

Agenda item B4

By: Deputy Chief IFCO

To: Kent and Essex Inshore Fisheries and Conservation
Authority – 18 June 2025

Subject: TECFO stock surveys

Classification **Unrestricted**

Summary:

This report provides a summary of the spring 2025 cockle stock assessment surveys

Recommendations –

For **NOTING** and **COMMENT** only

1. Introduction

Following the review of cockle management within the District, a key component of the management of both fisheries – the spatial restrictions – has been the subject of change. The fishery management areas which are used to spatially control the fishery have been moved, and in some cases renumbered, to reflect the alteration of the TECFO management area and to make year-to-year management slightly more logical when referring to management areas. Annex 1 is a chart of the revised spatial management areas but the main bed changes are shown in table 1 below.

TECFO 2024 Area	TECFO 1994 Area
1	1
2	2
3	3
4	4
5	5
6	6
7	8
8	9
9	12

2. Spring 2025 Cockle Stock Surveys

Stock surveys on the main harvesting areas of the Maplin and Foulness sands commenced on 11 April 2025 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 four 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.

Analysis of the survey results show that there remains a stable number of cockles on the Maplin and Foulness Sands (fig. 1). The total number of cockles has slightly increased compared to last year and is now higher than the previous four years.

Spatfall in 2024 was good, albeit not quite as good as during 2023. This means that there have been three good spatfalls in the past four years which seems to be resulting in a more stable stock spread over several year classes.

The numbers of adult cockles have benefitted from regular spat falls and a focus on long term sustainability when setting annual TACs, which is resulting in a gradual increase in the numbers. Whilst we are not yet quite at the level of the long-term average, the numbers have bounced back from the low experienced last year (figure 3).

Winter survival was very good this year, possibly as the result of low numbers of winter storms impacting the east coast. This can be seen especially in figure 2 in relation to spat, where the drop in spat numbers between the 2024 autumn survey and the 2025 spring survey is rather much smaller than the drops evident over the past ten years.

The graphs below show the latest stock situation on the main Maplin Sands beds in areas 4,5 and 6..

Fig. 1: Abundance of cockles from 2004 to 2024 in the main cockle harvesting areas of the Maplin and Foulness sands.

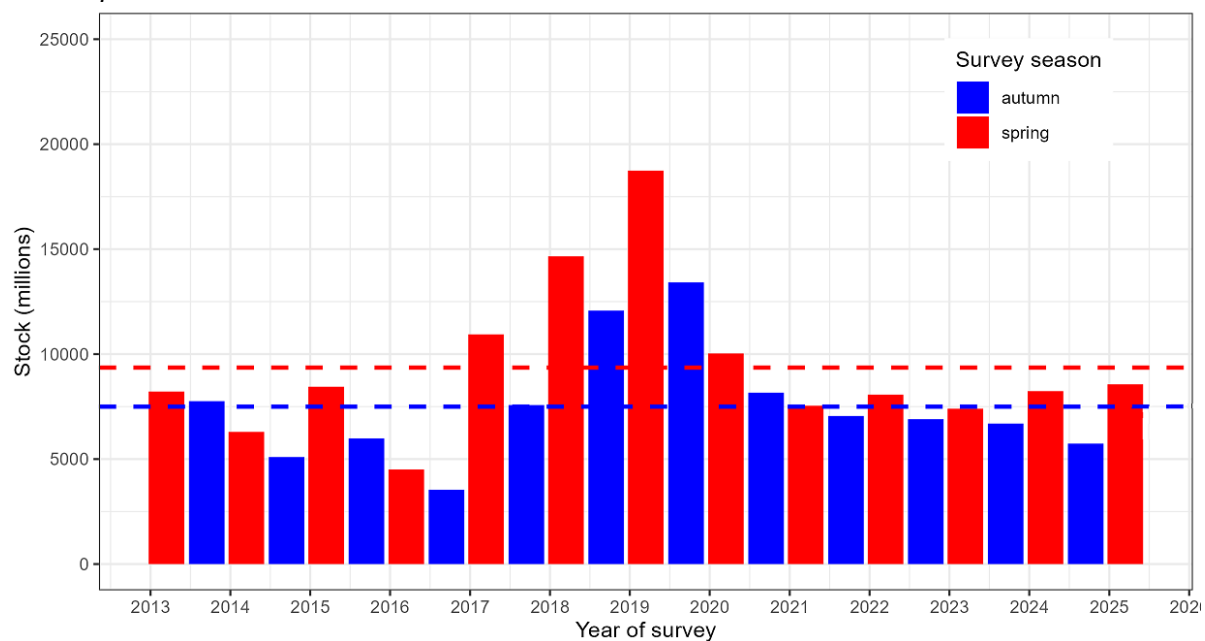


Fig. 2: Abundance of spat before and after the first winter for 2003 to 2023 year classes in the main cockle harvesting areas of the Maplin and Foulness sands

Stock size of spat before and after first winter

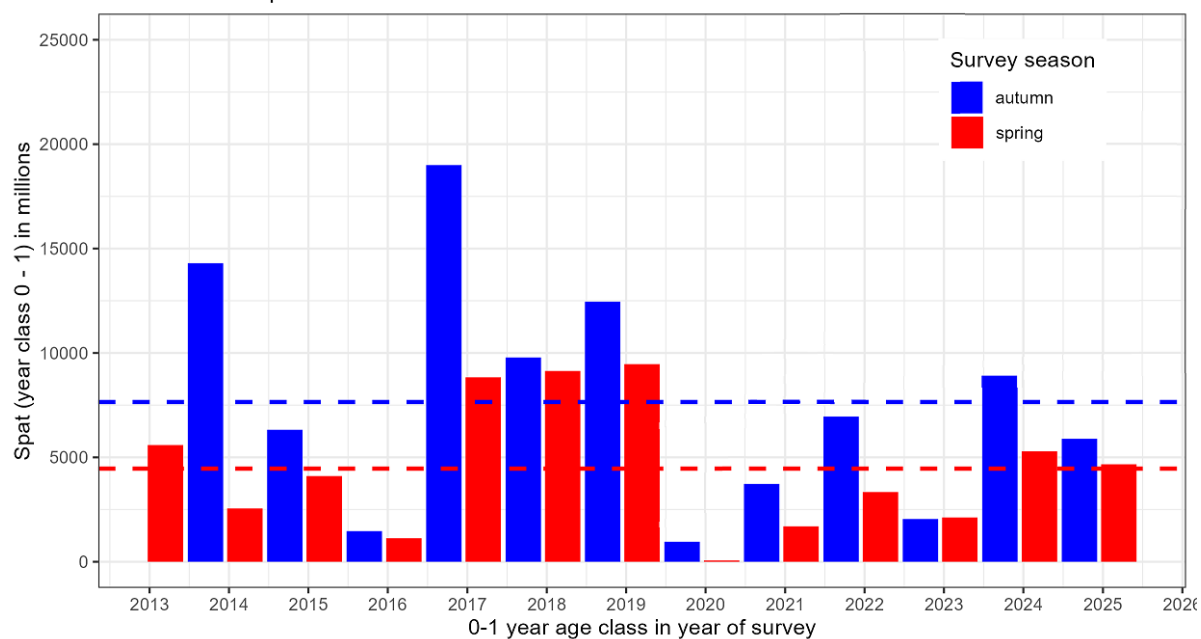
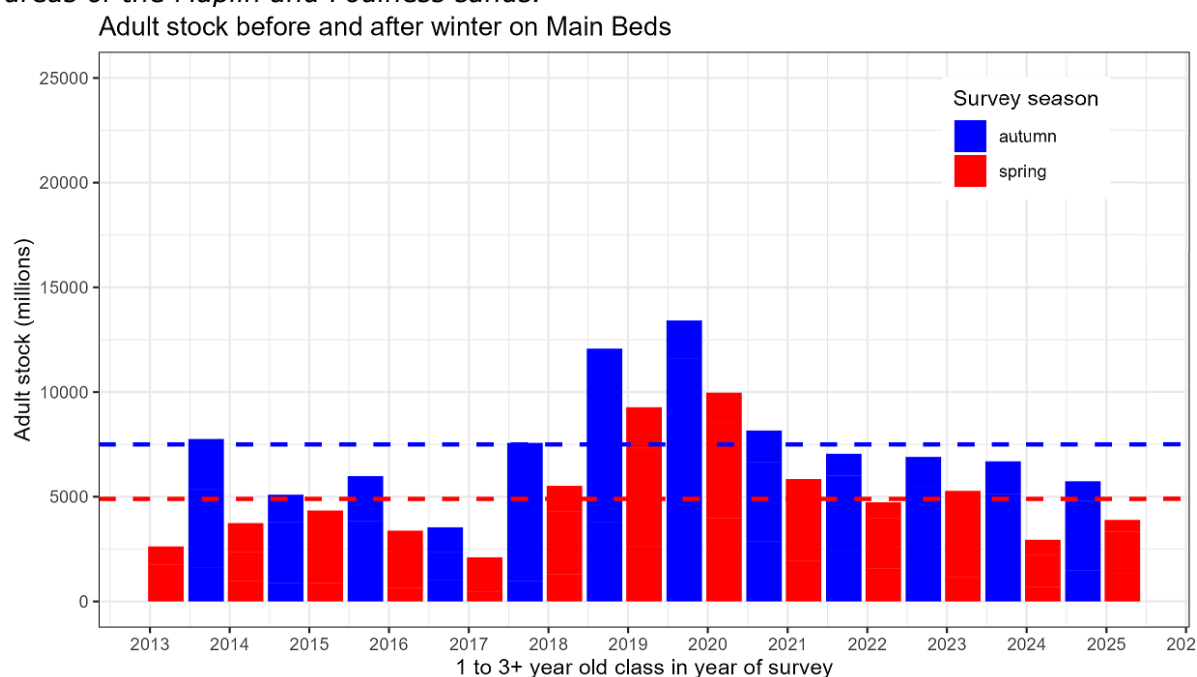


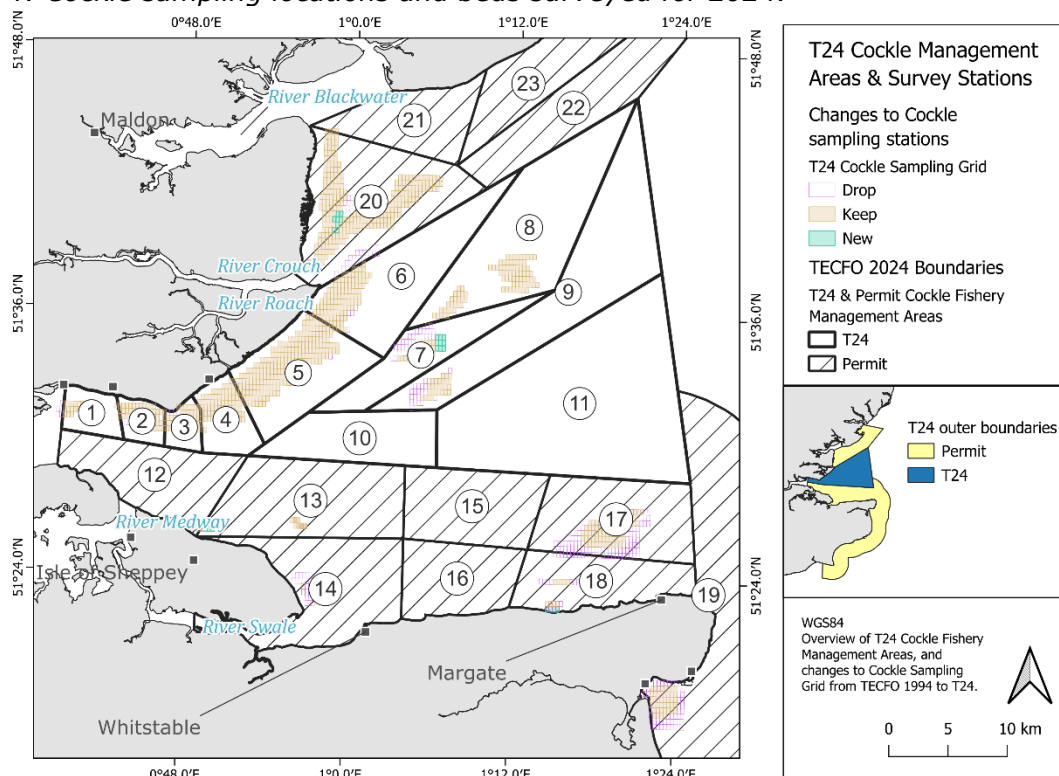
Fig. 3: Abundance of adult cockles from 2005 to 2024 in the main cockle harvesting areas of the Maplin and Foulness sands.



The TAC discussed in Agenda item B5 is based upon the stock of adult cockles as well as the expected growth based upon the long term average.

Surveys of additional cockle grounds beyond the major harvesting areas have also been completed. Areas 7, 8 and 9 have proven to be very productive in recent years. All of these areas have been considered when setting this years' TAC.

Fig. 4: Cockle sampling locations and beds surveyed for 2024.



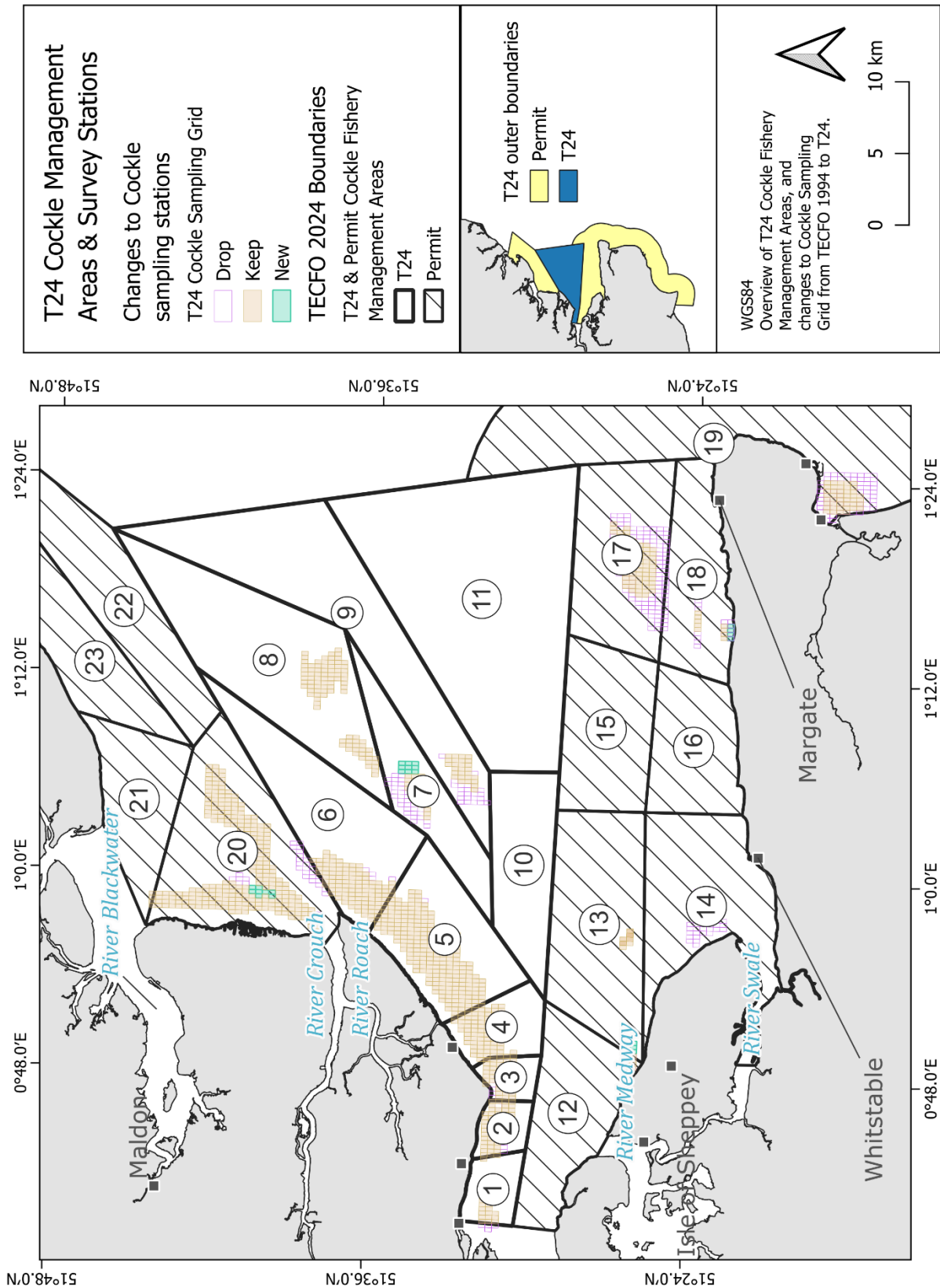
Other management areas

Areas 7, 8 and 9, appear to contain good numbers of cockles this year with the East Barrow in particular (Area 8) having recovered well from a couple of years ago. Over 70% of the cockles in all three of these management areas are now above the minimum size of 16mm, and therefore some management may be required in order to prevent overfishing.

Recommendations –

For **NOTING** and **COMMENT** only

Appendix A



Map showing the cockle production areas within the Kent and Essex IFCA District