

Wash Cockle Fishery 2022 Stakeholder Group Meeting

1230hrs Monday 13th June 2022, King's Lynn

Purpose of the meeting:

The meeting was convened to enable fishing industry stakeholders to discuss the Eastern IFCA cockle survey 2022, the conservation requirements relating to birds (bird food model), and to examine the possibility of further surveys to ascertain whether there could be sufficient stocks to support a cockle fishery in 2022.

It was noted that even if additional stocks are found and the bird food threshold is met, there are still significant concerns that a fishery this year could cause excessive damage to juvenile cockles and impact prospects for the fishery for the next two years.

Present:

Fishing industry: Martin Garnett, John Poll, Stephen Bagley, Lee Doughty, Wayne Brewster, Leigh Lake

Eastern IFCA Authority members: Tony Goldson (MMO appointee)

Eastern IFCA officers: Julian Gregory (Chair), Jon Butler, Ron Jessop, Jason Byrne, Judith Stoutt

Key discussion points (arranged into text boxes separated into general themes):

- Background context: difficulties in the fishing industry
- Eastern IFCA / Industry communications
- Fishable density of cockles
- Verification of Eastern IFCA surveys
- Information on potential fishable areas
- Bird Food Model
- Purpose of Marine Protected Areas
- Natural England advice
- Dredged mussel fishery
- Need to protect juvenile cockles
- Agreed actions.

Background context – difficulties in the fishing industry

The Wash fishermen are facing huge difficulties at present. The combination of the cost-of-living crisis (including substantial increases in fuel bills), the prospect of no cockle fishery this year and restrictions on the whelk and shrimp fisheries means fishermen's livelihoods are seriously threatened. Fishermen and crew are already leaving the industry.

Fishermen also feel that they are not being listened to by Eastern IFCA.

Eastern IFCA understand the difficulties being faced by the industry. We are doing all we can to support sustainable fisheries and a viable industry, within our remit and within the legal framework including conservation requirements.

We are meeting today to listen to fishermen's concerns and answer questions about the cockle fishery and our work to try to facilitate a fishery if it is possible.

Eastern IFCA/ Industry Communications

Some industry members felt they had not been given opportunities to talk to Eastern IFCA about the cockle fishery and felt that Eastern IFCA had given preferential treatment by accommodating a meeting in the office with a small number of fishermen before the Authority meeting.

Eastern IFCA have held many consultations in the past two years on the Wash fishery byelaw and access policies and on other fishery management matters. COVID prevented some face to face meetings, and Eastern IFCA have deliberately moved away from large Industry meetings because experience has shown that type of meeting is not productive. However, since COVID restrictions have been lifted, Eastern IFCA has offered small group meetings and maintains its invitation for fishermen to come to talk to officers or to telephone them.

Eastern IFCA request that fishermen present today do talk to their peers about what is being discussed here, and that this communication is continued in a constructive way.

“Fishable density” of cockles

Q 1. Eastern IFCA refers to “fishable densities” – how does Eastern IFCA determine what is “fishable”? Industry determines it according to price rather than density.

“Fishable” used to base densities on the numbers of adult cockles (≥ 14 mm width cockles) in the samples. Due to atypical mortality, smaller cockles are now harvested so a new approach is used to estimate fishable densities. Total weight of cockles in sample (excluding Year-0 cockles) is thought to be a better metric for estimating fishable densities than cockle numbers. Scale has been calibrated so that red areas should enable 2 tonnes to be harvested. In yellow areas, densities are higher.

This year densities are lower than last year.

Validation of Eastern IFCA surveys

Q 2. Might the foot surveys under-estimate cockle stocks if there are dense patches in between the sampling points? Isn't this more likely to happen in low stock years?

Yes, this can happen. Survey stations are 400 yards apart. But it works both ways, i.e. surveys can over-estimate stocks if an area is mostly sparse, but the sampling point happens to be in a small dense patch, e.g. in a run where cockles have washed into. Overall, the under- and over-estimates are likely to balance out because of the high number of sample stations ($>1,000$). We have estimated a 13% error either way. The surveys are designed to produce an accurate total biomass for the whole Wash, but at finer scales tend to be less accurate locally due to the 400 yard spatial resolution.

Q3. As Eastern IFCA reduced the number of sample points on Holbeach, doesn't this mean less cockles are found for the industry?

Eastern IFCA increased the space between sample points on Holbeach to make that survey grid consistent with the one applied to the rest of the Wash. Although this means there are fewer sample points, it does not mean fewer cockles are found, because the sample size is multiplied by a larger figure to reflect the area that sample represents. (On the smaller grid, one sample represented about 9ha, but on the larger grid it is about 12 ha). Reducing the number of sample points reduces the survey resolution but should not affect the overall cockle biomass.

Validation of Eastern IFCA surveys (cont.)

Q4. Could spat cockles be washed out of the grab sample before they are counted?

No, if a grab sample is incomplete (e.g. if the grab didn't "fire" properly, or didn't close properly), the sample is taken again. When the grab has closed properly, it allows water and some sand to wash out but nothing the size of spat cockles. Doors on the top of the grab prevent anything flushing out of the top. The sample is rinsed over a 3mm-meshed sieve to ensure spat cockles are not lost. Cockles are weighed as well as measured.

Q5. How long do Eastern IFCA's surveys take? Can the industry do their own verification survey, using grabs, with Eastern IFCA officers on board?

Eastern IFCA's cockle surveys are conducted on spring tides between mid-March and the end of April each year, taking approx. 6 weeks (working 13-16 days around the clock within that period). This is a significant resource requirement. It would be problematic for Eastern IFCA officers to accompany industry vessels on surveys. In order to increase the cockle stock contributing towards the bird-food calculations, Eastern IFCA recommend industry concentrates effort on areas that Eastern IFCA have not surveyed, since cockles identified within the survey grid are likely to have already been included within the calculations. Earlier today, a fisherman provided Eastern IFCA with information on a relatively high density area of cockles on Mare Tail; this aligned with Eastern IFCA's survey findings in that area.

Q.6 Would Eastern IFCA pay for industry to re-survey the cockle stocks?

Eastern IFCA would not fund industry to re-survey cockle stocks.

Industry information on potential fishable areas

Q. 7 What if fishermen know there are cockles outside of Eastern IFCA's survey areas? E.g. in late 2021, fishermen identified cockle brood all the way down the western edge of Roger/Tofts. And there are cockles on Daseley's that Eastern IFCA have missed.

Eastern IFCA welcomes input from the fishing industry on cockle stocks outside of the survey areas. The survey targets areas we believe are most likely to support cockles based on previous years. Identifying stocks in between survey points is likely to confirm survey results rather than show additional cockles, so it would be better for industry to look at areas outside of Eastern IFCA's survey grid.

Fishermen identified areas of Roger (Bar Sand)/Toft, Hook Hill and the western edge of Gat Sand where they committed to conducting informal surveys on foot to examine the densities and size of cockles present, and report back to Eastern IFCA.

Eastern IFCA is committed to survey the mussel bed near Blackshore (the "back of the wall") that did not feature in Eastern IFCA's 2021 mussel surveys, but anecdotally supports 700-1000 tonnes of mussel that could be fed into the bird food model and *potentially* help open a cockle fishery. Eastern IFCA will also look at areas of cockles identified by industry, outside of our survey grid.

Bird Food Model – background

Eastern IFCA has a legal duty (under the Habitats Regulations 2017) to ensure activities we authorise (in this case, the cockle fishery) do not impact on protected species and habitats. We do "Habitats Regulations assessments" (HRA) to assess the likely impact on fishing on species and habitats, including oystercatchers. We need to ensure we leave enough cockle and mussel stocks in The Wash for overwintering birds to feed upon.

The conservation advice gives us targets that we use in our assessments. This year the target number of oystercatchers, based on the average peak count in the last 5 years, is 26,586. This is higher than previous years, because the 2019-20 count of oystercatchers (46,129) was significantly higher than the preceding years. [Oystercatcher numbers were also very high in the late 1980s (46,912 in 1988-89) but we did not have the oystercatcher conservation target or the bird food model in those days.]

Bird food model (cont.)

Q.8 Why is there such a big jump in the 2019-20 oystercatcher number? Do we have confidence that the count number is correct?

Eastern IFCA have been scrutinising the oystercatcher numbers, provided to us by Natural England. Birds are counted monthly in the “Wetland Bird Survey (WeBS) scheme, co-ordinated by British Trust for Ornithology. The results are available on the BTO website: <https://app.bto.org/webs-reporting/numbers.jsp>

We have started discussions with Natural England and RSPB about the high count for 2019-20, to try to understand why it is so high compared with recent counts. We are planning to meet them very soon. RSPB have also queried the high count for 2019-20. We do not know how the counts are verified, but we think it unlikely that BTO would publish the results if they thought they were wrong.

Q.9 Why are we not using more recent oystercatcher numbers, i.e. for 2020-21 and for 2021-22?

There were no results for 2020-21 because counts were disrupted by COVID. We understand the 2021-22 count results are due soon, because the WeBS count year runs from July to June. Natural England have requested the results for 2021-22 ASAP. We have to use the best available evidence, which at the moment is up to 2019-20.

If the 2021-22 peak count was higher than counts in 2017-18 and 2018-19, the five-year mean peak (which equates to the target number of birds to support) will increase above 26,586.

Q. 10 What if the bird numbers continue to rise, making it impossible to open fisheries?

Eastern IFCA share this concern. We recognise that with higher numbers of birds, the conservation target for shellfish stocks is higher, making it less likely to enable fisheries. We have raised this question with Natural England, who indicated they are open to adjusting their advice if bird populations are doing very well – but these discussions are in their infancy.

Purpose of marine protected areas (MPAs)

This is a higher-level issue that needs to be raised with MPs and Defra.

When The Wash was designated for conservation, stakeholders were promised that it would be a “sustainable use” site – i.e. activities could continue so long as they were properly managed, so they align with conservation targets. However, with oystercatcher numbers – and targets – increasing, this leaves no option for sustainable use – going against the definition of marine protected areas:

“ MPAs are defined geographical areas of the marine environment established and managed to achieve long-term nature conservation and sustainable use. The development of a network of MPAs in the marine environment is part of the UK’s commitment to protecting its seas and associated benefits to society for future generations.”

<https://jncc.gov.uk/our-work/about-marine-protected-areas/>

Bird food model (cont.)

Q.11 What if bird numbers go down – can the fishery take more than one third of the adult stocks?

The conservation advice is that we must leave sufficient stocks for a minimum of 24,000 oystercatchers, even if the population is lower than that. This is precautionary because we do not know from year to year what numbers of birds will arrive at the site.

Q.12 Can stocks on the lays be taken into account in the Bird Food Model?

A small quantity of cockles on lays that are adjacent to our survey areas are taken into account, but we do not survey lays so the majority of cockles and mussels on lays are not included. Eastern IFCA could only take into account cockles and mussels on lays if we know what biomass (weight) and size of stocks are on them, and if we could be certain the stocks would remain there (i.e. not be fished) until the following March/April, so that they are available for birds to feed on over the winter. Since cockles and mussels on lays are private property, we cannot tell fishermen to leave stocks on their lays. We understand mussel stocks on lays are currently not particularly marketable but if this changes stocks could be fished.

Q.13 Can mussels on Welland Wall be included in the Bird Food Model?

Yes, they can, and we do include them.

Q.14 Can stocks on Le Strange be included in the Bird Food Model? The surveys will take place next week.

Potentially yes if the stock data is made available and Natural England have confidence that a certain level of stocks will be unfished.

Q.15 Now we have the bird food model, do we still need to apply the “rule of thirds”? That rule was brought in as a precaution when we had a dredge fishery. Mat (previous CEO) said it should be 50/50 if we have a hand worked fishery only.

The TAC using a “rule of thirds” was introduced in 1998 to help sustainability of the stocks. Since then other minimum thresholds have been introduced that also protect sustainability. Similarly, the bird food model provides a minimum threshold to support the bird population. Due to atypical mortality and the recent cockle population demographics, in recent years the TAC doesn’t seem to have much synergy with the stocks. We could have a separate discussion on how the TAC is determined, or whether we still need one, but at present we still use the rule of thirds.

Q.16 Does the bird food model account for growth of cockles?

The bird food model is based on research comparing bird mortality rates at the end of the winter with cockle and mussel stocks assessed the preceding spring. This automatically takes growth into account, because the model recognises that birds feed throughout the winter on cockles that have grown over the summer. It also accounts for birds feeding on other species.

Q. 17 Can the year 0 cockles be included in the bird food model?

Eastern IFCA is planning to discuss this with the bird food modellers. We currently do not include year 0 cockles, on the basis that they are too small to be targeted by oystercatchers. This is based on size ranges at the time of the survey, however. We now understand (from discussions with a Natural England ornithologist) that oystercatchers can predate on smaller cockles than we thought if larger cockles are scarce, which could mean Year-0 cockles are of sufficient size to be targeted by oystercatchers over winter.

Natural England advice

Q. 18 Does Eastern IFCA have to take Natural England's advice?

Our current understanding is that we can go against Natural England's advice, but we would require very good reasons for doing so and we would have to follow a drawn-out process of notifying Natural England, waiting for their response, then waiting a further "cooling-off" period while Natural England notifies the Secretary of State. We followed this process once, to open a small mussel fishery on the Mare Tail, around 15 years ago. Since then, we've worked closely with Natural England and the Industry to develop The Wash Cockle and Mussel Policies, and so long as our fishery proposals are in line with those policies (which take conservation objectives into account), Natural England are able to agree our fisheries.

Dredged mussel fishery

Industry members stated that they do not want to have a dredged mussel fishery if it means there cannot be a cockle fishery.

Need to protect juvenile cockles

All agreed it is vital that we protect juvenile stocks, in order to maintain the possibility of opening fisheries in the next couple of years. Even if we find additional stocks this year and can include private stocks and smaller cockles in the bird food model, we can only open a fishery if we can protect juvenile stocks. This would need closures around dense areas of juveniles, and careful hand-working operations only in areas with low densities of juveniles that minimise disturbance, riddle the catches and return juveniles carefully. Prop-washing may not be permissible.

Q 20 Do cockles survive if they are spread over the black layer in a prop wash ring?
The exposed black layer is anoxic – bacteria living in the layer have depleted it of oxygen. Small organisms that rely on the surrounding sediment for their oxygen cannot live in it. Cockles, however, extend their syphons into the water to draw in food and oxygen. As such, they can survive in the anoxic layer. Similarly, larger worms have tunnels that also circulate water and oxygen from above the anoxic layer

Eastern IFCA has a duty to manage sustainable fisheries and support viable industry wherever possible whilst meeting nature conservation requirements,

and the industry has a collective responsibility to fish in a manner that protects the long-term interests of the fishery.

Actions

1. Eastern IFCA to survey the possible mussel bed on Blackshore / 'Back of the Wall on Wednesday this week
2. Industry members to walk Roger (Bar Sand)/Toft, Hook Hill and the western edge of Gat Sand to assess suitability for further survey work on Thursday and Friday this week
3. Industry members to liaise with other members and consider and walk other areas that Eastern IFCA might survey on the next set of spring tides
4. Eastern IFCA is working with Natural England on the bird food model.

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