



Agenda Item No. B4

By: Lead Scientific and Conservation Officer
To: Kent and Essex IFCA – 29 November 2019
Subject: **2019 Cockle Fishery Management**
Classification: Unrestricted

Summary:

This paper will provide Members with a summary of the cockle fishery management for 2019 for both the Thames Estuary Cockle Fishery Order (TECFO) 1994 and the Permitted Cockle Fishery (chart of fisheries attached).

Recommendations:

Members are asked to **NOTE** this report

Background:

1. Thames Estuary Cockle Fishery Order

The cockle fishery within the area of the Thames Estuary Cockle Fishery Order opened between 16 June 2019 and 4 October 2019. At the Authority meeting on 21 May 2019, the Authority approved the following trips allocation:

Landings per Specified Fishing Period

16 th Jun – 26 th Jul (6 weeks)	3 specified landings per period
28 th Jul – 23 rd Aug (4 weeks)	4 specified landings per period
25 th Aug – 4 th Oct (6 weeks)	3 specified landings per period

At the request of the cockle fleet, due to poor growth of cockle stocks, the increase to 4 trips per week was delayed and at the Authority meeting on 16 September 2019, the Authority approved the following amended fishing trips allocation:

Landings per Specified Fishing Period

16 th Jun – 30 th Aug (11 weeks)	3 specified landings per period
1 st Sep – 27 th Sep (4 weeks)	4 specified landings per period
29 th Sep – 4 th Oct (1 week)	3 specified landings per period

Catches of the maximum of 13.6 m³ were consistently made throughout the season although the poor growth meant that yields were lower than anticipated. In general, weather conditions were good during the season. The total allowable catch (TAC) of 8008 tonnes that was agreed by the Authority in May 2019 was maintained for the season.

The lack of growth and poor yields have been seen across the North Sea in 2019, including the Wash and in the Netherlands. Lack of summer rainfall may again have been a contributing factor to the poor growth recorded

KEIFCA continues to make use of VMS+ for vessel monitoring of all 14 vessels in the TECFO fleet. An additional pilot experiment was run this year to assess the effectiveness of gear in/out sensors on the dredges of 4 vessels in the fleet. While this data has not been studied extensively, initial findings suggest that more work need to be put into this device before it is ready to roll out. Data collected from VMS+ feeds into the annual Habitat Regulations Assessments of cockle dredging within marine protected areas, which are required for the opening of the fishery each year.

1(a) Cockle Stock Surveys 2019

Cockle stock surveys were completed between 30 August and 1 September 2019 for the main cockle harvesting areas within the TECFO on the Maplin. These surveys supported the industry viewpoint of high numbers of cockles but low growth.

2019 appears to have been a poor year for spatfall with few juvenile cockles found on the sands. This is not entirely unexpected following three years of very high spatfall as competition for food and space is high with significant numbers of adult cockles on the ground.

Numbers of adult cockles on the ground remain high, but for this to translate into a strong 2020 fishery significant growth will be required. However, much will depend upon the severity of the winter weather and how the cockle stocks survive.

The following graphs show population numbers of adult cockles and spat for 2019 compared to earlier years.

Fig. 1: Adult cockle stock size in Spring and Autumn from 2001 to 2019

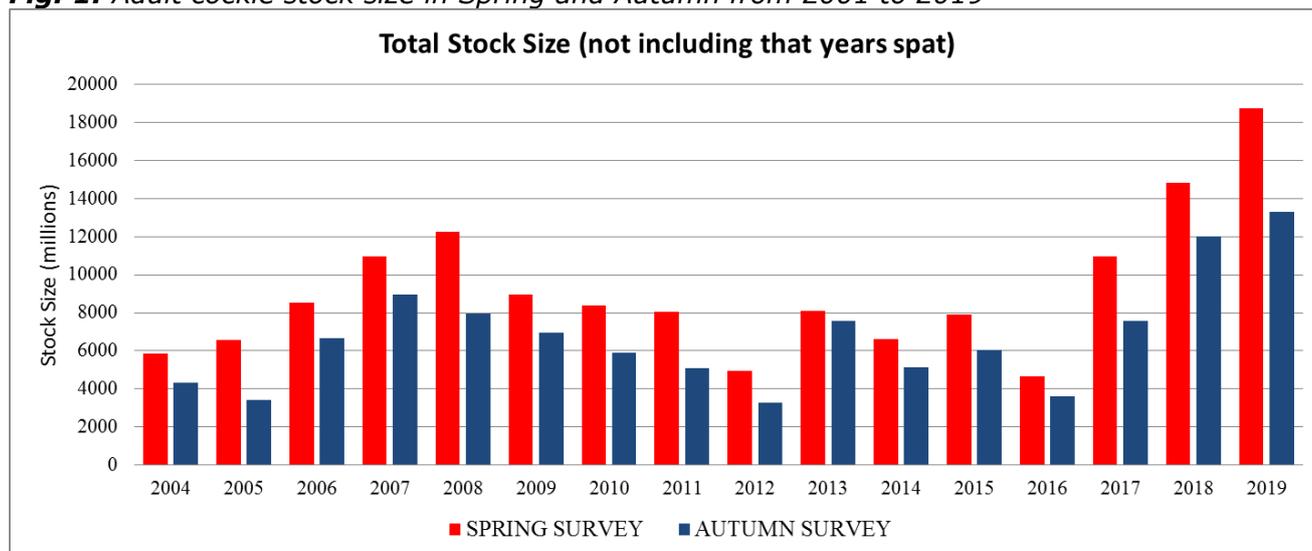
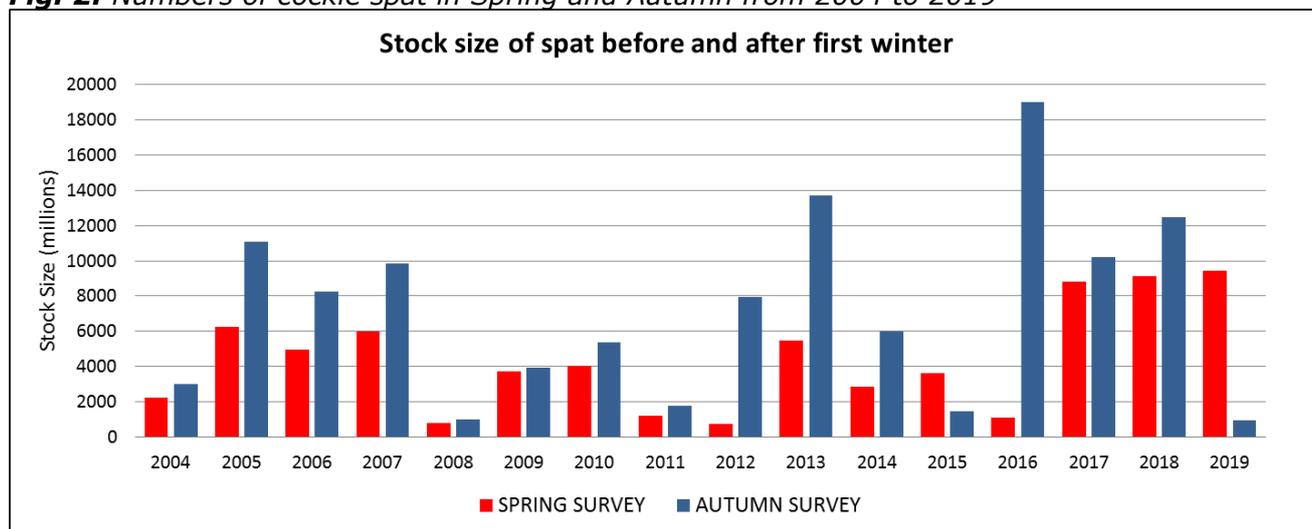


Fig. 2: Numbers of cockle spat in Spring and Autumn from 2004 to 2019



1 (b). Outlook for 2020 fishery and beyond

Outlook for the 2020 fishery is mixed. Adult stock numbers on the ground are high, higher than at any September survey in the last 15 years. However, growth has been poor for the past 2 years, and the high spatfalls that have occurred in 2016, 2017 and 2018 have resulted in large numbers of slow growing cockles. These high numbers appear to be causing a choke point on the sands as spat are being outcompeted, or adult cockles are not in a condition to spat at all.

Winter survival rates will provide a better understanding of how the stock may perform in 2020. A harsh winter could thin out the adult stock and allow a better growth rate in the stronger, surviving cockles, while a mild winter may leave a higher stock, but again stunt growth into next season.

2. Permitted Cockle Fishery (outside of the TECFO 1994)

The areas outside of the Regulating Order were surveyed during the spring and it was found that significant numbers of cockles were present in Area 7 (the Buxey Sand, Ray Sand and Dengie Flats). Cockles in this area showed similar characteristics to those inside the TECFO area, in that large quantities were present, but growth was poor. A good number of the cockles present had reached the minimum landing size of 16mm, but there were also significant number on the Essex coast which were between 14-16mm.

Under the terms of the Cockle Fishery Flexible Permit Byelaw, Area 7 was approved for opening during 2019. Prior to the fishery opening 30 permits had been applied for by the 31 March 2019 deadline as specified in the byelaw. As approved at the 21 May 2019 meeting a total TAC of 480 tonnes was set. This resulted in 1 trip for each permit holder in the fishery to be carried out between 9am on 8 October and 12pm on 10 October 2019.

Prior to the fishery

The management of the fishery fell into two distinct areas, the biosecurity and technical measures inspections prior to the fishery and the duration of the fishery itself. At the end of August, officers travelled up to the Wash to ensure that vessels not based in the District were aware of the upcoming fishery and to ensure that gear technical restrictions were being considered by any vessels which needed to make any changes.

Throughout September vessels both in the KEIFCA district and in the Wash were visited on multiple occasions in order for biosecurity inspections to be carried out. During this period all vessels which had applied for a permit had an initial inspection carried out by KEIFCA officers following the procedures laid down in the byelaw and approved by the Authority. All vessels which were inspected passed the biosecurity inspections.

During the fishery

Of the total 30 permit holders eligible to take part in the fishery, 22 attended and fished between 8 and 10 October, with two boats from the Wash and 20 boats from the KEIFCA district taking part in the fishery.

During this week, all staff were involved in enforcement of the management measures of the byelaw. Nerissa operated in the day enforcing spatial closures and monitoring the fishing vessels and their active fishing time, with Tamesis and her crew of three officers working the night hours with the same tasking. In addition to this, six officers carried out shore patrols across the district in ports which were landed into by vessels including, Whitstable, Queenborough, Leigh and Brightlingsea. The output of this effort was that officers effectively enforced all of the management measures employed within the fishery.

The fishery opened with restricted opening times of 9am Tuesday 8 October until 12pm Thursday 10 October. All vessels completed their trips by the Wednesday. A

total of 146 tonnes of cockles were landed during this week with the majority of vessels taking their full allocation of 13.6m³.

After the fishery

Following the completion of the 2019 flexible permit cockle fishery, correspondence was received from a representative of the Boston cockle fleet. A request was made, that as the boats from Boston had not attended during the open period of the fishery, could they be granted permission to attend at a later date and complete one trip per boat.

This request was denied as the fishery is permitted under the conditions as specified within the Habitat Regulations Assessment. One of the conditions for a fishery to occur within, and in proximity to, marine protected areas (Essex Estuaries Special Area of Conservation and Mid Essex Coast: Dengie Special Protected Area) is that the disturbance caused by the fishery does not impact the nationally and internationally important populations of waterfowl present in the area. As Natural England granted approval of this fishery based on a limited temporal disturbance of three days, it was not possible to extend the fishery in this way.

3. Management of Cockle Beds 2020 – Permitted Cockle Fishery

Following the completion of the spring 2020 surveys, a decision will be taken on the flexible permit fishery for next year.

While stock numbers on the ground in Area 7 were good this year, slow growth remains a concern. It will be necessary to monitor the growth of these cockles during the coming year. If the majority of cockles within defined areas grow to above the minimum size or population densities are above the Authority's Stock Management Criteria Guidelines beds will be opened.

The flexible permit fishery has now been open for three consecutive years, providing a single trip per permit holder each year.

<p>Recommendations:</p>

<p>Members are asked to NOTE this report</p>

