

## DRAFT MINUTES

### Joint NWWAC/NSAC Focus Group Skates & Rays

**Virtual meeting 21 January 2022**

#### Participants

Pauline Delalain	CNPMEM
Erik Lindebo	DG MARE
John Lynch	Irish South & East FPO
Matthew McHugh	BIM
Martin Oliver	BIM
Solène Prévalet	FROM Nord
Amerik Schoutemaker	Nederlandse Vissersbond
Sofie Smedegaard Mathiesen	Danmarks Fiskeriforening
Matilde Vallerani	NWWAC Secretariat
Jasmine Vlietinck	Rederscentrale
Paddy Walker	Dutch Elasmobranch Society
Johnny Woodlock	Irish Seal Sanctuary

#### 1. Welcome and introductions

The Chair welcomed all participants. The agenda and minutes from the previous meeting were approved. Apologies were received from Geert Meun, Linda Planthof, Mo Mathies and Tamara Talevska.

#### 2. DG MARE update on request for the setting up of an STECF EWG

Erik Lindebo reported that the Commission is committed to collaborating with the UK in the annual consultations to agree on a way forward on how to use scientific advice to set the current skates and rays group TAC that is in place for skates and rays, since the EU and the UK have now different approaches. Lindebo added that the Commission hopes to finalise this in the coming months.

At the same time, the Commission is also discussing with the STECF the setting up of an Expert Working Group on skates and rays management. It is foreseen that the EWG will be convened by summer. Terms of Reference are being developed and include all the items mentioned in the joint NWWAC/NSAC recommendations sent in January. Lindebo pointed out that the specific work carried out in 2017, relevant previous projects and ongoing studies will be feeding this work.

Additionally, the Commission is considering requesting ICES to assemble catch information on the various skates and rays species per Member State, fishing method and area, to update the information on skates and rays fisheries.

Paddy Walker asked if UK representatives will be allowed or invited to join the EWG. Lindebo replied that they are probably not going to be part of STECF plenary meetings, but when it comes to the EWGs, they should be considered as any other experts.

The Chair agreed that working together with UK scientists would be important to ensure sustainable management. Regarding the future planning of stocks management, he pointed out that if individual TACs have to be established stakeholders should be involved in the process. He then asked it vulnerable species would be the first to be separated from the group TAC. “We would hope that it's not going to be an overnight process. There should be enough time allocated to this exercise, to avoid ending up with an arrangement that is not workable”, he concluded.

Johnny Woodlock pointed out that the consensus is to move towards an ecosystem approach and it is thus fundamental to have all stakeholders involved, including the UK.

Lindebo replied that indeed any process of moving from a group TAC to individual TACs would need to take into account the critical aspect of stakeholder consultations, also in light of the ecosystem approach, and that the UK should be part of this comprehensive work. He also added that there will be a management discussion acknowledging relative stability and quota allocations in the EU where stakeholders, and specifically the Member States and the fishing sector, will have to be engaged.

**ACTION:** Secretariat to follow the developments of the STECF EWG.

### 3. BIM trial: Survivability of cuckoo ray in the Irish Sea

Martin Oliver gave a brief overview of a full-scale captive monitoring study conducted in autumn 2021 on survival of cuckoo ray.

Fishing was conducted between 20 September and 09 October 2021. The trial took place in Irish waters and the onshore holding facility (a refrigerated container with a closed recirculating system) was located in South County Dublin, on Dun Laoghaire pier.

Researchers worked with the skipper (the FG Chair) and a crew of the fishing vessel Eblana, who were very helpful throughout the whole study. Catches were landed directly onto the deck as per standard practice and remained there until the trawl was redeployed or stowed away. The crew recorded the maximum time ray spent on deck prior to placement in the onboard holding tanks.

Cuckoo rays were held onboard for up to three days in 3 x 310 litre tanks. The holding tanks were supplied with a flow through of sea water from the deck hose and sand to provide refuge, to help reduce stress levels while in captivity.

The vessel was an otter trawler fishing in normal commercial conditions. Rays were tagged using velcro tags on the tail to identify them by each haul and were then put into the holding tanks until they came ashore.

COVID posed restrictions to scientists, who could only go to sea for day trips, while the vessel was out for a couple of days at a time. When cuckoo rays came ashore, scientists conducted condition

assessments on the fish looking at vitality, injury and reflexes, before putting the rays into the monitoring onshore system. Fish were maintained in the closed recirculating system for 15 to 23 days, depending on when they were caught.

The refrigerated container housed six tanks in a 2 x 3 configuration. To eliminate risk of contamination from water in the harbour, saltwater was made using dechlorinated freshwater mixed with aquarium salt. Water quality was assessed four times daily throughout the whole holding period to ensure conditions were appropriate.

Kaplan-Meier (KM) survival plots of fish in test, control and vitality categories were used to assess survival over 15 days captivity. Any mortalities during onboard holding or transport were treated as dead at time zero. Survival over a longer period was estimated using predictive modelling over 25 days. To identify the best fitting model, four distributions were tested under non-cured and cured models with AIC values used to select the optimal distribution. Reflexes were analysed by summing the scores for each individual fish and the total was standardised to fall between 0 and 1. With four possible reflexes, each reflex impairment was given a score of 0.25 with a potential maximum score of 1. Injury scores were also standardised to fall between 0 and 1. Injury type for each individual fish had a potential score of 0.33, 0.66 or 1, depending on severity.

A total of 12 test hauls and two control hauls were carried out over seven days fishing. Tow duration ranged from 135 – 300 minutes with a mean of 224 minutes for test tows. The two controls tows were 55 minutes average duration. Bulk catch had a mean of 293 kg. Cuckoo ray numbers were relatively low with a total of 61 test (46 females and 15 males) and 12 control fish caught. A total of 39 test cuckoo rays were retained for captive observation. A further 22 mortalities occurred while at sea and during transit and were treated as mortalities at time zero. A total of 9 control cuckoo rays were retained and 3 mortalities occurred at sea.

Results indicate test ray mortality of 36% on the vessel and 48% in the holding system. The control ray mortality is at 25% on the vessel and 33% at sea. Survival results of 11% over 25 days suggest likely poor post-release survival of cuckoo ray due to the capture process in the Irish otter trawl fishery. Mortalities were unlikely induced by poor holding conditions. However, it is not certain whether high cuckoo ray mortality rates are due to the capture process or species-specific susceptibility to captive monitoring. A tagbased survival study where cuckoo ray could be released almost immediately might help elucidate this issue.

Woodlock asked the presenter's view on whether the difference in timing between actually catching the fish and getting them to the holding tank was responsible for fatalities. Oliver agreed that it could have been a possibility: some of the fish were on the vessel for a couple of days and while everyone was trying to reduce distress, the fish was still on a moving and rolling vessel. There are unpredictable variables that could definitely have an effect on the overall survival at a fish. Tagging fish on site and releasing them could be another option to assess their survival.

The Chair added that in everything there is a learning process. In his experience, he would normally have kept fish in a very small container, where they can't be moved or thrown around, so they are steady on the vessel. If he would be involved in a survivability trial again, he would consider the use of much smaller storage containers and shorten the time at sea as much as possible. He also added that the crew was disappointed in the difference between the vitality rates obtained from a study a

few years ago and the survivability this time. *“I’m sure there will be many more studies and there’s a learning process in this”*, he concluded.

Oliver pointed out another difference between this study and the pre COVID studies. In this study, the fish were assessed when they came ashore, which means they had been on the vessel, some of them for a couple of days, before they could actually be assessed. The Chair confirmed that it was a major disadvantage to the whole team not having scientists onboard the vessel.

Walker suggested that in future research, vitality scores could possibly be done on board, then when the vessel gets to shore and then maybe again afterwards, when the experiment is finished as a comparison of sorts. That could be useful to see if there is a difference between the vitality score when the fish get back onshore as compared to the vitality score onboard. This could help identify where the extra mortality or the decrease in vitality came from.

#### 4. Update from the Thornback Ray FIP

Solène Prévalet gave an update on the progress on the Thornback Ray FIP. A meeting was held in January 2022 with the steering committee and the project stakeholders, where the actions overview was presented. All the information about the FIP and current progress is available on the Fisheryprogress website (access via free user account).

- Action 1: to improve knowledge about the Thornback ray stock in the Eastern Channel

In its latest advice from October 2021, ICES has classified this stock as a category 3 stock. The FIP will contribute to the identification of missing data looking towards the ICES benchmark at the end of 2022/beginning 2023. Moreover, a study will be carried out starting in March to improve knowledge on the functional areas of Thornback ray in 7d. The project is led by a French organisation, APECS, and supported by a WWF fund.

- Action 2: management options for TACs

This action is looking at the options for a monospecific TAC for Thornback ray. The work of the previously mentioned STECF EWG will be followed. The topic was also discussed in a meeting in October 2021 of the French commission on rays and sharks.

- Action 3: improved data on fishing activities to support the management strategy

A survival study will be launched examining Thornback ray post-capture with Danish seine, following the SUMARIS protocol. The tagging option is still to be determined. The goal is to provide data supporting the benchmark in late 2022.

- Action 4: minimising the effects of Danish seine fishery on the stock status of red striped mullet

In collaboration with ICES WKNSK, the FIP will consider the type of data needed and help identifying research and management priorities.

- Action 5: monitoring the VMEs in 7d and effective application of measures to minimise the impacts of the fishery on sensitive habitats if required

The objective is to follow up on the different management perspectives. The outcomes of the IPREM project will help identifying the areas that are mostly affected by trawling.

- Action 6: development and implementation of management plan for Thornback ray fishing activities in 7d

To be carried out later on in the project, as it is related to the outcomes of the previous actions.

- Action 7: identification and traceability of ray species

This relates to the identification guide produced by POs from Normandy and Ethic Ocean on rays and sharks species in the Channel. A pilot project is currently being implemented by Ifremer and MNHN to monitor the correct identification-recording of skates and rays by fishers and in French fish auctions along the Eastern Channel and the North Sea coasts.

- Action 8: communication of the progress and results of the project

The Chair asked whether the survivability work would only be done with other fishing methods than the Danish seine. Prévalet replied that at the moment this will involve the Danish seine as this has not been done previously for this fishing method. Even though the catch rate for Thornback ray is low for this method if compared to trawlers, it was important to consider the Danish seine in view of the MSC certification.

The Secretariat put forward two proposals:

- Prévalet would regularly report updates on the work of the FIP to the Focus Group at every FG meeting; there will be no need to translate FIP meetings' minutes.
- The Secretariat could include links to all the identification guides received from members on the NWWAC website, under the page "Useful links".

Members agreed with the Secretariat's proposal. The Chair added that many identification guides have been developed on skates, rays and sharks, with the risk of creating confusion. It would be useful if at some point a guide was created on all the rays and sharks species in all EU sea basins. Members agree that this could be part of the Focus Group advice to the Commission.

**ACTION:** Prévalet to regularly report updates on the work of the FIP to the Focus Group at every FG meeting; there will be no need to translate FIP meetings minutes.

**ACTION:** Secretariat to include links to all the identification guides received from members on the NWWAC website, under the page "Useful links".

## 5. Update on the Dutch project "Bridging knowledge gaps for sharks and rays in the North Sea"

Paddy Walker reported on the progress of the Dutch project "Bridging knowledge gaps with sharks and rays in the North Sea", consisting of three work packages. The first one looks at post capture survivability of Thornback and Spotted rays in flyshoot and beam trawler. The second work package will be looking at spatio-temporal distribution of sharks and rays, using data storage tags data.

The third work package deals with stakeholder dialogue and meetings. This had to be postponed due to pandemic restrictions to live meetings. The idea is to facilitate the dialogue between stakeholders

and to formulate recommendations. The first step of this process will be a questionnaire, which Walker shared on screen. Its objective is to gain an overview of how people see the implementation of the of the high survivability exemption and the results will help to shape the stakeholder dialogues with stakeholders from across Europe, including UK fishers. In particular, there will be a two-day stakeholder workshop in the spring, to prepare for the discard plan 2023. A hybrid seminar is planned in the summer and later in the year another workshop will be held to discuss the project results. A project report will also be published in between these meetings to be shared with stakeholders.

## 6. Summary of actions agreed and decision adopted by the Chair

The Chair thanked all participants for their contributions and closed the meeting.

### Actions

<b>1</b>	Secretariat to follow the developments of the STECF EWG.
<b>2</b>	Solene to regularly report updates on the work of the FIP to the Focus Group at every FG meeting; there will be no need to translate FIP meetings minutes.
<b>3</b>	Secretariat to include links to all the identification guides received from members on the NWWAC website, under the page "Useful links".