THE RIVER NITH DISTRICT FISHERY BOARD

MANAGEMENT REPORT AND REVIEW
16 MAY 2005 – 15 MAY 2006

River Nith, Blackaddie Bridge, Sanquhar.

THE NITH DISTRICT SALMON FISHERY BOARD
MANAGMENNT REPORT AND REVIEW 2005 SEASON

Acknowledgements

Many organisations and individuals have contributed to the well being of the river during the past year. In particular, thanks are due to:

The Association of District Salmon Fishery Boards

Scottish Environment Protection Agency (David McNay)

Scottish Natural Heritage (Stuart Graham)

Galloway Fisheries Trust (Jamie Ribbens)

Nith Fishing Improvement Association

Dumfries and Galloway Constabulary

Thomas Florey
Chairman

1. Constitution and Area

The Board for the year prior to the Triennial elections comprised:-

Chairman	Sir David Landale	
Lower Proprietors	Ronald Clark	Drumburn
	John Kingan	North Corbelly
	Anthony Mumford	Caerlaverock Estate
Upper Proprietors	Mrs Sophy Weatherall	Cowhill Estate
	David Gwyther	Buccleugh Estates
	Raymond Marshall	Dumfries & Galloway Angling Association
Lower Co-optees	James Cowan	Netting Representative
	Robbie Cowan	Netting Representative
Upper Co-optees	Michael Keegans	Angling Representative
	Thomas Florey	Angling Representative
	Ivor Hyslop	Angling Representative

Additional Members without voting power

	Jamie Ribbens	GFT
	David McNay	SEPA
	Tim Dawson	SNH
Officers	Roderick Styles	Clerk
	RST Accountants	Auditors
Staff	James Henderson	Fishery Director
	Barry Young	Senior Bailiff
	Duncan Thomson	Bailiff
	Scott Bazinet	Seasonal Bailiff
	Ian Lindsay	Seasonal Bailiff
	Glen Henderson	Student

The Annual General Meeting took place on 16th February 2006 after which (as is required by governing legislation) the Board demitted office and election procedures were undertaken. The Board formed and which will hold office for the next three years comprises:-

Chairman	Mr Thomas Florey	
Lower Proprietors	John Kingan	North Corbelly
	Robbie Cowan	Caerlaverock Estate
	Ronald Clark	Drumburn
Upper Proprietors	Sir David Landale	Dalswinton Estate
	David Matthews	Blackwood Estate
	Mark Coombes	Buccleuch Estates
	Alan Bryden	Dumfries & Galloway Angling Association
Lower Co-optees	Wally Wright	Netting Representative
	Tom Brown	Netting Representative
Upper Co-optees	Mike Keegans	Angling Representative
	Ivor Hyslop	Angling Representative
	Brian Lord	Angling Representative
	Gordon McGregor	Angling Representative

Its main areas comprise the principal River System of the River Nith and all its tributaries including those parts of the Solway Firth that fall within the jurisdiction of the Nith District Salmon Fishery Board limits.

2. Invitees

In addition to the statutorily elected Chairman, lower proprietors and upper proprietors, the Board has invited representatives from the Scottish Environmental Agency (SEPA) and Scottish Natural Heritage (SNH) and the Galloway Fisheries Trust (GFT). The Board has also successfully made representations to Dumfries and Galloway Council and East Ayrshire Council to be considered as Consultees in respect of any works undertaken in the region that would or could have impact on watercourses within the catchment.

3. Research and Improvement

In 1991 the Board, together with Nith Fishing's Improvement Association (NFIA) instructed that a research report be prepared by West GFT (now GFT) in connection with the ecological and biological condition of the catchment and as a result of the preparation of that Report the Board together with FIA formed the Nith Habitat Enhancement Committee (NHEC) who are in the course of undertaking a project in respect of the enhancement of the ecology of tributaries with a view to improving natural regeneration and restocking of flora and fauna to encourage the natural regeneration of salmon and sea trout. NHEC has been subsumed into the Board as its environmental and habitat department. In addition, the Board has built and operates its own hatchery.

4. Staff

The Board employs a Fishery Director, two water bailiffs and two seasonal bailiffs, In addition the Boards bailifing team were supported by a work placement student during the summer months. The Fishery Director is qualified in the diploma of Institute of Fisheries Management, Basic I.T. and Management. He graduated in the spring of 2006 from the Open University, obtaining an Honours degree in Environmental Studies. The two water bailiffs have obtained the certificate of the Institute of Fisheries Management. The Fishery Director and one water bailiff are suitably qualified in the use of chainsaw equipment for Habitat Enhancement Work. James Henderson and Barry Young are qualified to Team Leader Status in electrofishing techniques to Scottish Fishery Coordination Centre (SFCC) standard and Duncan Thomson is qualified SFCC team member standard. Members of bailiffing staff have undertaken a course in 4x4 driving techniques. All staff are qualified in basic first aid at work and members of bailiffing staff are qualified in life saving techniques.

5. Objectives

The Board is constituted under the Salmon Fisheries Legislation commencing in the 1860s as subsequently amended and presently stated in the Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003. The Board is empowered under the 2003 Act and other legislation to do such Acts as is considers expedient for the protection, enhancement and conservation of stocks of salmon and sea trout and the general protection and enhancement of the fishery itself.

The Board's principle objectives are therefore to preserve, protect and enhance stocks of migratory salmonids in the Nith catchment and to preserve, protect and enhance the fishery.

The Board's principle objectives as set out above are likely to be significantly widened as a result of the Water Framework Directive and in addition in terms of a policy being promoted by the U.K. Government towards integrated Catchment management. The Fisheries Director attends regular meetings convened by SEPA concerning the development of the Nith Catchment Management Plan. It is important that the Board, in responding to this wider remit, should never lose sight of its basic principle objectives but on the other hand should seek to promote these through exercise of its anticipated rights and obligations as a "Competent Authority" under E.C. Directives.

Specific angling interests are from time to time dealt with by an entirely separate body, the Nith Fishing's Improvement Association, an organisation comprising members some of whom are also members of the Board.

6. How the Board Works

The Board itself, constituted by voluntary non-remunerated members, meets three to four times a year. It reports to proprietors at the Annual General Meting once a year at which the proprietors meet for the purposes of considering the report and audited Accounts, NHEC business is now convened at Board meetings.

Day to day responsibility for administration of the Board rests with the Clerk who reports to the Chairman and liaises with the Fishery Director on a regular basis.

The Fishery Director and Bailiffs are responsible for the protection and enhancement of the stocks of fish and these measures undertaken include anti-poaching enforcement measures, catchment patrol, sea patrol, pollution observation, conducting fishery research, providing advice on best practices in respect of civil engineering works that might impact upon the river systems and other general responsibilities. Work particularly during the summer months can involve long nocturnal hours. The liaison with proprietors, keepers and river watchers is a priority.

The Fishery Director and Bailiffs also run the hatchery and principle duties include collection of brood stock, maintenance of salmon ova, rearing fry and releasing fed fry into suitable stream areas.

7. Funding

The Board under its legislative powers, derives its income each year from all proprietors of Salmon fishing's in the district. All assessments are based on rateable value as calculated by the Local Authority Assessors for the respective beats and a sum determined by the Board is levied against all salmon fishing proprietors to meet the assessment needed to fund the Board. In addition the Board and NHEC have received direct or indirect financial and grant assistance from:-

Scottish Natural Heritage
Hunter Boot Ltd
Invicta Trout

The Board also received donations for its hatchery operations from Nith Estuary Haaf Netting Association and Dumfries and Galloway Angling Association.

The Board is enormously grateful for the support that it receives from the above and other sources.

The Board also receives consultation income from various third parties (such as civil engineering contractors and others) who require information and guidance from the Board in connection with any work to be carried out that might impact upon the River system under the Board's jurisdiction.

8. Constitutional Evolution

The Board has, for many years, comprised a chairman and representative of lower and upper proprietors. The upper members represent angling proprietors while lower members represent coastal and estuarine proprietors involved in net fishing.

Even prior to recommendations from the Nixon report (Scottish Salmon Strategy Task Force, 1997) the Board extended invitations to SNH and SEPA. Although these invitees do not have voting powers their attendance at meetings has been substantially beneficial since the inception of this arrangement in 1996.

9. Fish Species Present in the Nith

The Nith is similar to many Scottish rivers and supports only a limited number of fish species. These include Atlantic salmon (***salmo salar***), trout (***salmo trutta***) as migratory Sea trout and as resident Brown trout, European eel (***anguilla anguilla***), pike (***esox lucius***), minnow (***phoxinus phoxinus***), stoneloach (***neopmacheilus barbatulus***), three spined stickleback (***gasterosteous aculeatus***) and Grayling (***thymallus thymallus***).

Three varieties of lamprey are also present, sea lamprey (***petromyzon marinus***), river lamprey (***Lampetra fluviatilis***) and the fresh water resident brook lamprey (***lampreta planeri***). In recent years a number of local lochs have been stocked with rainbow trout (***oncorhynchus mykiss***) that have subsequently found routes

into the Nith itself. However, there is no evidence that they have established a breeding population. This trend of stocking rainbow trout into ponds is of concern to NDSFB due to the predatory nature of this species of non indigenous fish.

10. Fishing methods

Four methods of salmon and sea trout fishing are operated in the Nith District, fixed engine on the coast, haaf netting on the coast and on the tidal river estuary, net and cobble in the river Cairn and rod and line in the river.

Most of the angling on the Nith is concentrated from Sanquhar to the river mouth. However, salmon are taken further up stream and also from a number of tributaries most notably the Cairn. The current season extends from 25th February to 30th November and angling for salmon and sea trout is not permitted on Sundays in Scotland by law.

11. Salmon and Sea Trout Populations

Both salmon and sea trout are anadromous fishes – that is to say they spawn and undergo their early lives in freshwater but experience most of their growth at sea. In Scotland, a period of sea growth is pre-requisite for the attainment of sexual maturity in hen salmon, but not for cocks, a proportion of which first contribute to the spawning act as mature parr. The dynamics of sea trout populations are more complex in that both sexes may attain sexual maturity while in fresh water. However, this tendency to early maturation is much more strongly developed in cock trout.

Rod and line fisheries for salmon are based upon the interception of sea run adults returning to spawn. The interception usually takes place in rivers of origin but a few fish, especially those entering fresh water many months before spawning, may be caught during the course of temporary excursions into non-native rivers. Exploratory behaviour of this sort is seen to a greater extent in sea trout that may also use non native fresh and estuarine waters for feeding and over wintering purposes. However, as with salmon, the abundance and timing of spawning migration are the primary factors that determine the availability of sea trout to the fisheries.

In relatively large rivers like the Nith, the seasonal characteristics of the fisheries vary and the extent of the variation is greater for salmon than for sea trout. Generally speaking, it is believed that the earliest running salmon are derived from and home to the upper part of the river and the later running fish to the lower. There is increasing genetic evidence that the homing behaviour leads to a degree of reproductive isolation among various main groups of fish that may therefore be regarded, for management purposes, as separate self-sustaining populations. Within each population, it is generally found that the higher the sea age the earlier the seasonal date of river entry by Salmon.

12. Marine pressures/International Impact

It has been known for many years that long-term changes take place in the numbers and seasonal availability of salmon. When such changes take place, their effects tend to be widely felt and there is increasing evidence that alterations in marine climate may lie behind them. The slower fish grow, the more vulnerable they remain. Similarly, the faster fish grow, especially in the spring, the earlier they are likely to mature and return. Because different populations of salmon appear to migrate to different parts of the North Atlantic, the effects of changes in marine climate may differ among the various groups of fish. The result for the fisherman may be a radical alteration, lasting for much of his fishing lifetime, in the numbers and seasonal distribution of the resource available to him. Growth and survival opportunities for salmon are currently poor for much of the North Atlantic. This conclusion is especially true in the North West Atlantic where many of the older sea springers complete their growth cycles.

Current insights into the likely causes of both short and long term changes in the abundance and structure of Atlantic salmon resources are largely based on the work of British, Norwegian and North American scientists as discussed at the regular meetings of the ICES (International Council for the Exploration of the Sea) Working Group on Atlantic Salmon.

In addition to changes in marine climate, the Working Group has recently drawn attention to other factors such as predation by seals and the side effects of marine fisheries for other species. So far as the Nith is concerned, the key requirements during the current lean period are to ensure that smolt production is not limited by lack of spawning adults. The risk of such limitation is greatest for the populations of early running salmon that currently spawn mainly in the upper catchment of the river.

13. Angling Availability

There are five angling associations on the River Nith as follows: -

Dumfries & Galloway Council (Burgh Anglers Association)
Dumfries & Galloway Angling Association
Mid Nithsdale Angling Association
Upper Nithsdale Angling Association
New Cumnock Angling Association

The public can also easily gain access to the other beats on the river. A trend, which has been developed by many owners over recent years, is to allow for evening sea trout fishing at a very reasonable cost to the public on various beats of the Nith. This has proved to be very successful financially for those beats letting the fishing. It has also been successful in dissuading poachers from settling in to a night of crime on an otherwise deserted beat. The Nith provides more public access to angling than many other major Scottish rivers.

14. Water Quality and Riparian Habitat

Clean and well-oxygenated water is obviously of paramount importance in safe guarding fish stocks of all kinds within the Nith. The quality and quantity of water in the Nith catchment is monitored by SEPA, formerly the Solway River Purification Board (SRPB) and apart from a few isolated pollution incidents the quality of the river is considered excellent.

15. Fish Access

Access to spawning areas is of paramount importance for salmon and sea trout to complete their life cycle successfully. There are few obstructions to fish passage on the Nith and those that exist are largely natural waterfalls. The Board has initiated several management options including stocking with juveniles above these impassable obstructions to try to improve smolt output. These stockings from Hatchery reared fry are easily monitored. The results obtained from electrofishing are not massaged in any way by natural stocks.

Other threats to adult access to spawning areas were recorded on a number of burns due to road bridge construction and natural blockages such as log jams over the course of the year. These were dealt with and removed as appropriate. Discussions with road departments have resulted in securing bridge constructions that do not compromise adult access on a number of tributaries. Discussions now take place with Contractors prior to their moving onto site with full consultation with the Fishery Director. The District Salmon Fishery Board has good liaison with Dumfries & Galloway Council Roads and Bridges Department to ensure future consultation on any projects on or near to the watercourse.

16. Riparian Habitat Assessment and Management

Management of the riparian zone is an area of interest that has developed rapidly during the last decade. Pioneering work on the Tweed has illustrated the advantage of reinstating bankside vegetation and improving in-stream cover for fish. In addition there is clear evidence that a well vegetated and maintained riparian zone offers considerable advantages in terms of shading, a source of food production and habitat for salmonids. There are also additional benefits to the watercourse such as improved bank stability and more varied habitat for other wildlife. To this end the work previously carried out by the Nith Habitat Enhancement Committee, which was formed in July 1995, continues under the guidance and control of the Board with help from invitees from Nith Fishing's Improvement Association. The Committee comprises of four representatives from Nith Fishing Improvement Association Committee and four representatives from Nith District Salmon Fishery Board.

The Nith Habitat Enhancement Committee (NHEC) continues to carry out habitat enhancement work throughout the Catchment. Money is ingathered on an annual basis and the project is financed from year to year. All work conducted by NHEC is monitored to evaluate the benefit of the project. The work carried out by NHEC is of long term benefit and the river is unlikely to see the benefit of this organisation's work in the short term.

Reference is made to the enclosed report of NHEC at page 19 of this report.

17. Juvenile Salmon and Trout Populations

The Nith Fishing's Improvement Association commissioned a report, carried out by Dr. Alistair Steven, BSC PHD of Galloway Fisheries Trust and started a programme of juvenile surveys in 1991. The aims of this initiative were to determine the distribution and density of juvenile salmon and trout within the Nith, and use this data to estimate smolt output, monitor changes in fish populations and identify weak areas of the catchment in terms of low juvenile densities. The report showed that in general juvenile salmon and trout are well distributed throughout the catchment and often present in high densities. Poorly stocked areas are also evident particularly above physical obstructions such as Shinnel falls and Rouken Bridge on the old water of the Cairn. Ongoing survey work to assess juvenile population densities has continued on an annual basis. Galloway Fisheries Trust in the past carried out this work but in recent years the District Salmon Fishery Board bailiffs have also conducted their own electrofishing surveys. The Boards own staff are qualified, equipped and capable of conducting these research surveys.

18. Hatchery and Stocking

Following Galloway Fisheries Trust juvenile salmon and trout survey in 1991 it was evident that there was a need to produce hatchery stock to stock areas that were devoid of salmonids. To meet that need the Nith District Salmon Fishery Board established a Hatchery at Blackwood Estate in 1994. This Hatchery has the capacity to hold brood stock and produce ova and resultant fry for the catchment. Invicta Trout, Newtonairds Fish Farm, supplies all feed for fed fry.

It is well documented that salmon return to the rivers and tributaries of their origin to spawn. Recent research by Verspoor (1995) looking into the genetic variation among salmon populations in the River Dee (Aberdeenshire) indicates that each tributary may contain a separate breeding population. It is likely that the Nith Salmon populations are similarly structured. This has implications for the management of the stocks. The collection of brood stock from certain tributaries and the planting out of fry in other parts of the river could be creating unnecessary havoc with the natural genetic mix. All stocking conducted by the Nith District Salmon Fishery Board is the subject of follow-up electrofishing survey work to ensure survival of the fry. In general, fed fry exhibit good survival rates even when introduced to more extreme areas of the catchment. Fry are stocked into suitable tributaries at a stocking rate of 3 to 5 fry per square metre. Although many anglers, gillies, proprietors and fishery biologists acknowledge that stocking can be used to supplement salmon stocks, difficulties arise in measuring the returning rates of the adult stock to the fishery. However, stocking within the Nith should not be implemented in isolation but in combination with other techniques reducing obstructions, habitat management predator control and so on.

There was released from the hatchery for this year 672,853 fed salmon fry and 51,347 fed sea trout fry.

Fry were planted out at the following locations:-

122,771	Euchan Water
120,499	Shinnel Water
30,259	Burnsands Burn
28,780	Kirkburn (Carron)
102,904	Old Water (Cairn)
6,357	Dalwhat (Cairn)
113,721	Kello
35,720	Cample
72,022	Nith (Thornhill)
10,000	Glenmidge Burn
30,000	Polneul Burn
11,177	Nith (Waterhead)
19,995	Mennock Water
19,995	Spango Water

19. Sea Trout/Brown Trout

Salmon and trout do not exist in isolation and inevitably interact with other species. Salmon and trout at all life stages represent a food source for predators. The main predators in the Nith system include pike, otter, heron and mink within the river, seals which primarily forage around the river mouth and along the coast, and the goosander, and cormorants which migrate between the sea and river depending on the season. Ospreys also capture smaller salmonids.

20. Predators - Statistics

Counts of goosander and cormorants were conducted on the mainstem and a number of tributaries during the early 1990's and numbers varied considerably both seasonally and from year to year. These counts indicated that large numbers of goosanders and cormorants were often present in the lower Nith during the early months of the year. During the summer month's numbers dropped considerably and were predominantly female birds with young. While in autumn numbers began to increase again as male and immature birds returned to the river.

A licence is applied for annually from the Scottish Executive to cull avian predators. This policy is carried out taking account of best practice and in consultation with SNH.

The Bailiff Staff continues to follow Board approved policy on mink control. 32 mink were captured during the period January to April inclusive; this is conducted at suitable times when the river is not in spate.

21. Exploitation

Early work by Shearer (1988) suggested that in summer between 5% and 8% of the returning adult salmon are captured by anglers. However, because early running spring salmon remain in the river for longer they may be subjected to higher levels of exploitation. There is some limited evidence from radio tracking (Laughton, 1991b) and mark recapture studies (Davidson, Cove, Milner and Purvis, 1996) to support this suggestion.

There is increasing interest in Catch and Release as a conservation policy for salmon stocks. Although concerns have been raised that this is damaging to the fish and may compromise survival, a recent study by John Webb (Biologist with the Atlantic Salmon Trust) on the Aberdeenshire Dee refutes this. His work clearly indicates that spring and early summer salmon caught and returned by anglers, provided they are handled with care, can complete their spawning migrations successfully (Webb, 1998).

22. Salmonid Stocks

Juvenile Stocks	Our surveys show that in general stocks of juvenile salmonids are at a satisfactory level in a majority of the catchment. There are, however, some tributaries in which numbers are well below optimum levels. Closely monitored trial stockings will help to determine which of these tributaries require Habitat Enhancement measures before their potential can be realised.
Spring Fish	The Nith does have a run of spring fish (those fish available to be caught from 25th February to 30th April) however numbers of these fish are very much reduced from what they were in the 1960s. A small number continue to be caught each year despite an apparently low fishing effort. It is essential this genetic core be safeguarded if there is to be any chance of an increase in its numbers.
Grilse and Autumn Fish	The availability of grilse and summer salmon plays an important part in providing unclouded fishing for local rods before many visitors come to the Nith for the autumn fishing. Current stocking policies appear to be helpful in sustaining this element of the Fishery.
Sea Trout	The Nith has no fish farms close to its estuary or adjoining coastline and has not suffered the near extinction of its stocks experienced by many Scottish, especially West coast, rivers. Considerable annual variations do occur in the Sea Trout catch. The Nith System has in common with other river systems draining to the Solway Firth experienced over the last three years a noticeable and concerning downturn in the numbers of sea trout caught by all methods. The Board is monitoring the situation closely with a view to deciding upon

what courses of action it might to try to stem the apparent decline in the sea trout population within the Nith system.

23. Engineering Works

Kier Mining

Kier Mining continues to operate the opencast coal mine at Greenburn, New Cumnock. Whilst their current operations do not interfere with the River Nith, Kier are interested to know what impacts their activities are creating in the surrounding environment. Consequently Kier have commissioned NDSFB to conduct annual electrofishing surveys in the section of the River Nith which borders their site. The results from this year's survey are positive and prove no adverse environmental impacts have been manifest over the previous 12 months.

House of Water OCCS

Scottish Coal's site at House of Water has been "mothballed" temporarily. The site is still being monitored and all discharges from settlement lagoons continue to be monitored. It is envisaged that coal extraction will re commence in the spring of 2007. However all commitments and reinstatement works on the River Nith Diversion are being met by Scottish Coal. These include the habitat creation works for parr aged fish and the planting of the Riparian zone. Electrofishing data for this year again indicates exceptionally high densities of fry aged fish. Spawning was very good over the entire length of the new channel.

Glenmuckloch OCCS

ATH Resources are a mining company which have taken over the site at Glenmuckloch at Kirkconnel. The site was formerly owned by Scottish Coal and was taken over by ATH with planning permission. ATH contacted NDSFB to see what environmental monitoring would be required to measure the impact of their operations in the Nith catchment. NDSFB have agreed to conduct annual electrofishing monitoring for all ATH's operations which include 2 open cast sites in the Nith catchment in East Ayrshire, a coal conveyor and their new site at Glenmuckloch.

ATH Coal Conveyor which crosses many water courses all of which are monitored by NDSFB.

GMJV

Galliford and Morgan Utilities contacted NDSFB during the spring of 2006 regarding a proposal to lay a new water main under the Kello Water. These works could have potentially adversely impacted on salmonid species of fish, both in the immediate area of the works and beyond. NDSFB worked with the Scottish Environment Protection Agency and the contractors to design a method of working which would minimise any impacts on the aquatic environment. The Board monitored these works closely and can report that no impacts were detected in populations of fish in the lower Kello Water.

Windfarms

NDSFB are consulted regarding any windfarms that are proposed within their area of jurisdiction. Currently the Board are working on 11 wind farm proposals. These types of development can impact on the aquatic environment due to their requirements to construct road infrastructure and associated cabling. The Board have been encouraged by the commitment that windfarm developers have given to protecting the aquatic environment and therefore the salmonid species contained within them.

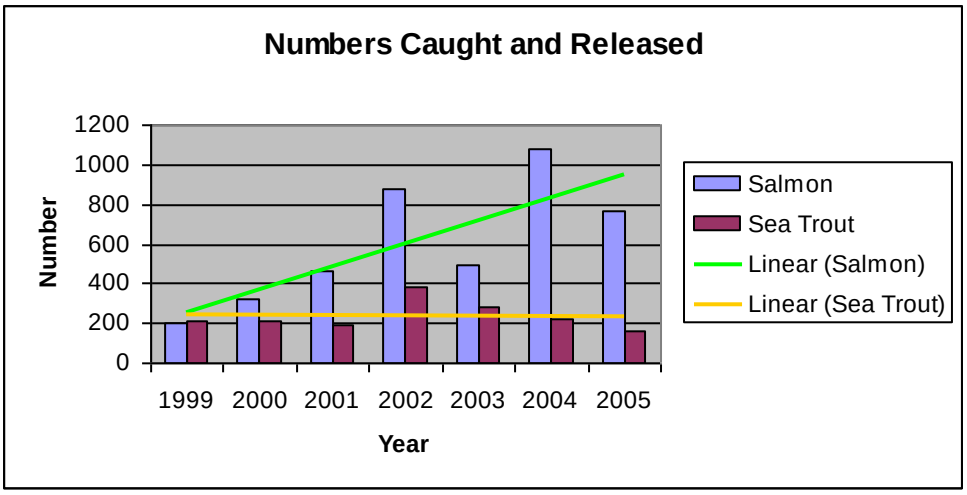
24. Illegal Fishing

Statistics of incidents are provided at page 18 of the report.

25. Exploitation

Catch and Release

Following on from the comments about the stock of spring fish the Board has recommended to all proprietors and anglers to adopt catch and release of spring fish. NDSFB recognises the contribution which catch and release can make to conserving salmon stocks and has encourages this practise. Proprietors and fishers have "bought in" to this initiative enthusiastically.



Netting

The Board is representative of all fishery proprietors on the Nith and benefits from the long and wide experience of its netting members.

Hatchery

The Board believes that the hatchery has a very necessary role to play in the foreseeable future.

Habitat

The Board attaches much emphasis to Habitat Enhancement. Naturally produced fish have been shown to be much hardier than those produced in a hatchery. The Board is mindful of maintaining a proper balance between resources used for hatcheries and those used for Habitat Enhancement.

Predators

Although present in the Solway Firth, seals do not appear to be the threat that they are in other Salmon Districts. Cormorants and goosanders are known predators of juvenile fish and the Board staff applies for and obtains an annual license to cull limited numbers of avian predators. Scottish Office research scientists have analysed the birds' diet and use the findings to establish a case for the sensible and effective management and control of these species. Mink appear to be increasing especially within the catchment of the major tributary Cairn.

The Board operates a mink control policy.

Water Quality	Close liaison with SEPA results in the Board having access to water quality monitoring data on the Nith.
River Engineering Works	The Board continues to provide guidance upon safe methods of work in relation to engineering works in or near the environs of watercourses to minimise risk of environmental damage to the river system.
Public Access	Approximately 62% of the mainstem of the Nith is directly available to public access for fishing via local associations. Of the remaining 38% the vast majority is available by daily or weekly rental. The Board considers this to be a very satisfactory situation; there is plenty of access for local anglers and good access for visiting anglers whose contribution to the Catchment's economy is considerable and vital. A recent report from Stirling University opined that Salmon Angling at 1999 figures was worth in excess of £2.2 million to the local economy.
Open Cast Coal Mining Sites	The Board has established good liaison with the Planning Departments of Local Authorities whose areas include OCCS. It takes up to 18 years before some OCCS complete their restoration and the Board where possible will seek a bond from contractors to ensure that restoration is completed even if the contractor should go into liquidation.

26. Legislation and Its Development

The Board has over the course of the year been involved in a consultation process with ASFB in connection with EU Water Framework Directive and associated legislation. The Salmon (Consolidation) Scotland Act received royal assent in early 2003 and is now in force. The Board contributed to the consultation process on this legislation and is pleased to report that for once its views were taken account of in the final production of the legislation. This legislation now provides statutory recognition of haaf netting and retains the protection of the Solway Act 1804 in respect of all watercourses draining to the Solway Firth. The matter of Land Reform and Countryside Access Code and their respective implications for salmon fisheries continues to be monitored and be the subject of response by the Board to the Scottish Executive as required.

Freshwater Fisheries Consultation.

The Board participates and contributed to the Freshwater Fisheries Forum, a group which acts a consultative vehicle for Scottish Freshwater Fisheries Issues and reports to the Scottish Executive.

27. Summary of the Year's Events

The Board met on 30th June 2005, 31st August 2005, 11th November 2005, 1st February 2006, and 16th February 2006(AGM)

- Reference is made to hatchery operations at section 18 of the report for the statistics upon released salmon and sea trout fry from the hatchery
- The school liaison project with Sanquhar Academy and Moniaive Primary School continues
- The Board continues to participate in and attend meetings relating to consultation on the European Water Framework Directive.
- Fishery Board Staff attended at the Dumfries and Galloway Environment Day held in the Loreburn Hall, Dumfries
- Fishery Board Staff attended at World Oceans Day held at Rockcliffe
- The Fishery Director delivered a presentation at House of Water OCCS on the opening of the River Re-Diversion
- During the Course of the year the Fishery Director represented the Board at ASFB Council meetings, the annual water Bailiffs Conference, The institute of Fisheries Management Training Panel, Kier Technical Working Group meeting ATH Technical Group Meetings, Scottish Coal Technical Working Group meetings, Cairnhead Community Forest Trust, the Solway Firth Partnership, the Nith Catchment Management Plan meetings, freshwater Fisheries Forum meetings and The River Restoration Annual Conference
- The Fishery Director delivered a lecture on Fisheries legislation to Police Probationers.
- The Fishery Director delivered a lecture to Delegates at the annual Children in Scotland conference on the Boards Education programme
- The Fishery Director delivered presentations to MNAA and UNAA

NITH DISTRICT FISHERY BOARD POLICY STATEMENT

Introduction

The numbers of salmon available for exploitation in the Nith is, broadly speaking, a product of the numbers of smolts produced by the river and the proportion that return. An upper limit on smolt production is set by the availability of spawning and nursery habitat. Whether or not that limit is attained depends upon the adequacy of egg deposition for each of the main populations of salmon that use the Nith.

The broad objectives are to ensure that smolt production is maximised by focusing exploitation on the most robust populations, currently summer and autumn running salmon and grilse, and by taking all practicable steps to improve adult access and the quality of juvenile habitats.

In this section the Board outline their current policy on a number of key areas and issues as described in Section 5.

General Policy

The Board will: -

- continue to protect, conserve and enhance all stocks of salmon and sea trout in the River Nith,
- continue to monitor and encourage stock components in particular the spring salmon,
- remain accountable to Proprietors and ensure that resources are properly applied such that the most efficient and economically beneficial application of the funds, raised by Proprietors through assessments, is achieved, and
- continue to liaise with and inform Proprietors, their agents and anglers on the work of the Board.

Enforcement

The Board will: -

- Continue the employment of a qualified Bailiff force of suitable size to curtail unlawful fishing
- methods and activities,
- Maintain both river and sea patrol systems,
- Continue with the development of sophisticated intelligence systems, and
- Promote the prosecution of those breaching salmon fisheries legislation.

Monitoring

The Board will, in liaison with other relevant bodies, continue to monitor and influence:-

- The riverine and related environment,
- Water volume and quality,
- Juvenile stocks,
- Smolt production, and
- Numbers of returning adult fish

and to utilise information arising from all of the above towards the better management of the Nith salmon and sea trout stocks.

Research

The Board will continue and increase where possible its commitment to producing high quality research data to improve the management of the river and its salmon and sea trout stocks. Key areas include:-

- Improving data on spawning escapement through catch data,
- Maintaining and improving data on juvenile salmonid distribution and density,
- Further developing instream and bankside habitat surveys and establishing where improvements, if any, can be made,
- Monitoring the benefits, or otherwise, of stocking and/or habitat enhancement for salmonid stocks,
- Examining current data with respect to any available historical information and catchment land use data using latest available techniques.
- Continuing to promote the work of the Board through presentations and publications at local and national level,
- Providing assistance and encouragement, where possible, to neighbouring Boards with their research and management plans, with a view to establishing as comprehensive a network of information as possible for the Nith and neighbouring Districts, and
- Continuing contributions to and liaison with other fisheries research bodies including, but not limited to, Scottish Fisheries Co-ordination Centre, the Freshwater Fisheries Laboratory and the Marine Laboratory Aberdeen, Environment Agency, SEPA and SNH.

Stock Enhancement

The Board will: -

- Continue to operate the Board's hatchery,
- Take all reasonable steps to avoid genetic mixing of ova, and
- Encourage natural spawning where possible but undertake stock enhancement in areas where stocks of fish are seriously depleted.

Spring Fish

The Board will: -

- Encourage proprietors to act responsibly over fishing methods and effort, and
- Encourage anglers to return fish to the river where possible and appropriate.

Predators

The Board will: -

- Continue to encourage control of salmonid predators such as, but not limited to, sawbills by continued application to SEERAD for annual licences when deemed necessary,
- Encourage the trapping of mink and other riverside predators where lawfully possible and demonstrated to be damaging salmonid stocks, and
- Resist the re-introduction of the beaver (although it is not a direct predator on salmon) due to its potential harmful effects on riparian habitat.

Transfers of fish and fish disease

The Board will: -

- Maintain vigilance in the unlawful transfer of fish and/or fish diseases both to salmon, sea and brown trout, rainbow trout and other species to continue to monitor and operate surveillance in this regard paying particular attention to keeping Proprietors advised of the information passed to it on best practice for the prevention of outbreak of Gyrodactylus Salaris.

Habitat Management

The Board will: -

- Encourage appropriate instream and bankside management,
- Encourage the adoption of beneficial land management practices, and
- Encourage liaison with and among relevant proprietors and other bodies such as, but not limited to, SNH, FWAG, SEPA, Forestry Commission and Planning Authorities.

River Engineering Works

The Board will: -

- Continue to provide guidance and assistance through its Fishery Director to those wishing to undertake such works enabling repairs to take place, and seek to restrict improvement works without prior consultation and assessment, and
- Provide an Advisory Service to Proprietors.

Abstraction

The Board will: -

- Continue to monitor the amount of abstraction from the river, and
- Monitor the use of water for agricultural irrigation purposes.

Catchment Land Use

The Board will: -

- Liaise with the all relevant bodies over land within the catchment and encourage moves towards integrated catchment management,
- Provide an advisory service preventing irresponsible land use developments which may adversely affect salmonid populations, and/or their habitats, and
- Seek to inform proprietors, where salmon or sea trout angling may not be a priority, of the importance of maintaining upper tributaries and spawning areas in good condition.

Level of Angling Exploitation

The Board will: -

- Monitor levels of fish returning to the river system and encourage proprietors to utilise common sense and sensitivity in the levels of exploitation exercised by anglers at any time and from time to time,

- Restrict, where appropriate, spring fishing to protect the vulnerable early running populations of salmon,

- Encourage proprietors to ensure that the level of fishing effort is reasonable, and take other appropriate steps to protect, conserve and enhance the stocks of fish and to give publicity thereto.

Catch and Release

The Board will: -

- In addition to the general policy of restraint and already advocated encourage, where fish are cleanly caught, the return of spring salmon and hen fish in the autumn.

Netting

The Board will: -

- Continue to take an interest in the level of high seas exploitation to support bodies such as, but not limited to:-

    - Association of Salmon Fishery Boards
    - North Atlantic Salmon Fund (UK)
    - Atlantic Salmon Trust
    - North Atlantic Salmon Conservation Organisation (NASCO)

    in their endeavours to restrict and where possible remove interceptory high seas fishing.

Nature Conservation

The Board will: -

- Liaise with proprietors and bodies such as, but not limited to, SNH, Solway Firth Partnership and SEPA in maintaining the high quality of the natural environment and safeguard the outstanding natural heritage features within the Nith system.

Liaison with neighbouring Boards

The Board will: -

- Continue to liaise and encourage the promotion of good relations with other neighbouring Boards.

- Continue surveillance and enforcement activities in liaison with neighbouring Board Bailiffs and to provide and receive assistance under existing complementary jurisdiction arrangements.

European Directives

The Board will: -

- Continue to consult with SNH and other bodies and will liaise closely with proprietors in promotion of the salmon and sea trout interests covered by the Habitat and Species Directive, and

- Review its potential responsibilities and the advantages to be gained from the Water Framework Directive.

U.K. Legislation

The Board Will: -

- Continue to monitor the promotion and development of draft legislation which is likely to have an effect, whether direct or indirect, upon the promotion of the interests of salmon and sea trout, the fisheries related thereto and the sustainable exploitation of the fishing resource within the Catchment.

- Continue to consult with the proprietors in connection with the drafting of responses germane to the interests of proprietors in relation to the promotion of relevant draft legislation by the Scottish, U.K. and European Parliaments.

RIVER NITH CATCH DATA

The data is shown in the attached appendices and for the first time shows all categories of catch returns including returns of farmed salmon and returns of salmon and sea trout caught and released.

Liaison Organisations

Organisations and groups with which Nith District Fishery Board liaise closely and regularly regarding local, national and international management of salmon and sea trout stocks.

Local Organisations and Groups	Proprietors and Agents Nith Fishing's Improvement Association Galloway Fisheries Trust Nith Haaf Net Fishers Association Anglers and Angling Clubs Local Authorities and Councils Other Fishery Boards The Solway Firth Partnership Solway Heritage
National Organisations (Fisheries)	Scottish Office (FRS Marine Lab, Freshwater Fisheries Lab) Association of Salmon Fishery Boards (ASFB) Atlantic Salmon Conservation Trust (Scotland) (ASCT(S)) Scottish Net Fishing Association North Atlantic Salmon Conservation Organisation (NASCO) Institute of Fisheries Management Other Fishery Boards
National Organisations (Conservation/Protection)	Scottish Environment Protection Agency (SEPA) Scottish National Heritage (SNH) Forestry Farming & Wildlife Advisory Group (FWAG) Forestry Commission (FC) Environment Agency (EA)
Industrial Companies	Scottish Coal & Associated Sub-Contractors Kier Mining ATH Resources Amey Highways Windfarm Operators

Incidences of Illegal Fishing/Poaching activities

- Two Persons cautioned on Blackwood Estate breach of permit regulations
- One Person charged with an offence at Drumburn
- One person reported to Police and D & G Council breach of permit regulations
- Two persons reported to Police and DGAA breach of regulations
- One person charged with an offence at Glenmarlin Falls
- One person reported to DGAA for unsporting practices
- Three persons charged with offences at Cluden Rocks
- One Trammel net recovered from Dalswinton Estate Water
- Three persons charged with offences at Rouken Bridge Old Water Of Cairn
- One Trammel net recovered from Thorny Bank on Closeburn Castle Water

Nith Habitat Enhancement Committee

- Chainsaw work carried out near Ryecroft to prepare for Riparian Fencing
- Strengthening of Barrier at Burn Sands Burn Fish Pass
- New Hatchery Sump Built
- Removal of Log obstructions on Burn Sands Burn, Carron Water, Enterkin Burn, Sposforth Burn and Cog Burn
- Tree Planting on Cample Water
- Tree Planting at Kello Water Habitat scheme
- Tree Planting on New Channel, River Nith at House of Water
- Bank Maintenance with Burgh Angling Club
- Bank Maintenance with Mid Nithsdale Angling Association
- Bank Maintenance on Portrack and Cowhill Waters
- Electrofishing carried out in various parts of the Catchment in respect of obtaining baseline and annual monitoring regarding the impact of civil engineering works on water courses within the catchment.

APPENDIX
Catch Statistics Returns 1952-2005