annual basis. This resulted in a number of reclassifications. The Earn and the Eden moved from category 3 to category 2, but the Tay remained in category 1. There were, however, still significant anomalies. For example, the total estimated numbers of salmon running some rivers appeared to be greatly overestimated while others seemed underestimated. In a response to the associated consultation, the Board pointed out that rivers with mainly summer runs were overestimated and those with mainly autumn runs were underestimated. This was due to the fact that, in most of those rivers with fish counters, catches upstream tended to be low in summer relative to the counts, whereas in the autumn, catches upstream were often high relative to autumn counts for the simple reason that anglers are then fishing for fish that have entered the river over a whole season. The Board's response to that consultation can be found at www.tdsfb.org/wildfisheries.html.

On 24 November 2016, the Order for the 2017 Regulations was laid in the Scottish Parliament. A number of rivers again had their categorization changed as a result of the consultation, but not in the Tay district where the Tay upstream of Earnmouth is grade 1 and the Earn and Eden are both grade 2. However, in Marine Scotland's response to the consultation responses, there was no reference to some of the outstanding problems with the methodology identified by the Board. The document also stated that Marine Scotland has apparently "no plans at the moment to make major structural changes to the assessment model in the coming year. Changes in the conservation status of assessment areas/rivers for the 2018 fishing season will thus be driven largely by changes in the reported catch and biological characteristics of the stock such as age structure and run timing".

With this in mind, in order to obtain better information locally, the Board issued packets to several beats / clubs on the Earn and Eden for anglers to take samples of scales. It is hoped that this information will help build up a picture of the size, sea age and sex of fish caught on those rivers to help improve these models.

Work is understood to be ongoing in developing templates for conservation plans.

Further information from the Scottish Government website can be found at www.gov.scot/Topics/marine/Salmon-Trout-Coarse/fishreform/licence.

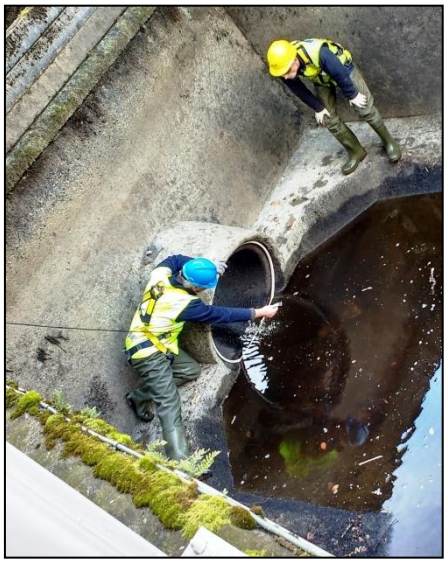
## RIVER TUMMEL SMOLT TAGGING PROJECT

The Tummel smolt tagging project is a joint project between the Tay Foundation, Marine Scotland Science, SSE and the Board which has been several years in the making but finally commenced in 2016. The project involves catching salmon smolts upstream of Pitlochry Dam and implanting them with individually identifiable Passive Integrated Transponder (PIT) tags. These tags remain in the smolts as they move out to sea and eventually return as adults. A detector placed within the fish pass at Pitlochry Dam will record each adult fish as it ascends, thus allowing annual survival rates from smolting to return to be determined.

In February 2016, when the fish pass at Pitlochry was drained down for maintenance, a trial detector was installed and found to work satisfactorily. There was therefore no impediment to the project and smolts could be caught and tagged in spring 2016 while the permanent detector would be installed in February 2017 when the fish pass is drained for annual maintenance again.

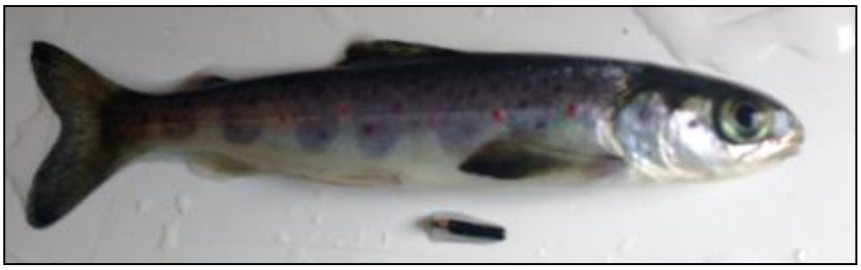
In April 2016, a rotary screw smolt trap (RST), imported from British Columbia, was installed in the lower Errochty Water. The Errochty Water was chosen for this first year because of its dependable hydro controlled flow.





*Rotary Screw Trap in position to catch smolts funnelling through a weir on the Errochty Water (above), testing a PIT tag detector in the drained fish pass, Pitlochry Dam (right).*

Between 1st April and 18th May 2016, 388 salmon smolts with an average length of 114.5 mm were captured and tagged. Initially, relatively small numbers of smolts were caught on a daily basis and these were released just below the trap to go on their way. But from 21st April most tagged smolts were transported 2km upstream of the trap before release. 241 individuals were transported in this way and 130 of those were recaptured in the trap for a second time. From some batches, 100% of the transported smolts were recaptured and in others as few as 25%. Generally, smolts were recaptured the next day after release and this trend was more pronounced as the smolt run progressed. By thus obtaining estimates of the efficiency of the trap, which cannot catch all the smolts which swim past it, it was possible to statistically estimate the total run of smolts. Over the trapping period this was estimated at 720 individuals. Admittedly, higher numbers were expected. It may be that many smolts had moved out before trapping started during periods of higher water.



*Salmon smolt and PIT tag*

Between 2nd and 6th May, a proportion of the smolts caught were transported down to Pitlochry. 95 tagged individuals were released above the dam at Fonab Castle and 92 directly below the dam. This trial was undertaken to determine whether the trip through Loch Faskally and subsequently passage through Pitlochry Dam had any effect on the descending smolt run.

In addition to salmon smolts, 154 juvenile salmon, predominantly parr around 70 - 90mm in length, were also captured. Numbers of these increased as the smolt run began to decline. Their numbers particularly increased on 3rd May after an increase in flow and numbers continued daily thereafter. This presumably indicates a natural dispersal of salmon juveniles leaving upper catchments in the spring to smolt further down river in subsequent years.

While years of conducting juvenile electrofishing surveys have indicated that juvenile salmon greatly outnumber trout in the Errochty Water, 378 trout were in fact caught during the trapping period. While trout made up a significant proportion on the catch between the 12th April and the 1st May, 120 individuals were caught on the 3rd of May following a rise in water. Interestingly no trout that had just turned one year old were captured.

This first trapping season was considered a success in familiarizing the staff in the procedures required etc, but more smolts need to be tagged to make the exercise robust. Trapping will commence earlier in 2017 (trapping was delayed in 2016 due to an unforeseen delay in the arrival of the trap) plus a second trap has also been purchased by the Tay Foundation for use in the River Garry.

## AQUACULTURE AND FISHERIES (SCOTLAND) ACT 2013

The Aquaculture and Fisheries (Scotland) Act 2013, placed a number of new duties on DSFBs relating to openness and accountability. It requires that the Annual Report should include:

1) A summary of what the board has done in carrying out its statutory functions during the year to which the report relates.
2) A summary of what the board propose to do in carrying out those functions in the following year.
3) Information about complaints made to the Board during the year, including: the number of complaints; and a statement of the nature of each complaint and how it was disposed of.
4) A statement as to how the Board have complied during the year with the good governance requirements and propose to comply with those requirements in the following year.

Point 1) has been covered by the main body of this report. 2) has partly been summarised by the main body of the report but might be further summarised by saying that the Board intends to continue to work on the same issues covered in 2016, but particularly intends to develop the River Tummel Smolt Tagging Project in 2017.

Regarding point 3), as of the time of writing (November 2016), no complaints were received in 2016.

**New governance requirements**

The Act placed a number of governance requirements on DSFBs, as indicated in point 4) above.

***Meetings***

All meetings of the Board, including Board meetings and the annual meeting of qualified proprietors, were open to the public as observers, and will continue to be so, although some items of business at Board meetings may be taken in private.

There was an annual public meeting on 31 March 2016, which was separate from the annual meeting of proprietors. Members of the public participated fully and minutes of the meeting can be found at www.tdsfb.org/reports.html. There will be another such meeting in 2017.

The dates and details of forthcoming meetings can also be found at www.tdsfb.org/reports.html.

The minutes of Board meetings have also been published at www.tdsfb.org/reports.html where they will continue to be published. Hard copies can also be obtained from the Clerk on request.

***Annual Report and Accounts***

The Annual Report with accounts for 2014/15 was published at www.tdsfb.org/reports.html and hard copies were sent to all qualified proprietors in the district and a copy sent to Scottish Ministers

on 17 February 2016. This report and subsequent Annual Reports will also be published on the same basis and a copy will be sent to Scottish Ministers.

***Complaints procedure***

The Board has set up and maintains a complaints procedure which can be viewed at www.tdsfb.org/governance.html.

***Board members' interests***

The Board has set up a register of members interests. This can be viewed on request at the Board's office. We have included 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.

**TAY DISTRICT SALMON FISHERIES BOARD**

**Minutes of Annual Meeting of the Proprietors within the Tay District held in terms of Section 44(1) of the Salmon & Freshwater Fisheries (Consolidation) (Scotland) Act 2003 held at Birnam Institute, Birnam, Dunkeld at 11am on Tuesday, 8th December 2015.**

Present: William Jack (Chairman)
Alastair Riddell
John Wood
Alistair Munro, P&KC
D R Milburn
Simon Wright
Claire Mercer Nairne
Mike Smith
Callum Towns
David Godfrey
Gary Harkin
Edward Eadie
Ian Wood
Iain Wood
Ian Dalglish
William Jackson

In Attendance: Dr. David Summers, Fisheries Director
Inga McGown, Clerk to the Board
Stephen Mannion
Mike Brown
Gavin Clark, SNH
David Brown
Simon Furniss
Geordie Stewart
Bob White
Gordon Pollock
John Lessels

Apologies: John Apthorp, Eric Starke

**Minutes of Annual Meeting of Proprietors held on 12th December 2014:**

The Minutes of the 2013 Annual Meeting of Proprietors were previously circulated in the Annual Report and taken as read. There were no matters arising, and on a proposal by David Brown, and seconded by Simon Furniss, were approved.

**Accounts for the Year Ended 31st December, 2014**

The Accounts for the year ended 31st December 2014, which were incorporated into the Annual Report, had been circulated and were taken as read.

The Clerk gave a brief overview of the accounts and the main variances year on year. 2014 saw a surplus of £35,757 due largely to a provision release against revaluations of £30k.

There were no questions, and on a proposal from David Brown, and seconded by Simon Furniss, the Accounts were approved.

**Annual Report 2014/15**

The Annual Report 2014/15 had been previously circulated and was taken as read. On a proposal by Callum Towns, and seconded by Alastair Riddell, the Annual Report was approved.

**Board Activities for 2015 season and beyond**

The Chairman explained that the Wild Fisheries review had dominated much of the Board's time over the last year, and handed over to Dr. David Summers to summarise the year's activities.

David Summers gave a brief review of the year, highlighting in particular, the catch figures for 2015, the Wild Fisheries Review, the Licence to Kill, the Hatchery, the River Garry, and a future Tummel smolt project.

2015 saw an encouraging start in Spring, and David Summers went on to explain that the 2015 catch figures were likely to exceed the 2014 figures, which had been relatively poor. Although the season started fairly well, the autumn run was slightly disappointing which may have had a number of causes, not least a widespread poor return of grilse.

Dr. Summers then went on explain the Wild Fisheries Review in detail, giving its history before progressing to the current situation. He told the attendees that, at the recent ASFB AGM, the Government appeared to be listening to the collective Boards' view that redistribution of funds between rivers was not an option. He ended the topic by stating that further consultation on the Bill could be expected around February 2016, with the Bill being laid before Parliament anytime from August 2016 onwards.

As to the recent kill licence scenario, Dr. Summers stated that Andrew Thin's report had been in favour of introducing a quota scheme for salmon which would be administered with carcass tags. The Government had then proposed introducing such a system through a consultation earlier in the year. However, following widespread objections over the practicability of such a scheme, in September there was another consultation in which quotas and tagging had been abandoned in favour of a new proposed system whereby rivers were allocated to one of three distinct categories of health. While no change in practice was required in category 1 rivers, mandatory catch and release

would be required in category 3 rivers. The Tay was in category 1 but the Earn and the Eden were in category 3.

David Summers then focused on catch and return handling techniques, and asked that anglers try to keep the fish in the water if possible, and not to hold them by the tail, as well as minimizing any human contact with them, as it could have significant effects on their survival.

The hatchery then became the source of discussion, with Dr. Summers explaining that we have used the hatchery fish to stock the River Garry with a fairly high degree of success which can be evidenced from electrofishing studies. As well as stocking out eyed ova and unfed fry, we are rearing fish to parr stage and fin clipping them to make identification easier. He then urged anyone who hadn't seen the facility to come and have a look.

As to the River Garry, Dr. Summers stated that it was meant to be rewatered by the end of December 2015 per the EU Water Framework Directive, but as no decisions had been made as yet, that deadline was clearly not going to be met.

Regarding the future, David Summers was excited to announce that the Board were embarking upon a potential project with Marine Scotland Science, The Tay Foundation and SSE to assess marine survival rates of salmon smolts leaving the River Tummel. Salmon smolts would be trapped in the Tummel system and tagged with "PIT" tags. On their return as adults, these fish would trigger a detector in the fish pass at Pitlochry Dam and be individually identified. Such a scheme could also be adapted to measure survival rates of smolts passing through hydro turbines. In the past, staffing had been the main reason this project had not progressed, but with Mike Brown about to join the Board early in 2016 as Operations Manager, this issue had now been resolved.

**Any Other Business**

***Conservation plan responsibility for Category 3 rivers:***

Simon Wright of Lochlane & Laggan asked with regard to the potential to have rivers recategorised and in particular category 3 rivers, who would be responsible for the conservation plans. DS replied that after attending a meeting with Roseanna Cunningham MSP and Marine Scotland Science, it appeared that the fundamental methodology, the accuracy of which he questioned, seemed fairly inflexible in so far as changing categories was concerned. While altering the flawed model didn't seem an immediate option, MSS did seem to be interested in receiving any relevant data they might not have that might be fed into the model. While MSS had not provided any detail regarding the proposed conservation plans, he assumed that MSS, fishery boards and trusts, together with proprietors and all other interested parties would possibly be involved in the production and delivery of conservation plans.

***Sustainability calculation:***

Bob White then asked how the sustainability number had been calculated in determining which category a river was in. David Summers replied that the calculation involved estimating how many eggs a river required to adequately populate with juvenile salmon. The problem lies in the fact that

very few rivers have the data required to make the calculation. Indeed, the North Esk has a figure of 9.8 eggs per square metre, whilst the River Bush in Northern Ireland uses 3.5 eggs per square metre. The figure applied across all Scottish rivers was effectively the average of a wide range of figures quoted in the literature, 5.45 eggs per square metre. Dr. Summers considered that it was clearly not right that a single figure should be applied to all of Scotland's diverse rivers. In particular, he considered that lowland rivers with relatively poor salmon habitat (e.g. much of the Earn and Eden) may have conservation limits set at twice what they can achieve and they would thus never hit targets.

***Spate damage?***

Bob White then asked what with the recent spates, do these not have a catastrophic effect on spawning? He then emphasized the importance of the hatchery with respect to stocking out. David Summers stated that good numbers of stocked out fish appear to have survived in electrofishing studies. He went on to say that the floods of 2006 caused huge amounts of damage on the Tilt and other areas, but in the following years, numbers through the Pitlochry counter had been up, so perhaps abnormal spates were not always as catastrophic as first thought.

***Worming:***

Mike Smith congratulated the Board on the annual report and asked, as the Board had advised against worming after 31st August in their conservation leaflet, how did the Board feel about some beats worming fairly heavily into September. The Chairman replied that many beats had endured a tough time towards the end of the season with low water and few fish, and therefore they had resorted to worming during that period. Ian Dalglish remarked that worming was not the only useable method.

***Eden season extension:***

Ian Young of the Eden Angling Association thanked David Summers for all his hard work with respect to category 3 classification, and asked whether the Board would consider helping the Eden to extend their season to the 15th November, considering the Eden has no spring component to speak of and the main run of fish is during October and November. Historically their season was 15th February to 15th November.

Dr. Summers replied that given the Board's experience with season extensions, this process might be very long and drawn out. Furthermore, considering the Eden is category 3 and could potentially become 100% catch and release, he questioned whether the proposal would stand much of a chance with the Government in terms of conservation. He added that the logical time to address this issue would be when the Eden conservation plan was drawn up, but he didn't have a timescale.

The Chairman added that the Board was still pursuing changing the methodology behind the proposed categorization process and the Eden may well find if it was reclassified it may no longer be category 3.

There was no other business and the Chairman closed the meeting.

# REPORT OF THE AUDITORS TO THE PROPRIETORS OF SALMON FISHERIES IN THE TAY DISTRICT

In accordance with the Salmon and Freshwater Fisheries (Consolidation)(Scotland) Act 2003, section 44, we have audited the financial statements on pages 42 to 46. These financial statements have been prepared in accordance with the Financial Reporting Standard for Smaller Entities (effective January 2007), under the historical cost convention and the accounting policies set out on page 44.

This report is made solely to the proprietors of Salmon Fisheries in the Tay District. Our audit work has been undertaken so that we might state to the proprietors those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the proprietors for our audit work, for this report, or for the opinions we have formed.

**Respective responsibilities of duly elected and duly co-opted board members and auditors**
Section 44 of the Salmon and Freshwater Fisheries (Consolidation)(Scotland) Act 2003 requires the Board to prepare a statement of accounts for each financial year which give a true and fair view of the state of affairs of the Board and of the surplus or deficit for that period. In preparing those accounts, the Board members are required to:

- select suitable accounting policies and apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- prepare the accounts on the going concern basis unless it is inappropriate to presume that the Board will continue in operation.

The Board members are responsible for keeping proper accounting records which disclose with reasonable accuracy the financial position of the Board. They are also responsible for safeguarding the assets of the Board and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Our responsibility is to audit the financial statements in accordance with relevant legal and regulatory requirements and International Standards on Auditing (UK and Ireland). We report to you our opinion as to whether the financial statements give a true and fair view and are properly prepared in accordance with the Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003. We also report to you whether in our opinion the information given in the Annual Report is consistent with the financial statements.

In addition, we report to you if, in our opinion, the company has not kept proper accounting records, if we have not received all the information and explanations we require for our audit, or if information specified by law is not disclosed.

We read the Annual Report and consider the implications for our report if we become aware of any apparent misstatements within it.

**Basis of Opinion**
We conducted our audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgements made by the Board members in the preparation of the financial statements, and of whether the accounting policies are appropriate to the Board's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the accounts are free from material misstatement, whether caused by fraud or other irregularity or error. In forming our opinion, we also evaluated the overall adequacy of the presentation of information in the financial statements.

**Opinion**
In our opinion:

- the financial statements give a true and fair view, in accordance with United Kingdom Generally Accepted Accounting Practice applicable to Smaller Entities of the state of the Board's affairs as at 31 December 2015, and of its surplus for the year then ended;
- the financials have been properly prepared in accordance with the Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003; and
- the information given in the Annual Report is consistent with the financial statements.

Campbell Dallas LLP
Chartered Accountants and Registered Auditors
Perth
October 2016

TAY DISTRICT SALMON FISHERIES BOARD
INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED 31 DECEMBER 2015

| | NOTES | £ | 2015<br>£ | 2014<br>£ |
|---|---|---|---|---|
| INCOME | | | | |
| Fishery assessments | 2 | | 468,266 | 468,133 |
| Revaluation Appeals | | | - | 30,000 |
| Bad debts, changes to provision for doubtful debts etc | | | (6,255) | - |
| | | | 462,011 | 498,133 |
| Compensation Received (SSE) | | | 6,791 | 6,791 |
| Contributions from Tay Foundation(Hatchery) | | | - | - |
| Contributions from John Apthorp through TF (new offices) | | - | - | |
| Contribution from Tay Foundation (Invasives) | | | - | - |
| Rent | | | - | - |
| Consultancy | | | 3,690 | 6,590 |
| Other | | | - | 1,766 |
| | | | 472,492 | 513,280 |
| EXPENDITURE | | | | |
| Salaries and National Insurance | | 208,885 | | 203,761 |
| Pension plus Death in Service- Board's contribution | | 13,186 | | 12,890 |
| LBM Consultancy Costs | | - | | 800 |
| Recruitment & Training | | 5,021 | | 244 |
| Road Maintenance | | - | | 20,993 |
| Bank Charges | | 212 | | 181 |
| Motor cars and boats running costs, incl insurance | | 28,866 | | 29,103 |
| Rent, rates and general insurance | | 30,949 | | 29,737 |
| Heat & light | | 11,511 | | 19,114 |
| Repairs&maintenance - General | | 8,137 | | 10,694 |
| Repairs&maintenance - Hatchery | | - | | - |
| Telephone & Communications | | 8,720 | | 6,368 |
| Printing, Stationery, Postage & Advertising | | 2,769 | | 4,424 |
| Annual Report Costs | | 600 | | 600 |
| Meetings and other statutory costs | | 3,030 | | 2,788 |
| Ghillies lunch and meeting | | 619 | | 713 |
| Administration costs | | - | | - |
| Legal fees | | 4,809 | | 10,268 |
| Audit and accounts fees | | 2,670 | | 2,400 |
| Depreciation | | 30,112 | | 27,470 |
| Subscriptions and levies | | 15,886 | | 16,043 |
| I T costs | | 492 | | 475 |
| Health & Safety implementation incl clothing | | 6,958 | | 5,369 |
| Hatchery Running Costs | | 53,868 | | 53,055 |
| Project Work | | 82 | | 1,337 |
| Websites | | 9,631 | | 9,808 |
| New Offices | | 170 | | 9,197 |
| Conservation Dinner | | - | | - |
| Gifts & Presentations | | 390 | | 58 |
| | | | 447,573 | 477,890 |
| | | | 24,919 | 35,390 |
| Gain on sale of fixed assets | | | 2,100 | - |
| | | | 27,019 | 35,390 |
| Interest received | 3 | | 528 | 369 |
| | | | 27,547 | 35,759 |
| Transfers to reserves: NASF(UK) | 5 | | - | - |
| (Deficit)/Surplus for the year | | | 27,547 | 35,759 |

The notes on pages 44 to 46 form part of these accounts.

TAY DISTRICT SALMON FISHERIES BOARD

BALANCE SHEET
AS AT 31 DECEMBER 2015

| | NOTES | £ | 2015<br>£ | 2014<br>£ |
|---|---|---|---|---|
| FIXED ASSETS | | | | |
| Tangible assets | 4 | | 118,571 | 127,500 |
| | | | 118,571 | 127,500 |
| CURRENT ASSETS | | | | |
| Debtors & prepayments | | 63,853 | | 52,018 |
| Cash at Bank and in Hand | | 334,764 | | 300,338 |
| | | 398,617 | | 352,356 |
| CURRENT LIABILITIES | | | | |
| Other creditors & accruals | | 99,235 | | 89,450 |
| Net current assets | | | 299,382 | 262,906 |
| NET ASSETS | | | 417,953 | 390,406 |
| Representing: | | | | |
| Reserves | 5 | | 83,434 | 83,434 |
| General Fund | 6 | | 334,519 | 306,972 |
| | | | 417,953 | 390,406 |

These accounts were approved on 13th December 2016

WILLIAM JACK
..... BOARD MEMBER

SIMON FURNISS
..... BOARD MEMBER

The notes on pages 44 to 46 form part of these accounts.

NOTES TO THE ACCOUNTS
AT 31 DECEMBER 2015

1 ACCOUNTING POLICIES

The accounts have been prepared under the historical cost convention and are in accordance with applicable accounting standards. The following accounting policies have been applied:

Fixed assets and depreciation

The cost of fixed assets is stated at the net amount after deducting grants available. Donations relating to expenditure on fixed assets are credited to the Profit and Loss Account in the year of receipt, where there are no conditions attaching to the donation.
Depreciation is provided on all fixed assets, at rates calculated to write off the cost over the expected useful lives of the assets concerned as follows:

| | |
|---|---|
| Hatchery | Over term of the lease |
| Motor vehicles | 25% per annum straight line |
| Boats | 25% per annum reducing balance |
| Plant and Equipment | 25% per annum reducing balance |
| Computer equipment | 33.3 % straight line |

## Taxation

No taxation is provided due to the fact that HM Revenue and Customs has agreed that the Board is not liable for corporation tax.

## Death in service scheme

Contributions to the Board's scheme are charged to the Income and Expenditure account in the year in which they become payable.

2 FISHERY ASSESSMENTS

| | | 2015 | | 2014 |
|---|---|---|---|---|
| | Rateable Value | Assessment | Rateable Value | Assessment |
| | £ | £ | £ | £ |
| Upper proprietors | 875,774 | 465,912 | 881,825 | 469,131 |
| Lower proprietors | 4,425 | 2,354 | 4,425 | 2,354 |
| | 880,199 | 468,266 | 886250 | 471,485 |
| Less River Shee | | 93 | | 93 |
| Estuarial netting stations | | 3,259 | | 3259 |
| | | 468,133 | | 468,133 |

The assessments are based on 53.2% of Rateable Value (2014 – 53.2%)

| 3 INTEREST RECEIVED | 2015 | 2014 |
|---|---|---|
| | £ | £ |
| Bank interest | 528 | 367 |
| | 528 | 367 |

NOTES TO THE ACCOUNTS (cont'd)
AT 31DECEMBER 2015

4 FIXED ASSETS

| | Leasehold Property | Motor VehiclesBoats | Equipment | Plant & Equipment | Office and Computer Total | |
|---|---|---|---|---|---|---|
| | £ | £ | £ | £ | £ | £ |
| Cost: | | | | | | |
| At 1 January 2015 | 191,468 | 77,939 | 42,671 | 186,517 | 20,028 | 518,623 |
| Additions | - | 22,933 | - | - | - | 22,933 |
| Disposals | - | 19,353 | - | - | - | 19,353 |
| At 31 December 2015 | 191,468 | 81,519 | 42,671 | 186,517 | 20,028 | 522,203 |
| Depreciation: | | | | | | |
| At 1 January 2015 | 83,279 | 63,969 | 42,429 | 181,417 | 20,028 | 391,122 |
| Charge for year | 10,817 | 17,953 | 61 | 1,281 | - | 30,112 |
| Eliminated for disposals | - | 17,603 | - | - | - | 17,603 |
| At 31 December 2015 | 94,096 | 64,319 | 42,490 | 182,698 | 20,028 | 403,631 |
| Net book amounts: | | | | | | |
| At 31 December 2015 | 97,372 | 17,200 | 181 | 3,819 | - | 117,935 |
| At 31 December 2014 | 108,189 | 13,969 | 242 | 5,100 | - | 127,500 |

5 RESERVES

| | GENERAL | NASF(UK) | TOTAL |
|---|---|---|---|
| | £ | £ | £ |
| At 1 January 2015 | 83,434 | - | 83,434 |
| Provision in year | - | - | - |
| | 83,434 | - | 83,434 |
| Expenditure in year | - | - | - |
| At 31 December 2015 | 83,434 | - | 83,434 |

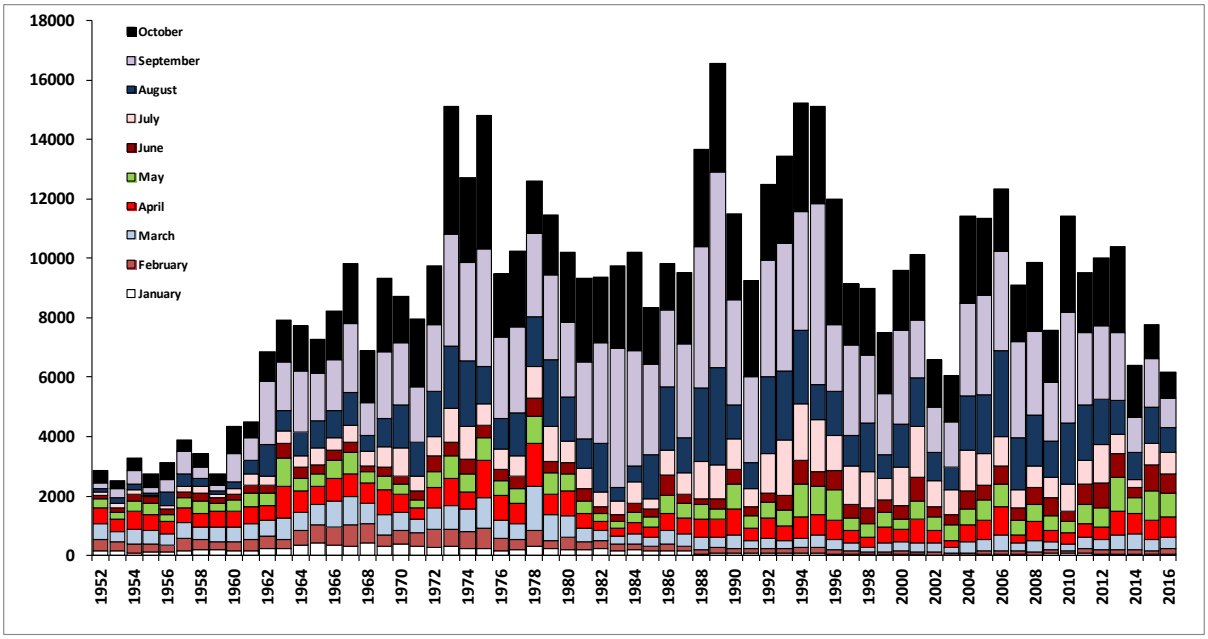
NOTES TO THE ACCOUNTS (cont'd)
AT 31 DECEMBER 2015

6 GENERAL FUND

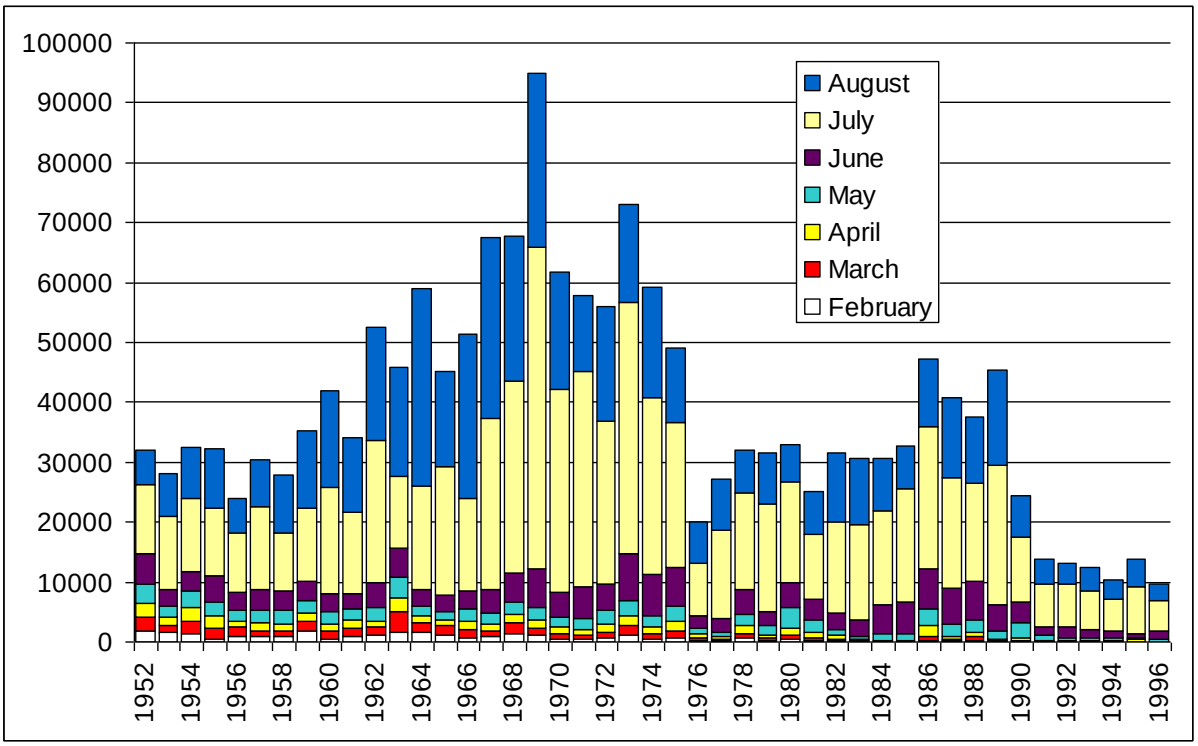
| | 2015 | 2014 |
|---|---|---|
| | £ | £ |
| At 1 January 2015 | 306,972 | 271,213 |
| (Deficit)/Surplus for year | 27,547 | 35,759 |
| At 31 December 2015 | 334,519 | 306,972 |

7. CAPITAL COMMITMENT

There were no capital commitments as at 31st December 2015.




*Monthly angling catch for the Tay District 1952 – 2016 (including released fish). The 1952 – 2010 data used in this graph are Crown copyright, used with the permission of Marine Scotland Science, Aberdeen. Marine Scotland is not responsible for interpretation of these data by third parties. 2011 to 2015 data were collected by the Board and 2016 is based on a preliminary analysis of [www.fishtay.co.uk](http://www.fishtay.co.uk) catches.*




*Monthly net and coble catch, Tay District 1952 – 1996 (netting largely ceased in 1996). The data used in this graph are Crown copyright, used with the permission of Marine Scotland Science, Aberdeen. Marine Scotland is not responsible for interpretation of these data by third parties.*

## BOARD MEMBERS ATTENDANCE FOR 2015

| | 10 February | 14 April | 2 June | 6 August | 20 October | 8 December |
|---|---|---|---|---|---|---|
| W. Jack | X | X | X | X | X | X |
| S. Furniss | X | X | X | X | X | X |
| D. Godfrey | X | X | X | X | X | X |
| E. Starke | X | - | - | - | - | - |
| C. Mercer Nairne | X | X | X | X | X | X |
| S. Mannion | X | X | X | - | X | X |
| D. Brown | - | X | - | - | X | X |
| A. Riddell | - | X | X | X | - | X |
| I. McLaren | X | X | - | - | X | X |
| J. M. Wood | X | X | X | - | - | X |
| J. Coburn[1] | - | - | - | - | X | X |
| M. Brown[2] | X | X | - | - | X | X |

1 – A. Munro replaced J. Coburn as PKC Mandatory on 20 October.

2 – Bob White attended as Tay Ghillies Association rep instead of M. Brown on 14 April.

X Present - Apologised for non-attendance

## ACKNOWLEDGEMENTS

The Tay District Salmon Fisheries Board wishes to acknowledge the following people, organisations and companies for their very kind assistance and support in 2015 and 2016.

All Proprietors within the Tay District
Andrew Graham-Stewart
All Honorary Bailiffs
All Ghillies and Boatmen
All Tay Board staff
The Tay Ghillies Association
The Tay Foundation
The River Earn Improvement Association
Scottish Environment Protection Agency
The staff of Marine Scotland at:
Victoria Quay, Edinburgh
Freshwater Fisheries Laboratory, Pitlochry
Montrose Research Station
The Association of Salmon Fishery Boards
The River and Fisheries Trusts of Scotland
Fishlegal
Scottish Natural Heritage
SSE plc
Police Scotland