Preliminary Synopsis of the WFD Surveillance Monitoring Fish Stock Survey on Lough Corrib in the Western River Basin District, June 2011

1.1 Introduction

A WFD fish stock survey was conducted on Lough Corrib (Fig. 1) from the 8th to the 23rd of June 2011 by staff from Inland Fisheries Ireland as part of the programme of surveillance monitoring for the Water Framework Directive.

1.2 Methods

Lower Lough Corrib was surveyed over three nights between the 8h and the 13th of June 2011. A total of six sets of Dutch fyke nets and 24 benthic monofilament multi-mesh (12 panel, 5-55mm mesh size) CEN standard survey gill nets (14 @ 0-2.9m and 10 @ 3-5.9m) were deployed in the lake (30 sites). The netting effort was supplemented using six benthic braided survey gill nets (62.5mm mesh knot to knot) at six additional sites.

Upper Lough Corrib was surveyed over six nights between the 14h and the 23rd of June 2011. A total of nine sets of Dutch fyke nets, 49 benthic monofilament multi-mesh (12 panel, 5-55mm mesh size) CEN standard survey gill nets (11 @ 0-2.9m, 11 @ 3-5.9m, 11 @ 6-11.9m, 6 @ 12-19.9m, 7 @ 20-34.9m and 3 @ 35-49.9m) and ten floating monofilament multi-mesh (12 panel, 5-55mm mesh size) CEN standard survey gill nets were deployed in the lake (68 sites). The netting effort was supplemented using 11 benthic braided survey gill nets (62.5mm mesh knot to knot) at 11 additional sites.

Nets were deployed in the same locations as were randomly selected in the previous survey in 2008. A handheld GPS was used to mark the precise location of each net. The angle of each gill net in relation to the shoreline was randomised.

All fish apart from perch were measured and weighed on site and scales were removed from all brown trout, salmon, roach, pike, bream, tench and roach x bream hybrids. Live fish were returned to the water whenever possible (i.e. when the likelihood of their survival was considered to be good). Samples of fish were retained for further analysis.

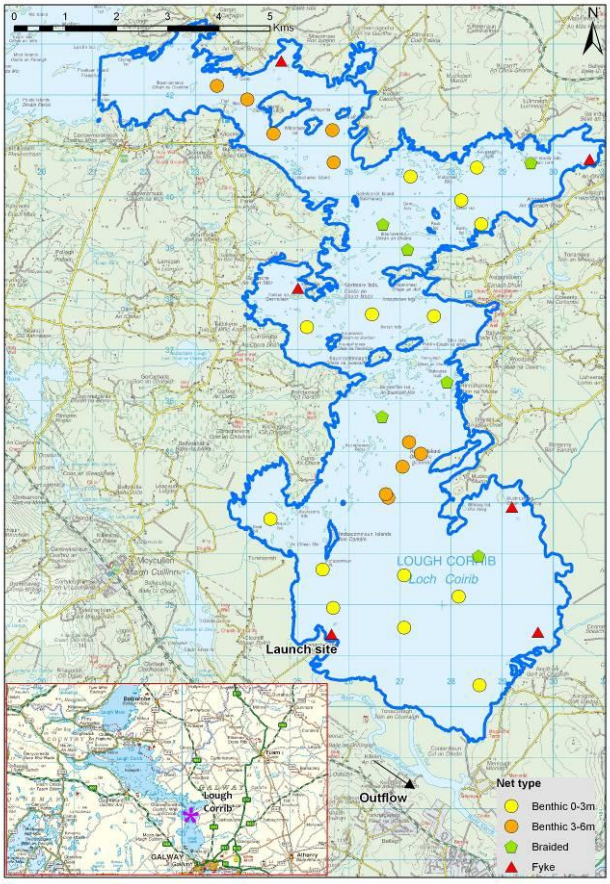

Fig. 1.1. Location map of Lower Lough Corrib showing locations and depths of each net (outflow is indicated on map)

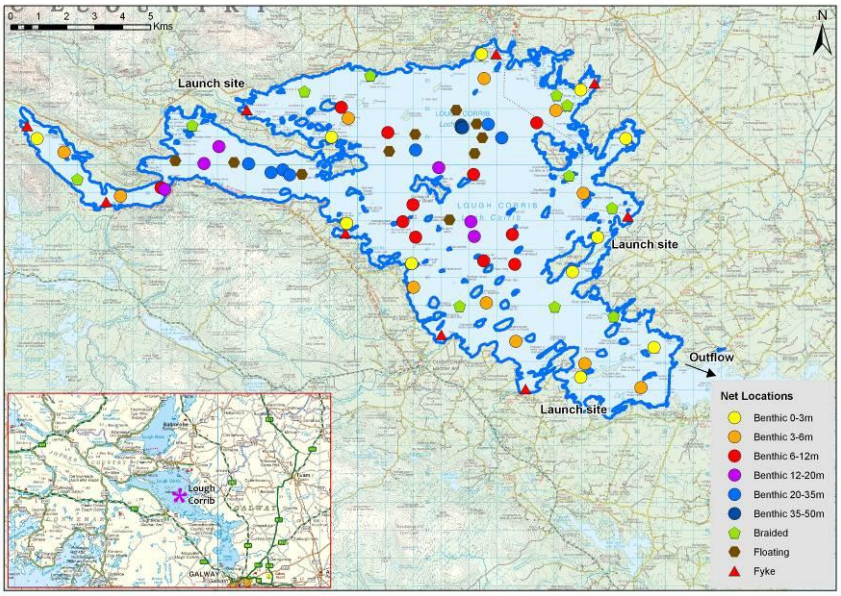

Fig. 1.2. Location map of Upper Lough Corrib showing locations and depths of each net (outflow is indicated on map)

1.3 Results

A total of ten fish species and two types of hybrids were recorded in Lower and Upper Lough Corrib, with a total of 669 fish being captured. The number of each fish species recorded is shown in Table 1.

Table 1. Number of each fish species recorded in Lower Lough Corrib, June 2011

Scientific name	Common name	Number
Rutilus rutilus	Roach	66
Perca fluviatilis	Perch	60
Anguilla anguilla	Eel	21
Salmo trutta	Brown trout	18
Rutilus rutilus x Abramis brama	Roach x Bream	18
Esox lucius	Pike	8
Salmo salar	Salmon	2
Abramis brama	Bream	1
Petromyzon marinus	Sea lamprey	1

Table 1. Number of each fish species recorded in Upper Lough Corrib, June 2011

Scientific name	Common name	Number
Rutilus rutilus	Roach	205
Perca fluviatilis	Perch	163
Anguilla anguilla	Eel	51
Rutilus rutilus x Abramis brama	Roach x Bream	24
Esox lucius	Pike	10
Salmo trutta	Brown trout	9
Abramis brama	Bream	8
Gasterosteus aculeatus	3-spined stickleback	2
Tinca tinca	Tench	1
Rutilus rutilus x Scardinius erythrophthalmus	Roach x Rudd	1

1.4 Further work

Perch will be measured and weighed and opercular bones will be removed in the laboratory. Otoliths will be removed from eels and all fish will be aged after the fieldwork season has ended. Catch per unit effort (CPUE), biomass per unit effort (BPUE) and age profiles will be calculated for all fish species and a more detailed report will be available in 2012.