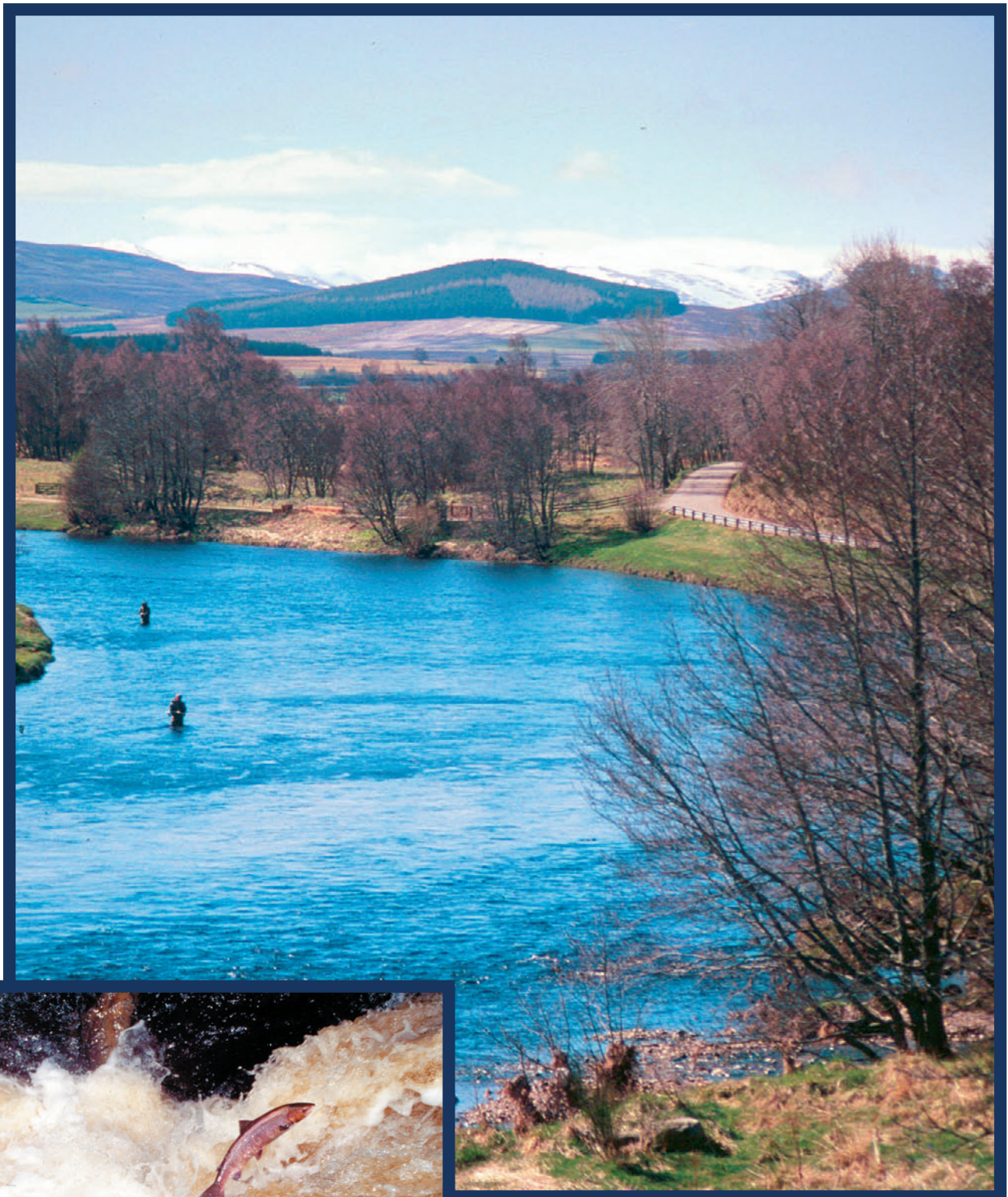


ANNUAL REPORT 2006

Spey
Fishery
Board





www.speyfisheryboard.com

ANNUAL REPORT 2006

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February 2007

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Spey Fishery Board

- Chairman:** *Alan Williams*, Carron Fishings
- Lower Proprietors:** *Toby Metcalfe*, Mandatory for Crown Estate Commissioners
Grenville Johnston, Mandatory for Atlantic Salmon Conservation Trust
- Upper Proprietors:** *Major General Bernard Gordon Lennox*, Mandatory for Brae Water Trust
James Litchfield, Tulchan Estate
Sir Edward Mountain, Delfur Fishings
Oliver Russell, Mandatory for Ballindalloch Trustees
Dr. Catherine Wills, Knockando, Phones and Lower Pitchroy
Anthony Tinsley, Wester Elchies Fishings
- Co-optees:** *William Henderson*, Speymouth Angling Association
Grant Mortimer, Strathspey Angling Improvement Association
- Invitees:** *Paul Timms*, Scottish Natural Heritage
- Clerk:** *William Cowie*, R. & R. Urquhart

Research Committee (Spey Research Trust)

- Chairman:** *Anthony Tinsley*, Wester Elchies Fishings
- Members:** *Alan Williams*, Carron Fishings
Dr. Catherine Wills, Knockando, Phones and Lower Pitchroy
Peter Graham, Bidwells
Dr. Malcolm Beveridge, Director, FRS Freshwater Laboratory
Lionel Main, Chairman, Spey Ghillies' Association
Prof. David Mackay, Chairman, Scottish Angler's National Association
Dr. Colin Bean, Scottish Natural Heritage
Dr. Alastair Stephen, Scottish & Southern Energy
Ross Gardiner, FRS Freshwater Laboratory

Spey Fishery Board Staff

Director: Roger Knight

Hatchery Manager: Jimmy Woods

Hatchery Assistant: Ben Taylor

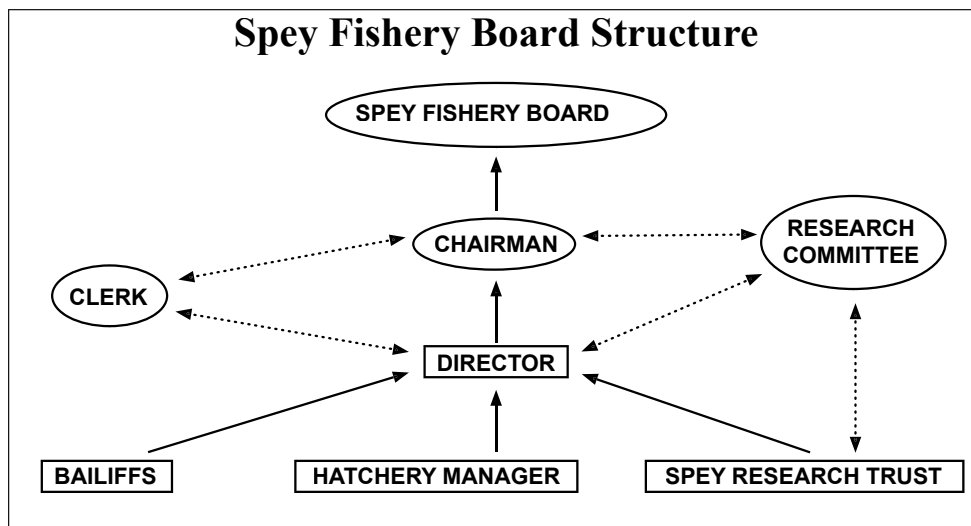
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Richard Whyte

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Jason Hysert

Spey Research Trust: Robert Laughton (Biologist)
Steve Burns (Assistant Biologist)
Kevin Redgewell (GIS Project Officer)
Jim Reid (seasonal)
Graham Laughton (seasonal)
Graeme Wilson (seasonal)



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Tony Smith (River Spey Anglers' Association)
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Johnny Irvine (Inverloch Farm)
Mike Ewan (Rothes)

Chairman's Foreword

In June Roger Knight became our director. He was previously in the British Army and subsequently worked in the Foreign Office and the United Nations with tours of duty in various parts of the world. Bob Laughton continues as our biologist, he has considerable experience of the Science of Freshwater Fisheries Management and a first hand knowledge of the Spey built up over many years and is well respected amongst the River Biologists in Scotland. I believe that our team of Roger and Bob possess the complimentary skills that are required to manage the duties and responsibilities of the Spey District Fishery Board.

During 2006 a new Aquaculture and Fisheries Bill has been making legislative progress through the Scottish Parliament. For the most part the Bill deals with issues which concern the Aquaculture Industry and has only peripheral impact on Freshwater Fisheries Management. It does however demonstrate that Scotland is alive to the threat of the devastation which would be caused should *Gyrodactylus Salaris* ever be found in freshwater in Scotland. The Consultative Process concluded that a Unitary Authority system of management for Freshwater Fisheries is preferred to the existing one. However this legislation will not it appears change the existing District Fishery Board structure but a marker has been put down for the future. The Board's policy is to continue to monitor the situation and to work with the Association of Salmon Fishery Boards and Rivers and Fishery Trusts Scotland (RAFTS) to achieve an evolution rather than a revolution in how in particular Salmonoid Fisheries are managed. In that regard the Board entertained Richard Lochhead, the new MSP for Moray, who leads for the Scottish National Party in the debate surrounding the process of the new legislation. Richard spent much of the day touring our hatchery at Sandbank and meeting our bailiffs and ghillies and familiarising himself with what we do.

The Board continues to liaise closely with the Scottish Environmental Protection Agency (SEPA) and Scottish Natural Heritage (SNH) and a representative of the latter, Paul Timms, attends meetings as an Invitee. SNH has responsibility for Site Condition Monitoring on the River Spey Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC). Following a site condition monitoring carried out in 2004 SNH concluded that the conditions for Freshwater Pearl Mussel and Atlantic Salmon were unfavourable and decided to disseminate this conclusion to all Salmon Fishery Proprietors on the river, amongst others. Similar studies were also carried out on other rivers in Scotland but no such letters have so far been sent. SNH have said "that they are in the process of developing a robust classification tool, which, with the addition of good quality data and not just one year's data, will improve our understanding of the status of the River Spey in a Scottish and UK context". Site Condition Monitoring should be carried out every six years and it is hoped that "good quality data" and not just one year's data will be available in 2010 and a result obtained in which we can all have confidence.

The 2006 season produced a total catch of 11,378 salmon and grilse. This is a figure comfortably in excess of the average for the last twenty years and closer to the average which the river enjoyed in the 1970's. The percentage of released fish was 71 per cent, a figure of which everyone can be proud. More than two thirds of the fish caught in the last four years have been released to spawn. The number of fish caught in the Spey before the 1st of May was also an improvement. I hope we can be cautiously optimistic after the last three years that the spring component is increasing. However welcome as this news is the Board is determined to continue its current policies of Voluntary Catch and Release, Habitat Improvement and Stocking into areas where natural spawning is low and where returning fish can not access.

The Sea Trout catch also showed an improvement over 2005 and 3286 were caught. The released percentage also improved to 49 per cent and there has been a steady rise in this figure since the Voluntary Conservation Policy was introduced. However it does seem as though Sea Trout in the Spey are under pressure as they are throughout the United Kingdom, for reasons that we do not fully understand. The Board has retained the Conservation Policy unaltered and would like to see a similar percentage of Sea Trout released to spawn as that for Salmon.

The Board continues to operate a hatchery at Sandbank on a tributary of the Livet and our stocking requirements are satisfied from there and with the valuable assistance of Tulchan Sporting Estates from their Glenmore Hatchery. Sandbank Hatchery needed a new insulated roof this year which was provided from our own resources but new wiring and electric equipment were most generously provided by the Fletcher family and Forth Electrical Services. Our stocking policy has been extensively explained in various Annual Reports not least that for 2005. We are using less than one percent of returning adults as our broodstock. We are taking our broodstock from as close to the stocking area as possible. More than eighty percent of our stocking has been in areas where naturally returning adult fish can not gain access. For the time being Fisheries Science is generally not in favour of stocking in catchments where wild fish exist. We are fairly confident that our stocking policy is not resulting in any harm to the Wild Fish Populations however it is very difficult to know whether we are in fact having any beneficial effect on the numbers returning to spawn. The Board's strategy has been to try and measure this using DNA monitoring from the broodstock and from the returning fish. Such a project is a long way beyond the financial resources of the Board but as yet we have not been able to attract funding to enable this project to proceed. In the absence of this it will be difficult to decide whether we are obtaining any worthwhile return from the considerable expense that the Proprietors incur operating our hatcheries.

We are fortunate to have such a dedicated workforce. Running a Hatchery needs seven days a week twenty four hours a day attention for about two thirds of the year. Likewise our bailiffs work often anti-social hours and I am certain that, absent what they do, we would loose many precious fish both in the river and along the coast. I would like to thank everyone involved with the Board's work, hatchery staff, bailiffs, Research Trust Staff and ghillies and volunteers who assist us for all their contributions to the success of what we do.

**Alan Williams
Chairman**



Richard Lochhead MSP visited the SFB in December 2006 (*Sir Edward Mountain*)

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 has recently been streamlined into the Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003. The Scottish Parliament has also approved The Conservation of Salmon (Collection of Statistics) (Scotland) Regulations 2006 which empower DSFBs to require any proprietor or occupier of a salmon fishery in its district to provide catch statistics relating to the number, species, description, weight, method and date of capture or capture and release of salmon and sea trout in that fishery for each calendar month. These regulations come into force with effect from 1 January 2007.

It is empowered under the legislation to take such acts as considered expedient for the protection, enhancement and conservation of Atlantic salmon and sea trout stocks and 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 also covers 32 km 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 (Fig. 1).

1.2 Aquaculture & Fisheries Bill 2006

The Scottish Executive is currently undertaking a review of aquaculture, freshwater and inshore fisheries legislation, with the aim of introducing a Fisheries Bill in 2006. In January 2006 the Executive produced a Consultation Paper and Draft Regulatory Impact Assessment for the Bill. Fisheries issues proposed for legislation include:

- Powers to prevent and contain *Gyrodactylus salaris*;
- Amendments of Protection Orders;
- Controls on wild fish movements;
- Clarification of close seasons, live bait etc.;
- Consideration of future fisheries management structures.

The draft Aquaculture and Fisheries (Scotland) Bill completed Stage 1 of the Parliamentary process in December 2006. The Bill now proceeds to Stage 2, where the Committee will consider amendments tabled by MSPs and the Minister in light of issues that have arisen during the evidence taken and report issued during Stage 1. There is a final opportunity to consider amendments at Stage 3, the final stage, when the Bill (as amended during Stage 2) returns to the full Parliament.

1.3 A Fisheries Trust for the Spey

Although the Bill is not proposing to change the current legal framework of District Salmon Fishery Boards (DSFBs) in Scotland, the consultation proposes to alter fisheries management structures in the future. Following discussions of various options via the Fisheries Forum, the Executive has concluded that a catchment-based, 'unitary authority' is the favoured model. Such an authority would be locally-based, and cover all fish species within a catchment, backed up by suitable legislation.

In many parts of Scotland the process of creating such unitary bodies has begun with the expansion of the fisheries trust network. Although charitable bodies without statutory powers, trusts have a broad remit to monitor, conserve and promote all fish and fisheries. In 2004 a national coordinating body, Rivers and Fisheries Trusts of Scotland (RAFTS) was formed to assist and support the establishment of trusts across all Scotland as prototype 'unitary authorities'.

In 2005 the SFB began considering the establishment of a fisheries trust for the Spey catchment. It is proposed to modify the existing Spey Research Trust (SRT), established in 1982 to study salmon, to work in collaboration with the SFB and Spey Fishing Trust. The SRT joined RAFTS in 2004, and is undergoing the process of altering its constitution to comply with RAFTS guidelines. It is also proposed to change the SRT's name to the Spey Foundation, and to adopt the framework illustrated in Fig. 2.

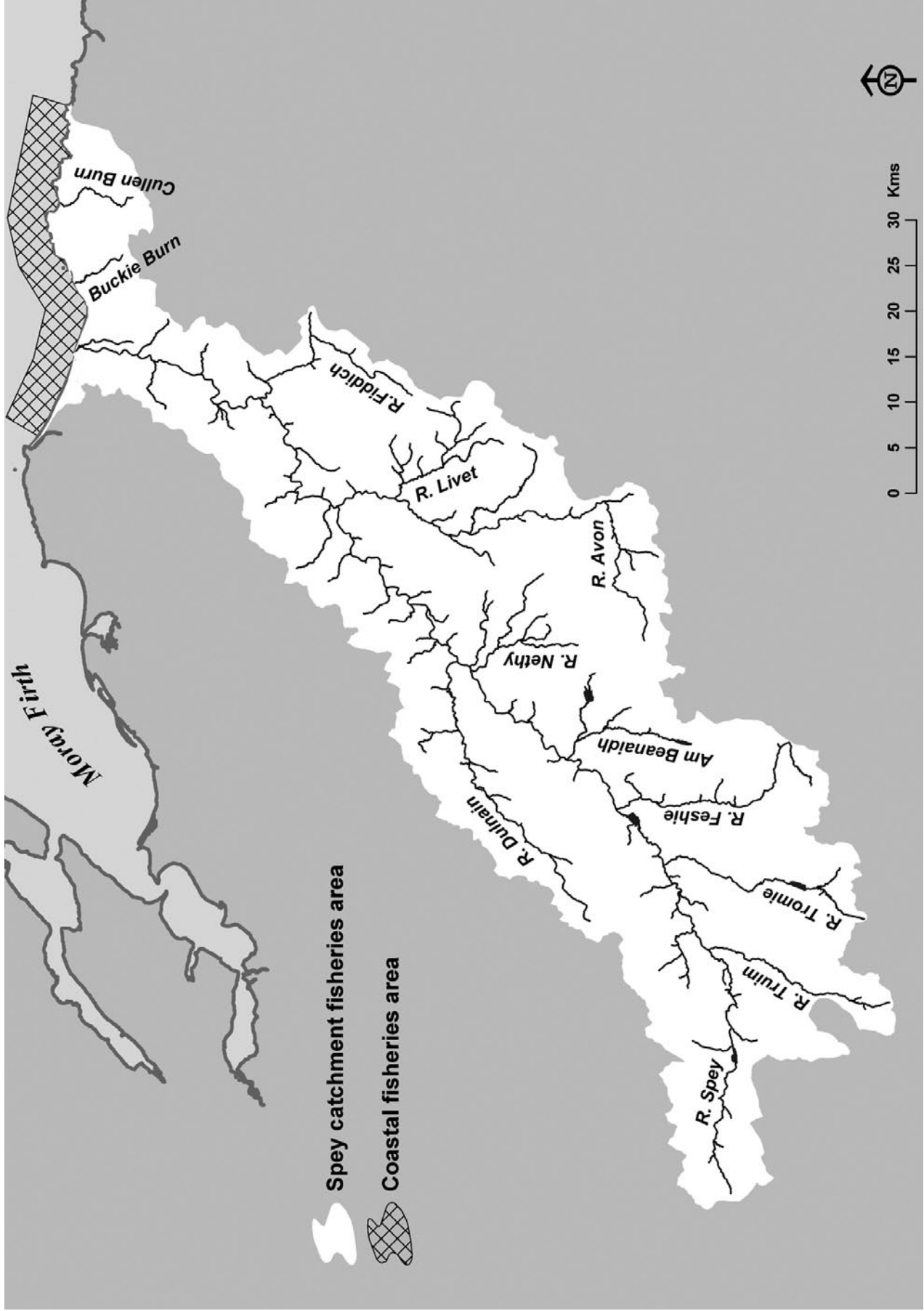


Figure 1. The River Spey catchment and Spey Fishery District

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 Planning to achieve ‘good ecological status’ of freshwater, groundwater and coastal water bodies.

SEPA has made progress towards sub-dividing Scotland into sub-basins, where catchments of similar types are grouped and managed collectively. The Spey has been included in the North East sub-basin, which includes the Rivers Deveron, Ythan, Don and Dee. An advisory group is being established for this sub-basin, and will include

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.

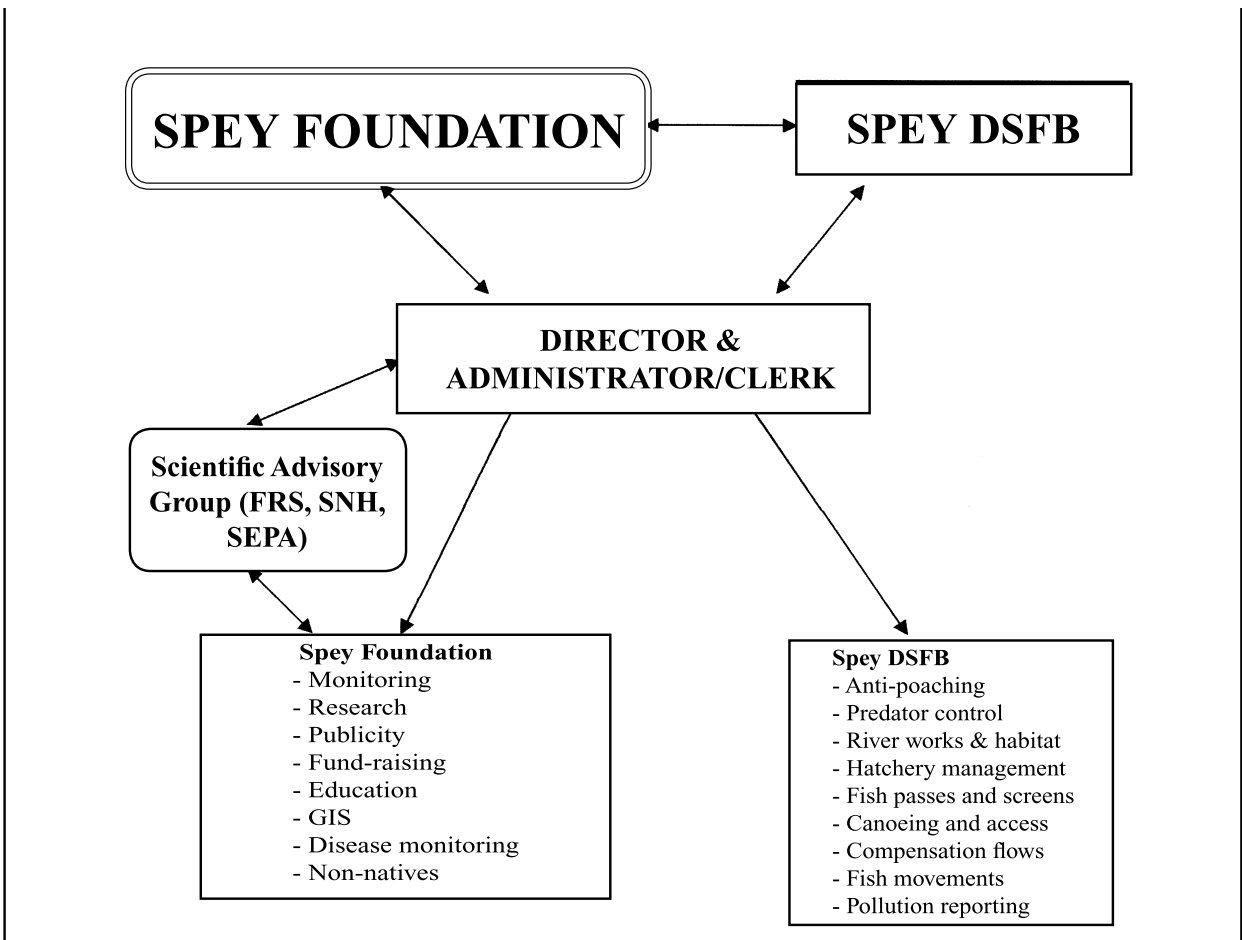


Figure 2. Proposed management and administrative framework of the Spey Foundation and the Spey Fishery Board, and their respective duties

Part 2

Fisheries and Conservation

2.1 River flows 2006

River heights in 2006 were similar to those in 2005, although with another dry period in July and August. Hence rod fishing conditions were largely good. By contrast, November and December were two of the wettest months on record, causing damage to burns and tributaries. This may have had an adverse impact on spawning egg survival rates.

2.2 Salmon and grilse catches

With the cooperation of all proprietors, ghillies, angling associations and hotels a timely assessment of 2006 catch returns was possible. Rod catches exceeded those of 2005 and 2004, with a total of 11,378 fish caught, in comparison to 9,700 in 2005 and 9,820 in 2004. This was a healthy increase on the 10 year average (1992-2001) of 9,100 (Fig. 3).

Spring catches also showed improvement on the long term trend. Between 11th February and 30th April, 1,186 were

caught, in comparison to 930 in 2005 and 1,100 in 2004. Once again, this was in excess of the 10 year average (1992-2001) of 600 (Fig. 4).

A notable feature of the season was the significant numbers of small grilse reported. This trend was also noted on other East coast rivers. Catches curtailed in July, in comparison to previous years, but rose again in August, where the long, hot, dry period saw the largest monthly catch (3,220) (Fig. 5).

The detailed catch returns also allowed an assessment of the seasonal variations in catches relative to distance from the sea. In 2006 the lower beats (Spey Bay to Inverfiddich) peaked in August (Fig. 6). By comparison the upper beats (Tulchan to Loch Insh) and middle beats (Craigallachie to River Avon) peaked in May and June respectively. These geographical variations suggest that the lower river is more dependent on late summer runs, while the middle and upper river is more dependent on spring and early summer fish.



11,378 salmon and grilse were caught in 2006 (*Ian Neale*)

Salmon and Grilse Catch 1952 -2006

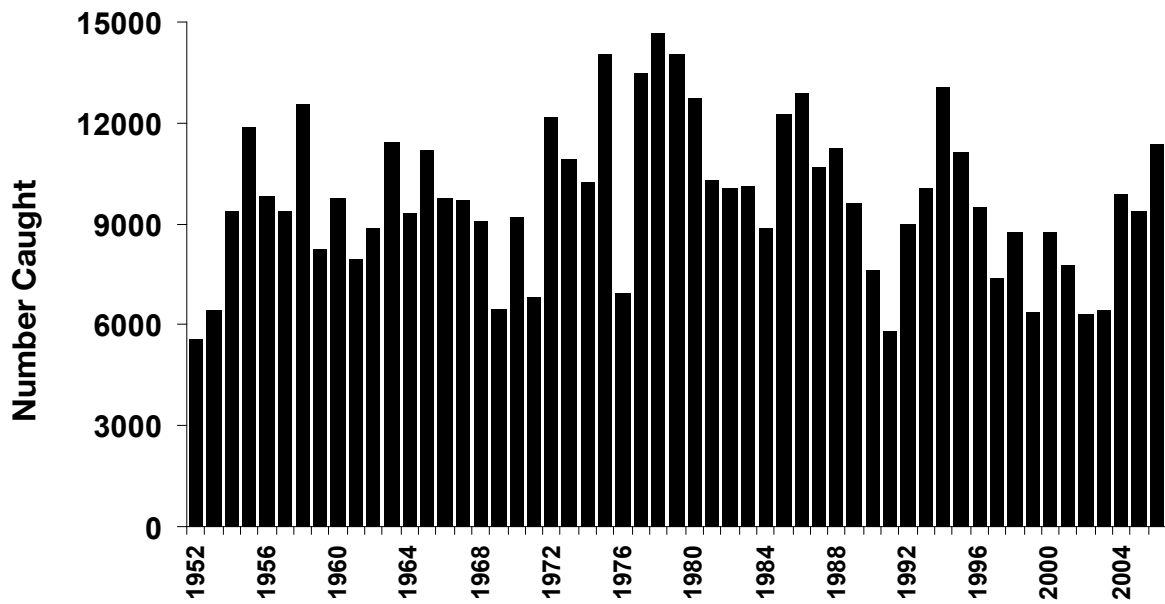


Figure 3. Annual declared rod catch of wild salmon and grilse from the River Spey, 1952-2006. The 2002-2006 catches are from returns made to the SFB by proprietors.

Spring Salmon Catch 1952 -2006

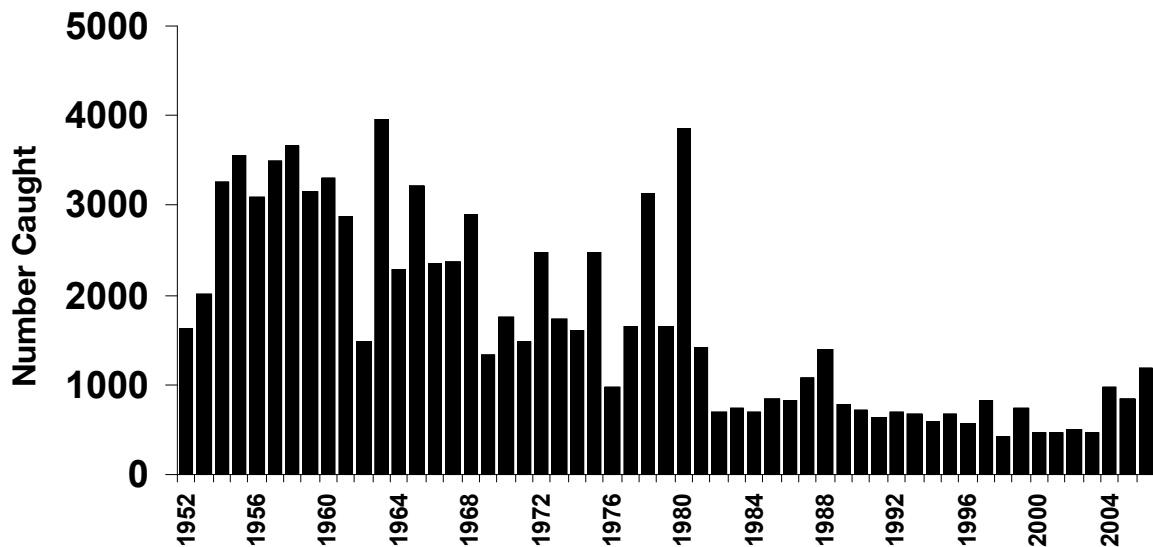


Figure 4. Annual declared rod catch of wild spring salmon (February-April) from the River Spey, 1952-2006. The 2002-2006 catches are from returns made to the SFB by proprietors.

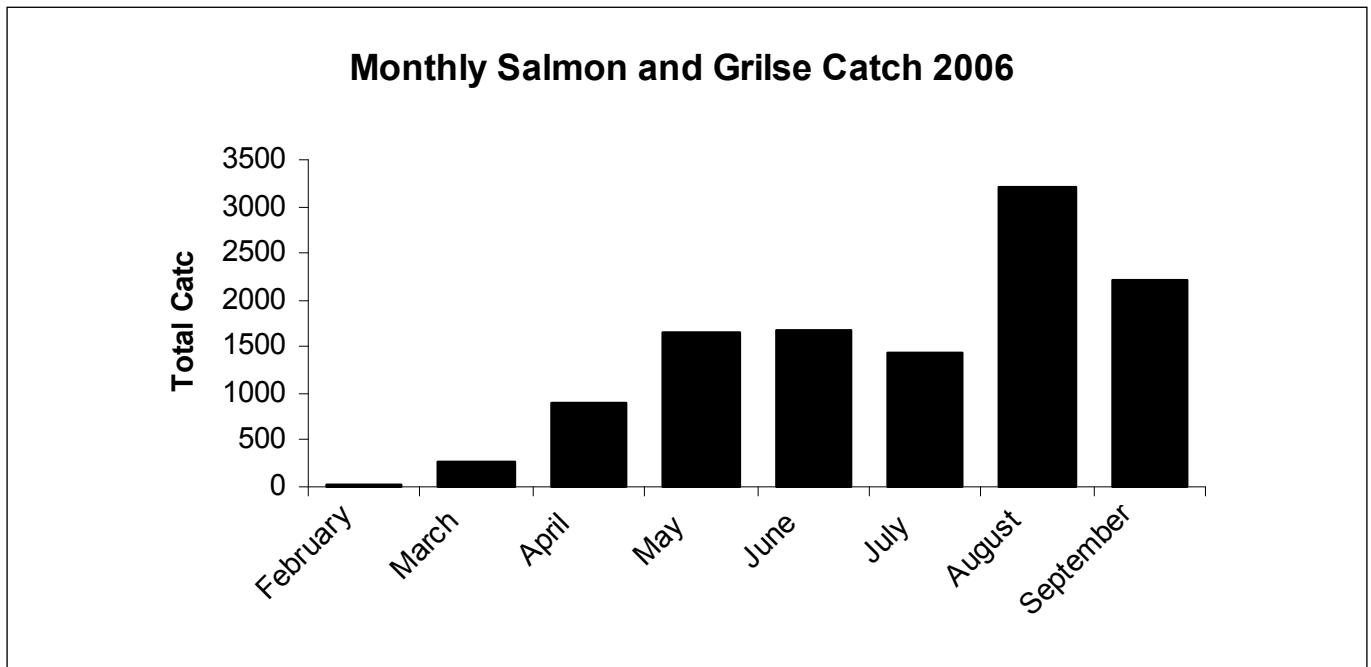


Figure 5. Declared monthly rod catch of wild salmon and grilse from the River Spey in 2006, calculated from returns made to the SFB.

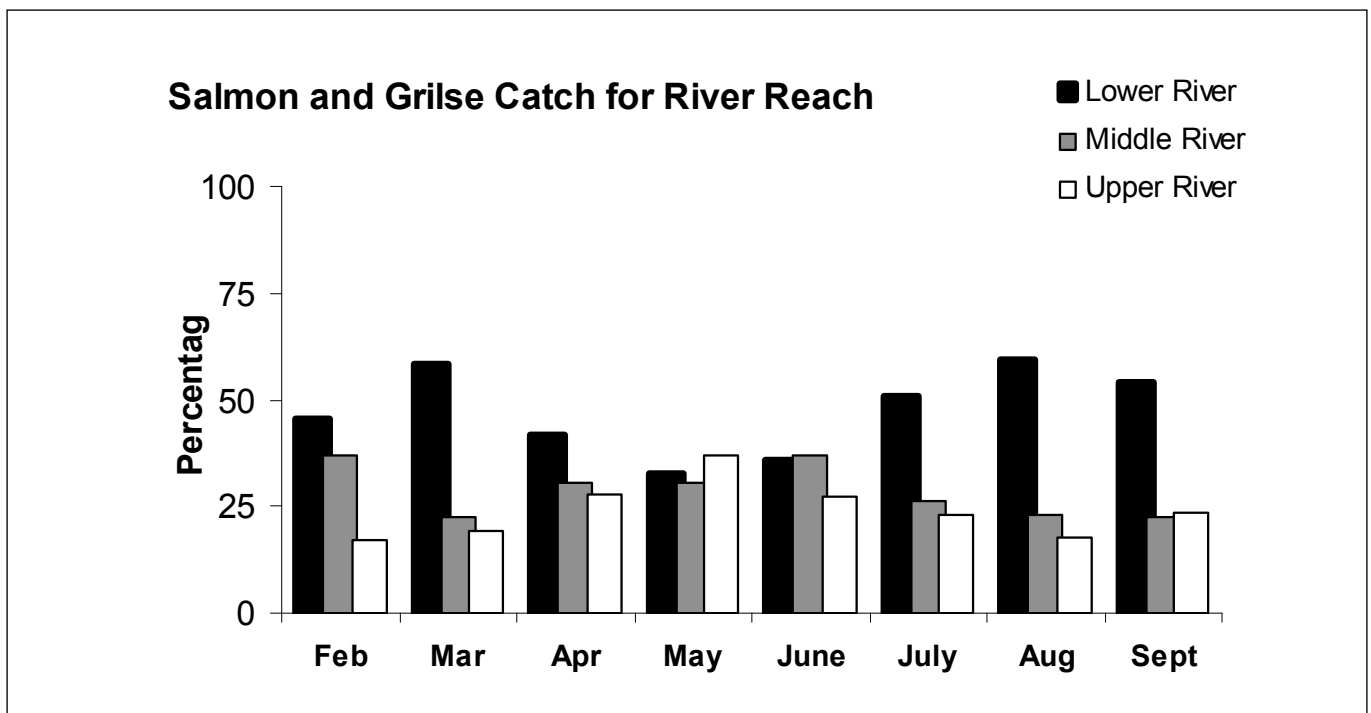


Figure 6. Declared monthly rod catch of wild salmon and grilse from the lower (Spey Bay – Inverfiddich), middle (Craigellachie – Avon) and upper beats (Tulchan – Loch Insh) in 2006, calculated from returns made to the SFB.

2.3 Salmon and grilse runs

Following the Spey Research Trust's analysis of the acoustic counter information collected in 1998-2000, it is now possible to make annual estimates of salmon and grilse runs during the rod fishing season, and to estimate exploitation rates within the fishery.

The estimated total run in February-September 2006 was 93,977 salmon and grilse. This was higher than the run

of 79,754 in 2005, although exploitation rates remained similar at 12.1% (Table 2).

Table 2. Estimates of salmon and grilse runs from Boat o'Brig upstream during February-September 2002-2006, and resulting calculations of exploitation rates and the total run

Table 2. Estimates of salmon and grilse runs from Boat o'Brig upstream during February-September 2002-2005, and resulting calculations of exploitation rates and the total run

Year	Estimated total count Boat o'Brig u/s	Salmon & grilse catch Boat o'Brig u/s	Exploitation rate (%) Boat o'Brig u/s	Total Spey salmon & grilse catch	Total Spey run derived from exploitation rate
2002	37,820	4,992	13.2	6,499	49,235
2003	38,521	4,381	11.4	7,066	61,982
2004	52,649	7,723	14.7	9,820	66,797
2005	57,359	7,016	12.2	9,730	79,754
2006	74,473	9014	12.1	11,378	93,977

2.4 Sea trout catches

The 2006 rod catch for sea trout was 3,286, a notable increase on the 2005 catch of 2,270 and the 2004 catch of 2,810. It was, however, still 28% below the 10 year average (1992-2001) of 4,590 (Fig. 7). The poor numbers of fish evident since 1997 in comparison to the 1980s and early 1990s remain a cause for concern.

As for 2005, monthly catches show that most sea trout (35%) were caught in June (1,155). July was the

second most prolific month, with 1,059 caught (32%). Overall therefore, 67% of sea trout were recorded in these two months (Fig. 8).

Catches on the lower river peaked in March, whilst the middle river peaked in August. The upper river was fairly consistent from May through until September, with a peak in catches in July (Fig. 9).



3,286 Sea Trout were caught in 2006, still 28% below the 10 year average (Ian Neale)

Sea Trout Catch 1952- 2006

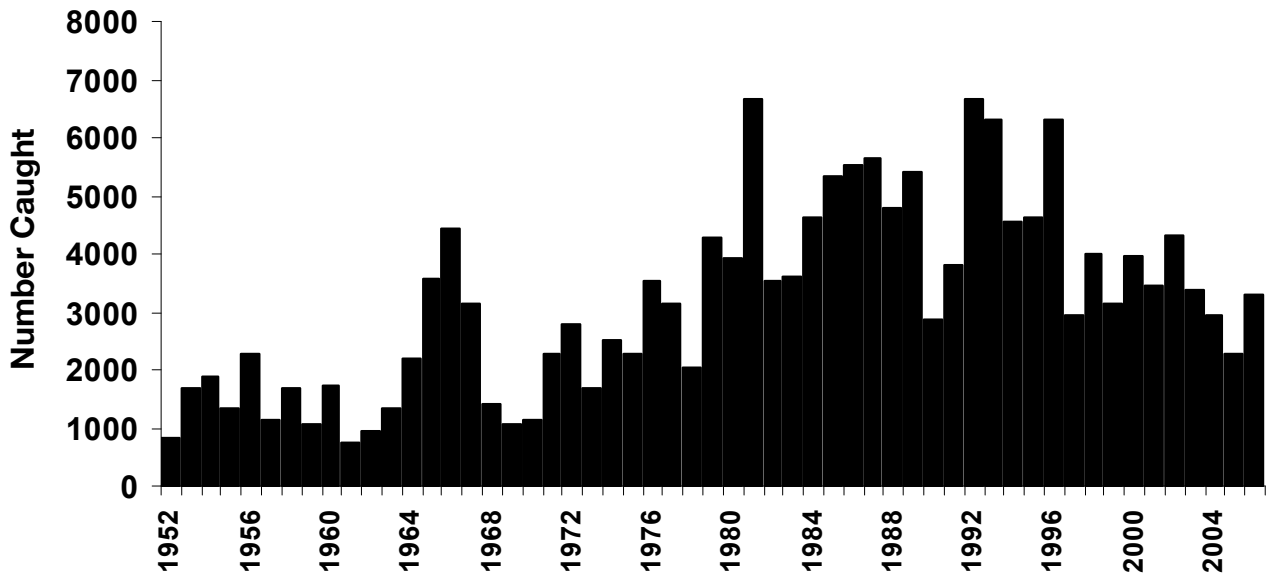


Figure 7. Annual declared rod catch of sea trout from the River Spey, 1952-2006. The 2002-2006 catches are from returns made to the SFB.

Monthly Sea Trout Catch 2006

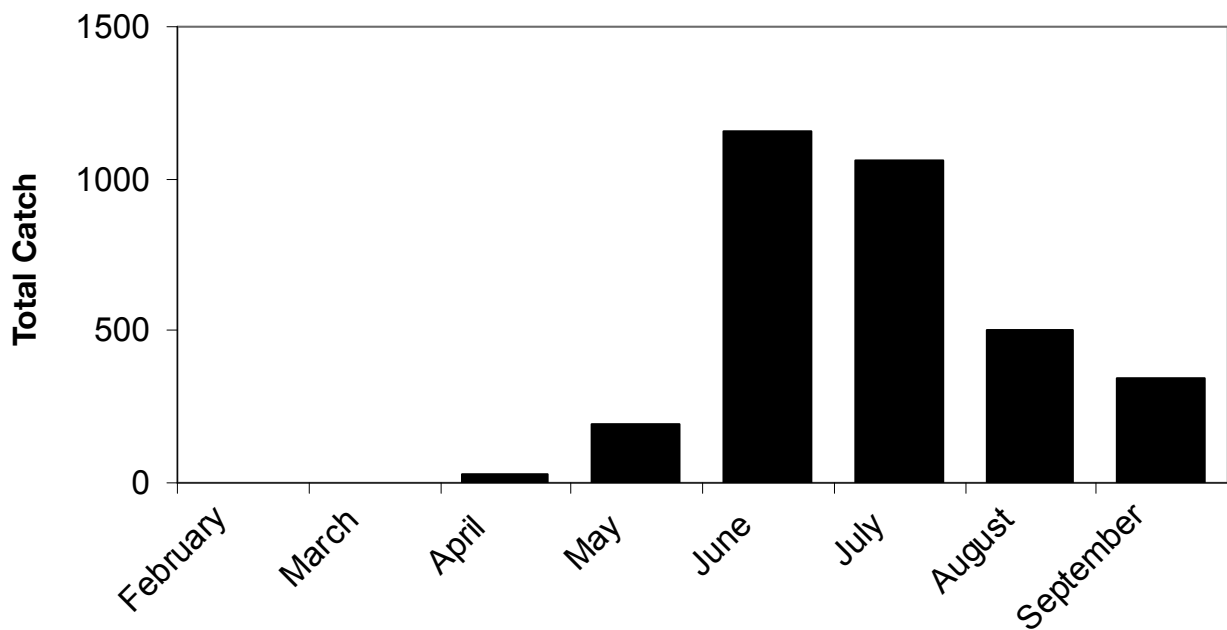


Figure 8. Declared monthly rod catch of sea trout from the River Spey in 2006, calculated from returns made to the SFB.

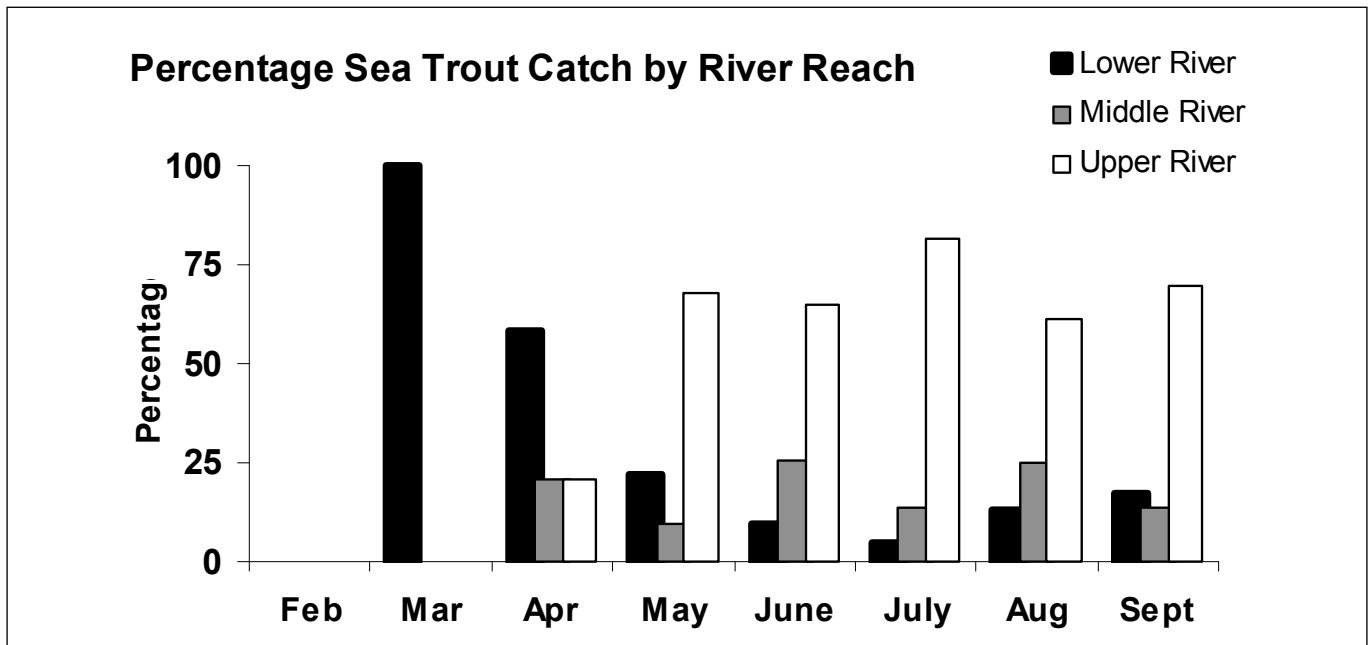


Figure 9. Declared monthly rod catch of sea trout from the lower (Spey Bay – Inverfiddich), middle (Craigellachie – Avon) and upper beats (Tulchan – Loch Insh) in 2005, calculated from returns made to the SFB.

2.5 Salmon Conservation Policy

As part of its long term commitment to the protection of salmon stocks, the SFB launched a Voluntary Salmon Conservation Policy in the 2003 season (Table 3). 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. At least 70% of these fish are female, and therefore contribute an important part of the river's spawning stock. Also, studies by the SRT have shown that these fish are particularly vulnerable to capture and re-capture having been released.

Until 30th June 2006, 69% of fish caught had been released. By the end of the season the release rate was 71% (Fig. 10). In total, 8,059 salmon and grilse were released to spawn in 2006, compared to 6,629 in 2005, which is the highest number ever recorded on the Spey.

Despite the encouraging catches of 2006 and 2005, the SFB has decided to maintain a precautionary approach, and following discussions with the Spey Research Trust, proprietors and the Spey Ghillies' Association, the current policy will be maintained for 2007. The SFB will continue to monitor catches to ensure their accuracy.



In 2006 anglers released 71% of salmon caught in the Spey (Ian Neale)

Catch and Release Rates

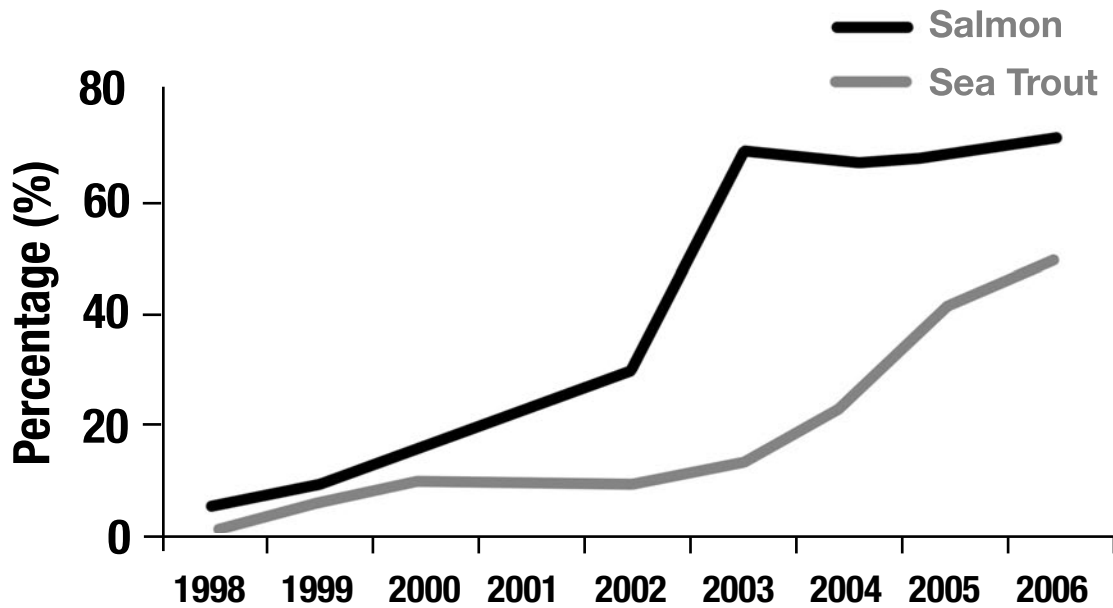


Figure 10. The proportion of rod-caught wild salmon and sea trout released on the River Spey, 1996-2006

Table 3. Details of the SFB Salmon Conservation Policy

1. Catch and release

- Until 30th June each angler must return the 1st, 3rd, 5th etc. salmon and grilse caught;
- After 30th June all hen salmon and hen grilse must be released;
- Throughout the season all stale or gravid fish must be released;
- Escaped farmed salmon must be retained.

2. Method

- Where possible anglers should be encouraged to fish with a fly;
- All hooks should be 'pinched' or barbless;
- Where spinning is allowed only one set of barbless hooks may be used on a lure.

3. Fishing effort

- Where possible the numbers of hours and rods fished should be limited.
-

2.6 Sea Trout Conservation Policy

Under fisheries legislation sea trout have the same legal status as salmon, and DSFBs are also responsible for their protection and improvement. Sea trout in the River Spey are poorly understood and often overlooked. However, catch statistics show that the Spey sea trout rod fishery is one of the largest in the UK, with a 10 year average annual catch of 4,590 (Fig. 7). By comparison only the Rivers Tywi and Teifi in Wales catch more fish.

In July 2004 an International Sea Trout Symposium was held in Cardiff to focus current understanding of sea trout, sponsored by the Environment Agency and the Atlantic Salmon Trust. The following key points were made:

- Sea trout are the sea-running form of brown trout;
- Sea trout and brown trout interbreed;
- The majority of sea trout are female;
- Sea trout can return to spawn up to 10 times;
- Female sea trout provide most of the trout eggs laid in a river;
- 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.

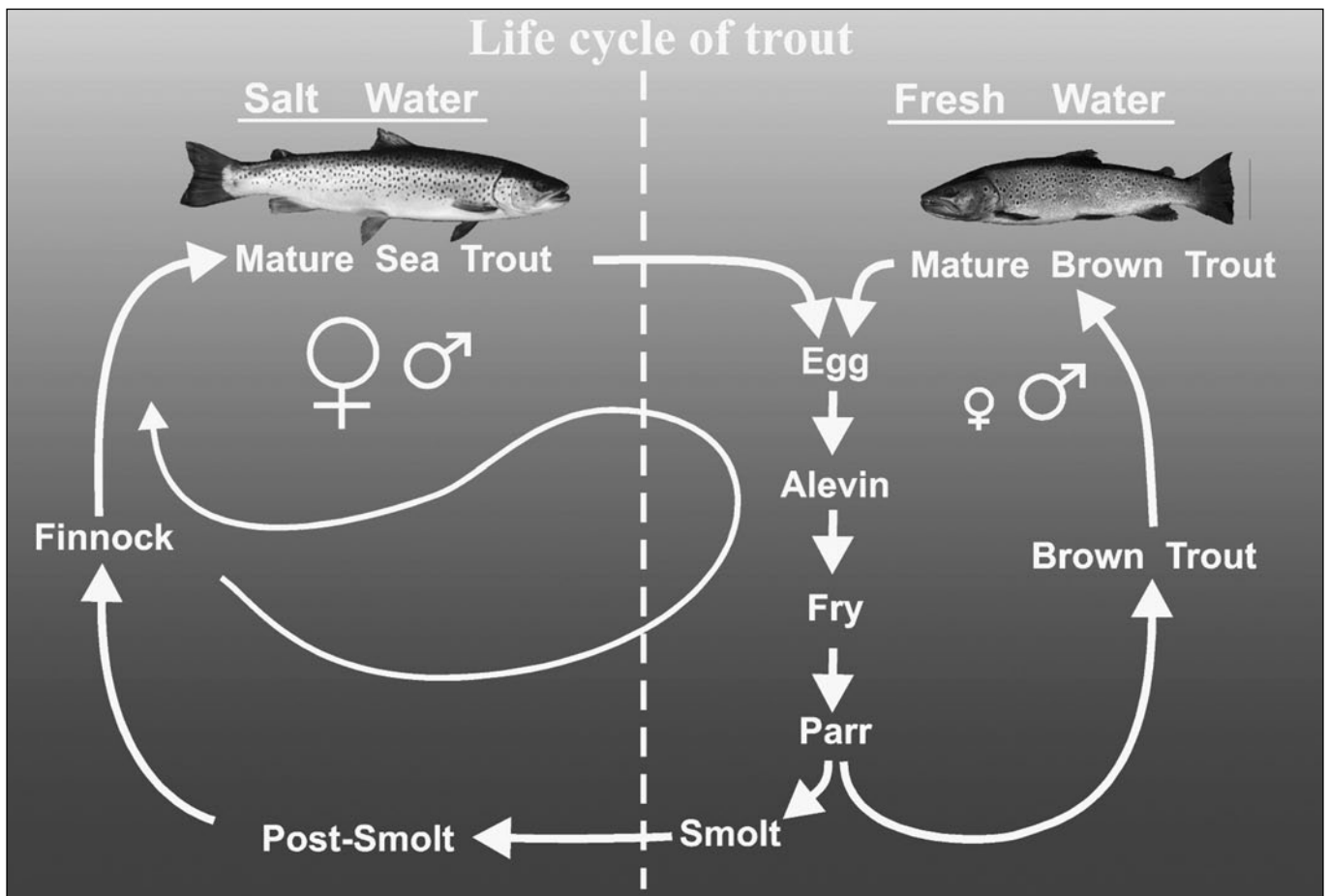
Because sea trout catches have not been as prolific as in the early 1990s (Fig. 7), the SFB is taking a precautionary approach and assuming that this trend is indicative of reduced sea trout abundance. While the causes of this trend

are not known, the SFB proposed in 2004 to introduce a Sea Trout Conservation Policy for the Spey rod fishery. In consultation with proprietors, angling associations and the Spey Ghillies' Association, a policy was designed to encourage catch and release of finnock and larger adult sea trout (Table 4).

In 2006 the rate of catch and release increased to 49% from 43% in 2005 and 21% in 2004 (Fig. 10). However, whilst the overall upward trend is encouraging, there remain concerns that some angling associations, which together contribute 60-70% of the total sea trout catch, are not adhering to the policy. This may be due to a lack of general knowledge about the policy. Rather than altering the policy for 2007, the SFB has decided to maintain it, whilst also promoting a better knowledge of the policy to encourage greater compliance by all. The SFB will reassess the situation in the course of 2007. Concerns over the decline in sea trout numbers in recent years has led to the consideration of a research project to identify the reasons behind this decline. The aim is to conduct research throughout the Moray Firth and the SFB/SRT will continue to work closely with other DSFBs within the region during 2007.

Table 4. Details of the SFB Sea Trout Conservation Policy

- | | |
|-----------------------|--|
| 1. Finnock: | Release all fish of 10 oz. / 25 cm / 10” or less |
| 2. Sea Trout: | Release all fish of 3 lb. / 50 cm / 20” or more |
| 3. Bag Limit: | 2 sea trout or finnock of takeable size per calendar day |
| 4. Unseasonable Fish: | Release all unseasonable fish (smolts, stale fish, kelts, over-wintered finnock) |



Part 3

Spey Catchment Management Plan

Funding for this collaborative project with Scottish Natural Heritage (SNH), SEPA, Moray and Highland Councils was exhausted in October 2004. However, the SFB has continued to pursue initiatives raised by the Management Plan, including angling, canoeing and access, the Northern Periphery Programme, and the Moray Firth Partnership.

3.2 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 is 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 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.

In 2006 there continued to be some problems between fisheries and canoeing interests on the river, although these were more isolated than in the past. White water rafting is also becoming more popular on the river, particularly in the Ballindalloch and Knockando areas, and some problems have occurred. To aid the resolution of these issues, the SFB, Spey Fishing Trust, Cairngorms National Park Authority and Scottish Canoe Association held the now annual meeting on 26th October 2006 at the Ben Mhor Hotel in Grantown on Spey. Discussions were cordial and continued to explore possible compromises, particularly regarding rafting problems. Disappointment was expressed over the lack of progress in developing mutually acceptable access points for canoes, and the establishment of car parking. It appears that this issue is dependent upon grant aid which has yet to be forthcoming. Work on this is continuing and we hope to see further progress in 2007.



Canoeing and rafting is increasing on the Spey
(Malcolm Newbould)

During 2006 the SFB continued to contribute to the safety of canoeists on the Spey by removing fallen trees in the Kinrara and Rothiemurcus areas of the river which are hazardous and have caused fatalities in the recent past. Representatives of the Scottish Canoe Association assisted Bailiffs with the removal of the fallen tree at Kinrara.

3.3 Northern Periphery Programme



The NPP project has progressed rapidly throughout 2006 and Spey personnel are involved in two of the three themes, Theme 2; Habitat Restoration and Theme 3: Raising Awareness of Watercourses.

Theme 2: Habitat Restoration.

The Conglass Burn provided the centrepiece for habitat restoration works and these have been completed throughout 2006. The Crown Estate has supervised the completion of riparian fencing and water-gates near Ruthven Farm to reduce stock grazing pressure and erosion. Forestry culverts have been removed from the Glenmuliach Burn to facilitate fish passage and extensive clearance of conifer plantation has taken place. While Moray Council

has installed a series of baffles to ease fish passage through the bridge over the Blair na Marrow an important sea trout spawning tributary. Monitoring of the effects of the culvert removal and fencing on juvenile stocks is also underway.

Exchange visits were an important part of the project and delegates from Finland and Sweden visited the Conglass to tour the improvements during 2006. Similarly Spey Board staff paid a return visit to Sweden and Finland to view river habitat restoration works and hatchery facilities. In both these countries rivers have been extensively modified in the past to allow the free floating of timber. This has led to extensive loss of fish habitat and major large scale projects are now underway to replace the boulders removed from rivers and create suitable habitat for adult and juvenile fish.

Theme 3: Raising Awareness of Watercourses

Pupils from Aviemore and Craigellachie Primary Schools have been gaining an insight into the lifecycle of the salmon and its importance in the Spey. The opportunity was provided as part of the NORWAT project which involves four countries, Scotland, Finland Norway and Sweden and is funded by the EU's Northern Periphery Programme (NPP). Environmental education and interpretation is one of the main themes and schools in each of the countries get the chance to learn more about a watercourse, not only for its environmental value but also in terms of the part that it plays in the economic, social and cultural life of the area.

Pupils from both Aviemore and Craigellachie Primary Schools, visited the SFB Hatchery at Sandbank, Glenlivet and under the expert supervision of hatchery manager, Jim Woods and his team, they helped collect eggs from ripe females, watched them being fertilised and then placed on trays within the hatchery. Pupils then visited the Tervie Burn with biologist, Bob Laughton, and observed adult salmon spawning and completed a redd count. In January 2005 an illustrated talk, introduced the pupils to the various fish species found within the Spey and the lifecycle of the salmon. Spey Board staff then provided a classroom hatchery and eggs for the children to nurture. After a few weeks the fry were ready to be released into a local burn. During 2006 the project was developed further with Aviemore pupils receiving tuition in fly tying and casting. Pupils from Craigellachie conducted a study into the effects of warm water on juvenile salmon within the Fiddich.

Both schools came together in August for a fishing day on the River Avon. The Richmond Hotel kindly provided its Avon beat and Inverlochy Pond was also provided by Mr John Irvine. Tuition in casting and fishing techniques for salmon and trout was provided and the pupils proved to be fast learners as several trout were captured through the day. Pupils also gained an insight into the invertebrates and juvenile fish populations of the River Avon by participating in a “Bugs and Beastie Hunt” and electro-fishing survey.

An important part of the project has been sharing experiences with the other countries involved. Both Craigellachie and Aviemore have established email links with schools in Norway, Sweden and Finland. In addition exchange visits have also taken place. The Spey Fishery Board, Scottish Natural Heritage and The Highland Council, hosted a two-day seminar on educational projects during May 2005. Delegates from Finland and Norway visited both schools and were entertained by an excellent DVD created by Aviemore pupils and a variety of powerpoint presentations at Craigellachie. Teachers from both schools made a return visit to Norway during May 2006 and Speyside will host a final project conference in Aviemore during April 2007.

Some adult education has also featured in Theme 3. An introduction to invertebrate collection and identification course was completed on the Spey during May 2006 and proved popular. Further courses are planned for early 2007 along with a seminar on Fish Management in the Spey during February.



Invertebrate training course for children (*Roger Knight*)



Tuition in casting and fishing techniques (*Roger Knight*)



Bugs and Beasties hunt (*Roger Knight*)

Part 4

Management Report

4.1 Stock Enhancement Policy 2006

On the basis of advice from the Research Committee, which includes representatives of Fisheries Research Services (FRS) and SNH, the SFB introduced a Stock Enhancement Policy in 2003 (Table 5). The Policy aims to boost natural smolt output from the Spey by targeting under-populated areas above man-made obstacles and natural obstacles, and also accessible areas proven to be under-stocked.

As part of the Geographical Information System (GIS) Project, the SRT has identified all man-made and natural obstacles within the catchment. The area of water above man-made obstructions is estimated to be 878,000 m², and the area above natural obstructions is 200,000 m², giving a total of 1,078,000 m². Juvenile surveys carried out by the SRT suggest that most naturally accessible areas of the catchment are utilised by salmon (see Part 5), and therefore little enhancement is possible. Planting juvenile salmon at a density of approximately 2 fry/m², a target of 2 million fry is required to fully stock the target areas. Allowing for some mortality in the hatchery, an annual target of 2.2 million eggs has been established.

This target was achieved by the SFB's Sandbank Hatchery, by Tulchan Estate (which is run at Tulchan's expense, but under the supervision of the SFB) and by eggs from autumn 2005 which were held at the Alvie Hatchery, Kincaig.



Sandbank Hatchery received a new roof in 2006
(Roger Knight)

Table 5. SFB salmon and sea trout Stock Enhancement Policy

1. Stock areas accessible to salmon and sea trout proven to be under-populated;
 2. Stock inaccessible areas above man-made obstructions;
 3. Stock inaccessible areas above natural obstructions;
 4. Use only wild broodstock from the Spey catchment;
 5. Take broodstock from close to target stocking areas, to maintain local adaptations and ensure optimal survival of stocked juveniles;
 6. Stock eggs, fry or autumn parr subject to ease of access;
 7. Monitor stocking success with juvenile surveys and DNA screening of returning adults
-

In October 2006, SFB Bailiffs collected sufficient broodstock to fill the capacity of the Sandbank and Glenmore Hatcheries. In addition, 2006 saw the collection of sufficient sea trout to produce 100,000 eggs. In line with best practice outlined in FRS's 'Salmon and Sea Trout: To Stock or Not?' guidelines, juveniles were planted into the same areas of the catchment that their parents had originated from, to ensure optimal survival. Eyed eggs, unfed and fed fry were planted out from February to August 2006 (Table 6). In total, 400,000 (18%) were planted into understocked but accessible areas, 1.04 million (46%) into areas above man-made obstacles, and 821,000 (36%) above impassable falls.



The Electro-Net proved highly effective (*Jim Woods*)

The collection of broodstock was again made highly efficient due to the use of the electro-net and associated equipment purchased two years ago with a 50% grant from SNH. With the assistance of ghillies from Delagyle, Tulchan and Castle Grant estates, plus members of the Tomintoul, Strathspey and Abernethy Angling Associations, broodstock were collected from target areas throughout the catchment. The electro-net was used to great effect on the tributaries, whilst the main stem river saw the bailiffs employing the more traditional rod and line. This is because the size of the River Spey (particularly with the high water levels at the end of 2006) does not lend itself to electro-netting for health and safety reasons.

The SFB was also contracted to assist the Deveron and Findhorn DSFBs in the collection of broodstock.



Assistance from the ghillies (*Duncan Ferguson*)



The Catching-Up Team in operation (*Roger Knight*)

Table 6. Salmon stock enhancement in the Spey catchment, 2006

Broodstock source	Stocking site	Accessible/inaccessible	Quantity	Fish type	Month
River Truim	Allt Coire Fahr, Allt an Tuirc, R. Truim	Partly inaccessible above man-made obstacle	110,500	Eggs	February
River Tromie	Allt Garbh Gaig, R. Tromie	Partly inaccessible above man-made obstacle	75,000	Eggs	February
River Feshie	Allt Mhor, R. Feshie	Inaccessible above falls	71,000	Eggs	February
River Dulnain	Batten Burn, R. Dulnain	Inaccessible above man-made obstacle	61,500	Eggs	February
River Avon	Burn of Brown, R. Avon	Inaccessible above falls	80,000	Unfed fry	May
River Avon	R. Avon at Findouran Lodge	Accessible	340,000	Unfed/fed fry	May/August
Castle Grant, mainstem	R. Spey, Spey Dam	Partly inaccessible above man-made obstacle	290,000	Unfed/fed fry	May/June
River Dulnain	Feithlinn and Allt Mor, R. Dulnain	Accessible	60,000	Fed fry	June
River Dulnain	Allt na Moireach, R. Dulnain	Inaccessible above falls	60,000	Fed fry	June/July
River Dulnain	Allt Ghiuthais, R. Dulnain	Inaccessible above falls	30,000	Fed fry	June
River Dulnain	Caochan na Gaibhre, R. Dulnain	Inaccessible above falls	30,000	Fed fry	June
River Dulnain	Allt an Tudair, R. Dulnain	Inaccessible above falls	30,000	Fed fry	June
Delagyle, mainstem	Knockando Burn	Inaccessible above man-made obstacle	110,000	Fed fry	June/August
Delagyle, mainstem	Ballintomb Burn	Inaccessible above man-made obstacle	65,000	Fed fry	June/August
Brae Water, mainstem	Mulben Burn	Inaccessible above man-made obstacle	100,000	Fed fry	June
Brae Water, mainstem	Fochabers Burn	Inaccessible above man-made obstacle	45,000	Fed fry	June/August
Castle Grant, mainstem	Milton Burn	Inaccessible above man-made obstacle	10,000	Fed fry	July
Castle Grant, mainstem	Allt Coire Chondraich, R. Druie	Inaccessible above man-made obstacle	10,000	Fed fry	July
Castle Grant, mainstem	R. Nethy	Inaccessible above falls	60,000	Fed fry	July
Castle Grant, mainstem	Dunachton Burn	Inaccessible above man-made obstacle	10,000	Fed fry	July
Castle Grant, mainstem	Gynack Burn	Partly inaccessible above falls	70,000	Fed fry	July
Tulchan, mainstem	Burn of Coire Seileach	Inaccessible above falls	10,000	Fed fry	July
Tulchan, mainstem	Glenmore Burn	Inaccessible above falls	10,000	Fed fry	July
Tulchan, mainstem	Allt Eoghainn	Inaccessible above man-made obstacle	10,000	Fed fry	July
Castle Grant, mainstem	Strath an Eilich Burn	Inaccessible above falls	35,000	Fed fry	July
Castle Grant, mainstem	Allt Breachy	Inaccessible above falls	35,000	Fed fry	July
Castle Grant, mainstem	Allt a Chaorainn, R. Calder	Inaccessible above falls	30,000	Fed fry	July
Castle Grant, mainstem	Allt Fionndrigh, R. Calder	Inaccessible above falls	30,000	Fed fry	July
River Avon	Mickle Fergie Burn, R. Avon	Inaccessible above falls	45,000	Fed fry	July
River Avon	Tommore Burn, R. Avon	Inaccessible above man-made obstacle	10,000	Fed fry	August
River Avon	Allt Loin Beag, R. Avon	Inaccessible above man-made obstacle	10,000	Fed fry	August
Delagyle, mainstem	Allt Arder	Inaccessible above falls	50,000	Fed fry	August
Brae Water, mainstem	Dullan Water, R. Fiddich	Inaccessible above man-made obstacle	125,000	Fed fry	August
Total salmon:			2,118,000		

Table 7. Sea Trout stock enhancement in the Spey catchment, 2006

Broodstock source	Stocking site	Access	Quantity	Fish type	Month
Avon	Allt a Choileachain, R. Livet	From Colin Riches' house u/s	15,000	Fry	April
Avon	Tommore Burn, R. Avon	From culvert on B9008 u/s	20,000	Fry	April
Avon	Allt Loin Beag, R. Avon	From Irish Bridge culvert u/s	15,000	Fry	April
Avon	Allt na Cabar, Conglass Water	From culvert at Blairnamarrow on A939 u/s	10,000	Fry	April
Avon	Glenmullie Burn, Conglass Water	From forestry culvert u/s	5,000	Fry	April
Avon	Chabet Water, R. Avon	From road culvert at Ballcorach u/s	35,000	Fry	April
Total Sea Trout			100,000		

4.2 Monitoring stock enhancement

The aim of the Stock Enhancement Policy is to boost the natural smolt output from the Spey catchment, and hence adult returns. In turn, extra fish may be caught in the rod fishery, and additional spawners may be present within the accessible area each autumn. Between 2000 and 2006 the numbers of juvenile salmon stocked into the river has increased from approximately 750,000 to 2.2 million (Fig. 11). However, it is important to quantify whether this policy is yielding extra smolts and returning adults.

In 2006 the SRT has continued collaborating with FRS to use novel genetic technology to assess the contribution of hatchery stocked fish to the rod fishery. Tissue samples were taken from all broodstock stripped and there is the potential to take DNA fingerprints of the families. We are now liaising with the FRS regarding the analysis of these genetic samples.

Choice of stocking location is also under review. Stocking above natural waterfalls has been practised but recently concern about the effect this practice will have on resident trout populations has been raised. To study this, the SRT, in collaboration with Dr Phil Bacon (FRS), have begun a study on the Lour Burn. During 2006, 100,000 eggs were carefully stocked into the Lour in planned density units. Electro-fishing surveys were then conducted during June to assess the success of the stocking exercise and the effects on the existing trout population.

One interesting initial finding related to some riverworks which were carried out in the lower part of the Burn shortly after the eggs were placed. This led to increased silt loads for a short period. Egg survival in the areas downstream was much lower than those upstream in the unaffected stretch. Direct evidence that riverworks carried out during periods when eggs are still within the substrate can potentially lead to significant fish loss. Monitoring of the stocked salmon will continue in 2007 to assess the success and effects of the stocking exercise.



Monitoring the stock enhancement (*Ken Tsurasaki*)



Salmon leaping the Falls of Truim (*Roger Knight*)

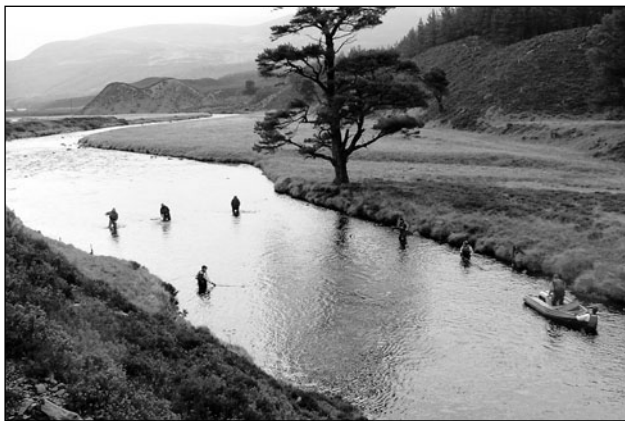
4.3 Obstacles to Fish Passage

The process of identifying man-made obstructions within the catchment has continued. As part of the GIS Project each obstacle has been mapped, and its details collated. In total 109 obstacles have now been identified, ranging from road culverts to hydro-electric dams. If removed, the riverine area accessible to salmon and sea trout would be increased by 10%

4.4 CASS LIFE Project



The process of removing or mitigating these obstacles has continued throughout 2006 with the EU LIFE Project, 'Conservation of Atlantic Salmon in Scotland (CASS)'. Because the Spey is a SAC the SFB is eligible for funding through the EU LIFE Nature scheme. LIFE funding is targeted at improving the physical status of an SAC, while also supporting research and public awareness projects. In 2003 the Association of Salmon Fishery Boards and SNH coordinated a £3.5 million bid by the Spey and other salmon SACs including the Oykel, Moriston, Dee, South Esk, Tay, Teith, Tweed, Bladnoch and Endrick. The bid was approved by the European Commission in August 2004.



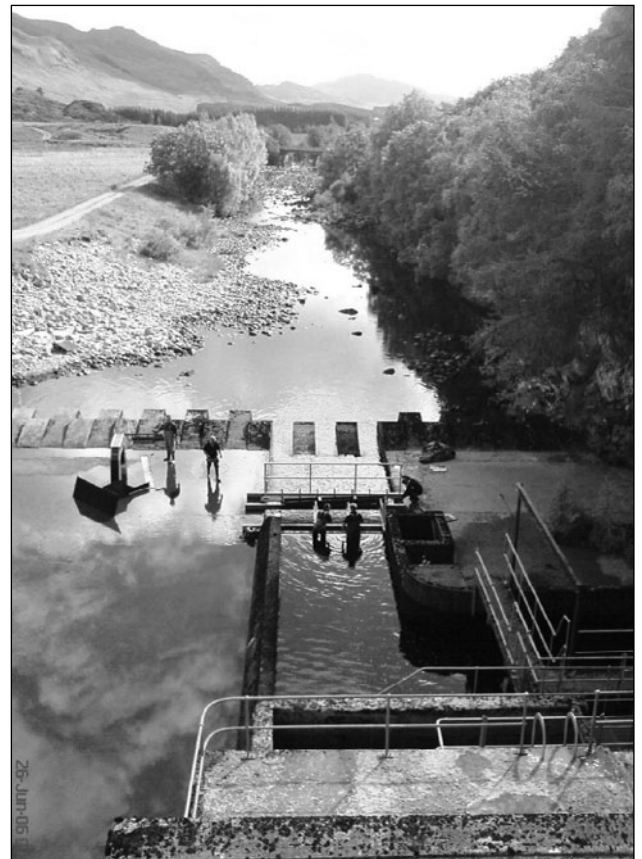
Bailiffs catching broodstock by electro-net on the Feshie (Roger Knight)

The SFB's component of the CASS LIFE Project focuses on removing or mitigating 13 major man-made obstacles to fish passage (Fig. 12). To improve monitoring of salmon stocks, three fish counters are being installed in fish passes on the Truim, Dullan and at Spey Dam. The Spey work includes a public awareness component, which focuses on the extension of the SRT's Salmon Go To School programme, and demonstration site visits.

The total value of the work on the Spey is £573,274, of which 64% is being sourced from LIFE and SNH. The SFB is providing support for project management, the running of fish counters, juvenile surveys, and stocking above the obstacles. Project management is assisted by officers employed by SNH, and the civil engineers A.F. Cruden Associates of Inverness.

During 2006 works were completed on the following six projects:

1. **Spey Dam smolt trap:** In collaboration with British Alcan Smelters, the original smolt trap used for monitoring smolt runs through Spey Dam was replaced in 2005 by a modern, light-weight version. This was put in to operation in 2006, resulting in 4,300 smolts being trapped, counted and subsequently released. This has been particularly encouraging as this number indicates a substantial increase in the numbers of smolts above Spey Dam.



Bailiffs working on the smolt trap at Spey Dam (Roger Knight)

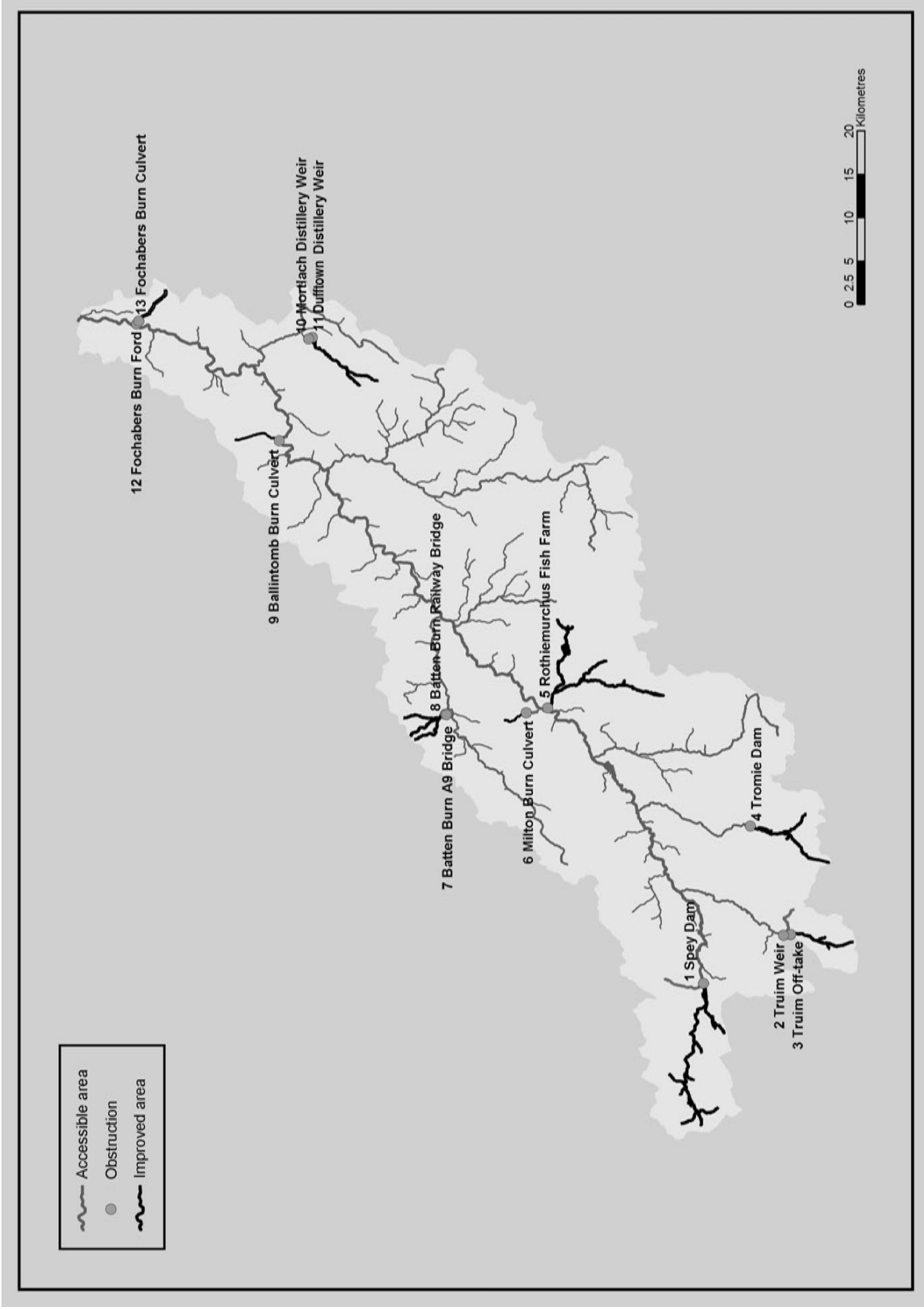


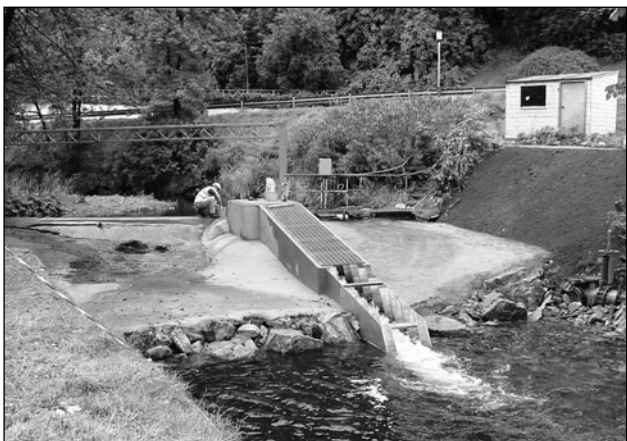
Figure 12. Man-made obstacles targeted for remedial works by the Spey CASS LIFE Project.

2. Mortlach Weir: In partnership with Diageo Distillers and civil engineers AF Cruden Associates, work was completed in 2006 to improve the efficiency of the Mortlach Weir fish pass. This was reinstalled at a more efficient angle and work was carried out to improve the gabian baskets to each side of the pass. A fish counter has now been installed within the fish pass and monitoring of fish numbers will be undertaken in 2007 .



Mortlach Weir before the alterations (Roger Knight)

3. Batten Burn Bridges: liaison with the Scottish executive and Network Rail has continued throughout 2006, aiming to progress with improvements to the A9 and rail bridges over the Batten Burn. The existing concrete surfaces below the bridges currently deny fish access to the Burn above. It is intended to install a series of baffles under these bridges to allow fish to pass through them. Progress has been slow so far, but it is hoped that this work will be completed in 2007.



Mortlach Weir after the alterations (Roger Knight)

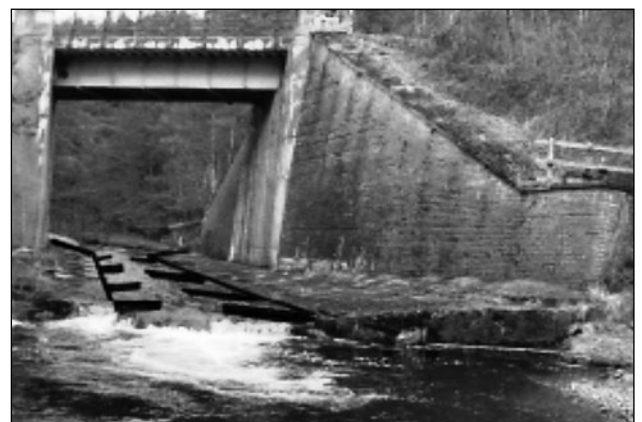


Habitat improvements have improved the numbers of native tree species at Batten Burn (Bob Laughton)

The Batten Burn has also seen considerable habitat repairs, with improvements made to fences and the use of soft engineering within the burn. These have resulted in a considerable improvement in the numbers of native tree species. Further monitoring of juvenile fish stocks within the burn has continued throughout 2006.



Habitat improvements at Batten Burn (Bob Laughton)



The proposed installation of baffles under the Batten Burn bridges will allow fish to travel through them (Bob Laughton)

4.5 Riparian Habitat Improvement

The process of identifying and prioritising areas of the catchment requiring riparian habitat improvement has progressed. In August 2004 the HDH Wills 1965 Charitable Trust generously agreed to fund a continuation of the SRT's GIS Project, and to extend this work into using mapping technology, aerial photographs and field surveys to pinpoint problem areas in the catchment. This work has continued throughout 2006, and has produced a list of locations where habitat restoration works should be undertaken. Of particular interest is the identification of several mainstem back channels blocked by river works, which if re-opened could contribute significantly to the area of the river accessible to salmon and sea trout.

Meanwhile SFB Bailiffs continued to clear a 2 km section of the heavily afforested Milton Burn at Castle Grant. Using chainsaws, and with assistance from Castle Grant ghillies, this important spawning tributary has been considerably improved.

4.6 Pollution Incidents

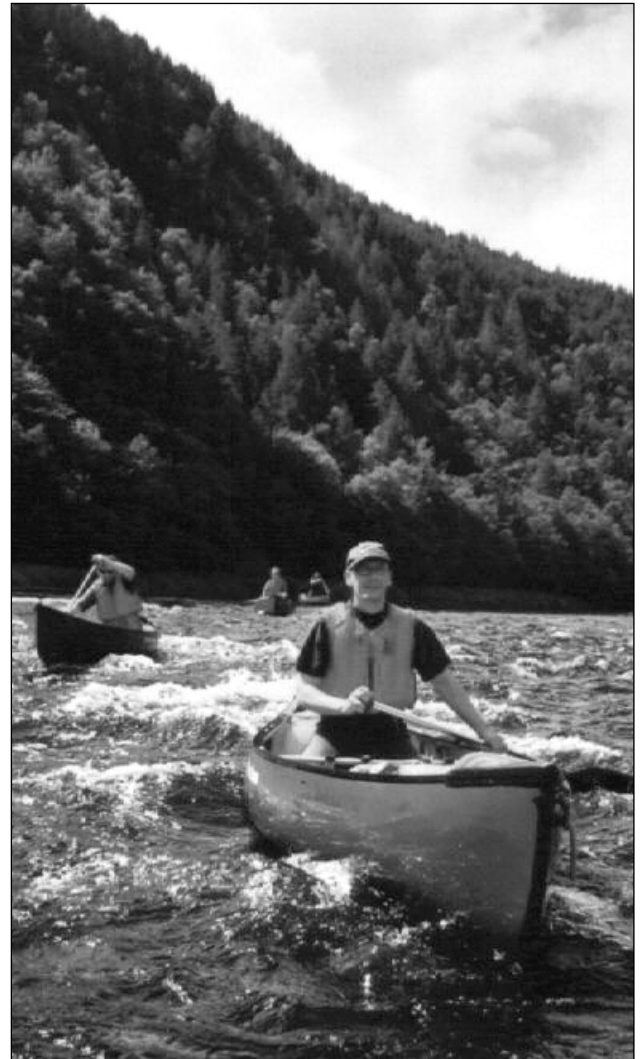
There were no serious pollution incidents reported in 2006.

4.7 Sawbill Ducks and Cormorants

Following an application to the Scottish Executive the SFB was awarded a licence in February-April 200 to shoot 18 goosanders and three cormorants. This represented a reduction in the 2005 and 2004 quotas, when 29 and 30 goosanders and no cormorants or red-breasted mergansers were licensed.

The SFB has continued counting these species using canoes. Counts are carried out from Loch Insh to Spey Bay once every two months, weather and river conditions permitting. The SFB is continuing to work with SNH and the Scottish Executive to establish a Moray Firth-wide management scheme for sawbill ducks and cormorants,

and it is anticipated that this will come to fruition in 2007. Due to the designation of the Inner Moray Firth and Cromarty Firth as SPAs for these species under the Habitats & Birds Directives, future schemes must consider the conservation obligations of DSFBs and other relevant authorities for both piscivorous birds and the fish stocks on which they prey.



(David Craig)

4.8 Moray Firth Seal Management Plan

2006 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 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.

In April 2006 the Scottish Executive issued a licence for the shooting of 50 common seals and 60 grey seals by DSFBs in agreed Management Areas. These areas are largely restricted to freshwaters and river estuaries. A further 10 animals of each species were expected to be shot by salmon netsmen, who do not require licences, at netting stations in the Moray Firth. Among these the SFB shot five common and five greys, according to our licensed quota of 5 of each species.



SFB Bailiffs monitor seal numbers at Spey Bay
(Rob Harris)

The Moray Firth Seal Management Plan will continue throughout 2007 in its third and final year as a pilot scheme for Scotland. The SFB is also continuing to support the coordination of the Seal-Salmon Research Programme in collaboration with the Sea Mammal Research Unit, the Scottish Executive, FRS, SNH and the Atlantic Salmon Trust. As part of this research SFB Bailiffs carry out counts of seals at Spey Bay, and ghillies at Castle Grant, Carron and Delfur have continued to record and photograph predator damage on rod-caught salmon and sea trout.



Ghillies have continued to record damage to fish caused by seals
(Willie Mearns)

4.9 Fishery Protection

Coastal patrols between Nairn and Fraserburgh were continued in April-September 2006 in collaboration with the Nairn, Findhorn, Lossie and Deveron DSFBs. A total of 19 patrols were completed with the SFB's 17ft Rigid-hulled Inflatable boat, during which four illegal gill nets were intercepted.

In 2006 the SFB continued to collaborate with the Grampian and Northern Constabularies' Operation Fish Net, which aims to increase public awareness of illegal salmon netting and the dangers gill nets pose to dolphins. Records of illegal gill nets retrieved by Moray Firth DSFBs since 2002 suggest that poaching activity is declining, as are the numbers of illegal gill nets retrieved by the SFB.

On 28th September 2006 SFB Bailiff Lindsay Grant, assisted by Strathspey Angling Improvement Association river watcher Ali Grant, apprehended one man fishing with shrimp bait on the River Spey near Dulnain Bridge. Despite charges being brought, these were subsequently dropped by the authorities. There were no other serious incidents of illegal rod and line fishing or poaching.

Whilst poaching activity may be declining, there is no doubt that this is partly as a result of the dedicated, professional work of the SFB's Bailliffs and the deterrence that they provide.

4.10 Staff Training

In 2006 SFB and SRT staff completed the following training:

- **Institute of Fisheries Management Certificate in Scottish Bailiffing, Keeping Duties and Law;**
- **Chainsaw - Maintenance, Cross-Cutting and Felling**
- **National Powerboat Certificate Level 2**
- **Environment Agency Electric Fishing Certificate of Competence**
- **SFCC Electro-Fishing Introduction and Team Leader Training Courses**

During 2006 SRT biologist, Bob Laughton and staff were contracted by SFCC and Inverness College to deliver training in electro-fishing techniques for both the SFCC Introduction and Team Leader training courses. During the year three courses were delivered.

Part 5

Spey Research Trust Report

5.1 Juvenile Survey 2006

Juvenile surveys were completed throughout a number of the tributaries and mainstem of the Spey during 2006. This type of monitoring is essential to monitor the success of the SFB's Salmon and Sea Trout Conservation Policies, stock enhancement programs and the removal of man-made obstacles. The SFB and SRT are members of the Scottish Fisheries Coordination Centre (SFCC), and all data is gathered according to standard SFCC electro-fishing protocols.

The 2006 survey was similar to previous years although poor weather conditions during September limited the final tally of tributaries visited. The survey included 47 timed electrofishing sites along the length of the mainstem along with a further 47 tributary sites. An initial assessment shows that salmon fry were found at 80% of 94 sites surveyed, compared to 87% of the sites in 2005 (Fig. 13). Of these sites, 29 sites had been influenced by stocking of salmon fry in 2006. The distribution of fry was slightly reduced when compared with 2005. However, this reflects the higher number of middle mainstem sites visited which seldom produce salmon fry, rather than an overall decline. Distribution in the tributaries was good and survey locations downstream from Spey Dam also indicated very good numbers of wild salmon for the first time in a number of years. Overall indications were that adult salmon had accessed most spawning areas during in autumn 2005.

Trout fry were found at 50% of the 94 sites in 2006, (Fig. 14), Compared to 67% in 2005. Although some sea trout stocking was carried out none of these survey sites were influenced by the program. Again some caution is needed with this data. A higher proportion of mainstem sites were

included and these generally have low or no juvenile trout present. However, there was a reduction in tributary distribution as well and this may reflect the very poor run of sea trout in 2005. Runs improved in 2006 and hopefully we will see a better distribution in 2007.

5.2 Autumn Salmon Project

In 2004 the SRT initiated the Autumn Salmon Project, which addresses the following questions:

1. Are salmon running the Spey after the end of the fishing season?
2. What are their characteristics and how abundant are they?
3. Where and when do they spawn?

In 2004 and 2005 a licence was granted by the Scottish Executive to fish experimentally with rod and line in October-December. Gordon Castle, Carron, Orton, Delfur and Knockando all generously provided access for anglers participating in the study. River Spey Anglers' Association members and ghillies volunteered to fish, and were trained to floy tag, scale sample, photograph and release all salmon and sea trout caught. The condition and sexual status of each fish was assessed later from the photographs.

In 2004, 156 fish were tagged between October 2004 and January 2005. Fresh, coloured and kelt salmon were tagged and released throughout the sample period and the proportion of each category present within each two week block is illustrated in Figure 15.

Spey Juvenile Survey 2006

- Salmon fry present
- Salmon fry absent

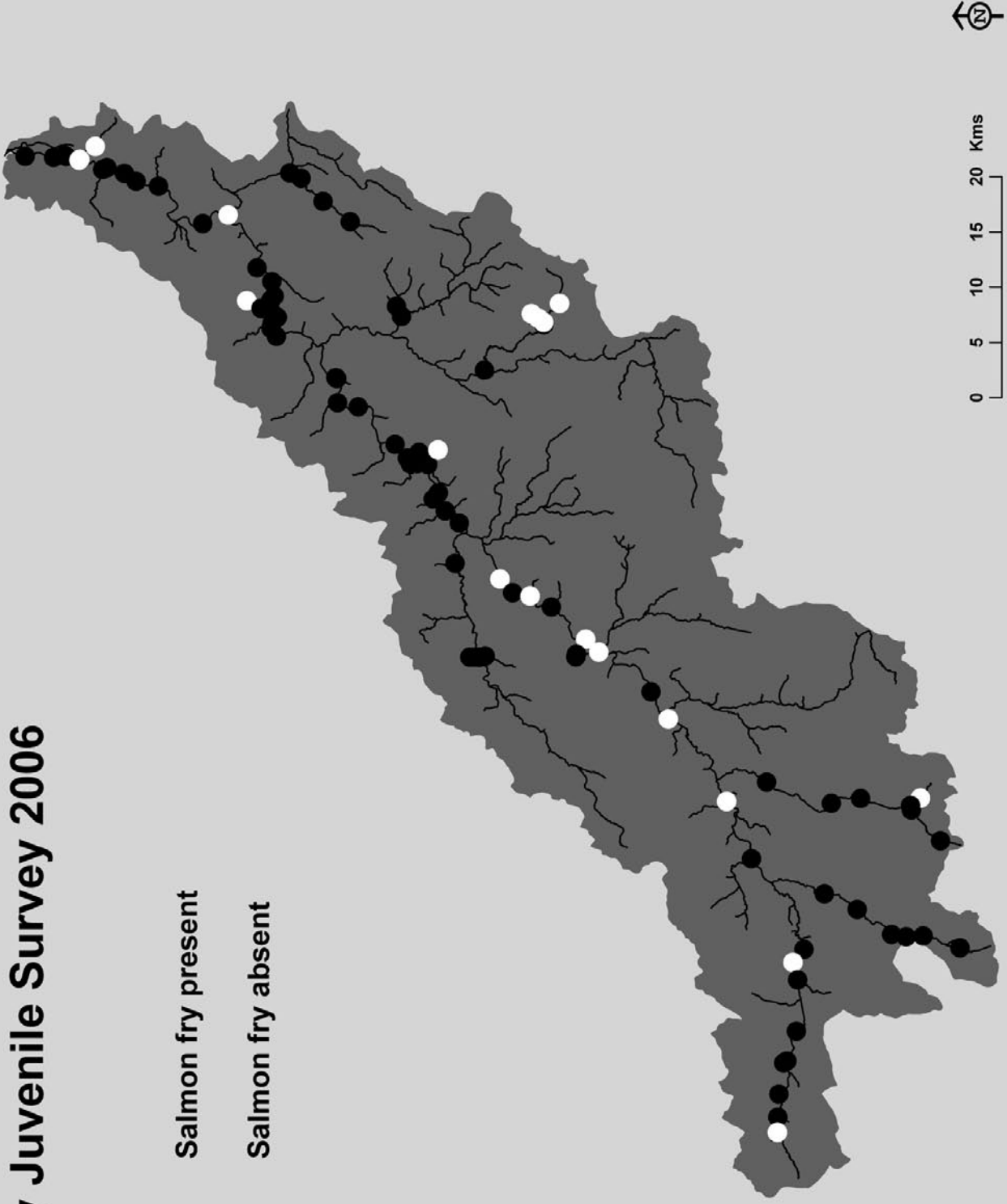


Figure 13. Distribution of salmon fry at 94 survey sites within the Spey catchment in 2006

Spey Juvenile Survey 2006

- Trout fry present
- Trout fry absent

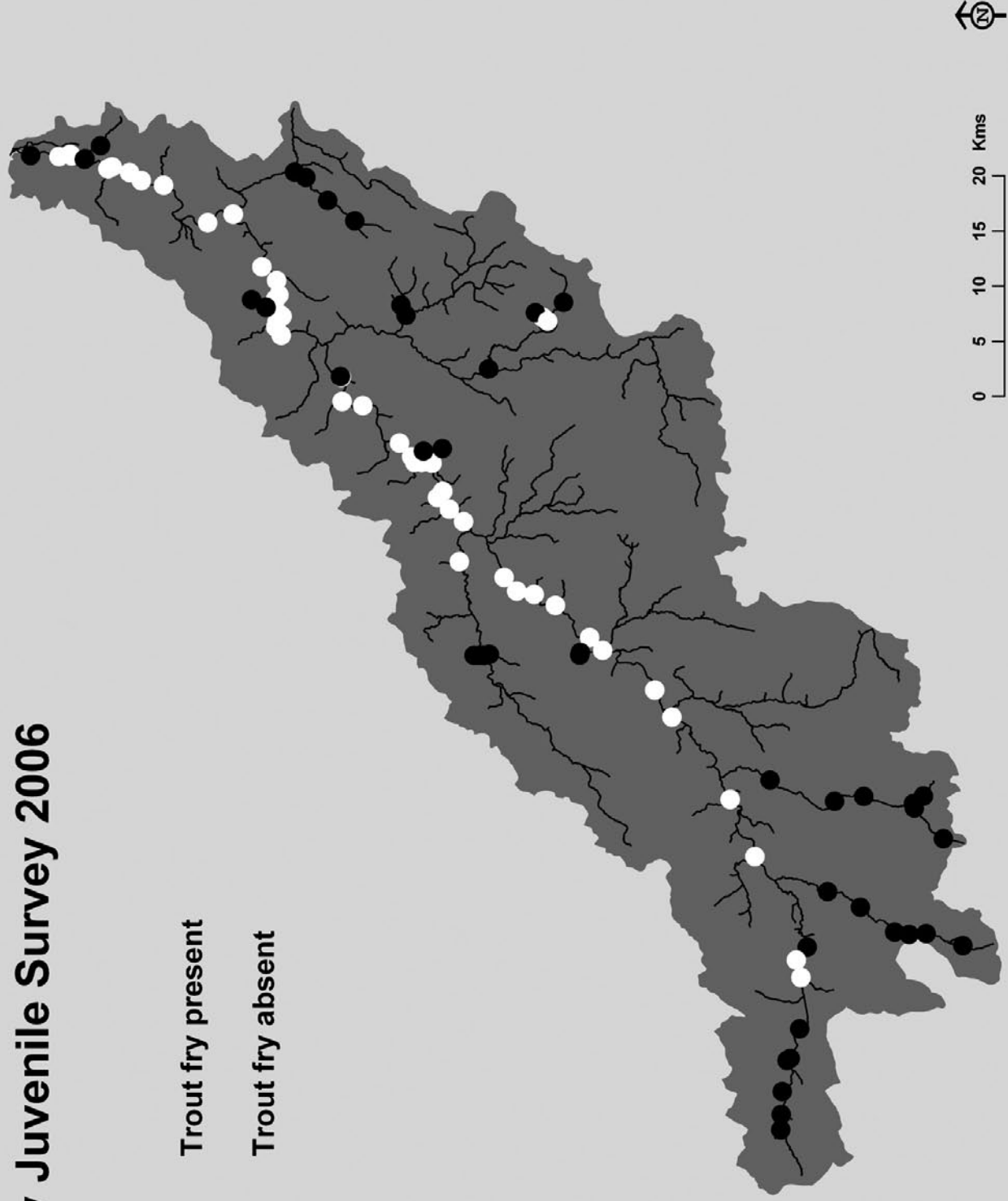


Figure 14. Distribution of trout fry at 94 survey sites within the Spey catchment in 2006

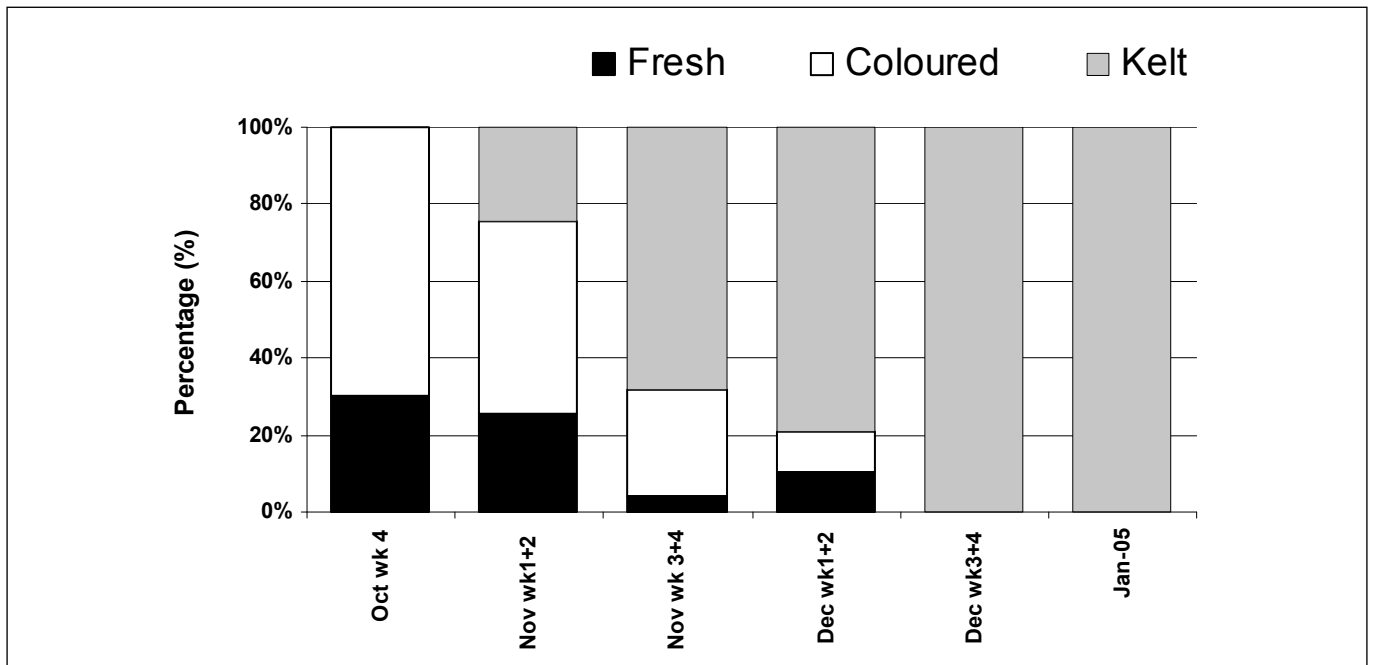


Figure 15: Proportion of fresh, coloured and kelts tagged during October 2004 to January 2005.

Proportions of fresh salmon and grilse varied throughout the tagging period ranging from 28% in late October and dropping to 11% by early December and 0% thereafter. In late October the remainder of the population consisted of coloured salmon. By November kelts had started to feature in the catch and this proportion of the catch grew steadily to reach 100% in late December. Although this pattern is not unexpected it is worth noting the reasonable proportion of fresh salmon in late October early November and that even in December a few fresh salmon still ascend the river.

During October to December 2005 a further 545 salmon and grilse were tagged. Again using photographs these were apportioned in to their condition, fresh, coloured or kelt. Figure 16 illustrates the percentage of each category present during two weekly sample blocks from 1st October through to 15th December 2005.

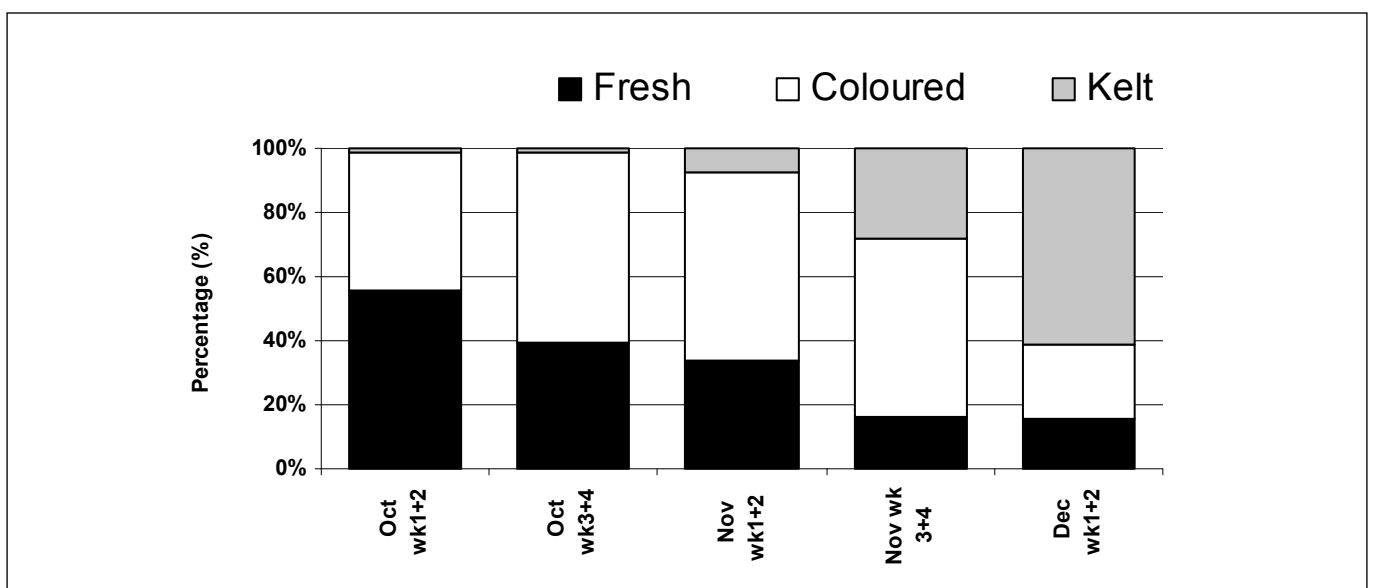


Figure 16: Proportion of fresh, coloured and kelts tagged during October to December 2005.

Similar to 2004 the results from 2005 indicate that the proportions of each category vary throughout the sample period. Initial tagging results in October indicate 55% of the salmon and grilse entering the river were fresh run. This percentage declined steadily as the tagging progressed to 5% in early December. Coloured fish dominated the remainder of the population in October and November. Some early spawned salmon (2%) were captured in October and this proportion increased steadily to 60% by early December.

Both the 2004 and 2005 datasets indicated differences in the relative size of coloured and fresh fish. Table 8 indicates the average length and weight for the two categories in 2004 and 2005. In both sampling periods the mean length and mean weight of the fresh was less than the coloured fish. Although some work on scales to determine the actual age structure of the tagged fish is required these result hint that more of the fresh fish are grilse.

Table 8: Mean length (cm) and mean weight (lb) for fresh and coloured salmon tagged during the Autumn salmon project 2004 -2005.

	2004		2005	
	Mean Length (cm)	Mean Weight (lb)	Mean Length (cm)	Mean Weight (lb)
Fresh	65	7	68	8
Coloured	74	12	72	10

Fifteen tagged fish were reported as recaptures. Eight of these were found as dead kelts during the winter, seven were recaptured alive in the following fishing season. The majority of recaptures (14) was found in the lower river which combined with evidence from previous tracking studies suggesting the lower mainstem and tributaries would be utilized for spawning.

One fresh salmon did not fit this pattern, White 1561, was tagged by Graeme Mackenzie on 30th Nov 2005 at Orton. This salmon was subsequently recaptured on the 11th Feb 2006 by Jim Stewart upstream from Grantown in the Lackie Pool. The fish captured a third time by Lewis Hay on the 16th May 2006 at Grantown. The fish was reported in good condition by both anglers. However, it does indicate that a few post season entrants will travel a considerable distance upstream.



Photo courtesy of Jim Stewart

Tagging continued under licence from 1st October 2006 to 15th December 2006 for a third and final year. Data is still under collection and results will be presented shortly.

5.3 Rotary Screw Trap (RST)

In 2005 the SRT successfully installed and operated a 6ft rotary screw trap at Brae Beat 2 on the lower Spey. The exercise was repeated in 2006 with the trap re-installed on the 1st of March and operated until the 24th June. Spring 2006 provide to be a good sampling period with only three sampling days were lost due to high flows or excessive weed build-up on the drum.

A second trap, with additional funding from SNH and the SFB, was purchased in 2006 and installed at Brae Beat 4 on 28th May and operated through to 24th June 2006. This second location also proved a good sampling spot with smolts captured soon after installation. Only two sampling days were lost due to weed accumulations.

Data from 2006 provided an interesting insight into the Spey salmon and sea trout smolt populations. Table 9 provides a summary of the catch at both traps during 2006.

Table 9: Fish species captured by the rotary screw traps at Brae Beat 2 and Brae Beat 4 during March to June 2006.

Fish Type	Number	Mean Length (mm)	Size Range (mm)
Salmon Smolt	5302	125	64 – 171
Salmon Parr	210	70	44 – 135
Salmon Fry	1	36	
Trout Smolt	255	158	84-242
Trout Parr	47	99	65-280
Finnock	3	346	300-390
Minnow	147	72	56-91
Lamprey	18	115	95-145
Eel	16	225	95-390
Stickleback	11	63	58-70

Salmon smolts were the largest group of fish with 5302 captured by both traps combined. Trout smolts were the next largest group followed by minnows. Eels, lamprey and sticklebacks were also caught. Other life-stages of salmon and trout such as parr and fry were also captured along with three larger finnock.

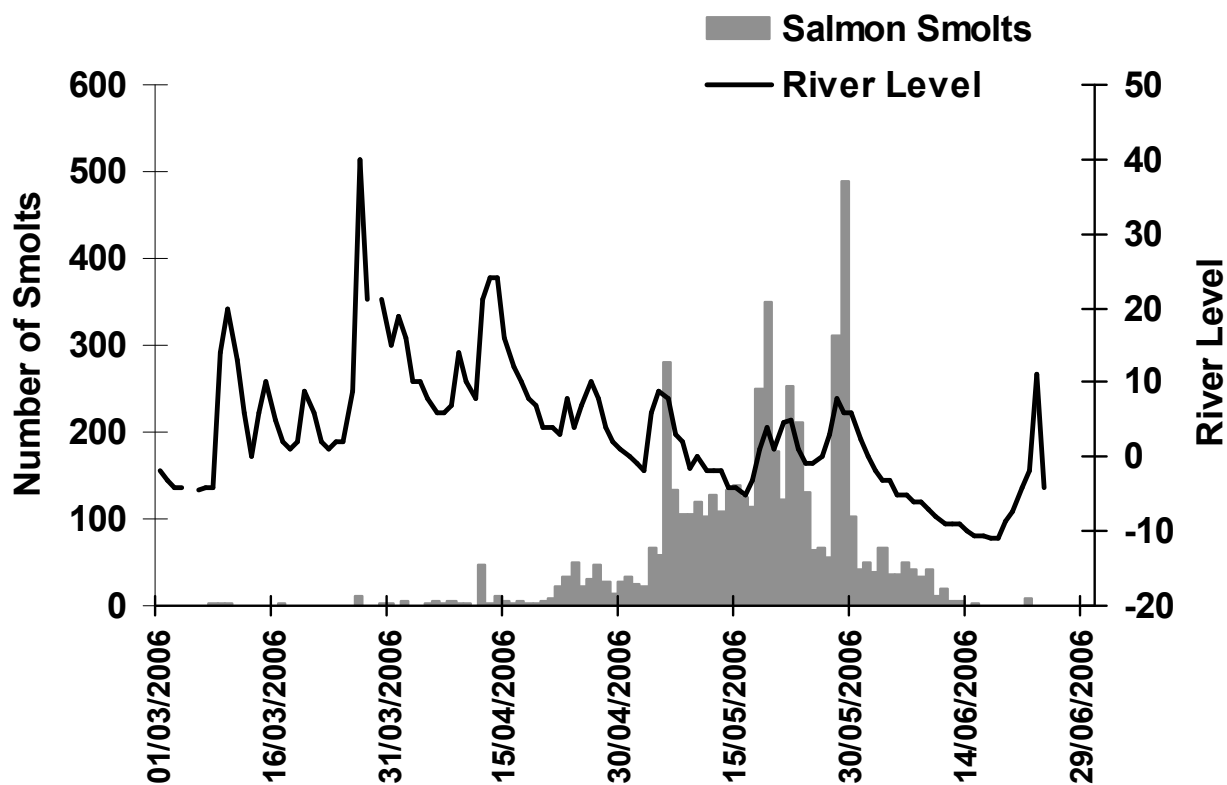


Figure 17: Salmon smolt capture and relative river level during 1st March to 26th June 2006 at RST1, Brae Beat 2.

Data from Rotary Screw Trap 1 (RST1) at Brae Beat 2 is presented in Figure 17. Salmon smolts were captured from 8th March until the 22nd of June 2006. However, it is clear that the majority of smolts migrate during late April through May. High capture rates were recorded on several occasions and these were often related to the period immediately after a spate.

Scale samples were taken regularly from the smolts and Table 10 indicates the age pattern determined.

Table 10: Percentage of each salmon smolt age recorded during 2006.

Age Class	S1	S2	S3	S4
Percentage (%)	3	57	37	3

Four age classes of salmon smolt were present within the catch. The population was dominated by two year old smolts (57%) with three year olds being the next most common (37%). Four year olds were rare (3%) and a small proportion of one year olds were also captured (3%).

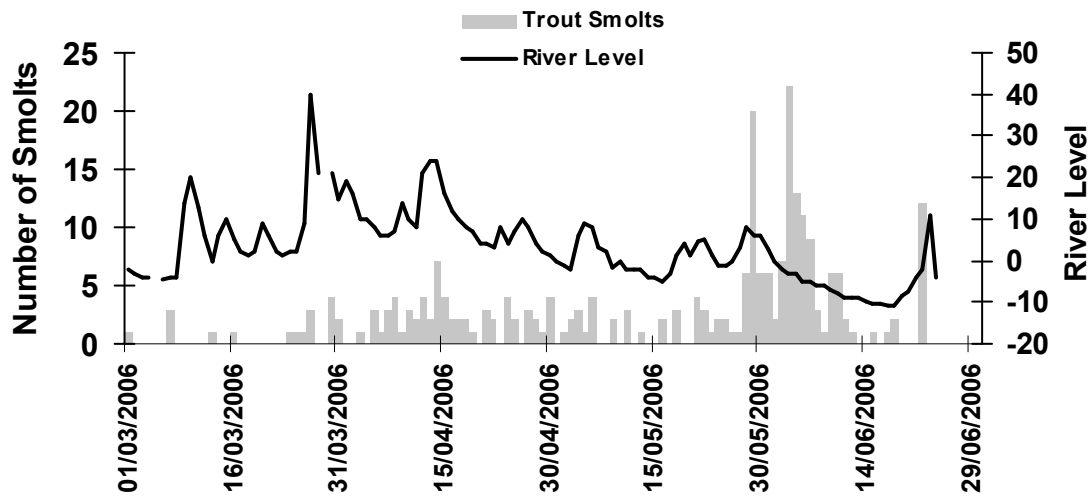


Figure 18: Trout smolt capture and relative river flow levels during 1st March to 26th June 2006 at RST1, Bare Beat 2.

Figure 18 illustrates the captures of trout smolts through the 2006 sample period. Much lower numbers of trout were captured than salmon but similarly higher numbers of trout tended to be captured shortly after spates. The peak period of capture appears to be late May and early June which is later than salmon.

Age classes of trout were also determined and are presented in Table 11. Two and three year old smolts were the most prevalent with a small percentage (8%) of four year olds.

Table 11: Percentage of each trout smolt age recorded during 2006.

Age Class	Tr2	Tr3	Tr4	Unknown
Percentage (%)	39	42	8	11

Prevailing weather conditions were good throughout Spring 2006 with no major damaging spates, so the traps operated well and provided a valuable insight into the smolt run. Current plans are to repeat the exercise with both traps stationed in the lower mainstem in 2007. In addition mark recapture studies will be developed further to determine the size of the Spey smolt output.

5.4 Sea Trout and Brown Trout Research

Trout tagging began on the Spey in 2005 when ghillies and anglers were encouraged to tag and release any sea trout captured as part of other tagging initiatives. However, in 2006 the River Spey Anglers Association (RSAA) successfully bid to the “National Lottery Awards for All” for funding to develop the trout tagging project further. This allowed the purchase of additional tagging guns and suitable Floy Tags to increase the numbers of trout tagged within the Spey.



(Peter Cosgrove)

Anglers were trained and equipped during spring 2006 and encouraged to tag any type of trout captured and released. In addition Spey Board staff conducted trout tagging during broodstock capture on the tributaries in 2005 and 2006.

Although some data has still to be returned initial figures indicate 60 brown trout, 50 sea trout and 13 finnock have been tagged so far. Most of the brown trout were captured and tagged in tributaries such as the Truim, Tromie, Feshie and Avon. Sea trout were generally from the mainstem and the finnock were mostly caught and tagged between Orton and the mouth of the Spey. Four recaptures have been reported so far.

Although only a limited data set three of the recaptures provide some insights into trout movements (Table 12). Brown trout, W1913, which was tagged in the Truim during broodstock collection in October 2005 re-appeared near Grantown the following Spring. Indicating that the fish spawns in the tributary but may utilize the mainstem during the spring and summer. In contrast brown trout, W1908, did not make such a long journey. Again this was tagged during broodstock capture in the Truim and re-captured by an angler fishing the Truim during May 2006 close to the original pool of capture. A sea trout kelt tagged at Delfur, W3033, made the longest migration of the project so far when it was re-captured in the North Esk!

Table 12: Recaptured tagged trout during 2005-06.

Trout	Tag	Release Date	Release Location	Recapture Date	Recapture Location
Brown	W1908	04/10/05	Truim	18/05/06	Truim
Brown	W1913	04/10/05	Truim	06/04/06	Grantown
Sea Trout	W3033	24/03/05	Delfur	06/08/05	North Esk
Sea Trout	W1068	12/02/05	Wester Elchies	19/02/05	Delagyle

5.5 Salmon Go To School

CASS LIFE project, the SRT is continuing to promote awareness of the Spey with its highly successful Salmon Go To School educational programme. Knockando, Carrbridge and Glenlivet Shools all participated the scheme during 2006. All three schools raised salmon fry in classroom aquaria and released them into nearby burns.



5.6 Thermal Discharge Project

The Water Framework Directive allows cooling waters from whisky distilleries to elevate water temperatures by a maximum of 1.50C. There are 25 distilleries within the Spey catchment, and in 2004 the SRT was contracted by SEPA, FRS and the whisky industry to investigate the thermal discharges of selected distilleries, and their impacts on juvenile salmon growth. The Thermal Discharge Project builds on earlier work carried out by the SRT on the River Fiddich in 1998-1999, which suggested that growth rates and smolt ages of juvenile salmon are accelerated downstream from distillery outlets, but this has little effect on the adult return time and age structure.

Monitoring of discharge temperatures continued a several distilleries within the Spey and Lossie catchments throughout 2006 and data was compiled and presented to the Thermal Discharge Expert Group. As a member of this group the SRT contributed extensively to the development of a derogation application for distilleries on the River Fiddich. This application will be submitted to the EU by SEPA and allows the distillers to continue production at current levels but during the derogation period they must make substantial improvements to their discharge temperatures.

5.7 Contract Surveys

The SRT have conducted juvenile surveys for neighbouring Fishery Boards and in particular routine surveys of the Findhorn catchment have been completed since 1997. A further survey of 27 sites was completed on the Findhorn during 2006. A report on the findings is in preparation for the Findhorn Fishery Board.

Part 6

Consultations

6.1 Paul's Hill wind farm

Monitoring water quality, invertebrate and fish populations has continued throughout 2006 under an agreement with the developers Paul's Wind Farm Ltd. Sediment monitoring was also initiated in the Allt Arder (Cally Burn). The construction of the wind farm was completed in 2006 and to date no adverse effects on salmon or trout populations have been detected in the burns being monitoringmonitored.

6.2 River works

During 2006 the SFB was consulted on 16 applications to undertake river works. In agreement with SNH and SEPA, the standard recommendation is to discourage works which disturb the river bed during October – May, when the risk of destroying incubating salmon eggs and juveniles is greatest.



Construction of the wind farm at Paul's Hill
(Bob Laughton)

Part 7

Publicity

7.1 FishSpey Website

Following the successful establishment of internet-based promotion of salmon fishing on the River Tweed, the SFB has facilitated discussions between proprietors, angling associations and hotels to establish a similar initiative for the Spey, FishSpey (www.fishspey.co.uk). In 2005 the SFB established a sub-group to manage the pilot project.

In October 2006 responsibility for the Fishspey Website passed from the SFB to the Spey Fishing Trust.

7.2 Briefings and SFB Website

The SFB continues to produce Briefings which are circulated to 600 individuals and organisations including proprietors, angling associations, ghillies, hotels and tackle shops. These are also available on the SFB website (www.speyfisheryboard.com), along with other pertinent information.

The screenshot shows the FishSpey website homepage in a browser window. The browser address bar displays <http://www.fishspey.co.uk/>. The page features a navigation menu with links for 'Getting Started', 'Latest Headlines', 'motorcycle info', 'joblog', and 'TV'. The main header includes the 'FishSpey' logo and a navigation menu with links for 'Salmon Fishing', 'About the Spey', 'When to fish', 'Where to fish', 'Beats', and 'Map of river'. A sidebar on the left contains sections for 'Current Conditions', 'Booking Fishing', 'When You Come Getting here', and 'FishSpey site guide'. The main content area features a 'SPEY FISHERY BOARD NEWS UPDATE - *GYRODACTYLUS SALARIS*' section, followed by a 'Fishing on the Spey' article. The article includes an aerial view of New Bridge, Grantown, and a photo of a ghillie netting a salmon at Craigellachie. A sidebar on the right contains an 'About this web site' section and a list of features available on the site.

FishSpey – Salmon Fishing – Home

http://www.fishspey.co.uk/

Getting Started Latest Headlines motorcycle info joblog TV

FishSpey

- The definitive guide to fishing on the River Spey
- See current availability and book online today
- For telephone enquiries please ring 01573 470612

Powered by FishScotland

SPEY FISHERY BOARD NEWS UPDATE - *GYRODACTYLUS SALARIS*

Fishing on the Spey

The River Spey is the home of speycasting and one of Scotland's big four salmon rivers. It has the third largest drainage area after the Tay and Tweed and is the second longest after the Tay. However, its major attraction is its size and the strength of its stream - in the middle and lower river it falls on average 12 feet per mile - the greatest of any British river.

An interesting aside, the Spey, unlike most British rivers, does not have a sizeable town at its mouth. The river is snow fed from the Cairngorm Mountains and in a good year this can mean the river staying high until early June.

The ghillie nets a salmon at Craigellachie

About this web site

Many of the Spey's beats are included on this site so you can read about each one, see its current fishing availability and book fishing permits online or by telephone.

In particular you have free, unlimited access to:

- **Daily river levels** - updated twice daily during the salmon season
- **Daily salmon catches** - updated automatically on ghillie notification
- **Rods available** - updated hourly
- **Online booking** - with immediate issuing of permits

7.3 Talks and Presentations

In 2005/2006 SFB and SRT staff gave the following talks and presentations:

- 16th January: Banff Rotary Club;
- 19th January: River Spey Anglers' Association AGM, Elgin;
- 15th-16th March: NPP visit by Finnish delegates, Speyside;
- 26th April: Edinburgh University MSc Resource Management class, Crown Estate, Tomintoul;
- 3rd-5th May: NPP visit by Swedish delegates, Speyside;
- 4th May: Edinburgh University MSc Resource Management class, Crown Estate, Tomintoul;
- 8th-12th May: NPP visit to Norway;
- 27th May: Glenlivet Open Day;
- 3rd-4th August: NPP visit to Finland;
- 20th August: Findhorn Bay DSFB;
- 18th-22nd September: NPP visit to Sweden
- 25th-28th September: CASS Life Study Tour & presentation, Denmark;
- 26th October: Spey Users Group. Grantown on Spey;
- 2nd November: River Spey Anglers' Association meeting, Elgin;
- 8th November: CASS Life Partners' Meeting, Perth;
- 5th December: River Spey Ghillies annual meeting with the SFB/SRT, Ballindalloch

7.4 Committees

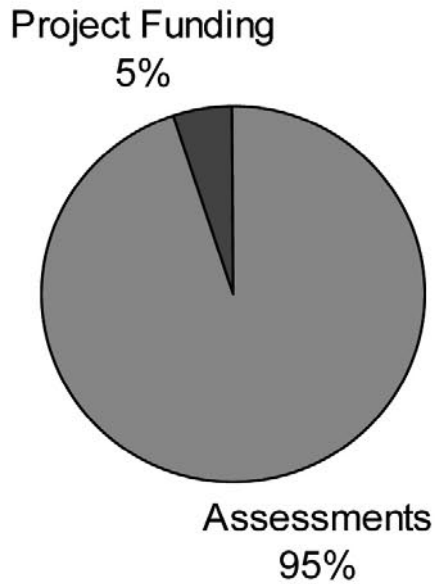
In 2005/2006 SFB and SRT staff were members of the following committees:

- SFCC Management Committee
- RAFTS Management Group
- RAFTS Executive Committee
- SEERAD Trusts Funding Committee
- Cairngorms Local Biodiversity Action Plan Management Committee
- Findhorn DSFB
- Thermal Discharge Project Expert Group
- Scottish Executive Fisheries Forum
- Moray Firth Partnership Fisheries Action Group
- Spey Catchment Steering Group
- Scottish Executive Seals Forum
- Scottish Seals Working Group
- Seal and Salmon Research Programme Advisory Board
- Institute of Fisheries Management Scottish Branch Committee
- Northern Periphery Programme Management Committee
- Cairngorms Integrated Land Management Forum
- Feshie Management Plan Consultation Group

Part 8

Financial Summary 1st October 2005 - 30th September 2006

INCOME (£419,381)



EXPENDITURE (£418,651)

