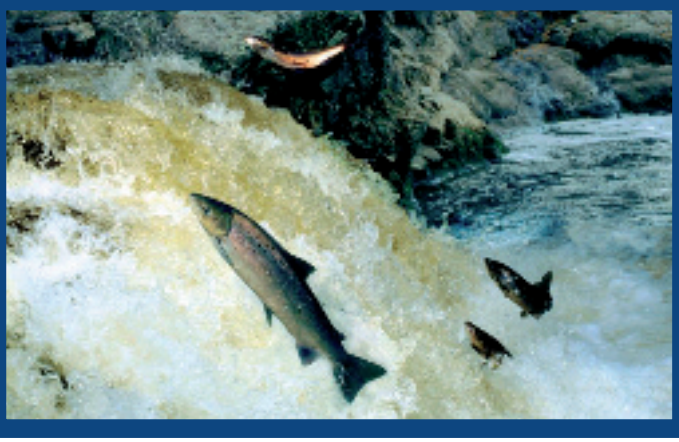
Annual Report 2012

Spey Fishery Board



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Cover Photo: *Autumn Evening at Lord March pool, Brae Water Beat 3, River Spey (Photo: Roger Knight)*
Inset Photo: *Leaping Salmon (Photo: Ian Neale)*

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ANNUAL REPORT 2012

by

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and

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January 2013

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Spey Fishery Board

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Oliver Russell, Mandatory for Ballindalloch Trustees
Angus Gordon Lennox, Gordon Castle & Mandatory for Brae Water Trust
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Toby Metcalfe FRICS, Mandatory for Crown Estate Commissioners
Peter Graham, Mandatory for Rothes & Aikenway and Laggan Fishings

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Grant Mortimer, Strathspey Angling Improvement Association

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Melville McDonald, River Spey Anglers Association
Brian Doran, Spey Rods & Ghillies

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Brian Shaw, SFB Biologist
Malcolm Newbould, Wester Elchies Fishings
Frank Clark, Spey Foundation Whisky Ambassador
Duncan Ferguson, SFB Operations Manager
Sally Worsdall, SFB Administrator

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Office Administrator:	***Sally Worsdall (Part-Time)***
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Operations Manager:	***Duncan Ferguson***
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	Robert Laughton (Part-Time Biologist)
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	Jim Reid (seasonal)
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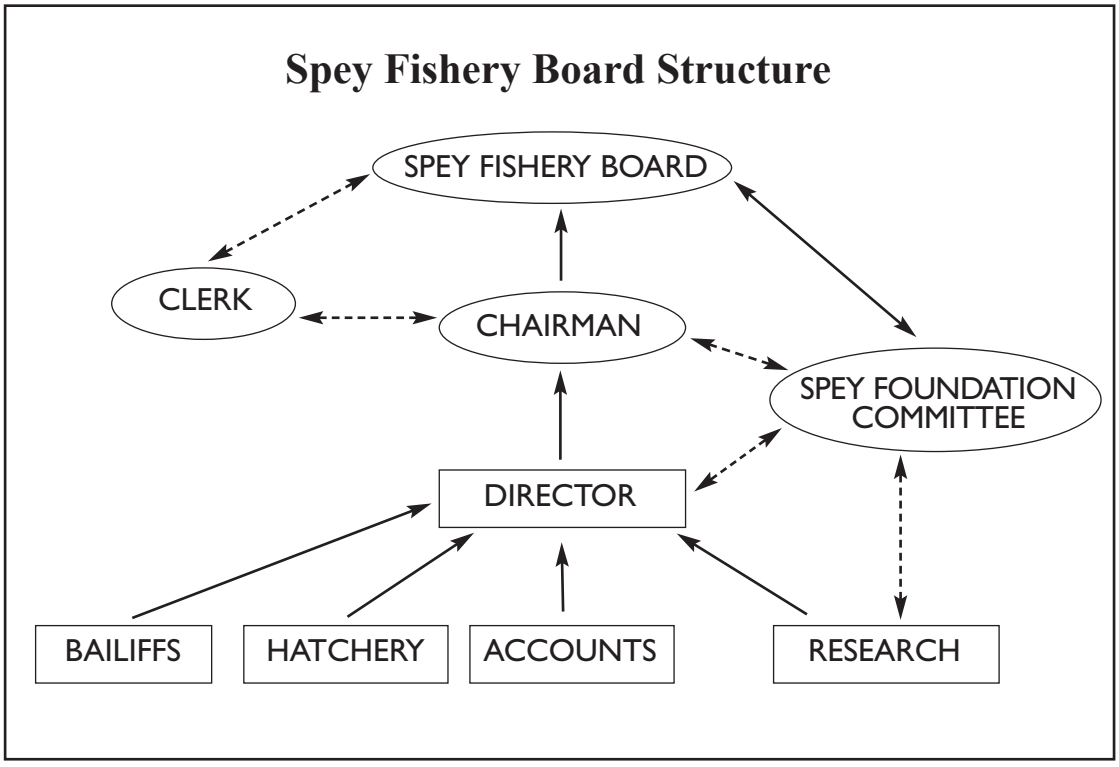


Figure 1. *The Spey Fishery Board Structure*

Chairman's Foreword

2012 was a disappointing year for Salmon and Sea Trout catches on the River Spey. This was echoed in other rivers in Scotland. Icelandic rivers suffered a particularly poor year and Norway, too, on the whole reflected reduced numbers of fish returning from the sea. The Spey catch was in the region of 7,500 Salmon and Grilse, a low number, but even taking into account recaptures not a new low seen in a historical context. Sea Trout did not return in strong abundance and the catch was just under 1,700. The release percentage for both Salmon and Sea Trout continued to increase.

Sadly we must record the deaths of two men who dedicated much of their lives to the River. In the early spring, Keith Macdonald, a ghillie at Arndilly, died suddenly. Keith was a ghillie almost before he left school, his father was a ghillie before him and Keith grew up on the river. I was fortunate to spend a day with Keith this past season at Arndilly not long before he died. His knowledge and experience were massive and he illustrated the human qualities inherent in a good ghillie, which draw so many anglers to return to the River year after year. In December, Walter Polson, a retired school master from Aberlour, died. Many years ago Walter worked on a contractual basis for the Spey Board. He had a lifelong interest in the Spey, Salmon Fishing and not least in the fish themselves. As a mature student he took a Masters Degree in Fisheries Biology, in which he wrote a thesis based on the research he undertook on the River Spey. In the lives of each of these two men the River and its fish played a significant role.

In September the Board held an Open Meeting in Aberlour to which everyone interested was invited. The purpose of the Meeting was to put into the public domain, the research which the Board has been undertaking. Subsequently, this appeared on the Board's Web Site. A further objective was to discuss the Board's Stocking Policy in the light of this research and it is the Boards objective to continue to hold similar meetings. It was a constructive event, with the opportunity for everyone to express their opinions and points of view.

In the world of Scottish River Management, the Spey Hatchery has a significant profile. If anyone doubts this, I suggest they refer to the recent sessions of the Holyrood Rural Affairs Committee debating the forthcoming Aquaculture and Fisheries legislation. Stocking, and particularly the Spey Hatchery, occupy a prominent position. Our Hatchery Policy has been described as "progressive". It has certainly evolved and is significantly different from only a few years ago. Doubtless it will continue to change in the light of future legislation, our own monitoring of its success and its impact. It must also reflect the results of research undertaken elsewhere into the affects that Hatchery Life has on the ability of subsequent generations of fish to reproduce in the wild.

Recently there have been a number of somewhat negative articles and comments about the River and its Management. The same thing occurred around ten years ago, following reduction in the runs of fish returning to the River. Once catches recovered in the years from 2004 to 2008, this negativity disappeared, but with the reduced catches of the last four years, the sentiment has returned. Whether this negativity is justified or not, its impact is totally destructive. Everyone connected with the River needs to encourage as many anglers as possible to fish the Spey and to continue to visit this area of Scotland. Articles and

comments about all the detrimental aspects will not achieve that. In many cases, these do not reflect the information which the Board makes available. It is to be hoped that the positive aspects will assume more prominence in the future. It is in all our interests that they do.

A very positive development in 2012 has been the Board's new Web Site. In addition to the excellent Weekly Fishery Reports, which give everyone the ability to keep up to date with the development of the Fishing Season, the site now contains "The Blog". This facility has enabled our Research to be broadcast more or less as it develops. "The Blog" is interactive, it allows questions and comments to be made and addressed. Through this medium, the Board has been able to demonstrate the high numbers of juvenile fish found in the Catchment this year. Another positive feature of research this year has been the strength of the Smolt production monitored in the Truim and the Tromie, and further details of this will be found in this Annual Report. There are reasons to be optimistic about the future runs of Fish into our beautiful river.

The Board recognises that it faces many challenges in the Management of the Spey. The limitations which are inherent in the Board's remit also need to be recognised. Mankind has the ability to impact the natural world in a detrimental way and is relatively puny when it comes to making positive interventions. Constructive work can be done on Habitat, but thereafter it is usually best to leave the repair to nature and the fish themselves. Increasingly the Board recognises that its role is to hold those other, normally Governmental, bodies to account. It is these bodies that have the legislative muscle to make decisions, both negative and positive, which have the most impact on our Catchment and on our Fish. In these times of pressure on Public Sector spending this makes the role of the Board even more important.

Fortunately the Board has never been in a stronger position to discharge that responsibility. We have first class, experienced and properly qualified resources. We are, through this Annual Report and through the Web Site, making public the results of our research which form the background to the decisions we take. We will continue to strive to improve the runs of fish into the River and are optimistic and positive about the future.

Alan Williams
Chairman

Part 1

Statutory Remit of the Spey Fishery Board

1.1 Constitution

The Spey District Salmon Fishery Board (SFB) was established under the 1860s Salmon Fisheries legislation as subsequently amended and stated in the Salmon Act 1986 and the Salmon Conservation (Scotland) Act 2001. This legislation was later streamlined into the Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003. The SFB is empowered under the legislation to take such acts as it considers expedient for the protection, enhancement and conservation of Atlantic Salmon and Sea Trout stocks and their fisheries (Table 1). The SFB is responsible for the Spey Fishery District, which includes 52 rod fisheries within the mainstem of the Spey and its tributaries. The District covers 107 miles of Mainstem River, approximately 560 miles of tributaries and 20 miles of coastline in the Moray Firth, from Lossiemouth to the west of the Spey estuary to Cowhythe Head in the east. The District extends 3 nautical miles out to sea (Figure 2).

1.2 Aquaculture & Fisheries (Scotland) Act 2007

The Aquaculture & Fisheries (Scotland) Bill was passed by the Scottish Parliament on 1 March 2007 and received Royal Assent on 5 April. It has three main purposes: to provide a statutory basis for regulating previously unregulated practices in aquaculture; to enhance emergency powers for controlling Gyrodactylus salaris (a parasitic disease in salmon); and to make a number of miscellaneous amendments to salmon, freshwater and sea fisheries legislation. Further changes are in the process of being addressed by the Strategic Framework for Scottish Freshwater Fisheries (previously documented in the SFB's 2009 Annual Report, available from the SFB's website at www.speyfisheryboard.com).

The Act also brought changes to constrict the introductions and transfers of fish. Whilst this legislation does not specifically affect Salmon hatcheries, it resulted in the Association of Salmon Fishery Boards (ASFB) and Rivers and Fisheries Trusts Scotland (RAFTS) producing more robust guidelines for stocking which have continued to play an integral part in the SFB's stocking policy since 2011 (see section 3.3).

1.3 Aquaculture & Fisheries Bill

In December 2011 the Scottish Government went out to consultation on a draft Aquaculture & Fisheries Bill. Recognising that aquaculture production and Salmon and freshwater fisheries are both equally important sectors, it seeks to manage them effectively as part of the wider marine and freshwater environment.

The Aquaculture and Fisheries Bill was introduced to Parliament on 3rd October 2012. The Bill consists of six parts, the second of which relates to Salmon and Freshwater Fisheries. There are a number of provisions relating to duties of transparency and accountability, including: a duty to publish and copy to Scottish Ministers the annual report and audited accounts; a duty to hold at least one public meeting, with all other meetings held in public unless there are good reasons for them to be held in private; to maintain and keep under review arrangements for dealing with complaints; and to maintain, and keep under review, arrangements for the registration and declaration of relevant financial interests of board members.

Aside from aquaculture issues, the Bill also involves: issues such as the introduction of a statutory carcass tagging system for net-caught fish by regulation and the modernisation of enforcement provisions; a reserve power for Scottish Ministers to collect fish samples, from both net-caught and rod-caught fish, for genetic analysis and to conduct inquiries and obtain information for the protection and development of stocks; Powers for Scottish Ministers to include changes to annual close time orders as part of a salmon conservation measure and to impose requirements on DSFBs and proprietors relating to monitoring and evaluation of the effect of annual close time orders and salmon conservation regulations (and on DSFBs for baits and lures regulations), the contravention of which may become a criminal offense; a technical amendment to the 2003 Act to provide clarity on the circumstances in which it is legal to fish by rod and line during the annual close time; and an enabling power for Scottish Ministers to modify, by regulation, DSFBs functions under the 2003 Act with respect to consenting to stocking.

Representations from a number of bodies, including the ASFB, have been made to the Scottish Government's Rural Affairs and Climate Change Committee in relation to this Bill, which is expected to complete its passage through Parliament by the summer of 2013. The SFB will continue to liaise closely with the ASFB and will be monitoring developments carefully.

1.4 EU Water Framework Directive

The European Union (EU) Water Framework Directive came into force in December 2000, and has been transposed into Scottish law through the Water Environment & Services Act 2003. Under the aegis of the Scottish Environment Protection Agency (SEPA), the Act aims to establish a process of River Basin Management Planning to achieve "Good Ecological Status" of freshwater, groundwater and coastal water bodies by 2027. For Heavily Modified Water Bodies (e.g. those impacted by water diversion for the production of hydro electricity) such as the River Spey, the aim is to achieve "Good Ecological Potential".

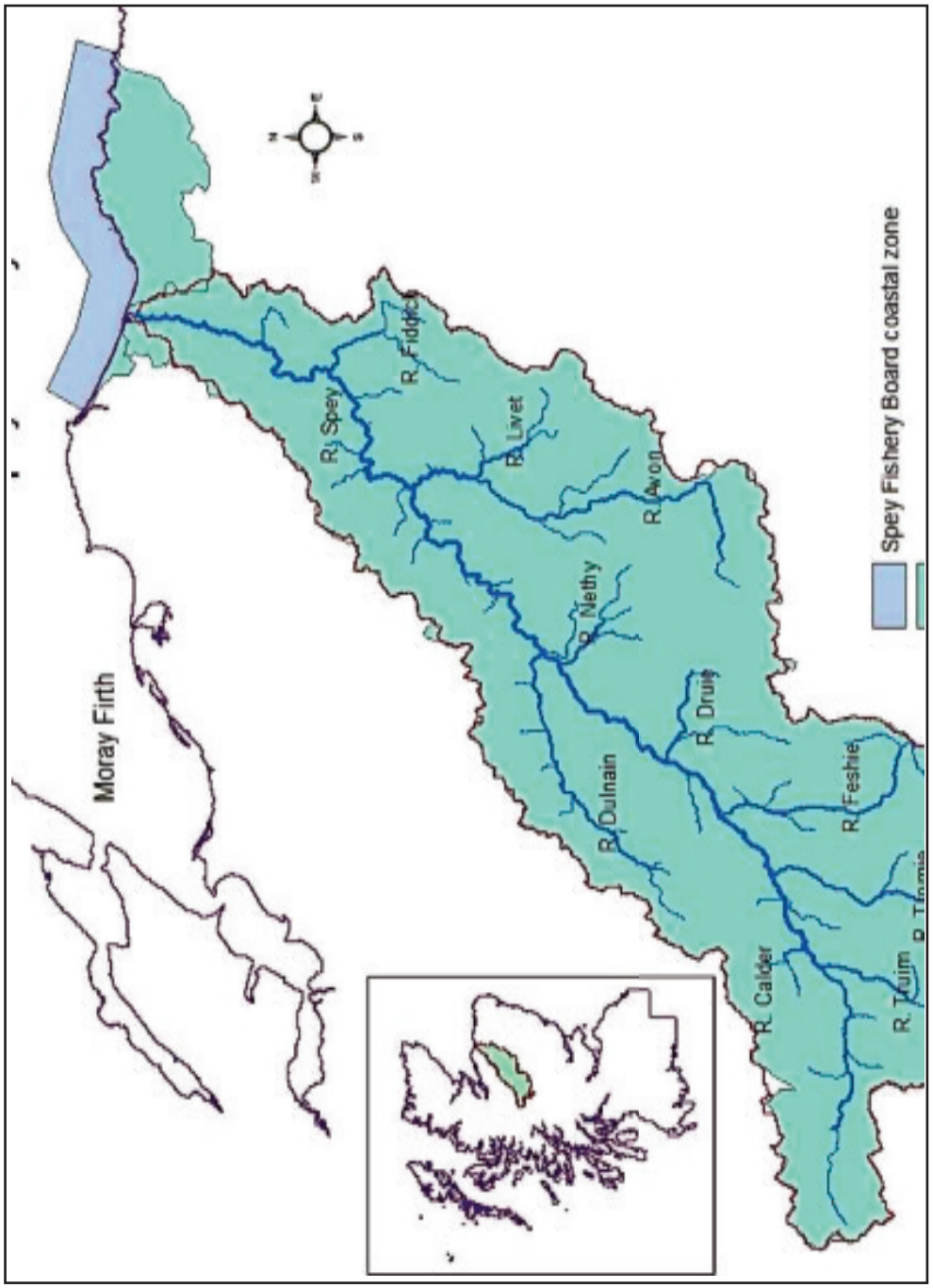
SEPA divided Scotland into eight sub-basins, where catchments of similar types are grouped and managed collectively. The Spey is included in the North East sub-basin, which also includes the Rivers Deveron, Ythan, Don and Dee. The SFB is part of the North East Area Advisory Group which has developed an Area Management Plan, which in turn forms part of Scotland's first River Basin Management Plan (RBMP). The final RBMP was approved by Scottish Ministers in December 2009.

Preliminary work by SEPA on the RBMP involved the categorisation of all water bodies throughout Scotland as good, moderate or poor, in order to prioritise the work necessary to implement the WFD. The SFB has continued to dispute the moderate category awarded to parts of the upper River Spey, which it believes should be categorised as poor due to the significant levels of water impoundment, diversion and abstraction and the effects that these have had upon the ecology of the area. SEPA has now revised a number of these categorisations, with some Spey Water Bodies (e.g. the River Markie, just above Spey Dam) now categorised as poor.

Table 1. Statutory Responsibilities of the Spey Fishery Board

1. Provide fisheries protection;
2. Set Salmon rod fishery season (11th February – 30th September);
3. Set Sea Trout rod fishery season (15th March – 30th September);
4. Set weekly rod fishery close times (midnight Saturday – midnight Sunday);
5. Police the purchase and sale of illegally-caught or unseasonable fish;
6. Ensure fish passage over obstructions to migration;
7. Protect juvenile fish and spawning redds;
8. Regulate the movement and introduction of adults, juveniles and ova.

Figure 2. *The River Spey catchment and Spey Fishery District*



1.5 Water Abstraction Update

1.5.1 Rio Tinto Alcan: Spey Dam

In 2012 Rio Tinto Alcan (RTA) installed a resistivity counter immediately below the fish pass at Spey Dam, to try to monitor the numbers of adult fish ascending and descending the fish pass. This followed the round of meetings undertaken by the Board with RTA and the Scottish Environment Protection Agency (SEPA) in 2010 to discuss RTA's water diversion at Spey Dam. The Board remains concerned that the water flows from the Dam are insufficient to allow adult fish to migrate up to and above the Dam to spawn, or to allow smolts to migrate downriver to the sea. The Board is also concerned about the efficiency of the fish pass at Spey Dam, the level of spawning activity above the Dam, the heck on the River Markie, and the effectiveness of the screens at the off-take in preventing juvenile fish from transiting from the River Spey in to Loch Laggan.

The SFB had attempted to install a VAKI counter within the Spey Dam fish pass as part of the CASS LIFE project between 2004 and 2008, in order to monitor the number of adult fish using the fish pass. However, the turbulent water flow through the fish pass precluded the counter from working effectively. RTA installed the resistivity counter on the apron approach to the fish pass in October 2012, after which it has undergone a period of validation and calibration to ensure its operational effectiveness. The SFB awaits with interest the results of this installation and will continue to closely monitor developments on this issue throughout 2013, which amounts to the largest diversion of water from the Spey catchment.

RTA installed a resistivity counter immediately below the fish pass at Spey Dam in 2012 to try to monitor the numbers of adult fish ascending and descending the fish pass. The coloured water was due to a significant landslide in to the Markie Burn, which enters the Spey immediately above the Dam. (Photo: Brian Shaw).

1.5.2 Scottish & Southern Energy: Tummel CAR Licence Scheme

Scottish & Southern Energy (SSE) divert water from the Loch An-t Seilich at the top of the River Tromie and from the River Truim, both important upper Spey Salmon spawning tributaries, into the River Tay catchment as part of the Tummel CAR Licence Scheme. Water from Loch An-t Seilich (River Tromie) is piped to a power station on the River Cuaich (a tributary of the River Truim) before being channelled to Loch Ericht near Dalwhinnie. The Cuaich, which is the most important tributary of the Truim, has in effect been lost in its entirety to the Spey catchment as a salmonid habitat. This Spey water then travels through Loch Rannoch and on to Loch Tummel, passing through power stations at Rannoch, Tummel, Clunie and Pitlochry before being disharged into the Tay system (see Figure 3).

SSE's Dam at Loch An-t Seilich on the River Tromie

Since September 2006, SSE has proposed to reduce the flow down the River Tromie, an important tributary of the Spey, and to provide small Compensation Flows down the Rivers Cuaich and Allt' Sluie which lead into the Truim near Dalwhinnie. In addition, they proposed to alter the flow down the River Truim to transfer more water to the Tummel Scheme. This was proposed in order to meet their conflicting responsibilities of achieving "Good Ecological Potential" (GEP) under the Water Framework Directive whilst also maintaining Scotland's renewable energy policies.

The Board remains particularly concerned by the potential impact of the proposals on the River Truim. SSE propose to change the compensation flow in the River Truim to a "Hands Off" Flow (i.e. one that is dependent upon rainfall in order to maintain a flow down an already impacted river), but do not provide any guidance as to the impact of this change on the flow throughout the year. This is of particular concern given that the River Truim, as a tributary of the River Spey, is a Special Area of Conservation (SAC) under the EC Directive on the Conservation of Natural Habitats and Wild Fauna and Flora 92/43/EC, for

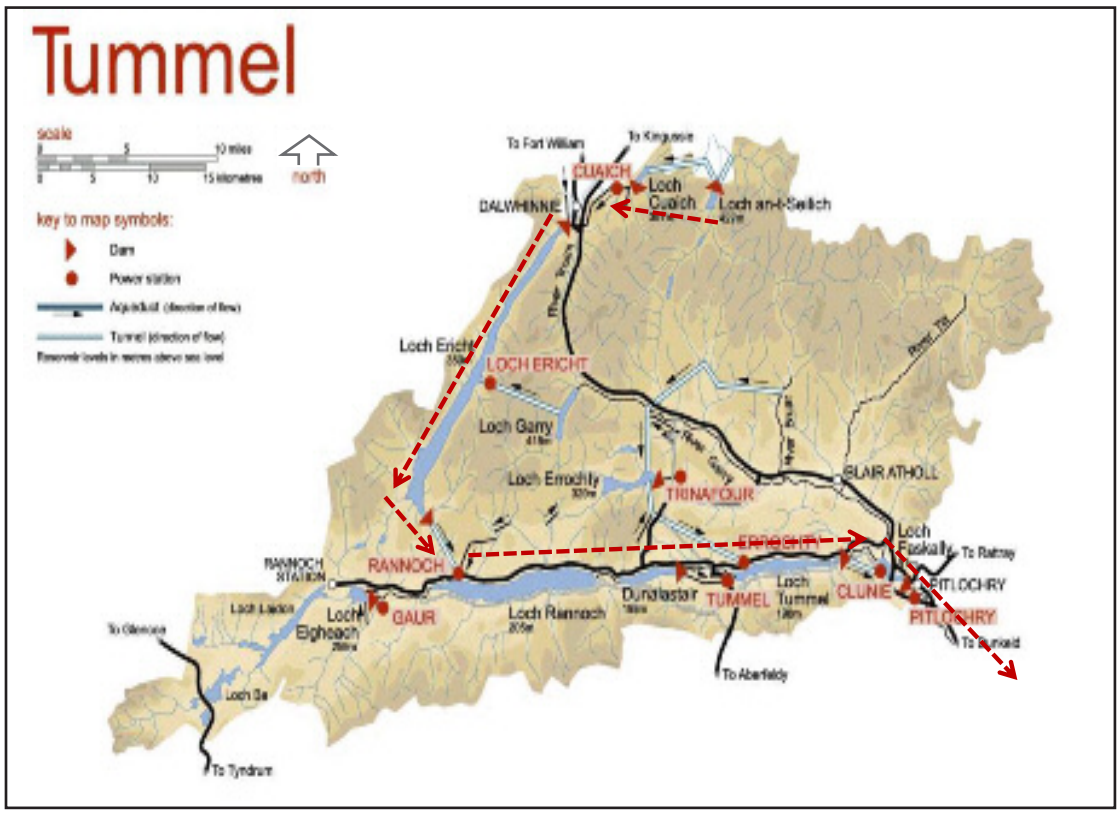


Figure 3: *Scottish & Southern Energy's Tummel Scheme CAR Licence allows the diversion of water from the Spey Catchment into the Tay catchment.*

Atlantic Salmon, Otter, Sea Lamprey and Fresh Water Pearl Mussel. It is, therefore, afforded the very highest level of environmental protection available under European legislation. The Spey Board also remains unconvinced that the proposals for the River Tromie will not have a significantly adverse impact upon Atlantic Salmon in that River, or that this would be compensated by additional smolt production from the River Cuaich after minimal re-watering, as suggested by APEM, the consultants commissioned by SSE to produce an extensive Environmental Impact Assessment. This is particularly significant given that the River Tromie is also included within the Spey SAC.

Our concerns for the River Truim were heightened further during 2012, following the results of genetic research undertaken as part of the FASMOP Project (see section 3.4). This latest research has shown that the River Truim holds a sub-population of Salmon that is genetically distinct from other Spey stock. Therefore, if the SSE proposals are accepted and they result in a substantial reduction in the wetted area of the River Truim, then in times of low flow there will be a significant impact upon the smolt production of that river which, if it adversely impacts upon the Salmon population within it, would be extremely difficult to replace. SEPA has been made aware of this development.

A decision by SEPA on these complex proposals had been expected by the end of 2012. The Board will be monitoring developments on this issue closely throughout 2013.

1.6 Angling, Canoeing and Access

A major issue highlighted by the economic survey commissioned by the Spey Catchment Management Plan was the potential conflict between angling and canoeing. This situation has been complicated by the introduction of the Land Reform (Scotland) Act 2003 and the launch of the Scottish Outdoor Access Code in 2005. The Code encourages reasonable and responsible access to rivers and river banks, and is being promoted within the Spey catchment by the Moray Council, Highland Council, SNH and the Cairngorms National Park Authority.

2012 was a relatively settled year, with only a handful of incidents between paddling and angling interests reported to the SFB. The principle concerns remain though, in relation to the significant numbers of paddlers between the Ballindalloch and Knockando areas of the River. These are acknowledged to be the busiest section of the River for paddlers, where white water canoeing and some rafting have continued to be popular. Concerns about "wild camping" also remain, which is still a problem Scotland-wide. It is still expected that the Scottish Outdoor Access Code will be revised to re-classify this as "remote camping", with appropriate definition and guidance.

To aid the resolution of these issues, core representatives of the Spey Users' Group (SUG), including the SFB, Scottish Canoe Association and Access Officers from the three Local Authorities, met in November 2012. This small group of core representatives will continue to meet in 2013 to further explore possible compromises in areas of concern.

Part 2

Fisheries and Conservation

2.1 Salmon and Grilse Catches

Reported rod catches in 2012 amounted to **7,490** Salmon and Grilse caught, which was below the 2011 catch of 8,607 (Figure 4).

The early part of the 2012 season produced a spring catch (between 11th February and 30th April) of 441 fish. This was slightly below the 535 caught for the same period in 2011, but above the 334 caught for the same period in 2010.

A further 852 fish were caught in May and 1,312 in June. This brought the catch for February – June to a total of 2,605, somewhat below the 3,869 caught during the same period in 2011, but better than the 2,154 caught during the same period in 2010. Catches rose to 2,175 in July, which was the best month of the season (1,551 had been caught in July 2011) before falling back to 1,631 in August (against 2,005 in August 2011). Catches fell back further in September to 1,079, slightly lower than the 1,182 caught in September 2011 and more akin to the September 2009 catch of 1,060 (Figure 5). Although the lower River produced more fish than usual (Figure 6), 2012 will not be remembered by many as a good season.

***7,490** Salmon and Grilse were caught in 2012, of which 6,354 were voluntarily released. Pictured above is visiting angler and Chairman of the Tay District Salmon Fishery Board, Bill Jack, with a fish he caught at Easter Elchies in July. (Photo Roger Knight)*

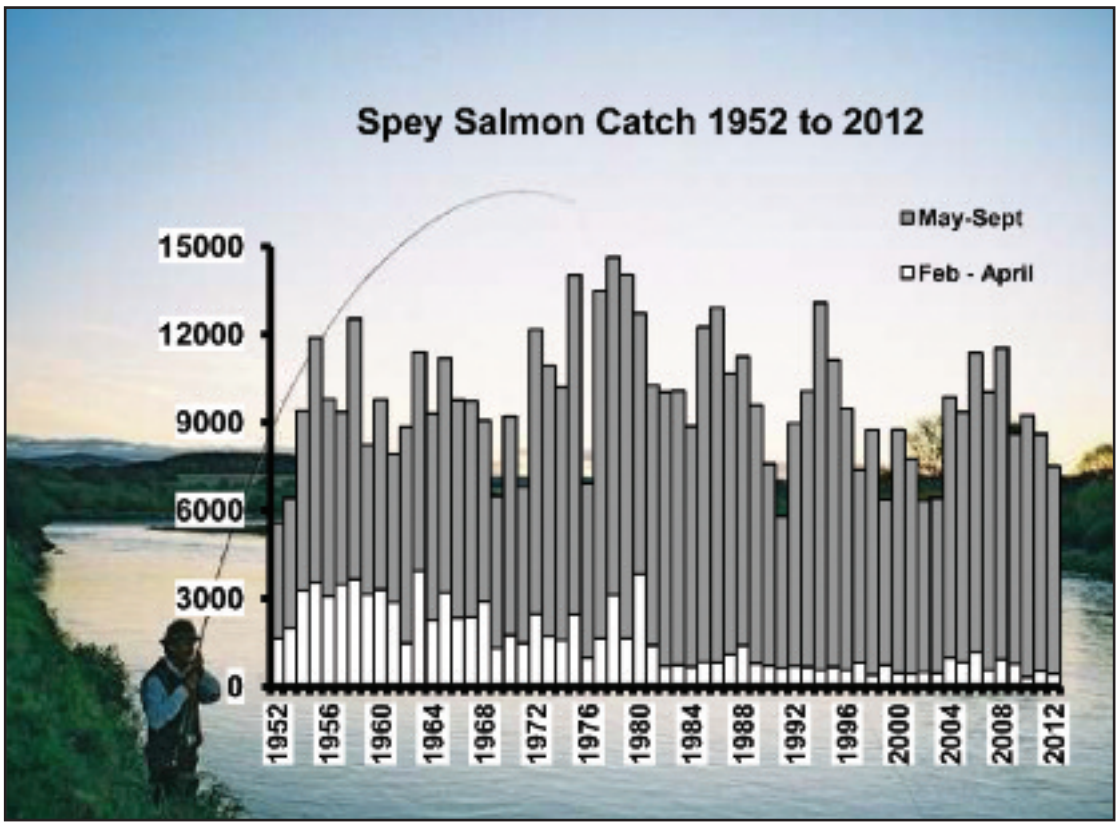


Figure 4. *Annual declared rod catch of wild Salmon and Grilse from the River Spey, 1952-2012. The 2002-2012 catches are from returns made to the SFB by proprietors.*

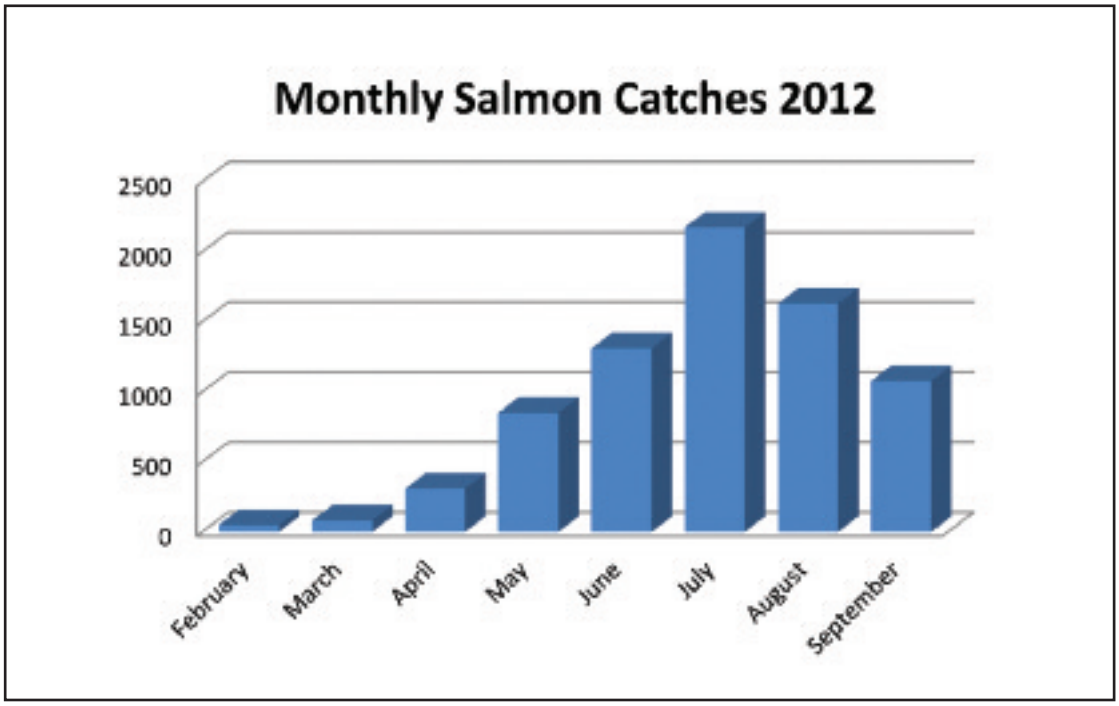


Figure 5. *Declared monthly rod catch of wild Salmon and Grilse from the River Spey in 2012, calculated from returns made to the SFB.*

Detailed Catch Returns analysed by River area for the last three years are set out in Figure 6. The Lower River refers to the River between Inverfiddich and Spey Bay; the Middle River refers to the River between Craigellachie and Ballindalloch, including the River Avon; and the Upper River refers to the River above Ballindalloch.

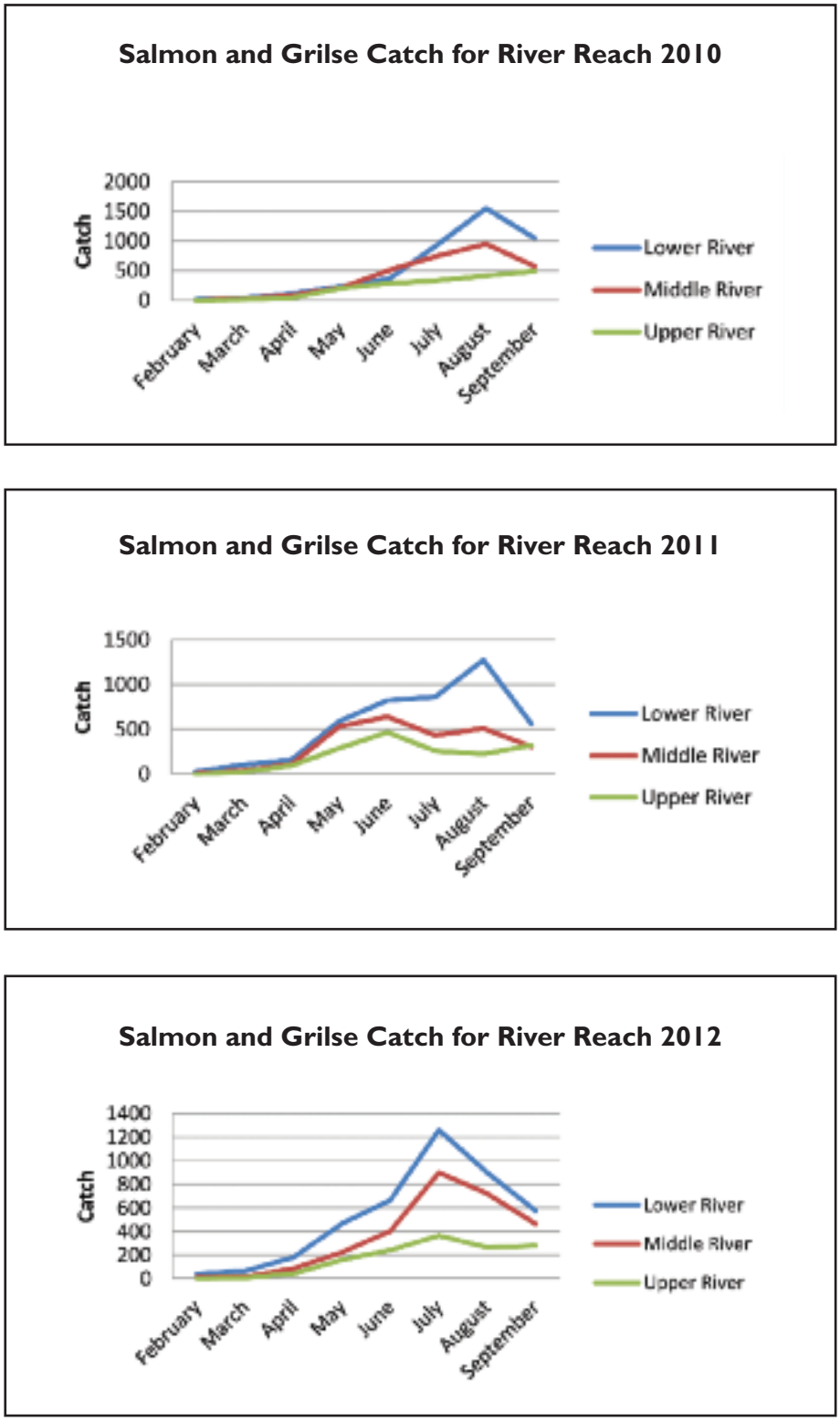


Figure 6: *Declared monthly rod catch of wild Salmon and Grilse by river reach from the River Spey between 2010 and 2012, calculated from returns made to the SFB.*

2.2 Sea Trout Catches

The 2012 rod catch for Sea Trout was **1,680** (Figure 7), a 15% reduction on the 1,975 caught in 2011, but just over half of the 3,290 caught in 2010. For further comparison 2,022 were caught in 2009, 1,627 in 2008, 2,199 in 2007, 3,286 in 2006 and 2,270 in 2005.

As for the previous five years, monthly catches (Figure 8) show that the most Sea Trout caught in any one month were in June with 536 fish caught (32%). July was again the second most prolific month, with 509 caught (30%). Overall therefore, almost two thirds of Sea Trout caught were recorded in these two months.

A fresh Sea Trout, about to be returned to the river so that it can go on to spawn naturally.
***1,680** Sea Trout were caught in 2012.*
(Photo: Mark Melville, Head Ghillie, Delfur)

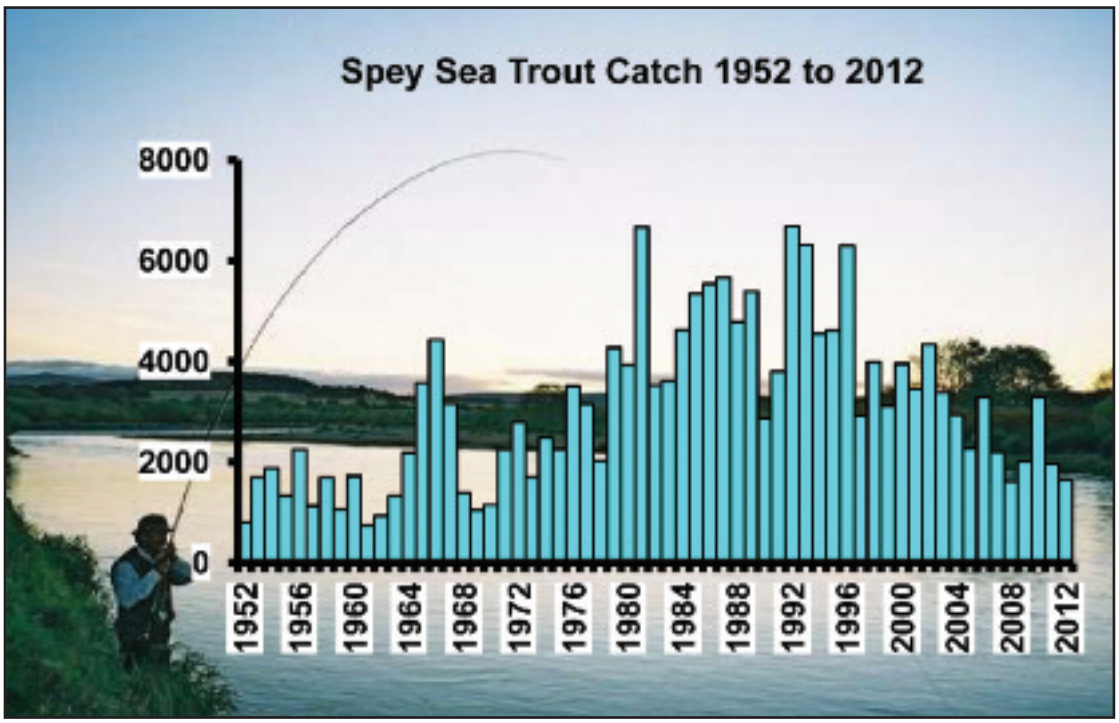


Figure 7. *Annual declared rod catch of Sea Trout from the River Spey, 1952-2012. The 2002-2012 catches are from returns made to the SFB.*

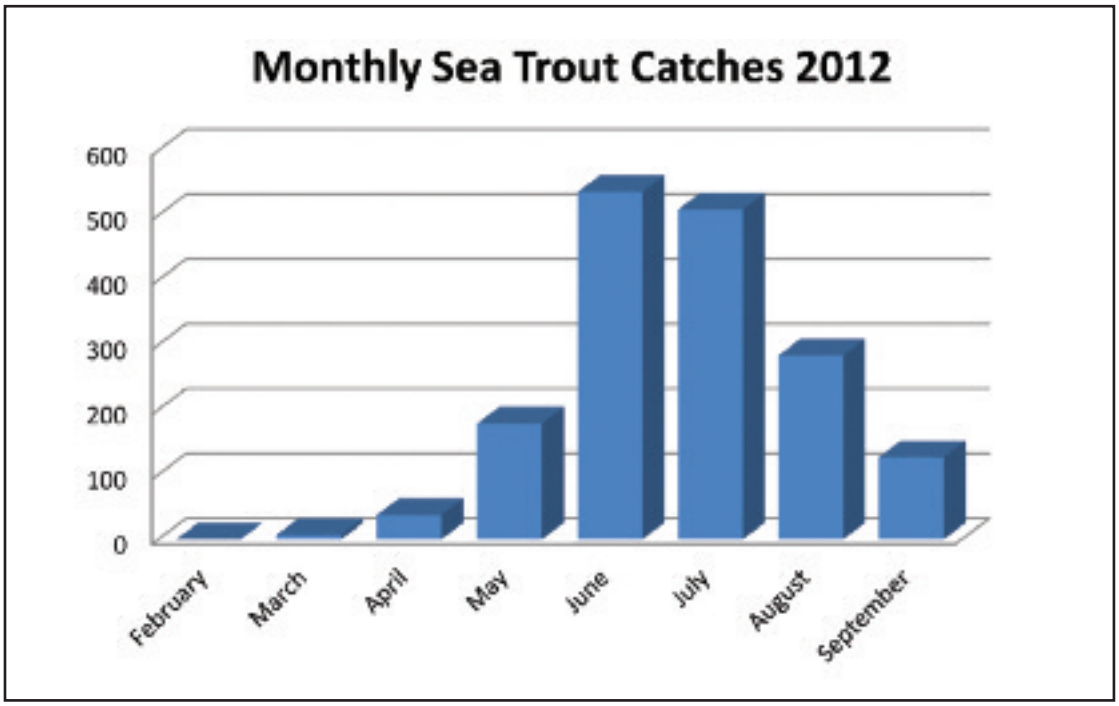


Figure 8. *Declared monthly rod catch of Sea Trout from the River Spey in 2012, calculated from returns made to the SFB.*

2.3 Salmon Conservation Policy

As part of its long term commitment to the protection of Salmon stocks, the SFB launched a Salmon Conservation Policy in 2003. The policy aimed to achieve the release of at least 50% of Salmon and Grilse, and to protect the depleted stocks of multi-sea winter Salmon in February-June. Most of the larger fish arrive in the river in the early months and these are the fish which have the potential to make the most significant contribution to successful spawning and are likely to be the fish which spawn in the upper reaches of the catchment. Furthermore, at least 70% of these fish are female, and therefore contribute an important part of the river's spawning stock. Studies by the former Spey Research Trust (now the Spey Foundation) have also shown that these fish are particularly vulnerable to capture and re-capture having been released.

Until 30th April 2012, 86% of all Spring Salmon caught had been released and by the end of June, 84% of fish caught had been released, which was a small increase on the 82% for that period the previous year. By the end of the season the release rate had climbed to 85%, an increase on the overall 82% achieved for the preceding year (Figure 10). For a voluntary policy to achieve such a high release rate is commendable and we are grateful to all proprietors, ghillies and anglers for their support for the policy. In total, 6,354 Salmon and Grilse were released to spawn in 2012.

Nonetheless, with over 200 fish retained by anglers to the end of May 2012, the SFB has become increasingly concerned about the conservation of the Spring component of the Spey's stock. The Board attaches the utmost importance to the conservation of these fish and has strengthened its Catch & Release recommendation by urging all anglers to release these fish. The Policy henceforth is as shown in Figure 12 and the SFB will continue to monitor the success of its Conservation Policy. Further consideration may be given to a recommendation for total Catch & Release in these months in the absence of signs of further restraint.

The life cycle of the Atlantic Salmon is depicted below in Figure 9.

Figure 9. *The life cycle of the Atlantic Salmon (courtesy of the Atlantic Salmon Trust)*

2.3.1 Savills Malloch Trophy Challenge

The most prestigious and historic trophy in the Scottish angling world, The Savills Malloch Trophy Challenge, was reinstated from the opening of the 2009 salmon fishing season after an absence of 10 years.

The magnificent silver model of a leaping salmon, pictured above, which for decades was the most coveted and keenly contested award in Scotland, has been acquired by The Tay Foundation. It is now awarded annually to the angler who catches the heaviest Salmon of the season on a fly on any Scottish River and then releases the fish alive, back into the water. The full criteria for applications, together with Entry Forms, are available from the following web address: http://www.sportinglets.co.uk/malloch/malloch-trophy.htm

On the 2nd May 2012, long-time Spey angler and Editorial Consultant for Trout & Salmon magazine, Sandy Leventon, caught a magnificent 30-32lb Spring Fish at Castle Grant Beat 2, which was subsequently entered for the Savills Malloch Trophy Challenge. Although it was not the winning entry, it was greatly admired by all of the judges.

This 30-32lb Spring Fish was caught by Sandy Leventon (Editorial Consultant to Trout & Salmon magazine) at Castle Grant Beat 2. It was subsequently entered as a candidate for the 2012 Savills Malloch Trophy.(Photo: Lionel Main, Head Ghillie, Castle Grant)

2.4 Sea Trout Conservation Policy

Under fisheries legislation Sea Trout have the same legal status as Salmon, and District Salmon Fishery Boards are also responsible for their protection and enhancement. Sea Trout in the River Spey are poorly understood and often overlooked. However, catch statistics show that the Spey Sea Trout rod fishery has historically been one of the largest in the UK.

An International Sea Trout Symposium in 2004 made the following key points, which are still valid today:

- Sea Trout are the sea-running form of Brown Trout;
- Sea Trout and Brown Trout interbreed;
- The majority of Sea Trout are female;
- Unlike Salmon, Sea Trout can return to spawn up to 10 times;
- Because of their large size, female Sea Trout provide most of the Trout eggs laid in a river;
- Genetic studies show that larger, longer-lived Sea Trout produce young that are also likely to grow large;
- Finnock are Sea Trout in their first year after leaving the river as smolts;
- Some Finnock enter rivers in the summer/autumn, and some of these breed;
- Interbreeding with stocked 'domestic' Trout may interfere with Sea Trout genetics;
- Sea Trout and Brown Trout should be managed jointly;
- Since Sea Trout are largely coastal, they are barometers of the health of the local marine environment.

Although catches have been more encouraging in recent years, they have not been as prolific as in the early 1990s (the life cycle of the Sea Trout is illustrated in Figure 11) and the SFB has maintained a precautionary approach, assuming that this trend is indicative of reduced Sea Trout abundance. While the causes of this trend are still not known, the SFB introduced a Sea Trout Conservation Policy for the Spey rod fishery in 2004. In consultation with proprietors, angling associations and the Spey ghillies, the Policy was designed to encourage catch and release of Finnock and larger adult Sea Trout.

2012 saw the rate of catch and release for Sea Trout increase to **73%**, up from 69% in 2011, 68% in 2010, 64% in 2009, 61% in 2008, 53% in 2007, and 49% in 2006. In 2005 it had been 43% and in 2004 only 23%, whilst between 1998 and 2003 the meagre return was usually less than 10% (Figure 10). Whilst the overall upward trend is commendable, the SFB has been concerned by the fall in the numbers of Sea Trout being caught. In 2008 the then Spey Research Committee (now the Spey Foundation Committee) had reviewed the Sea Trout Conservation Policy in light of the reduced catch and recommended to the Board that the Policy be enhanced. These recommendations were unanimously supported by the Board and a revised Sea Trout Conservation Policy has been adopted since 2009. When it was reviewed during 2012, the Board decided that in line with its precautionary approach, the voluntary policy was working well and should remain unchanged for 2013 (Figure 12). The SFB will continue to monitor the situation throughout 2013.

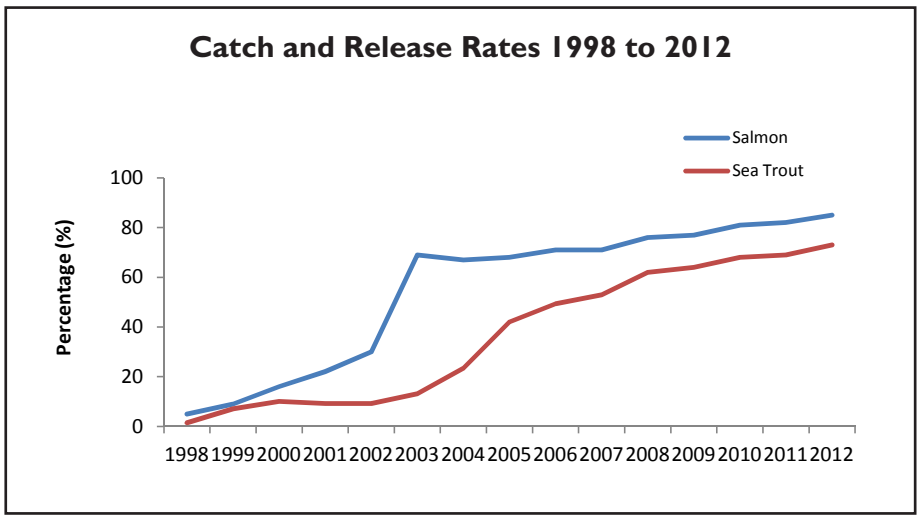


Figure 10. *The proportion of rod-caught wild Salmon and Sea Trout released on the River Spey, 1998-2012.*

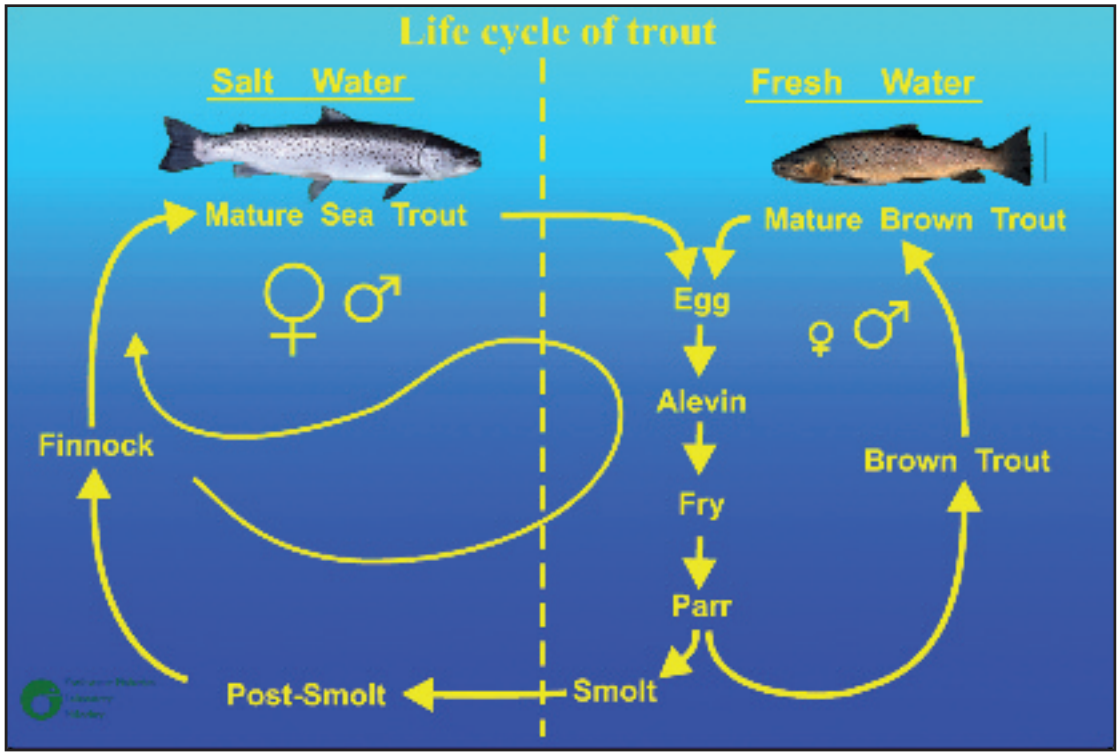


Figure 11. *The Life Cycle of Sea Trout.*

Figure 12. *Spey Conservation Policies for 2013*

SPEY CONSERVATION POLICIES

SPEY FISHERY BOARD RESEARCH OFFICE
TEL: 01340 810841 E-MAIL: research@speyfisheryboard.com WEB: www.speyfisheryboard.com

The Board considers the Conservation of Fish entering the river before the end of May to be of the utmost importance.

The Board urges all anglers to release these fish if at all possible. Most of the larger fish arrive in the river in the early months and these are the fish which have the potential to make the most significant contribution to successful spawning and are likely to be the fish which spawn in the upper reaches of the catchment. The Board will continue to monitor the success of the Conservation Policy and further consideration may be given to a recommendation for total Catch & Release in these months in the absence of signs of further restraint.

SEA TROUT


© James Butler

Release all finnock of 16oz / 35cm / 14" or less


© Ian Neale

Release all Sea Trout of 3lb / 50cm / 20" or above


© Ian Neale

Retain only 1 Sea Trout of takeable size per calender day. Anglers are also encouraged to release their first fish and keep the second that is of takeable size


© James Butler

Release all unseasonable fish (smolts, stale fish, kelts, over wintered finnock)

SALMON


© Robin Ade

Each angler must return the 1st, 3rd, 5th etc... cock fish caught


© Robin Ade

All hen salmon and hen grilse must be released


© Robin Ade

Throughout the season all stale or gravid fish must be released


© Trout and SalmonMagazine

Escaped farmed salmon must be retained

Part 3

Management Report

3.1 Spey Catchment Initiative

Significant progress has been made with the Spey Catchment Initiative (SCI) during 2012. Following Project Officer Christene Skene's departure in September 2011, the SFB chaired a selection panel to appoint her successor. Elizabeth Henderson was recruited in February 2012 and began work in March.

With the assistance of SFB Operations Manager, Duncan Ferguson, Liz Henderson wasted no time in establishing herself. Through the Cairngorms National Park Authority (CNPA), an application was made at short notice for funding that was unexpectedly available from the Scottish Government for environmental projects that were "shovel ready". Three projects under development were subsequently short-listed: the Allt Lorgy river restoration; the Allt Mor riparian enhancement; and the Aviemore Countryside Park repair of two footbridges. £85,000 of Scottish Government funding was subsequently secured and the implementation of these projects began.

The Allt Lorgy had been artificially straightened over time for agricultural purposes. (Photo: Duncan Ferguson)

The Allt Lorgy river restoration project has generated considerable interest and positive publicity for the Board. A tributary of the River Dulnain, near Carrbridge, the Allt Lorgy had been straightened and altered for agricultural purposes. Under the supervision of SFB Operations Manager Duncan Ferguson, the project aimed to allow the river to assume a more natural course: artificial flood banks were removed to slow down the flow of the river in times of spate and allow it to spread out and create a more natural path; and rock armouring was replaced with natural wooded debris, as a form of "soft engineering". The following "before and after" photos (all taken by SFB Operations Manager Duncan Ferguson) provide a good illustration:

Before: floodbank in place.

After: floodbank removed.

Before: rock armouring in place.

After: rock armour removed and replaced with wooded debris.

The SCI also hosted a successful Stakeholder Forum at the Boat O'Garten Community Centre on the 26th September 2012. Approximately 40 people attended, including land owners, land managers, Local Authority Officials, CNPA Board Members and representatives of SNH, SEPA and the Spey Fishery Board. This enabled the SCI to showcase the success of engaging private sector management with public sector finance.

Further progress has also been made with the project on the River Mashie, just downstream of Spey Dam. A first step is to produce an assessment of Natural Catchment Processes. This aims to generate a better understanding of how mankind's use of land impacts upon the hydrological and geomorphological processes of that river. This will act as a pilot project for a larger, catchment-wide assessment of the hydrology and morphology of the Spey District. The project is being funded by the SEPA Restoration Fund and SNH, and it was awarded to the River Restoration Centre based at Stirling University, under the stewardship of Professor David Gilvear.

The Allt Mor Burn is one of those targeted for habitat improvement, commencing in January 2013. (Picture: Duncan Ferguson)

3.2 Spey Fishery Management Plan

The Spey Fishery Management Plan was comprehensively reviewed in 2008, funded by the Scottish Government, to provide a framework within which the Spey Fishery Board can identify target areas for research and apply specific funding. It builds on previously developed Plans and policies (Spey Fishery Management Plans 1993 and 1998, Spey Catchment Steering Group 2003) and work on its implementation continued throughout 2012.

The Plan does not replace the Spey Catchment Initiative, but focuses on more specific issues directly relating to the management of the Spey's fish stocks. It also recognises and incorporates new requirements and commitments developed from the Water Framework Directive (WFD), the Strategic Framework for Scottish Freshwater Fisheries (Scottish Government 2008) and more local plans such as the Cairngorms National Park Plan (CNPA 2007). Copies of the plan are freely available in 'pdf' format from the Research Office and the Board's website.

A comprehensive report on progress between 2008 and 2012 in implementing the Fishery Management Plan was submitted to River and Fisheries Trusts of Scotland, and thence to the Scottish Government, in December 2012. Copies are available from the Research Office, or can be downloaded from the Board's website.

3.3 Salmon Stocking on the Spey

Historically, stocking has often been the first choice strategy adopted by organisations such as fishery boards to try to improve fish numbers. Hatcheries have been operated on the Spey periodically since the late 1800's, when a large scale hatchery at Gordon Castle reared up to one million fish annually, although it was discontinued in 1914 after 22 years of operation. In the late 1960's, the fishery board established a hatchery at Knockando, prior to the construction of the current facility at Glenlivet in 2001. Various drivers have prompted the establishment of hatcheries on the Spey, including declining catches, changing stock components or UDN-associated mortalities.

The Spey stocking policy is reviewed annually by the Spey Foundation Committee, which then makes recommendations to the Board, resulting in a number of refinements and changes.

It is generally considered that there are four different types of stocking:

- **Reintroduction:** with the aim of re-establishing populations in areas from where they have been lost, e.g. salmon stocking in the Thames, where there was historically a thriving salmon population.
- **Restoration:** where the aim is to restore populations at a low ebb back to numbers back to previous abundance.
- **Enhancement:** the aim is to increase stocks, and subsequently catches, in the catchment above natural carrying capacities.
- **Mitigation:** compensatory stocking to maintain production in areas no longer accessible to migratory fish due to e.g. man-made obstacles.

In 2003 the number of salmon stocked on the Spey was increased three-fold as part of a programme aimed at increasing salmon catches by 8%, using a combination of catch and release, habitat improvements and stocking. The stocking expansion was based on a combination of enhancement and mitigation stocking. The enhancement element focussed on stocking suitable habitat above impassable waterfalls, in effect expanding the range of salmon within the Spey catchment, and in "underutilised" areas, whilst mitigation stocking upstream of man-made obstacles was also increased.

In recent years the focus has been on mitigation stocking. Whilst mitigation stocking is generally considered acceptable, providing best practice is followed, there is now considerable resistance to stocking above impassable waterfalls. Indeed it may become an offence to do so once the Wildlife and Natural Environment Act is fully implemented. The opportunities for mitigation stocking on the Spey are limited; with the exception of the big hydro schemes in the upper river, it is estimated that the proportion of the catchment rendered inaccessible to migratory fish is less than 1%, a figure that is slowly reducing as more and more barriers are removed. Hence, we are now in a situation where we have a relatively small hatchery operation, focused on mitigation stocking, mainly in small tributaries in the middle and lower catchment.

There is litle point stocking in areas where fish are naturally present. However, with new research indicating that when stocked fish inter-breed with wild fish, their reproductive success is reduced, our stocking may be potentially harmful rather than beneficial.

The identification of areas perceived to be underutilised can be difficult and may lead to incorrect conclusions being drawn. There are areas of the Spey catchment which are likely to have always supported low densities of fish, such as high altitude areas and those with granite geology that support only low productivity, and to try to improve fish populations in these areas by stocking is counter-productive. Salmon do use these areas in the Spey (we have a strong population of salmon spawning at over 500m (1640ft) altitude, up to over 650m (2130ft), but these should be viewed as highly specialised and adapted fish that spawn early, hatch late and concentrate their growth in the relatively short summer. Highly adapted populations such as these are particularly susceptible to disruption, be that climate or habitat change, or the introduction of stocked fish from outwith that particular area.

A more sustainable strategy, that will benefit the whole river, is to conserve stocks to ensure there are adequate fish available to spawn, and to ensure that the habitat in the nursery areas is as good as possible, so as to promote enhanced survival through the parr and ultimately smolt stages of the salmon life cycle.

3.3.1 Stocking Policy

In 2011, the Board had accepted the recommendations of the Stocking Sub-Group of the Spey Foundation Committee, that stocking take place in the following areas by order of priority and coded in Table 2 overleaf:

1. Above man-made obstacles.
2. Above partly-accessible waterfalls, but only if appropriate broodstock was available.
3. In areas of poor juvenile density, although a clear reason for doing so needed to be demonstrated e.g. after a natural disaster.
4. Above the natural reach/distribution. This was the least-favoured and it was recommended that such locations should be avoided and only used where subsequent electrofishing showed that smolt production was likely to be successful.

The Spey Foundation Committee had also recommended to the Board that henceforth a far more targeted approach to stocking, with a reduced production that could be effectively monitored, should be undertaken. This followed consideration of the extensive programme of electrofishing that had been undertaken in June and July that year, and the results of the genetic analysis project which had provided an indication of the hatcheries' contribution to the rod fishery. The result of this was the stocking programme for 2012 as detailed in Table 2, although it is likely that stocking above waterfalls will be prevented by forthcoming legislation.

An extensive programme of electro-fishing was undertaken by the Board throughout 2012, initially to monitor its stocking in 2011 and to confirm the stocking locations for 2012. These are reported in detail in section 4.5. Specific attention has been paid there to the results of the survival of juvenile fish stocked at different times of he year. The Spey Foundation Committee and the Board also had to consider the stocking policy and requirement for 2013. The Board, recognising that autumn parr had been stocked in 2011 and their progress had been monitored, decided that this needed to be repeated. The Board also decided that the genetic research, which had provided an indication of our hatcheries' contribution to the rod fishery, needed to be enhanced. This is to be achieved by including the analysis of more rod-caught samples from further years and is covered in detail in section 3.4. In light of this, the Board decided to maintain, where appropriate, the current level of stocking, pending further consideration during 2013.

It has been a requirement for the Board to apply for a licence from the Scottish Government to catch and hold broodstock outside the Salmon fishing season. By the nature of the SAC-designation of the River Spey, this application is also required to be accompanied by an Appropriate Assessment. The Board subsequently applied for and was granted a licence from the Scottish Government for the collection of broodstock, which began in October, immediately after its 2012 stocking had been completed.

The SFB Stocking Policy is progressive and will continue to be subject to review in light of new legislation, our ongoing monitoring and advances in scientific research.

Above left: The SFB's Broodstock Capture Team for 2012 and right, the Team in action on the River Avon, October 2012. (Photos: Roger Knight)

Table 2. Spey Fishery Board Stocking 2012

Broodstock source	Target Stocking Site	Stocking Reason	Code	Habitat	Area Available (m^2)	Stocked 2012 Fed Fry	Month Stocked
Mainstem	Mulben Burn	Above inaccessible falls	4	Good	17564	20,000	Sept
Mainstem	Broad Burn	Above man made obstacles	1	Good	7916	20,000	Sept
Mainstem	Macallan Burn	Above man made obstacles	1	Good	7260	15,000	Sept
Mainstem	Knockando Burn	Above man made obstacles	1	Good	17746	15,000	Sept
Mainstem	Cally Burn	Above inaccessible falls	4	Good	16735	15,000	Sept
Mainstem	Glenbeg Burn	Above man made obstacles	1	Good	9304	20,000	Sept
Fiddich	Burn of Mackalea	Above man made obstacles	1	Moderate	2797	6,000	Sept
Fiddich	Corrie Burn	Above man made obstacles	1	Good	11279	20,000	June
Fiddich	Maggie-knockater Burn	Above man made obstacles	1	Moderate	7538	15,000	Sept
Avon	Tommore Burn	Above man made obstacles	1	Good	7120	20,000	June
Avon	Deskie Burn (Tervie)	Above man made obstacles	1	Good	4000	8,000	Sept
Avon	Burn of Brown	Above inaccessible falls	4	Good	19713	30,000	Sept
Dulnain	Batten	Above partly inaccessible falls	2	Good		30,000	Sept
Total						**234,000**	

Eggs laid down in hatchery for stocking in 2013

Source	Number females	Eggs laid down in hatchery
Mainstem	20	105,000
Fiddich	9	60,000
Avon	8	46,000
Dulnain	5	24,000
Total	**42**	**230,000**

3.4 Genetic Analysis Project (FASMOP)

Background

Pressure by mankind on the ecology of the River Spey continues to increase. In the past we have seen significant water transfers out of the catchment from major infrastructure projects such as Spey Dam, the diversion of water from the Truim and the Tromie to the Tay catchment to make hydro-electricity and the development of the Dipple Wellfield near Fochabers to provide water for Elgin and the surrounding area. Today the demands for water are increasing all the time with population growth; the emergence of Aviemore as a major tourist resort is but one example. The River Spey currently faces one significant threat of increased water abstraction and diversion; more are likely to follow. If the Spey Board and its Proprietors are to fulfil our primary requirement to conserve, protect and enhance Atlantic Salmon and Sea Trout, we need to be in a position to illustrate what impact any particular new project will have on the population of fish. Without the ability to identify different fish populations, their individual distinct habitat and their relative strengths or weaknesses, we will not be able to illustrate the impact that further incursions by mankind into the Natural World will have. Pin-pointing the different fish families is fundamental to a new and accurate plan for the Management of Fish Populations in the Spey Catchment. This logical and crucial next step in our fisheries management planning would also allow us to identify whether or not our hatchery operations are an appropriate way of enhancing the fish population within the River Spey catchment, without compromising the conservation of natural stocks.

The Science

An increasing number of behavioural and genetic studies have shown that the Atlantic Salmon is structured into multiple, distinct breeding populations. The evidence shows that Salmon in different river systems belong to different breeding populations and stocks in all but the smallest rivers can generally be expected to contain many breeding populations which are reproductively and genetically distinct. In practical terms, the Spey will have a Salmon population that is distinct from that of other Scottish Rivers and within the Spey, tributaries such as the Fiddich, Avon and Tromie etc will each hold distinct sub-populations.

Breeding populations are the fundamental units underpinning recruitment and defining the character of a river's salmon stock. It is therefore essential to understand a river's population structure for the development of effective stock conservation and management plans. Identifying breeding populations can be achieved by the analysis of heritable variation in the DNA of Salmon. Genetic variations in human beings are used to determine paternity or identify criminals with crimes they have committed. These same techniques can also be used to investigate population structuring in Atlantic Salmon stocks as each Atlantic Salmon has a unique combination of genetic variants by which it and its offspring can be identified.

Progress in 2012

FASMOP (Focussing Atlantic Salmon Management On Populations) has been a pan-Scotland project which began in 2009. Specifically, as far as the Spey is concerned, the original aims of the project were as follows:

i. To assign fish to their river of origin.
ii. To identify whether fish caught in the rod fishery had originated from our hatcheries using the genetics of maternity/paternity.
iii. To determine whether our stock consists of sub-populations so as to better-inform our management of the fishery.

FASMOP initially used a suite of seventeen Microsatellites as the vehicle for analysis, fourteen of which had been used successfully in a similar project in Ireland. This proved to be highly effective for our secondary aim of identifying maternity/paternity and thereby giving a first indication of whether our hatcheries are contributing to the rod fishery, full details of which were outlined in last year's Annual Report. However, whilst the Microsatellites also gave an indication that the Spey's stock was broken-down into sub-populations, they did not have sufficient resolution to provide a clear picture of these and the project subsequently cooperated with CIGENE in Norway, which was developing Single Nucleotide Polymorphisms (SNPs or "SNiPs") for analysis. These SNPs provided an approximate three-fold increase in the ability to differentiate the samples when compared to analysis using Microsatellites. Furthermore, in co-operation with the SALSEA Merge project, which has been running alongside FASMOP, the SNPs have enabled us to assign fish from the marine environment to their river of origin with a confidence level of 80-85%.

Whilst we are now able to assign fish to their river of origin with an acceptable degree of confidence, the SNPs also showed that the Spey's stock generally exhibits close genetic relationships which are very subtle. The result was that the SNPS were effective in identifying sub-populations in some of the outlying reaches of the catchment (particularly in the Truim and also the Loin, which is a tributary of the Avon), but less effective when looking at the main stem and inner reaches. So when looking at this as a whole, the confidence level for determining in-river fish to their area/tributary of origin diminished to an average of only 40%. This pattern of differentiation using SNPs compared to Microsatellites is broadly similar amongst the other big rivers engaged in the project too (Tweed, Dee and Kyle of Sutherland), whereby some sub-populations have been clearly identified, but not all.

In summary, the results from the project can be expressed as follows:

i. Success in the ability to assign fish from the marine environment to their river of origin. Without this, it would have been impossible to identify fish destined for the Spey that had been caught in a Mixed Stock Fishery.
ii. From the analysis of rod-caught fishery samples, we have obtained an indication of the impact of our hatcheries on the fishery.
iii. In common with other rivers, the identification of sub-populations has been partially successful and specific genetic types, particularly in the outlying reaches of the catchment, have been identified. However, for the time being, the positive identification of all sub-populations has proved to be elusive.

A draft of the final genetics report has been received which explains all of the above in detail and we are expecting this to be finalised and published early in 2013.

Next Steps

The Board has decided to make the analysis of the hatcheries' contribution to the rod fishery more robust. Initially, the rod-caught samples were taken in 2008 and 2009 and related back to the broodstock samples from 2004 and 2005. To complete the full analysis of returning fish that may have emanated from these broodstock samples, we need to analyse the 2010 and 2011 rod-caught samples, which were not available at the time the original analysis was undertaken. The Board considered this in August 2012 and approved the continuation of this important research by analysing these samples, as well as the 2006 broodstock samples. This will complete the research already undertaken and effectively double the number of rod-caught samples analysed, thereby enhancing the genetic analysis of the contribution made by the Board's hatcheries to the rod fishery. This research will be undertaken early in 2013 and a report of the findings is expected to be considered by the Spey Foundation Committee and the Board in May 2013.

3.5 Pollution Incidents

There were no significant pollution incidents in the River Spey during 2012.

3.6 Control of Ranunculus

Ranunculus is an invasive aquatic plant species which is non-native to the River Spey. It was accidentally introduced to the river over 30 years ago near Grantown-on-Spey and much of the River downstream of Grantown is now badly affected by this plant.

Ranunculus in the River Spey at Grantown Bridge.
(Photo: Brian Shaw)

In the past we used to control Ranunculus using the chemical Midstream, which contained the active and toxic ingredient diquat. As a result of EC legislation, we are no longer able to use this chemical and so the plant is spreading and in some areas choking the flow of the river. The plant is detrimental to two of the SAC-designated species (Atlantic Salmon and Freshwater Pearl Mussels). The extensive mats of Ranunculus often accumulate sand and gravel underneath, choking the underlying substrate beneath it. This affects the Freshwater Pearl Mussel and Salmon fry habitat.

Alternative methods of control, such as manual cutting and removal or hand pulling, are not considered practical as they are costly, labour-intensive and pose considerable health and safety issues for individuals working in a fast flowing river. The SFB has previously tried to obtain a special consent from the UK's Advisory Committee on Pesticides (ACP) to use diquat on a limited, experimental basis, for which Ministerial permission would also have been required. The ACP felt, however, that we would still not be able to prove that we could mitigate against the broader and highly toxic impacts of diquat on all species within the River and a licence was not forthcoming.

In October 2010, Scottish Natural Heritage (SNH) produced a Position Paper which clearly explained how Ranunculus is detrimental to two of the Spey's SAC-designated species and outlines the history of attempts to address it. In 2011 the Board identified Roundup Pro Biactive as a suitable chemical for plant control that is potentially applicable for use in and around watercourses. The Centre for Ecology & Hydrology has also developed a sticking agent, TopFilm, which when mixed with Roundup Pro Biactive will enable it to adhere to plants in order to be effective in flowing water. Despite a joint approach by the Spey and Dee Boards to the Scottish Environment Protection Agency (SEPA) in 2011, seeking acceptance of the SNH Position Paper and proposing a collaborative approach to trialing Roundup Pro Biactive and TopFilm on selected areas of each River to resolve this long-running issue, progress has been disappointingly slow. In 2012, SEPA accepted the Position Paper and informed us that a UK Technical Advisory Group (UKTAG) had been working on a directive for the application of herbicides in watercourses. There had also been concerns about the application of herbicides in to SAC Rivers and a proposal was submitted for a trial in the neighbouring River Don. A Management Group, consisting of SEPA, SNH and the Spey, Dee and Don Boards and Trusts has been established to develop this and met for the first time in December 2012. We look forward to progress with this initiative during 2013 and we hope that trials will commence soon.

3.7 Sawbill Ducks and Cormorants

In November 2011 the SFB again coordinated a combined application to Scottish Natural Heritage (which earlier that year had assumed responsibility for licensing issues from the Scottish Government) for the Spey, Conon, Ness and Beauly Rivers to shoot Goosanders, Mergansers and Cormorants during 2012. This application was successful and the Spey was licensed to shoot 20 Goosanders, 2 Mergansers and 1 Cormorant between January and the end of May, with 3 of the Goosanders licensed to be shot during May to provide additional protection to Salmon stocks during the annual smolt run. Carcasses of birds shot were also collected where possible and submitted to the Marine Scotland Science laboratory in Pitlochry for analysis of stomach contents.

In 2012 the SFB continued counting Goosanders, Mergansers and Cormorants using canoes. Counts were carried out from Loch Insh to Spey Bay in late March and early May and using the data collated, the SFB again coordinated a combined application in November 2012 for the Spey, Conon, Ness and Beauly Rivers to shoot Goosanders, Mergansers and Cormorants during 2013. The application continued our efforts towards creating what is anticipated will be a Moray Firth Sawbill Plan, broadly along the lines of the successful Seal Plan for the area (see section 3.10). The application for 2013 has again requested that some of these birds be shot during May (rather than restricted to January – April, as had been the case up until recently) to provide additional protection to Salmon stocks during the annual smolt run. The Board is currently awaiting the outcome of this licence application.

Since the Inner Moray Firth and Cromarty Firth are designated as SPAs for these species under the Habitats & Birds Directives, future schemes must consider the potentially conflicting conservation obligations of other relevant authorities for piscivorous birds against the obligations of DSFBs to conserve the fish stocks on which these birds prey. One of the issues facing the licensing authorities is the lack of data indicating whether there is a clear link between the estuarine and riverine populations of Goosanders as to whether birds migrate between these areas. In 2010 the Scottish Government granted £30,000 towards Integrated Predator Management throughout the Moray Firth region, aimed initially at funding a literary review of

all available data on this matter and the development of an effective project to progress our knowledge of it. Work on this continued during 2012 and a Steering Group was formed, consisting of representatives of the Spey, Conon, Ness & Beauly and Findhorn, Nairn & Lossie Boards/Trusts, the Scottish Government and the Scottish Agricultural Science Agency. Advertisements led to three tenders being submitted for this work and the Steering Group subsequently appointed MacArthur Green Ltd, based at Glasgow University, to undertake this initial research. It was completed in December 2012 and its findings are now being evaluated. During 2013 the SFB will continue to work with SNH, the Scottish Government and neighbouring Boards and Trusts to establish a Moray Firth-wide management scheme for Sawbill Ducks and Cormorants.

The numbers of Cormorants (pictured above) and piscivorous birds such as Goosanders and Mergansers are controlled on the River Spey under licence from the Scottish Government. (Photo: courtesy of the Scottish Agricultural Science Agency).

3.8 Moray Firth Seal Management Plan

2012 saw the continuation of the Moray Firth Seal Management Plan. This was first implemented in 2005 with the aim of protecting Salmon and Sea Trout stocks while also maintaining the conservation status of the Dornoch Firth Special Area of Conservation (SAC) for common seals. The scheme introduced the novel approach of managing seals and Salmon over a large geographical area, the training of Nominated Marksmen to an agreed standard, and the accurate reporting of all seals shot.

Having operated as a pilot scheme for Scotland, the Moray Firth Seal Management Plan will continue throughout 2013. The SFB is also continuing to support the coordination of the Seal-Salmon Research Programme in collaboration with the Sea Mammal Research Unit (SMRU), the Scottish Government, Marine Scotland Science, Scottish Natural Heritage and the Atlantic Salmon Trust. As part of this research SFB Bailiffs carry out counts of seals at Spey Bay and have continued to assist the SMRU with the collection of other scientific data.

3.9 Fishery Protection

A Government-sponsored survey conducted in 2003 showed that Salmon and Sea Trout angling on the Spey contributes at least £11.8 million each year to the local economy and supports 367 full-time-equivalent jobs. Poaching therefore not only causes irreparable environmental damage, but also has a significant impact upon the local economy and causes damage to the rural community. In 2012 the SFB continued to work closely with and enhance our already close ties with the Police in order to eliminate the poaching of these valuable fish.

Coastal patrols between the Boar's Head stretch of coastline and Cowhythe Head were continued from April-August 2012. A total of 11 patrols were completed with the SFB's 5.8m (19ft) Rigid-hulled Inflatable Boat (RIB), during which two illegal gill nets were intercepted. However, the deterrent effect of these patrols should not be under-estimated. The SFB was also contracted in 2012 to undertake patrols for the Lossie District Salmon Fishery Board, enhancing our already close ties with other regional DSFBs and illustrating the value of pooling resources to tackle shared problems.

Poaching activity on the River Spey in recent years has seen a rise in the presence of known poachers about the Catchment and 2012 was no different, with considerable activity mid-season. Furthermore, whilst the numbers of arrests and convictions may be low, there is no doubt that without the dedicated, professional work of the SFB's Bailiffs and the deterrence that they provide, the River Spey would be far more of a target for such illegal activity.

3.10 ASFB/IFM Bailiffs' Seminar 2012

Each year the Association of Salmon Fishery Boards (ASFB) and the Institute of Fishery Management (IFM) co-sponsor a Seminar for Bailiffs from around Scotland, hosted by one of the District Salmon Fishery Boards. The SFB hosted the 2012 Seminar in Aviemore on 13th and 14th March and we are grateful to Donald MacDonald and MacDonald Highland Resorts for their assistance.

Some of the 60 Bailiffs from around Scotland who attended the 2012 ASFB/IFM Bailiffs Seminar hosted by the SFB in Aviemore, shown here listening to a presentation by the Police. (Photo: Roger Knight)

Approximately sixty Bailiffs attended from around Scotland and a comprehensive programme of law enforcement and fisheries management training was provided. The SFB utilised its excellent links with Grampian Police and Northern Constabulary to assemble five Police Officers who gave presentations and answered questions on a broad range of law enforcement issues, including: the use of the new official Bailiff's Notebooks and the collation and presentation of evidence in court; forensics and crime scene handling; surveillance and intelligence gathering. Presentations were also given by SEPA on the CAR Licensing process and by the SFB on stocking and the use of hatcheries. Outdoor training was provided in First Aid and Casualty Recovery from the Water and the Seminar concluded with a visit to the Board's hatchery at Sandbank. The programme was well received by all who attended.

Bailiff Seminar attendees received practical training in Casualty Recovery from the Water and in First Aid. (Photos: Roger Knight)

3.11 Administration and Staffing

2012 has seen some significant changes for both the Board and the Spey Foundation. After over twenty years with the Spey Research Trust and more latterly the Spey Foundation, Biologist Bob Laughton was appointed as Director of the Findhorn, Nairn & Lossie Fisheries Trust in January 2012, with 50% of his time contracted back to the Spey Foundation. The Board wishes Bob every success with his new appointment.

Bob Laughton's new appointment required the recruitment of a new Biologist and in January 2012 we welcomed Brian Shaw to this challenging role. Brian joined us from the Ayrshire Rivers Trust, where he had spent the last seven years. Prior to this he spent twenty years in the aquaculture industry, before transferring to wild fish interests. He is a keen angler and has made a strong start to his new role, meeting all of the Ghillies on their beats and re-acquainting himself with the area in which he grew-up. Brian made an immediate impression and quickly got to grips with the broad remit of his position. Keen to make his work transparent from the outset, he established the successful "Spey Blog" on the Board's website and in September 2012, he gave a commanding validation of the Board's research at a Public Meeting to a packed – and at times sceptical – audience at the Aberlour Fleming Hall. The Board wishes him every success with his new appointment.

Biologist Brian Shaw joined the Board in January 2012 (Photo: Roger Knight)

Sally Worsdall joined the team as our part-time Office Administrator in May 2012. Sally had been a part-time secretary and administrator with the National Health Service and had spent the last sixteen years in secretarial/administrative roles, with much of it in the hospitality industry. She has brought a diverse range of skills to the Board and Foundation, including website maintenance and events organisation and we wish her every success for the future.

Sally Worsdall became the Board's Office Administrator in May 2012 (Photo: Brian Shaw)

Part 4

Spey Foundation Report

4.1 Juvenile surveys 2012

In 2012 a revised electrofishing protocol was introduced covering both mainstem and tributary surveys. Given the importance of the mainstem, and the high quality habitat available therein, it is surveyed annually using timed surveys to monitor salmon fry abundance and distribution. The Spey catchment is too large to survey completely each year, so a structured system was introduced in 2012 with all tributaries surveyed on a three-year rota (see Figure 14). In addition to the rota, a number of stocking monitoring and other investigative surveys were completed. All surveys that had been planned were completed.

4.2 Mainstem Spey Salmon Fry Index

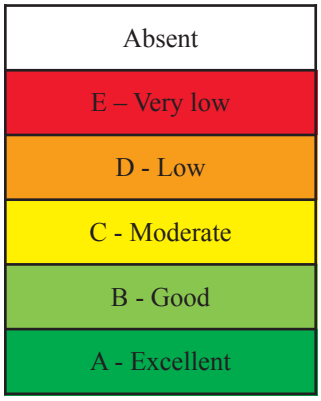
Approximately 60% of the juvenile habitat available in the Spey catchment lies within the mainstem of the river. However, trying to assess juvenile production in such a large river is not easy. The only appropriate technique is a timed "fry index survey" which involves fishing in shallow, fast flowing run/riffle habitat for a defined and standardised period. The Spey Foundation has employed this technique in the mainstem for the last ten years, although in 2012 site selection was refined and the purchase of new electrofishing equipment with a built-in timer provided an enhanced level of data robustness.

New electro-fishing equipment with a built-in timer has enhanced data robustness. (Photo: Sally Worsdall)

In the past, a range of habitat types, including pool and glide, which would be considered sub-optimal for salmon fry, were selected at random from a master list. In 2012, fifty sites were selected based on factors such as habitat suitability, access and geographical spread. These fifty sites, which extend from Spey Bay to Spey Dam, will be surveyed annually, providing a robust salmon fry index for the Spey mainstem. The Timed Survey technique was used in the Spey mainstem, including upstream of Spey Dam, and in the River Dulnain. In future years, the same technique will be included whenever larger tributaries are surveyed.

In the past, Timed Surveys in the mainstem were of ten-minute duration, timed with a stopwatch. The new electrofishing kit has a countdown timer which is only activated during actual fishing time. By comparing the two timing methods, we were able to establish that three-minute timed surveys using the new equipment were equivalent to the ten-minute surveys used in the past. Over the course of the summer, the elapsed times recorded at each site varied from seven to thirteen minutes, the main influences being ease of wading, depth, access etc. By using the new electrofishing kit, this variation has now been eliminated. By cross-calibrating both the results from the methodology and the elapsed time, we were able to compare the results from the 2012 revised method with the past ten years of historical data. However, as we were targeting run/riffle habitat almost exclusively, then the 2012 results should be higher on average than recorded previously. Annual comparisons will become more relevant as further years are added.

The 2012 salmon fry index results for the Spey mainstem were classified according to fry densities in to five bands, each of 20%, as shown in Table 3. The results are colour coded for ease of reference, with dark green representing the top 20%, down to red for the bottom 20% and white for absent, as follows:



The 2012 salmon fry index has used this year's results only. In future years, as the database expands, the classification scheme will be based upon a rolling five-year average.

Full details of the classification scheme and full details of the mainstem survey can be found on the Spey Fishery Board website at: **http://www.speyfisheryboard.com/wp-content/uploads/downloads/2012/11/Spey_2012_electrofishing_survey.pdf**

This type of survey is best interpreted by looking at the big picture, rather than focussing on individual sites which could have, for example, been subject to disturbance prior to the survey. In that regard, the results were encouraging, with salmon fry found at all sites downstream of Spey Dam, indicating widespread and successful spawning throughout the Spey mainstem in 2012.

The results above Spey Dam were notably different. Although salmon fry were found within 2.5km of the source of the river at Loch Spey, in the first suitable habitat downstream of the Loch, there was a significant reduction in salmon fry abundance above the Dam in comparison to below it and salmon fry were absent at two sites. This provides further evidence of our concerns about the water regime emanating from Spey Dam. These concerns are set out more fully in Section 1.5.1.

Table 3. 2012 Spey Mainstem Salmon Fry Index

Site code	Location	Situation	Salmon fry/min
S007R1	Gordon Castle	Riffle at top of Essil Pool	24.67
S012R1	Gordon Castle	Riffle at top of Quarry Pool	11.33
S017L2	Gordon Castle	Beat 5 100m u/s of Ghillies Hut	31.67
S019L2	Gordon Castle	Beat 4 40m u/s/ of Red Cliffs	13.33
S025L1	Gordon Castle	Beat 2, d/s rock Pool	7.67
S029L1	Orton Water	Left channel, tail of Cairnty	6.33
S032L1	Orton Water	u/s Cooperee Pool	9.00
S034R1	Delfur	u/s Boat O'Brig	19.67
S040L1	Delfur	Middle of Island (Haddie)	6.67
S042L1	Rothes Riffle	u/s Geantree Pool	7.67
S047L1	Rothes Riffle	u/s Creichie Pool	6.33
S050R1	Arndilly	500m d/s from house at end of track	13.67
S052L1	Arndilly	100m u/s from hut	15.67
S056L1	East Elchies	Riffle d/s Inverfiddich Pool	17.67
S059R1	Craigellachie	Riffle u/s Telford Bridge	36.67
S060R1	Craigellachie	In front of hut	13.00
S061R1	Craigellachie	Upper Slabs	20.33
S066R1	Aberlour	d/s Victoria Bridge, below playpark	10.00
S068R1	Kinermony	Opposite hut	3.33
S071R1	Delagyle	At burnt out hut	7.00
S074L1	Laggan	Opposite Dailuaine Burn	7.00
S077L1	Laggan	Side channel u/s Carron Bridge	36.67
S079R1	Carron	Riffle at tail of Dalmunach	15.67
S082L1	Knockando	Riffle above Craig Steel Pool	8.33
S093R1	Lower Pitchroy	Slobs Pool	21.33
S096R1	Ballindalloch	Pitchroy, riffle at end of island	11.00
S104L2	Ballindalloch	Riffle at top of Russawrie Island	20.33
S105L2	Tulchan D	Riffle upstream of March Pool	35.00
S112L1	Tulchan C	Mid channel below Straan Pool	10.33
S119L1	Tulchan B	End of islands	28.00
S124R1	Tulchan A	50m upstream of hut	13.00
S131L1	Castle Grant 3	Riffle upstream of Pollwick	29.00
S135L1	Castle Grant 2	Riffle near top of island	17.67
S141L1	Castle Grant 1	200m upstream of hut	3.67
S147L1	SAIA	70m upstream of old bridge	11.00
S149L1	SAIA	100m downstream of new bridge	12.00
S163L1	Abernethy AA	Broomhill Bridge	33.67
S177L1	Abernethy AA	450m upstream of Garten Bridge	23.00
S183L1	Kinhurdy	200m d/s of groyne (Oyster Pool)	5.67
S195L1	Aviemore AA	200m d/s of Dalfaber STW	14.00
S209L1	Kinrara	at 4th electric pole d/s from kennels	19.00
S212R1	Kinrara	wide riffle oppsite end of alders on LHB	16.00
S215L1	Dalraddy	Caravan site, end of quad track	24.33
S243R1	Badenoch AA	Ruthven Bridge	8.67
S254R1	Badenoch AA	Newtonmore Golf Club	6.00
S258L1	Badenoch AA	Riffle u/s Calder confluence	12.67
S264R1	Truim	Immediately d/s Truim confluence	22.00
S282R1	Laggan	Allt Na Cubhaige, d/s mouth	19.67
S287L1	Laggan	Gargask Burn, d/s confluence	12.33
S290L1	Below Spey Dam	Riffle at 90º bend in road above Blargie Farm	18.00
S298R1	Glenshirra	Upstream bridge	0.00
S305L1	Garvamore	Upstream of pine wood	3.33
S305L2	Garva Bridge	Below ford	1.33
S311L1	Upper Spey	Left channel, upstream of plantation	4.00
S312L1	Upper Spey	Below Allt a' Ghiubhais	4.67
S315L1	Upper Spey	Between plantations	5.67
S317L1	Upper Spey	U/s ford at Alltachorain	7.00
S318L1	Upper Spey	40m d/s Allt Feith a' Mhoraire confluence	3.00
S319R1	Upper Spey	200m d/s bridge, opposite Melgarve	0.67
S326L1	Upper Spey	Opposite burn mouth above Shesgnan Bothy	5.67
S328R1	Upper Spey	60m d/s Allt Coire Bhanain confluence	0.00

The results from twenty-five mainstem sites that had been surveyed within the last three years were then compared with the results from the same sites surveyed this year. It was found that the mean salmon fry number at those sites had increased from 1.63/min to 4.33/min. When this analysis was broadened to an overall comparison between all sites (shown in the graph in Figure 13 below), the results are similar. Note that although salmon parr (1+) years old are shown on the graph, this type of survey is targeted at fry (0+) habitat with parr being an incidental capture. When sites with suitable habitat were surveyed, parr were found. The Foundation is currently investigating options for effective monitoring of parr in the Spey mainstem.

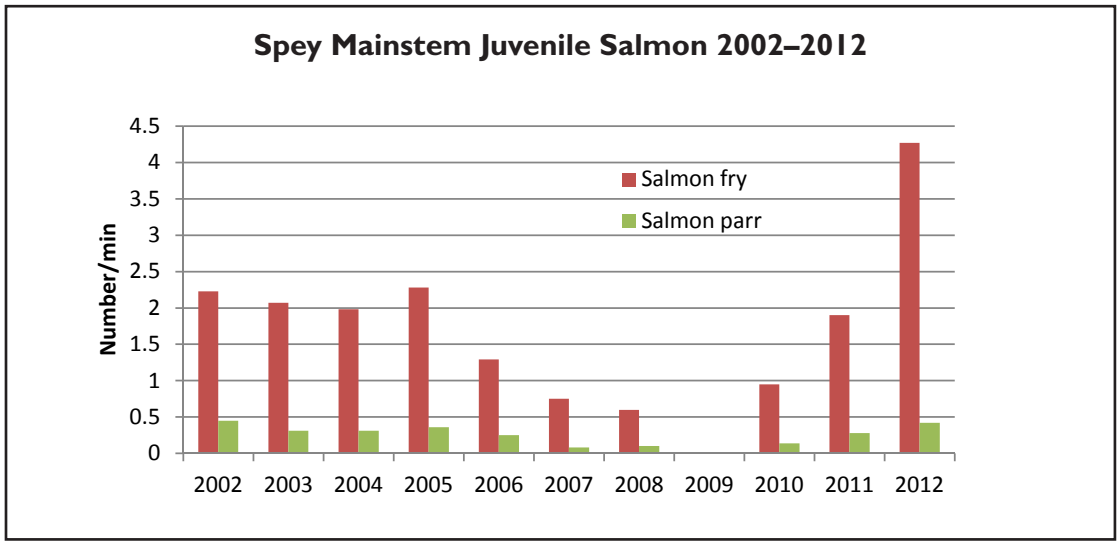


Figure 13: *An analysis of Spey mainstem juvenile salmon densities between 2001 and 2012.*

Whilst encouraging, these results follow the big run of two sea-winter fish in 2011. Monitoring will be maintained in future years.

4.3 Tributary Surveys 2012

In order to ensure that the entire Spey catchment is surveyed comprehensively, a three-year survey rota has been introduced. This rota is depicted in Figure 14 below. In 2012 the Dulnain, Nethy, Druie and Spey Dam sub-catchments were surveyed intensively. In addition, a selection of burns flowing directly into the mainstem will be surveyed annually. Comprehensive monitoring of sites stocked with salmon (0+) in 2011 and 2012 was completed (see section 4.5). A total of 140 sites were surveyed, most using a single-run Scottish Fisheries Coordination Centre (SFCC) area-based protocol, with some sites surveyed using multiple runs to allow estimates of total fish densities to be calculated. Full details of the SFCC electrofishing protocol can be found at the following website: www.scotland.gov.uk/Topics/marine/science/sfcc/Protocols

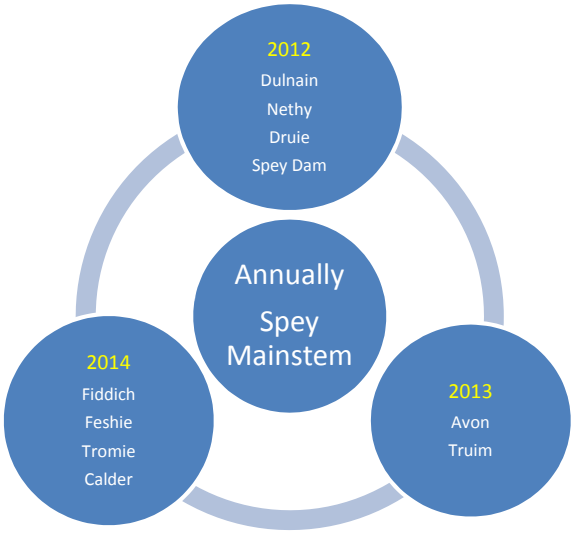


Figure 14: *Spey Catchment three-year survey rota.*

To allow electrofishing results from the Spey to be put into some sort of context, the results from surveys where fish densities (per 100m^2 wetted area) have been obtained, are classified according to the SFCC Scottish national classification scheme, which was derived using data from over 1,600 Scottish sites covering the period 1997-2002. The SFCC national classification scheme included refinements such as regional classifications, with the Moray Firth region being relevant to the Spey catchment. Each regional classification was also split by stream width, i.e. >4m wide, 4-6m wide etc. The Moray Firth region classification scheme based on stream width was adopted as the most suitable classification scheme for Spey results. Full details of the classification scheme can be found at: http://www.scotland.gov.uk/Topics/marine/science/sfcc/Background

This is a highly-refined and demanding classification scheme with, for example, 86.4 salmon fry/100m2 required to be in the top 20% of results for streams less than 4m wide in the Moray Firth region. The classification scheme was based on results obtained at the time and the assumption should not be made that this is the optimum or ideal density. However, as salmon and trout juvenile populations in freshwater are known to be controlled by density dependent factors, then the parr classification in particular should be relatively stable. It should be borne in mind that some rivers/burns will only naturally support low numbers of fish, even if the habitat is pristine, e.g. high altitude burns draining granite geology. Where surveys reveal significant parr fluctuations, further investigations into possible causes will need to be undertaken. The Spey catchment is highly variable and salmon are able to access a wide range of habitat types. So, for example, the potential carrying capacity and therefore expectations for fish densities in the lower Fiddich should not be the same as those for the high altitude reaches of the Avon.

It is not possible to summarise the results from 140 sites in this Annual Report, but a detailed report can be found on the Board's website at the following address: http://www.speyfisheryboard.com/wp-content/uploads/downloads/2012/11/Spey_2012_electrofishing_survey.pdf

The results from the Dulnain and Spey Dam surveys and the stocking monitoring are highlighted and discussed below, as an example of the 2012 electrofishing results. Table 4 (as Table 3 earlier) has been colour coded for ease of interpretation, with dark green representing areas with the top 20% of fry densities, red the bottom 20% and any areas coloured white indicating that fry were absent, as follows:

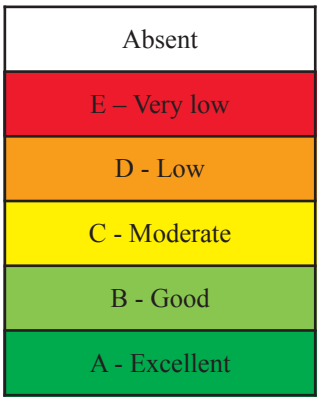


Table 4. 2012 electro-fishing results from the River Dulnain and its tributaries based upon juvenile fish densities per 100m².

Site Code	Date	River	Average Width (m)	Salmon fry	Salmon parr	Trout fry	Trout parr
D15	03/09/2012	River Dulnain, at Balnaan	22.3	46.1	5.4	6.0	0.0
D21	03/09/2012	River Dulnain, at Inverlaidnan	16.2	30.0	9.9	0.6	1.0
D22	03/09/2012	River Dulnain, at Dalnahaitnach	10.9	43.0	11.9	0.5	0.0
D9	12/10/2012	River Dulnain at Suspension Bridge	12.0	28.6	2.9	0.7	2.2
D20	17/08/2012	Auchnahannat Burn	3.1	118.0	7.7	29.5	11.5
D20a	17/08/2012	Auchnahannat Burn	3.2	14.9	5.0	14.9	7.4
D2	11/09/2012	Duthil Burn	5.3	47.8	26.3	34.1	9.7
D2b	11/09/2012	Duthil Burn	4.3	40.0	13.6	17.6	6.1
D2c	11/09/2012	Duthil Burn	4.9	1.2	13.3	9.7	8.4
D2a	11/09/2012	Duthil Burn	2.7	0.0	1.1	57.4	6.9
D4a	03/08/2012	Allt Lorgy	4.3	26.8	1.8	1.8	5.4
D4d	04/09/2012	Allt Lorgy	5.8	48.8	13.4	7.1	2.4
D4b	03/08/2012	Allt Lorgy	6.1	33.8	3.0	3.0	2.4
D4c	03/08/2012	Allt Lorgy	5.0	8.8	9.9	2.2	1.1
D4e	04/09/2012	Allt Lorgy	4.9	33.2	11.1	16.1	9.1
D4f	04/09/2012	Allt Lorgy	3.3	10.2	2.3	1.1	2.3
D5a	31/08/2012	Batten Burn (Allt Ruighe Magaig)	6.6	34.3	2.7	8.8	0.0
D5d	31/08/2012	Batten Burn (Allt Ruighe Magaig)	6.3	67.7	11.0	8.2	1.8
D6	03/08/2012	Batten Burn (Allt Ruighe Magaig)	5.4	55.2	11.3	12.4	1.1
D5b	03/08/2012	Batten Burn (Allt Ruighe Magaig)	7.0	38.7	6.7	8.0	8.0
D5e	31/08/2012	Batten Burn (Allt Ruighe Magaig)	4.1	0.0	2.3	4.7	3.9
D16a	02/08/2012	Allt an Aonaich (Slochd Burn)	4.6	129.1	4.2	13.5	2.1
D16	02/08/2012	Allt an Aonaich (Slochd Burn)	5.5	86.0	7.1	5.3	0.0
D16b	02/08/2012	Allt an Aonaich (Slochd Burn)	5.5	63.7	6.6	12.2	6.6
D12	06/08/2012	Feithlinn Burn at Bothy	4.4	5.4	5.4	1.8	0.0

The results for salmon fry were generally good, with 68% of sites in the moderate to excellent categories. Salmon fry were absent at two sites, one immediately below and the other above an impassable waterfall. The four sites in the mainstem of the Dulnain were all good to excellent for salmon fry, including one site at over 1,500ft altitude. For salmon parr the results were not so good, with 38% in the moderate to excellent categories. Understanding the factors controlling parr production is key to understanding the productivity of the River Spey, so some sites in the Dulnain will be re-surveyed in 2013 to assess parr populations following the good fry densities found in 2012. The results for trout were similar, with 60% of the sites in the moderate to excellent categories for fry and 40% for parr. Most of these Dulnain tributaries will be spawning burns for sea trout, although the trout population present will contain a mix of river and resident burn trout as well.

4.4 Mainstem and Tributary Surveys Above Spey Dam

The results from the mainstem above Spey Dam, as well as the tributaries above the Dam, are shown in Table 5 below. The results from these surveys match the findings of the timed salmon fry index sites in the upper Spey, with both survey techniques showing low numbers of juvenile salmon. The timed salmon fry index showed a distinct drop in numbers at Spey Dam. The habitat in the Spey upstream of the Dam is excellent, with an abundance of spawning gravels. All the evidence held by the Board and the Foundation indicates that the upper Spey was formerly a very productive part of the Spey catchment, prior to the construction of the Spey Dam water diversion scheme. What the Spey catchment above Spey Dam now supports is a sparse and low-density salmon population that appears to be significantly below the full carrying capacity of the available habitat.

Table 5. 2012 Electro-fishing results above Spey Dam based upon juvenile fish densities per 100m².

Site Code	Altitude	River	Average Width (m)	Salmon fry	Salmon parr	Trout fry	Trout parr
SD5	275	River Spey	25.3	3.4	4.9	0.8	0.4
SD4	295	River Spey	25.2	0.6	3.4	0.6	0.6
SD22	310	River Spey	16.1	2.3	0.0	0.0	1.5
SD27	325	River Spey	18.9	2.7	0.5	0.0	0.0
SD36	330	River Spey	18.1	4.1	0.0	0.6	0.0
SD6	270	Markie Burn	10.9	0.0	0.0	1.1	3.4
SD6A	319	Markie Burn	9.3	0.0	0.0	0.5	0.5
SD6B	350	Markie Burn	6.0	0.0	0.0	0.0	1.5
SDCB1	305	Allt Coire a' Bhein	5.7	0.0	0.8	6.8	3.4
SDAC1	330	Allt a' Chaorainn	4.8	3.8	3.8	3.8	1.5
SDFM1	338	Allt Feith a' Mhoraire	6.8	2.8	0.9	3.7	2.8
SDY1	335	Allt Yairack	9.8	0.0	1.3	1.3	0.0
SDSB1	350	Shesgnan Burn	3.5	0.0	0.0	2.9	0.0
LSB1	345	Loch Spey Burn	2.6	0.0	0.0	8.9	11.8

4.5 Post-Stocking Monitoring

Considerable effort in 2012 was directed towards the monitoring of burns that had been stocked with salmon over the last two years. In 2011 and 2012, almost all sites had been stocked with 0+ salmon in Sept/Oct with the exception of two burns stocked with fed fry in June as a trial. The results are shown in the table below.

Most of the sites are inaccessible to salmon, hence the absence of salmon fry. Salmon can access some of the Blye and Conglass Water sites and naturally-produced salmon fry were found in three of those sites. All other sites where salmon fry (0+) were present were as a result of stocking in 2012. Densities of 1+ parr in sites stocked with 0+ parr in 2011 were generally low. Only 18% of stocked sites supported densities in the moderate to excellent categories. Two of these sites were accessible to spawning fish and, as a result, some of those parr would have been produced naturally. Some sites were surveyed in October 2012, three weeks after stocking with 0+ parr, including the Mulben and Knockando Burns. In these sites, stocked fish were either absent or present in very low densities only. Better survival figures for stocked parr were obtained in some of the Avon tributaries, such as the Burn of Brown, the Blye and the upper Conglass Water sites. The reasons for the better survival in these burns compared to the majority are not known, although water quality in these burns is similar to that in the hatchery burn. However, stocking in all of these sites is in areas which are either naturally accessible for fish, or above waterfalls.

The results from this year's and previous years' monitoring do not indicate any significant difference in the survival of fish stocked either during the summer or in the autumn.

Detailed monitoring of stocking will continue in 2013.

Table 6. Electro-fishing results from post-stocking monitoring

Site Code	Date	River	Average Width (m)	Salmon fry (0+parr) /100m²	Salmon parr /100m²	Trout fry /100m²	Trout parr /100m²	Stocked Stage/month/year
LB28a	02/07/2012	Fochabers Burn	4.1	0.0	2.0	61.0	2.0	0+ parr Sept 11
LB28d	02/07/2012	Fochabers Burn	3.4	0.0	0.0	12.5	8.9	0+ parr Sept 11
mul1	07/08/2012	Mulben Burn	3.4	0.0	1.5	1.5	4.5	0+ parr Sept 11
mul1	08/10/2012	Mulben Burn	3.2	6.9	2.3	10.8	9.2	0+ parr Sept 11/12
mul2	07/08/2012	Mulben Burn	4.6	0.0	0.9	0.9	3.5	0+ parr Sept 11
mul3	07/08/2012	Mulben Burn	7.6	0.0	1.9	12.0	0.6	0+ parr Sept 11
mul3	08/10/2012	Mulben Burn	7.6	4.1	1.4	15.1	2.7	0+ parr Sept 11/12
MUL5	08/10/2012	Mulben Burn	2.8	11.6	0.0	7.5	2.5	0+ parr Sept 11/12
LB17A	02/07/2012	Broad Burn	5.4	0.0	6.7	31.2	5.6	0+ parr Sept 11
lb17b	02/07/2012	Broad Burn	5.0	0.0	3.8	10.8	0.6	0+ parr Sept 11
lb17c	02/07/2012	Broad Burn	3.0	0.0	4.0	13.9	21.8	0+ parr Sept 11
FCB1	04/09/2012	Corrie Burn	2.8	1.2	0.0	28.4	8.3	Fry June 12
FCB2A	04/09/2012	Corrie Burn	2.6	23.2	0.0	10.5	16.9	Fry June 12
FCB3	04/09/2012	Corrie Burn	2.9	8.6	0.0	13.5	13.5	Fry June 12
MCA2E	09/08/2012	Burn of Ringorm	2.6	0.0	4.8	11.1	4.8	0+ parr Sept 11
MCA3E	09/08/2012	Burn of Ringorm	1.7	0.0	0.0	4.3	10.8	0+ parr Sept 11
CB1	30/08/2012	Cally Burn	3.3	0.0	0.0	0.0	5.9	0+ parr Sept 11
CB2	30/08/2012	Cally Burn	3.2	0.0	1.9	8.6	10.5	0+ parr Sept 11

Table 6. Electro-fishing results from post-stocking monitoring (continued)

Site Code	Date	River	Average Width (m)	Salmon fry (0+parr) /100m²	Salmon parr /100m²	Trout fry /100m²	Trout parr /100m²	Stocked Stage/month/year
A16A	04/09/2012	Burn of Tommore	2.4	24.9	0.0	1.5	24.9	Fry June 12
A16B	04/09/2012	Burn of Tommore	2.1	20.8	0.0	6.4	20.8	Fry June 12
DK1	12/09/2012	Deskie Burn	2.5	0.0	0.0	74.3	7.0	0+ parr Sept 11
DK2	12/09/2012	Deskie Burn	2.1	0.0	1.2	0.0	1.2	0+ parr Sept 11
A35	06/09/2012	The Blye Water	1.8	0.0	3.9	38.6	42.5	0+ parr Sept 11
A36	06/09/2012	The Blye Water	1.8	0.0	6.1	37.9	31.8	0+ parr Sept 11
A37	06/09/2012	The Blye Water	3.4	0.0	10.5	79.7	33.1	0+ parr Sept 11
A38	06/09/2012	The Blye Water	2.7	5.3	12.8	52.4	35.3	0+ parr Sept 11
A5	07/09/2012	Conglass Water	6.2	21.8	11.3	19.4	13.7	0+ parr Sept 11
A5A	07/09/2012	Conglass Water	3.4	15.4	6.3	18.1	25.3	0+ parr Sept 11
A6	07/09/2012	Conglass Water	2.8	0.0	24.2	30.3	52.1	0+ parr Sept 11
BB3	11/09/2012	Burn of Brown	5.5	0.0	11.1	0.8	2.5	0+ parr Sept 11
BB5	11/09/2012	Burn of Brown	4.9	0.0	18.9	4.9	19.7	0+ parr Sept 11
BB6	11/09/2012	Burn of Brown	3.3	0.0	6.2	3.1	1.0	0+ parr Sept 11
KB1	09/08/2012	Knockando Burn	5.2	0.0	1.6	2.1	4.3	0+ parr Sept 11
KB1	03/10/2012	Knockando Burn	4.8	0.0	1.2	10.7	5.4	0+ parr Sept 11/12
KB4	03/10/2012	Knockando Burn	4.8	2.9	0.0	7.9	15.7	0+ parr Sept 11/12
KB2	09/08/2012	Knockando Burn	5.6	0.0	1.3	3.8	8.9	0+ parr Sept 11
KB2	03/10/2012	Knockando Burn	5.0	5.2	3.1	3.1	14.6	0+ parr Sept 11/12
D5E	31/08/2012	Batten Burn	4.1	0.0	2.3	4.7	3.9	0+ parr Sept 11

4.6 Truim and Tromie Smolt Traps

For the fourth successive year on the Tromie and the third on the Truim, the Foundation operated Rotary Screw Traps to sample and quantify the smolt run from these two upper tributaries. Trapping conditions were excellent in 2012, with generally low and stable river flows throughout the trapping season; only two trapping days were lost on the Tromie and four on the Truim. The main salmon smolt run in both rivers was the earliest recorded, probably as a result of the exceptionally warm weather that persisted throughout March. The smolt run in both rivers was also highly compressed, with 50% of the Truim smolts trapped during the six-day period from the 7-12th April and 55% trapped on the Tromie in the four-day period between 7-10th April. Both runs had been prompted by relatively small rises in river level. The salmon smolt trapping results for the Tromie over the last four years can be seen in the graph below.

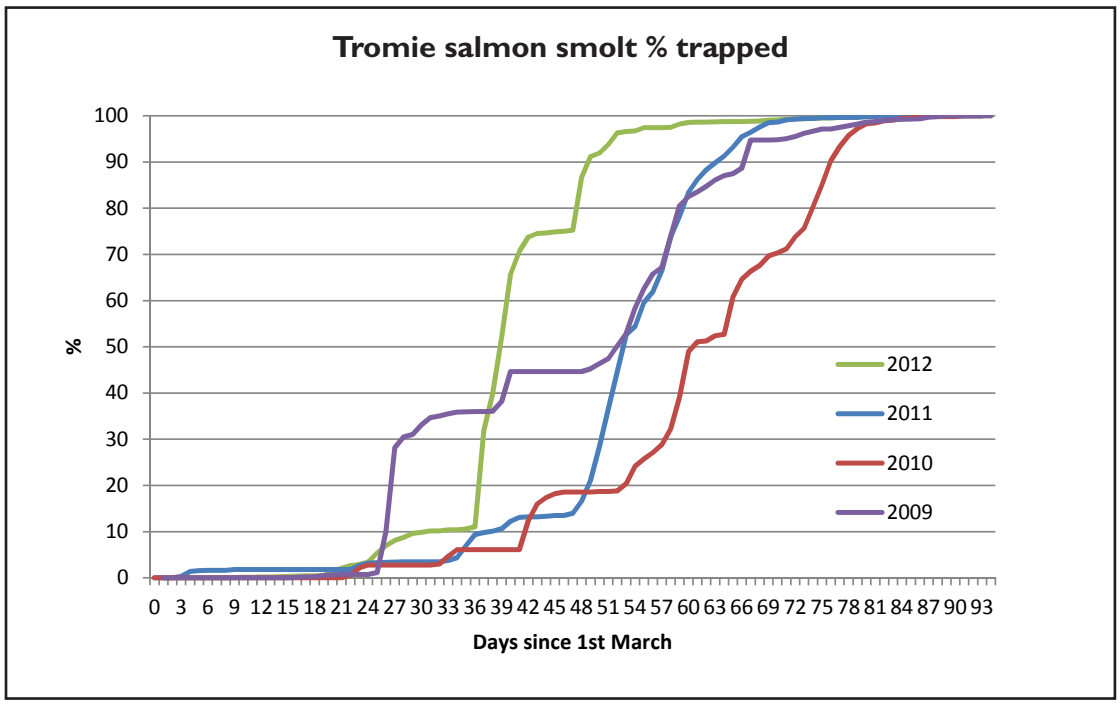


Figure 15: *The percentage of salmon smolts trapped on the River Tromie between 2009 and 2012.*

The number of smolts trapped in 2012 were approximately double that recorded in previous years, as were the estimates of the total run derived from mark-recapture monitoring at both traps. The good trapping conditions undoubtedly contributed to the high numbers of smolts captured, but the figures indicate a significant increase in smolt production from these important upper tributaries in 2012. In 2011 a greater number of non-operational days occurred due to high water, but they were all at the start of the trapping period when low numbers of fish had been captured in other years. During the main smolt run period in 2011 and 2012, the traps were operated almost continuously and a good assessment of the run could have been expected.

The results from the Truim and Tromie smolt traps over the last 3 and 4 years are shown in Tables 7 and 8 opposite. The 2012 salmon smolt production estimate for the Truim was 8.0/100m^2 and 6.3/100m^2 for the Tromie. These are very good smolt outputs for upland tributaries and exceptionally good in the case of the Truim. Both the Truim and the Tromie are known destinations for spring salmon and it is likely that the salmon population here is dominated by earlier- rather than later-running fish.

In both tributaries, three-plus-year-old salmon smolts formed the majority of the run, with no evidence of an enhanced output of younger age smolts following the relatively mild winter of 2011/12.

The Spey Foundation is grateful to Scottish and Southern Energy and the Honourable Michael Samuel for funding for these smolt trap studies, from which we have gathered important data to inform the application to vary the Tummel Scheme CAR Licence, which governs water diversion from the Spey catchment into the Tay catchment.

Table 7: River Truim Smolt Trap results 2010-2012

River Tromie

	2010	2011	2012
Start Date	**25/03/2010**	**24/03/2011**	**05/03/2012**
End Date	**03/06/2010**	**24/05/2011**	**22/05/2012**
Operating Period (Days)	**70**	**61**	**78**
Total Days Lost	**14**	**2**	**4**
Actual Fishing Days	**56**	**59**	**74**

Fish Data

	Salmon	Trout	Salmon	Trout	Salmon	Trout
Number smolts captured	2845	67	2139	102	5490	77
Number parr captured	41	71	17	426	23	359
River Age	%	%	%	%	%	%
1	0.0	0.0	0.6	0.0	0.0	0.0
2	46.5	12.1	36.5	7.3	39.4	6.7
3	45.1	33.3	55.8	26.8	53.1	18.3
4	0.3	15.2	0.6	14.6	6.1	23.3
5	0.0	21.2	0.0	36.6	0.0	20.0
6	0.0	0.0	0.0	0.0	0.0	21.7
7+	0.0	0.0	0.0	0.0	0.0	3.3
No Age Resolved	8.0	18.2	6.6	14.7	1.4	6.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Population Estimates

	Salmon	Trout	Salmon	Trout	Salmon	Trout
Number Dye Marked	2662	116	1668	194	3651	278
Recaptures	916	13	467	17	1127	45
Percentage %	34.4	11.2	28.0	8.8	30.8	16.2
Petersen Method Estimate	**8268**	**1231**	**7639**	**2579**	**17825**	**2691**
Smolt production/m²	**0.037**	**0.005**	**0.034**	**0.012**	**0.080**	**0.012**

Table 8: River Tromie Smolt Trap results 2009-2012

River Tromie

	2009	2010	2011	2012
Start Date	**17/03/2009**	**23/03/2010**	**04/03/2011**	**05/03/2011**
End Date	**29/05/2009**	**03/06/2010**	**24/05/2011**	**22/05/2011**
Operating Period (Days)	**73**	**72**	**81**	**78**
Total Days Lost	**10**	**13**	**12**	**2**
Actual Fishing Days	**63**	**59**	**69**	**76**

Fish Data

	Salmon	Trout	Salmon	Trout	Salmon	Trout	Salmon	Trout
Number smolts captured	4513	8	1294	199	2139	102	9005	164
Number parr captured	39	756	77	396	17	426	15	980
River Age	%	%	%	%	%	%	%	%
1	0.0	2.1	0.0	4.8	0.0	0.0	0.0	0.0
2	36.8	32.7	58.0	35.5	36.6	23.2	27.6	14.2
3	45.1	31.6	39.1	33.9	54.2	48.2	65.4	46.0
4	0.0	9.2	0.0	3.2	0.9	10.8	2.7	30.2
5+	0.0	6.1	0.0	4.8	0.0	8.9	0.0	9.6
No Age Resolved	18.1	18.3	2.9	17.8	8.3	8.9	4.3	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Population Estimates

	Salmon	Trout	Salmon	Trout	Salmon	Trout	Salmon	Trout
Number Dye Marked	2107	521	1208	506	2014	477	2954	880
Recaptures	1211	101	365	83	489	79	1935	272
Percentage %	57.5	19.4	30.2	16.4	24.3	16.6	65.5	30.9
Petersen Method Estimate	**7348**	**3941**	**4283**	**3627**	**8810**	**3188**	**13770**	**3701**
Smolt production/m²	**0.034**	**0.018**	**0.023**	**0.023**	**0.041**	**0.015**	**0.063**	**0.017**

4.7 Invasive Non-Native Species survey

A walk-over survey of the Spey catchment from the Avon confluence downstream was completed this summer to map the distribution of invasive non-native riparian plant species. The target species were Giant Hogweed, Japanese Knotweed, Himalayan Balsam, White Butterbur and Ranunculus. All five species were present, generally in increasing abundance towards the lower river, with the exception of Ranunculus which was locally present throughout. The data gathered were essential information to enable the Spey Foundation to submit a bid for inclusion in the RAFTS Life Plus funding application to the EU. If the RAFTS bid is successful, it will provide significant funding to enable progress to be made in containing and eradicating these invasive species in the lower Spey.

Japanese knotweed and Giant hogweed

Giant hogweed lower Spey

White butterbur on the banks of the Fiddich

Himalayan balsam

(Photos above all by Brian Shaw)

The source of the Giant hogweed in the lower Spey appeared to be the Mulben Burn and downstream from the Spey-Mulben Burn confluence it increases in abundance. The River Fiddich has a variety of invasive species but is severely infested with White butterbur, which dominates some areas to the extent that there is no regeneration of trees. In the absence of an effective control programme, these invasive species will continue to spread, impacting the quality of the lower Spey environment. Subject to a successful RAFTS Life Plus bid, it is anticipated that a large-scale control programme will commence on the Spey during 2014.

4.8 Salmon Head Lesions

In spring 2012, increasing numbers of fresh-run salmon exhibiting varying degrees of head lesions were reported from beats on the Spey. In mid-May, Marine Scotland inspectors examined and sampled two affected fish from the lower river, one of which was subsequently diagnosed as suffering from Ulcerative Dermal Necrosis, or UDN. Following this diagnosis, a monitoring and reporting system was established with the assistance of the ghillies and enhanced biosecurity measures were put in place. By mid-June it was apparent that the incidence of affected fresh-run fish was declining and few cases were seen from July onwards. A few dead or moribund fish were observed in late May, following a week of hot weather, mainly due to secondary Saprolegnia (fungus) infection, but numbers of such fish also declined very rapidly as the summer progressed. No evidence of abnormal fungal infection or marked fish was observed at spawning time.

A fresh-run salmon suffering from UDN head lesions, May 17th 2012, lower River Spey. (Photo: Brian Shaw)

UDN is not a new phenomenon. It is likely to be present at low levels every year, although it does occur in epidemic proportions occasionally, mainly during periods of high salmon abundance. Other rivers have suffered from high numbers of diseased fish in recent seasons, although a UDN diagnosis has not been reported. The unusual weather conditions experienced in the spring of 2012 (exceptionally warm and dry March, followed by cold in April and early May) may have exacerbated the problem. In order to investigate this disease further, the ASFB is coordinating a collaborative project involving some of the major salmon fishery boards (including the Spey), the Scottish Government and the Institute of Aquaculture at Stirling University. A PhD student has been recruited to undertake a three-year research project and we look forward to reporting on progress on this in due course.

4.9 Salmon Go To School

During 2012, the Spey Foundation continued to promote awareness of the Spey with its highly successful "Salmon Go To School" educational programme. Glenlivet Primary School, West End Primary School and Aberlour House all successfully completed "Salmon Go To School" projects and released their salmon fry into the Livet, Broad Burn and Fochabers Burn respectively. Meanwhile, pupils from Aviemore Primary School enjoyed a river visit to the Milton Burn to examine fish populations during May 2012.

Both Glenlivet and West End Primary Schools followed their success in raising salmon by trying the "Schools Go to Fish" option. The pupils received casting tuition from SFB Head Bailiff, Richard Whyte and the Bailiff team during May and both schools then enjoyed a fishing trip to the Rothes Glen Trout Fishery on the 14th and 27th June. The pupils had a chance to fish for Rainbow Trout and gained further fly-casting tuition from fishery owner and manager, Kevin Moss. In addition a "Bugs and Beastie Hunt" was also completed on the Broad Burn. Both days went extremely well and were generously funded by the River Spey Anglers Association (RSAA). RSAA Chairman Mel MacDonald and committee members attended to help.

West End Primary School Pupils Luisa Bokor and Jamie Angus, supervised by SFB Bailiff Jason Hysert, proudly display their catches at Rothes Glen Trout Fishery, 14th June 2012. (Photo: Roger Knight)

Pupils from West End Primary School were fascinated by the Bugs & Beasties hunt, which showed some of the non-fish species that also live in the rivers. (Photo: Roger Knight)

Glenlivet Primary School Pupils Lucy Stronach and Declan Fraser, with SFB Bailiff Jason Hysert, at Rothes Glen Trout Fishery, 27th June 2012. (Photo: Roger Knight)

4.10 Work Experience Placements

Work experience placements are offered to local secondary school pupils, and this year Briony Scholes and Andrew Johnson, both from Speyside High School, joined the Spey Foundation staff for work placements.

Part 5

Consultations

5.1 Wind Farms

5.1.1 Berry Burn Wind Farm

Planning permission for the Berry Burn wind farm in the Findhorn catchment was granted in 2009 and the Spey Foundation was successful in securing the monitoring contract for this development. The initial monitoring programme is similar to that completed at Paul's Hill and will operate for one year prior to construction, to collect baseline data on the affected area of the Berry Burn and the control stream, the Ourack Burn. Monitoring will then continue throughout the construction phase and for up to two years after completion. The programme consists of regular water sampling, together with annual invertebrate and juvenile fish surveys. The programme is co-ordinated by the Spey Foundation with water sample analysis conducted by Dr Iain Malcolm and his team from Marine Scotland Science Freshwater Fisheries Laboratory at Pitlochry. Meanwhile, the invertebrate sampling and analysis is conducted by Dr Chas Emes of Aquaterra Ecology in Huntly.

Baseline monitoring of the Berry Burn wind farm continued throughout 2012. Construction of the wind farm was delayed by six months until November 2012 and during those six months, additional water samples were collected, providing additional baseline data. This water sample data, along with the invertebrate and fish data from the 2011 surveys, have been incorporated into a water monitoring plan. This Plan provides details of the expected range of water quality parameters within the Berry Burn. During the construction phase these will continue to be monitored. Any significant deviations from this expected range may be indicative of a problem within the construction process and so will provide an early warning, allowing any improvements in practice to be implemented quickly to alleviate that problem.

The Berry Burn wind farm is located within the Findhorn catchment and from April 2013, implementation of the monitoring programme will transfer to the Findhorn, Nairn and Lossie Fisheries Trust.

5.1.2 Dorenell Wind Farm

The Spey Foundation, in conjunction with the Deveron, Bogie & Isla District Salmon Fishery Board and Trust, have also been involved in negotiations with developers Infinergy over a proposal to construct a wind farm at Dorenell. This is an area at the top of the River Fiddich in the Spey Catchment and the Black Burn in the Deveron Catchment. Detailed fishery management plans for the proposal were compiled and a legal agreement between the developers and the Boards/Trusts was signed by all the relevant parties. On the 28th December 2011, the Scottish Government announced that the Dorenell Wind Farm would proceed.

Implementation of the fishery management plan will begin in earnest during Spring 2013, when pre-construction baseline monitoring will begin on the upper Fiddich and the Black Water. Monitoring of the upper Deveron will also take place to provide a control-comparison river.

Water quality monitoring on the three rivers will be conducted by Helen Watson and her team from the Macauley Institute, Aberdeen. During February-March 2013, water monitoring equipment will be installed to monitor pH, alkalinity, temperature, substrate load and a wide range of minerals. Invertebrate

populations will be monitored by Chas Emes of Aquaterra during April-May 2013. All three rivers have important salmon and trout populations and to monitor these, Rotary Screw Traps will be installed and operated during spring 2013 and electrofishing surveys of the juvenile stocks will be conducted later in 2013. The study will provide important and detailed information for the three rivers, but also ensure that the wind farm construction has no adverse effects on the water quality, invertebrates and fish stocks within them.

5.2 Micro Hydro Schemes

There is a growing interest in establishing micro-hydro schemes to contribute towards power generation from renewable resources. Following fish surveys undertaken in 2011 by the Spey Foundation as part of an Environmental Impact Assessments associated with the proposed micro hydro schemes on the Gynack Burn near Kingussie, the Cairngorms National Park Authority (CNPA) granted planning permission in 2012 for this project to proceed. The surveys indicated that the scheme was sited above the natural reach of migratory fish. The Board was also consulted during 2012 on a proposed micro hydro development on Phones Estate near Newtonmore, planning permission for which has also subsequently been granted by the CNPA.

5.3 River Works

During 2012 the SFB was consulted over numerous applications to undertake river works. However, some of these consultations have been complex proposals which have necessarily involved liaison with numerous interested parties and so have involved more work than might usually be undertaken. In agreement with SNH and SEPA, the standard recommendation remains to discourage works which disturb the river bed during October – May, when the risk of destroying incubating salmon eggs and juveniles is greatest.

Part 6

Publicity

6.1 Briefings

One comprehensive Briefing was published during 2012 to provide guidance on Salmon Head Lesions, following the diagnosis by Marine Scotland of a fish suffering from Ulcerative Dermal necrosis (UDN). This was distributed widely to individuals and organisations, including proprietors, ghillies, anglers and tackle shops. It was also posted on the Board's website.

6.2 Website

Weekly updates of catches have continued to be made available on the Board's website throughout the season. The Board is most grateful to Dr Malcolm Newbould for his time and dedication in maintaining this. However, more information and fishing reports from beats (including anecdotes and particularly photographs) would be greatly appreciated. Full details of this, as well as details about the Board and Foundation and a wealth of research reports, can be found at:

www.speyfisheryboard.com

Soon after his arrival in January 2012, the Board's new Biologist, Brian Shaw, started "The Spey Blog" on the Board's website. This has enabled him to quickly publish regular accounts of his work and the research that is being undertaken. It was immediately well-received and its popularity has grown throughout the year. There is also a facility for visitors to "The Spey Blog" to leave comments or ask questions. Whilst this does not imply that the Board's website is a salmon forum, it has helped to make our work even more transparent.

6.3 Public Meeting

The Board held a Public Meeting at the Fleming Hall in Aberlour in September 2012. It was attended by over one hundred proprietors, ghillies and anglers and provided the Board with the opportunity to put into the public domain the results of the extensive research that it has been conducting. The Board looks forward to repeating this event in the future.

6.4 Ballindalloch Castle Queen's Diamond Jubilee Celebrations

Staff from the SFB's research team attended the Queen's Diamond Jubilee Celebrations at Ballindalloch Castle in June 2012. The team provided several demonstrations of electro-fishing techniques, each of which attracted crowds of fascinated spectators.

The SFB's research team provided demonstrations of electro-fishing which fascinated visitors to the Queen's Diamond Jubilee Celebrations at Ballindalloch Castle. (Photo: Roger Knight)

6.5 Committees

Throughout 2012, SFB Chairman Alan Williams was also Chairman of the Association of Salmon Fishery Boards. SFB Director Roger Knight continued to be Company Secretary to the Spey Fishing Trust Limited and Convenor of Moray Council's Local Outdoor Access Forum.

Throughout 2012, SFB and Spey Foundation staff were also members of the following committees:

- The Association of Salmon Fishery Boards
- River Directors' Group – Chair
- Moray Local Outdoor Access Forum - Convenor
- Spey Fishing Trust Limited – Company Secretary
- Moray Firth Sawbill Management Plan Group - Coordinator
- Findhorn DSFB
- Findhorn, Nairn and Lossie Fisheries Trust – Director
- Findhorn, Nairn and Lossie Fishery Trust Management Committee
- Lossie DSFB
- Moray River Watch Group
- RAFTS Board
- Moray Firth Sea Trout Project Management Committee
- FASMOP Genetic Analysis Project Steering Group
- North East Area Advisory Group for the Water Framework Directive
- Grampian Partnership Against Wildlife Crime
- Spey Users' Group
- Institute of Fisheries Management Scottish Committee

Part 7

Spey Fishery Board Financial Summary

Income and Expenditure Account – Year ended 30 September 2012

	2012 £	2011 £
Income		
Assessments issued	504,867	483,683
Other Income and Intereset Receivable		
Other operating income	31,051	6,882
Insurance proceeds for screw trap	-	9,659
Interest received	873	1,233
Total other income and Interest Receivable	**31,924**	**17,774**
TOTAL INCOME	**536,791**	**501,457**
Expenses		
Personnel costs		
Salaries	283,565	202,152
Social security costs	27,327	20,011
Training	1,935	440
Contributory pension scheme	26,941	19,879
Bob Laughton costs	31,057	-
Total Personnel cost	**370,825**	**242,482**
Direct expenses		
Rent	1,500	1,500
Light and heat	953	1,010
Insurance	10,146	10,346
Repairs and maintenance	2,236	2,978
Protective clothing	3,316	4,457
Equipment costs	3,205	1,571
Hatchery	5,622	4,938
Patrol Boat	1,138	1,327
Health & Safety	549	272
Fuel	25,040	22,391
Other Motor vehicle costs	17,102	12,111
Total Direct expenses	**70,807**	**62,901**
General expenses		
Meeting expenses	2,803	1,829
Telephone	3,736	3,319
Publicity	5,907	4,386
Stationery and printing	1,439	1,222
Clerk's salary	6,000	6,000
Sundry	768	269
Admin repairs and overheads	38	35
Computer costs	1,475	1,463
Subscriptions	15,171	13,652
Staff Entertaining	-	127
Moray Firth Sea Trout Project	-	500
Other professional fees	-	5,114
Accounting and audit fees	3,584	3,225
Depreciation	53,262	44,838
Profit on disposal of fixed assets	(29,630)	(12,838)
Total General expenses	**64,553**	**73,141**
Bank interest and charges	559	502
Hire purchase and finance lease charges	3,861	5,666
	4,420	**6,168**
Total Expenses	**510,605**	**384,692**
Income less expenses	**26,186**	**116,765**
Contribution to Research Project	-	(75,000)
Surplus for Year	**26,186**	**41,765**

Balance Sheet – 30 September 2012

	2012 £	2011 £
Fixed Assets		
Tangible assets	**131,254**	93,322
Current Assets		
Debtors	**64,884**	26,393
Current account	**43,127**	7,480
Deposit account	**155,433**	132,025
Fixed rate deposit account	–	80,000
Total Current Assets	**263,444**	245,898
Current Liabilities	**54,897**	36,166
Net Current Assets	**208,547**	209,732
Total Assets Less Current Liabilities	**339,801**	303,054
Long Term Liability		
HP/Finance leases – > 1 Yr	**31,054**	20,493
Net Assets	**308,747**	282,561
Financed by:		
Capital accounts	**38,569**	38,569
Current accounts	**270,178**	243,992
	308,747	282,561

Notes:

1. A full set of accounts for both the Spey Fishery Board and the Spey Foundation are available on the Spey Fishery Board's website at: www.speyfisheryboard.com

2. A number of beats have challenged their Rateable Values with the District Assessor. Decisions on these had been anticipated during this financial year, but many have yet to be resolved. If successful, the respective Assessments will need to be reimbursed from the Board's surplus. This will also impact upon the next financial year.

The Spey Foundation Company Limited by Guarantee

Statement of Financial Activities
(Incorporating the Income and Expenditure Account)
Year ended 30 September 2012

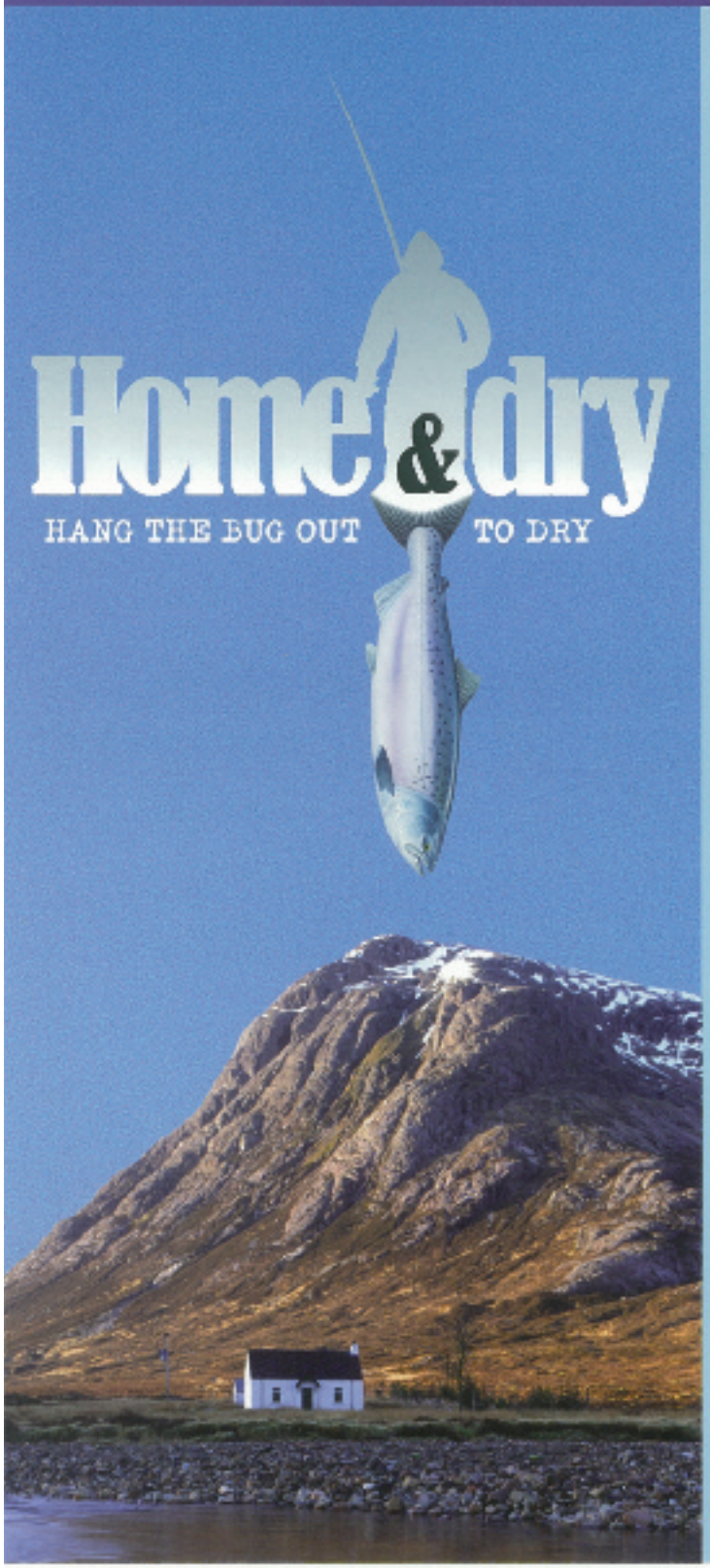
	Unrestricted Funds £	Restricted Funds £	Total Funds 2012 £	Total Funds 2011 £
Incoming Resources				
Incoming resources from generating funds:				
Voluntary income	**2,112**	**27,000**	**29,112**	111,334
Investment income	**905**	**–**	**905**	572
Incoming resources from charitable activities	**1,889**	**71,555**	**73,444**	92,547
Total Incoming Resources	**4,906**	**98,555**	**103,461**	204,453
Resources Expended				
Charitable activities	**(25,833)**	**(69,225)**	**(95,058)**	(163,274)
Governance costs	**(3,641)**	**–**	**(3,641)**	(3,439)
Total Resources Expended	**(29,474)**	**(69,225)**	**(98,699)**	(166,713)
Net Incoming Resources before Transfers	**(24,568)**	**29,330**	**4,762**	37,740
Transfer between funds	**47,202**	**(47,202)**	**–**	**–**
Net Income for the Year	**22,634**	**(17,872)**	**4,762**	37,740
Reconciliation of Funds				
Total funds brought forward	**23,829**	**83,114**	**106,943**	69,203
Total Funds Carried Forward	**46,463**	**65,242**	**111,705**	106,943

Balance Sheet – 30 September 2012

	2012 £	2011 £
Fixed Assets		
Tangible assets	**23,533**	**16,244**
Current Assets		
Stocks	200	1,000
Debtors	15,957	8,851
Cash at bank	125,590	131,212
Total Current Assets	**141,747**	**141,063**
Creditors: Amounts falling due within one year	**(53,575)**	**(50,364)**
Net Current Assets	**88,172**	**90,699**
Total Assets Less Current Liabilities	**111,705**	**106,943**
Net Assets	**111,705**	**106,943**
Funds		
Restricted income funds	65,093	83,114
Unrestricted income funds	46,612	23,829
Total Funds	**111,705**	**106,943**

Notes:

1. Included in Creditors is £25,547 (2011 - £25,547) for the Genetic Analysis Project, £8,303 for the Berry Burn Windfarm (2011 - nil), £3,726 (2011 - £3,500) for Audit & Accountancy and £10,365 (2011 - £11,204) owed to the Spey Fishery Board.



Fishing or doing water sports abroad?

Just come back from Denmark, Finland, France, Germany, Italy, Norway, Portugal, Russia, Spain or Sweden?

Ensure your equipment is not carrying the highly contagious Gs parasite which has the ability to wipe out freshwater salmon stocks.

What is the Gs Parasite?

The Gs parasite is a highly contagious bug that has devastated salmon stocks in Norway. We want to keep it out of Scotland's rivers.

Here's what you need to do

To ensure your equipment is not contaminated, please take one of the following precautionary measures:

- Completely dry equipment (e.g. waders, fishing equipment, bags, canoes and windsurf gear) at the minimum temperature of 20° for at least 2 days **or**
- Heat for at least 1 hour at above 60°C **or**
- Deep freeze for at least 1 day **or**
- Immerse in a Gs killing solution for min 10 minutes

For more info call: **0131 244 6225** or go to: **www.infoscotland.com/gsbug**

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