

Dee (Kirkcudbright) District Salmon Fishery Management Plan (2008-2012)

The primary objective of the plan, through its effective implementation in the next five years, is to restore the stocks of salmon in the Kirkcudbrightshire Dee catchment to the levels of the 1970's (when the fish counter indicated that about 2500 salmon ascended the Dee).

- The plan should assist the Dee District Salmon Fishery Board and Scottish Power with their short-term and long-term planning of resources.
- The plan should assist in securing funding towards the future management of salmon stocks.
- Whilst improving the management of salmon, other fish stocks in the catchment should not be adversely impacted.
- Sea trout, being anadromous like salmon, will also benefit from the improved management techniques outlined in the report.
- The Dee District Salmon Fishery Board, Galloway Fisheries Trust and Scottish Power can use the plan to input effectively to the Solway Area Advisory Group at an early stage of the river basin planning process.

Listed below are a summary of the 65 actions which are listed through the plan. These have not yet been prioritised by the GFT and Dee DSFB. It is proposed to review success against these actions and re-consider prioritisation annually.

- 1) The sensitive restructuring of conifer forest on the catchments suffering from acidification is essential. All parties to work together to examine forest design plans in sensitive areas. Treat the Forest & Water Guidelines as minimal standards.
- 2) Ensure the continuation of sampling programmes of acidified waters (including water, invertebrate and fish).
- 3) Fit Continuous Monitoring Equipment to record water pH, water height and water temperature at a location susceptible to acidification.
- 4) Use Dee data in any future Critical Load Analysis testing.
- 5) Consider targeted liming / limestone spawning beds to accelerate the recovery of key acidified watercourses.
- 6) Investigate whether compensation flows could mimic natural flows.
- 7) Examine and aim to increase compensation flows in the Black Water of Dee (from Clatteringshaws and Pullaugh Burn), Tongland Dam, Carlsfad and Earlstoun.
- 8) Fit denil fish pass on Pullaugh Burn.
- 9) Undertake a full catchment habitat survey of the main river and major tributaries (completed to SFCC protocol). This survey would consider sources of excessive

siltation, degraded riparian habitat, invasive alien plant species, channel modifications and obstructions to fish movement. Undertake a habitat enhancement programme targeted at problem areas highlighted from habitat surveys.

- 10) Highlight to forest managers/developers/land managers sensitive salmon spawning burns to encourage the development of more sensitive works and felling/replanting plans especially regarding siltation and width of buffer zones.
- 11) Minimise the risk of silt transport by careful planning and construction of road works encourage use silt traps / sediment mats if appropriate. Works which may result in a risk of siltation to take place during July – September.
- 12) Consider an invasive alien plant species control programme.
- 13) Undertake a geomorphological survey on the Black Water of Dee and the Dee below Tongland to consider dam impacts on substrate movement.
- 14) Further investigate reducing flows in fish ladders while maintaining the present compensation flows.
- 15) Continue to examine salmon movement in the lower river. Consider radio tagging salmon to see movements in the lower river.
- 16) Review the implications of a downstream pass at the Black Water Burn intake.
- 17) Consider feasibility of undertaking a research programme to examine smolt survival through the various turbines.
- 18) Examine whether Tongland fish ladder acts as a temperature barrier to spring running salmon ascending the Dee.
- 19) Consider various possible methods to assist kelts descending through Tongland.
- 20) Continue to ensure that accurate data is provided from the VAKI fish counter.
- 21) Ensure that accurate rod catch data is supplied to FRS and the DDSFB to allow exploitation rates to be calculated.
- 22) Agree and complete electrofishing at a network of long term monitoring sites.
- 23) Encourage 100% catch and release for rod caught salmon and if necessary use available legislation to achieve this.
- 24) Ensure that poaching is minimised. Security cameras covering key areas of the lower river should be installed.
- 25) Undertake genetic profiling on juvenile salmon in the Dee and the main tributaries. This would give an indication of the different salmon stocks.
- 26) Continue to follow FRS Hatchery Best Practice Guidelines for all aspects of the hatchery programme to minimise potential ecological risks.
- 27) Complete a feasibility study (to include approximate costs, possible sites and suggested numbers of fish) to consider the practicalities of undertaking a scheme of stocking the upper Water of Ken, capture and transport of smolts.
- 28) DDSFB to continue with best practice guidance for anglers to kill any pike under 5lb in the main river.
- 29) GFT / DDSFB to organise a visual saw bill duck and cormorant survey of the mid / lower river at key times.

- 30) Organise a survey by an otter specialist to consider levels of otter predation in the lower river below Tongland.
- 31) Organise a catchment wide co-ordinated mink trapping programme using Mink Rafts.
- 32) Relevant bailiffs to vigorously enforce the ban on live baiting by pike anglers.
- 33) DDSFB and GFT to meet with representatives from both local fish farms to discuss the issue of escapes and examine whether screening is adequate.
- 34) Ensure that all associated with the Dee system (canoeists, anglers, scientists) adhere to Association of District Salmon Fishery Boards (ADSFB) / Rivers and Fisheries Trusts Scotland (RAFTS) / Scottish Government guidance on preventing GS from entering the UK.
- 35) Continue to investigate the control, minimising spread and possible eradication of American Signal Crayfish on the Dee system. Also research ASC in Loch Ken.