

## Minutes for Channel scallop habitats meeting

Meeting Date: 3 July 2020

Location: MS Teams

Attendees	Organisation
AT: Adam Townley	NESI
BS: Bryce Stewart	University of York
CP: Claire Pescod	Macduff
EB: Ewen Bell	Cefas
FD: Femke de Boer	SWFPA
FN: Fiona Nimmo	Poseidon
HG: Hubert Gieschen	MMO
HS: Hayley Swanlund	WWF
JH: Jan Geert Hiddink	Bangor University
JM: Jenny Murray	Defra
JP: Jo Pollett	MSC
KK: Katie Keay	MSC
LP: Lauren Parkhouse	Devon & Severn IFCA
MD: Mark Duffy	Natural England
MS: Matt Spencer	MSC
ND: Nathan de Rozarieux	Falfish
RC: Robyn Cloake	Labeyrie
TR: Theresa Redding	Natural England
SN: Steve Newstead	Presenter

### Purpose of the meeting

The purpose of this call was to provide the Steering Group with an opportunity to discuss the recently published habitat impacts report, including a presentation by Steve Newstead, the European Maritime and Fisheries Fund (EMFF)-funded Post Doc, who was responsible for delivering the research.

### Agenda Item 1:

#### Habitat report presentation

Project UK received EMFF funding over a two-year period to investigate the habitat types present in ICES areas 7d and e (English Channel), to assess the level of overlap with the scallop fishery, and to calculate the impact of scallop dredge gear on these habitats.

SN approached the assessment in two ways:

- 1) A species by species approach to understand the sensitive species present in the Unit of Assessment (UoA).
- 2) A whole community approach to understand habitat vulnerability, using the Bangor University Benthic Habitat Tool.

**Approach 1:** Sensitive species.

Factors considered as part of this approach were: longevity of a species, whether the species create a structurally complex habitat, and whether rare or threatened species were once common in the UoA.

Using available literature and online sources, a list of 68 species belonging to nine phyla were identified as being known to occur within the English Channel. Of these, 29 species were taken forward for further analysis using the MaxEnt species distribution model. The MaxEnt model uses known species records and environmental variables to predict the likely habitat for each species in question. SN added a caveat that while this approach can predict the possible presence of species based on the available environmental factors, it cannot definitively indicate whether a species is actually present.

The second part of this approach used swept area data to determine how often an area within the UoA is being fished. This, combined with the MaxEnt model output, provided a map indicating fishing effort and habitat area overlap across the UoA. SN used scores for fishing mortality, depletion and recoverability of each organism to help determine the relative benthic status (RBS), which informs an observer of the state of a habitat, relative to their unimpacted state. This assessment estimates a worst-case scenario.

Initial results from this work identified 39 different habitat types in the UoA, with only one habitat type scoring below the 0.8 threshold – which is the score needed to pass the habitats performance indicators as set out in the MSC Standard. SN's report demonstrated that one habitat type - deep circalittoral coarse sediment - did not meet the 0.8 score, and that the recovery period would take an estimated 2.5 years. This is quicker than the MSC Standard's requirement for recovery of between 5-20 years.

**Approach 2:** Benthic habitat tool

This approach involved use of the Bangor University Benthic Habitat Tool which produces RBS scores directly. Results from this approach indicated that all habitat scores were above 0.8, indicating that no commonly encountered habitat types were failing as set out by the MSC Standard.

SN said that vulnerable marine ecosystems (VMEs) were considered to overlap with the fishery by approximately 20%. Of these, two were of note: sandbanks and reefs, where individual species had a low RBS values but averaged above the 0.8 threshold, implying that habitat type could still pass full MSC assessment.

SN went on to explain the limitations of his research:

- He used a conservative approach which may slightly skew results;
- Estimates on longevity for species are difficult to find;
- The swept area data for vessels was for the >12m fleet and no data from under 12m vessels was available, but SN noted that these smaller vessels are not fishing as far offshore; and
- The model didn't use recruitment and dispersal of species.

**Recommendations**

SN reviewed the main recommendations from the report:

- Vessels should avoid VMEs and areas where there is a high chance of interaction with highly sensitive or protected species;
- Fishery managers should consider greater use of zonal approaches; seasonal or permanent e.g. scallop fishing box approach;
- The fishery should seek to increase survey data to ground truth species distribution. Data for the model came from a global database and that if there was more extensive knowledge on where these species occur, it would help the estimate of the RBS. One way of doing this would be a continuation of the camera work on vessels; and
- Future work should account for recruitment and dispersal of each of the species.

## Discussion

JM asked whether deep circalittoral coarse sediment scoring below 0.8 was due to the modelled presence of low-scoring species or whether it was due to dredging intensity, and in which case it implies that it's not the entire sediment type that needs recovering, only where those species are then found. SN explained the score was due to the sensitivity of a few species, and MSC has specific requirements for recoverability. The impact of intense fishing pressure and associated recoverability in one area of the habitat may be offset by other areas of the same habitat type not being under any fishing pressure. SN went on to explain that reefs and sandbanks scored above 0.8, not because they are not susceptible to the impact of dredging, but because large areas of reef and sandbank fall out of areas of intense fishing activity.

TR asked about the lack of <12m vessel information, as the MMO should know the number of vessels <12m who are involved in the fishery; and suggested that while iVMS is not yet available yet, port data may indicate what is being landed. TR also suggested IFCA's might have data that would be available to use. SN said unfortunately with the time available to deliver this report the <12m vessels were not considered but could feature as a recommendation for the Steering Group to take on. SN felt that based on the available data, including the <12m into the calculations wouldn't change the results, but cautioned that the modelled data can only be as good as the information put into it. JH added that the <12m activity is not easy issue to solve until iVMS is rolled out and suggested that although estimates could be drawn from logbooks, researchers could not infer too much from them.

MD asked about validation of the model against real-world examples, such as Lyme bay, as he believed the results from this report did not align with results from studies in that area. JH explained that the parameters that drove the model were based on best available literature, including research and results from Lyme Bay. SN and JH were keen to stress that the results from the study do not indicate there are no negative impacts of dredge gear on the habitat types in the study, but that where dredging occurs there are large areas of the same habitat type not being impacted by dredge gear.

BS added that the limitations are made clear in the report and that this is not the last of the work being done on this subject. This report represents a large area and fleet, and there may need to be more research into the inshore fleet activity. FN said there could be opportunities to ground truth the work with the <12m through the IFCA's. FN confirmed that requirements for SG80 were being met and that she was pleased VMEs had been included. During an assessment it would be common to use the best available data, which this report does.

CP informed the group that industry is calling for better regulation of the <15m fleets and a part of this work will be gaining a better understanding of where their effort is taking place. CP pointed out that

there are areas on the 'high-risk' map that fall outside areas of protection and questioned what the Steering Group intended to do about that.

FN suggested the Steering Group needs to start developing a habitat management plan. A summary of the Habitat Management Plan (HMP) will need to be inserted into the Fishery Management Plan (FMP) and a review undertaken of what management is already in place within the UoA. LP has already started compiling management measures for the inshore area, including Devon & Severn, Cornwall, Southern and Sussex. LP acknowledged that this could be extended to Kent and Essex and said she would follow up with colleagues from those IFCA's.

SN added he can share more information with the Steering Group when he gets back into the Bangor office, which has been closed since lockdown started. In particular, the group requested copies of some of the maps in the presentation, which SN confirmed.

One issue that was raised was that the data for this report was from UK vessels only and did not have any data from Irish or French vessels. FN pointed out that in terms of MSC standard the group will need the other nations to comply with our UoA management. She also noted that the Steering Group should begin drafting a Habitat Management Plan that includes a summary of the Post Doc report and details of all management measures in the UoA.

#### ***Actions from Item 1:***

1. LP to compile management measures for inshore areas under Kent and Essex IFCA's, and circulate when complete.
2. SN to share any remaining or supporting documentation with FN, including the inshore maps and shapefiles.

#### **Any Other Business**

None.

#### **Meeting Closes**

11.15am

Actions Arising		Responsibility
1	Compile inshore management for inshore areas under Kent and Essex IFCA jurisdiction	LP
2	Secretariat and FN to liaise with SN to share any remaining or supporting documentation with the group	FN/Secretariat