



Agenda item B5

By: Assistant Chief IFCO

To: Kent and Essex Inshore Fisheries and Conservation Authority – 23 May 2017

Subject: Cockle TECFO Licenced Fishery Management

Classification **Unrestricted**

Summary:

This report provides a summary of the spring 2017 cockle stock assessment surveys and outcomes of the annual cockle licence holder meeting. Resulting recommendations on the management of the 2017 licenced cockle fishery inside the Thames Estuary Fishery Order area are included in this report and members are asked to review and approve this recommended management of the 2017 cockle fishery.

Recommendations –

Note: If additional licences are issued it will be necessary to review management allocations.

In respect of the Thames Estuary Cockle Fishery Order:

- (a)** The Total Allowable Catch (TAC) should be set initially at 4053 tonnes and that information related to the stocks will be continually reviewed throughout the season to ensure future sustainability.
- (b)** Allocation of additional TAC, and therefore extension of the fishing season, may be made in the event of previously unknown or un-surveyed stocks of cockles being located, conversely if by monitoring of catch rates stocks in individual areas are shown to be falling then those areas may have to be closed.
- (c)** That the Chief IFCO be authorised, after consultation with the Chairman and Vice Chairman, to implement changes to fishing controls within the limitations of the agreed TAC.

(d) That the fishery will commence at 0900 hrs on 26th June 2017.

(e) Provisional fishing allocations will be as follows – this is subject to discussions with licence holders and will be reported on verbally. This will also be subject to further amendment.

(f) The fishing season will be divided into weekly specified fishing periods which will run from 0900 hrs on Monday to 12.00 hrs on Friday and during these periods licence holders will be permitted to make the following specified numbers of landings (Reg. No. 7). This will maximise production when meat yields and quality are at their best.

26th June – 29th September (14 weeks) 2 specified landings per period

Within these specified landings, licence holders will make one landing from Area 5 and one landing from one of Areas 4, 6 or 13. Details of the number of trips to be carried out in each of these areas will be provided to licence holders.

(g) The maximum quantity of cockles that may be landed or carried on board will remain at 13.6m³/500 baskets per fishing trip (approx. equivalent 11 tonnes).

(h) As is usual it is recommended that sections of Areas 1, 2 and 3 should be closed at all times during the period June - September inclusive. These areas are defined as inshore sections of Areas 1, 2 and 3 from Two Tree Island at Leigh-on-Sea in the West to The Coastguard Station at Shoeburyness in the East and also within the area of Shoeburyness East Beach. (This closure applies only to the area inside the moorings and where there are no moorings closer to the shore than a distance of 300 metres measured from mean high water mark.)

(i) In addition to the above closure, it is recommended that all of areas 2 and 3 should be closed at all times during the period June – September inclusive. This is to protect the significant spat populations in area 3 and allow recovery of depleted stock in area 2.

In respect of the licence fee:

(j) The licence fee will remain the same as 2016, at £5346

In respect of the issuing of additional Cockle Fishery Licences:

(k) That the number of licences should be restricted.

(l) The Regulating Order gives a right, to those that held a licence last year, to be granted a licence for this coming season and therefore those 14 licences should be granted as adequate stocks are available.

1. THAMES ESTUARY COCKLE FISHERY ORDER 1994

1.1 2016 Cockle fishery

As previously reported, the cockle fishery within the area of the Thames Estuary Cockle Fishery Order (TECFO) opened between 26 June 2016 and 7 October 2016 with a total of 16 weeks fishing. During this period a total of 6160 tonnes were landed from within the TECFO area.

1.2 Spring 2017 Cockle Stock Surveys

1.2.1 Method

Stock surveys on the main harvesting areas of the Maplin and Foulness sands commenced on 11 April 2017 over the low ebb spring tides which gave best access to the drying sands that extend out to three miles offshore in some sections (a chart showing the cockle management areas is attached at Appendix A). These surveys took five days to complete, covering a total area of 57.8 km² (22.3 miles²) and a total of 430 quadrat samples were taken. The sandflats were accessed from land using two Honda All-Terrain Vehicles for transportation and cockles were dug out from a 0.1 m² quadrat at each sample point, counted, weighed and the age determined (the method is described in more detail in the annual cockle report). The surveys were undertaken by the Authority's officers in teams of four. It is necessary to complete surveys during periods of spring tides when the ebb tide leaves the sands dry and these tide times result in the surveys being carried out around sunrise.

Whilst undertaking these surveys, additional samples were collected for Marine Ecological Surveys Ltd that are working for DP World to assess whether port dredging has an impact on cockle stocks.

1.2.2 Results

Analysis of the survey results show that there are fewer cockles on the Maplin and Foulness sands in this spring 2017 survey compared to any of the previous 10 years (fig. 1). The amount of spat in autumn 2016 was the highest in the previous 19 years (fig. 2) and the spring 2017 survey showed that although there had been normal winter mortality, extremely good quantities of spat remain on the main fishing areas.

Despite low overall stock of cockles, survival of all year classes was higher over the winter of 2016/2017 compared with the winters of 2015/2016 and 2014/2015. All year classes experienced severe mortalities across the areas surveyed during the 2013/2014 winter, with only 3% survival in area 6. This severely depleted 2013 age class, as well as the poor recruitment to the fishery in recent years (since 2011) remains a limiting factor for the TAC that can be set this year.

The graphs overleaf show the latest stock situation.

Fig. 1: Abundance of cockles from 2004 to 2017 in the main cockle harvesting areas of the Maplin and Foulness sands.

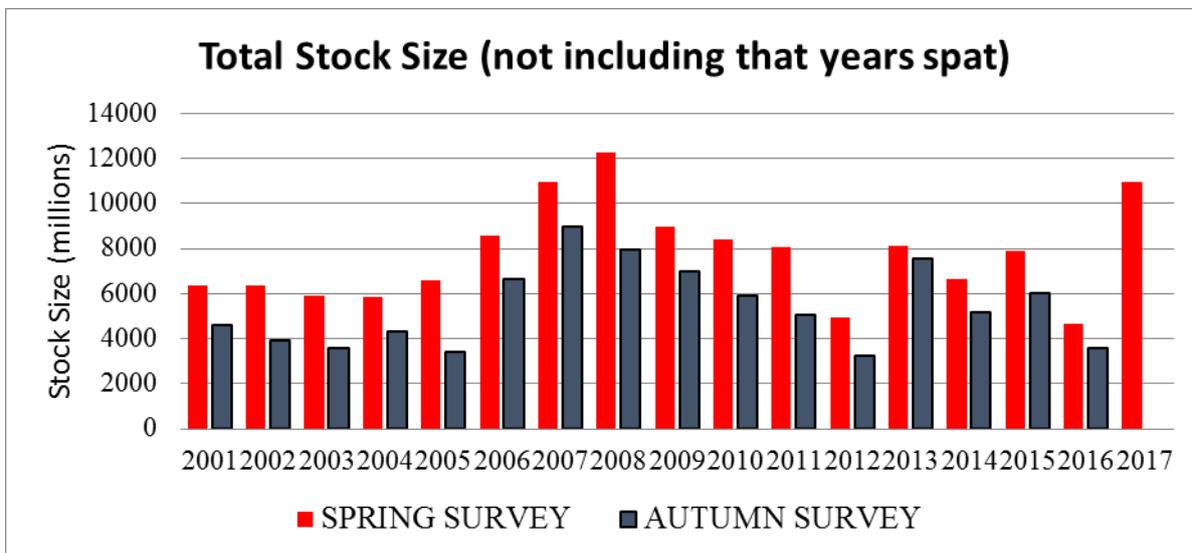
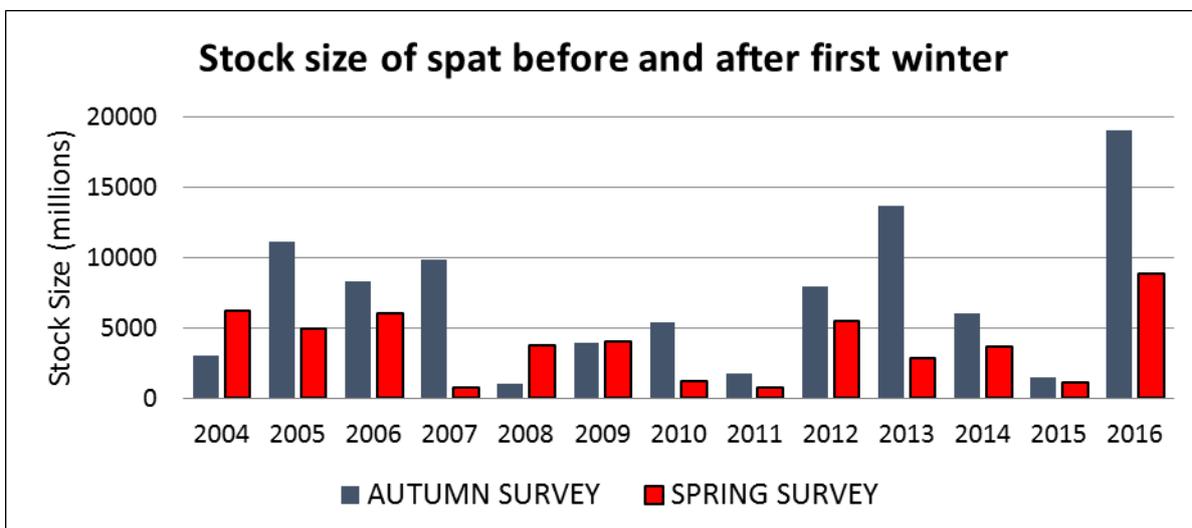


Fig. 2: Abundance of spat before and after the first winter from 2004 to 2017 in the main cockle harvesting areas of the Maplin and Foulness sands.



Surveys of additional cockle grounds beyond the major harvesting areas have also been completed. Areas 2 and 3 were also surveyed during this period and whilst there are very good quantities of spat in area 3, numbers of adult cockles are reduced whilst area 2 is extremely depleted of all year classes. As a result, it would be prudent to close all of areas 2 and 3 to fishing for the 2017 fishery.

1.2.3 Conclusion and TAC

Analysis of survey data indicates that the recommended Total Allowable Catch (TAC) that can be taken from the major beds will be 4053 tonnes; 2,100 tonnes less than was landed in 2016 and the lowest TAC set in the history of the TECFO 1994.

There was an extremely significant spat fall in 2016 and this stock has benefitted from very good survival over the 2016/2017 winter which, if impacts upon it are minimised, should bode well for the future of the fishery. However, the fishery and the cockle population cannot be reliant upon a single year class. As a result, recruitment this year will again be a key point in the sustainability of the fishery.

1.3 Cockle Licence holder meeting

On 10th May a meeting was held with the cockle fishery licence holders at the town council offices in Leigh-on-Sea. The management of the 2017 fishery along with specific dates for the fishery and the number of trips per week were discussed and the details reported here were agreed by majority of the licence holders.

1.3 2017 Fishery Management

Following consideration of the previously discussed items I **RECOMMEND** the following management measures. If additional licences are issued it will be necessary to review management allocations.

- (a)** The Total Allowable Catch (TAC) should be set initially at 4053 tonnes and that information related to the stocks will be continually reviewed throughout the season to ensure future sustainability.
- (b)** Allocation of additional TAC, and therefore extension of the fishing season, may be made in the event of previously unknown or un-surveyed stocks of cockles being located, conversely if by monitoring of catch rates stocks in individual areas are shown to be falling then those areas may have to be closed.
- (c)** That the Chief IFCO be authorised, after consultation with the Chairman and Vice Chairman, to implement changes to fishing controls within the limitations of the agreed TAC.
- (d)** That the fishery will commence at 0900 hrs on 26th June 2017.
- (e)** Provisional fishing allocations will be as follows – this is subject to discussions with licence holders and will be reported on verbally. This will also be subject to further amendment.
- (f)** The fishing season will be divided into weekly specified fishing periods which will run from 0900 hrs on Monday to 12.00 hrs on Friday and during these periods licence holders will be permitted to make the following specified numbers of landings (Reg. No. 7). This will maximise production when meat yields and quality are at their best.

26th June – 22nd September (13 weeks) 2 specified landings per period

(g) The maximum quantity of cockles that may be landed or carried on board will remain at 13.6m³/500 baskets per fishing trip (approx. equivalent 11 tonnes).

(h) As is usual it is recommended that sections of Areas 1, 2 and 3 should be closed at all times during the period June - September inclusive. These areas are defined as inshore sections of Areas 1, 2 and 3 from Two Tree Island at Leigh-on-Sea in the West to The Coastguard Station at Shoeburyness in the East and also within the area of Shoeburyness East Beach. (This closure applies only to the area inside the moorings and where there are no moorings closer to the shore than a distance of 300 metres measured from mean high water mark.)

(i) In addition to the above closure, it is recommended that all of areas 2 and 3 should be closed at all times during the period June – September inclusive. This is to protect the significant spat populations in area 3 and allow recovery of depleted stock in area 2.

Note: Within Areas 1 and 2 Southend Borough Council licencing conditions apply.

The Authority is asked to **APPROVE** the above recommendations

1.4 Licence Fees

Operating costs for the 2015 and 2016 fishery included an additional £378 compared to 2014 to cover the costs for using the new vessel monitoring system (VMS+) installed as a requirement from MMO on all cockle boats. The cost of VMS+ will remain the same this year and operating costs of the fishery will be kept to a minimum, therefore the licence fee will remain the same as 2015 and 2016, at £5,346.

The Authority is asked to **APPROVE** that the licence fee will remain the same as 2016, at £5,346

1.5 Consideration of Issuing Cockle Fishery Licences - Formal Procedure

The Thames Estuary Cockle Fishery Order gives rights to a licence for those that have held licences during the previous 24 months (section 4(8)(b)). The Authority may also issue, subject to directions given by the Minister, licences in such numbers and to such persons as it may determine as defined in section 4 (5) of the Order.

It will be necessary to proceed with the following formal procedure by considering whether to limit the number of licences that will be issued and if so how many and to whom these should be granted.

As required by the Order, consultation has taken place with those likely to be substantially affected by a limitation on the number of licences issued. This consultation was undertaken via a letter sent to persons likely to be substantially affected. Interested parties were made aware that they could provide representation in writing or apply to the Authority to speak to this meeting; ten written requests for additional licences were received. These are included in appendix B.

Consideration will need to be given to the level of stocks and future prospects for the fishery. Last year the Authority resolved that no additional licences would be granted for the 2016 fishery and that licences would only be issued to the existing 14 licence holders.

Once a decision has been made by the Authority it will be necessary to inform the Minister to allow him to give directions if so decided under Section 4(5) of the Thames Estuary Cockle Fishery Order.

Recommendations:

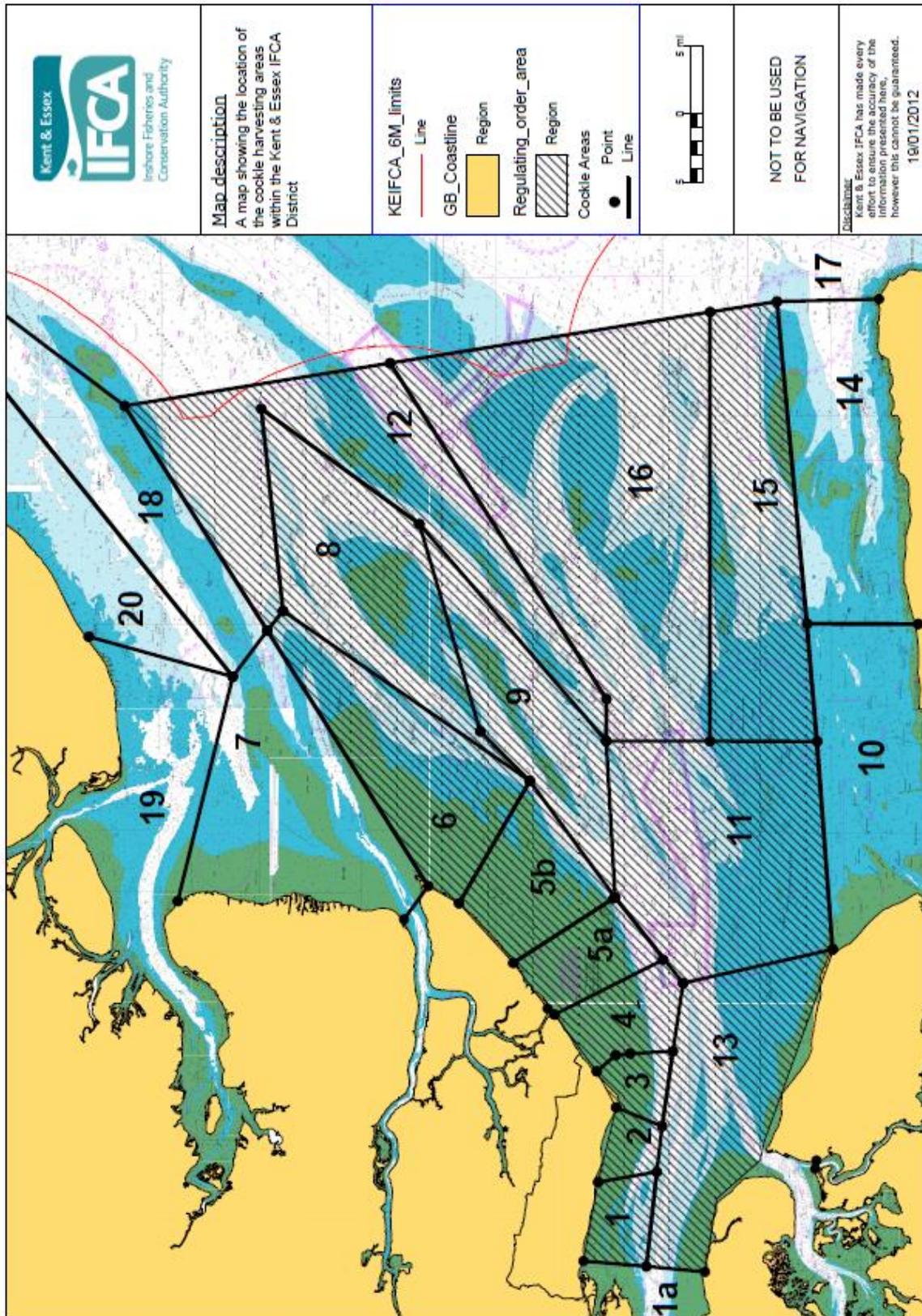
(k) That the number of licences should be restricted.

(l) The Regulating Order gives a right, to those that held a licence last year, to be granted a licence for this coming season and therefore those 14 licences should be granted as adequate stocks are available.

1.6 Fishing in Marine Protected Areas

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 is required to give notice to Natural England of intention to issue licences to fish for cockles within designated SSSI, EMS and Ramsar inter-tidal sites. The Authority's management of the TECFO area cockle fishery is subject to a Habitat's Regulation Assessment as it occurs within several European Marine Sites (Essex Estuaries SAC, Mid-Essex Coast SPA, Thames Estuary and Marshes SPA and Outer Thames SPA). The required appropriate assessment of the impacts of this fishery on protected features has been updated from previous years to be consistent with the approach adopted under the Defra revised approach to managing fisheries in European Marine Sites. VMS data collected in 2015 and 2016 was a key part of the assessment, allowing a 'fishing footprint' to be calculated and further monitoring of VMS data will be an important factor in order to assess any impacts of cockle suction dredging. This appropriate assessment was submitted to Natural England for advice and we are currently awaiting a response. A copy of this appropriate assessment is provided in appendix C.

Appendix A



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