

Squid jigging: An important emerging fishery for the Manx economy?

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Summary

With the global decline in finfish stocks and other traditional fisheries, many fishermen are beginning to explore the potential economic benefits of diversification. A small, directed squid fishery using traditional line and hook (hand jigging) methods has recently been reported in several coastal locations around the Isle of Man. Jigging is a highly selective fishing method which has minimal impact on the marine environment and for existing fishermen requires minimal start-up cost (e.g. new fishing gear). This study investigated the potential cost and benefits, both socio-economic and ecological, for the Manx economy of further developing the extent of this seasonal artisanal fishery within the territorial sea.

Introduction

A small, directed squid fishery using traditional line and hook (hand jigging) methods is developing around the Isle of Man in response to an increased awareness of the economic potentials of this commercial fishery resource and a decline in the productivity of traditional fisheries. As a fishing method jigging is highly selective, has minimal impact on the marine environment and is a relatively cost effective means of seasonal diversification for existing fishermen with minimal start up costs. Two squid species (*Loligo forbesi* and *Alloteuthis subulata*) have commonly been recorded around the Isle of Man (Montgomery, 2008, Duncan, 2009, Boyle and Thompson, 2012), however, the current state of knowledge of stock identity, distribution, seasonality, life cycle and population dynamics of squid species within the Isle of Man territorial sea remains limited.

Materials and Methods

This developing jig fishery for squid may represent an important, underdeveloped fisheries resources in this area. However, the amount by which the Isle of Man can sustainably increase its squid production is currently unknown. This preliminary study has assessed the current levels of squid exploitation within the territorial sea for all métiers and assessed the proportion of catch contributed by jigging to the overall landings (in terms of both quantity and value). The level of catches not currently recorded within the official landing statistics was also assessed. An evaluation of the potential economic value of this fishery was also made along with an assessment of methods by which to monitor future landings from the jig fishery with more precision.

Results and Discussion

Since 2011 several Manx fishing vessels have begun to target squid using a hand jigging method. Over the last three years the jig fishery has increased both in terms of landed weight and value from only 2.6 tonnes (t) (£7,941) from its start in 2011 to over 6.5 t (£19,870) in 2013. This fishery has a marked seasonal peak around October and November (Duncan, 2009), corresponding to the occurrence of pre-breeding or spawning squid in inshore coastal waters. In addition, data collected from trawl bycatch surveys showed higher abundances of squid in waters to the west of the Isle of Man (Montgomery, 2008). Squid were recorded at 3 x higher densities in trawls on the west coast of the Island (average of 8.45 squid per tow) compared to the east coast of the Island (average of 2.63 squid per tow) (Montgomery, 2008). As such directed squid fishing may only be commercially viable in certain coastal locations around the Island and solely during periods of high abundance (e.g. October and November), with a need for individual fishers to continue to exploit more traditional fisheries at other times of the year and in other locations. To date, this small-scale emerging fishery in the Isle of Man has not received any directed scientific research or management input. This poster will explore the extent of this emerging fishery, its future potential for expansion and the potential benefits of diversification to the Manx economy.

References

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