

MINUTES

WORKING GROUP 1 - IRISH SEA

Virtual

Thursday 09 September 2020 08:00 – 10:00 IE | 09:00 – 11:00 CET

1. Welcome and introductions

The Chair John Lynch welcomed all participants to the meeting. Apologies were received from Norah Parke (KFO) and Emiel Brouckaert (Rederscentrale). The agenda was adopted as drafted.

Action points from the minutes of the last meeting (02 July 2021, virtual) include:

1) Secretariat to follow up with DG MARE on the letter sent on TAC setting for cod and haddock in the Irish Sea.

Topic included in the NWWAC Fishing Opportunity 2022 advice.

2) Secretariat to follow up with DG MARE on the list of questions on control issues in relation to the TCA.

Reply received from DG MARE and distributed to members on 12 August 2021. The Control & Compliance Focus Group will examine the reply and consider possible follow up.

3) Secretariat to contact BIM experts to present on the results of trials for measures to improve the whiting stock at the September meeting of WG4.

See paragraph 3 and 4 in this document.

4) Prepare a letter to the DG MARE on the urgency of having cohesion between EU and UK technical measures.

Letter submitted to DG MARE on 27 August.

5) Secretariat to share the document with UK Technical Measures and comparison with existing EU measures done by the MSG with all the NWWAC membership.

Done by the Secretariat on 7 July.

6) NWWAC to recommend the COM to request ICES that information on quality assurance is



included in the advice sheet for each stock.

- 7) NWWAC to recommend the COM to request ICES a re-evaluation of the haddock stock in the Irish Sea after the autumn survey.
- 8) NWWAC to recommend the COM that the ecosystem approach is included in the ICES catch option table.

All three topics were included in the NWWAC Fishing Opportunity 2022 advice.

9) Secretariat to reach out to OIG members to ask if they would be interested in joining the group.

Previous NGO members contacted by the Secretariat on 6 July, with an update on NWWAC restructuring and including an invitation to the Executive Committee July meeting. No positive replies were received. The Secretariat is planning to draft a letter from the AC Chair to distribute to all e-NGO stakeholders in NWW fisheries.

The Irish Seal Sanctuary, represented by Johnny Woodlock, will rejoin the WG starting from the new financial year.

10) WG members shall send their nominations to the Secretariat for elections of a new Chair and Vice-Chair at the meeting in September.

No nominations received by email, but proposal to reconfirm John and Norah as Chair and Vice-Chair.

2. Confirmation of Chair and Vice-Chair

Members agreed to reconfirm John Lynch and Norah Parke as Chair and Vice-Chair for the next 3 years term.

3. Selective gear development in the Northern Ireland Nephrops fleet, 2019 – 2020 by Ben Collier, NI Gear Trials (<u>available here</u>)

Ben Collier presented on a gear trial project from Northern Ireland. It is a six-year industry-led project, in collaboration with DAERA, AFBI & Seafish, that started in 2017 and is funded up to December 2022 by the EMFF fund. The project has focused on engaging directly with the industry from the beginning, trying to encourage fishermen, skippers, gear manufacturers to participate and provide their own ideas and suggestions on how to improve selectivity and efficiency of the trawls they use. Gear trials were carried out in Northern Ireland, in parts of the Irish Sea where most productive *Nephrops* grounds lie.

Collier explained that the aims of the project were to design, trial and implement more selective



fishing gears, trying to help fishers complying with the landing obligation, reducing unwanted catches of quota species and/or juveniles without compromising the retaining of commercially valuable target species.

Collier listed the gear trials carried out in 2019-2020:

- Inclined Net Grid vs 300mm square mesh panel (Twin rig >12m)
- Inclined Net Grid vs 200mm square mesh panel (Single rig<12m)
- Large pelagic mesh size in cover vs 160mm diamond cover (Twin rig >12m)
- Coverless trawls vs set of SELTRA270s (Twin rig >12m X2)
- Green lights fitted to bottom panel of SELTRA270 vs unilluminated SELTRA270 (Twin rig >12m)
- Luminous netting in bottom panel of SELTRA270 vs unilluminated SELTRA270 (Twin rig >12m)

Slide 6 of Collier's presentation shows the two different versions of the inclined net grid that we commissioned (200mm and 400mm square mesh) and the results of the work started in 2018. The table last column shows the percentage differences between catch rates for the experimental nets and the control nets. Researchers initially built an incline net grid using 200mm square mesh, which was very effective at reducing whiting, but quite a lot of prawn catch were lost from that trial. Thus, they decided to increase the square mesh size of the panel that could potentially allow more Nephrops to pass through. This wasn't as effective at removing whiting as the 200mm, but it was better at retaining Nephrops. Collier explained that researchers decided to stick with the 400mm version and see what they could do to resolve the loss of Nephrops. Unfortunately, results from September 2019 and March 2020 were very mixed. Collier also pointed out that the design of trawl is very low and prone to seaweed blocking, which is a lot more difficult to clear than in a traditional trawl. Obviously, as the seaweed amount in the net increases, the selectivity characteristics of the net and its capturing ability diminish.

Researchers then started looking at modifying the front of a Nephrops trawl. The idea here was to remove the trawl cover or to modify it with a larger mesh, to give the opportunity for rising fish to escape over the headline. The first trial was to replace the standard trawl cover with a mesh size that would be normally observed in pelagic gear. Results showed that the larger pelagic mesh had the tendency to overspread, which was very difficult to compensate for when using it in a twin rig setup with another net that was drastically different in terms of its design. For the coverless trawls, researchers found a local gear manufacturer and commissioned a new coverless trawl rather than trying to remove parts of an existing gear.

The pelagic mesh cover worked well at reducing whiting but was not so effective at reducing haddock. The Nephrops loss was significant as well. Collier highlighted that more encouraging results were obtained with the coverless trawl, which reduced the number of whiting in comparison to the control net but caught slightly more whiting in terms of weight. Collier reported that more work is needed but there are good possibilities that the catch of larger whiting can be reduced. Moreover, the coverless trawl increased the prawn catch by nearly 40%.

Collier explained that researchers are aiming at solutions that both satisfy conservation needs and is attractive for fishermen to use and added that with a few more trials researchers will be closer to moving onto an implementation phase.



Collier also commented on the work done looking at the effects of light and luminous netting on reducing capture, for example by sawing a sheet of luminous netting into the bottom of a SELTRA box section. The idea was to put luminous netting on the belly of the nets as it may encourage more fish to rise and out of the escape points. Initials results were good but got less clear over the course of a five-day trial, probably because of the netting becoming dirty and the luminous effect diminishing.

Collier concluded that researchers are planning to start a project using pressure sensors attached to foot ropes of Nephrops trawls to get data to back up some of the modelling that is being done in relation to depth penetration. Collier said he is "hopeful that further work with lights or other innovative features such as pressure sensors will move us closer reducing the impacts of the fishery".

Questions & answers:

When Johnny Woodlock asked if any considerations were done on lowering the headline to exclude fish, Collier replied that it was not the case. "However, part of my job involves going to the harbors every week and measuring individual gears on both sides and the headline is already low", he added.

Ronan Cosgrove followed up on the light's topic, adding that BIM has worked on the raised fishing line for trawlers targeting mixed-demersal fish species in the Celtic Sea. They added green-coloured lights at the mouth of the trawl and while this only had very little effect on whiting, substantial reductions in haddock occurred when the trawl mouth or area around the fishing line was illuminated. He mentioned the BIM report on this work, which might help inform Collier's research. Collier was also very interested in the coverless trawl and the 40% increase in prawns and asked what might be driving the increase in the Nephrops. Collier replied that according to him this was due to the gear designer making the mouths of the nets about 5 foot bigger than usual. "The mindset of most fishermen was that any mouth size over what they are using normally wouldn't work in the Irish Sea and we proved that wrong, which was quite useful for them", said Collier.

Sean O'Donoghue asked for confirmation about the coverless gear being the best option going forward. Collier explained that "in terms of what looks like the best option from what I've showed today the inclined net grid wins hands down in terms of reducing bycatch without affecting the Nephrops catch". However, he also recalled that the inclined net grid is about a third more expensive to manufacture, is more difficult to repair when it's damaged, and it clogs with seaweed. This is why the research is now focusing on the coverless trawl.

Patrick Murphy asked about the inclined net grid issue with seaweed. "Was the gear actually picking up the seaweed off the ground or was it down to weather conditions during trials which caused to have more seaweed?". Collier replied that the weather was pretty decent when that trial was done and explained that in his opinion a lot of the seaweed that is being picked up lies on the seabed, but it is not getting ripped off.

Finally, Collier added that all results data from the trials is available in reports produced annually, which get published on the project's Facebook page.



4. Developing gear options to reduce unwanted catches of whiting in the Irish Sea (Daragh Browne, BIM) (available here)

Daragh Browne's presentation focused on the Irish Nephrops fishery, where the majority of whiting catches are below MCRS (27cm).

Browne stated that according to BIM trials done before 2017 the sorting grid achieves the largest reductions in whiting below MCRS and slightly lesser results for small waiting below 20cm. The 90mm is also pretty good with whiting reductions, but at a quite significant cost of marketable Nephrops. It is also worth noting that the large mesh escape panels, which are effective for species like haddock and whiting, achieve quite poor reductions in small whiting.

Pre-2017, the minimum mesh size in the Irish Sea was 70mm and all of these trials would have been carried out with that mesh size.

Since 2017 there's been an increase to 80mm. The post-2017 BIM trials have arisen from a proposal by the Commission to introduce mandatory gear measures in the Irish Sea to protect whiting: the 90mm codend and the Swedish grid. The 90mm codend achieves pretty good reductions in small whiting, but at the cost of even more reductions in Nephrops. There's evidence from Scottish survival experiments that survival rates of small whiting escaping through codend meshes are quite low.

The gear used by Irish fishers is primarily a quad-rig or a half quad-rig, which was introduced in 2013 and has largely replaced the twin-rig. The main difference is the number of trawls that can be towed with the quad-rig, which is four trawls, facilitated by V sweeps. These V sweeps have very different herding characteristics to the twin-rig. Fish get herded between the warps where they make contact with the bottom, they get herded in front of the V sweep until they are fatigued and then turn back into the path of the trawl. "This explains why larger meshes escape panels have such poor effect on reducing catches of whiting less than 20cm", concluded Browne. Thus, it is important to reduce whiting catches as early as possible in the catching process and with a view to maximize survival and positive outcomes for the escape fish.

One option was to modify the rigging of the quadric to facilitate an escape gap where fish are herded and can then pass between the trawls. BIM trialed this on the western Irish Sea prawn grounds on the 18th and 21st of June 2021. The vessel deployed twin Nephrops trawls in half-quad rig configuration. A range of sweep modifications were conducted with the aim of assessing the escape corridor:

- 1) V sweeps were removed with inner sweeps joining at the inner trawl wing-ends. This modification increased door and wing-end spread potentially improving gear performance.
- 2) 1.8 m of chain was added between the ends of the inner sweeps to provide a gap and potential fish escape route between trawls.
- 3) Following discussion with the skipper, the V sweeps were reintroduced and a second inner sweep with 1.8 m lengths of chain at the fore and aft joining points was added for stability and replaced the escape gap with an escape corridor between the trawls.
- 4) The length of chain between the joining points was increased to 4.6 m to increase the width of the escape corridor.



Browne explained that this escape corridor is very promising, but it will need more testing and evaluation in 2022. Further development of the corridor might be necessary, to optimize the utilization by small whiting. Widening the gap between the inner sweeps or reducing bottom contact may assist in this regard. Browne concluded by referring to the BIM website, where publications on the discussed topic are available.

Cosgrove added that among the measures that have been introduced since around 2016, the 300mm square mesh panel is very effective for reducing undersized whiting (typically 60% reduction). He explained that the issue Browne was pointing to is the very small whiting, less than 20cm length, that at times of the year can form a big component of catches. "They are the ones we're having difficulty getting out of the quad-rig because they are quite passive in the gear", he explained, clarifying that some of the measures introduced are effective in reducing whiting, but the very small fish are the issue.

5. Discussion on NWWAC advice 'Fishing Opportunities 2022'

The Secretariat proposed to review the advice submitted in August to see if any follow up actions were needed. Main recommendations for the Irish Sea included:

- Considering the ecosystem approach for Irish Sea stocks, and especially when addressing mixed fisheries assessment and management.
- The review of ICES advice for haddock in 7a, when new survey data are available in the autumn.
- Addressing the issue related to the Irish Sea statistical rectangles 33E2 and 33E3 which are traditionally included in the Celtic Sea management area.

When the Chair asked for DG MARE's feedback on the advice, Ribeiro replied that many of the points raised by the NWWAC are in line with the Commission's concerns. However, she could not provide any specific feedback as DG MARE still had to form its internal position. Ribeiro concluded by appreciating the invite to the meeting, enabling her to follow the AC's discussions and get additional insights and views.

Sean O'Donoghue pointed out that the recommendations mentioned by Secretariat mentioned are very clear and important. He proposed that these topics are raised with the Member States Group at the next meeting to see if there could be any progress made.

ACTION: Secretariat to explore if any progress can be made on the WKIrish approach together with the MSG.

ACTION: Secretariat to raise the attention of the MSG on issues raised in the advice on Fishing Opportunities 2022 on haddock in 7a (re-evaluation of ICES advice following new survey results in the autumn and stock ID issue with Celtic Sea impacting TAC setting)



6. Input on the draft advice 'Addressing Choke Risk in NWW after exemptions' for WG1 stocks

The Secretariat introduced the work done on the draft traffic light table including risk categories and proposed measures to solve the choke risk. Mo Mathies recalled that the choke advice was previously also made of another spreadsheet, which was reporting specific data on Member States quota shares and swaps. Mathies explained that the Secretariat had been discussing this old tool with Michael Keatinge and Dominic Rihan on how to make it relevant regarding the new post-Brexit landscape and how available data can be used to predict the choke risk. "Previously, we would have used data from previous years to populate the sheet and the tool was always looking backwards. What we are doing now is trying to turn it into a predictive tool", said Mathies. The best way forward seems to be using Union shares for 2021, which are available. Then, by including the landings and discards from last year, it might be possible to predict where bottlenecks may arise regarding quotas. Mathies added that the Secretariat had written to the Commission to ask for any available data on quota swaps from this year.

Dominic Rihan confirmed that the intention was to try and progress the tool into something that is forward looking rather than retrospective. In terms of discard data, it is Rihan's opinion that using the ICES data is really the only approach to consider.

O'Donoghue agreed that the tool needs a total revamp to make sure it is fit for purpose and looking forward. However, he was skeptical that the NWWAC would be able to have a proper version of the tool until next year once post-Brexit arrangements with TAC and quotas have settled. Rihan agreed with O'Donoghue and proposed to focus only on the traffic light spreadsheet for this year, which still remains valuable and useful.

7. Review of progress, summary of actions agreed and decisions adopted (Chair)

- Secretariat to explore if any progress can be made on the WKIrish approach together with the MSG
- 2. Secretariat to raise the attention of the MSG on issues raised in the advice on Fishing Opportunities 2022 on haddock in 7a (re-evaluation of ICES advice following new survey results in the autumn and stock ID issue with Celtic Sea impacting TAC setting)

8. Participants

Participants

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NWWAC members		
John Lynch (Chair)	IS&EFPO	
Sander Meyns	Rederscentrale	
Patrick Murphy	IS&WFPO	



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SEPTENTRIONALES ADVISORY COUNCIL

NOROCCIDENTALES

Sean O'Donoghue	KFO	
Johnny Woodlock	Irish Seal Sanctuary	
NWWAC Observers		
Jésus Angel Lourida Garcia	Puerto de Celeiro	
John Ward	IFPO	
Experts and Observers		
Daragh Browne	BIM	
Ben Collier	Northern Ireland Gear Trials	
Ronan Cosgrove	BIM	
Juan Antonio Espejo Leña	Ministerio De Agricultura, Pesca y Alimentación	
Pauline Joyeux	Direction des pêches maritimes et de l'aquaculture	
Léa Pertel	Direction des pêches maritimes et de l'aquaculture	
Cristina Ribeiro	DG MARE	
Dominic Rihan	BIM	
Maeve White	Department of Agriculture, Food and the Marine	
NWWAC Secretariat		
Mo Mathies	Executive Secretary	
Matilde Vallerani	Deputy Executive Secretary	