

Small Grant Report

FSSG14: Effectiveness of escape panels for reducing undersized catch in the Orkney brown crab
Cancer pagurus

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Overview

Funding from this grant has been used to purchase fifteen Medley Pots. These were used to assemble a string of 15 scientific creels investigating the effect of technical measures, in this case escape hatches within the Orkney brown crab fishery.

Benefits expected from this award

Statics gear, such as creels have shown particular selectivity in crustacean fisheries by capturing mainly the target species and reducing bycatch and little to no damage to the marine environment compared with others gear types. Therefore, it becomes important to gain a better understanding of how catch composition changes within a fishery through the inclusion of gear selective technologies and if such additions provide adequate benefit. This study aims to establish whether the inclusion of escape gaps as a technical measure provide added benefit to legal and undersize catch compositions.

Creels were fitted with escape hatches (46mmx80mm), and have been deployed in Orkney waters alongside existing creels with escape panels (46mmx84mm) and those without used by commercial fisherman.

Pre grant allocation baseline data has been collected on-board two commercial fishing vessels since June 2015. Data consists of creel by creel CPUE and morphometric measurements of the carapace length (CL) of both legal and undersized individuals. From this and data collected through the scientific string the comparison of escape hatch size and the overall use of escape gaps on catch composition of *Cancer pagurus* will be investigated.

This project is currently ongoing, with data collection scheduled for completion by August 2015 and data analysis thereafter.

This project aims to provide two outcomes, firstly: provide information from which appropriate science driven management measures can be assessed, and secondly act as an information source for the collective IFG network.

MASTS contribution

The Marine Alliance for Science and Technology of Scotland (MASTS) play an important role for this particular study, in which helped towards a better acknowledge of effectiveness of escape panels in creels.