NWIFCA Technical, Science and Byelaw Committee

15th May 2018: 10:00 a.m.

AGENDA ITEM NO. 15

THE HISTORY OF REGULATING COCKLE MINIMUM LANDING SIZE (MLS) IN NWIFCA DISTRICT

Purpose of Report: to provide information on the history of regulating cockle fisheries using

MLS in NWIFCA District

Background:

1. Two Members of TSB have recently raised the question of the need for the cockle MLS in Byelaw 3. The question of MLS for cockle and mussel was posed during the recent informal consultation on proposed measures within the review of that byelaw. A summary of the responses to that question are given:

2. Summary from Informal Consultation Responses:

- 35 of the 42 who responded agreed to an MLS for both or either species
- the median suggested MLS for cockles was 20mm and the average was 20mm
- the suggested range for cockles was 17-30mm
- the median suggested MLS for mussels was 44mm and the average was 45mm (omitted 0mm re seed)
- the suggested range for mussels was 40mm to 50mm
- 6 consultees suggested a variation of the MLS for cockles with respect to chocking stock and mussels in terms of stunting and pearl
- 3 responses question the need for an MLS in the context of other effort controls such as permit numbers and TAC.

3. Main Points Raised from Informal Consultation:

- the link between setting the MLS and the closed season
- citing the lack of MLS in the Wash fisheries
- the cockle MLS should be set at mortality to avoid chocking or stock being wasted
- the current MLS for mussels are a metric version of the historic MLS set 100yrs ago and are not based on biology
- queries regarding the scientific basis for the setting of the MLS
- 4. A commonly held thought was that the MLS had originated from work into the biology of the species carried out by the previous Senior Scientist Bill Cook. An investigation was undertaken to ascertain the origins of the MLS for cockles, and the Clerk to the Authority was asked to look back into past reports.

Outcome:

5. There is little information contained in the early proceedings as to the reasons for introducing most of the byelaws. The committee reports are not available until 1986.

However there is reference to the need for minimum landing sizes going back to the nineteenth century notably 1891.

- 6. <u>16th February 1891</u> the byelaw number for the cockle byelaws are not consistently used. In the proceedings of the meeting held on 16th February 1891, in most cases in the printed Agenda when talking about the draft byelaws these just say that Byelaw? be adopted so it is not clear which byelaw is being referred to.
- 7. <u>25th April 1892</u> An Appendix to the minutes of the Lancashire Sea Fisheries District on 25th April 1892 (Finance & General Purposes Sub-Committee report) starts off by saying:

"The sub-committee has considered the byelaws regulating the fishing for mussels and cockles, and also the new byelaws adopted at the last meeting of the Joint Committee, and is of opinion that *no byelaw will be satisfactory which does not determine the size at which mussels and cockles may be taken*" (the new byelaws only had a byelaw for methods of fishing for cockles, not MLS).

- 8. <u>16th November 1892</u> there is a report of the sub-committee appointed to inquire into the operation of the byelaws from 16th November 1892. Meetings had been held at Ulverston, Morecambe, Fleetwood, St. Annes, Southport and Liverpool.
- 9. <u>26th November 1894</u> there seems to have been a byelaw on cockle methods of fishing right from formation of the Lancashire SFC District but the first reference found to a cockle MLS byelaw is in the minutes of the meeting on 26th November 1894.

This meeting resolved to adopt the byelaws and to submit the same to the Board of Trade for approval. Byelaw 22 in those approved byelaws states "No person shall remove from the fishery or have in his possession any cockle which will pass through a square aperture measuring seven-eighths of an inch (22.225 mm) on each side of the square, or three and a half inches (88.9 mm) measured round the four sides".

10. <u>26th August 1895</u> – the report of the Finance and General Purposes Sub-Committee states:

"The Sub-Committee has had before it the modifications in the proposed byelaws suggested by the Board of Trade. The following are the byelaws materially modified, the alterations suggested by the Board of Trade being underlined.

Byelaw 21 (number previously was 22). No person shall remove from a fishery any cockle which will pass through a riddle having spaces of three-quarters of an inch (19.05 mm) between the wires and used in the ordinary manner."

It does get slightly muddled here as to which measures were in place when, but the evidence of the existence of a MLS using the gauge of around 20mm square is continual.

11. <u>25th April 1901</u> - on 25th April 1901 it was resolved that "Subject to the approval of the Board of Trade the following byelaws be adopted:

Byelaw 19(b) - No person shall remove from a fishery any cockle which will pass through a gauge having a square opening of thirteen-sixteenths of an inch (20.64 mm), measured across each side of the square."

12. <u>25th November 1905</u> - at a meeting on 25th November 1905 it states "Byelaw No. 21 has been amended to read as follows:

"No person shall remove from a fishery any cockle which will pass through a gauge having an oblong opening of three-quarters of an inch (19.05 mm) in breadth and not less than 2 inches in length (50.8 mm)". (This latter length does appear rather large and possibly relating to mussels).

The instrument the Joint Committee proposed to use was a gauge with a square aperture measuring seven-eighths of an inch (22.225 mm) on each side of the square. The Sub-Committee is of the opinion that the instrument suggested by the Board of Trade will allow quite as large a cockle to pass through as the one proposed by the Joint Committee and begs to recommend that the modified byelaw be approved.

- 13. 1908 Byelaw 15 Gauge size 13/16ths of an inch (20.64 mm) except a line drawn due west from Southport Pier and the main channel of the Ribble ¾ of an inch (19.05 mm).
- 14. 1951 Byelaw 15 Gauge size 13/16ths of an inch (20.64 mm).
- 15. 1973 Byelaw 15 Gauge size given as 13/16ths of an inch (20 mm)
- 16. 1985 Byelaw 13 Gauge size given as 20mm. This byelaw was made in 1984, confirmed in 1985 and was revoked and incorporated in to Byelaw 5 when this was made in 2006 (confirmed 2007).
- 17. 21st January 2003 at a meeting of the Scientific and Byelaws Sub-Committee on 21st January 2003 the question of riddling of cockles was discussed. The minute says "Officers feel that further research into this matter is necessary and that consideration may need to be given to an amendment to Byelaw 13 (Cockles Minimum Size)." Nothing further seems to have been discussed on this and future reports started to talk about the introduction of a permit scheme under Byelaw 13A.
- 18. There are no historic documents prior to 1956 for Cumbria SFC District available.
- 19. Cumberland SFC byelaws confirmed December 1956 and confirmed in the new byelaw booklet in 1981 provides for a gauge for cockle MLS of ¾ inch (19.05mm).

Conclusions:

- 20. Cockle MLS has been incorporated into regulation in Lancashire District since at least 1894 and Cumbria SFC District since at least 1956.
- 21. The original justification for cockle MLS is not known other than it could be inferred from the Appendix to the minutes of the Lancashire Sea Fisheries District on 25th April 1892 (Finance & General Purposes Sub-Committee report) as being thought to be good fishery management practice.
- 22. The justification and evidence behind the actual size used is not known, or whether it was based on size of maturity (SOM).
- 23. The cockle MLS has been consistently set as around the 20 mm square gauge since 1894 with some minor variation from this in some byelaws.
- 24. It would be sensible to carry out research into SOM of cockles across the District, to ascertain whether or not this gauge size is appropriate to protect broodstock and what variability exists across the District.
- 25. Of 14 UK cockle fisheries managed by other regulators, 10 have MLS, one differentiates between adult and juvenile it its management (The Wash Cockle Order by management plan), one has no MLS because of high unexplained mortalities in young cockles (Burry Inlet) and for two Welsh fisheries under Regulating Order it is not known whether MLS is currently implemented or not the Dee and Three Rivers.

26. Until such time as that research is carried out it would be risky to remove MLS without evidence to inform alternative management measures and it is recommended to maintain the status quo.

Mandy Knott Senior Scientist April 2018