Tay District Salmon Fisheries Board



Annual Report
2009 / 10

ANNUAL REPORT 2009/ 10

CONTENTS **PAGE**

Tay District Salmon Fisheries Board Members and Staff	2
Chairman's Report	3
2010 Report	6
Fish Counter Results 2010	26
Analysis of 2010 Season	31
River Tay Experimental Trial of Shrimp Fishing	32
Proposed Tay Salmon Angling Season Trial Extension	35
The River Garry – Application to Re-Water Finally Made	37
The River Tay Conservation and Awards Dinner	39
Minutes of the Annual Meeting of Proprietors 2009	41
Report of the Auditors to the Proprietors of Salmon Fisheries in the Tay District	45
Tay Salmon Catch Graphs 1952 – 2010	51
Board Members Attendance	52
Acknowledgements	52

TAY DISTRICT SALMON FISHERIES BOARD

Chairman

William Jack (Mandatory for Ballathie Timeshare)

Members Elected by Upper Proprietors

W. Lindsay (Mandatory for Taymount Timeshare), J. Young (Mandatory for Laird Securities), A. Riddell, Viscount Stormont (Mandatory for The Viscount Stormont's Trust Trustees), R. White (Mandatory for Mr A. Gifford), T. Steuart-Fothringham, S. Mercer-Nairne (Mandatory for Meikleour Hotels and Fishing), S. Furniss (Mandatory for Hilton Dunkeld House Hotel), M. Wedderburn, I. Massie, J. Tritton (Mandatory for Mrs C. C. Ward) and B. Reid (Mandatory for W Reid)

Members Elected by Lower Proprietors

D. Godfrey (Mandatory for Tay Salmon Fisheries Company Ltd)

Co-opted Members

Representatives of Salmon Anglers

D. Barwick (Tay Ghillies Association)
A. Stewart
J. Wood
C. Lowson

Clerk and administrator
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CHAIRMAN'S REPORT 2010

2010 was a year of mixed fortunes. It was on the whole a low water year, conditions that generally benefit catches on the Tay. This, coupled with a grilse run that started earlier than in recent years and remained strong throughout most of the season, resulted in catch totals that we have not seen for a very long time. Indeed, some lower beats had their best numbers for more than a decade. The same was not true for many parts of the upper system, the low water coupled with a very poor spring run, did not help that part of our catchment.

The greatest cause for optimism has been the progress that has been made in addressing the environmental disaster which is the River Garry. The European Water Framework Directive is forcing the regulators (SEPA) and SSE (the abstractors) to address this national disgrace. I have found my meetings with SSE officials to be very constructive and, while their proposals fall short of what we would ideally like to see, it is clear that the proposals made so far, represent real progress in our efforts to see the Garry and its tributaries brought back to life.

During the year, the Board has listened to representations regarding later autumn run timings and after considerable debate, is now recommending a three year trial extension of the season to the end of October. It has done so, on the understanding that all fish will be released and at least one third of the income generated by letting these additional two weeks be donated to the Tay Foundation to be spent on river improvement projects.

The other even more controversial initiative was the 12½ day trial of shrimp fishing. This was carried out under very strict conditions which included barbless hooks and mandatory catch and release. Although the trial would have been more relevant, had it been undertaken in the high water low grilse run of 2009, it nonetheless provided a useful insight into Tay anglers and their preferred methods of fishing and the relative effectiveness of each. A copy of the outline report is published separately.

Stocking the system is also an area where there are differences of opinion and some strongly held views. It is a substantial cost and its impact on our river is far from clear. I believe that if we are to continue, we should do so within the framework of a properly documented policy. This should set out what we are trying to achieve and how we will measure success, as well as what risks it may pose and what steps we should take to mitigate them. It should include detailed record keeping on broodstock, (location of capture, mortality, etc.) and detail what the criteria are for planting out. The Board has asked Dr Summers to work with interested parties to produce such a policy for presentation during the first half of 2011. It would be my hope that once approved, it would be published and lead to a more informed debate about how we go forward.

The Board published for the first time, a complete project plan detailing its proposed activities for the year. Management has reported to the Board at each of its meetings on progress against plan. This has proved to be a very successful way of ensuring that all interested parties can keep check on how assessment monies are being spent. The down side is that it highlighted our failure to enlarge upon this and to communicate to the whole angling community through a meaningful relevant website. I believe that open communication is essential. There are many people who use the web to share their

thoughts and ideas with the wider world. Some are thought provoking, others simply wrong and some quite ridiculous.

Those who seem to be on permanent transmit, can often lose sight that whilst their criticism may be aimed at an individual or even the Board collectively, it can be damaging to the perceptions of our river as a whole. To me, it becomes an imperative that we develop a web platform that allows us to communicate the most up to date information on the Board's activities to distribute the results of research or analysis and just as importantly, to engage in a dialogue with those who work on the river as well as those who come to fish it. I hope to see such a site in place by early 2011.

My predecessor in his report last year, mentioned the stretched finances of the Board. Beat owners were faced with substantial increases in their assessments and neither position was satisfactory. The Board resolved to set a three year financial plan that had the twin aims of holding the assessment at present levels for a minimum of three years and, at the same time, creating a substantial surplus in the Board's cash position sufficient to allow it to respond to almost anything it was likely to face. This could only be achieved by generating income in addition to the assessment and at the same time reducing costs. I am pleased to report that this ambitious goal is already well on track. Once again, the generosity of John Apthorp should be recognised as playing a big part and he has our grateful thanks.

Anglers have responded to the call for conservation in a way that few would have believed even just a few short years ago. Although there are still a few who think it right and seek to justify killing the scarce, precious spring fish, it seems the vast majority of fishermen wish to do what they can to encourage their survival by returning them safely to the river when caught. The Board would like to acknowledge and thank all of those who have done what they can to help our beleaguered spring salmon.

Finally, I would like to thank the TDSFB management team, the ghillies and the excellent team of bailiffs for their work throughout the year. I would also thank the Board members for the support they have given me from the outset.

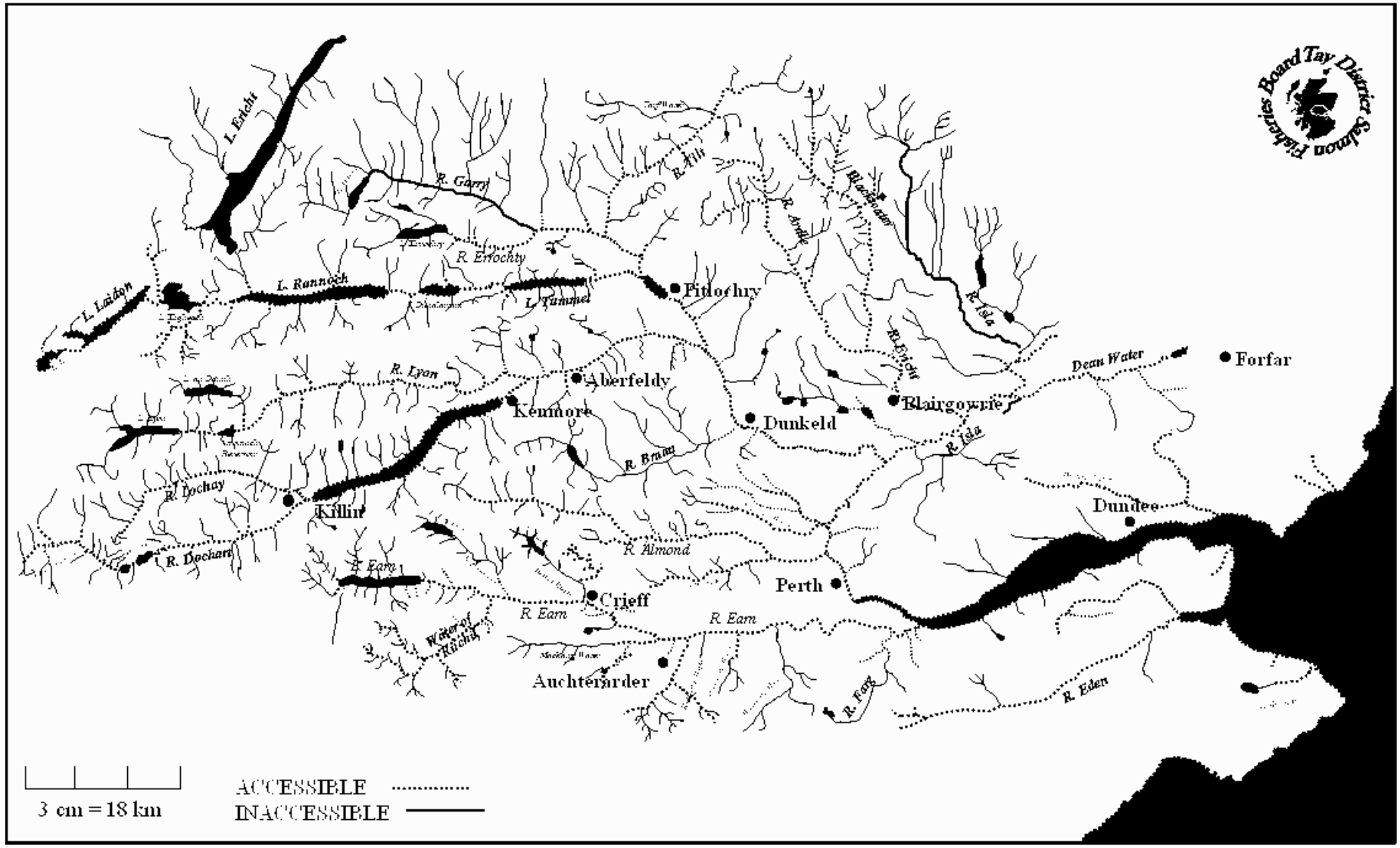
I hope that 2011 is even more rewarding for all who visit our great river.

Yours sincerely



W H JACK
Chairman

Salmon Distribution within the Tay District



2010 REPORT

Season 2010

The month preceding the opening of the 2010 Tay salmon season saw the coldest winter weather since the winter of 1981/82. Unremitting hard frost had drawn the Tay down and ice was widespread on the river. The opening of the season was eagerly awaited because, unlike most recent years, there was a prospect that the early springers would be concentrated in a short length of the lower river rather than being thinly spread throughout the 100 km between Perth and Killin as has happened in recent years. Would the return of "an old fashioned" winter see a return to old fashioned catches?

In the event, we were never to know. A thaw set in on opening day and the river rose. Although the middle and upper river were clear, the lower river coloured up, scuppering any chances there may have been of good catches in the area where most fish were likely to have been.The second day saw the river in a high spate and it stayed high until early February. Nevertheless, although not high like historic Januarys, the first two weeks did produce more fish than most recent years, with an estimated catch of 75, as opposed to a five year average of 43.

February saw a return to cold weather. Any precipitation fell as snow, which accumulated in the hills. The river fell thoughout the month back to a low level. Despite the fact conditions might have been good for concentrating springers in the main river, catches were not that encouraging. It is estimated that less than 100 springers were caught, as opposed to a five year average of 111. Fishing effort was admittedly low, but the first indications were becoming apparent that the 2010 spring run might again be relatively weak, which was feared after the weak grilse run in 2009.

March, which normally heralds a significant increase in the spring run, started off with low water and cold weather but the latter half saw warmer weather and higher water caused by melting snow. Nevertheless, catches were disappointing overall, with an estimated catch of 250 as opposed to an average of 365.

April opened with a large spate but thereafter the Tay fell more or less continuously until early June. April was another disappointing month with an estimated 400 springers as opposed to an average of 580. By mid May, the Tay had become very low for the time of year, after what turned out to be the driest winter / spring for many years, despite the abundant snowfall. Catches continued to disappoint with about 450 for the month, as opposed to an average of 592. It was apparent that, despite conditions, the run of 2SW salmon was weak, as it had been at the same time in 2009.

However, in 2009 the run picked up in the late spring / early summer and it was hoped this would be repeated in 2010. But this was not to be. June produced an estimated 400 salmon as opposed to an average of 553. Apart from one brief rise, June saw the dry weather continue and levels remained low. As such conditions are better than high water in the main river at that time of year, the conditions could not wholly be blamed for the reduced catches.

The spring drought finally broke on the first weekend in July and signaled a change to very different fishing conditions. Thereafter, July saw a succession of spates and generally rising levels, peaking at about nine feet on the 22nd before starting a gradual fall. While catches

were affected by poor conditions in the middle of the month, it was apparent that after the big spate cleared there were grilse around and the last week in July proved to be the Tay's best July week in a number of years. The grilse had arrived a week or two earlier than they did in 2009, though not as early as they did ten years ago. Therefore, despite conditions that were generally against good fishing in the main river, the catch for July is likely to exceed the recent average of 813.

The encouraging run of grilse which commenced in July continued right through August in a way it did not do prior to 2005. The estimated catch of over 2000 was the best August since 2006. There was both a better run of grilse than 2009 and August was a much drier month which helped to slow down the fast moving grilse, in the lower river particularly. Some beats reported a majority of good conditioned grilse, although the average size was lower than it would have been in the past. However, some very small specimens and some thin grilse were in evidence and red vents were again reported.

September started with levels well back after the high water of July, but from the end of the first week onwards, there were a number of rises and levels remained several feet up for most of the month. Although conditions were conducive for fish to run, the best of the fishing in September was in the lower reaches where good numbers of fish were particularly evident. The total catch for the month is estimated at 3500 as opposed to an average of 2955 making it one of the better Septembers in recent years. There was clearly a better run of autumn grilse in the river, exceptionally so for the River Almond, and a better smattering of bigger fish. This seems to fit in with the general pattern of a better grilse run in 2010, although the upper Tay / Tummel area did not appear to benefit.

October opened with a large spate of over 8 feet and thereafter dry weather persisted until the end of the Tay season on 15 October. Many beats in the lower Tay and some middle Tay beats fished well. It is estimated that October produced a catch of around 3,000 fish as opposed to an average of 2126. The Taymount beat, for example, had its best October since 1989. Higher and unsettled conditions returned in the last week of October which marred the end of the Earn season, which had also benefited from perhaps the best autumn run since 2004.

In summary, the main features of the 2010 season were a relatively weak spring run with lower catches up to mid July. This was reflected in the counts at all fish counters I the district. Thereafter, a better summer and autumn grilse run produced better catches in the late summer and autumn. While final catch returns are not available at the time of writing, it is estimated that the total catch could exceed 11,000 which would have been even higher if the spring had been better. Still, this represents a 50% increase on 2009. However, not all of the district enjoyed same success. A better grilse run was counted by the Ericht fish counter and was visually apparent on the Almond. Grilse catches also better on Lyon, but the Tummel was poor, possible reasons for which will be considered later.

Catch and release – spring salmon

After a relatively poor spring catch and weak grilse run in 2009 it was clear that the adverse conditions which have affected the marine survival of salmon in recent years have still not abated. It was agreed therefore that the catch and release policy should be further strengthened for 2010 by requesting 100% catch-and-release of salmon up to the end of

May. Previously the policy was that the first spring salmon caught each day had to be released, which meant that very few were being killed anyway (Table 1).

The policy of 100% catch and release was well accepted and it is believed that most beats adhered to it as far as possible. Detailed returns were not yet available at the time of writing but these should bear this out once they are available. Given the strength of the 2010 spring run it was, in retrospect, clearly the right thing to have done.

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

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

As a result of the Board's evolving catch and release policy there has been a complete change in the behaviour of Tay anglers over the last ten years (Table 1). In 2009 the Tay performed as well as any other of the major Scottish salmon rivers in terms of catch and release, apart from the Dee (Figure 1). Interestingly, despite the perceptions of some on the quality of Tay spring fishing, the Tay had the second highest spring catch in Scotland in 2009, second only to the Dee, which always caught more spring salmon.

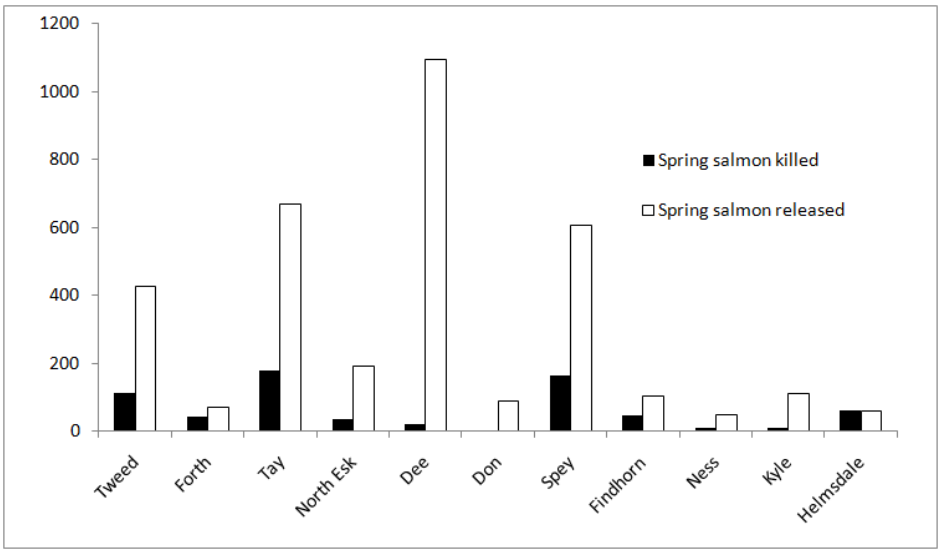


Figure 1. Numbers of salmon killed and released by anglers to 30 April 2009 on Scotland's major spring salmon rivers. Data from Marine Scotland Statisitical Bulletin.

Catch and release – summer

In addition to the spring salmon policy, it was agreed after the end of the 2009 season that after May 2010 all female fish should be released and that no more than one male fish should be retained per day, which should be clean and, where possible, weigh less than 10 pounds (i.e. clean male grilse). This policy is marginally tighter than the previous policy which had requested the release of all females and males that were over 15 pounds or coloured. As a result of the previous policy the proportion of fish released in 2009 was never less than 60% (Figure 2). In 2009 some 5,103 salmon and grilse were released in the Tay district. If 2/3 of these were female that would mean perhaps an extra 20 million eggs would have been saved than would have once been the case.

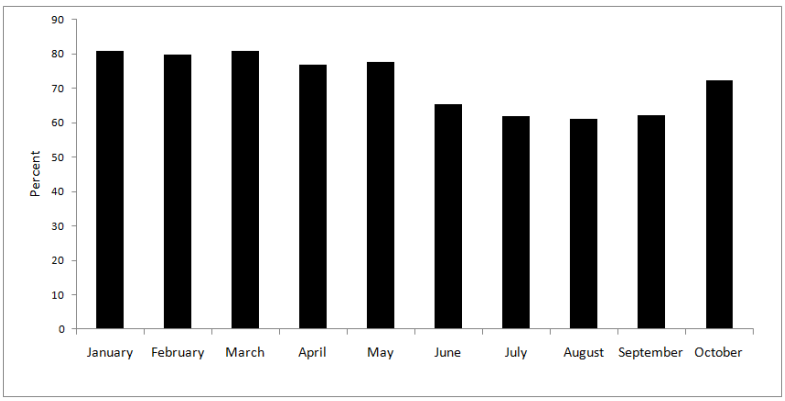


Figure 2. Percentage of salmon and grilse catch released each month in 2009. The data used in this graph are Crown copyright, used with the permission of Marine Scotland Science. Marine Scotland is not responsible for interpretation of these data by third parties.

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.

In the event, 2009 proved to be a better year for sea trout, as evidenced by the catches in this district (Figure 3) and neighbouring districts. However, it is heartening to see that within a period of only three years there has been a dramatic turnaround in the attitude to conserving this species. 2010 also was a better year for sea trout, but while 2009 and 2010 catches were encouraging, the Board considers that problems may still continue to occur and that catch and release of sea trout should continue until there is a sustained recovery.

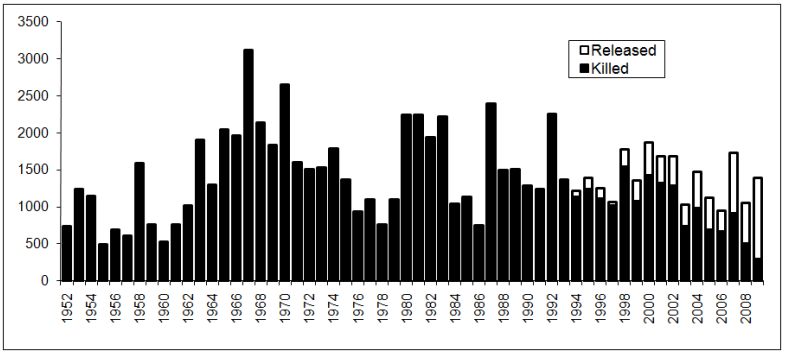


Figure 3. Tay District rod & line catch of sea trout, 1952 – 2009. (Data obtained from Marine Scotland's Statistical Bulletins of Scottish Salmon and Sea Trout Catches)

Enforcement

2010 was a quieter year in terms of enforcement than 2009. Only one incidence of illegal fishing (on the River Isla) led to charges being made.

The Board is once again indebted to Tayside Police, especially Alan Stewart, Wildlife Liaison Officer, who were again extremely helpful. 2010 saw even greater cooperation with the Police and it is hoped this will continue.

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.

Because of the building of the new Board office in 2009 and the roofing of the broodstock tank area of the hatchery, a review of the Board's Health & Safety Policy was instigated in 2009 and was completed in 2010. While the Fisheries Director would maintain overall responsibility for health and safety, after attending a relevant course, bailiff Ron Whytock had been charged with overseeing H & S issues from the perspective of staff on the ground and raising any items of concern which resulted.

No accidents reportable under RIDDOR occurred in 2010.

Staff changes

A major reorganization of the Board's staff structure took place in 2010, mainly in connection with increasing the role of the Tay Foundation in the management of the river. Previously the Tay Foundation did not employ staff, unlike most of Scotland's 20+ fisheries trusts. This situation changed on 1 April 2010 when the Fisheries Director was appointed as the joint director of both organizations. 75% of the Fisheries Director's time is now spent working for the Board and 25% as director of the Tay Foundation. 25% of the fisheries Director's costs are now borne by the Tay Foundation.

The Development Manager was wholly transferred from the Board's to the Tay Foundation's employment on 1 April but it was agreed that the Board would still contribute 50% of the Development Manager's salary for the year.

In March the Tay Foundation employed a biologist, Rob Mitchell. Rob is wholly employed by the Tay Foundation but 75% of his costs are borne by the Board.

After two years of employment the Board's office manager left at the end of September.

These changes mean that the Board will pay a small amount (3%) less on staff in 2010 than originally budgeted and 13% less than in 2009.

Kelt reconditioning

The kelt reconditioning project is a collaborative project between Marine Scotland Science (MSS) and the Board which has been running for well over ten years. Spring salmon caught in headwater spawning areas by Board staff are kept in captivity at the MSS experimental

fish farm at Almondbank and are successfully fed on to spawn in subsequent years. This facility produces eggs from spring females which would otherwise have died. 2009 / 10 was yet another successful year. The problems which occurred after the ban on malachite green have been overcome and over 700,000 eggs were produced from fish originally sourced in the Fillan, Tilt, Lyon, Garry, Errochty and Shee waters.

In order to ensure that genetic diversity is maximized, in a new development, the fish to be stripped in the autumn of 2010 have been genetically typed by Landcatch Natural Selection from Alloa. This will ensure that crosses will not be made between closely related individuals, for example, although it is not thought this should have been a major issue.

Hatchery report

Broodstock for the hatchery are obtained by netting spring salmon in upper tributaries and by angling for autumn salmon in the main stem Tay and larger tributaries. However, the 2009 / 10 winter proved to be difficult for obtaining broodstock. For the second year in a row high water persisted after the end of the close for the angling season. From about the 20th of October until the cold weather commenced in mid December the Tay experienced high water. This made netting difficult in the higher tributaries.

Nevertheless, approximately 1.3 million eggs were laid down and incubated in the hatchery. It was decided, in view of the numbers laid down and because the cold weather made access difficult to some parts of the district in February and March, to bring through almost all the eggs to the unfed fry stage as opposed to stocking as eyed ova. Ova and fry were stocked out into areas close to where the broodstock were sourced from, i.e. either the same tributary or a smaller tributary close to the source area.

The following numbers were released in the spring or early summer of 2010:

River Tilt (mainstem, Lochain Burn, Tarf Water, Fealar Burn, Glen More Burn)	300,000
River Lyon	190,000
River Garry	50,000
Banvie Burn (Garry)	50,000
Errochty Water	170,000
River Lochay (Corrycharmaig to Kenknock)	40,000
Auchtertyre Burn (Fillan)	40,000
Shee Water (tributaries)	40,000
Cononish	100,000
Allt Essan (Dochart)	40,000
River Almond (headwaters)	60,000
River Braan	60,000
Keithick Burn (Isla)	40,000
Tullimet Burn (Tay)	20,000
Shochie Burn (Tay)	30,000
Dowally Burn (Tay)	40,000
Total	**1,270,000**

Table 2. Estimated numbers of eyed ova / unfed fry stocked out into respective tributaries in the spring of 2010.

Following an unusually frosty winter in 2008 / 09, the Tay Ghillies Association kindly donated funds for the construction of a shed over the adult broodstock holding tanks to protect them from frost. This was constructed over the winter 2009/10 and proved to be a very fortuitous move given the even harder frosts in the 2009 / 10 winter. While it was not fully complete by the time the hardest frosts commenced – the ridge on the roof had still to be completed – the protection afforded did prevent the pipework from freezing solid.



A shed was constructed to cover the adult broodstock holding tanks which had previously been in the open air. The funds were raised and donated by the Tay Ghillies Association. The timing could not have been better as the winter of 2009/10 saw such hard frosts that the water would have frozen before all the broodstock were stripped.

2010 WORK PLAN

In 2010 the Board introduced a new practice by agreeing a plan of the work for the year along with indicative starting and finishing dates. The plan was issued on the Board's website so that interested stakeholders could clearly see what work the Board was involved in. It is intended this will become the standard way for the Board to operate.

Of 19 stand-alone projects (not including on-going tasks which happen every year) 14 were completed within the year, one could not be undertaken because of unforeseen circumstances, one will not be completed until 2011, and two have been deferred until 2011. One of the tasks (responding to the River Garry proposals) did have the effect of delaying some of the others on account that the amount of work required could not have been fully anticipated in advance. Two other major issues were introduced into the work plan in the course of the year and had a similar impact.

The following pages summarise progress of the planned projects.

Feeding on fry in the hatchery

One of the questions often asked is whether it is better to feed on fry in the hatchery for a period rather than stock them out as unfed fry or eyed ova. While there are many opinions on this subject there appear to be few reliable comparisons of the two approaches and these have provided equivocal results.



Six new three metre diameter tanks have been purchased to allow the feeding on of salmon fry and parr. The tanks were purchased with a generous donation from Mr John Apthrop.

In order to help clarify this debate it was decided that a certain number of fry should be fed on in the hatchery and their survival after stocking compared with that of unfed fry. However, as the existing incubation facilities did not allow for fry being fed, six new tanks were obtained which can be used for both feeding on fry and keeping adult broodstock in the winter. This will also significantly increase the flexibility of the hatchery facilities as well as increasing the number of broodstock which can be held. The intention is that unfed fry and fed on parr will be stocked in separate areas and their survival to the smolt stage monitored to assess the relative merits of the different strategies.

Protecting salmon access in the River Almond

On the River Almond there are two structures which are currently passable to salmon but do need maintenance / repair if they are to pass salmon efficiently in the long term.

The first of these is a weir at Almondbank which formerly had a shallow gradient up which fish could easily swim. Over time the lower half of the weir has eroded away meaning the weir no longer consists of an even slope but now requires fish to make a vertical jump onto the remaining upper half of the weir before they can start to swim up it. In years when there is plenty of water in the early part of the autumn when water temperatures are still relatively high, this does not cause any problem. However, in a dry autumn year like 2007, fish may experience difficulty ascending the weir if rain does not occur until temperatures have dropped.

In order to assist salmon to ascend this weir more easily under difficult conditions it is desirable to raise the water level in the pool below the weir to reduce the height salmon have to jump. This could be done by reinstating a part of the original weir structure. Investigations are still ongoing as to the most appropriate method of doing this.

Further up the Almond the same principle of raising the tailwater level below a jump was adopted at the Buchanty Spout waterfall in the 1960s. Because the North of Scotland Hydro Electric Board abstracted water from the upper Almond they paid for work to make Buchanty Spout easier to jump, including blasting and the installation of a gabion weir a short distance downstream to raise the water level below the fall. However, part of the

gabion wire has burst and at some point in the future this weir will breach. It is desirable, therefore, that this weir should be reinstated or reinforced before this happens.

Options for doing this are still being considered. Having been able to closely investigate the weir under conditions of very low water this year with a gabion installation specialist it is clear that this project will involve more than originally anticipated.

Tay Eastern Survey

In recent times much of the Board's interest has centered around upland tributaries because they are the areas where spring salmon mainly spawn. However, the Board is aware that significant problems exist in the lowland tributaries and that these also need addressing.

Accordingly in the early months of 2010 Board staff commenced a survey of tributaries of the lower Tay, lower Isla and the lower Earn. The tributaries surveyed are shown in Figure 4. A number of previously unknown obstructions to salmon migration were identified along with other issues. For example, high loads of fine sediment appear to be a major problem in some of the Isla tributaries in particular. A detailed report can be obtained from the Board's website - www.tdsfb.org/documents/TayEasternSurveyReportreducedsize.pdf.

Over the course of the next two winters it is hoped to survey all the salmon producing tributaries in the area (Figure 4) and to develop improvement projects as a result of the findings.

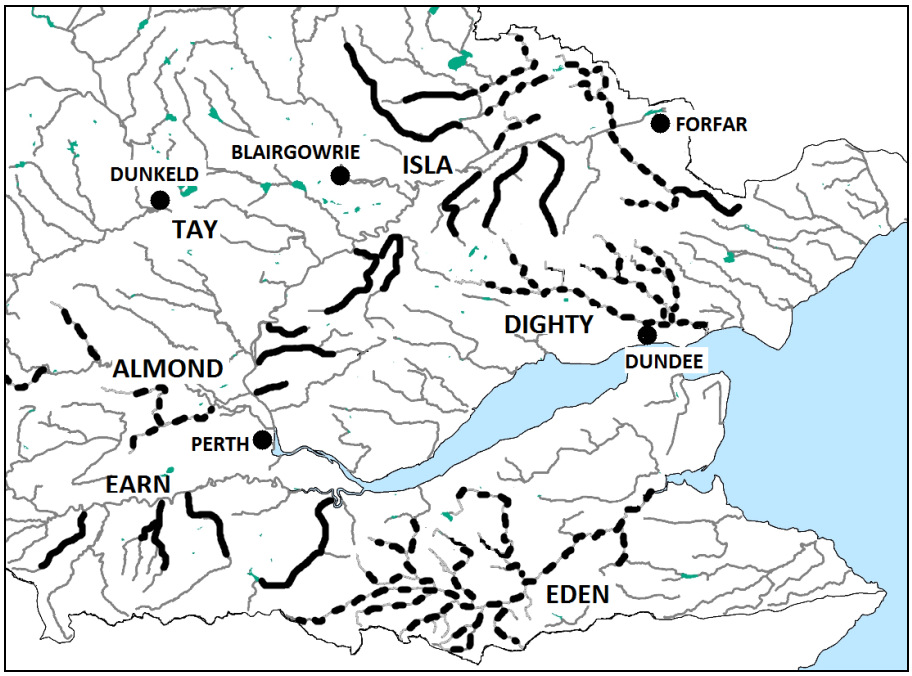


Figure 4. Locations of lowland tributaries which were surveyed in 2010 (solid black) and those which will be surveyed in following years (dashed black).

Alyth Burn Weirs

For some years the Board had been aware of a significant weir on the lower reaches of the Alyth Burn which is likely to hinder salmon on their spawning migration, unless the water happens to be high at the right time. Having brought the existence of this weir to the

attention of SEPA, SEPA included it in a survey performed by the engineering firm W S Atkins to advise on options for improving fish passage. This survey was paid for by SEPA's river restoration fund which hopefully might also pay for appropriate remedial work.

As a result of the Eastern Survey another significant weir was found upstream of Alyth. Electrofishing proved that although salmon fry were found below this weir, none were found above it, showing that no adult salmon passed it in the autumn of 2009. However, salmon parr were found above it, but their distribution was restricted, showing that some fish had successfully ascended in 2008, but not in sufficient numbers to fill the entire available habitat. Investigations will be made in 2011 to try and get remedial work done on this weir under the SEPA river restoration fund.

The Eastern Survey identified the Alyth Burn as having the best habitat for juvenile salmon of all the tributary burns draining into the Isla. Therefore improving access to this burn has become a priority.

Dall Burn Weir Survey

The Dall Burn is one of the very few large burns flowing into Loch Rannoch which is naturally accessible to migratory fish for a significant length or is not abstracted by from hydro power. However, there is an impassable weir in its lower reaches which is no longer used. The Board contracted a fish pass consultant who surveyed the weir and advised on the most appropriate design of fish pass to construct. The survey was part funded by the SEPA river restoration fund and it is hoped that more funds will be available from this fund to install a pass.

Lunan Eel Trap

On the Lunan Water between Marlee Loch and Loch Clunie an old weir has been adapted to trap eels. The operator of the trap has installed screens on the main flows routes over the weir, except for one channel which may not be too easy for migrating salmon to find unless the water is very high. Several years ago an electrofishing survey showed there were juvenile salmon immediately downstream of the trap but none above. The owner has now agreed that a main passage will now be kept open every autumn to ensure salmon can pass through freely. Future monitoring will be undertaken to prove that fish do pass through or otherwise.

Weirs on the Ruthven Water

The Ruthven Water, is a significant tributary of the lower / middle Earn and is unusual in naturally having good access right to the headwaters for salmon and especially sea trout. Some of the other Earn tributaries are naturally inaccessible because of large waterfalls in their lower reaches.

However, we had already identified the presence of two large weirs which are likely to be impassable to migratory fish, one on the upper Ruthven Water and another on a tributary called the Cloan Burn. Electrofishing was conducted in autumn 2010 and proved there were very high densities of juvenile trout downstream of both weirs and, in the case of the Cloan Burn, some salmon. Densities of trout dropped off upstream of the weirs and growth rates were higher, indicating a lower competition environment where only trapped brown trout are present.

If fish passage was allowed at these weirs a significant amount of extra spawning and rearing habitat would be made available for sea trout in the Ruthven.

As it happens, the owner of the Cloan weir is interested in re-establishing a hydro station. Discussions have already taken place with the owner and SEPA and it is hoped that if and when an application is made to SEPA, a fish pass will be installed as a condition of the abstraction license. The owner has been very cooperative in the investigations and indeed has already permitted the removal of a smaller weir which formerly supplied water to a trout farm.





A very dense population of juvenile trout was found a short distance downstream of this impassable weir on the Cloan Burn. This burn clearly holds great potential for sea trout.



While only an impediment to fish migration, the smaller redundant Cloan fish farm weir was breached by Pitlochry based contractor, Tim Childs.

Discussions have yet to commence with the owners of the old weir on the Ruthven Water but it is hoped that money may be obtained from SEPA's river restoration fund to enable fish passage to be re-established.

Proposed fish counter for the Shochie Burn

The Shochie Burn is a tributary which joins the River Tay at Luncarty. It is, for salmon, the most significant burn sized tributary to directly enter anywhere on the main stem of the Tay. It is widely stated by locals that runs of salmon in the Shochie are less than they were several decades ago. In order to understand more about the numbers of salmon and sea trout which run the Shochie, in conjunction with the Tay Foundation, it is the intention to install a fish counter in the lower reaches of the burn. The fish counter has already been obtained and the Tay Foundation have received funding for the project from the Scottish Government via the Rivers and Fisheries Trusts of Scotland (RAFTS).





A weir with a fish pass on the lower reaches of the Shochie Burn provide a perfect opportunity for the installation of a fish counter.

River Earn Japanese knotweed spraying

The Tay Foundation obtained a grant from the Esme Fairbairn Foundation to control invasive weeds, in particular Japanese knotweed, as part of an all Scotland project led by RAFTS. This project has been implemented by the Tay Foundation, although with assistance from TDFSB staff. Permission was obtained from number of proprietors on the River Earn and in the autumn of 2010 a contractor was engaged to spray large sections of the banks of the River Earn between Crieff and Aberuthven where Japanese knotweed has reached nuisance proportions. It is hoped that this work will be expanded in forthcoming years, extending hopefully to the whole river upstream of Crieff.

Ordie Burn tree coppicing project

For much of the length of the Ordie Burn from its confluence with the Shochie Burn near Luncarty to the upstream limit of salmon penetration, the banks of the burn are lined by a dense corridor of alders which effectively “tunnel” the stream and reduce light input in summer. This is a stream in a fertile agricultural area but the dense shading is likely to reduce in-stream primary productivity and reduce the growth of marginal vegetation developing which would provide cover for fish.

Following on from the experience the Board’s staff have gained from thinning out trees on the Errochty Water, the Board’s staff thinned out alders over a 1.75km stretch of the middle reaches of the Ordie Burn in the late winter of 2010. This added to thinning work which was

conducted in 2005 over a one kilometre stretch on another nearby property. That site was also revisited and some of the regrowth removed.

The actual felling and pruning work was carried out by Board staff who have been trained in chainsaw use. However, specialist contractors had to be employed to tidy up the site by chipping the large amount of brushwood produced. That work was kindly funded by the Tay Foundation from a grant received from a fisheries improvement grant from the Scottish Government administered by RAFTS.



Riparian alders along the Ordie Burn have been thinned out of lower branches lopped off to allow more light to penetrate densely areas to promote greater juvenile fish production.

Smolt passage at small hydro stations

In addition to the old Hydro Board power stations, there are in the district several small private hydro stations in areas where significant numbers of migrating smolts must be protected from being exposed to turbines. It is essential that these stations are regularly monitored to ensure that fish screens etc are working as intended.

The largest of these hydro stations is at Stanley Mill. This scheme was only commissioned several years ago. Although a large smolt screen was installed, its effectiveness in successfully deflecting wild smolts has never properly been tested. This is something we would like to pursue, but in 2010 the station did not operate because of maintenance work, so no monitoring work could be undertaken.

A smaller hydro station exists in an offtake from the lower Tay, the Stormontfield Lade. This station was monitored on a number of occasions on evenings when smolts were migrating in May. Some smolts appeared to be more attracted to the flow through the screen rather than the bywash flow and could have suffered damage as a consequence. We are keen to progress this further in 2011 to establish what proportion of migrating smolts are so affected.

The third of these hydro schemes is on the River Almond upstream of Almondbank. Unlike the other two this station operates something called a louver screen rather than a physical mesh or bar screen. This is not a physical impassable barrier but consists of a series of metal slats which are intended to generate a type of turbulence which smolts avoid and become deflected to a bywash if it is sufficiently attractive. Following concerns over the effectiveness of this array the operator made some modifications several years ago, including the replacement of the last few louvers before the bywash entrance with wire mesh panels. Because very low water persisted through the smolt migration period in 2010 it proved easy to observe smolts. It was apparent that significant numbers of smolts did pass through the screen rather than down the bywash, although the proportion of all smolts passing down the lade that this represented is not known. A louver screen would be expected to be less efficient when flows and therefore the turbulence generating current is low. We understand that SEPA are in the process of reviewing the abstraction licence for this scheme which also has no compensation flow arrangement and can at times abstract all of the flow of the Almond into its lade. The results of this process are awaited.

SIGNIFICANT ISSUES WHICH WERE NOT PART OF THE BOARD'S WORK PLAN

Glamis Burn Culvert



Angus Council installed baffles inside a previously smooth steep culvert which was too shallow and fast for salmon to ascend. Strathmore Estates installed the walls in the foreground to help back up water at the entrance to the culvert to ensure salmon have an easy passage.

Following requests from Board member John Wood, Angus Council installed baffles in a culvert on the Glamis Burn under the main Coupar Angus – Forfar road. The culvert was steep and shallow and no juvenile salmon were found upstream of it during an electrofishing survey in 2009. The baffles should impede the flow sufficiently to allow spawning salmon to swim right through with ease. John Wood and staff from Strathmore Estates also installed baffles on the concrete apron at the culvert entrance to ensure salmon can enter the culvert with ease. Future surveys will prove the success or otherwise of the work.

SEPA diffuse pollution priority catchments

One of the major issues affecting Scotland's rivers and streams which has not been subject to regulation until recently is "diffuse pollution". This includes impacts such as the run off of sediments, excess nutrients and other chemicals from agricultural land. It was apparent that in the course of the Eastern Survey that this type of impact was significant in some of the lowland tributaries.

As diffuse pollution can impact on the "ecological status" of waterbodies, the EU Water Framework Directive requires improvements to be made. As part of this process, in 2008, the Scottish Government introduced some "General Binding Rules[1]" to prevent some

[1] The Water Environment (Diffuse Pollution) (Scotland) Regulations 2008. S.I. 2008 No. 54

practices which are thought to significantly contribute to this type of problem. These include rules such as:

- No organic fertilizer shall be applied to land that is within 2 metres of any drainage ditch.
- No inorganic fertilizer shall be applied to land that is within 2 metres of any surface water or wetland and no organic fertilizer shall be applied within 5 metres of any other surface water or wetland.
- Significant erosion or poaching of any land that is within 5 metres of surface water or wetland shall be prevented.
- Livestock feeders shall not be positioned within 10 metres of any surface water or wetland.
- No land shall be cultivated for crops that is within 2 metres of any surface water or wetland

Recognising that addressing the larger number of Scottish waterbodies impacted by this type of problem will take a long time, SEPA have identified ten priority catchments to be tackled in the first Water Framework Directive River Basin Plan to be delivered by 2015. Included in the ten priority catchments is the Tay catchment. In particular the main area of concern includes Strathmore, those tributaries flowing into the Tay between Perth and Dunkeld and the lowest tributaries of the River Almond.

While we recognize that this area does suffer from diffuse pollution, there might actually be worse areas within the district (e.g. River Eden) but we understand that priorities were determined on factors like the importance of catchments for drinking water rather than just ecological degradation. Thus, a number of rivers with upland headwaters have been included rather than catchments of a wholly lowland nature which might have a more pressing need in fisheries terms. Areas like the Eden or lower Earn will not unfortunately be considered until the next Water Framework Directive planning deadline (2021).

For those catchments which have been identified as priority catchments SEPA will soon initiate a program of stream walks to identify sources of diffuse pollution. These will then be followed up by farm visits etc to advise on remedial work. This will be a slow process which will be further impeded by reducing resources, but we hope very worthwhile in the long run.

Electrofishing report

Since 1999 the Board has monitored the population of juvenile salmon in a number of key tributaries of the River Tay through annual electrofishing surveys. Owing to the number of years some of these sites have been monitored it is now possible to make meaningful inferences about the state of health of some of these juvenile populations.

In most instances it has not been possible to discern any systematic trend in numbers. These may vary from year to year but it is not apparent that the average level is increasing or decreasing. This may mean that many populations are at, or are close to, their natural carrying capacity for juvenile salmon.

However, in a few instances, notably the River Gaur area, the upper River Lochay and the Cononish Water (headwaters of the River Dochart) juvenile salmon densities were relatively very low and growth rates were high relative to those in other similar tributaries. This

suggested that in these areas the population was well below carrying capacity and that competition between the fish was low therefore. In the case of the Gaur and Lochay access for adult spawners was thought to have been restricted, therefore such findings come as no surprise.

However, when stocking with unfed fry was undertaken on the Cononish and Lochay using locally sourced broodstock, the densities of juvenile salmon increased and growth rates decreased to levels comparable with similar tributaries where access for adult salmon was considered to be good. In the case of the Lochay higher densities continued when stocking was stopped but access was improved (Scottish & Southern Energy refurbished a number of fish passes on waterfalls as part of the Conservation of the Atlantic Salmon in Scotland EU LIFE project). Therefore, this survey has confirmed that when unfed fry are stocked into suitable juvenile habitat with restricted access for adult spawners the fry do survive and utilize the available habitat, but equally if adult fish are permitted good access they are likely to saturate the habitat anyway.

After comparing the results from the more stable tributaries (e.g. the Lyon, Errochty, Almond, Fillan, Shee, Shochie) with the Cononish, Lochay and Gaur, it is apparent that while there is perhaps not enough information to be certain that those tributaries really are at carrying capacity, it is certainly safe to say they are not grossly understocked.

The results also show that different tributaries have very different carrying capacities of salmon. The rivers in the east, for example, are generally more productive than those in the west. The Shee, for example, appears to be inherently more productive than the Lyon, Errochty or Almond and some of the lowland Isla tributaries even much more so. These differences in salmon production appear to be related to water chemistry. As on land, the more fertile the river (up to a point), the more salmon it might produce.

The full report can be accessed on the Board's website
http://www.tdsfb.org/documents/TayTributariesElectrofishingSurveyReport.pdf.

New hydro stations

New hydro stations continue to create a significant amount of work for the Board, although in 2010 the number of new proposals fell. The prime steep stream sites have largely now been claimed and constructional issues have been coming to the fore. However, some of the more recent schemes have had more significance for salmon and are described individually below.

Proposed Ericht hydro station

An organization called the Blairgowrie and Rattray Regeneration Committee (BARRC) applied for permission in 2009 to install an Archimedes screw turbine on the River Ericht at Keathbank Weir, on the northern outskirts of Blairgowrie.

An Archimedes screw turbine was chosen because this is a new type of turbine which is claimed to not harm migrating smolts and thus does not require costly screening etc. The proposal was to draw water off the Ericht immediately upstream of the present fish pass on Keathbank Weir and return it to the Ericht a short distance downstream of the exit of the fish pass.

Despite an objection from the Board, SEPA issued an abstraction licence for this scheme in December 2009. The Board appealed this decision because it permitted an abstraction of more than half the flow of the Ericht, precisely under those conditions when salmon could be expected to run. The concern was that if salmon found the flow from the tailrace too attractive they may accumulate downstream of the tailrace rather than moving through and run the fish pass. This appeal was dismissed by the Scottish Government unfortunately.

However, planning permission had still to be obtained and the Board maintained an objection because detailed plans had not been provided to show how the flow from the tailrace was to be "dissipated". After significant negotiation the Board agreed to withdraw its objection when BARRC agreed to abstract a lower proportion of the flow at critical times for salmon migration. SEPA agreed to amend the licence accordingly.

Construction of the hydro scheme commenced in July 2010 and the scheme was due to be operational by the end of the year. However, construction work took longer than initially envisaged and spates caused damage to the work which had been done. It was decided therefore that further construction work would be postponed to spring 2011. Following the cessation of work, in October, a section of Keathbank Weir collapsed and more might collapse during the winter. The weir will need to be rebuilt for the hydro station to operate. It is not clear yet how this will be done. The collapse of the weir will also allow fish to pass the weir without using the fish pass in which the Board's fish counter is situated. It would, therefore, represent the end of fish counts from the Ericht.

Proposed hydro station on the River Isla

Scottish & Southern Energy have sought opinion from the Board on possible concerns regarding a proposed hydro scheme on the River Isla. The proposal is to abstract water from the Isla just upstream of the Reekie Linn waterfall and return it 9.5 km downstream at Shanzie. The particular attraction of this part of the river is a large head difference resulting from a sequence of large waterfalls. Salmon cannot ascend these waterfalls, but approximately half of the proposed abstracted section will be accessible to salmon with two important spawning streams, the Melgam Water and Auchrannie Burn. The Board is concerned that sufficient flow will be left not only to allow salmon to spawn and maintain juvenile production, but also to ensure that local fisheries are not impacted. Views are being sought from local fisheries interests before a final position is reached.

Proposed new biomass power station at Dundee

Forth Energy have applied to the Scottish Government to build a 100MW thermal "biomass" power station at Dundee. A major concern with this type of station is entrainment of small fish, including salmon smolts, in the cooling water intakes. In this instance it is proposed that the cooling water inflow will amount to almost 5 cubic metres of water per second. However, as it is proposed to screen the inflow with "wedge wire" with 3 millimetre gaps and that inflowing water will have a low velocity, there should be no threat to migrating smolts.

River Braan Hydro Application

Several years ago Npower Renewables applied to construct a hydro station on the lower reaches of the River Braan. The powerhouse would have been a short distance upstream of the Hermitage Falls and the intake about 1.5km upstream. As salmon cannot naturally

access the area upstream of the Hermitage Falls the Board had little involvement in this issue. However, SEPA refused the application on various grounds, including impact on canoeing. An appeal by Npower went to a public enquiry, the conclusions of which were finally reported this year. In the event the Scottish Government upheld SEPA's original decision and the appeal was dismissed. However, this sets a useful precedent because it has effectively been admitted that the projected 11.6 GWh annual output of this scheme is inconsequential in national energy terms, despite this being a particularly large run-of-river scheme (over 40 times bigger than the Ericht hydro scheme, for example). This only confirms what the Board has been saying for years.

Abolition of the Fisheries Electricity Committee

The Fisheries Electricity Committee, a committee of independent experts, was set up in 1943 to advise on the likely impacts of the proposed Hydro Board stations and the mitigations which should be put in place to protect fish. Prominent committee members included, for many years, William Malloch.

The FEC continued to exist in an advisory capacity even after the Hydro Board schemes were complete. However, in recent years it became very active again as a result of the upsurge in interest in new hydro schemes. The Board has found the FEC a very good ally during this period. Since SEPA became involved in the licensing of hydro abstractions the FEC essentially operated in an advisory capacity to SEPA, who were still gaining experience in this sector. However, as the FEC's existence was seen by some as a duplication of regulation it was abolished in 2010. This means that the regulation of hydro schemes is now almost wholly the realm of SEPA. This is a concern because SEPA is still gaining expertise on hydro matters while it is the process of suffering large cuts to its budget and staff. We hope this does not mean there will be less rigorous scrutiny of new hydro applications, a concern that the FEC itself made in its final report. The loss of the FEC can only mean that overstretched district salmon fishery boards will have to spend more time and effort on these issues themselves.

Guidance for new hydro developers

In 2010 SEPA issued draft guidance on measures which new hydro schemes should incorporate for the protection of fish. Both fisheries and hydro interests were able to contribute to the process. The advice contained is a major step forward. Fish and fish habitat protection is given a high priority and there are effectively ground rules which are clear to developers beforehand which should lead to less time consuming negotiation for bodies like the Board on individual schemes in future.

The draft guidance can be found at
http://www.sepa.org.uk/about_us/consultations/closed_consultations.aspx#runofrivercons ultation.

Genetic Fingerprinting Project

In 2009 the Board collected tissue samples from juvenile salmon in a number of tributaries in the Tay district as part of a national salmon genetic fingerprinting project coordinated by the Rivers and Fisheries Trusts of Scotland (RAFTS) and funded from a grant to fisheries trusts from the Scottish Government and the Atlantic Salmon Trust.

When the results were obtained in 2010 the level of differentiation between tributaries was nowhere nearly as great as initially hoped, at least with the markers used. The greatest degree of genetic differentiation was between fish from tributaries of Loch Earn and fish from the Fillan Water, which though close as the crow flies, are far apart by river. There seemed to be a gradation between lower and upper tributaries, Almond fish, for example, were very similar to Shochie fish and then next closest to Lunan fish. This is not to say that significant genetic differences do not exist between different tributaries, it may just be due to the fact that the small number of genetic markers used, out of the great number of genes in every fish, were not relevant in this regard. However, it would not be possible, with the genetic markers used, to be able to assign adult salmon caught in the main stem of the river to their tributaries of origin, as had been the original hope. In collaboration with Norwegian researchers, Marine Scotland / RAFTS are now looking at the possibility of using a different type of genetic marker to try to do this. Initial trials look much more promising but the practicalities of the technique need to be established.

Signal crayfish confirmed in the Shee Water

Signal crayfish are a highly invasive freshwater crustacean, like a small lobster, which were introduced into England from North America (via Sweden) several decades ago. More recently they have been found in various locations in Scotland. For some time their presence has been known in the upper Earn, in a tributary of the River Eden and unconfirmed in the Dighty Burn. The Board was involved in an eradication exercise from some ponds in Strathardle in 2006. However, in the same year crayfish were confirmed in a pond in Glenshee, where they had been introduced a numbers of years earlier, apparently.

However, in the autumn of 2010 our worst fears were confirmed when it was established that signal crayfish are now present in the Shee Water itself and seemingly well established, albeit in a limited length of river. There is, as yet, no recognized way of eradicating this pest from a watercourse of this size. This is really most unwelcome as experiments with captive crayfish show that they can compete with juvenile salmon for cover among stones and they can significantly alter the make up of the invertebrate community. The effects they may have on a stream like the Shee are not yet completely clear but this is one experiment we could do without.

The most unfortunate thing is that the presence of these crayfish was known to some for years before their presence was “officially” discovered. Had they been known about sooner the population may have been containable but instead this cancer was only discovered after it was much too late.

Should any reader be aware of such crayfish in any other undisclosed location, please let us know. It will be tragedy once these highly destructive animals spread throughout the entire system.

Please note that it is an offence in Scotland to introduce, remove or hold signal crayfish in Scotland. They can only be trapped under licence from the Scottish Government.

Opening Day celebrations at Dunkeld

In 2010 the Board lent its support to a new opening day celebration organized by the Dunkeld and Birnam Tourist Association. After an address by the Board's chairman, Bill Jack and John Swinney MSP, John Swinney made the symbolic first cast near Dunkeld Bridge.



John Swinney MSP, Cabinet Secretary for Finance and Sustainable Growth in the Scottish Government, making the first casts at Dunkeld on 15 January 2010.

Media and Public Relations

In 2010 the Board achieved some good media attention for its activities. Significant publicity was achieved regarding catch-and-release around Opening Day, including coverage on BBC national news. Andrew Graham Stewart continued to be used as PR consultant and worked extensively with the Development Manager and Fisheries Director to publicize issues of relevance. The Board was also involved with a BBC Scotland series *The Making of Scotland's Landscape* which was broadcast in November and particularly highlighted the plight of the River Garry.

FISH COUNTER RESULTS 2010

Pitlochry Dam

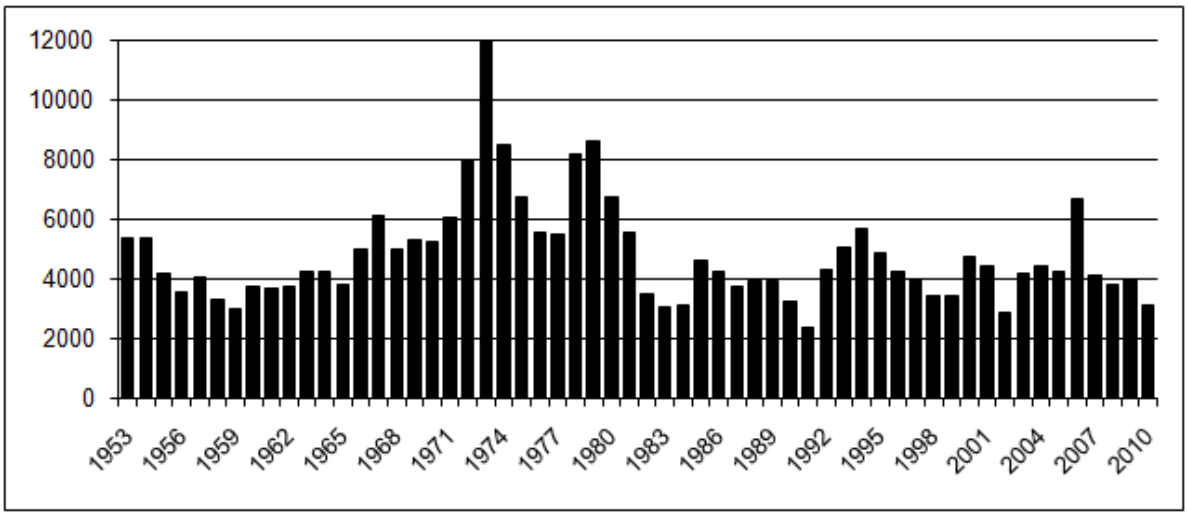


Figure 1. Annual net upstream counts (that is down counts are subtracted from up-counts on a daily basis) through Pitlochry Dam fish ladder, 1953 – 2010 (2010 provisional). (Data courtesy of SSE)

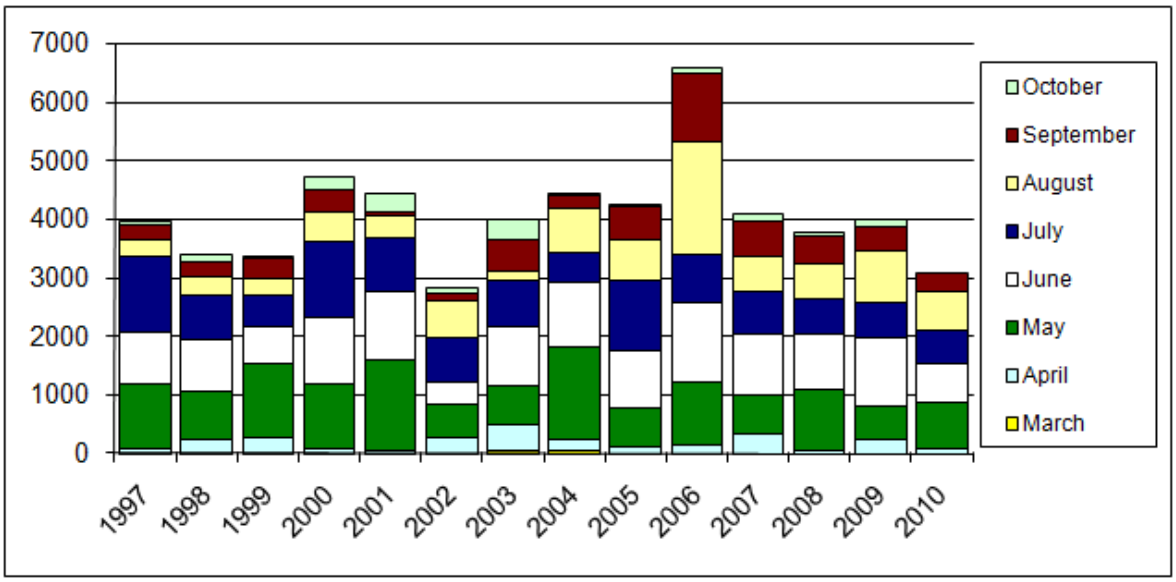


Figure 2. Monthly net upstream counts, Pitlochry Dam, 1997 to 2010 (2010 provisional). (Data courtesy of SSE)

The total count at SSE's fish counter in the fish pass at Pitlochry Dam is still to be fully verified but may have been as low as 3,063 which would be the lowest count since 2002 and in fact one of the lowest counts in the entire series. Relative to recent years the decline in counts affected both the spring and the summer, showing there was both a poorer spring run and a poorer grilse run.

Clunie Dam

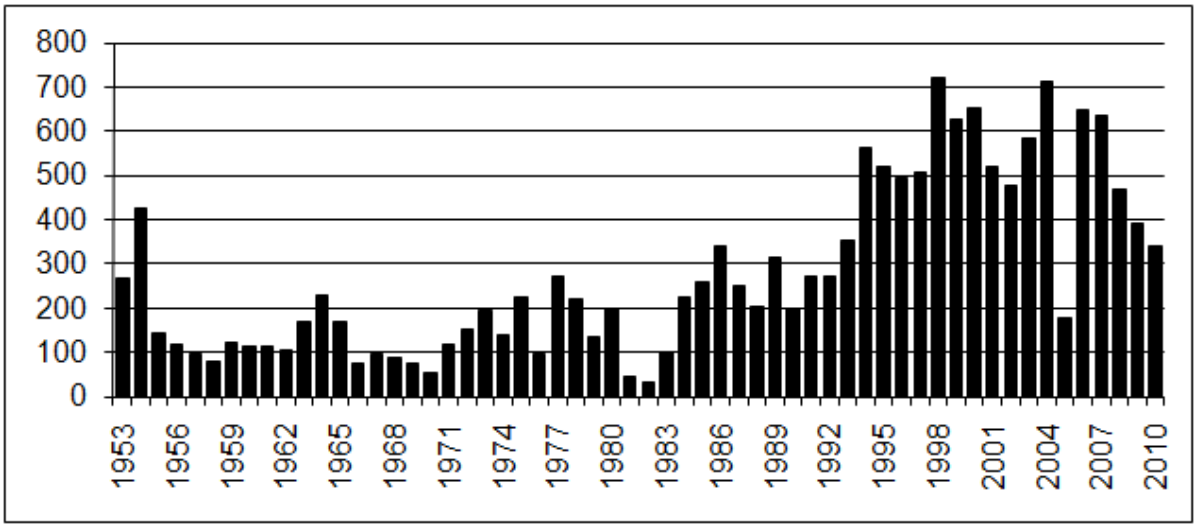


Figure 3. Net annual upstream counts through Clunie Dam fish ladder, 1953 to 2010. (Note: there was a malfunction in 2005). (Data courtesy of SSE)

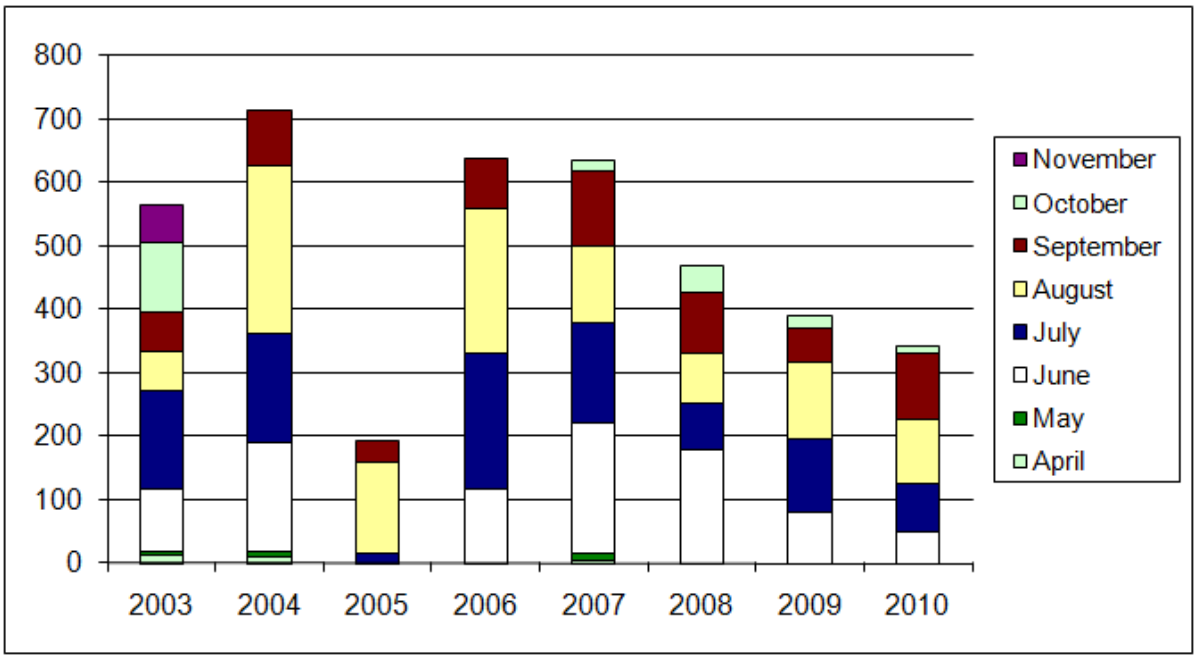


Figure 4. Monthly net upstream counts, Clunie Dam fish ladder, 2003 – 2010. (Data courtesy of SSE)

As at Pitlochry Dam, the 2010 count at Clunie Dam was well below the recent average, in fact it was the poorest count for 15 years. It represents the third year of decline from a recent peak. As at Pitlochry, the decline has affected both the summer and the autumn indicating a decline in both spring salmon and grilse numbers, as was the case at Pitlochry Dam.

Lochay Falls

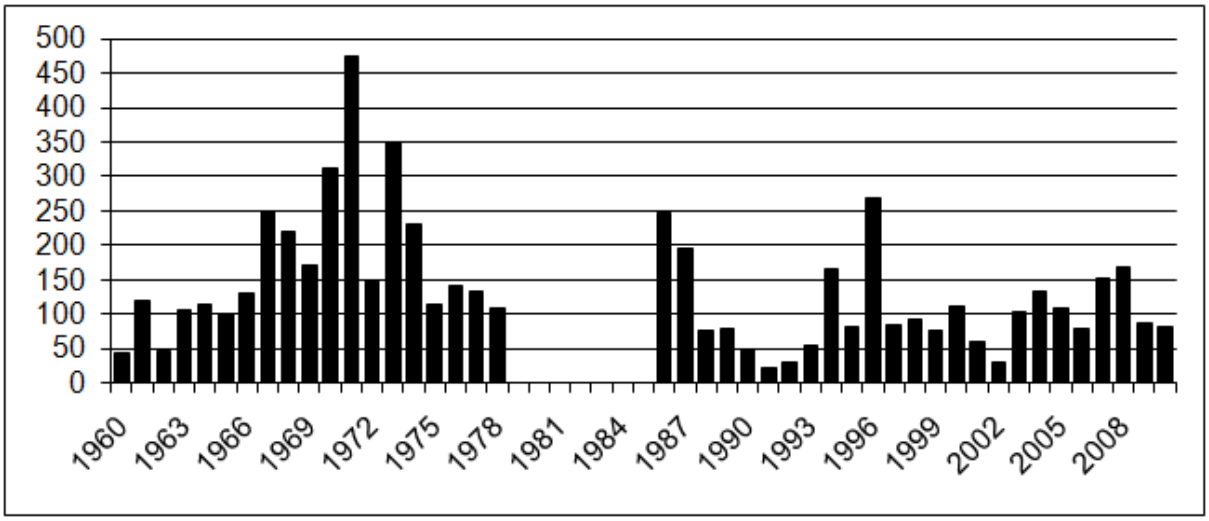


Figure 5. Net annual counts at Lochay Falls fish lift, 1960 to 2010. (Data courtesy of SSE)

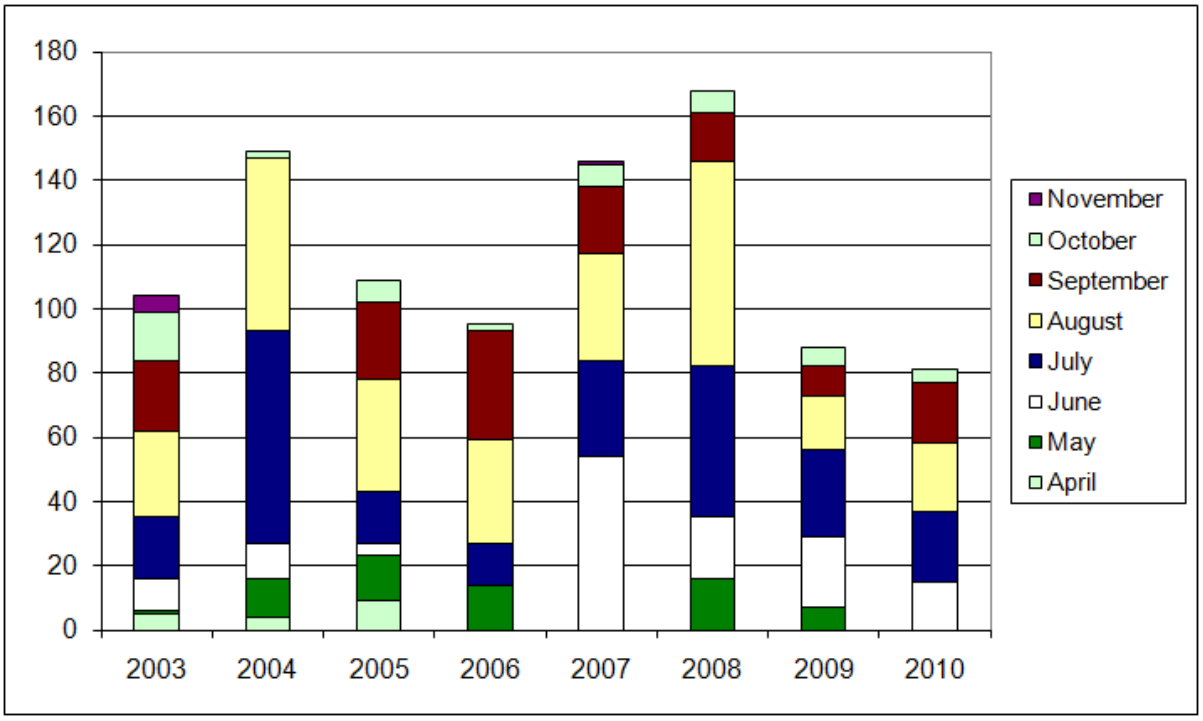


Figure 6. Net monthly upstream counts at Lochay Falls, 2003 to 2010. (Data courtesy of SSE)

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 count in 2010, like 2009, was lower than the recent average. This is disappointing because improvements were made to the fish pass in 2006 / 07 and it was hoped the two better years of 2007 and 2008 were the start of real improvement in this tributary. However, as this tributary, like the Tummel and Ericht, will be dependent on spring salmon, the lower count in 2010 may be, in part at least, a reflection of the relatively weak spring run.

Stronuich Dam

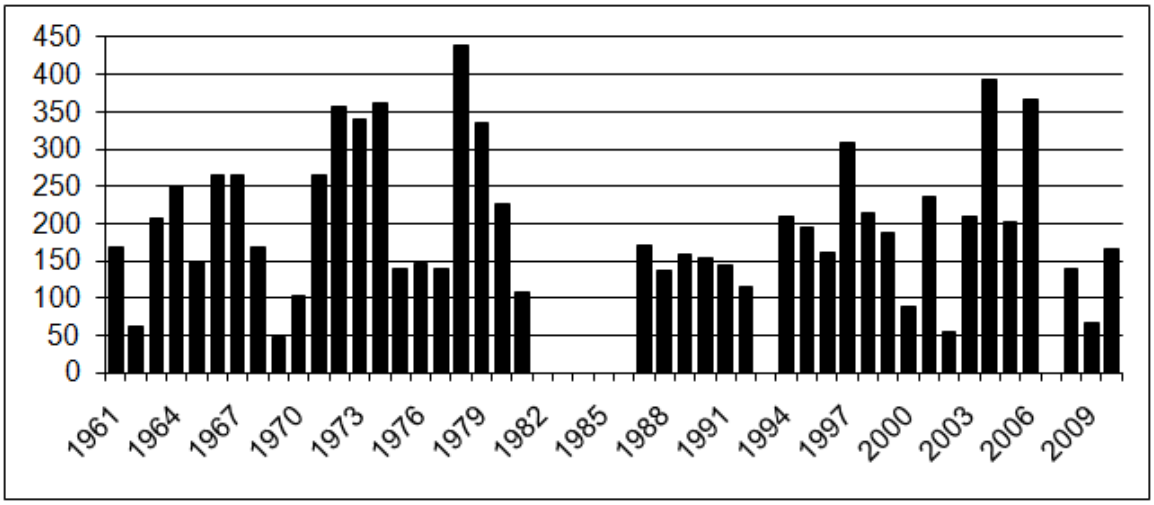


Figure 7. Net annual counts at Stronuich Dam, 1961 to 2010. (Note: there are no data for 2007). (Data courtesy of SSE)

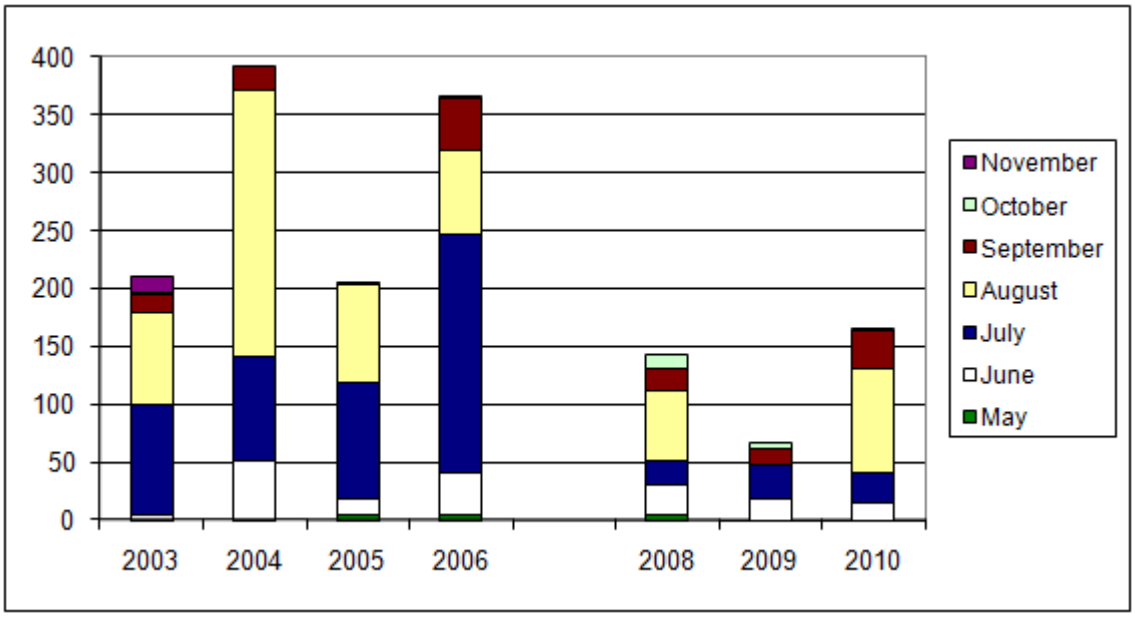


Figure 8. Net monthly upstream counts at Stronuich Dam, 2003 to 2010. (Data courtesy of SSE)

Stronuich Dam is situated on the headwaters of the River Lyon. It has a Borland lift fish pass to allow salmon access to about two miles of river up to the impassable Lubreoch Dam. Prior to 2007 the counter was situated on a gauging weir several hundred metres downstream from the dam and, in theory, not all fish counted would have actually ascended the Borland lift. In 2006 / 07 the lift was refurbished by Scottish and Southern Energy and the fish counter was reinstalled at the point where the fish exit into the reservoir upstream. Unfortunately no counts are available for 2007, the first year of the new counter. However, since 2007 counts have been relatively low, although they were slightly higher in 2010. It is not yet known whether this represents a genuinely poorer run or whether there are issues concerning the new counter.

River Ericht

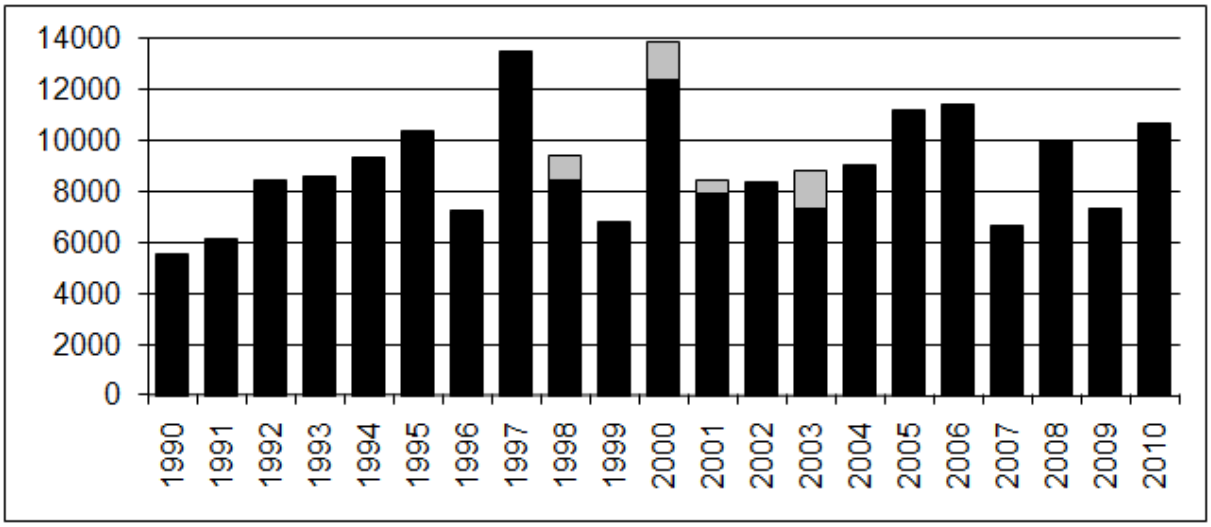


Figure 9. Annual upstream counts at the Blairgowrie fish counter, River Ericht 1990 – 2010. The grey areas give indication of possible extra counts which might be added in years of malfunctions or when fish were trapped below the counter.

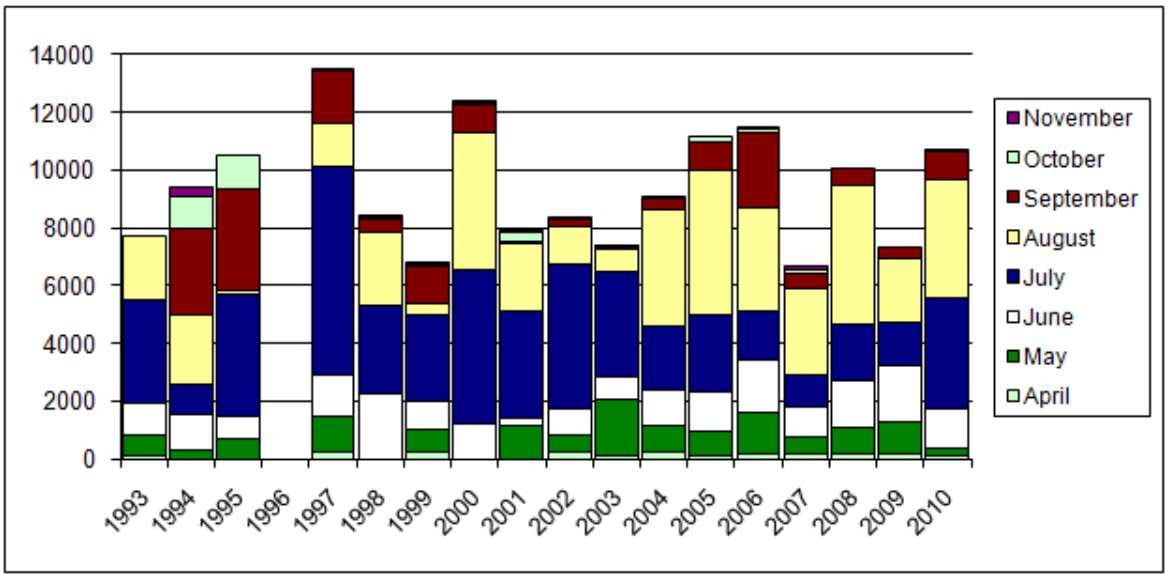


Figure 10. Monthly upstream counts at the Blairgowrie fish counter, River Ericht, 1993 to 2010. Note: data are not available for 1996 nor the springs of 1998 and 2000.

The fifth fish counter in the district is situated in a fishpass at Keathbank Weir on the River Ericht on the outskirts of Blairgowrie and is operated by the Board.

2010 had one of the highest counts (10,657) in the series which commenced in 1990. While the overall total was very respectable, it masked the fact that the count to the end of June was one of the poorest. This means that the count from July onwards was the highest since the year 2000. Normally this might be taken as confirmation of a good grilse run, but in 2010 it may partly reflect a delay in spring fish getting up that far on account of the very dry weather in May and June. However, there is clearly a big contrast with 2009 which had a good count to the end of June and a poor grilse run.

ANALYSIS OF 2010 SEASON

The 2010 salmon season was one of two extremes. On the one hand the spring run of 2SW fish was clearly one of the poorest experienced, but the grilse run was the strongest for some time in some parts of the river system, although not all.

This pattern was not unique to the Tay. Many rivers in Scotland appear to have had a relatively weak spring run, indicating poor survival of that year class of fish at sea. This is not surprising given the generally weak grilse run in 2009. In contrast, the 2010 grilse run was also much better in many Scottish rivers, although there appear to have been regional variations. Those rivers which have a summer grilse run found that the grilse started earlier in 2010, more like their "normal" time compared to the delayed runs of the last few years. On the north coast of Scotland and northern shore of the Moray Firth in particular, the summer grilse run appears to have been the strongest for some time. The autumn grilse run, which is particularly a feature of many rivers from Aberdeenshire southwards also appears to have been good and in some instances exceptional. This suggests there was a big improvement in marine survival in 2010.

However, back end runs in some of the rivers in south west Scotland do not appear to have experienced the same degree of upswing as seen in some rivers on the east coast of Scotland. Another widespread feature has been the occurrence of very small grilse, even late in the season, mixed in with larger ones.

It does appear, therefore, that there may be differences in conditions for salmon in different parts of the North Atlantic area. If one run of fish finds a productive area it does well and vice versa.

Of course, while variations in marine survival do have a major influence on the strength of salmon runs, variations in smolt production can also be significant.

Of particular concern is why the River Tummel did poorly in the summer. Was it because the Tummel grilse migrate to a different part of the sea from the Ericht grilse, for example, or did the Tummel have a particularly poor smolt run in 2009?

One possible explanation might lie in a very big spate which occurred in the western part of the Tay catchment in mid December 2006. Significant damage was done in the rivers Tilt and Garry and also on the lower Lyon. An electrofishing survey in 2007 indicated that fry densities were very low in the River Tilt, although this has not been repeated. That could have impacted on numbers of two year old smolts leaving the River Tilt in 2009. However, many of the smolts from the Tilt are likely to leave as three year olds, meaning that this theory is most likely only to be true if one year old fish were washed out by the flood as well.

Another point to consider is the fact that the count at Clunie Dam (which is upstream of Pitlochry Dam) was particularly poor in 2010. That part of the Tummel catchment might have been expected to have been less impacted by the 2006 flood given the flows were moderated by the lochs and dams in the system. Therefore we cannot be sure whether the 2006 spate affected the Tummel or not in 2010, but if it did, then we may expect its effects to take another two years to work their way out.

RIVER TAY EXPERIMENTAL TRIAL OF SHRIMP FISHING

In the years 2007 - 2009 the summer grilse fishing on the Tay was difficult because of high water, and indeed, it was again in July 2010. Because of the perceived uncertainties of summer fishing, including the latening of the summer grilse run which occurred after 2005, summer lets began to suffer. Some anglers and ghillies put it to the Board that if shrimp fishing was allowed it might be possible to catch some more of the fast running grilse when difficult conditions occur, thereby helping to secure lets. It was argued that if the fish were released there should be no impact in conservation terms.

In order to establish whether or not this was the case, a decision was taken in June 2010 to apply to the Scottish Government for permission to run a strictly monitored summer trial of shrimp fishing in the main stem of the Tay. Shrimp fishing would only take place on beats that had agreed to participate in the trial and only beats employing a full-time ghillie would be invited to participate. In the event, 13 beats accepted the invitation. The application was successful, and the trial was run strictly adhering to the following conditions of the licence:

1. The experiment ran from 2 August to 31 August 2010 and shrimp fishing could amount to no more than 25% of the weekly fishing effort on participating beats in order to provide valid comparison with other fishing methods (in the event, a strict rota was created enabling shrimp fishing only on alternate mornings/afternoons).
2. Strictly 100% catch and release of all fish caught using shrimp, with hook barbs flattened.
3. No shrimp fishing to be carried out without a ghillie present on the beat.
4. Detailed return sheets were completed by each beat, including number of anglers fishing each method each day, catches etc.

<u>Results</u>

It can be seen from Table 1 that as an average of all the participating beats combined, shrimp was used for a small proportion of the time. Fly fishing was the most popular method. However, while shrimp fishing accounted for approximately 10% of the effort, it accounted for nearly 15% of the total catch. For all the data combined, fly fishing had the lowest catch per hour fished. Spinning was little more effective. Shrimp fishing had almost twice the catch per hour of fly fishing. Worming and harling were the most successful methods, although harling especially was hardly used (the water was generally too low).

Method	% Total hours fished	% total catches	Catch per hour
Shrimp	10.1	14.9	0.17
Fly	54.8	44.2	0.09
Spinning	27.1	25.7	0.11
Worm	6.8	12.2	0.2
Harling	1.1	2.9	0.28

Table 1. The amount of time fished by each method expressed as percentages of the total hours fished for all beats combined and the catch by each method expressed as percentages of the total catch for all beats combined.

However, the overall averages hide the fact that there was considerable variation between individual beats. Two beats which agreed to participate did not in fact ever use the shrimp and are not considered in the following results. But, of the remainder, the catch per hour of all methods did vary between different beats (Figure 1). On six of the 11 beats shrimp caught more fish per hour than fly and spinner but shrimp only had a higher catch per hour on four beats compared to the worm.

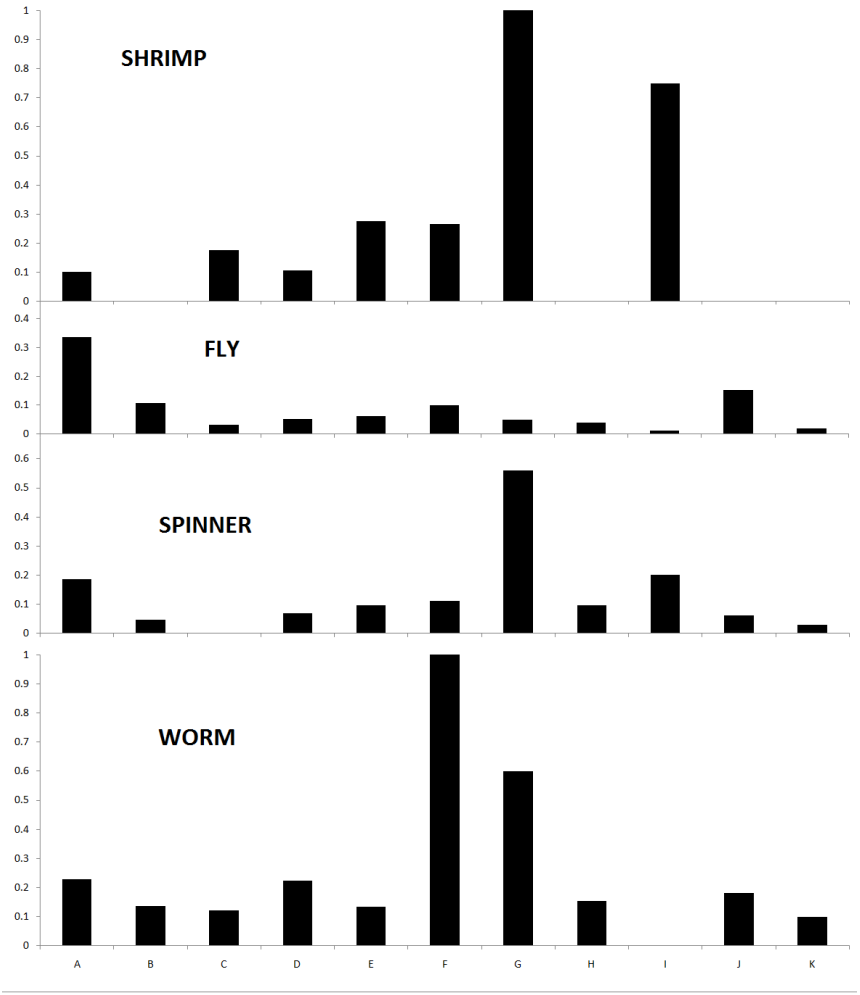


Figure 1. Catch per hour according to angling method for individual beats denoted as A to K.

There was also a wide range of usage of shrimp between beats from hardly at all to almost as much as permitted. In 6 of the 11 beats fly fishing was the commonest individual method, but in others spinning was more popular (Figure 2). Interestingly, on no beat did the method which was used most frequently have the highest catch rate per hour.

Discussion

The major question to be answered is did this trial prove the shrimp to be a more successful summer bait in terms of catching fish?

Certainly, on more than half of the beats shrimp fishing produced the greatest catch per unit effort. However, the fact that all methods were not used in equal proportion, especially that shrimp fishing was generally used sparingly, might have influenced these results. The fact that the most commonly used method on each beat tended to have a relatively low catch rate raises the possibility that the apparent effectiveness of a method depends on how

frequently it is use. For example, fish might find a novel bait or lure more attractive than one they see repeatedly. Therefore the major question has not really been answered.

It was also the case that the conditions which prevailed during the trial were conducive to all methods of fishing and were not those under which shrimp fishing really needed to be tested. The results may have been different had the trial been conducted in July rather than August.

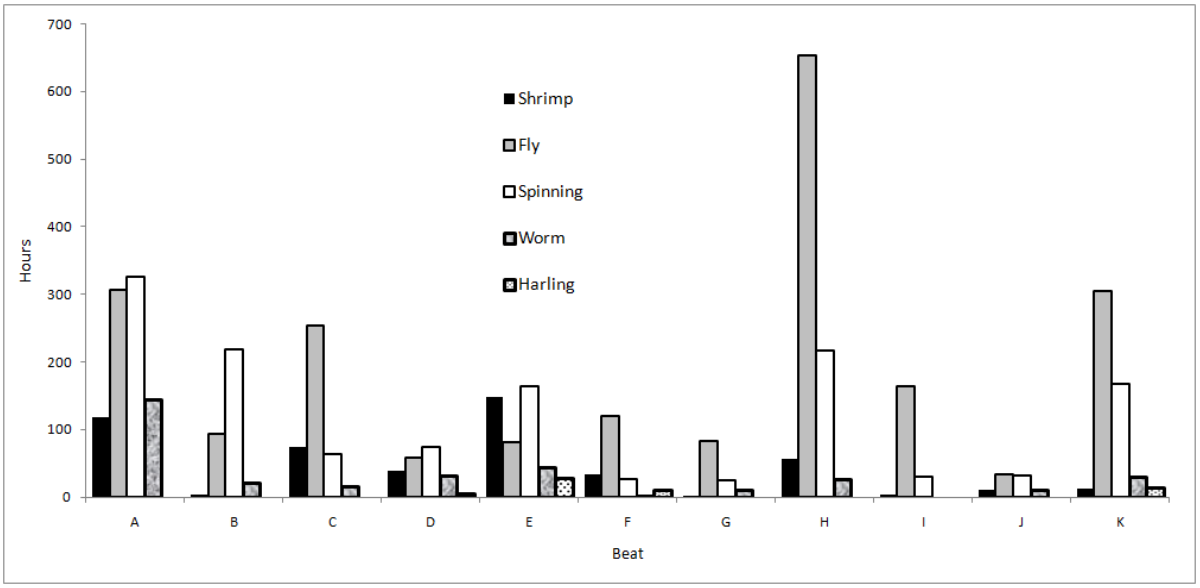


Figure 2. Amount of hours fished with each fishing method according to beat (A to K).

In addition to the data obtained, a number of interesting anecdotal observations were made which are of relevance.

1. There was reluctance from some anglers to using this bait. Some anglers simply preferred to fish with other methods. However, some anglers avoided participating in the trial because they thought it might preclude them from keeping any fish during their holiday on the river.
2. The feedback from those who used it suggests that relatively few of the fish caught on the shrimp were hooked deeply or bled, suggesting that it compares favourably as a method for successful release of salmon.

PROPOSED TAY SALMON ANGLING SEASON TRIAL EXTENSION

The autumn is now the most important period for salmon fishing in the Tay district, although this was not the case prior to the 1960s (see bottom graph on page 51). Although the biggest monthly catch is usually in September, the fact that only two weeks of October are fished on the Tay means that those two weeks are often the best two weeks of the season. Those two weeks can produce as many fish the first six months put together.

The main concentration of the catch in the last two weeks occurs in the lower river. For example, over the period 2003 to 2008, an average of 850 fish out of the average October catch of 2089 were caught in the lower Tay (Islamouth downstream). About a quarter, 485, were reported from the Earn where fishing continues to 31 October and a little over 10% (248) came from upper spring salmon tributaries (e.g. Ericht, Garry, Lyon etc).

The fish which are caught in the lower and to a lesser extent middle Tay, the Earn and Eden at this time are predominantly fish which have only relatively recently entered freshwater and form what is likely to be a genetic sub-stock of fish which only spawn in the main river and lowland tributaries. Such fish do not enter higher tributaries as evidenced by the Ericht and Tummel fish counters. The fish which are caught in the higher tributaries in October are generally fish which entered the Tay some months previous, including old spring salmon. Some such fish may also be caught in the main river.

This autumn fishing on main river beats generates most of the revenue which comes into Tayside from salmon fishing and therefore the great majority of the Board's assessment. As the assessment is used for the benefit of the whole river system it is very much in the interest of everyone with an interest in salmon fishing in the Tay district that the value of fishings in the main River Tay should be as high as possible.

However, this most productive period of fishing is now compressed into a few short weeks, partly because runs have become even later. If anything affects the fishing in these weeks, for example poor fishing conditions, proprietors' income, ghillies jobs, hotel jobs and the Board's income will be affected. Several lower Tay beats which always employed full time ghillies have already changed to part-time.

Given that the last two weeks of the season are often the most productive for many lower and middle Tay beats it was put to the Board that it should consider an extension to the season, which if it did not adversely affect stocks, would provide a significant additional fishing opportunity and help underpin the angling economy of the region.

Having considered this issue, the Board has agreed that, if there is sufficient support from proprietors and anglers, it will apply to the Scottish Government for a three year trial extension of the Tay angling season until 31 October, bringing the Tay into line with the neighbouring Esk and Forth districts and of course the Earn and Eden within our own district.

However, it is absolutely essential that any extension to the season has to be "sustainable" and must pose no threat to the future well being of salmon stocks and the fishery. Therefore the following conditions have been proposed.

- The extension would be for a three year trial period only.
- All salmon and grilse would have to be released alive.
- An extension should not apply to areas where salmon, particularly spring salmon, are about to spawn or may already have commenced spawning.
- Participating beats should donate at least one third of the income generated during this period to the Tay Foundation to be spent for the good of the river.

Such conditions preclude upper tributaries from any extension as they are dominated by spring salmon. As the Board would need to be confident that all fish would be released alive, it has agreed that any extension would only be appropriate on beats where full-time ghillies are present. These two issues have led to the conclusion that any such extension should be limited to the main stem of the Tay up to the junction of the Tay and Tummel. It would not apply to the upper Tay, Tummel or any tributaries.

Proprietors in the lower and middle part of the Tay have already, in all but a few cases, agreed in principle to the proposal and would make it a strict condition of let that all fish should be released and to donate a proportion of income to the Tay Foundation, although the detail of the latter has still to be resolved.

Opinions of all proprietors are still being sought for this proposal which the Board believes can, even under strict catch and release terms, generate a significant income for the Tay Foundation during the three year period and that this will be to everyone's advantage. As the autumn run is the strongest and most successful run in the river and that all the fish will be released there is unlikely to be any significant impact on the future sustainability of autumn salmon population.

If such a trial is given the go ahead, the trial will be carefully monitored to assess the types of fish being caught etc. Then, at the end of three years, the Board will have to consider whether it is appropriate to make the extension permanent or otherwise. Indeed, the River Dee has been engaged in exactly the same type of trial for these past three years (downstream of Aboyne only). Details of their findings, including the fact that caught-and-released fish do go on to spawn can be found at *www.riverdeetracking.com*.

It is also appreciated that some proprietors and others have concerns regarding the opening date of the season. As there are significant issues to be resolved if the start of the season is to be delayed, for example timeshare ownership, it is not appropriate that the starting date of the season should be changed during a trial period. This would also give the Board more time to agree an appropriate solution if it is ultimately agreed that both closing and opening dates should be changed permanently.

THE RIVER GARRY – APPLICATION TO RE-WATER FINALLY MADE

Few stories relating to Scotland's rivers are sadder than that of the River Garry. As is well known, the upper reaches of the river are dry because of water abstraction for hydro electric generation. This has been the case since the construction of the Tummel-Garry hydro scheme in the 1950s.

However, as a result of the European "Water Framework Directive" the Garry and other rivers like it must be restored to something called "good ecological potential". This means that the river and its ecology must be restored as far as it can be without "significantly" affecting the "use" – i.e. hydropower output. Significantly has yet to be defined but does not preclude some loss in electricity generation.

The Scottish Environment Protection Agency (SEPA) are the lead agency in implementing these improvements and have powers to review hydro operators' licences at any time, although in practice SEPA have not yet fully initiated any hydro reviews themselves.

Presumably aware of its significance, in 2006 Scottish & Southern Energy made some informal proposals to rewater the Garry. The Board objected to these at the time on the basis that the flow proposed was in its view insufficient to restore an optimal self-sustaining salmon population. A public awareness raising campaign was undertaken to highlight the issue.

In the latter part of 2007 the Board was informed that rather than conduct a review itself, SEPA were expecting a formal application from SSE to request a variation in their licence under the Controlled Activities (Water Environment) (Scotland) Regulations 2005. This application was finally made in May 2010. The regulations require a 28 day period of public consultation and determination by SEPA within a four month period, although it is understood this has since been extended for this application.

The formal proposals differed slightly from the original 2006 proposals, having adopted some of the Board's earlier concerns. The application document ran to 284 pages but the main points were:

1) To restore a flow of 0.193 cumecs (cubic metres per second) into the River Garry at the outlet of Loch Garry where there is currently none.
2) To restore a flow of 0.499 cumecs into the River Garry at Garry Offtake near Dalnacardoch where there is currently none.
3) To restore a flow of 0.077 cumecs to the Allt Glas Coire, a tributary of the Allt Anndier which itself is a tributary which joins the Garry at Dalnamein. This had not been part of the 2006 proposal.
4) To restore a flow of 0.200 cumecs to the Bruar Water. This had not been part of the 2006 proposal.
5) To reduce the flow in summer in the Errochty Water to replace some of the "lost" generation caused by 1) – 4).
6) To reduce the frequency or duration of freshets at Dunalastair and Clunie Dams on the River Tummel for the same purpose as 5).
7) Reductions in the flow from tributaries of the River Spey for the same purpose of 5) and 6).

While more water was offered than in 2006 the Board still considered these proposals insufficient to optimize the potential juvenile salmon habitat and provide sufficient flow for adult salmon to spawn, apart perhaps from the very lowest reaches of the Garry. Furthermore they did not even meet the minimum flow standards agreed by the Scottish Government for achieving GEP. In order to optimize the habitat for salmon it would be important to release as much water as possible as far upstream as possible so that the longest length of river benefits. However, although a flow was proposed for the Bruar, which has very little value to salmon in its own right and enters the Garry where there is flow anyway, comparable flows were not proposed for some other significant tributaries further upstream. The proposed 0.2 cumecs for the Bruar would have almost no value to salmon but would have had a significant value to salmon if it had been proposed for some other more upstream tributaries. The logic behind this decision is unclear.

Following the publication of SSE's proposals the Board had constructive discussions with SSE who indicated that they may be able to restore flow to a second of the three abstracted tributaries of the Anndier. However, even this move would still leave the middle Garry short of the Scottish Government's agreed flow standard.

In response to the public consultation, which closed on 27 August 2010, the Board objected to the proposals on the basis that the flows proposed would not mean the Scottish Government's agreed minimum flow standards and that sufficient flow should be released for these to be achieved. Should this be technically infeasible then if any tributary has to fall short of the standard it must be the Bruar not the more upstream tributaries. The Board also objected to the proposed reductions in Tummel freshets on the basis that no information was provided to show these would not have an adverse effect on salmon migration and on the detail of the flow reduction proposals for the Errochty Water.

SEPA are now considering the application and responses. By law they must make a determination on the proposals. This does not seem likely until in 2011. Should the Board continue to be dissatisfied with SEPA's decision there will be a right to appeal to Scottish Ministers who will have the final say.

Therefore, in 2011, the Garry may become a political issue. We hope a satisfactory outcome can be achieved before then.

THE RIVER TAY CONSERVATION AND AWARDS DINNER

The 5th River Tay Conservation and Awards Dinner was held at Dunkeld House Hotel on Friday 11 June 2010. In addition to the presentation of the annual Tay Salmon Conservation Award, there were presentations of the Redford Trophy for the largest salmon caught and released on the Tay on Opening Day, long service awards to retired ghillies and for the first time, the presentation of the revived Savills Malloch Trophy for the largest salmon caught and released on fly in Scotland.

In addition to the presentations a humorous address was made by Donald Findlay QC. An auction, raffle and donations raised £20,500 for the work of the Tay Foundation rounding off what was a really wonderful evening.



The Ballathie Trophy, which is presented for an outstanding contribution to the conservation of salmon in the Tay, was awarded to Mike Miles and Steve Keay of the Marine Scotland Science hatchery at Almondbank in recognition of their invaluable services to the Kelt Reconditioning Project.





Long service awards were presented by Roddy Willis of the sponsors Savills to John Ferguson (left), boat builder from Stanley, and Robert Cairns (right) from the Edradynate beat. Geordie Stewart from Stanley also received an award but was unable to attend.



The Redford Trophy, for the largest spring salmon caught and released on the Tay on Opening Day was presented to Peter Backhouse by Arnot McWhinnie. Mr Backhouse caught a 16 pound fish at Kercock.



The Savills Malloch Trophy, for the largest salmon caught and released on fly in Scotland in 2009 was presented to Sandy Walker from Fort William for a magnificent 32 pound fish caught on the River Lochy.

Photographs courtesy of Roy Summers, Scottish Field.

Minute of the 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 the Birnam Institute, Birnam, Dunkeld at 11am on 8th December, 2009.

Present:	John Milligan (Chairman)
	Ross Gardiner
	Bob White
	David Barwick
	Ian Davie
	David Godfrey
	John Wood
	Simon Furniss
	Thomas Steuart Fothringham
	Lord Stormont
	Sam Mercer-Nairne
	Alex Stewart
	Michael Wedderburn
	John Young
	Bruce Reid
	John Wood
	Christopher Dunphie
	William Lindsay
	Robert Rattray
	Wattie Barbour
	Glyn Jones
	Jock Tait
	Jim Taylor
	Sir William McPherson of Cluny
	Alan Dunnet
	M C Smith
	G Stewart
	Lee Fisher
	Christopher Dunphie
	Charlotte Gifford
	Tim Atkinson
	C J McIntosh
	Ian Dalglish
In Attendance:	Dr. David Summers
	Callum Towns, Clerk
	J Murray Smith, Administration Manager
Apologies:	Colin Lowson
	Alastair Riddell
	Ian Wotherspoon

Minutes of the Annual Meeting held on 1st December, 2008.

The Minutes of the 2008 Annual Meeting were taken as read and, on a proposal by Sir William McPherson and seconded by Christopher Dunphie, were approved.

Accounts for the Year Ended 31st December, 2008

The Accounts for the year ended 31st December, 2008 which were incorporated in the Annual Report had been circulated and were taken as read.

There were no questions and on a proposal by William Lindsay, seconded by Michael Wedderburn, the Accounts were approved.

Annual Report 2008/9

The Chairman reported that 2009 had been a disappointing season, but that this had been the case throughout the UK. He pointed to a number of reasons for this including conditions in the North Atlantic, trawling, high rainfall, commercial netting, seals, sawbills, hydro operations, salmon farming and rafting. On this last item he felt it was essential that an accommodation was reached with rafting organisations.

He reported on the completion of the extension to the Hatchery and the further works which were currently ongoing to enclose the holding tanks area. He expressed thanks for the financial support of John Apthorp and the Tay Ghillies Association towards this work.

The Board had strengthened the Catch and Release Code for 2010 which included 100% release until 31 May.

The Board now had a robust Plan of Project work for 2010 and 2011. David Summers should be contacted by anyone wishing to see the Plan. The Board was in the process of recruiting a Project Biologist to oversee the implementation of the Plan.

The Chairman expressed condolences in respect of the angler who lost his life during 2009, and reinforced the importance of safety on the river.

He requested that owners support the Annual Tay Conservation Dinner which would be held at the Dunkeld Hilton House Hotel on 11 June 2010 as well as the morning and evening events being organised for Opening Day, 15 January 2010.

He thanked the Board members, David Summers, the Bailiffs, Murray Smith, Lorna Bromley-Martin and Callum Towns for their contributions during the year. He also thanked the ghillies for their hard work on the river where they interact directly with the anglers.

The Chairman then asked for any questions from the floor.

Michael Smith asked whether the Board had considered delaying the start of the season in order to avoid the loss of 3-4 million eggs in the main stem. The Chairman reported that this item had been raised at the Board meeting prior to the AGM and it had agreed a commitment to consider this matter further.

Alan Dunnet expressed concern at the lack of fish in the system, particularly in the Spring and suggested that no fish meant few tenants with the resulting drop in income which would impact on the Board's finances.

In connection with the Catch & Release Policy he was concerned that some beats were not applying the rules and queried whether the Board were doing enough to police the system.

His own beat had not had any visits from bailiffs in 2009. David Summers reminded the meeting that there were only 6 bailiffs for the whole system and that ghillied beats were seen to be self policing and therefore a lower priority. He also pointed out that the Recommendation had no force in law and that proprietors had to take responsibility. The Chairman stated that the Board preferred not to use the Statutory route which was likely to be irreversible. David Summers added that it was possible to apply for statutory legislation for a specific beat.

Mr Dunnet expressed concern at seeing the Dunkeld smokery full of fish but it was pointed out that the smokery took a substantial volume of fish from other rivers not applying Catch & Release.

Mr Dunnet asked why there had been no response to his offer to meet with himself and his colleague, Hugh Currie who was an authority on broodstock/egg matters and could supply the Board with both from his own hatchery. The Chairman assured him that the Board would undertake to contact him in 2010 and examine what was being proposed.

Christopher Dunphie asked what progress was being made in connection with the Garry. David Summers reported that SEPA were awaiting a revised proposal from SSE which would result in a public consultation process where it was important that as many submissions as possible were made by owners/interested parties.

On a proposal by Lord Stormont, seconded by Thomas Steuart Fothringham, the Annual Report was approved.

Presentation by David Summers

David described the 2009 season which had been comparatively poor, although counter numbers were not as low as catches, indicating that the wet conditions did play a part. He reinforced the Chairman's comments on marine problems and global warming. Whilst we may look for measures to be taken at the Copenhagen Climate Change Summit which may help, our own input has to be local. The 2010 Catch & Release measures must be encouraged. The Board's Management Plan includes enhancing the Hatchery work, further removal of obstructions, and habitat improvement. The last item includes tree thinning, burn survey and controlling Invasive plants, particularly Japanese Knotweed, and owners who had this species on their land were encouraged to contact TDSFB if they required advice or assistance.

Another issue was the winter diet of goosanders which was thought to include smolts. It was the intention to work along with the Fisheries Laboratory at Pitlochry to examine goosander stomach contents with the aim of determining the specific tributary source of any smolt remains found.

David asked Lorna Bromley-Martin to give an update on her fundraising work. Currently work is being done in setting up the 2010 Tay Conservation Dinner and there are also advanced plans in place for Opening Day morning and evening events at Dunkeld in association with the Dunkeld & Birnam Tourist Association where John Swinney will open the season.

The Malloch Trophy was now owned by the Tay Foundation and Savills have agreed to sponsor it at £5,000 p.a. for 3 years.

The sale of Conservation Dinner raffle tickets will be ongoing throughout 2010.

There is also an Appeal currently in progress to raise £50,000 for two Wheelyboats for use on the river.

There are a number of other initiatives currently in progress.

Any Other Business

John Milligan told the meeting that this would be his last as Chairman as he had made the decision to resign. He would be replaced by Bill Jack, currently tenant of the Almondmouth beat. Sir William McPherson thanked John Milligan for his 7 years of hard work as Chairman and this was endorsed by those present.

The Ghillies lunch would be held on 6th January 2010 at the Royal Dunkeld Hotel at 10.30am.

No further items were raised and the meeting was closed.

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 46 to 50. 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 48.

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 2009, and of its deficit for the year then ended;
- the financial 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

TAY DISTRICT SALMON FISHERIES BOARD
INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED 31 DECEMBER 2009

	NOTES	£	2009 £	2008 £
INCOME				
Fishery assessments	2		390,436	376,553
Revaluation Appeals			(2,016)	-
Bad debts, changes to provision for doubtful debts etc			(2,054)	-
			386,366	376,553
Compensation Received (SSE)			5,706	5,652
Contributions from Tay Foundation			97,579	25,258
Contribution from SNH			2,068	17,293
Conservation Dinner			(7,527)	(604)
Consultancy			21,147	827
			505,339	424,979
EXPENDITURE				
Salaries and National Insurance		259,039		221,719
Pension plus Death in Service- Board's contribution		10,567		10,255
Recruitment		107		-
Training		360		-
Employee Expenses		2,323		-
Motor cars and boats running costs, incl insurance		29,665		29,831
Rent, rates and general insurance		15,050		14,228
Heat & light		5,792		5,352
Repairs&maintenance - General		809		4,369
Repairs&maintenance - Hatchery		6,246		12,200
Telephone & Communications		8,484		7,075
Printing, stationery and advertising		3,360		2,416
Annual report costs		544		742
Meetings and other statutory costs		2,453		2,352
Public Relations		320		4,097
Ghillies lunch and meeting		800		780
Administration costs		18,000		18,020
Legal fees		2,114		5,793
Audit and accounts fees		2,173		2,229
Depreciation		27,074		23,852
Subscriptions and levies		12,223		11,354
I T costs		1,536		1,330
Health & Safety implementation incl clothing		6,659		7,998
SOAFD - Kelt reconditioning		16,500		16,500
Stock enhancement costs		2,793		3,862
Project Work		16,926		22,766
Fishtay Website		6,458		6,203
Scottish Native Woods		-		4,284
Gifts & Presentations		240		447
			458,615	440,054
			46,724	(15,075)
Gain on sale of fixed assets			2,350	-
			49,074	(15,075)
Interest received	3		117	7,467
			49,191	(7,608)
Transfers to reserves: NASF(UK)	5		-	-
(Deficit)/Surplus for the year			49,191	(7,608)

The notes on pages 48 to 50 form part of these accounts.

TAY DISTRICT SALMON FISHERIES BOARD

BALANCE SHEET
AS AT 31 DECEMBER 2009

	NOTES	£	2009 £	2008 £
FIXED ASSETS				
Tangible assets	4		145,149	96,101
			145,149	96,101
CURRENT ASSETS				
Debtors & prepayments		26,169		33,676
Cash at Bank and in Hand		170,309		155,101
		196,478		188,777
CURRENT LIABILITIES				
Other creditors & accruals		41,877		34,319
Net current assets			154,601	154,458
NET ASSETS			299,750	250,559
Representing:				
Reserves	5		83,434	83,434
General Fund	6		216,316	167,125
			299,750	250,559

These accounts were approved on 20th April 2010

WILLIAM JACK WILLIAM JACK
..... BOARD MEMBER

WILLIAM LINDSAY WILLIAM LINDSAY
..... BOARD MEMBER

The notes on pages 48 to 50 form part of these accounts.

TAY DISTRICT SALMON FISHERIES BOARD
NOTES TO THE ACCOUNTS
AT 31 DECEMBER 2009

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

	2009		2008	
	Rateable Value	Assessment	Rateable Value	Assessment
	£	£	£	£
Upper proprietors	719,785	388,684	720,535	374,678
Lower proprietors	13,955	7,535	13,805	7,179
	733,740	396,219	734,340	381,857
Less River Shee		(356)		(156)
Estuarial netting stations		(5,427)		(5,148)
		390,436		376,553

The assessments are based on 54% of Rateable Value (2008 - 52%)

3 INTEREST RECEIVED	2009	2008
	£	£
Bank interest	117	7,467

NOTES TO THE ACCOUNTS (cont'd)
AT DECEMBER 31 2009

4 FIXED ASSETS

	Leasehold Property	Motor Vehicles	Boats	Equipment	Plant & Equipment	Office and Computer	Total
	£	£		£	£	£	£
Cost:							
At 1 January 2009	64,578	76,620		42,671	186,517	16,853	387,239
Additions	75,403	-		-	-	719	76,122
Disposals	-	(7,925)		-	-	-	(7,925)
At 31 December 2009	139,981	68,695		42,671	186,517	17,572	455,436
Depreciation:							
At 1 January 2009	20,489	54,983		41,302	157,741	16,623	291,138
Charge for year	9,194	9,870		343	7,198	469	27,074
Eliminated for disposals	-	(7,925)		-	-	-	(7,925)
At 31 December 2009	29,683	56,928		41,645	164,939	17,092	310,287
Net book amounts:							
At 31 December 2009	110,298	11,767		1,026	21,578	480	145,149
At 31 December 2008	44,089	21,637		1,369	28,776	230	96,101

5 RESERVES

	GENERAL	NASF(UK)	TOTAL
	£	£	£
At 1 January 2009	83,434	-	83,434
Provision in year	-	-	-
	83,434	-	83,434
Expenditure in year	-	-	-
At 31 December 2009	83,434	-	83,434

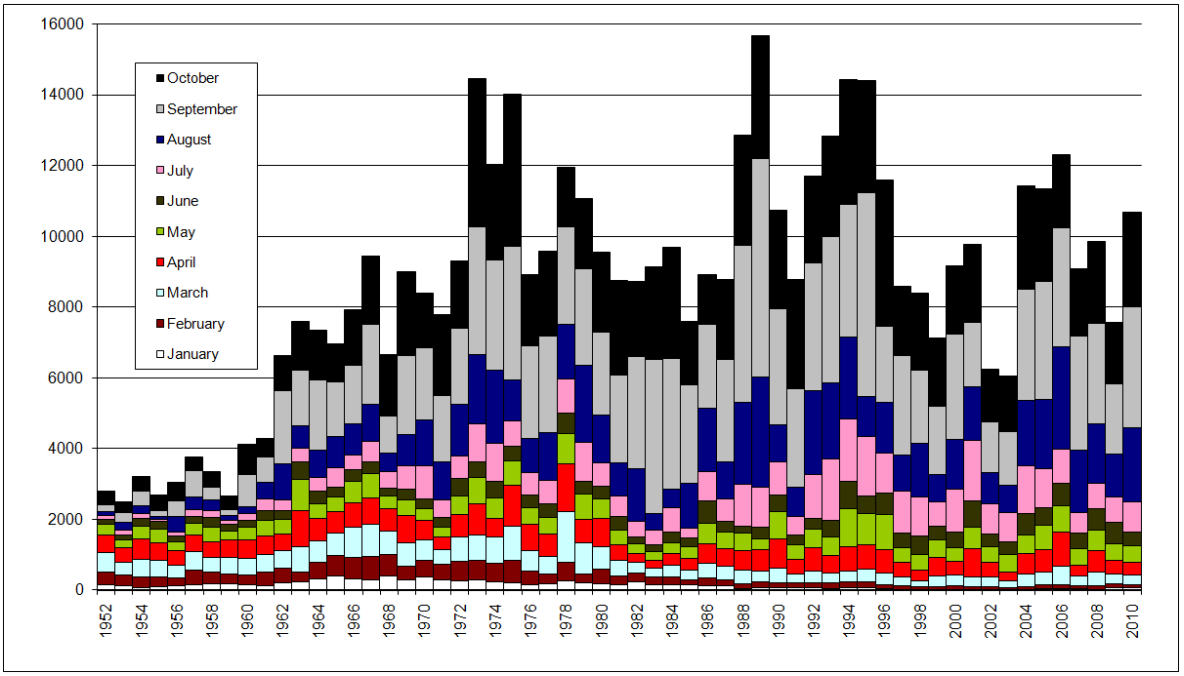
NOTES TO THE ACCOUNTS (cont'd)
AT DECEMBER 31 2009

6 GENERAL FUND

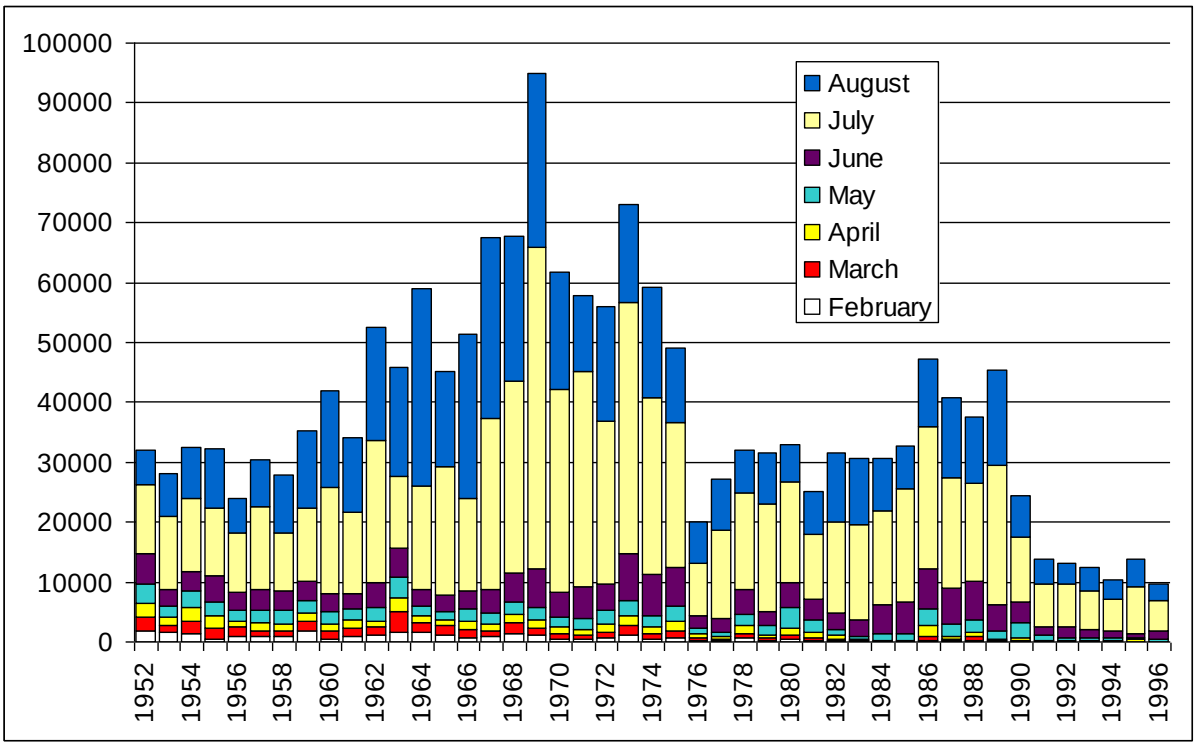
	2009	2008
	£	£
At 1 January 2009	167,125	174,733
(Deficit)/Surplus for year	49,191	(7,608)
At 31 December 2009	216,316	167,125

7. CAPITAL COMMITMENT

At the year end the Board had budgeted for Capital Expenditure totalling £17,750 including a new vehicle at £10,000.



Monthly angling catch for the Tay District 1952 – 2010 (including released fish). The 1952 – 2009 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. 2010 is a preliminary estimate based on fishtay website analysis.



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 2009

	5 February	30 April	23 June	26 August	28 October	8 December
J. Milligan	X	X	X	X	X	X
D. Barwick	X	-	X	X	X	X
I. Davie	-	-	X	X	X	X
S. Furniss	X	X	X	X	-	X
D. Glass	X	Resigned				
R. Gardiner	X	X	X	X	X	X
D. Godfrey	X	X	X	X	X	X
W. Lindsay	-	X	X	X	-	-
C. Lowson	X	X	X	X	X	-
I. Massie	X	X	-	X	X	-
S. Mercer-Nairne	X	X	-	X	-	X
B. Reid	X	X	-	-	-	-
A. Riddell	X	X	-	X	X	-
T. Steuart Fothringham	X	X	-	X	X	X
A. Stewart	X	-	X	X	X	X
Lord Stormont	X	-	X	X	-	X
J. Tritton	X	-	-	X	X	-
M. Wedderburn	X	X	-	X	X	X
R. White	X	X	X	X	X	X
J. M. Wood	X	X	X	X	X	X
I. Wotherspoon	X	-	-	X	-	-
J. Young	X	X	X	-	X	X

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 throughout 2009 and 2010.

All Proprietors within the Tay District
Callum Towns
Andrew Graham-Stewart
All Honorary Bailiffs
All Ghillies and Boatmen
All Tay Board staff
The Tay Ghillies Association
The Tay Foundation
Scottish Environmental Protection Agency
Mike Miles, Steve Keay and Jim Muir at the Freshwater Fisheries Laboratory, Almondbank
The staff of Marine Scotland at:
Pentland House, Edinburgh
Freshwater Fisheries Laboratory, Pitlochry
Montrose Research Station
The Association of Salmon Fishery Boards
Scottish Natural Heritage
Scottish and Southern Energy plc