



Agenda Item No. B6

Success Criteria: 2, 3, 4, 5 & 6

By: Assistant Chief Officer and Project Officer

To: Kent and Essex Inshore Fisheries and Conservation Authority – 19 May 2015

Subject: **BLACKWATER /CROUCH MCZ OYSTER MANAGEMENT MEASURES AND RIVER ROACH ORDER**

Classification Unrestricted

Summary: To report on progress in working towards the recovery of native oysters within the MCZ area and actions regarding the River Roach Oyster Fishery.

1. Native oyster management within the Blackwater, Crouch, Roach and Colne MCZ area.

1.1 Essex Native Oyster Restoration Initiative (NORI)

Meetings took place on 21 January and 15 April 2015

Both meetings considered the Constitution and Terms of Reference for the initiative and a draft is now under consideration with the intention to sign up to final wording at the next meeting in June.

The initiative has been working on a grant application to fund the trial laying of cockle shells in two specific sites which it is hoped would create an improved surface for oyster spat settlement. Unfortunately funding was not obtained for this to take place this year, however an application is now being made for next year.

Discussion took place with regard to the impacts of oyster disease on oyster stock regeneration and possibilities of setting up a small hatchery. Further consideration is to be given to both of these matters.

KEIFCA position to-date was reported to the group with reference to consideration of what we are seeking to achieve, discussion with MMO regarding

regulatory options and how future management will be required to achieve conservation objectives.

Discussion regarding the need for a Management Plan resulted in KEIFCA officers agreeing to talk to the industry and draw up a draft Management Plan with a view to this being adopted, after consideration and amendment if required, by all stakeholders and members of Essex NORI.

Natural England discussed progress with drafting their conservation advice and their intention that this will not apply to private oyster fisheries.

2. Oyster restoration project in the Ray Sand Channel

Oyster fishermen gave a presentation at the last Essex NORI meeting promoting a proposal of theirs to undertake trial oyster dredging within a defined area of the Ray Channel. The oyster fishermen suggested that this dredging would benefit oyster recovery within the area, which is badly silted, by cleaning silt from the cultch and thus improving the chances of a successful settlement of oyster spat. Oysters harvested during this operation would, it was proposed, be re-laid on private beds at West Mersea where they would have an improved chance of successful spawning during the following summer before being harvested and sold to cover the operating costs to the industry of the cleaning operations.

Essex- NORI and Natural England supported the project but were opposed to the removal of oysters from the site due to the low native oyster populations within the Ray Channel area which would not be consistent with the draft conservation objectives for the site. However, it was suggested that the effect of cleaning silt from the cultch is likely to be beneficial and that as the numbers of oysters are low this would be an initial step to recovering oysters within the MCZ in keeping with the conservation objectives. If the project proceeds the benefits of cleaning the ground on the recruitment and settlement of oyster spat could be assessed and evidenced. Essex NORI members considered that if a funding stream for the project could be found then the husbandry activities could be carried out without the need to move and sell oysters to fund the work.

There is continued concern amongst the members of Essex NORI regarding delays in moving forward with oyster restoration projects. Husbandry activities need to be undertaken in June/July in order to align with the summer oyster spawning events. It is very unfortunate that the proposed grant funding to trial the laying of cockle shell cultch is not proceeding this year, which means that this project is the only possible on-site work which could be carried out this year.

In an effort to see trials on restoration commence it is proposed that consideration is given to KEIFCA using some of its research funds, over a 3 year period, to pay commercial oyster vessels to undertake the restoration work whilst the site remains closed to commercial oyster harvesting. Kent and Essex IFCA research funds have been used so far as seed match funding for some projects which have already been carried out but as a result of income from those surveys the funds have been replaced. Currently the research reserves stand at approximately £90,000.

This project would cover 2 sites within the MCZ. These would be at the entrance to the Blackwater and in the Ray Sand Channel.

Site 1 – Ray Channel

In the Ray Channel a defined area would be fished during early summer with oyster dredges and by doing this silt would be cleaned from empty shells (cultch) on the seabed. The cleaned cultch would then present good conditions for native oyster spat settlement as water temperatures rise and spawning takes place. This work would require 120 hrs of vessel time in the Ray Channel. Detail of all works undertaken would be accurately recorded and annual monitoring of the site would be undertaken. Vessel time, not including transit time to the site, would be paid at £50/hour giving a total cost of £6,000 per annum for 3 years.

Site 2 Entrance to Blackwater

This proposed cleaning of silt from cultch would take place at the entrance to the Blackwater estuary, just to the east of the Private Several Order where there is a strong adult native oyster spawning stock. This would be undertaken by local vessels towing chains supported by a spreader bar across a defined area. The cleaned cultch would then present good conditions for native oyster spat settlement as water temperatures rise and spawning takes place. This work would require 30 hours of vessel time @ £50/ hr = £1,500.

Future planning

During the duration of the project, annual surveys will be conducted by KEIFCA on the sites and adjacent areas to monitor the effect of the restoration works. It is proposed that before the end of the 3 year project the success, or otherwise, of the works would be evaluated and application for grant funding would be made on the basis of evidence gathered during the trial in order to continue the project.

As discussed previously at the Authority meeting in November 2014 (and included in our 2015/16 annual plan) KEIFCA applied with Essex University for funding for two PhD students to work on the oyster regeneration project. One application was successful and it is proposed that the projects described above will be monitored by the PhD student who is likely to start in late summer/early autumn.

Due to the short period of time since the last Essex NORI meeting, this proposal has been outlined via email to the group and will, subject to the Authority's approval, be discussed further at the next meeting in to be held in June 2015. The outline and proposal has, however, been identified as a positive step by the group.

Recommendation: The Authority is asked to consider these proposals and agree in principle to undertake these stock restoration trials and provide funding of £7.5K per annum for 3 years.

2. Proposed continued Closure of Native Oyster beds

In order to provide continued protection to remaining stocks of native oysters KEIFCA has for the last 3 years decided, after consideration of survey data, to prohibit the harvesting of Native Oysters within the area of the MCZ.

The current closure expires on the 31 May 2015.

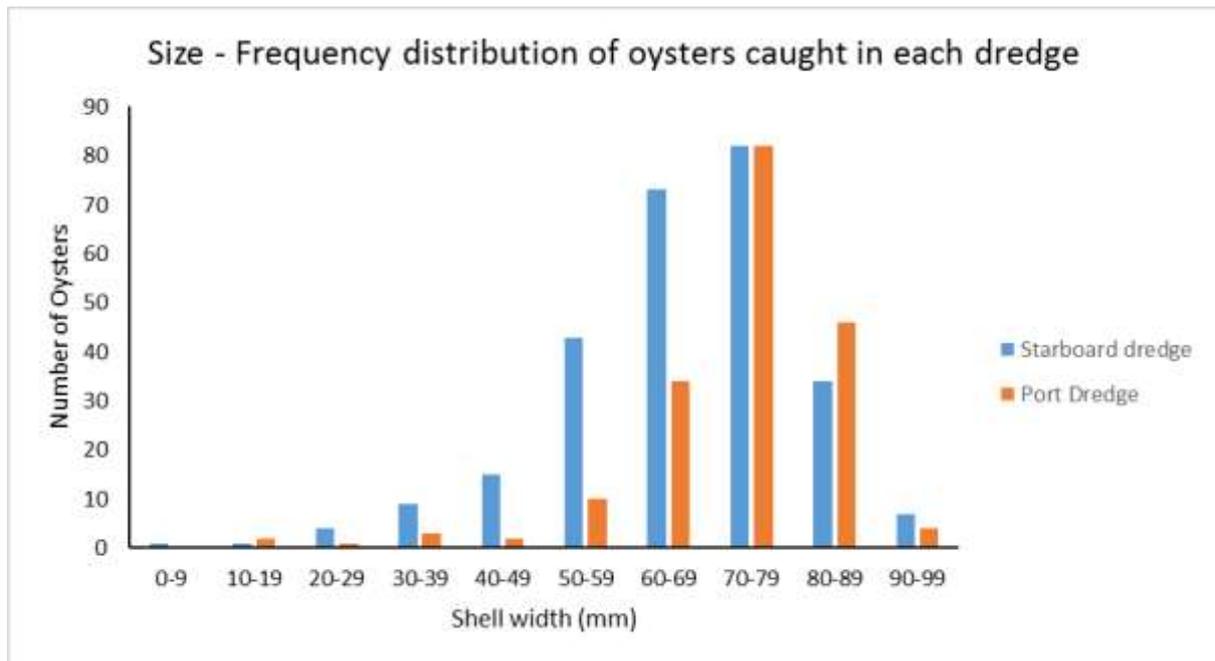
In previous years a small amount of restricted fishing has been permitted within defined areas for 2 to 3 weeks during April each year, however fishing effort and catches have been quite low. This assists in providing additional stock data.

These closures were implemented under the Authority's 'Shellfish Beds Byelaw' which makes provision for KEIFCA to prohibit the removal or disturbance of shellfish within a defined area if stocks are considered to be "so severely depleted as to require temporary closure in order to ensure recovery".

In previous years the Authority has concluded that available evidence constituted sufficient evidence to recommend prohibiting the removal of native oysters from within the area of the MCZ under the KEIFCA Shellfish Beds Byelaw (see wording below).

Previous surveys and evidence from monitoring of the 2013 and 2014 controlled fishing indicated a shortage of adult oysters and a continued severe shortage of juvenile oysters which was reported to KEIFCA last year.

A survey, on-board a West Mersea Oyster dredger, was undertaken on the 10 April 2014. This survey showed low populations of native oysters. This survey deployed 2 dredges, one with the standard mesh bag used for native oysters (port dredge) and one with a half size mesh (starboard dredge). During this survey 18 hauls were made, each covering an average distance of 187 metres. During these hauls a total of 270 oysters were taken in the starboard dredge and 184 in the port dredge. The port dredge produced slightly more oysters above the minimum landing size of 70mm but the starboard dredge produced significantly more undersized oysters. This gives an average, not allowing for inefficiencies of the dredge, of one oyster each 15 metres² dredged with the starboard dredge and one oyster each 21 metres² dredged with the port dredge. The highest catch rate achieved was one oyster per 6 metres² dredged.



The graph above shows the size composition of oysters taken by each dredge. This shows, as expected, that the smaller mesh starboard dredge retained more small oysters.

The total numbers of oysters taken and low numbers of oysters below 50mm indicate that there has not been a significant spat fall on these grounds over the past 2 – 3 years and that stocks remain severely depleted.

The August 2014 KEIFCA main survey of native oysters on the MCZ public grounds (as previously reported) also showed severely depleted native oyster population levels and no, previously unknown, populations of native oysters.

2.1 **SHELLFISH BEDS BYELAW** (Confirmed 1997)

Where, in the opinion of the Committee, in any fishery, any bed or part of a bed of shellfish within the District is so severely depleted as to require temporary closure in order to ensure recovery, or any bed or part of a bed contains mainly immature shellfish which in the interest of the protection and development of the fishery ought not to be disturbed for the time being, or any bed of transplanted shellfish ought not to be fished until it has become established, and where the bed, or part of thereof, has been clearly defined in notices displayed in the vicinity prohibiting the removal or disturbance of the shellfish, no person shall, without the written authority of the Committee, while the bed or part thereof is so defined, take away or otherwise disturb any shellfish therein.

Application for authority from the Committee to take away or otherwise disturb any shellfish in a bed which is temporarily closed, in pursuance of the byelaw specified above, should be made in writing to the undersigned.

The provisions of this byelaw are without prejudice to any historic right of Several Fishery, Act of Parliament, Royal Charter or other rights that exist

within the district as referred to in Section 6 of the Sea Fisheries Regulation Act 1966.

Due to increasing evidence showing severely depleted stocks and reality that recovery will take at least 5 years it is proposed that rather than close the grounds to taking or disturbing native oysters on an annual basis, as has recently been the case, a closure is put in place and reviewed every 3 years.

Provisions will need to be put in place to authorise the works outlined above, if approved, or other stock restoration work to be undertaken during this period as defined in the byelaw.

2.2. Recommendation: That the fishery for native oysters should be closed within the MCZ area until the 31 May 2018. KEIFCA will give consideration to allowing the removal or disturbance of oysters as referred to in the byelaw in line with its stock restoration policy and MCZ conservation objectives.

To implement the following closure:-

Under the KEIFCA Shellfish Beds Byelaw it is prohibited during the 3 year period 31 May 2015 to 31 May 2018 to remove or disturb any Native Oyster (*ostrea edulis*), without the consent of the Authority, from within the area known as the Blackwater, Crouch, Roach and Colne Marine Conservation Zone defined by a line drawn from a position on the coast at Clacton $51^{\circ}47'.223N$ $01^{\circ}09'.325E$, connecting through points at: $51^{\circ}43'.853N$ $01^{\circ}09'.178E$, $51^{\circ}41'.969N$ $01^{\circ}08'.367E$, $51^{\circ}40'.021N$ $01^{\circ}05'.053E$ to Foulness Point at position $51^{\circ}37'.206N$ $00^{\circ}57'.475E$ and thence following the line of mean high water along the Essex coastline and across the entrance to Havengore creek returning to a position on the coast at Clacton $51^{\circ}47'.223N$ $01^{\circ}09'.325E$.

3. River Roach Oyster Fishery Order

Leases were offered to all four previous lease holders for their acceptance and payment. These would be subject to the lease conditions and previously agreed Fishery Management Plan.

Two leases have been granted and other previous lease holders have indicated that they do not wish to take up new leases.

The current leaseholders are now preparing the layings for future use.

One further enquiry to lease an oyster bed within the Roach Fishery has now been received. Further details and a request for approval will be reported to the meeting if formal application is received by the date of the meeting.