



July 2013

Menai Seafood Festival



On 31st August, the first Menai Seafood Festival will be taking place in Menai Bridge and our group is going to be involved. This one day event will celebrate North Wales' coastal heritage and the seafood fished from local waters. This festival will include cooking demonstrations, local produce, art and crafts, music, activities for kids and educational displays. Our group will have an educational display to inform the public of our project "Sustainable Use of Fisheries Resources in Welsh Waters" and highlight some of the novel methods of data collection we have developed, as well as educate the public on the Welsh fisheries. Hope to see you on 31st August!

For more information on the Menai Seafood Festival visit the website at www.menaiseafoodfestival.com

Fisher questionnaire

The fishers' knowledge questionnaire is underway with the first interviews already carried out. We are still looking to schedule fishers for interviews. **Please spread the word and contact Julia if there is anything you would like us to know about Welsh fisheries!**

Email – j.pantin@bangor.ac.uk

Or you can register on our website – just click on the 'Get involved' link at: <http://fisheries-conservation.bangor.ac.uk>

Economic interviews

The economic interviews are underway. Thanks to all those fishers who have given up their time to help so far. **Please get involved and contact g.cambie@bangor.ac.uk.**

Whelks

Whelks from around Wales are being processed in the lab and we are continuing to get some very interesting data (which we will shortly be feeding back to the fishers who are involved). We hope to

continue the fishing through winter even though catches are lower, it will be important to determine annual trends in movement and activity. We're currently trialling some tagging methods and next summer we will be undertaking a large tag-recapture study to estimate abundance and movement.



Finfish

Recruitment index

We have been out looking for the influx of the juvenile (<1 year age group) sea bass entering the estuaries around Wales. This is to assess the abundance of bass recruiting to the area so we can start developing a recruitment index. We have surveyed 14 areas using a micromesh seine net. Very few recruits have been found so far, possibly due to the cold season, but we will continue our sampling over the next month. Thanks to all the helpers involved, particularly Dr John Lancaster of Swansea University.



Seine netting in search of the <1 year age group of sea bass.

Fishers and fish merchants

To assess the maturity of sea bass and to look at the male: female ratio we need samples of bass gonads. We have encountered difficulties obtaining a good amount of sea bass gut and gonad samples from fishers, as bass are often sold whole. We investigated taking blood samples as an alternative to cutting open the fish but this proved very difficult. Therefore we have started going to fish merchants, where the bass are gutted for customers. This will allow us to collect many more samples than the fishers alone are able to provide us with. Many thanks to all the fishers involved and to the merchants we have worked with so far; Chris Davies from Welsh Seafoods in Milford Haven docks, Owen Davies from Channel Fish in Burry Port, Debbie & Paul from Swansea Fish, and all the kind people from Mermaid Seafoods in Llandudno.

If you are a fisher targeting sea bass or a merchant and would like to get involved then please get in touch. We will not interfere with any work, we just need a corner where we can measure bass, take a small fin clip, a few scales and where possible take gut and gonad samples.



Taking scale samples, measuring the bass and collecting gonads at a processing industry.

Recreational Sea Anglers (RSA)

As part of their Masters research project a student with us has designed and is conducting two surveys. These are to gather information about the engagement of RSA with our research and to get feedback on the development of a web diary application. Please get involved and take a few minutes to complete our survey through our web page: <http://www.surveymonkey.com/s/M3FM7LZ>

For all projects related to sea bass please contact: g.cambie@bangor.ac.uk



Crustacea

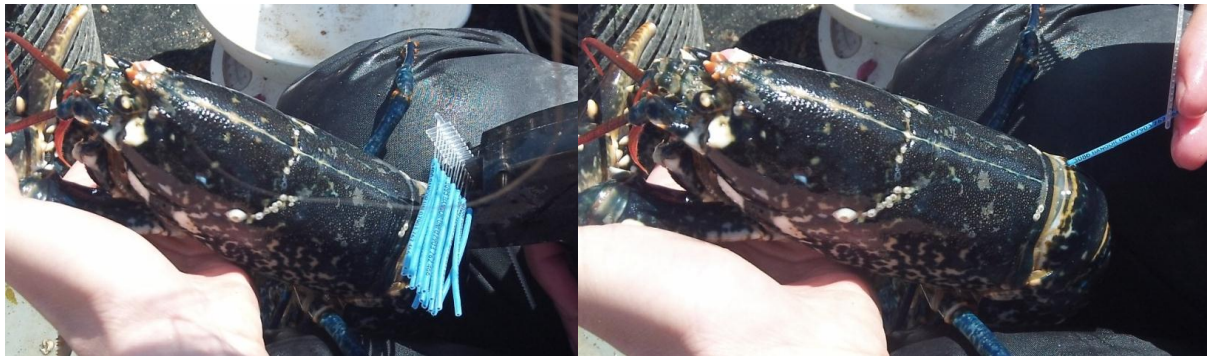
Juvenile crustacean survey

We have started our juvenile crustacean survey. We are aiming to identify the key habitat types for small juvenile lobsters and edible crab. Once we know the best habitat to find these juveniles in we will then start to monitor abundance throughout the year and at a variety of sites around Wales. The hope is that this will be the start of a juvenile abundance index that can be measured every year and be used to manage the fishery for these species. We have been using the flying array to map the habitat around Hells Mouth and Aberdaron. We will then deploy some specially made, small pots with small mesh in different habitat types to investigate which habitat type catches the greatest number of small crabs and lobsters.



Click on the image above to see footage from the flying array during trials.

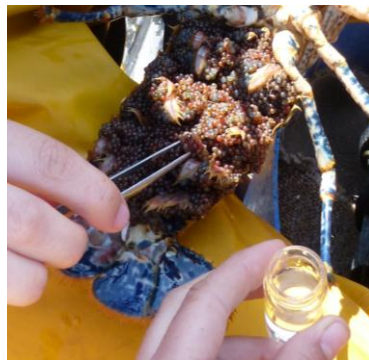
Lobster tagging



Tagging a lobster; Lobster with tag in place between the carapace and abdomen.

With the good weather in July we were able to get out to sea and start of the tagging program. So far we have worked with three fishers around the Llyn Peninsula and have tagged over 500 lobsters. The fishers immediately started to recapture the tagged lobsters and it appears that they are only moving 10's of meters. It has been too soon to re-capture any lobsters that have moulted so we are still waiting on our first growth data. We have started to tag lobsters in Pembrokeshire and will start in other locations in Wales throughout August. Hopefully we will start to catch tagged lobsters that have moulted and grown very soon.

Lobster paternity



Taking eggs for genetic analysis

We are getting to the time of year when we will start to see an abundance of berried female lobsters. We will re-commence the collection of lobster and egg samples for the paternity genetic study. In June we went out with Devon and Severn IFCA to Lundy Island. With this being a no take zone the lobster population structure is likely to be very different from fished areas, with more large and dominant individuals. This may lead to just a few large males fertilising the majority of females in an area, thereby decreasing the genetic diversity. We were able to take tissue and egg samples from Lundy Island. This will allow us to look at the paternity structure here compared to areas in Wales with varying degrees of potting effort.

Lobster size at maturity

A Masters student has been collecting data to estimate size at maturity in lobsters. She has samples from Pembrokeshire and the Llŷn Peninsula so we can compare North and South Wales. Her report will be ready in September and we are looking forward to seeing the results.

Lobster Moulting

Another Masters student has been studying lobster moulting patterns. This has been a tricky project this year due to the cold start to the spring and summer. The results from the last couple of weeks show many more lobsters ready to moult than earlier in the year and may be different than expected in warmer years. We will therefore continue this study into the autumn until the lobsters stop moving and then recommence next spring. Again the report on this study will be ready towards the end of September.

Thanks to all the fishers who are already involved in the lobster program, we also have a few more volunteers who would like to get involved. I will meet with you all in the very near future and get you set up to start collecting data.

For any information on lobster research please contact Natalie Hold: n.hold@bangor.ac.uk.

Lobster Escape Hatch Study in Cardigan Bay

As part of her PhD, Research Assistant Julia Pantin is investigating the use of lobster escape hatches in the Cardigan Bay lobster and crab fisheries. This study is in collaboration with the Cardigan Bay Fishermen's Association. After an initial delay the study has begun!

Brown crab



Juvenile brown crab, *Cancer pagurus*.

Masters students have been monitoring populations of juvenile brown crabs from Anglesey and the Pembrokeshire coasts all summer and are finalising their data now. Additionally they are piloting a small tagging study to establish an appropriate method for tagging juvenile crustaceans and also to determine population numbers.

On a side note, even though undersized brown crabs are protected, many small juveniles are collected from the shore to be used as bait. To allow these little guys a chance to grow up and contribute to the next generation (and also provide you with some good dinner) we need to protect them! Teach your friends and family how to spot the difference between brown crabs and other crabs (brown crabs have that "pie crust" edge and black tipped pincers) and that protecting these little guys on the shore is in everyone's best interest.

Prawns



Palaemon serratus, in the laboratory.

Masters students have been sampling prawn populations all summer from around Anglesey and Pembrokeshire Coasts and are currently in the lab looking at: sex ratio, size frequency and a host of environmental variables in the hope that they can determine two things: when and where do the new recruits arrive and also what is it about inshore habitats that prawns seem to like so much (structural complexity, salinity, temperature etc.). They have almost completed all their lab work and are currently writing their Masters theses on the topic. The results will be available soon!

We are looking for fishers to participate in the winter prawn fishery sampling. This sampling will provide valuable information about the fishery and will be used to understand fluctuations in catch and to provide a better understanding of the health of the fishery across Wales. If you would like to fish two scientific pots for us please get in touch with Jodie: j.haig@bangor.ac.uk. Jodie will come and visit you once a month to collect samples, for the rest of the time you are free to fish the scientific pots as you like.



Scallops



Between the 22nd of July and 4th of August the first part of the RV Prince Madog scallop stock assessment survey was completed in Cardigan Bay and off the Llŷn Peninsula. Take a look at our Facebook page for photos of the survey.

The scallop ground to the north-east of Anglesey is currently being surveyed (5th-12th August). The queenie ground off the 12nm limit has not been surveyed this time but will be in the future. During the first week of the survey, most of the work focused on the Cardigan Bay ground, inside and outside the SAC. Inside the SAC, dredged samples and videos were taken for scallop stock assessment purposes as well as for habitat surveying and habitat recovery monitoring. A short report on the survey will be made available by the end of August and a more detailed analysis of the data collected for stock assessment, comparing the 2013 to the 2012 survey, will follow by the end of October.

The elasmobranch survey, targeting skates and rays, that was originally planned alongside the scallop survey, could unfortunately not be conducted this time for legal and logistical reasons. Sampling of scallops by divers and from fishing vessels to find out the timing and location of spawning has not started yet but progress has been made on finding out the legalities of sampling scallops in summer so we hope to be able to get started very soon.



Thanks to all the volunteers! Some pictured here working hard to enter all the data & measuring and ageing scallops.



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



Llywodraeth Cymru
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