



November 2013

**We would like to say a huge thank you to all the fishers that have helped us with the project so far. Your help is invaluable in collecting this scientific data.**

Please keep checking our website for our latest reports and all the publications and presentations we have completed to date.

Visit: <http://fisheries-conservation.bangor.ac.uk> and choose 'Welsh fisheries' – 'Reports'. Or link to the latest reports via our homepage (top right). The website contains photos and videos of our work, and join our Facebook page for more: <https://www.facebook.com/fisheriesconservation>. You can also follow us on twitter: @Fisheriesbangor.

### **Fisher questionnaire**

The fishers' knowledge questionnaire is in progress with 20 questionnaires currently completed; 5 in North Wales, 7 in Mid Wales, and 8 in South Wales. We are looking to schedule fishers for interviews, so if you are interested please contact Julia ([j.pantin@bangor.ac.uk](mailto:j.pantin@bangor.ac.uk)). You can register on our website (just click on the 'Get Involved' link at <http://fisheries-conservation.bangor.ac.uk>)

***This questionnaire is vitally important as it will identify those areas of the coast that are most important to fishers, it will provide a portfolio of independent evidence for the fishing industry to use going forward, and it will inform our understanding of the biology of the commercially important species in Wales.***

### **Economic interviews**

The economic interviews are underway with 44 completed so far around Wales. Thanks to all those fishers who have given up their time to help. These interviews are essential to assess the economic performance of the inshore fisheries around Wales and they will be related to the current fishing grounds (obtained from the fisher questionnaire) to estimate the possible economic consequences of different management measures. Thanks to all fishers involved. We need more interviews to have a better picture of the performance of the activity. **Please get involved and contact:** [g.cambie@bangor.ac.uk](mailto:g.cambie@bangor.ac.uk), 01248 382615.

***Remember this survey is important because it will address the current undervaluation of the value of commercial fisheries to the Welsh economy and hence bring fisheries issues higher up the agenda.***



## Crustacea

### Juvenile crustacean survey



Juvenile brown crab (*Cancer pagurus*), and European lobster (*Homarus gammarus*) caught in our experimental pots.

The juvenile project has come to a close until next summer. We've had some eventful days on the sea this summer. All the data and video footage is currently being analysed and should be available as a report on the website in the very near future.

**Natalie Hold:** [n.hold@bangor.ac.uk](mailto:n.hold@bangor.ac.uk) (07903 762466)

**Jodie Haig:** [j.haig@bangor.ac.uk](mailto:j.haig@bangor.ac.uk) (07593 635348)

### Brown crab



Juvenile brown crab, *Cancer pagurus*

The "Size at Maturity" research is currently on hold until we can get a scientific dispensation to collect undersized brown crabs. We will determine if there are regional differences in size at maturity by assessing the reproductive state of both males and females from north, mid and south Wales.

### Lobster reproduction research

We are collecting data on the size at maturity and fecundity and reproductive success of lobsters. Please see the document attached to this email or visit our website to find out about the full research programme.

## Prawns



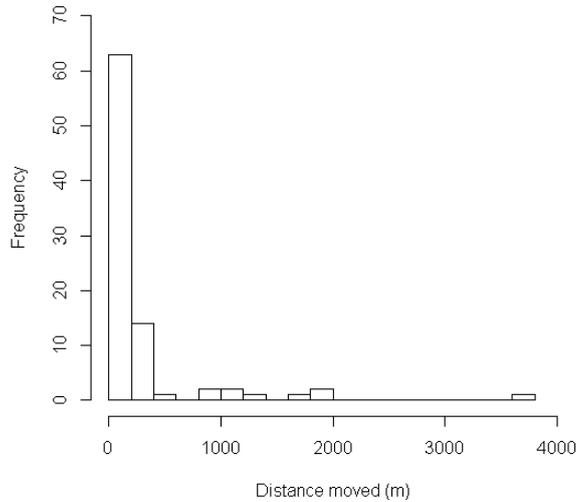
We formally welcome Kayla Williams and Niamh Ryan to our team. They will turn their experienced eyes to prawns now as they begin work on the “Sustainable management of the Cardigan Bay prawn fishery” with the Cardigan Bay Fisherman’s Association. This project (alongside our own) is focused on collecting base line data required under the new Marine Strategy Framework Directive.

We are continually engaging with prawn fishermen around Wales. If you would like to be involved in the project **please contact Dr Jodie Haig** [j.haig@bangor.ac.uk](mailto:j.haig@bangor.ac.uk). For very little involvement you can contribute some vital scientific samples to the Welsh study of prawns.

## Lobster tagging



To date almost 1000 lobsters have been tagged throughout Wales, with a large effort occurring off the tip of the Llŷn Peninsula. The carapace length of re-caught lobsters ranges from 66mm to 105mm, suggesting that larger lobsters are less likely to be re-caught. Plotting the GPS co-ordinates of tagged lobsters against the GPS co-ordinates of where they were re-caught shows that the majority of lobsters have moved less than 200m. These preliminary data agree with previous studies of the movement of the European lobster, with most lobsters staying close to their initial capture location whilst a few lobsters range further afield. A preliminary report is now available (see our website and email attachment).



**Histogram showing the distances between initial capture location and the re-capture location**



**Scallops**

**Fishing intensity trial**

The appropriate assessment for the Cardigan Bay scallop fishing intensity study is under way with NRW and the Welsh Government. We are currently working on the tender document to start the tendering process to select the vessels which will take part in the experiment as soon as possible.

**Scallop stock status**

We are currently finishing the analyses of the videos and pictures of the July-August 2013 survey to make the scallop stock status report available before Christmas.

The Tremadog Bay scallop stock study described in the October newsletter will be undertaken in spring or summer 2014.

**The red bag scheme**

This Scheme was established by Cefas to assess scallop stocks. It is a simple method that we are using to collect information on the status of scallop stocks in Welsh waters. A sample of at least 120 scallops above MLS is kept in a red bag that we will give fishers. A sample sheet needs filling in with details of the number of undersized scallops that are discarded. The bag is then landed as usual to the processor. The processed flat shells are returned to the bag and collected by Bangor University for age determination.

The first red bag has been returned to us. Thanks to the fisher involved and the processor AM Seafoods. **Please get in touch to participate in the scheme. Contact: [g.lambert@bangor.ac.uk](mailto:g.lambert@bangor.ac.uk)**

## **Whelks**



### **Whelk tagging results:**

Our research so far is hinting that a number of physical morphologies exist (i.e. locations where some whelks are thick shelled and small and some are thin shelled and large). We are testing this hypothesis by measuring all the shells from our samples and comparing to the biological data we have already collected.

If you're a whelk fisherman and would like to be involved in a whelk tag/recapture study next summer **please drop Jodie an email: [j.haig@bangor.ac.uk](mailto:j.haig@bangor.ac.uk)**



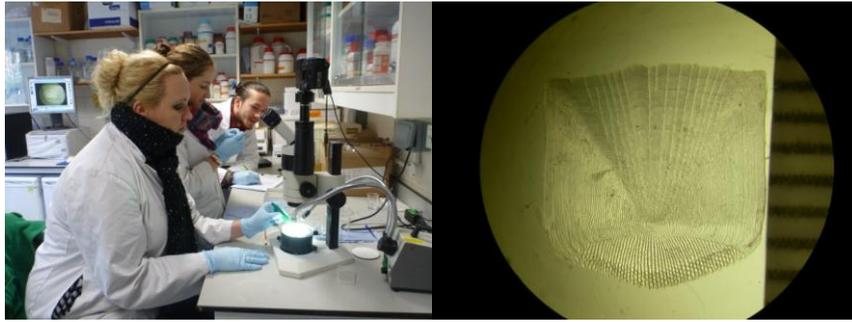
## **Finfish**

### **Sea bass**

More than 1300 fish have been sampled so far. We have started the analysis of the scales to age the fish and for the stable isotope analysis. Stable isotope analysis will give us an insight into the migration connectivity and migration patterns of the species.

We are constantly collecting samples of bass from fishers and processing industries. The reproductive season is starting and we need to increase the number of fish collected with gonads.

**Please get in contact with Giulia Cambiè ([g.cambiè@bangor.ac.uk](mailto:g.cambiè@bangor.ac.uk)) to provide bass samples (scales and gonads).**



Left: Gemma Godwin & Jordan McDermott-Buxton working on bass scales. Right: Bass scale recorded by our student Tom Overy.



Y Gronfa Pysgodfeydd Ewropeaidd:  
Buddsoddi mewn Pysgodfeydd Cynaliadwy  
European Fisheries Fund:  
Investing in Sustainable Fisheries



Llywodraeth Cymru  
Welsh Government