

Submission to the Mixed Stock Fisheries Priority for Action Group, January 2009.

Distribution of salmon catches in Scotland.

MSFWG0819

J C MacLean and G W Smith

Fisheries Research Services, Freshwater Laboratory, Field Station, Inchbraoch House, South Quay, Ferryden, Montrose, DD10 9SL

Introduction

In this brief note we describe and comment upon (1) the historical distribution of catches among fishing methods, (2) the latest available (2007 season) catch distribution among fishing methods, (3) the location of net fisheries active in 2007, (4) the 2007 distribution of catches among fishing methods and (5) the 2007 regional distribution of salmon catches by method.

The aim of the note is to provide background information to the Working Group on the reported catch distribution among regions and among methods. As the Orkney and Shetland regions of Scotland are not considered to be fully covered by the catch reporting survey at present, these regions have been omitted from the regional analyses described here.

1. Historical distribution of Scottish catches among fishing methods

Figure 1 shows the annual reported catch of salmon (caught and retained) in Scotland, by method over the period 1952 – 2007. A similar catch pattern has been observed for the fixed engine and net and coble fisheries: catches increased from 1952 until the early 1970s; thereafter a continued decline has been seen up to the end of the time series. These declines were associated with a decreasing trend in effort in both fisheries. In contrast, the rod and line catch has remained relatively constant from 1952 until the early 1990s when catches showed a decline that continues to the end of the time series. This decline has been associated with an increase in the practice of catch and release which, in 2007, accounted for 61% of all salmon taken by rod and line.

In the early part of the time series, the net fisheries took the vast majority of the total reported catch. By the late 1980s, the total catch was split approximately evenly among the three methods, and thereafter the rod and line fishery has taken the largest proportion of the total catch.

2. Current (2007) allocation of Scottish catches among fishing methods

Figure 2 shows the catch allocation among the three fishing methods in 2007. Twenty five percent of the total reported caught and retained catch was taken by fixed engine, 11% by net and coble and 64% by rod and line.

3. Location of active net fisheries in 2007

Figure 3 shows the location of fixed engine and net and coble fisheries that were active in 2007. Active fisheries were those which returned a catch form reporting either catch or fishing effort. Fixed engine fisheries operated in the following 6 regions; East, North East, North, North West, West Coast and Solway. Net and coble fisheries also operated in these regions and additionally in the Moray Firth and Outer Hebrides regions. No net fisheries were active in Clyde region. Active rod and line fisheries operated throughout the country in all nine regions.

4. Distribution of catches among regions by fishing methods in 2007

Figures 4, 5 and 6 show the distribution of catch by region for fixed engine, net and coble and rod and line fisheries, respectively. The majority of the Scottish fixed engine catch was taken in three regions (North East accounting for 31% of the total fixed engine catch, North 45% and Solway 18%). The majority of the Scottish net and coble catch was taken in two regions (East accounting for 71% of the total net and coble catch and North East 21%). The majority of the Scottish rod and line catch was taken in three regions (East accounting for 36% of the total rod and line catch, Moray Firth 27% and North 11%).

5. Distribution of catches within regions by fishing method in 2007

Figure 7 shows the distribution of catch within each region by fishing method. Fixed engine fisheries took the majority of the catch in two regions, the North East and the North. Rod and line fisheries accounted for the majority of the catch in the remaining seven regions.

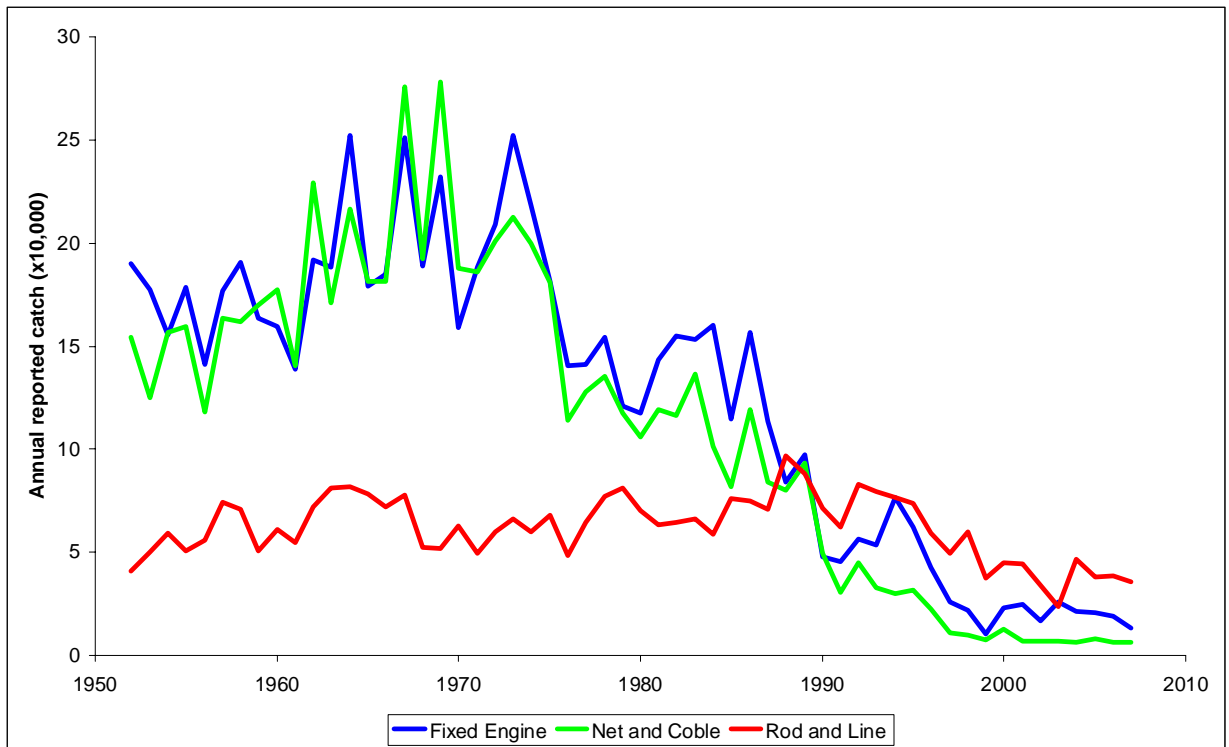


Figure 1. Annual reported catch of salmon (caught and retained) in Scotland, 1952 – 2007, by method.

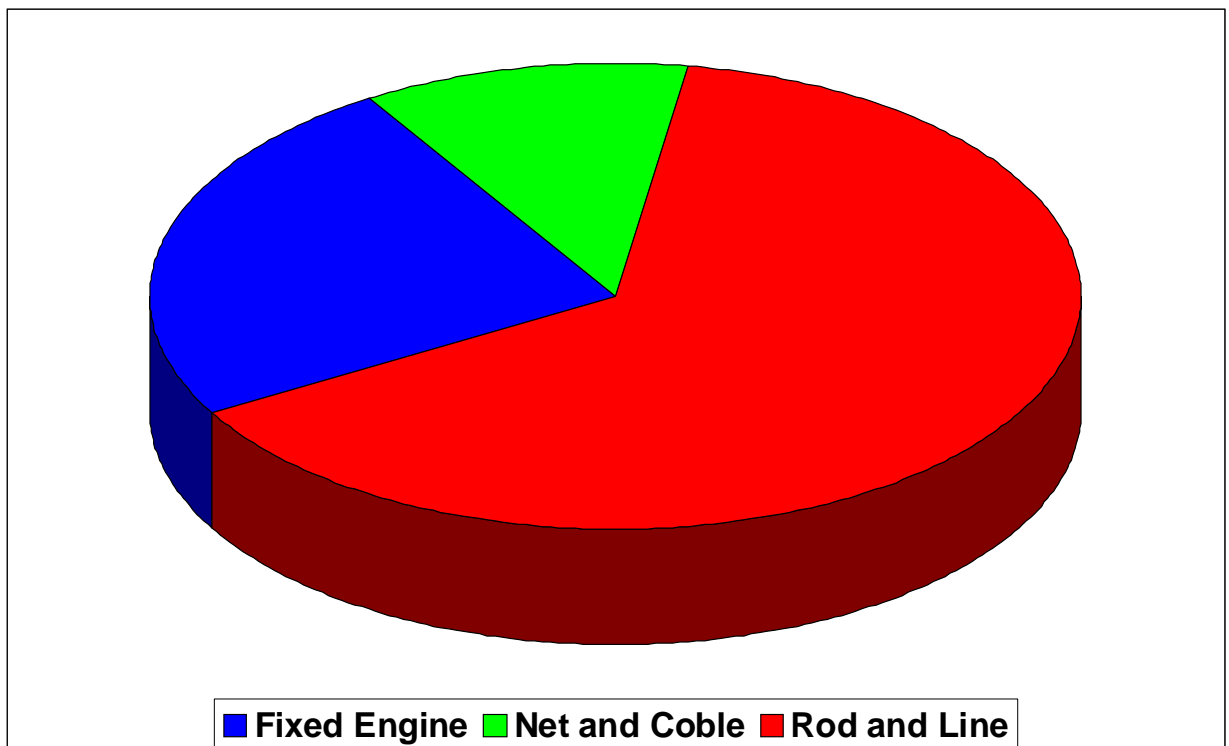


Figure 2. Reported catch of salmon (caught and retained) in Scotland in 2007, by method.

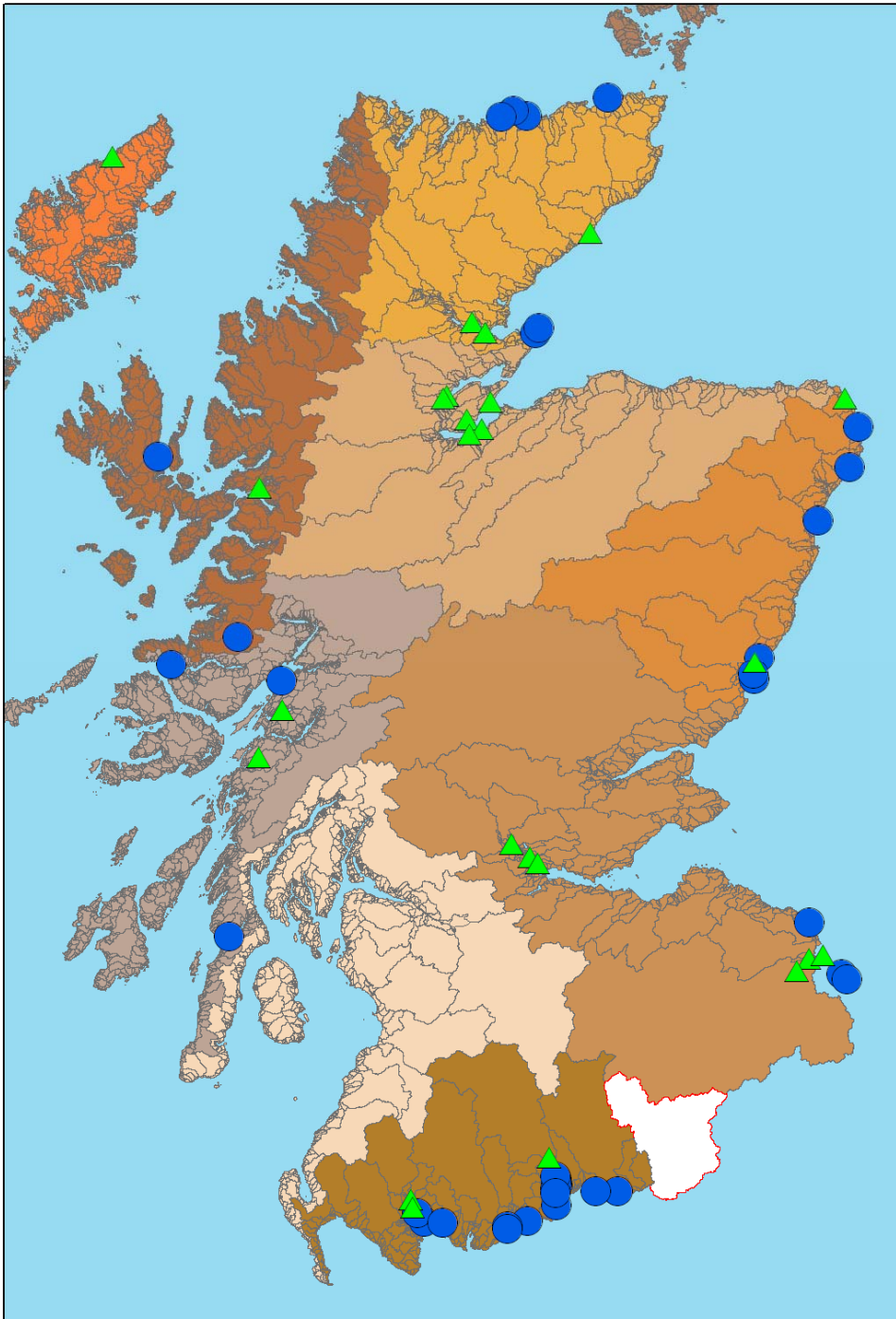


Figure 3. The location of active salmon net fisheries in Scotland in 2007 (fixed engine fisheries symbolised by blue circles and net and coble fisheries symbolised by green triangles).

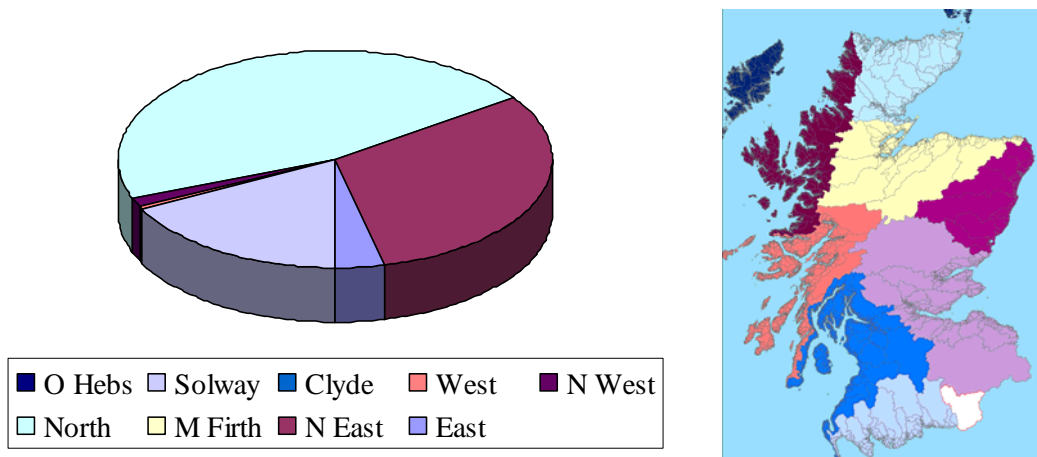


Figure 4. Distribution of catches among regions by fixed engine fisheries in 2007.

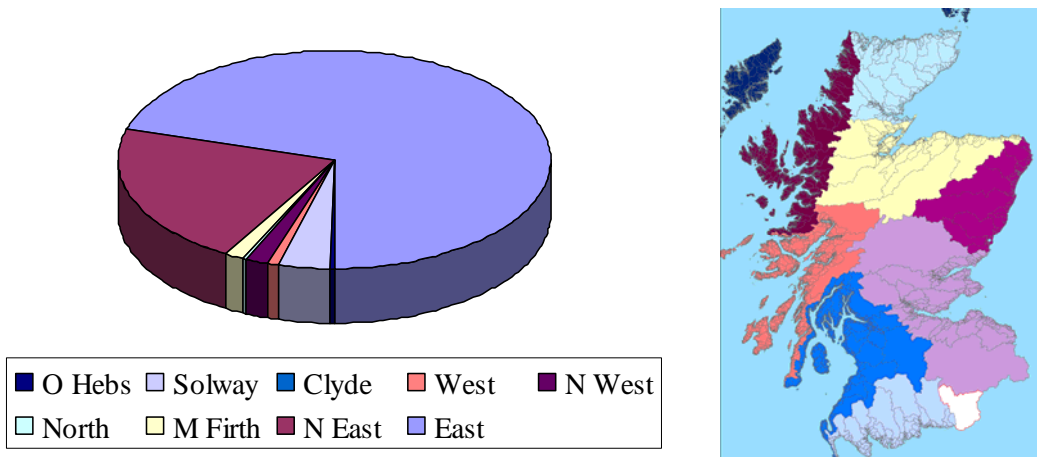


Figure 5. Distribution of catches among regions by net and coble fisheries in 2007.

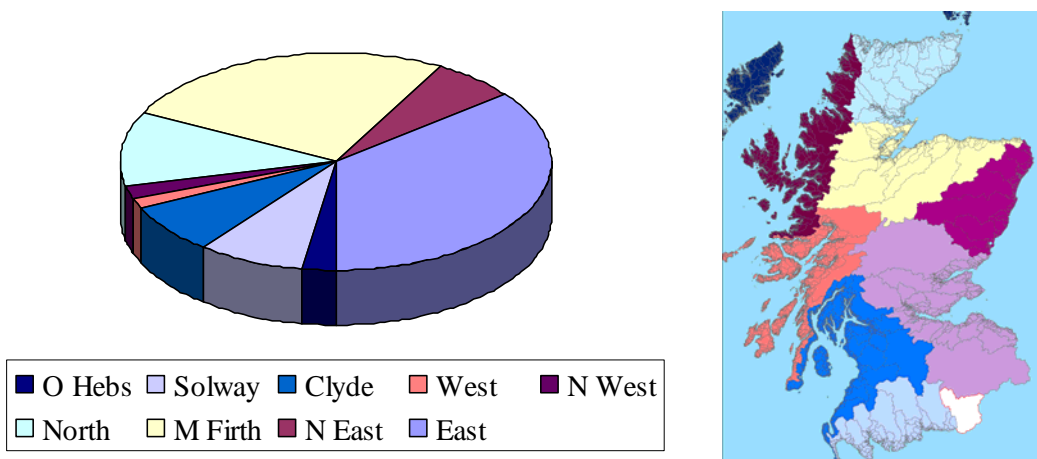


Figure 6. Distribution of catches among regions by rod and line fisheries in 2007.

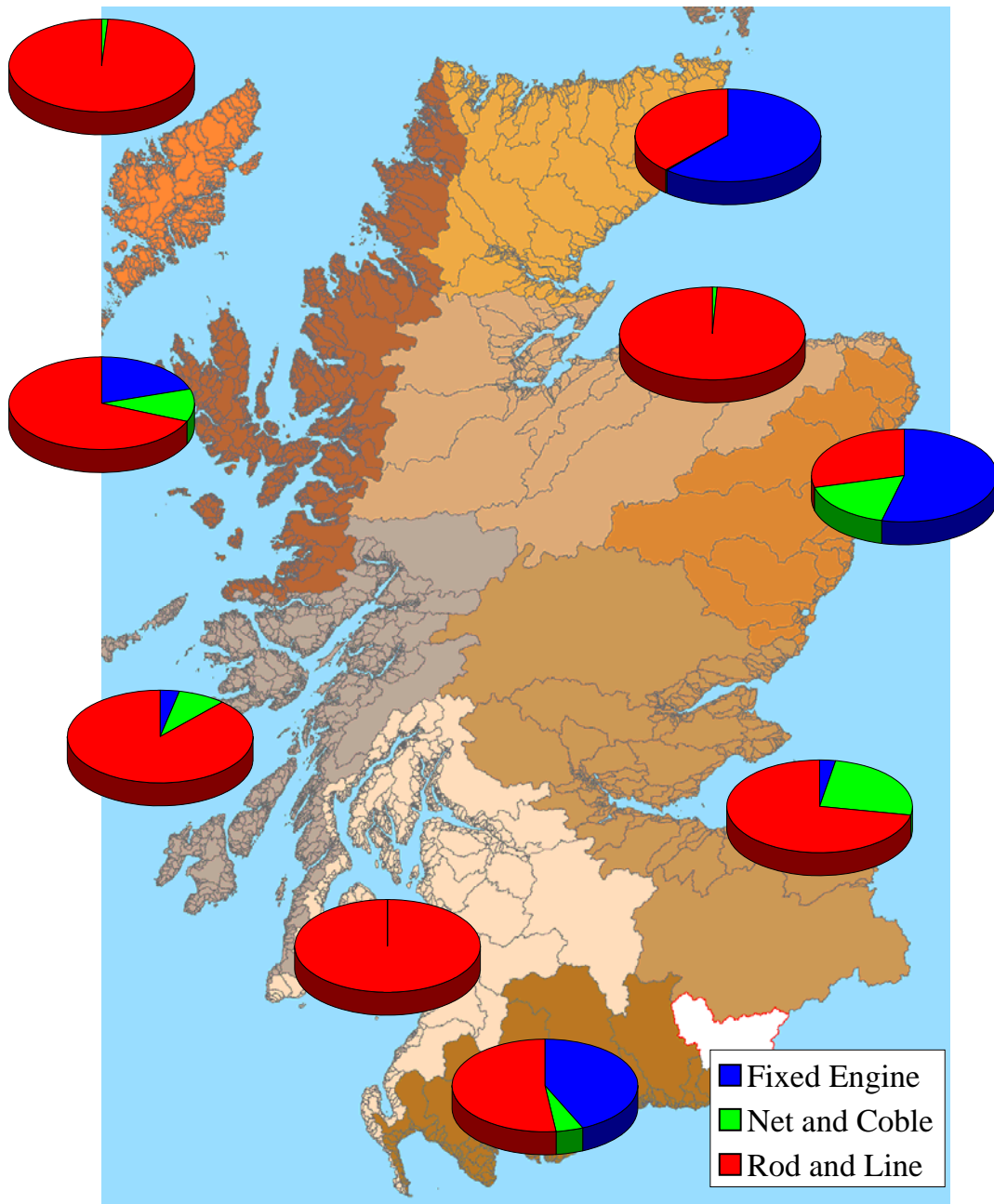


Figure 7. Distribution of catches (caught and retained) within regions by fishing method in 2007.