

Minutes: Round 2 scallops, Principle 2

Meeting Date: 29 April 2021

Location: Teams

Attendees	Organisation
AB: Abigayil Blandon	WWF-UK
ABO: Andy Boulton	Waitrose
AL: Andy Lawler	Centre for Environment, Fisheries and Aquaculture Science
BC: Ben Collier	Northern Ireland Gear Trials
BL: Bill Lart	Seafish
BS: Bryce Stewart	University of York
CM: Carrie McMinn	Agri-Food and Biosciences Institute
CP: Claire Pescod	Macduff Shellfish
DD: David Donnan	NatureScot
EW: Elaine Whyte	Community Inshore Fisheries Alliance
FdB: Femke de Boer	Scottish White Fish Producers Association
FN: Fiona Nimmo	Poseidon
HF: Hannah Fennell	Orkney Fisheries Association
JH: Juliette Hatchman	South West Fish Producer Organisation
JM: Jennifer Mouat	North and East Coast Regional Inshore Fisheries Group
JP: Jo Pollett	Marine Stewardship Council
JPo: Jim Portus	South West Fish Producer Organisation
KK: Katie Keay	Marine Stewardship Council
KR: Kate Rydzokwski	Orkney Sustainable Fisheries
LB: Lynda Blackadder	Marine Scotland Science
MF: Mairi Fenton	Heriot-Watt University
MS: Matt Spencer	Marine Stewardship Council
RG: Roy Griffin	Department of Agriculture, Environment and Rural Affairs
SB: Stuart Bell	Marine Scotland Policy
Presenting	
EM: Eleanor Michie	Seafish

Purpose of the meeting

This call was an opportunity for the Steering Group to review progress made against each of the actions under Principle 2 (wider environmental impacts) in the Round 2 scallop Fishery Improvement Project (FIP) action plan. Mairi Fenton and Eleanor Michie presented updates on the habitats action.

Agenda Item 1: secondary species

A key action for the FIP is understanding the nature and scale of effect the fishery is having on secondary species, with the Devolved Administration scientific bodies Agri-Food and Biosciences Institute (AFBI) and Marine Scotland Science working up independent quantitative bycatch reports.

Scottish bycatch report

LB informed the Steering Group that her report shows there were 400,000 incidents of bycatch in the Scottish scallop fleet, using data from 2009 – 2019. LB was drafting the discussion section of the report which would be reviewed internally before she could circulate it with the Steering Group. She

estimated the report would be ready in a few months' time. LB added that the Marine Scotland survey vessel had to go back to port for repairs whilst surveying the West Coast, and that the vessel would survey the East coast once those repairs had been carried out.

Northern Ireland bycatch report

CM's report used bycatch data from 2000-2021, with 2021 surveys in February going ahead, using a standardised database by distance and dredge per year. CM had not started the report yet and cautioned that it might be months before it could start due to other ongoing work.

Discussion

FN asked whether confidential data could be directly shared with herself to be included within the annual review, as some evidence of quantitative data was needed to progress this action. LB believed the data could be shared but she would have to follow up internally around sensitivities of sharing the data. CM seconded LB, saying the data could be put into a format that would make sharing the information feasible, but would have to check whether the data could be shared externally.

Alternative measures report:

An action around secondary species for the FIP was for BL to draft an alternative measures report on approaches that reduce unwanted and/or undersized catch in scallop fisheries. BL's report explains how differing gears work and how modifications can alter their catch composition and damage rates. Most of the gear trials mentioned in the report display high selectivity of scallops. The gears highlighted in the report included n-virodredge, hydraulic dredge and towed scallop collectors. Early studies into the n-virodredge indicated that their teeth – which are springed, as opposed to wrought steel – bent in muddy sediments.

BL said this report was still a draft and welcomed Steering group members to provide any relevant information to be added. BL requested that it not be shared further until he has shown it to the contacts of projects mentioned within the report.

Discussion

JPo thanked BL for his hard work and asked what the durability of 97mm rings that the French scallopers were using would likely be. As these are larger than the UK ring nets, JPo thought that they would stretch relatively quickly. BL said the French use of spiral attachment rings for each ring connection would likely increase overall durability; but as Seafish no longer employs a gear technologist which BL could ask, he was unsure of the effect spiral ring attachments would have on gear durability.

CP suggested the Heriot-Watt project, that is looking at putting the dredge and bag on skids to reduce abrasion with the seabed, could be included in the alternative measure report. There was some discussion between Steering Group members around the use of synthetic materials in dredges, and BL cautioned against this due to the risk of microplastics being released into the marine environment.

The Secretariat will upload the draft report to Dropbox and the group agreed to provide feedback once the link is circulated. After that has been incorporated, and once BL confirms it can be shared with the Steering Group, the next step is to identify if any alternative measures would be feasible to trial within the fishery. It would be useful to understand how to implement any trials, such as a dispensation from government to trial the new gear.

FN said the report was progress towards the action and recommended an update of this alternative measures report each year prior to the annual review.

Actions from Item 1:

1. CM and LB to check the sensitivity of their bycatch data and whether sub-sets of the data can be shared confidentially with FN.
2. Secretariat to upload the alternative measures report to Dropbox and send a link to Steering Group members. BL to confirm before the report can be shared more widely outside of the Steering Group.
3. Steering Group to review BL's alternative measures report and provide feedback.
4. MF to update the Steering Group on progress from the Heriot-Watt low impact gear research.

Agenda Item 2: endangered, threatened and protected species

The FIP action plan requires the development of a recording protocol to record, analyse and monitor endangered, protected and threatened (ETP) species interactions and outcomes (for example if they are returned alive). FN presented a draft ETP interaction log to the Steering Group.

The interaction log is based on working examples that the Danish Fish Producers Organisation (DFPO) and the Scottish Fish Sustainability Accreditation Group (SFSAG) already use in their MSC certified fisheries. The interaction log created by FN included invertebrates, mammals, benthic species, habitat features and birds, as well as Scottish Priority Marine Features (PMFs). Importantly, the location and outcome of the interaction can also be recorded in FN's interaction log. The draft interaction log will be circulated to the Steering Group for their feedback, and then needs to be tested by skippers to understand how it works in practice. A wheelhouse identification guide will be needed to support skippers and crew in identifying ETP species, which can be based on the current SFSAG guide.

Discussion

CP said Macduff would be willing to trial the interaction log with their skippers and wondered whether the FIP could access Seafish resources and support on the development of an ID guide. BL said he would ask Jess Sparks – at Seafish – whether there is capacity to support the development of an ID guide, and JH mentioned the Shark Trust ID guides that could be used to support the work.

DD agreed with FN that PMFs should be included in the interactions log as PMFs are protected under Scottish legislation and have significant importance. DD noted there is a large range of PMFs and that there would be some PMFs with little or no interaction with the scallop fishery.

JM said that the SFSAG had not used the interaction logs for a number of years due to the lack of consistency in recording and urged that the FIP fully briefs any skippers that trial the interaction log. She said that in the certified SFSAG Rockall haddock fishery they use benthic interactions reports. FN said the Steering Group did not have any access to the benthic habitat log and asked whether it could be shared, which JM confirmed.

Further along the progress of the action plan the Steering group will have to decide how the data would be inputted and held. FN provided the DFPO example: that vessel owners were responsible to submit their records to the DFPO at the end of each quarter, with data published annually. If a vessel owner did not submit the data, they are initially given a warning and later removed from the MSC certificate for repeated non-reporting offenses. However, it would be up to the Steering Group to

determine appropriate actions for this FIP should vessels not record ETP interactions and whether the information was public.

SFSAG fisheries have implemented voluntary closed areas and have a two-warning process. Should a vessel have more than two warnings they are temporarily removed from the MSC Unit of Certification (UoC) vessel list.

EW said there need to be caution about how the reporting log is used and whether they would be publicly available or only for the fishery to use, as some critical stakeholders may try to use the Freedom of Information Act to tarnish the reputation of the fishery.

Shetland Shellfish Management Organisation (SSMO) recording protocol:

MS summarised the publicly available information for the SSMO MSC certified scallop fishery. All vessels must conform with the SSMO Code of Conduct which provides principles and standards relating to the sustainable exploitation of resources, protection of ETP species and habitats, good governance, and the fishing operations and care of the catch.

The key findings from the SSMO ETP recording protocol were:

- The SSMO Code of Conduct and the SSMO log sheets require that fishermen record and report all ETP and habitat interactions to the SSMO.
- Since 2013 all logsheet data are based on daily data and all fishermen sent their logsheets to SSMO on a regular basis.
- The data from the logsheets on landings, ETP and habitat interactions are fed into the updated SSMO database.
- The Inshore Co-ordinator and SSMO Advisory Group reviews all data on ETP species and habitats interaction on a regular basis.
- For the scallop dredge fishery, the fishing area (5x5 nm SSMO square), hours towed, number of dredges, the species targeted (both king scallops, *Pecten maximus*, and queen scallops, *Aequipecten opercularis* are targeted in this fishery), and the numbers or weight of landed catch must be recorded.
- In addition, the numbers discarded and the reasons for discarding (such as undersized, diseased or damaged) and interactions with ETP species must also be recorded.
- No ETP interactions have been reported by fishermen over the last three years.

FN asked whether there was an available ETP species list and whether this had changed over the recent surveillance audits. MS said that his update focussed on the recording process, but he would see if an ETP list is publicly available and share it with FN.

Actions from Item 2:

1. BL to speak with Jess Sparks around Seafish capacity to support development of wheelhouse ETP guide for the FIP.
2. Secretariat to coordinate a group to develop the wheelhouse guide.
3. Secretariat to circulate the interaction log to the Steering Group for feedback.
4. CP to ask Macduff skippers if they would be willing to trial the use of FN's interaction log.
5. JM to share SFSAG benthic interaction report with the Steering Group.
6. MS to find SSMO ETP list if publicly available, and share with FN.

Agenda Item 3: habitats

This action requires knowledge on the scale and impact the fishery is having on habitats, as well as an understanding of marine areas where management measures are in place to limit fishing activity.

Presentation 1: PhD progress update

Mairi Fenton's PhD focuses on understanding the consequence of scallop dredging in relation to seabed habitat types. MF's research is funded by industry and has a wide range of supervisors from industry, academia and governmental bodies.

Introduction:

- Scallop dredging often occurs in areas of naturally high energy. These recover more quickly than areas of sedate biodiverse benthic areas, such as maerl beds.
- MF's thesis aims to assess the state of seabed habitats around the UK as a result of exposure to scallop dredging, in order to help inform any future management measures designed to reduce the impact of the fishery on the seabed.

Progress to date

- Review of global scallop management systems and how they manage seabed impacts, such as through technical measures, spatial controls, quotas and effort controls.
- MF had initially focussed on the development of habitat maps for Scotland and planned to scale up to create a habitat map for the entirety of the UK. .
- Mapping of >12m fleet's fishing effort through VMS data, currently at a coarse scale. Finer scale information can only be accessed in person in the marine labs in Aberdeen and Covid has prevented MF from visiting the lab yet.
 - <12m fleet is not required to have VMS so their effort will need to use local knowledge to estimate their footprint.

Presentation of maps

- Commonly encountered habitats showed that large areas are sand and coarse sediment. The inshore areas lack data and MF is running further analyses. She will address information gaps and update at the next Steering Group meeting.
- Vulnerable marine ecosystems included PMFs in the analysis. MF overlaid the fishing footprint with VME habitats, and identified some overlap, such as between Northern sea fan and vessel VMS data. However, when the PMFs are overlaid with a bathymetric layer, it shows them on steep gradient slopes that would not be conducive to dredging, thus unlikely to interact.

MF's next step is to model where PMFs might be using MaxEnt approach to understand likely wider interactions. This approach draws on variables such as water temperature, current velocity and slope aspect.

Once MF has status of seabed and better knowledge of the footprint of the fleet she will begin to consider recommendations for appropriate future management. MF also informed the Steering Group that her PhD was currently part-time due to her commitment to the low-impact scallop innovation gear project as a research assistant until the end of 2021.

Discussion

CP thought the maps MF had produced were incredibly useful for the FIP and was pleased with the progress being made. EW made the Steering Group aware that the high density of PMFs in ICES area 6a was due to the long history of research into the area, with other regions not having similar levels of research into their locality and status. MF reassured EW that the work would be scaled across the UK and would take into account the extensive research into ICES area 6a over other ICES areas.

Presentation 2: MPA mapping for fishermen

Eleanor Michie from Seafish presented the Kingfisher MPA mapping for fishermen project that is creating an interactive map to enable fishermen to know any restrictions that apply in the areas they fish.

Background

- Understanding fishing restrictions in the UK is highly complex, due to overlapping areas of restrictions and MPAs not necessarily having management measures in place.
- There is no single consolidated spatial data set for all UK fishing restrictions.
- Project funded by EMFF and MMO and aims to complete phase 1 by October 2021. Once phase 1 is complete, Seafish will begin to evolve the project and to ensure any new protected areas are easily inputted to the dataset.

Overlap with Project UK

- The project could contribute to Action 8bd of the Action Plan; to review status of management measures development and implementation within UK MPA network.
- The interactive map can filter by ICES area and has the full UK MPA network (with associated management measures)
- EM had worked closely with Whitby Seafoods to develop an interactive web map for the *Nephrops* FIP, which she presented to the Steering Group as an example.
- Outputs from the map could include imagery for the fishery management plan (FMP).

Discussion

AL thought the project was extremely useful for Cefas scallop surveys, and asked whether there were plans to include European restricted areas as well. EM said that phase 1 focussed on the UK EEZ and potentially phase 2 could broaden its scope to include European waters.

SB asked whether the Marine Scotland National Marine Plan Interactive (NMPI) dataset was used, which EM confirmed and said all the Scottish marine information came from NMPI. EM commented how user friendly the NMI dataset was.

Action from item 3:

1. Secretariat to follow up with EM for a timeline on providing fishing restrictions information for the scallop FIP.

Agenda Item 4: ecosystem

To understand more about the interaction between the fishery and the wider ecosystem a scale, intensity, consequence analysis (SICA) workshop was organised in March 2021. A wide range of experts were invited to the workshop to discuss their views on the fishery and provide evidence for

their understanding of the ecosystem impacts and contributed to a successful workshop. FN will write up the results and circulate them to the Steering Group and has updated the annual review on this basis.

Discussion

EW questioned why there was no focus on the socio-economic factors the fishery has on local communities. FN said was not what a SICA is designed to do, as it focuses on environmental variables and clarified she had referred to 'local communities' in an environment sense. FN said strengthening the socio-economic link was important for the FIP to do, with reference to it in the FMP. EW offered to share a Scottish government evaluation of MPAs with BL to insert in the FMP.

Actions from Item 4:

1. FN to share SICA report with the Steering Group once drafted.
2. EW to share Scottish government MPA evaluation report with BL.

Any Other Business

JPo informed the Steering Group that the SICG will be looking for an update from the FIP in their June meeting, which the Secretariat agreed to provide.

Meeting Closes

12.00hr

Actions Arising	Responsibility
<u>Secondary species</u> <ul style="list-style-type: none"> • CM and LB to check the sensitivity of their bycatch data and whether sub-sets of the data can be shared confidentially with FN. • Secretariat to upload the alternative measures report to Dropbox and send a link to Steering Group members. BL to confirm before the report can be shared more widely outside of the Steering Group. • Steering Group to review BL's alternative measures report and provide feedback. • MF to update the Steering Group on progress from the Heriot-Watt low impact gear research. 	CM, LB Secretariat Steering Group MF
<u>Endangered, threatened and protected species</u> <ul style="list-style-type: none"> • BL to speak with Jess Sparks around Seafish capacity to support development of wheelhouse ETP guide for the FIP. • Secretariat to coordinate a group to develop the wheelhouse guide. • Secretariat to circulate the interaction log to the Steering Group for feedback • CP to ask Macduff skippers if they would be willing to trial the use of FN's interaction log. • JM to share SFSAG benthic interaction report with the Steering Group. • MS to find SSMO ETP list if publicly available, and share with FN. 	BL Secretariat Secretariat CP JM MS
<u>Habitats</u> <ul style="list-style-type: none"> • Secretariat to follow up with EM for a timeline on providing fishing restrictions information for the scallop FIP. 	Secretariat
<u>Ecosystem</u> <ul style="list-style-type: none"> • FN to share SICA report with the Steering Group once drafted. • EW to share Scottish government MPA evaluation report with BL. 	FN EW