

By: Lead Scientific & Conservation Officer

To: Kent & Essex Inshore Fisheries and Conservation Authority  
– 30 January 2019

Subject: **Whelk Permit Byelaw Update**

Classification Unrestricted

**Summary:**

This paper will provide Members with an analysis of whelk landings data, feedback from the industry, an update on whelk enforcement activity and results of rotary riddle trials.

**Recommendations:**

Members are asked to **AGREE** that the pot limit, the riddle size and the number & size of escape holes remain set at:

- Pots – 300 for category 1 permits and 10 for category 2 permits
- Riddle – 25mm spacing between bars
- Escape holes – 10 @ 25mm per pot

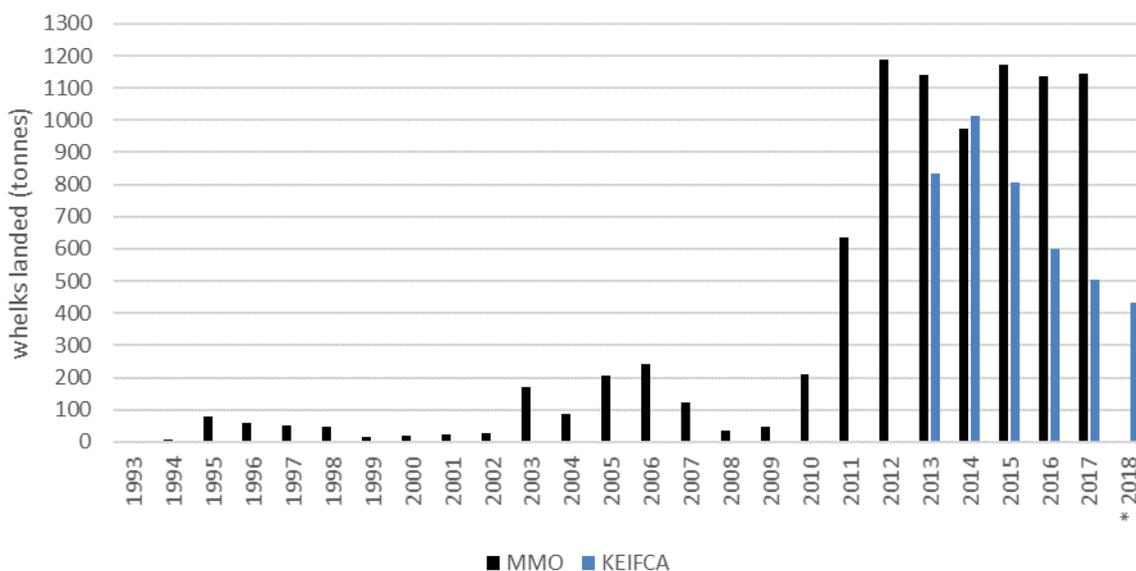
**Review of management**

The Whelk Fishery Permit Byelaw states that technical permit requirements will be reviewed by KEIFCA no less than every 3 years. The first 3 year review was conducted in early 2016 which resulted in the existing measures continuing until revised technical measures were agreed by the Authority in January 2017. An increase in riddle bar spacing from 22mm to 25mm and an increase in the number & size of escape holes from 2 @ 22mm to 10 @ 25mm became effective from 3 April 2017. The next review of these technical measures will be due to be held in early 2020.

**Review of landings data**

The long term picture of MMO landings data (recorded landings in KEIFCA district ports, from vessels fishing inside and outside our district) shows continued and relatively consistent high levels of landings compared to landings prior to 2010 (Fig. 1). At the time of printing the 2018 MMO data was not available to be

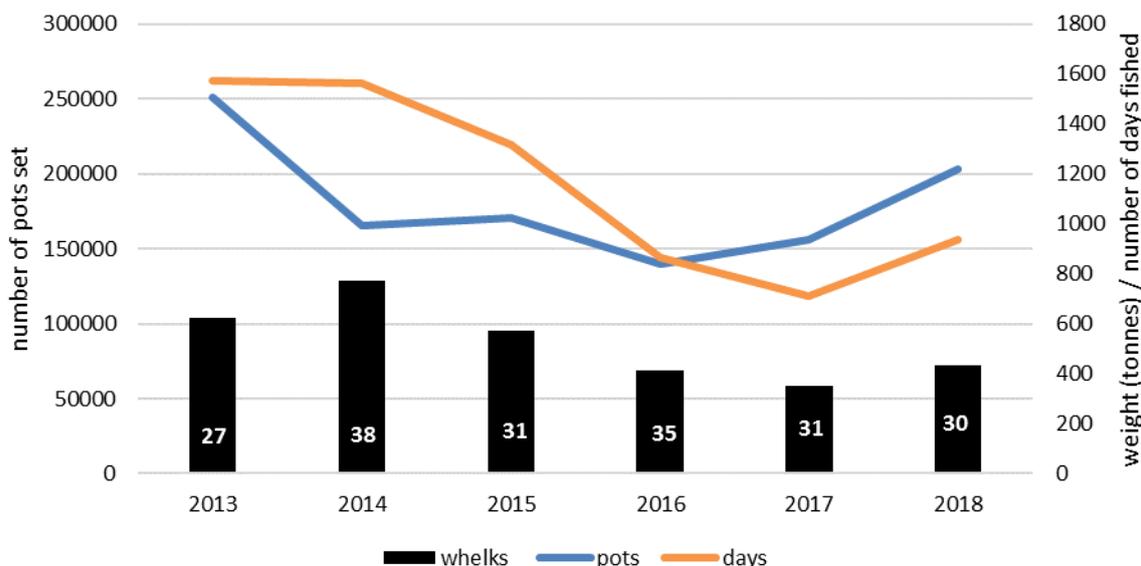
included in figure 1 below; an updated graph will be distributed at the meeting should the data be received in time.



\* 2018 figures are for April – November, all other years have 12 months of landings data

**Fig. 1, MMO whelk landings data for KEIFCA district 1993-2018 with KEIFCA’s landings data shown for 2013-2018**

Analysis of KEIFCA whelk permit data shows whelk landings from within the district have stabilised during 2018 and catches during April – November are marginally higher than for the same period in 2017 and 2016. Although only a small increase, 430 tonnes landed in 2018 compared with 352 tonnes in 2017 and 411 tonnes in 2016, it is significant as it is a reversal of the downward trend started in 2015.



**Fig. 2, total weight (tonnes) of whelks landed, the total number of pots set and the total number of days fished during the period April-November in each year from 2013-2018. The white number inside each black bar represents the number of permits issued for that year.**

Whelk landings within the district vary both seasonally and spatially. In general terms seasonal variances can be seen during the summer months when the increase in sea temperature causes whelks to move to deeper, cooler waters and

around Nov-Jan when poor weather prohibits or reduces fishing activity. Spatial differences are evident from catch return data as well as Fishery Officer knowledge of fishing activity from shore patrols and port visits. Spatial variations can be seen in figure 2 and seasonal differences are shown in figure 3, while figure 4 shows both the seasonal and spatial variations:

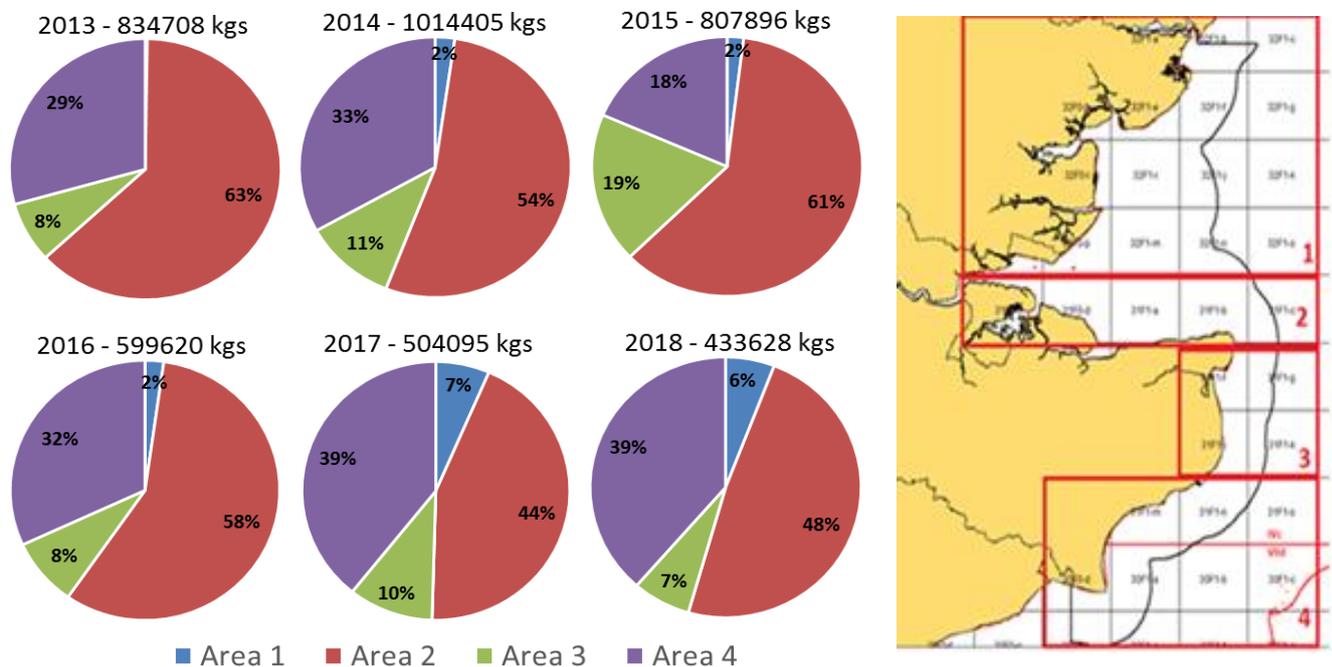


Fig. 2, percentage distribution of whelks landed in the 4 KEIFCA whelk fishing areas 2013-2018

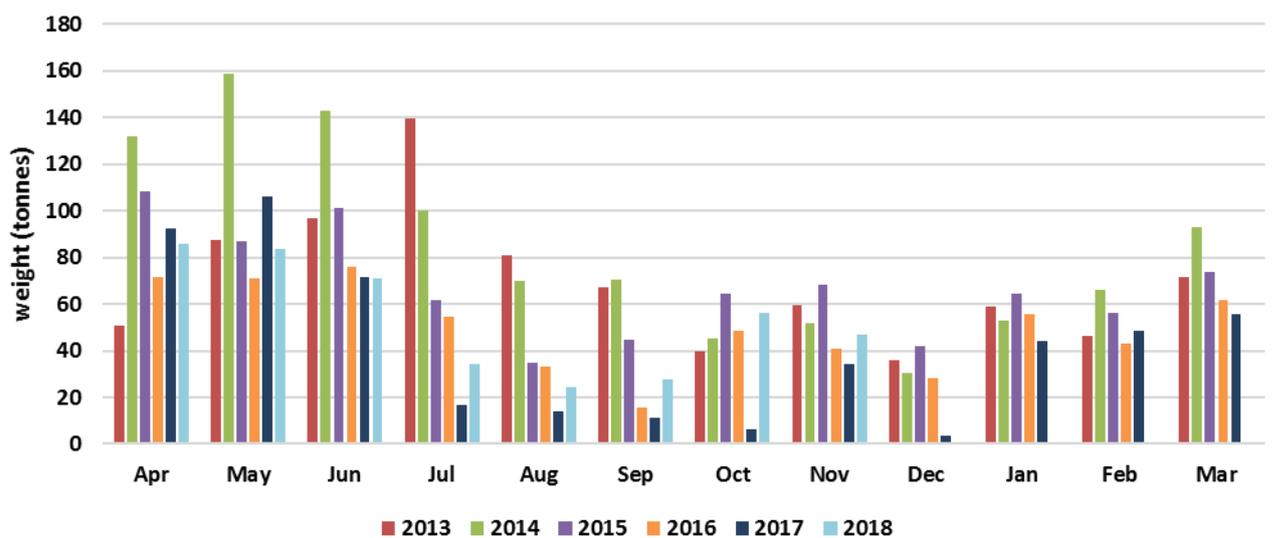
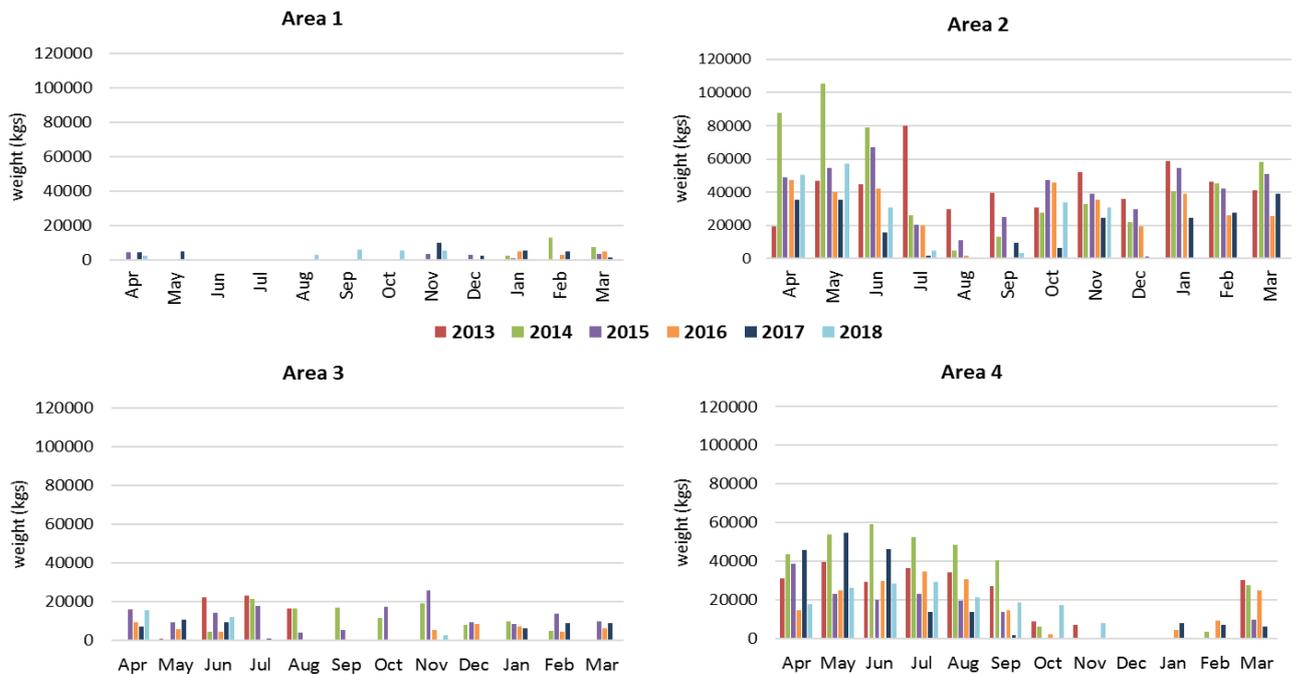
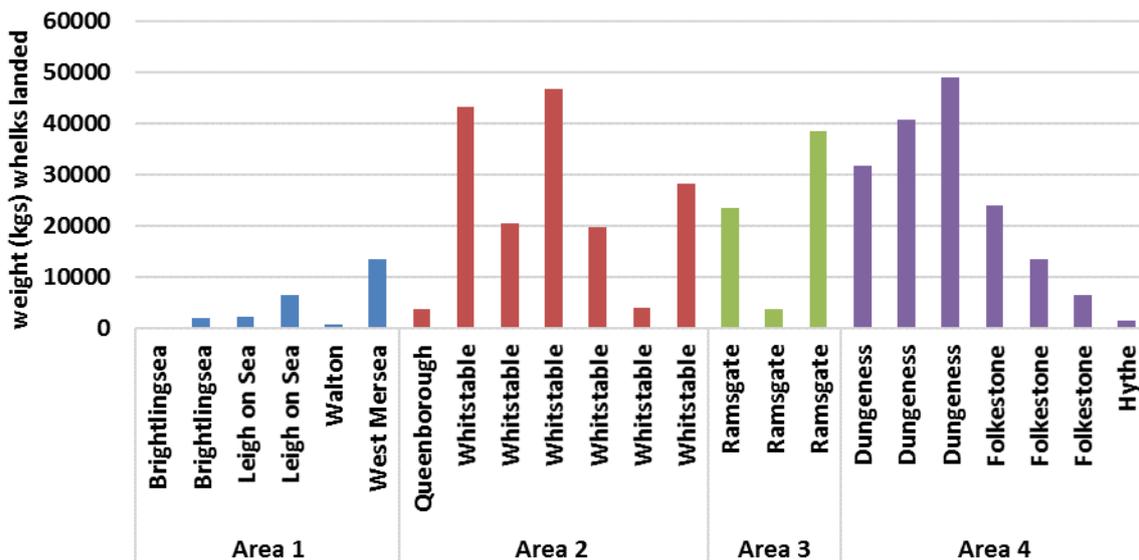


Fig. 3, total weight (tonnes) of whelks landed in the KEIFCA district each month from 2013-2018



**Fig. 4, total weight (kg) of whelks landed in the 4 KEIFCA areas each month from 2013-2018**

The permit holders' landings data reveals that between 80%-90% of whelks caught in the KEIFCA district in each of the past 3 years have been fished from Area 2 (north Kent coast) and Area 4 (south Kent coast), see figure 2. From the monthly catch return data received so far for 2018 we know that whelks landed into Whitstable by 6 permit holders account for 37% of the total landings for the district. In Dungeness there are just 3 whelk fishermen landing 28% of the district's total catch. Figure 5 below shows the monthly landings made by each Category One (commercial) permit holder into port from April – November 2018:



**Fig. 5, total weight (kgs) of whelks landed by each permit holder into ports in the KEIFCA district from April – November 2018**

The seasonal and spatial variances in this fishery have already been highlighted, but in addition to these differences is the varying level of fishing activity from one part of the district to another. Area 1 (Essex coast) accounts for just 5% of

whelk landings so far in 2018 with 6 commercial permits in place. This is in direct contrast to the level of activity and number of permits issued in Whitstable and Dungeness, as detailed above. The table below shows the number of permits issued, the total weight of whelks landed, the number of pots set and number of days fished in each of the 4 fishing areas:

2018	Area 1	Area 2	Area 3	Area 4
permits issued	6	8	4	7
tonnes landed	22	211	30	167
pots set	14720	96420	10010	80674
days fished	85	325	125	390

### Feedback from the local industry

A brief tick box based questionnaire is sent to all permit holders in December each year and the responses are evaluated. This year's response rate of 42% equalled last year's highest rate to date. Prior to 2017 the response rate was between 33% - 39%.

The responses from the questionnaires generally support the landings analysis above and suggest that fishing has been average this year, an improvement on last year's response of poor. Most report that prices have been good this year and that there are high or very high numbers of juveniles on the ground.

A summary of the full results is given in Appendix 1.

### Update on whelk enforcement activity

30 whelk permits have been issued in 2018; 26 Category 1 (commercial) and 4 Category 2 (hobby). These 26 commercial whelk fishing vessels, 21 of which are Kent based, rely on whelk fishing for a considerable amount of income. The season has a peak in demand for Chinese New Year when processors are particularly keen to meet demand. The price of whelks has remained high this year, although fishermen have reported lower catch rates. The 30 sacks of whelks shown in the photograph below are from one fishing trip and could be expected to fetch a price in the region of £1600.

Consistent enforcement of our whelk byelaw is a KEIFCA priority. Seasonal trends, intelligence and gaps in knowledge feed into the bi-weekly tasking and coordination meeting, where enforcement activity is planned.

Seaborne enforcement is necessary to ensure pots are permitted, clearly marked and comply with the byelaw in particular for escape holes.



In addition, KEIFCA vessels ensure all pots being processed within the district bear a KEIFCA tag and an effective riddling process is in place. Seventy five percent of whelk byelaw offences are currently detected at sea.

Land based enforcement is of growing importance. Putting officers in the right place at the right time to land small vessels will be greatly assisted by iVMS. We currently rely on knowledge of fishing trends, tides and intelligence. Working in partnership with the MMO officers regularly intercept vehicles carrying whelks for intelligence and enforcement purposes. Increased number of landing inspections are planned for the second half of the whelk season.

### **Update on whelk riddle project**

In April 2018 KEIFCA acquired a hydraulic rotary whelk riddle from Solent Engineering. The riddle came in a kit form and was fitted with a 25mm stainless steel riddle. The purpose of the riddle is to aid KEIFCA officers in enforcement and to become a standardised tool that can be used by IFCA officers to inspect catches of whelks landed by whelk permit holders fishing inside the KEIFCA district.

The rotary riddle has been tested extensively by KEIFCA officers using live muddy whelks against a hand riddle which up until now has been used as the enforcement tool by IFCA officers when checking catches from vessels working inside the district. The results showed that both tools produced the same results when worked properly but the rotary riddle riddled the whelks far quicker.

Currently in the Kent and Essex district, there are two vessels out of 27 whelk permit holders based in Kent and Essex that have a hydraulic rotary whelk riddle aboard their vessel and there has been plenty of interest from fishermen to get a rotary riddle aboard their boats. Feedback from the fishermen with a questionnaire and discussions with the whelk fishery permit holders has been mostly positive in terms of the riddle being used as an enforcement tool. If there is a cheaper alternative and an EMFF grant to put towards the cost of a rotary riddle, then this would help the fishermen interested.

The Solent Engineering's riddle drum has a diameter of 60cm and most of the fishermen shown the riddle thought that a smaller diameter of around 30cm would be adequate for their vessels. Length wise, a fish box length would work for the fishermen but they agreed the longer the riddle, the more effective it would be. Overall feedback was in favour of getting a riddle on their boats however cost was an issue for many of the fishermen and the boats that depend on whelk fishing for most of their income are more interested with the benefits highlighted that it saves time and effort.



**ROTARY MUD RIDDLE QUESTIONNAIRE 2015**

**IFCA**

**Name:** \_\_\_\_\_ **Phone number:** \_\_\_\_\_

The rotary mud riddle is a piece of equipment used to collect mud from the seabed. It is used to collect mud from the seabed and is used to collect mud from the seabed. It is used to collect mud from the seabed and is used to collect mud from the seabed.

1) What type of vessel do you use to collect mud?

Yes  No  Other

2) How often do you collect mud?

Yes  No  Other

3) How much mud do you collect each time?

Yes  No  Other

4) How many pots do you use to collect mud?

Yes  No  Other

5) How many escape holes do you use to collect mud?

Yes  No  Other

6) How many escape holes do you use to collect mud?

Yes  No  Other

7) How many escape holes do you use to collect mud?

Yes  No  Other

8) How many escape holes do you use to collect mud?

Yes  No  Other

9) How many escape holes do you use to collect mud?

Yes  No  Other

10) How many escape holes do you use to collect mud?

Yes  No  Other



**Recommendations:**

Members are asked to **AGREE** that the pot limit, the riddle size and the number & size of escape holes REMAIN set at:

Pots – 300 for category 1 permits and 10 for category 2 permits

Riddle – 25mm spacing between bars

Escape holes – 10 @ 25mm per pot