Joint NWWAC/NSAC Advice on Skates & Rays Management

02 May 2023

NSAC Ref: 06-2223

Background

In 2020, The North Western Waters Advisory Council (NWWAC) and North Sea Advisory Council (NSAC) established a joint Focus Group Skates & Rays having previously addressed the management of these species as individual ACs going as far back as 2009. Skate and ray fisheries constitute important targeted and by-catch fisheries for several Member States. The management of these fisheries has been subject to ongoing research and review across the various EU institutions over the past years including requests to the STECF to evaluate possible management approaches and changes to TAC calculation (STECF 15-01), and also to comment on a possible bycatch provision for undulate ray (*Raja undulata*) (STECF 15-03).

In 2017 the Commission received advice from the North-Western Waters Advisory Council (NWWAC) suggesting several alternative management measures and request their review by STECF DG MARE organised a seminar with fishers, scientists, national administrations and other stakeholders addressing this advice and assisting in drafting terms of reference for an STECF Expert Working Group (the EWG 17-10). The work of the EWG and STECF plenary resulted in the 2017 STECF report on long-term management of skates and rays (STECF-17-16).

Since the publication of this report numerous studies and trials have been and are being carried out regarding the management of skates and rays, including the INTERREG SUMARiS project[1], Bord Iascaigh Mhara[2], Harokit[3], INNORAYS[4], Raywatch[5], Bridging Knowledge Gaps for sharks and rays in the North Sea[6].

[1] https://sumaris-project.com/en/homepage/

[2] An assessment of cuckoo ray (*Leucoraja naevus*) survivability in an Irish otter trawl fishery 2021; Post-capture condition of cuckoo ray in an Irish otter trawl fishery 2019; Staggering the fishing line: a key bycatch reduction option for whitefish trawlers 2019; Raising the fishing line to reduce cod catches in demersal trawls targeting fish species 2017 https://bim.ie/publications/fisheries/

[3] https://ilvo.vlaanderen.be/nl/nieuws/harokit

[4] INNORAYS: Improving our knowledge-base for North Sea rays using 'Electronic Monitoring', Wageningen Marine Research

[5] https://ilvo.vlaanderen.be/nl/nieuws/raywatch-moet-kennis-over-roggen-vergroten-in-functie-van-beter-beheer

[6] https://www.wur.nl/en/Research-Results/Research-Institutes/marine-research/show-marine/New-shark-and-ray-research-project.htm

The International Council for the Exploration of the Sea (ICES) publishes skate and ray advice, usually on a two-year cycle. Assessments are carried out on stocks and fisheries from the Artic to the Azores by the ICES working Group on Elasmobranch Fishes. In 2021, WGEF provided advice for 16 stocks of rays and skates distributed the North Sea ecoregion, the Azores and MAR; catsharks (Scyliorhinidae) in the Greater North Sea, Celtic Seas and Bay of Biscay and Iberian Coast ecoregions; smooth-hounds in the Northeast Atlantic; and tope shark in the Northeast Atlantic. ICES organised a benchmark for porbeagle, thornback ray in the Bay of Biscay, cuckoo ray in subareas 6 and 7, and in divisions 8.a–b and 8.d and undulate ray in the English Channel (WKELASMO) in March 2022[7]. Furthermore, a benchmark for three North Sea stocks is proposed for 2023, and a second WKSKATE workshop that would examine the remaining skate and ray stocks is being planned.

In addition, the political landscape has changed considerably since 2017 with the UK's full exit on 01 January 2021. This has resulted in additional challenges to the TAC setting for skates and rays.

In 2022, the STECF Expert Working Group 22-08 Skates & Rays Management (link) addressed the following items as part of its Terms of Reference:

1. To consider the appropriateness of the current EU and UK approaches in terms of ensuring the sustainable exploitation and conservation of all skates and rays species falling under the SRX group TACs.[8]
2. To consider the appropriateness of using single species sub-TACs as an alternative to the current SRX group TACs.
3. To consider the possibility of developing bespoke management plans as a replacement to SRX group TACs.
4. To consider progress made in underpinning the exemption to the landing obligation and next steps, by species and by gears, by assessing catch data, discard survival rates, methods for improving avoidance, selectivity and survival.[9]
5. To consider transparent criteria to classify skate and ray species as prohibited species.

Following the conclusion of this EWG in September 2022, members of the joint Focus Group identified issues for further discussion to support the European Commission in the management of skates and

[7] https://ices-library.figshare.com/articles/report/Benchmark_Workshop_for_selected_elasmobranch_stocks_WKELASMO_/21025021

[8] The work under TOR 1 should, as a starting point, be based on the following documents:
- Joint UK-EU Non-Paper: EU and UK approaches to Skates and Rays TAC-setting for 2021 and 2022 (Draft, July 2022) – explanatory document of the two approaches
- Exploring alternative methods for Skates and rays TAC and quota management (Batsleer and Lorance, May 2022) – STECF ad hoc contract
- EU request for a Technical Service to provide catch statistics for skates and rays caught in ICES areas 3, 4, 5, 6, 7, 8 and 9 included in the SRX TAC group (ICES Technical Service, 20 April 2022)

For TOR 1-3, the EWG should discuss pros and cons of each approach considered, including their practical application, and especially in light of achieving conservation objectives, but also in terms of inter alia, relative stability and socioeconomics, species identification and reporting.

[9] TOR 4 should draw on the work done by the STECF EWG relating to the landing obligation.

rays. In order to best address these, an in-person workshop was held in Brussels on 09 February 2023[10] with the purpose of:

- to bringing together representatives from the European Commission, the UK administration, the Advisory Councils, and the scientific community to discuss in detail and progress the following issues:
    - Harmonisation of TAC setting approach between the EU and the UK noting the STECF 22-03 conclusion that "both methods have their pros and cons but neither approach is optimal for management of the exploitation of skates and rays."
    - Sub-TAC for specific species (e.g., listed as prohibitive species) & inclusion of specific species in MAP and development of bespoke management plans for specific species, management approaches incl. Usefulness of Minimum Landing Size
    - Prioritisation of specific species for survivability research
    - Best practices (avoidance, selectivity and survival) & socio-economic impacts of changed management plans

The workshop was attended by participants from eight different Member States as well as the United Kingdom and included representatives from the fishing industry, NGOs, scientific institutes, Member States' administrations and the European Commission.

The following recommendations are based on the discussions at this workshop.

Recommendations

1 Harmonisation of TAC setting

- The ACs recommend that the management should focus on regional approaches in 4 distinct geographical areas (North Sea, Irish Sea, English Channel and Celtic Seas).
- AC members understand that the UK approach to TAC setting is closer to the ICES advice so more relevant for stocks with a quantitative assessment (cat. 1 and 2). Therefore, the ACs recommend that the Commission follow this approach for stocks cat. 1 and 2. For other stocks a different approach should be found while protecting the most sensitive stocks and taking into account the socio-economic impacts.

2 Sub- TAC for certain species

- A single TAC could be established for North Sea and English Channel (7d) thornback ray and NWW cuckoo ray since they are both category 2 stocks. However, it is important to avoid choke situations arising and the ACs recommend that trials are carried out to ensure that this does not have a negative effect on the fishing opportunities for the single TAC species, as

[10] Details of proceedings can be found here.

well as the other ray species that are still in the group TAC . Stochastic surplus Production models in Continuous-Time (SPiCTS) should be embedded to arrive at meaningful advice. Consideration should be given to the development of a solution to the issues which will arise if the TAC setting key is applied to individual stocks by area.

- The ACs also recommend that the main target stocks of skates and rays are incorporated into Multi-annual Plans as this would provide clarity on their management also in relation to international countries.
- To enable better management and protection, target species and vulnerable species must be identified for each region.
- To take this further the development of a roadmap should be considered starting with is the main target species available and including potential single TAC setting, while developing alternative management measures for other species.

3 Research prioritisation

- The Commission should initiate the collection, collation and evaluation of all survivability studies on skates & rays over the past years at whether the data behind them is reliable. This is essential to ensure the exemptions to the Landing Obligation can continue and thus chokes can be avoided. Environmental variables should be considered as well.
- In the short-term, the ACs recommend that survivability research should focus on commercially important species to start off with, for example thornback ray, blonde ray and spotted ray, with the inclusion of minimum landing sizes.
- STECF should compile a list regarding what information is lacking in relation to the survivability exemptions to assist with aligning and focussing future research.
- Data quality is highly important and more data on vessel mortality is needed. The critical aspect for survivability studies relates to post capture conditions on board, as in some cases high mortality occurs when keeping the fish on board in small water tanks, landing and transporting these to a holding facility on land for prolonged vitality analysis. Returning unwanted catches to sea as soon as possible is estimated to have a much higher survival rate than the prolonged studies.
- Workshops should be organised between stock assessors and survivability experts and other experts, possibly under the lead of ICES in order to allow for full participation by representatives from the UK, with the purpose to address:
    - survivability - bringing together all available information on survival, vitality and metiers in order to identify data gaps and develop proxies for species survivability without having to research all species-metier combinations.
    - Best practices - assimilating all available knowledge on the biogeography of skate and ray species in order to identify areas or life-stages where it would be necessary and possible to avoid catching individuals
- A review is needed of the prohibited species list and the ACs highlight the need for scientific dispensation for some of these species. A differentiation could be made within the list, for example similar to CITES/CMS, appendix 1 and 2. The prohibited species list could potentially also have an appendix 1 and 2, i.e., strictly protected, and potentially

available for scientific permits (caveats) as currently the prohibited species are staying data limited as they cannot be researched on.[11]

- Gear trials should focus on gears increasing survival, and the content of abrasive material in the gear should be reduced. Other innovative fishing gears should also be explored. , Skates and rays behaviour before and after interacting with these gears should be looked at, ensuring that no other predators are attracted to the net. Spatial avoidance tools should also be investigated as a device to help the avoidance strategies. A science-industry partnership should be launched to trial gears with these tools.
- Flexibility should be included in legislation so that fishermen and scientists could work together for trials (fishing for science) and provide for example a scientific/best practice exemption in order to facilitate fishermen working with institutes and researchers. This must be supported by fisheries control.
- The ACs recommend that more funding be made available for research on these highly complex issues.

3 Best practices & socio-economic impacts

- The ACs strongly recommend the extension of the existing survivability exemptions for skates & rays in the North Western Waters and in the North Sea.
- Reporting of bycatch in all fisheries must be urgently promoted to address data deficiencies.
- At sea experience and observations by fishermen must be taken into account more closely.
- Currently, socio-economic effects are not considered in TAC setting or provision of management measures. The ACs recommend that this be carried out to evaluate the effects of measures implemented in the various fisheries including “what-if” scenarios.
- Better indications are needed as to which species are associated with which fishery to identify management measures.

- END -

[11] Please also note the separate NWWAC/NSAC request for clarification on the Prohibited Species List submitted on 06 April 2023 (link).