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Charter Fishing Vessel *Ocean Trust* (0B 38)

Cruise 0309H

REPORT

5 -11 March 2009

19 -26 March 2009

Personnel

D Bova (In charge)

J Drewery

I Penny

Objectives

1. To assess the performance and selectivity of a "Swedish grid" with an 80mm diamond mesh codend on reducing the by-catch of juvenile whitefish in Nephrops trawl. Attain underwater video footage of grid in situ using mini TV.
2. To assess selectivity of 80mm codend with 120mm SMP @ 12-15m.
3. To assess of 80mm codend with 120mm SMP @ 6-9m.

Narrative

Staff and equipment joined Ocean Trust at Mallaig on the 5 March. The rigging of the fishing gear, wheelhouse instrumentation, and fish measuring station commenced on board the vessel whilst along side Mallaig harbour. Also rigged at this time was the Mini TV cameras and IR light on to pre determined positions situated on the extension with the "Swedish grid" in place, and 80 mm codend.

Ocean Trust then set off to grounds suitable for an initial series of camera observations to check the rigging of the "Swedish grid". Having completed these initial observations with no modification required to the grid, further camera observations were undertaken until the observation work for objective 1 was concluded successfully. Selectivity hauls started on 7 March at the Hillies edge ground and surrounding area where there had been reported catches of round fish, fishing tows continued until deteriorating weather conditions prevented any further work to continue, at which point the half landing was made in Mallaig. Selectivity hauls recommenced from Mallaig on the 19 of March and normal fishing operation were again hampered by gale force winds and poor sea state. All the objectives were completed and the charter ended on the 26 of March at Mallaig.

Results

A total of 22 selectivity hauls were made and comprised of 10 hauls with the grid, 7 hauls with the 12 -15 smp position and 5 hauls with the 6 - 9 smp position. Also 9 Mini TV hauls were undertaken. The mini TV camera observations confirmed that the grid was correctly positioned in the extension of the net.

Video evidence was attained showing that not all large Nephrops are passing through the grid into the codend but being ejected out of the vent. This is backed up by preliminary statistical data, that when comparing the grid catch length frequencies for Nephrops with that from the control length frequencies for Nephrops we see that there are less numbers of Nephrops over 50mm carapace length in the codend with the grid in the extension. Large flat fish were also observed exiting the vent. This is an important observation as any loss of Nephrops at this size would reduce the value of the landings adversely as would also the loss of large flatfish. With respect to the round fish selectivity during the trip it was extremely difficult to find any quantities of Haddock, Whiting or Cod, with the most abundant fish species being juvenile hake. A more detailed statistical analysis is to be carried out on all the test cases.

David J Bova
8 April 2009