

Kingairloch Estate LLP



Report On Hatchery work & release of Native Wild Migratory Fish June 2009

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1.0 Introduction

This report presents details of native migratory fish restocking work carried out at Kingairloch Estate in 2008/2009.

2.0 Summary

2.1 A successful restocking of native sea trout was carried out in June 2009. This is the second successful restocking exercise carried out at Kingairloch Estate.

2.2 About 10,000 'Fed Fry' sized sea trout were released, split about 70 percent into the Abhainn na Coinnich and the remaining 30 percent into the Glengalmadale River.

3.0 Background

3.1 The effort to restock native migratory fish into the river systems on Kingairloch Estate was initiated in 2006. This followed discussions and consultation between Estate Management and the River Lochy Association, Lochaber Fisheries Trust, Scottish & Southern Energy (SSE) and John Gibb Associates.

3.2 Kingairloch and SSE worked together through the early part of the century to develop the Kingairloch Hydro Project. A strong interest was shown by both parties to encourage migratory fish back into the river system (Abhainn na Coinnich) that was effected by the Hydro development. This included: Electro fishing and netting during the site investigation and permitting phase of the project; review of historical catch information and recent impacts; Inclusion of a fish pass at the Loch Usige Dam; Restocking of native migratory fish; ongoing electro-fishing and netting.

3.3 Evidence from electro fishing and historical catch information indicated that native migratory fish stock had been seriously depleted. While the cause of this can never be fully substantiated, one could suggest that the presence of intensive fish farming in Loch a Choire where the Coinnich empties could have an influence. Likewise netting at the mouth of the Coinnich in the 1970s and

1980s could have contributed to the decline. Whatever the reason the fish stock is a fraction of that seen in previous times. Rod catches in excess of 300 sea trout and 20 salmon per season were commonplace in the 1920s – 1960s and today's catches fail to make double figures.

3.4 So Kingairloch set out to do something about this situation. John Gibb Associates of Glenfinnan was appointed as fisheries consultant. A consultation exercise was held with River Lochy Association and Lochaber Fisheries Trust. It was agreed to establish a hatchery and introduce native migratory fish into the river systems at Kingairloch. A habitat assessment was carried out on each of the river systems to establish stocking density.

3.5 In late 2007 Kingairloch under the direction of Gibb Associates established the hatchery including tanks, incubation trays and water supply. Fertilised eggs were delivered in November 2007, hatched in spring 2008 and placed in the Coinnich as fed fry in summer 2008. This was an introductory move for the Estate, with an inevitable "learning curve".

3.6 In May 2008 under the supervision of River Lochy Association the mouth of the Glengalmadale was netted. About 50 sea trout and 50 salmon smolts were caught and stored in Kingairloch and were then transferred to Gibb's Facility at Glenfinnan. This would become the broodstock for future migratory fish stocking.

4.0 2008/2009 Hatchery Programme

4.1 In late November 2008 Gibb Associates stripped and fertilized about 10,000 sea trout eggs from local river sources (River Moidart) at its facility in Glenfinnan. On 25th November these eggs were delivered to Kingairloch and placed in purpose- built incubation 'trays'. The trays had a trickle water feed from a dedicated hill water source.

4.2 A technique learned from the hatchery work in 2007/2008 was to place each nest of trays in a holding tank. Doing this would allow any ambitious hatched fish to fall into a tank of water rather than onto a wet concrete floor. Fish were kept in the dark during incubation with regular visits by Estate Operatives to check water flows and remove mortalities.

4.3 The majority of the fish were hatched around 12/13 March 2009. The fish were then swimming with yoke sacs attached and eventually discarded their yoke sacs. Objects such as screens and racks were placed in the tanks as resting areas for the fish.

4.4 Automatic feeding systems were employed to provide regular feeding for the sea trout. Monitoring of the fish was done on a daily basis including restocking of the automatic feeders, cleaning of tanks and rechecking of the water supply. Mortality levels were low. By mid-May the fish were swimming with high energy levels and all rocks were removed from the tanks and feed particle size was increased along with feed rate.

5.0 2009 Release Programme

5.1 On 2nd June a demonstration release of fed fry sea trout was arranged for Estate guests. Among the guests was John Strutt, son of the previous owner of Kingairloch and an avid fisherman at Kingairloch in his youth. Also in attendance was Angela Yeoman OBE DL who is the senior partner of current owners Kingairloch Estate LLP. About 500 fed fry were released into a pool near the B8043 Bridge on the Glengalmadale River. This release gave the Estate operators an opportunity to test deployment equipment and techniques. Conditions at that time were sunny and mild with light rain falling the previous day. The fish were released into slack water with tree cover, and once settled, the fish began rising to the surface for food.

5.2 On 18th June after a gap from heavy rain it was decided to do a full deployment. A planning and safety risk assessment/method statement was done with Estate Operatives. A strong safety culture was evident and a copy of the method statement and plan of deployment areas is attached to this report.

5.3 As the Kingairloch Hydro was in operation at the time of deployment it was decided not to make a planned release below the tailrace due to excessive turbulence.

5.4 Stocking density based on the habitat assessments and river flows was set at approximately 5 fish per square metre.

5.5 The actual National Grid Reference coordinates and location descriptions are noted in the table below.

Location no	coordinates	description
1	NM 821.0 544.3	Funeral Cairns Pool
2	NM827.1 540.5	Western Bridge Pool (elbow pool)
3	NM829.1 541.2	Ghardail Bridge Pool
4	NM833.7 536.3	Eastern Bridge Pool
5	NM834.6 534.1	Pulpit Rock Pool

6	NM865 531	B8043 Bridge Pool
7	NM865 541	Dam Pool

5.6 Based on an even spread of the fish in each deployment about 70% of the release was done in the Abhainn na Coinnich and the remaining 30% in the Glengalmdale River.

5.7 All deployments were in pools of relativity slack or slow flow of water. Each deployment area also had adequate shade and tree cover. Photos of some of the deployment work are attached in this report. The fish immediately took to the water and began rising to the surface in search of food.

6.0 Future Plans

6.1 The Estate and SSE will be arranging further electro fishing as a part of the hatchery commitment. Another hatchery programme of both sea trout and salmon from the broodstock netted in Kingairloch in May 2008 will commence in November 2009.

Method Statement/Location Plan Kingairloch Sea Trout Fed Fry
Release 18th June 2009

- Locations:
- 1) Pool by Funeral Cairns (tree cover exists)
 - 2) "Elbow Pool" by footpath bridge (tree cover)
 - 3) "Bridge pool" by footpath bridge (tree cover)
 - 4) "Pulpit pool" pool along footpath (tree cover)
 - 5) "Park pool" downstream of bridge (tree cover) only if Hydro is off
 - 6) Glengalmdale bridge (tree cover)
 - 7) Target range (tree cover)

Method Statement

Fill tank with water.

Apply Oxygen.

Catch fish with nets carefully.

Transfer by bucket with water to tank.

Drive to drop locations.

Fill container with sealable lid with water and fish.

Evenly space fish population on each drop, 5/7 Coinnich 70% - 2/7 Galmdale 30%

Two men carry container to deployment sites and exercise care in transit from tank to river.

Pour fry slowly into relatively still water.

Appendices

Photograph One: Transport equipment for fish deployment



Photograph two: Fish tanks and automatic feeding system

