



Ground Gear Changes and Effects

Target Species:

Nephrops and mixed round and flatfish

Fishing Method:

Twin Trawl

Area:

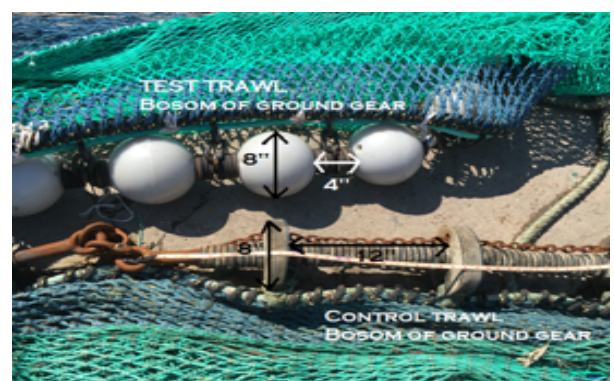
North Sea

Vessel:

MV Zenith BF106

Trial Objective:

To reduce the bycatch of round and flat fish.



Aim of the Trial:

To test if the unwanted by-catch of round and flat fish could be reduced in the Nephrops trawl fishery using a modified Nephrops trawl incorporating 200mm bobbins.

Gear Modifications:

The catching performance of a low headline "Letterbox" trawl with 200mm spherical bobbins in the 15m centre section of the ground gear was compared to a similar gear with 200mm rock hopper disks in the centre section.

Results

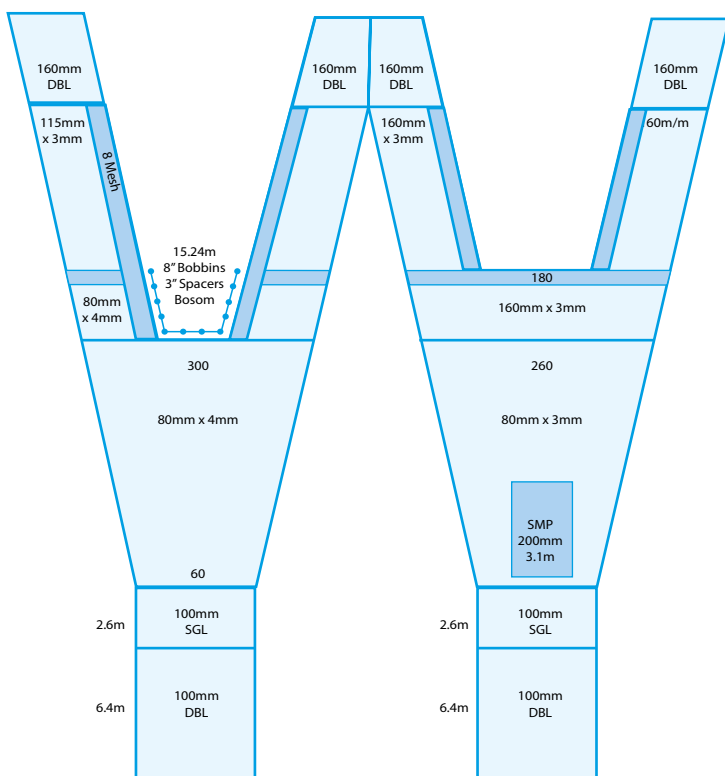
Catches of Nephrops and monkfish remained consistent with that of a standard commercial Nephrops trawl.

There were significant reductions in the capture of many of the species caught. Catches of haddock were reduced by 56%, whiting by 63%, cod by 25%, hake by 61%, saithe by 88%, long rough dab by 54% and megrim by 24%. There were no significant differences in the bulk catches of monkfish, Nephrops, common dab, lemon sole, plaice or witch

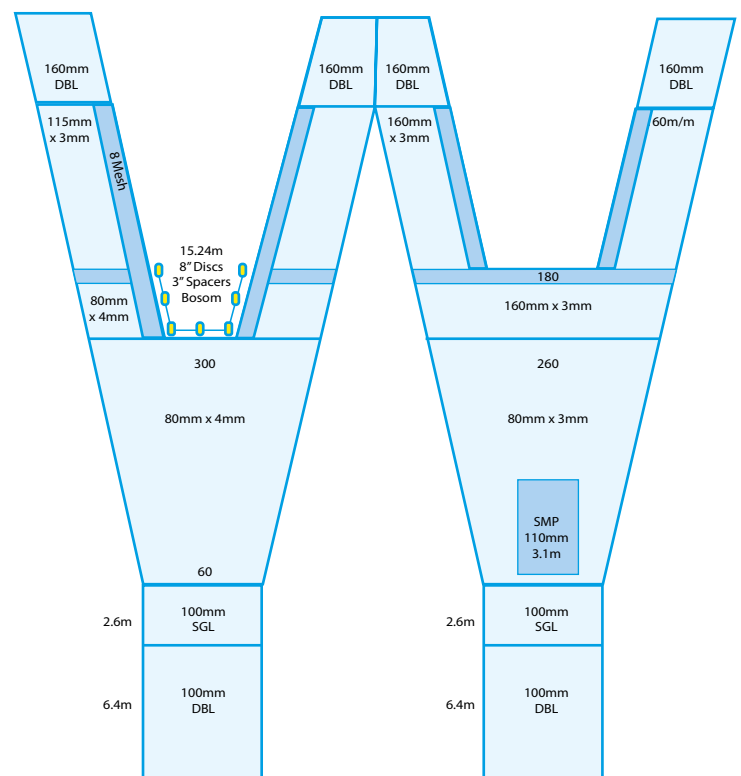
There was a significant reduction in the quantities of smaller common dab (<19cm) and long rough dab (<21cm) that were caught when using the modified trawl. However, significantly more larger plaice above 30cm were retained by the modified trawl.

Species	Test	Control	% Reduction
Haddock	670	1517	56 (49, 62)
Whiting	162	443	63 (56, 72)
Cod	1656	2214	25 (1, 42)
Hake	300	770	61 (50, 70)
Saithe	58	481	88 (79, 93)
Long Rough Dab	82	178	54 (34, 67)
Megrim	132	173	24 (9, 37)
Monk	1240	1367	9 (-4, 21)
Nephrops	591	654	10 (-5, 23)
Common Dab	50	59	16 (-9, 33)
Lemon Sole	150	143	-5 (-24, 11)
Plaice	256	261	2 (-16, 16)
Witch	96	108	11 (-1, 22)

Table ref: Trials to assess the effect of bobbin groundgear and a 200mm square mesh panel to reduce unwanted by-catches in the commercial Nephrops fishery.



Test Trawl



Control Trawl