



Agenda item B5

By: Lead Scientific and Conservation Officer

To: Kent and Essex Inshore Fisheries and Conservation Authority – 21 May 2019

Subject: Cockle TECFO Licenced Fishery Management

Classification **Unrestricted**

Summary:

This report provides a summary of the spring 2019 cockle stock assessment surveys and outcomes of the annual cockle licence holder meeting. Resulting recommendations on the management of the 2019 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 2019 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 8008 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 significant growth in the size of cockles. Reduction in TAC, and therefore a reduction in the number of trips, may be made in the event of very poor growth in the size of cockles.
- (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. Members would be notified of any changes made.

(d) That the fishery will commence at 2100 hrs on 16th June 2019.

(e) Provisional fishing allocations will be as follows, this will also be subject to further amendment;

The fishing season will be divided into weekly specified fishing periods which will run from 2100 hrs on Sunday 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.

| | |
|---|---------------------------------|
| 16 th June – 26 th July (6 weeks) | 3 specified landings per period |
| 28 th July – 23 rd August (4 weeks) | 4 specified landings per period |
| 25 th August – 4 th October (6 weeks) | 3 specified landings per period |

(f) 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).

(g) 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.)

In respect of the licence fee:

(j) The licence fee will remain at £6244 (or increase as required to cover the costs of a pilot observer program).

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 2018 Cockle fishery

As previously reported, the cockle fishery within the area of the Thames Estuary Cockle Fishery Order (TECFO) opened between 17 June 2018 and 28 September 2018 with a total of 15 weeks fishing. During this period a total of 6622 tonnes were landed from within the TECFO area.

1.2 Spring 2019 Cockle Stock Surveys

1.2.1 Method

Stock surveys on the main harvesting areas of the Maplin and Foulness sands commenced on 19 April 2019 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 69.8 km² (22.3 miles²) and a total of 519 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 a high number of cockles on the Maplin and Foulness Sands (fig. 1). The stock is currently underpinned by a very large 2016 year class, followed by excellent spat falls in 2017 and 2018, both of which showed high survival through the winters of 2017/18 and 2018/19 (fig. 2) and the spring 2019 survey showed that extremely good quantities of spat remain on the main fishing areas.

Stock on the Maplin and Foulness Sands has, in a manner which was unforeseen, increased significantly as a result of excellent winter survival and the 2019 TAC will reflect this. However, there is still a sizeable proportion of the stock below the 16mm harvestable size as growth continues to be poor. A good growth season will provide a sound basis for a healthy stock and should continue to have a beneficial effect on future years TAC, subject to 2019 winter survival rates.

The graphs overleaf show the latest stock situation.

Fig. 1: Abundance of cockles from 2004 to 2019 in the main cockle harvesting areas of the Maplin and Foulness sands.

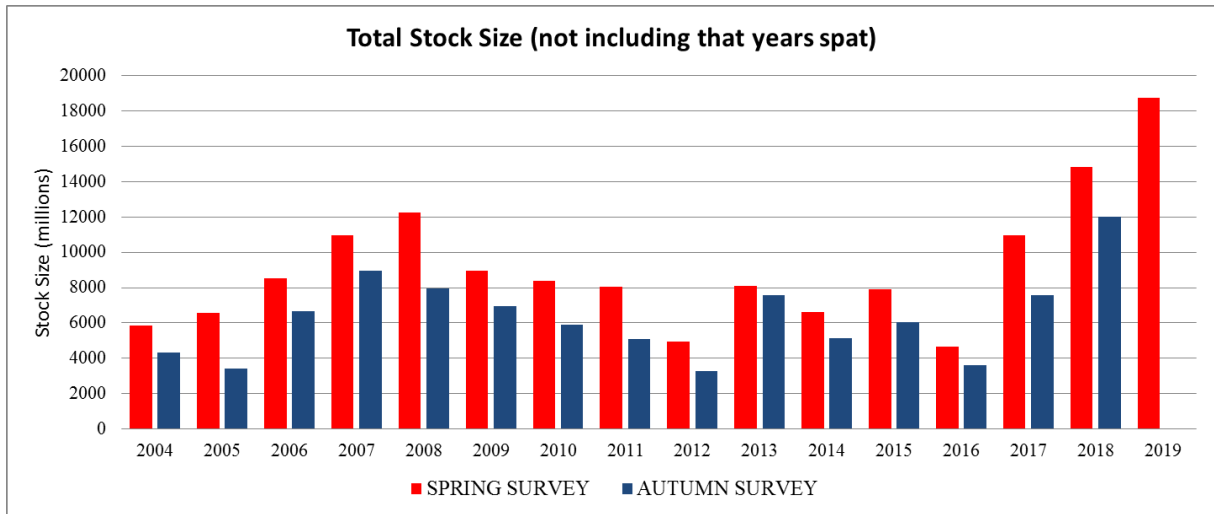
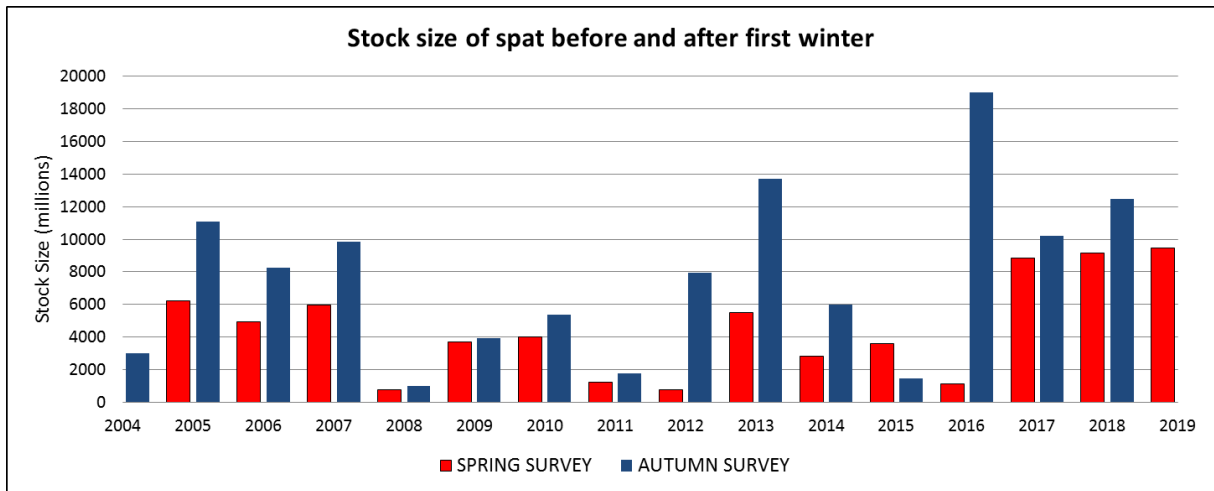


Fig. 2: Abundance of spat before and after the first winter from 2004 to 2019 in the main cockle harvesting areas of the Maplin and Foulness sands.



Surveys of additional cockle grounds beyond the major harvesting areas have also been completed. Areas 2 and 3, which were open for fishing during the 2018 season, were also surveyed during this period. Both areas currently show some sizeable stock on the ground, but growth will be needed for these areas to contribute significantly during the 2019 season. These areas will once again be opened for the 2019 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 8008 tonnes; 1540 tonnes more than was landed in 2018.

The extremely high spat fall of 2016, and that of 2017 has, again, been followed by a significant spat fall in 2018. Figures for spat numbers on the sands in the spring survey show the highest numbers of spat from the last 16 years. The stock continues to benefit from very good survival over the 2016/2017 and 2017/2018 winters which, if impacts upon it are minimised, should bode well for the future of the fishery. Successive strong year classes should be a key point in the sustainability of the fishery.

1.3 Cockle licence holders 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 2019 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 the majority of the licence holders.

Over the 2018/19 winter period, discussions were ongoing with the licence holders regarding continued improvement to the management of the fishery as well as the industry's MSC certification of the fishery. These discussions led to two project proposals between licence holders and officers, firstly to trial gear-in-water technology on board some of the vessels in the fleet and secondly to pilot an observer program for the purposes of improved damage rate and bycatch monitoring. The discussions related to both of these are ongoing and are subject to further agreement. The cost of both of these pilot projects will primarily be borne by the industry with some contribution by KEIFCA to the observer program, especially with regards to the employment of an individual to carry out the work. Any costs to the industry with regards to these projects can be recovered through an increase in licence fee. The cost of the observer program is likely to be in the region of £900 per licence holder and the cost of the gear-in-water technology is anticipated to be around £1000 per vessel.

1.3 2019 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 8008 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 significant growth in the size of cockles. Reduction in TAC, and therefore a reduction in the number of trips, may be made in the event of very poor growth in the size of cockles.

(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. Members would be notified of any changes made.

(d) That the fishery will commence at 0900 hrs on 16th June 2019.

(e) Provisional fishing allocations will be as follows, this will also be subject to further amendment;

The fishing season will be divided into weekly specified fishing periods which will run from 2100 hrs on Sunday 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.

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(f) 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).

(g) 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.)

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

Several factors influenced the increase in licence fee in 2018. This year the intention is for no increase in the basic amount as the full cost of administering the fishery was covered in 2018.

However, the observer program which has been discussed with the industry will result in additional costs. If this program is approved, the costs of the project will also be recouped through the license fee, by splitting the costs equally between the licence holders and KEIFCA. This would result in an increase in the licence fee, assuming a cost of £900 per vessel, to £7144.

The Authority is asked to **APPROVE** that the licence fee will increase to £7144 as required to cover the costs of a pilot observer program.

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 interested parties, who were made aware that they could provide representation in writing or apply to the Authority to speak to this meeting; nine 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 2018 fishery and that licences would only be issued to the existing 14 licence holders.

As the stocks are increasing and reaching high levels the issue of the allocation of additional licences becomes more significant. Although initial indications of the stock are good, the high stock levels this year are a result of unforeseen excellent winter survival over the 2018/19 winter, given the constantly evolving and developing MPA landscape the fishery is operating within it would seem prudent to require a stable high stock level prior to issuing more licences.

Given the above, now would seem to be a sensible and pragmatic time for the Authority to review the number of licences issued. However, given the very short period of time between this meeting and the start of the fishery, it is unlikely that such a review would have any impact on the number of licences in 2019.

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:

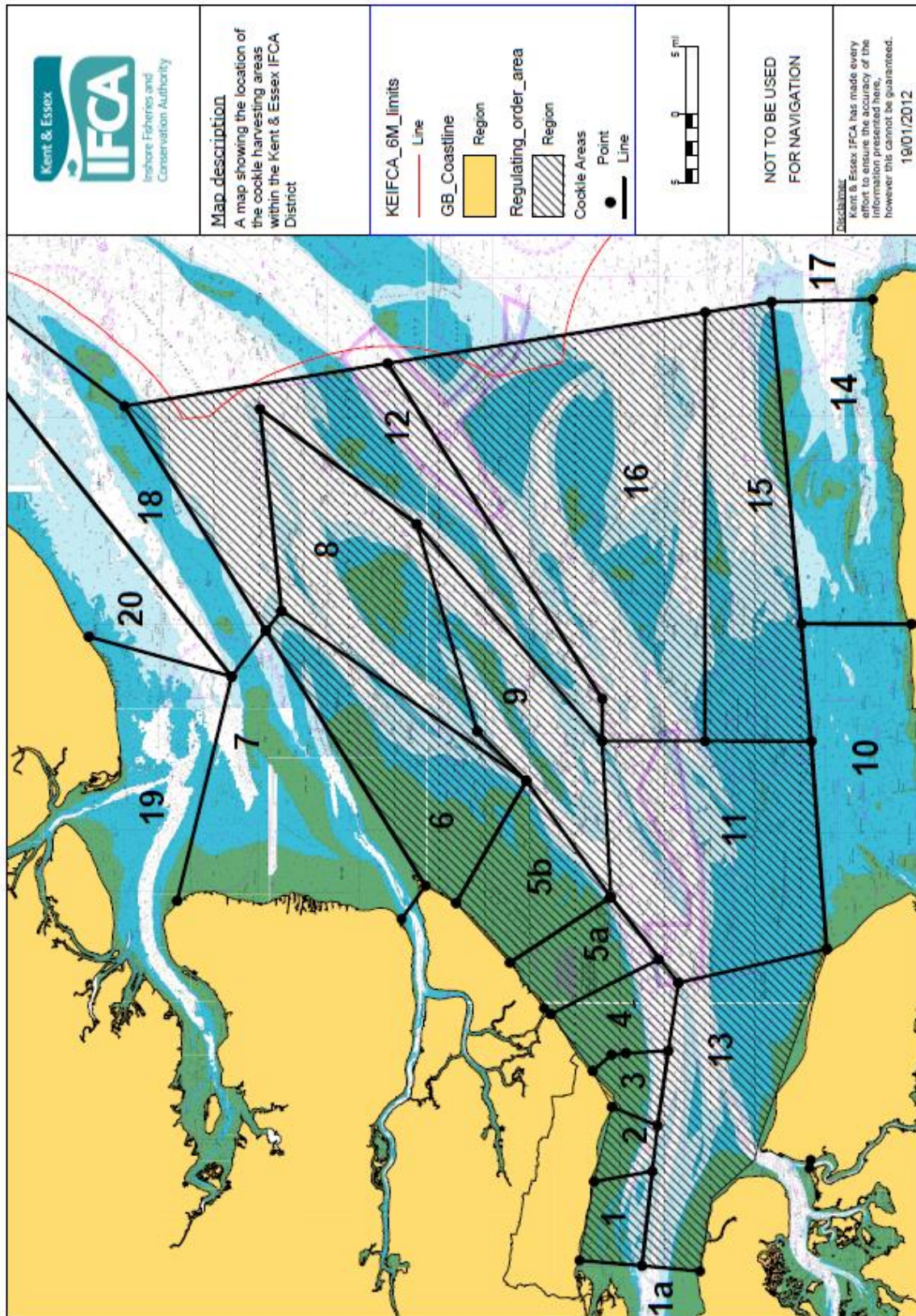
(k) That the number of licences should be restricted.

(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 previous years 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. The appropriate assessment for 2019 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 to Agenda item B5



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