



**North Western
Inshore Fisheries and Conservation Authority
Annual Meeting: 17th May 2011.
Copeland Borough Council Offices, 10.30 a.m.**

Agenda Item 10

SCIENCE REPORT

GENERAL

The gradual increase in daylight hours throughout the period made more tides available for survey work and this was reflected in a change in the balance of work undertaken by the scientific department compared to last quarter. Scientific staff were also heavily involved with the implementation work in the run up to the transition to the IFCA and the merger with Cumbria SFC, delivering and receiving a significant amount of training, both internal and external, and facilitating the establishment of the Technical, Science and Byelaws Sub-Committee.

SURVEY AND INSPECTION WORK

Mussels

Two inspections were made at Foulney Island which has seen a low level of exploitation throughout the quarter. Nothing untoward was apparent from a biological perspective: the bed maintaining what one might call a standard state with a "healthy" population of mussels made up of several year classes growing together on stable ground. Officers found evidence of a 2011 spatfall but this appears to be confined to very south western tip of the bed.

Heysham Flat was inspected in April by Mandy Knott and a spatfall was apparent there too. Although more extensive than on Foulney, the central area that has been the focus of the annual seed fishery for the last 6 years remains covered in old mussel mud and is not settled. Officers consider that this change in the pattern of settlement may well reduce the likelihood of a fishery later this year.

On the South America and Falklands skears, where an extensive spatfall has occurred, a novel method of surveying the beds was employed and proved very effective. These areas are notoriously difficult to access either by land or sea and are usually surveyed from the air but on this occasion a hovercraft was used. The ease of getting out to and around these, extensive, low lying beds combined with a large, stable and comfortable platform to work from impressed officers and enabled much closer and accurate assessment of the stocks than has been previously possible from the air. As mentioned, the spatfall was found to be extensive and heavy but, unusually for this area, some of the previous year class had survived the winter giving some mixed areas. However, this should not be a barrier to fishing as the general demeanour of the area suggested the new recruits will form "ephemeral" beds and become vulnerable to loss either through predation or erosion. Indeed, it was noted that predation by starfish was already occurring in large areas where the surviving 2010 mussels were most abundant.

COCKLES

Formal surveys were carried out at Leasowe and Southport. The work on the Wirral is aimed at assessing the impacts of the fishery there and the prospects for its continuance, while at Southport the priority is to quantify the extent of the population and measure growth rates to enable more accurate prediction of when the stocks there will become fishable.

Although no formal surveying was undertaken, monitoring of the stocks in Morecambe Bay continued throughout the quarter with Scientific Officers accompanying Fishery Officers during routine shellfish hygiene sample collections. Stocks of adult cockles remain very low in the Bay and with very poor over winter survival of the 2010 year class, look likely to remain so for the 2011/2 season.

PROJECT WORK

EIDER/MUSSEL RISK ASSESSMENT

In February and March Scientific Officers and Fishery Officers from both Cumbria and North West SFCs took part in conducting survey work on several mussel beds as part of the Natural England Eider Risk review. Mandy Knott also assisted with a low water bird count conducted from the Solway Protector and Helen Ake reviewed historical evidence of the mussel fishery in Morecambe Bay over the last 20 years through SFC committee and scientific reports. Currently, Natural England are in the process of writing a report, which has had significant input from the science team through several meetings, reviewing the mapped data and considering other literature. It is felt that further work could be undertaken on this project and Natural England are looking into this matter.

Liverpool Bay clam dredge trial

Scientific Officers have worked on the Assessment of Likely Significant Effect report for this proposal, working closely with the operator and Natural England. Currently the trials are due to commence in May with a set schedule of work regarding the assessment of the impact of the fishery and the recovery of dredged areas.

Ribble Estuary Cockles

Mandy Knott organised a meeting of local authority representatives and other enforcement agencies which were concerned about the management of the Ribble Estuary cockle beds. This was held at Ainsdale Discovery Centre in March. A presentation was given by Bob Houghton regarding the status of the beds and the possible methods of harvesting that could be used. Measures concerning the enforcement, health and safety, and conservation issues were discussed which were then carried forward and discussed further at the Technical, Science and Byelaws Sub-Committee.

Training

At the end of February Helen Ake attended a training course run by Eastern SFJC to boost her MapInfo skills. The new learning was cascaded down to other Scientific Officers on her return. Scientific Officers attended the DEFRA IFCA training days in Gateshead in March and familiarisation with the area and access points on the cockle and mussel beds has continued for the two new Scientific Officers through dedicated, on-site, practical training sessions conducted by the Scientific & Environmental Officer.

Bob Houghton attended a habitat mapping workshop in February and was part of the user acceptance team that signed off the changes made to the MMO's MCSS software to enable the central recording of IFCA enforcement and monitoring information. He also continued the Committee's representation on the IFCA Technical Advisory Group (TAG).

Newsletter/Stakeholder Engagement Plan

Helen Ake has been working on preparing the NWIFCA Stakeholder Engagement plan which is required as part of the new IFCA working plan. A newsletter has been compiled as a further way in which the IFCA can engage with its stakeholders.

Meetings

Scientific Officers attended the Shellfish Liaison Group meeting at Morecambe Town Hall in March and informed the group of the current state of the cockle and mussel beds. It was also brought to the attention of the group that now the IFCA district includes the English part of the Dee that the interested parties within the lower IFCA area may be invited to attend.

Much work went into facilitating the first Technical, Science and Byelaws Sub Committee for the IFCA, with the Science team preparing the necessary reports and assisting at the meeting to support Members in establishing the Terms of Reference and work programme.

OTHER

As in the previous quarter, Scientific Officers were called upon to assist with the collection of hygiene samples within the District while acquaintance training for new (and some old!) Fishery Officers continued to ensure the safe and effective operations.

Throughout the period, the Scientific & Environmental Officer continued to support the work led by Mandy Knott in relation to a Morecambe Bay Regulating Order. He also provided significant support and assistance in relation to the Authority's IT systems in Carnforth.