



October 2013

New reports

- Investigating the abundance, distribution and habitat use of juvenile *Cancer pagurus* (L.) of the intertidal zone around Anglesey and Llŷn Peninsula, North Wales (UK). MSc thesis. Report No. 29 - October 2013
- Taxonomic and functional recovery of epifauna after the permanent closure of an area of the Cardigan Bay Special Area of Conservation (SAC), Wales, to a scallop dredge fishery. MSc thesis. Report No. 28 - September 2013
- Variations in the abundance and spatial distribution of *Palaemon serratus* (Decapoda: Palaemonidae) in the littoral Zone of South Wales. MSc thesis. Report No. 27 - September 2013

Upcoming in the next few weeks reports on juvenile crab abundance, lobster size at maturity and bass angling.

Funding for the project

You may be pleased to know that we have obtained sufficient funding to continue our project until the end of May 2015. Although the budget will be substantially smaller than hoped, there is enough money for all eight full-time staff to be employed for the duration of the project. We will still be able to deliver the majority of the project aims but with some reduction in ship use, equipment purchases, and external contracts. So for at least the next 19 months we'll be undertaking research that we hope will contribute to achieving sustainable and profitable fisheries in Wales far into the future.

Fisher questionnaire

The fishers' knowledge questionnaire is in progress with 14 questionnaires currently completed. We are looking to schedule fishers for interviews, so if you are interested please contact Julia (j.pantin@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

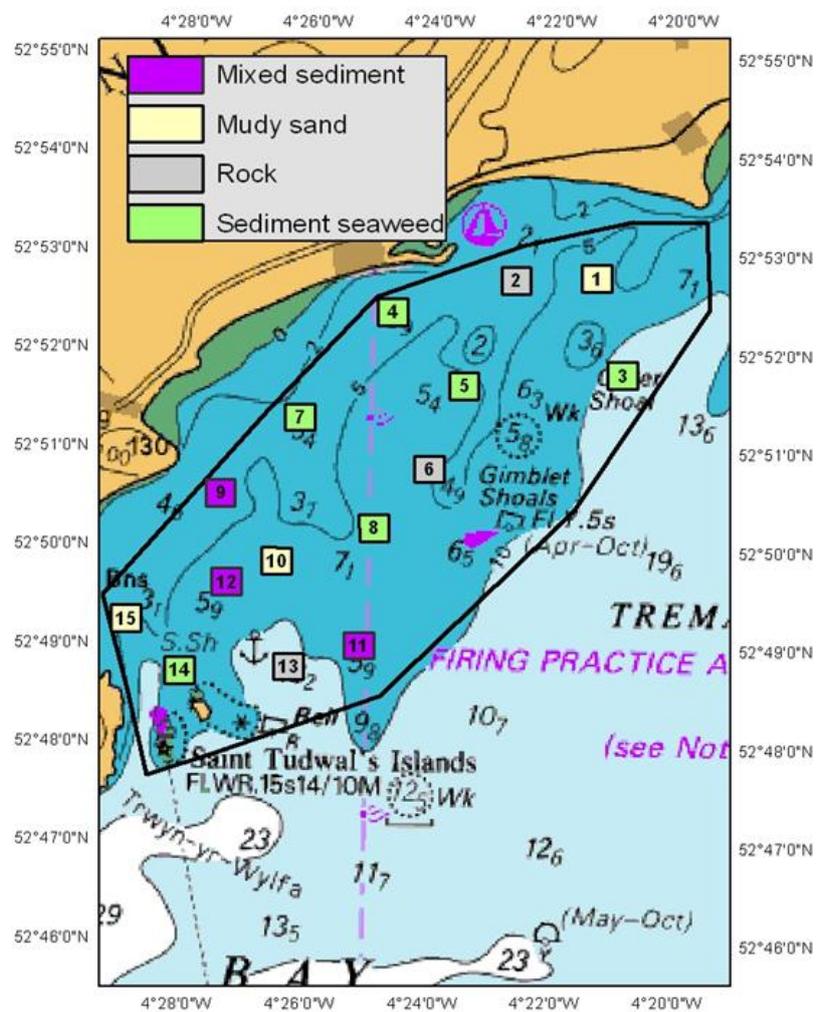
The economic interviews are underway with 18 completed so far around Wales. Thanks to all those fishers who have given up their time to help. We need to increase our sample size! ***Please get involved and contact: g.cambie@bangor.ac.uk, 01248 382615. Remember this survey is important because it will address the current undervaluation of the value of commercial fisheries to the Welsh economy and hence bring fisheries issues higher up the agenda.***

Scallop stock in Tremadog Bay

Another scallop survey has been planned in Tremadog Bay. This survey has got 3 objectives:

- 1) Compare scallop density estimates obtained from videos to “true density” estimated by divers in different habitat types.
- 2) Assess scallop stock status inshore Tremadog Bay
- 3) Collect habitat information

This survey might be conducted in the coming weeks or in spring/summer 2014, depending on the weather and the availability of the volunteers taking part in the survey.



Map of survey sites and expected habitat types from HabMap. Each site will be surveyed by videos and a selection of them by divers (ideally 8 sites minimum, 2 per habitat type)



Crustacea

Juvenile crustacean survey



Juvenile lobster (*Homarus gammarus*) in the pots, the D-shaped prawn pots used, and Gemma taking a salinity reading

We have been using D-shaped prawn pots to catch juvenile crab and lobster. Bad weather this month has meant that getting to sea has been harder than it was during our glorious summer! We will soon be analysing the data that we have collected through summer and will have a great idea on how to move the project forward for next summer!

Natalie Hold n.hold@bangor.ac.uk : 07903 762466

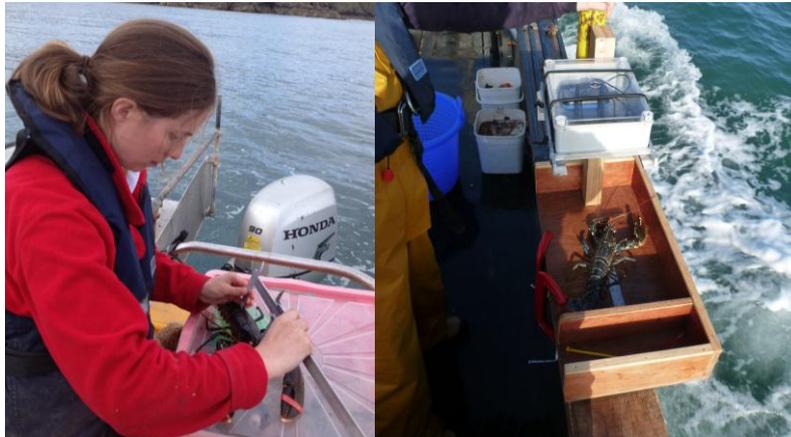
Jodie Haig j.haig@bangor.ac.uk : 07593 635348

Lobster tagging



Lobster tagging is continuing. We are awaiting dispensation from Welsh Government to bring some undersized lobsters into our tanks in Menai Bridge to look at the effect of tagging on these smaller lobsters. From our trial with larger lobsters, survival has been 100% over 3 months. We are re-capturing undersized tagged lobsters so we don't expect survival to be a problem. Lobsters have been tagged on the Llŷn Peninsula, in Cardigan Bay and Pembrokeshire. Initial re-captures show the lobsters tend to remain very local.

At sea sampling



On-board measurements, and the on-board camera system we are hoping to develop

The on-board camera system for collecting fisheries data from the potting industry is still undergoing development and improvements. We are still looking for extra funding to turn this viable idea into a user friendly and workable product. We aim to have a great product developed and in use by the end of the project. In the mean time we need to gather baseline data on the status of the crab and lobster stocks in Wales. We aim to do this by spending a day at sea on four boats once a month. We can collect size, sex, maturity, by catch, and effort data. With two of the basic camera systems also in operation we can then compare the data we obtain from the videos to that we obtain from being at sea. This will help validate the usefulness of the video system. We were hoping to start this at sea data collection in October, but so far bad weather has postponed our attempts.

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 the report is available on our website!

We are planning to undertake a “Size at Maturity” study throughout Wales. 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. We are currently waiting for dispensations (for the taking of undersized animals) to be approved before we can begin this exciting new study.

Prawns



Palaemon serratus, in the laboratory

Masters students have been sampling prawn populations all summer from around Anglesey and Pembrokeshire Coasts the report will soon be available. One report for the Pembrokeshire Coast is already available on our website.

Kayla and Niamh will start work with the Cardigan Bay Fisherman's Association on a project focused on achieving Marine Stewardship Council Accreditation for the Cardigan Bay *Palaemon* Fishery. These two ladies have done some outstanding work on lobsters with Natalie Hold over the summer and will now be applying their skills to the prawn fishery. CBFA will be alerting all members of an introductory meet to discuss the future of prawn fishing. If you are not a member of CBFA and you would like to be involved in the project please contact Dr Jodie Haig j.haig@bangor.ac.uk. For very little involvement you can contribute some vital scientific samples to the Welsh study of prawns.



Finfish

Ray fishery

We have started to collect data on thornback rays from fishery-independent surveys around North Wales. We are hoping to collect enough data to compare with previous studies carried out in this area, to provide an indication of the state of the stock.

Recruitment index



A juvenile bass

The bass recruitment project will finish at the end of the month. 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 sample using a micromesh seine net. We have netted in Conwy Estuary, Foryd Bay (Caernarfon Bay), Malltraeth Sands, Porthmadog, Fairbourne, Tywyn, Aberdovey (2 sites), Milford Estuary, Swansea Bay, Loughor. The only recruits (juvenile bass) we have found were in the south (Swansea Bay and Loughor), suggesting 2013 is a poor recruitment year.

Fishers and fish merchants



The ventral cavity of a bass showing the gonads, this is a female

We have continued data collection from fishers and fish merchants to collect sea bass gonad samples, to assess the maturity and male: female ratio of bass. Over 1000 samples have been analysed so far.

Many thanks to all the fishers involved and to the merchants we have worked with so far; Tucker's Fresh Fish and Coakely-Greene Fishmongers in Swansea Market, Gills's Plaice in Tywyn, 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 Mermaids Seafoods in Llandudno.

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

Whelks



These whelks have been tagged with glue, zip ties and elastic bands to see which is the most successful

We are currently undertaking a tag retention study to determine the best way to tag whelks. Whelks are tagged with quick drying glue, two different kinds of elastic bands and also with zip ties. We'll let you know what the best tagging method is for these slippery slimy sea snails!!

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



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



Llywodraeth Cymru
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