

## **NWIFCA Science Report 2011 – 2012**

The first year as an IFCA has proved to be an extremely busy year for the Science team in the Carnforth office. It has seen the proliferation in developments in the Irish Sea, particularly for renewable energy, thus increasing the amount of consultations that the IFCA responds to, an area of work that was not initially planned for in 2011.

The merger of the North West Sea Fisheries Committee with Cumbria Sea Fisheries Committee, along with the additional responsibilities of all estuaries within this large District up to their tidal influence (excluding migratory fish which remain the remit of the Environment Agency) has also created new areas of work and increased pressure on the limited resources of the IFCA.

A major piece of work that has been achieved during 2011-12 is the submission of an application to Defra for a Hybrid Fishery Order for bivalve shellfish in Morecambe Bay and the Duddon Estuary. This has been a long-standing target for shellfish management, and the application has reached a new milestone. Statutory consultation responses have been received from Defra and Defra partners, amendments incorporated based on these responses, and the revised application returned to Defra. We now await the drawing up of the Statutory Instrument and formal consultation period, and anticipate that any major areas of contention have already been settled during the drafting and re-drafting stages. There is enormous support for a Fishery Order for Morecambe Bay from all sectors. It is hoped that once in place, not only will it provide an invaluable legislative tool to manage the fisheries in the Bay much more effectively than previously, thus freeing up Officer time and providing resources to increase the scientific work carried out in the Bay, but that the Order may also provide a blueprint for other shellfish fisheries in the District for the future.

Staying with Morecambe Bay, an assessment of risk posed by the seed mussel fishery in north Morecambe Bay to the eider duck population in the Bay was elevated from low to medium prior to 2011. Science Officers worked extensively with Natural England and the RSPB to assess bird numbers using the Authority's patrol vessel Solway Protector, and conducting foot surveys and counts in areas where the birds were known to feed. Lengthy discussions were carried out, and a detailed response to a draft paper was given where other factors other than mussel harvesting being potential causes of a decline in eider numbers were argued. The result was a recommendation that the risk be returned back to low. Science Officers are committed to ensuring that our environmental responsibilities are intricate to all of our work. However, we will also seek to ensure that when available evidence suggests that impacts are being caused by other anthropogenic activities and not those of fisheries this is highlighted to our partners and fully considered in any assessment.

For many years there have been calls for the impact that recreational angling has on inshore fishery stocks to be assessed and management measures to be devised and implemented. Cefas has instigated a national series of surveys and requested that the IFCAs take on the delivery of face-to-face shore and private angling boat surveys within their Districts. NWIFCA Science Officers have been fully engaged in the process of designing and implementing these surveys which began in January 2012 and will continue for a full 12 month period. The team will also oversee data entry and analysis, and it is anticipated that when the results are eventually published these will provide an invaluable dataset to be used for future fisheries management, and feed into the Sustainable Fisheries Review (see below).

A great deal of Officer time has been spent in responding to consultations from the energy industry, where potential impacts on fisheries, both in sub-tidal and inter-tidal areas are assessed. These have included:

- Walney windfarm extension and export cable routing

- Burbo Bank windfarm extension and export cable routing
- Roosecote biomass station – request for data on habitats and fisheries
- Halite gas storage proposal at Preesall

The on-going annual work of shellfish stock assessments and associated work has significantly dominated the team's work this year. The science team are not only involved in practicalities of fieldwork and analysis of data from cockle and mussel surveys, they are also the lead officers for:

- undertaking Appropriate Assessments for all our fisheries in relation to the European Marine Sites in which the fisheries are found, in collaboration with Natural England;
- multi-agency working to draw up individual operational management plans for each fishery, working with local authorities, police, Gangmasters Licensing Authority, Maritime & Coastguard Agency, Fire and Rescue and ambulance services, wildlife conservation agencies amongst others;
- providing advice to CEO over management measures for each fishery;
- servicing the Technical, Science and Byelaws sub-committee (TSB), and the full NWIFCA on all matters relating to fisheries management;
- dialogue with fishermen / industry.

Following on from the cockle fishery on the Wirral in 2010 and early reports from fishery officers that stocks were likely to be good on the Southport beds in 2011, the team made an early assessment of stocks on all the intertidal cockle beds around the Ribble and in essence were 'ahead of the game'. By March multi-agency meetings were already being held and a full operational plan had been drawn up in time for the end of the seasonal closure at the end of August. What no-one could have foretold was that there was another bed, known as Foulnaze, which can only be accessed by boat, which had abundant cockles and would be a major interest to the industry. The fact that the NWIFCA only found out about this bed because local fishermen informed us of its presence probably highlights difficulties in terms of resources, both people power and equipment, to cover such a large geographic area. This is reinforced by the difficulties science officers are faced with in trying to access this bed to re-survey it. We are reliant on the industry to get us out there. However despite ours and their best efforts the weather thwarted attempts in the first quarter of 2012 to access Foulnaze for a further stock assessment.

Interest in the cockles on the Foulnaze bed reached local and national importance due to the antics of the few causing major safety problems. The science team were heavily involved in work to assess the options faced by the NWIFCA in the management of this fishery, the eventual implementation of an emergency byelaw and the subsequent responses to the glut of phone calls from stakeholders that came into the office.

In November following the closure of the Ribble and Wirral cockle fisheries under the emergency byelaw the science team were approached by the industry to authorise fishing of mussel on the West Kirby bed on the Dee Estuary. This generated a large amount of work in terms of assessment of the stock, consultation with fishermen, assessment of likely significant effect on the Dee Estuary European Marine Site and in particular bird species, surveys for the non-native invasive species *Eriocheir sinensis* (Chinese Mitten Crab), work with the local authority in drawing up an operational plan, and the devising of a permit scheme to authorise undersize mussel which included certain conditions around Safety at Sea training. The fishery was authorised taking the risk of Chinese Mitten Crab and bird feeding requirements into consideration from 16<sup>th</sup> January to 29<sup>th</sup> February 2012. Unfortunately due to market influences, despite all the work that went into the permit scheme

few fishermen worked the bed during this period. Subsequent requests to extend the permit scheme resulted in more officer time being devoted to this fishery.

The Science team are committed to encouraging research into the possibilities of aquaculture ventures / stock enhancement measures and have been involved in two pieces of work to this end during the past 12 months. The first is a mussel relaying trial in the Walney Channel in an area known as Barrow I. Monitoring of this trial and its success or otherwise, including its transferability to other areas is on-going. The second was a cockle transplantation trial on the North Run / Granny's Bay cockle bed in Lytham. Working under the supervision of the TSB, it is hoped in future years to develop the trial into a full experiment with methodology that can be adapted to other cockle beds within the District for when stocks allow.

One of the High Level Objectives laid out by Defra for all IFCA is to conduct a review of all fisheries within the District in terms of sustainability. The NWIFCA has adopted a working set of 'Sustainability Principles' and efforts have been made to access funding to progress this review, which is a substantial piece of work. Until such time as a dedicated officer can be sourced the Science Team will continue to lead on this review.

Although there are elements of work within the 2011-12 plan that have not been achieved, the amount of work completed by the Science team in 2011-12 has been considerable, and has informed the plan for 2012-13. The year sees another element of change with the resignation of Bob Houghton, and his subsequent replacement. We wish Bob well for his future adventures. For the NWIFCA challenges lie ahead, resources are stretched, but the enthusiasm and dedication of the small science team will continue to provide the information the NWIFCA requires to fulfil its duties under the MACA 2009, with the overall aim of achieving sustainable fisheries within the District, balancing the requirements of our fisher stakeholders with wildlife and conservation interests.