



Fisheries & Conservation Science

Welsh scallop stock assessment survey

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Feedback to the industry

By Gwladys Lambert – August 2013

Summary

The 2013 scallop stock assessment survey conducted by Bangor University has been successfully completed. A comprehensive report on the findings, including a comparison to last year data, and some initial conclusions on the status of the Welsh stocks, will be published by the end of the year, but here are some initial results.

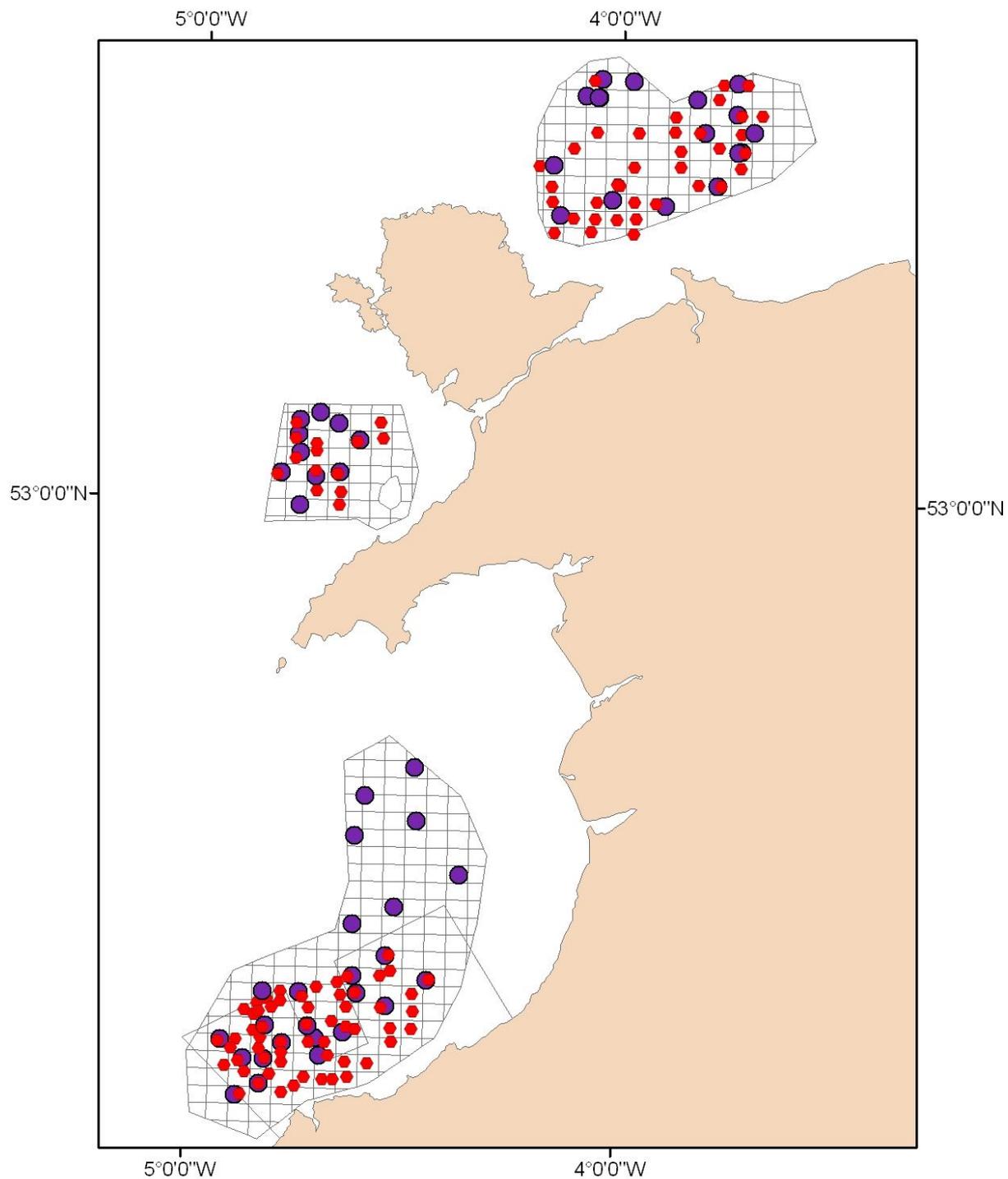
A total of 73 stations have been sampled by video and/or dredging for stock assessment between on the 3 main Welsh scallop grounds, see map and break down in table below. Dredging was done with one tow bar and 4 dredges, 2 king scallop dredges and 2 queen scallop dredges. The queen scallop dredges allowed catching more undersize king scallops, which is useful to predict the immediate future of the fishery. Many more videos were taken in the Cardigan Bay SAC and north of Anglesey (included on the map) but those were not for the scallop stock assessment and will therefore make the object of another report on habitat and recovery once all the images have been analysed.

Before drawing any conclusion there is still a lot of work to do on the data (and corrections to be made). However, from these initial observations, it seems that the results are consistent with the 2012 survey. The main scallop ground remains the Cardigan Bay, with very low catches off the Llyn Peninsula and off the north of Anglesey. Bycatches were much higher and more diverse north of Anglesey than in the 2 other grounds. The highest scallop densities are still found in the closed area of the SAC. It is also possible that the number of scallops was higher in 2013 than in 2012 but this is still to be confirmed by further analyses as it is also possible that by increasing the number of tows this year we went through more scallop patches than last year. The analysis of the age structure of the stock and of the videos will further add to the accuracy of the present findings.

Map of 2013 scallop stock assessment survey

Survey sites

- Video (for stock assessment or habitat mapping and recovery study)
- Dredge



Summary of the 2013 scallop stock assessment survey compared to the 2012 survey (*)

2013 results in blue – 2012 results in red

Fishing Ground	Number of sites visited	Video + dredge	Video only	Dredge only	Scallops caught (in kgs)	Scallop density (in number caught/100m ² dredged)(**)
Cardigan Bay	35 /21	15 /6	11 /5	9 /10	829 /362	Average: 3.7 / 2.5 SAC closed area: 5.6 / 4.9 SAC open area: 3.5 / 2.0 Outside SAC: 1.1 / 1.0
Llyn Peninsula	17 /15	7 /6	7/3	3 /6	33 /16	0.2 / 0.2
North Anglesey	21 /7	9 /0	6/0	6 /7	78 /40	0.3 /0.3

(*) Note: These are only estimates based on the raw data and does not take account of all biases and failures of the gear, this will be corrected in the final report. All data have to be interpreted with caution until the final official report is produced.

(**) Note: 100m² corresponds to the area covered by the sampling gear in approximately 30seconds of contact with the seabed

Summary of bycatch in the 2013 scallop stock assessment survey compared to the 2012 survey (*)

2013 results in blue – 2012 results in red

Fishing Ground	Bycatch caught (in kgs)	Bycatch density (in kgs caught/100m ² dredged)	Number of species caught (richness of bycatch)
Cardigan Bay	392 /184	Average: 0.11 / 0.06 SAC closed area: 0.15 / 0.09 SAC open area: 0.08 / 0.05 Outside SAC: 0.08 / 0.06	Total: 87 / 66 (***) SAC closed area: 68 / 44 SAC open area: 33 / 38 Outside SAC: 45 / 34
Llyn Peninsula	73 / 36	0.17 / 0.11	67 / 52 (***)
North Anglesey	125 /262(**)	0.29 / 0.51(**)	98 / 77 (***)

(*) Note: These are only estimates based on the raw data and does not take account of all biases and failures of the gear, this will be corrected in the final report. All data have to be interpreted with caution until the final official report is produced.

(**) Note: The difference between 2012 and 2013 might be due to the fact that, north of Anglesey, dead man fingers were not always weighed in 2013 while they were in 2012. This will be accounted for in the final official report.

(***) Note: The difference between 2013 and 2012 could be due to differences in the precision of species identification (more accurate in 2013) and/or to the increased number of tows in 2013, again this issue will be addressed in the final official report.