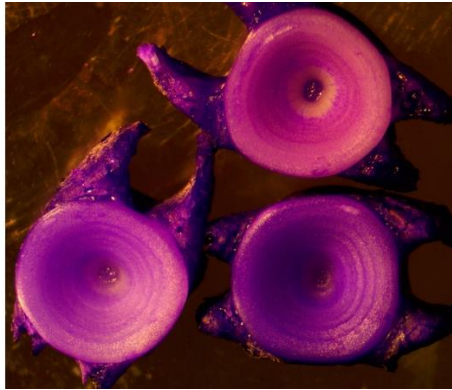




Pysgodfeydd
Cynaliadwy Cymru
Sustainable
Fisheries Wales

EMFF Fisher – Science Partnership for Sustainable Fisheries



Newsletter 4 March 2020

At such a challenging time for the fishing industry and our communities as a whole, we have been revising our plans for sustainable fisheries research at Bangor University during the coronavirus outbreak. We are aware of how devastated many people's livelihoods are already, as well as bearing in mind the human toll this virus may inflict over the coming months. To this end we have decided not to contact fishers directly by telephone or email asking for assistance with research activities at this time, unless you have already asked us to do so. We understand this will be low on your priorities at the moment. We are still working as best we can to deliver the research that will be important to Welsh fisheries once these difficult times pass, and welcome any engagement from fishers during the next few months. The newsletter will outline how you can stay involved, and who to contact. In addition we will keep our website up to date as best we can, and post any updates on social media.

Kind regards, Natalie and the team.

Crustacean minimum landing size and escape gap impact study.

We were planning to use data from the EFF project in 2012-2015, data collected in 2019 and again this coming spring and summer to study how the changes to the crustacean Minimum Landing size and escape gaps impacted the population biology of the fishery. In addition we were planning on gathering fisher knowledge to understand the economic impact of these changes, and the perceptions of fishers on how it has affected their fishing, the stocks and their livelihood. With the current coronavirus situation this project is on hold. However, if anyone does want to

The Science Partnership for Sustainable Fisheries is funded through the European Maritime and Fisheries Fund under European Structural and Investment



participate then please contact Natalie. We can still deliver interviews and questionnaires by phone, email and internet surveys. As soon as the restrictions on social distancing and travel can be lifted we would be interested in working with fishers to design a potting survey, which may provide welcome income through boat charter. Please contact Natalie on 07925 686305 or n.hold@bangor.ac.uk if you would be willing to participate in online or phone surveys on this topic in the coming months.

Fisher engagement evenings

The update meetings for fishers across Wales on 11-13th February went ahead as planned, with attendance by 33 fishers representing a number of different gear types and target species. The storms and poor weather might have helped boost the good turnout at Caernarfon and Swansea, but a break in the weather resulted in low attendance at Aberystwyth (we are keen to engage more with fishers in mid-Wales, so please get in touch). We introduced the team and presented research concerning lobsters, scallops, crabs, skates and bass. At the Aberystwyth meeting, our collaborators at the University there showcased the new camera system that will be able to automatically identify, size and sex crab and lobsters to collect data without the need for on-board observers. We had great discussions and questions from the industry, and we were able to network and make new contacts for future work. We hope the events were useful to help understand the work that we are doing in our team - we found it very useful to hear the perspectives of the industry. We hope to engage with the fishers more in future. Please contact us if you would like to get involved with our future work.

Finfish

Over the past few months we have had data back from our stable isotope work for both sea bass and skates, which we are now analysing to investigate broadly where and what fish have been feeding on. We can compare the data among fish captured in different locations e.g. North vs South to investigate differences between them.

We have almost finished preparing the juvenile bass otoliths, and can now begin to count the lines to age each individual fish captured in Welsh and English estuaries last year. The team have also been investigating other methods of aging elasmobranchs using their vertebrae. We have already stained the vertebrae and counted the growth bands, but we want to compare this to setting the vertebrae in resin and taking a fine slice to count the growth bands inside the vertebrae. We will then be able to compare results and test our accuracy.

Crabs

Many thanks to those of you that kindly completed the brief questionnaire on berried crabs at our fisher events. The accumulated expertise of fishers is essential in helping us to identify areas that might be important in sustaining the fishery. We would like many more questionnaire responses - if you are willing to complete this questionnaire, which takes less than 5 minutes, please contact Alec (a.moore@bangor.ac.uk) – he can either email a copy or go through it on the phone. We would welcome responses from all around the coast, but are particularly lacking responses from Mid- and South Wales, so please get in touch if you fish with pots in these areas especially.

Scallops

The 2020 annual Welsh scallop survey is due to take place in April 2020. During this survey, it has been proposed that four commercial vessels fish in parallel with the University's research vessel (RV Prince Madog, pictured below). This comparative fishing will allow us to quantify the differences in fishing performance between the Prince Madog

and four commercial vessels, which would be extremely important if commercial vessels were to be used for scallop stock surveys in the future. However, unfortunately due to the Covid-19 outbreak both the survey and this comparison work may be postponed to a later date. Other ongoing work includes further development of the stock assessment models to improve their performance, and this also involves testing them with data from the Isle of Man king scallop fishery to help validate and verify their performance. Scallops gathered during the April 2019 have all been dissected, and we will now analyse spatial and temporal patterns in maturity and spawning rates when combined with data from previous surveys. Work is also continuing to estimate the absolute catch efficiency of five commercial vessels from a historical study, which is important to quantify if conducting stock assessments by scaling commercial catch rates to stock size.



English EMFF work

Bass & thornback ray - England

We have been busy analysing the data from bass and rays collected in autumn 2019 for the pilot study in northwest England, in order to better understand their population biology and how these relate to Welsh stocks. This has included assessment of bass gonads to determine sex, maturity, and spawning status, and ‘reading’ growth lines on scales to estimate age and growth. Preliminary analysis of samples has shown some interesting patterns – for example, bass catches from northwest England were dominated by females, as the previous EFF project demonstrated for North Wales.

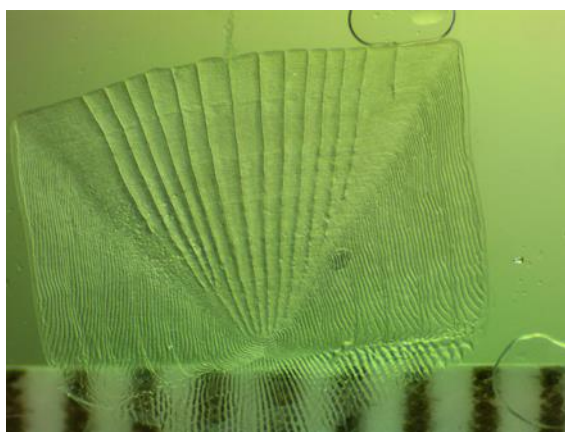


Photo 1 - Dissected female bass, showing early-stage developing ovaries

Photo 2 - Scale from a 5-year old bass



Marine
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