



Agenda item B5

By: Lead Scientific and Conservation Officer

To: Kent and Essex Inshore Fisheries and Conservation Authority – 20 May 2016

Subject: **PERMITTED COCKLE FISHERY MANAGEMENT**

Classification Unrestricted

Summary: This report provides a summary of the spring 2016 cockle stock assessment surveys. Resulting recommendations on the management of the 2016 permitted cockle fishery outside the Thames Estuary Fishery Order area are included in this report and members are asked to review and approve this recommended management of the 2016 cockle fishery

Recommendation:

That the Authority keeps the beds in the permitted cockle fishery closed in 2016 and refund the permit application fees to all applicants.

1. Permitted Cockle Fishery 2015

In May 2015, the authority decided not to open the permitted cockle fishery due to limited biomass and stock size reported from the spring surveys, therefore no permits were issued.

2. Cockle Fishery Flexible Permit Byelaw

The process for the management of this fishery each year is that anyone wishing to apply for a permit is required to apply by 31 March in that year and all stock assessment surveys will be completed before the May Authority meeting. This ensures that the Authority can be presented with a complete picture of the fishery, including the amount of stock available and the number of vessels wishing to work it.

2.1 Appropriate Assessment

The Authority is required under Regulation 48(3) of the Conservation (Natural Habitats) Regulations 1994, Wildlife and Countryside Act 1981 and the Countryside and Rights of Way Act 2000 the Authority to give notice to Natural England of intention to issue permits to fish for cockles within designated SSSI, SAC, SPA and Ramsar inter-tidal sites. The Authority is also required to submit a Habitat Regulations Assessment to Natural England which assess the impact if any of the fishery on protected features of European Marine Sites. This assessment includes survey data, fishery monitoring and details of mitigation implemented to ensure that there is no adverse impact upon these sites as a result of the Authority's action. A test of likely significant effect has been completed on the recommended management of the 2016 fishery, i.e. that the permitted cockle fishery does not open, and this has been submitted to Natural England. If the authority decides to open the fishery, a further assessment will need to be completed and approved by Natural England.

2.2 Number of Permit Applications

In 2015 the number of permit applications was 42 (40 category one and 2 category two). In 2016, 37 category one permits were applied for, which permit the taking of 13.6 m³ cockles per trip and there were no applications for a category two permit, which permit 6.8 m³ cockles to be taken per trip.

2.3 Spring 2015 Cockle Stock Surveys

2.3.1. Method and survey area

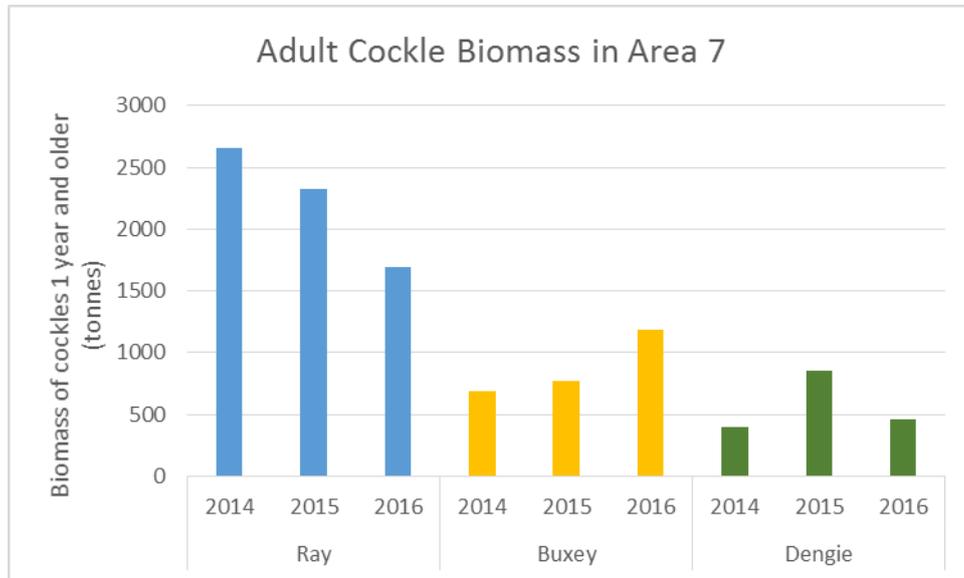
Stock surveys of the area outside the TECFO commenced on 5th April 2016 and were completed by 5th May 2016. At this time of year the cockles are coming into condition for their spring spawning following the winter dormant period. These surveys took a total of 10 survey days to complete using a Day grab deployed from FPV Tamesis, covering a total area of 54.5 km² (21.0 miles²) with a total of 456 grab samples being taken. The areas surveyed covered the Buxey, Ray and Dengie Sands, Minnis Bay, Leysdown and Pegwell Bay, which include all of the current main production areas outside of the TECFO (a chart showing the production areas is attached in Appendix A).

2.3.2. Results

The main harvesting areas outside the TECFO are in area 7 and data from the spring 2016 survey were compared with data from 2015 and 2014 to analyse trends in the three cockle beds in this area. The Ray cockle bed had a greater stock and biomass of adult cockles compared to the Buxey and Dengie cockle beds in 2014, 2015 and 2016, however the biomass

has decreased each year on the Ray since 2014 (Fig. 1). In contrast, adult cockle biomass on the Buxey cockle bed has increased steadily from 2014 to 2016, whereas the Dengie showed an increase in adult biomass in 2015 and a subsequent decrease in 2016.

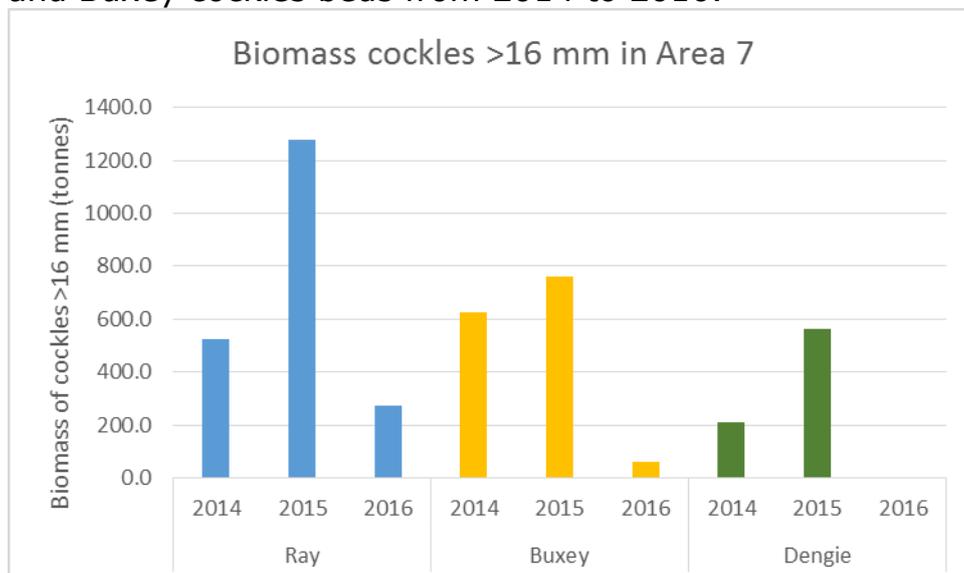
Fig. 1: Biomass of cockles aged 1 year and older on the Ray, Dengie and Buxey cockles beds from 2014 to 2016.



There was a considerably lower biomass of cockles sized 16 mm and over in 2016 in all 3 areas compared to the 2 previous years (Fig. 2).

The greatest number and biomass of cockles found in 2016 in all 3 beds in area 7 were 1 year old cockles from a large recruitment in 2014 which was detected as a high number of 0 year olds in 2015.

Fig. 2: Biomass of cockles size width 16 mm and above on the Ray, Dengie and Buxey cockles beds from 2014 to 2016.



Other areas in the permitted cockle fishery area had very few cockles as has been observed in previous years.

2.4 2016 Fishery Management

The survey shows that as in recent years, the Ray, Dengie and Buxey Sands are the most productive beds and that the other areas contain very few cockles suitable for commercial harvesting. The recommended maximum Total Allowable Catch (TAC) that can be taken from the beds will be less than 100 tonnes. This figure divided by the total number of vessels which have applied for a permit (37) would result in less than one fishing trip for each vessel. Given that the cockles in these areas are relatively slow growing compared to the cockles in the licensed fishery and that most of the population of cockles currently on the grounds are below the minimum size of 16 mm and even below 14 mm, it would seem prudent to not open the fishery this year and refund the permit fees which have been paid with each application as specified in the byelaw.

2.5 Outlook for 2017 and beyond

There are large numbers of 1 year old cockles at some sites in area 7 and depending on growth rates over the next year, these cockles may be of harvestable size in 2017 or 2018.

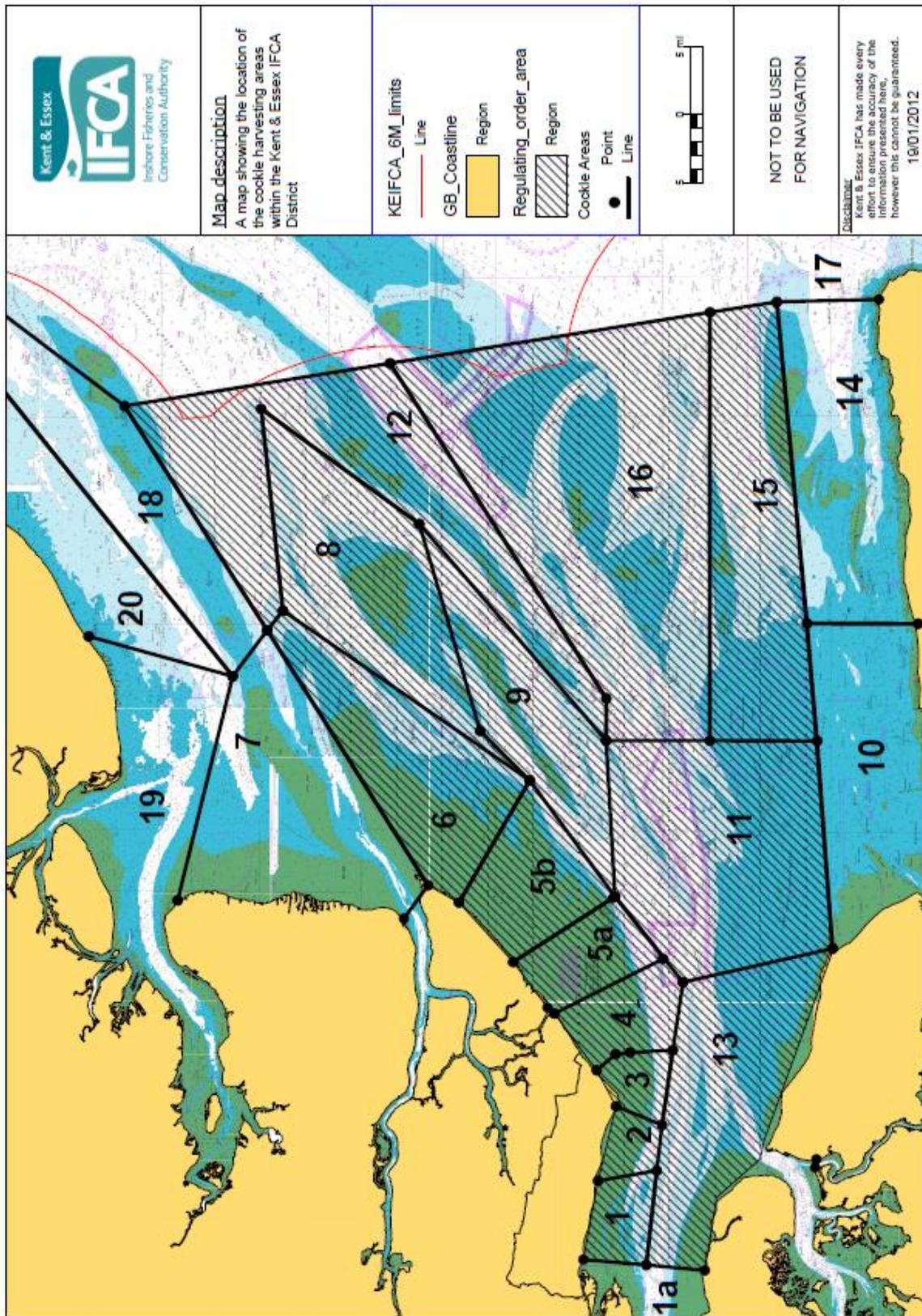
Financial Implications:

None identified in relation to agreed budget headings.

Recommendation:

That the Authority **APPROVE** the above management measures to keep the beds in the permitted cockle fishery closed and refund the permit application fees to all applicants.

Appendix A



A chart showing the cockle production areas within the Kent and Essex IFCA District