

Baie ny Carrickey Closed Area: Managing fishermen to manage Marine Protected Areas

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Summary

The Isle of Man is at the forefront of introducing Marine Protected Areas (MPAs) and a unique scientific and management trial is currently being conducted in Baie ny Carrickey on its south coast. In April 2013 a ground breaking lease was signed between the Isle of Man Government's Department for Environment, Food and Agriculture (DEFA) and the newly formed Baie ny Carrickey Crustacean Fishery Management Association (BNCCFMA) handing responsibility for conservation and management of the stocks of crab and lobster in the Bay to the local fishermen. DEFA and its independent scientific advisors, Bangor University are now working with the BNCCFMA to closely monitor the success of the venture as part of a three year scientific trial, which began on 1st November 2013, with the fishermen responsible for collecting the required scientific data to evaluate the trial. This is a unique situation and should the trial prove successful then it may in due course become a template for other Manx fishermen taking on responsibility for managing their own fisheries.

Introduction

As many traditional fisheries stocks continue to decline the requirement to improve protection and management of marine areas is becoming increasingly apparent. In the Isle of Man a total of six marine protected areas (MPAs) are now established (covering approximately 3 % of the seabed). Vital in gaining the support of the fishing industry for these MPAs was the effectiveness of the first Fisheries Closed Area, established in 1989 off Port Erin (Gell *et al.*, 2013). When fishermen saw improvements in catches adjacent to the first Fisheries Closed Area, they were proactive in initiating and supporting further closed areas (Gell *et al.*, 2013). The most recently designated site Baie ny Carrickey Closed Area, which covers an area of approximately 11 km² (1100 hectares) off the south coast of the Isle of Man, was selected by a group of stakeholders independent of the government.

Following a public consultation process Baie ny Carrickey was closed to scallop fishing by any means for a period of 20 years to provide protection for important seabed habitats (e.g. rocky reefs) and the associated commercial crustacean (crab and lobster) populations. A unique management situation exists within the Baie ny Carrickey Closed Area which is now managed, with expert support and advice from scientists and fisheries managers, by a local group of crustacean fishermen who joined together to form the BNCCFMA. The BNCCFMA developed a local fishery management plan (reduced effort regime, increased minimum landing size and scientific monitoring) that is currently being trialled over a three year period (November 2013 – November 2016). All members play a vital role in the assessment of the trial by collecting habitat data (video habitat surveys using flying arrays) and monthly population data (catches are monitored using onboard camera systems).

Materials and Methods

Exploitation of commercially important crustaceans (*Homarus gammarus* and *Cancer pagurus*) continues in the area under commercial licence to seven members of the Bannagh Carrickey Crustacean Fishery Management Association (BNCCFMA) with a total maximum limit of 390 commercial pots (reduced from approximately 650 commercial pots) and an increase in the Minimum Landing Size of crabs from 130 mm to 135 mm and for lobsters from 87 mm to 88 mm with an additional Maximum Landing Size of 120 mm introduced (Bloor *et al.*, 2014).

A support structure has been put in place to aid the fishermen in their management role. The BNCCFMA meet independently to discuss potential issues and ideas for the management of the area. Representatives of the BNCCFMA then attends meetings of a Management Advisory Committee which includes members from DEFA (to provide management advice and support) from Bangor University (to provide scientific advice and support) and from other interested stakeholders (to ensure a range of views are taken into account), in addition the committee is led by an independent chair person. The MAC provides a forum where the fishermen are able to ask for advice or support in their management of the Closed Area and to resolve any overarching issues.

The aims of this trial are three-fold:

Aim 1: To provide fishermen with the tools, knowledge and support to sustainably manage a marine protected area for themselves.

Aim 2: To maintain the ecological integrity of the area. Ecological integrity refers to the health of an ecosystem.

Aim 3: To maintain and enhance commercial fisheries resources, primarily crustaceans, within the Closed Area and promote their sustainable use.

Results and Discussion

The three year trial is currently coming to the end of its first full year of data collection. This presentation will describe the unique process of industry led management of MPAs, underpinned by expert scientific and management advice, and the impacts of the restrictions imposed within this designated area in terms of both benefits (ecology) and costs (socio-economics). In addition, this presentation will highlight the key lessons learnt whilst concluding that innovative approaches such as giving fishermen responsibility for management and training fishermen in fisheries science can bring real benefits to conservation and fisheries management.

References

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