

**BSAC Joint Working Group (Demersal + Pelagic)
Tuesday 9th- Wednesday 10th June 2020**

Virtual meeting

REPORT

1. Welcome by the Demersal WG chair Michael Andersen and Pelagic WG chair Mart Undrest

The Demersal and Pelagic Working Group chairs welcomed all participants. They welcomed to the meeting Colm Lordan, ICES/ACOM vice-chair, who was to present the 2020 ICES advice for the Baltic stocks and to answer questions on specific issues.

They informed that the main task of the working group was to discuss the ICES advice and to start preparing comments and recommendations from the BSAC. The BSAC recommendations would be produced through written procedure and submitted to the European Commission before the end of June 2020.

Due to COVID-19 restrictions, the meeting was held on-line. The code of conduct for web meeting was annexed to the agenda. The agenda was adopted without changes.

2. Formalities for the start of the meeting:

The list of participants and apologies¹ is on the website.

3. The 2020 ICES advice for the Baltic

Colm Lordan, ACOM vice chair, presented the advice and answered questions. He referred to the unusual circumstances under which the advice was produced this year, caused by COVID-19. For most of the stocks which had not undergone a benchmark, ICES had produced an abbreviated advice. He presented the [rules for advice on fishing opportunities](#), as well as the advice basis.

He explained the advice by stocks (cod, flatfish, pelagic stocks, sprat, salmon), demonstrated with a power point presentation². Participants had the opportunity to ask questions and comment at the end of each category of stocks.

Presentation of demersal species

Michael Andersen, chair of the Demersal Working Group chaired the discussion on demersal species.

Western and eastern Baltic cod

With reference to western Baltic cod, Colm Lordan noted that the 2016 year class remains the only strong year class in recent years and has been downgraded in recent assessments. The SSB is forecasted to increase in 2021, above the MSY B trigger level.

¹ <http://www.bsac.dk/Meetings/BSAC-meetings/BSAC-Joint-WG>

² <http://www.bsac.dk/Meetings/BSAC-meetings/BSAC-Joint-WG>

With reference to the eastern Baltic cod stock, Colm Lordan pointed to the biological changes in the stock, among others a decrease in fish size and fatness, and changes in the distribution of spawning. Due to the spread of anoxic waters, spawning is now limited to areas located more to the west. The recruitment in 2019 has been the lowest ever observed. As a result, a further decline of the SSB is expected, below precautionary reference points. The biomass of commercially sized cod is the lowest observed since the 1950s. This year's assessment is consistent with last year's assessment. The natural mortality is substantially higher than the fishing mortality. He explained that high natural mortality is an effect of a decline in the natural condition of fish and other issues, such as parasites. Despite a decrease in the fishing mortality, natural mortality of eastern cod continues to increase.

The ICES advice is zero catch in 2021, and applies to all catches in SDs 24-32. This would result in a 10% increase of SSB. There is a low probability that the stock will increase above B_{lim} in the short term. In answer to a question from the WG chair, Colm Lordan confirmed that the predicted increase in SSB was very dependent on the size of the incoming year class, and that this was highly uncertain.

With reference to recreational angling, Colm Lordan noted that the catches estimated at 1.315 t on the Western cod stock in 2020 are based on the best available data.

Presentation of flatfish species Plaice SDs 21-23 and SDs 24-32

Colm Lordan explained the basis for the advice for both stocks (Category 1: MSY and Category 3: PA), the stock status and the advised TACs. The change from advice based on precautionary approach to MSY approach happened in response to a request from the EU Commission. For the regulatory area SDs22-32 this gives an advice of 7.754 t.

The ICES assessment of stock status for brill, dab and the flounder was also presented: ICES has not been asked to provide advice.

Presentation of pelagic species

Mart Undrest, chair of the Pelagic Working Group chaired the discussion on pelagic species and salmon.

With respect to the western herring, Colm Lordan noted that the stock is close to the lowest level in the time series. Recruitment has been decreasing in recent years. The stock is below B_{lim} and there is no chance to rebuild it in the short term. The rebuilding frame is expected to be longer than 3 years. The ICES advice is zero catch.

Referring to herring in SDs 25-32, Colm Lordan explained that the stock had undergone a benchmark in the beginning of 2020, taking into account new natural mortality estimates. The reference points had been re-estimated.

With reference to sprat, Colm Lordan noted that there are indications that sprat is being misreported as herring. The effects of misreporting have not been quantified; however, it may affect the revision in SSB and F over time.

With reference to salmon in the Main Basin, Colm Lordan pointed out a decrease in misreporting. He explained that the large decrease was due to a change in regulations in the reported catch of sea trout with longlines in the Polish offshore fishery. The advice for 2021 TAC for salmon in the Main Basin and Gulf of Finland in terms of number is the same as for 2020.

Questions and discussion

On the western Baltic cod

A representative of German fishermen commented on the downgrading of the SSB of the western cod stock (50.000 t in 2017 compared to 20.000 t in 2020). He asked for an explanation about the overestimation of the SSB in order to get the assurance that the present prediction is not an underestimation of the same magnitude. Scientific surveys could not be carried out because of COVID-19, so there will be a difficult data situation for providing future advice. Some vessels could be hired for data collection, under scientific management, to improve the data situation and help to prevent such wrong predictions as has been the case in 2017 and 2018. Science should make more effort to solve the problems of regime shift in the Baltic and age determination of cod. If there is a systematic reduction of productivity of the ecosystem, there would be a need for the adaptation of fishing capacity and the whole structure of the sector. There should be a more substantial reflection on socio-economic aspects and transformation aid.

A representative of German small scale fishermen pointed out that more practical experience of fishermen must be included in the ICES advice. A package solution for all predators is needed to solve the problem of the cod stock in all areas in the Baltic Sea. Representatives of the OIG had comments concerning the dependence of catches on the single year class 2016, as well as the figure used as the basis for the recreational catches in the advice.

On the eastern Baltic cod

Colm Lordan was asked to comment on the closures of eastern cod fishery, related to the footnote in the TAC/quota regulation³. He informed that closures of the cod fishery had been considered in the special requests last year⁴. According to ICES, closures can be considered as supplementary measures, but their effects for the eastern cod stock cannot be demonstrated. To be effective, any spawning closure needs to be implemented during the spawning months of eastern cod.

On a question referring to the need to close the entire SD 25, he stated that if spawning closures are chosen to be applied as a supplementary management measure, a closure of the entire distribution area of the stock during spawning is preferable to small area closures, which cause effort reallocation to other stock components.

In the view of a fisheries representative, taking into account species interrelations is part of the ecosystem based management and should be included in the ICES advice.

³ <http://www.bsac.dk/getattachment/BSAC-Resources/Documents-section/Council/ENGForordning-Fiskerimuligheder-sters-en-2020-EN.pdf.aspx?lang=en-GB>

⁴ http://ices.dk/sites/pub/Publication%20Reports/Advice/2019/Special_Requests/eu.2019.11.pdf

On his question referring to the possibility to increase the cod stock by increasing the sprat outtake, Colm Lordan answered that such interrelations are not taken into account in a single stock assessment and advice.

With reference to the question asked by a representative of German fishermen as to whether the regime shift is taken into account in the advice, Colm Lordan replied that such regime shifts are taken into account in setting the reference points. ICES is planning to develop more science around it and operationalise it in the advice.

Representatives of the OIG asked whether discards of eastern cod are taken into account in the advice; Colm Lordan confirmed this was the case. Another OIG representative asked about improved recruitment, to which Colm Lordan replied that there is no information to indicate this.

With reference to a question on updated figures for the predation by cod on central Baltic herring and sprat, Colm Lordan stated that the ICES advice for sprat and herring has already been adjusted to take into account the predation. The predation of cod was higher on herring than on sprat.

On flatfish stocks

An OIG representative asked about the increased biomass of flounder and observed reductions in size. Colm Lordan explained that in other flatfish stocks there are observed effects of density dependence.

A fisheries representative asked about the quality of the MSY advice for the western plaice stock, given that the stock continues to increase, despite being fished above MSY. Colm Lordan informed of a planned workshop on the impact of reduced reproductive capacity of plaice. The usually observed trend is decreasing fishing mortality and increasing stock size. But in many cases, if the stock is exploited above F_{msy} the SSB can continue to grow.

On the interaction between plaice and cod, it was becoming clearer that plaice is becoming a target species rather than bycatch. The importance of developing more selective gears to enable the escape of cod was raised by a representative of the OIG.⁵ With respect to the advice on plaice and questions from OIG representatives, Colm Lordan explained that there is no updated information on by-catch of eastern Baltic cod in the plaice fishery; nor is it possible to provide information on mixed fisheries interactions between the advice for plaice and the zero advice for eastern Baltic cod.

Referring to a question on how the advice would change if plaice became a target species in the MAP, he replied that the advice for plaice would then be based on MSY ranges.

⁵ Reference made by WWF to ICES report: (2020). Report on eastern Baltic cod bycatch in non-targeted fisheries, mixing with western Baltic cod in SD24, and stock situation in SDs 27-32 (Ad hoc). ICES Scientific Reports. 1:76. 69 pp. and Annex 3, page 62, with factsheets on different selective fishing gears, including CODEX – Cod Excluder and ICES (2019). EU request for further information on the distribution and unavoidable bycatches of eastern Baltic cod. In Report of the ICES Advisory Committee, 2019. ICES Advice 2019, sr.2019.24. "Technical strategies to avoid cod catches in Baltic Sea trawl fisheries" and refers to different selective gears. <http://www.bsac.dk/Meetings/BSAC-meetings/BSAC-Joint-WG>

On the pelagic stocks

Asked about the possible scenario for a rebuilding plan for western herring, Colm Lordan chair noted that the WKREBUILD workshop on the rebuilding plans, with western Baltic herring being one of the case studies in the workshop, had made progress in terms of identifying the needs, setting the timeframe for rebuilding, risk level and target. Approximately 7 years will be required to reach with 97% probability an SSB above B_{lim} .

The Working Group discussed the spatial management for the sprat fishery to improve the quality of cod. The WG chair stated that the main reason why it is very difficult to move forward with this issue, is because there is no operational advice. It would need funding, and it would take 2-3 years to develop operational advice need in order to take further steps in spatial management.

The ACOM chair noted that a recommendation to consider such a management had been in the advice for a number of years, but was not repeated this year, because the scientific evidence was not of a quality that could support such an advice. Experts involved in sprat and cod biology are of the opinion that spatial management of the sprat fishery is a challenge for the future, and requires dedicated work, for which funding is lacking.⁶

Several OIG representatives expressed their support for restrictions to the sprat fishery in SDs 25-26 so as to redistribute the sprat fishery to the northern areas (subdivisions 27-29 & 32) to maximise food availability for cod in line with the ICES advice.

Several fisheries representatives were against the spatial management of the sprat fishery. In their view, moving the sprat fishery to the north would have a severe impact on those vessels that are too small to go to distant fishing grounds and which are becoming increasingly dependent on the sprat. They referred to the lack of scientific evidence that the growth of cod depends on sprat.

In their view, more scientific research is needed in order to document and evaluate the benefits of such spatial management for cod stocks.

The BSAC chair asked Colm Lordan to elaborate on the inter-benchmark for central Baltic herring and sprat, in particular related to the natural mortality. Numbers have been updated to include how much herring and sprat is eaten by cod. Colm Lordan

⁶ Marine Ingredients Marine Ingredients (unable to attend 10.6.20) supports the highest possible quotas on herring and sprat for 2021. In particular, sprat eats the cod eggs and larvae therefore it makes good sense to fish sprat on the spawning grounds of the cod. The science base for our recommendation can be found on page 34-35 of the attached report: “management policy would involve the deliberate reduction of the biomass of a forage fish—one of the few cases where such a measure might be considered beneficial to the ecosystem as a whole. This example is unique in that there is an attempt to examine forage fish in the context of their predators, where multi-species assessments account for changes in forage fish density (sprat and herring) based on predator abundance (cod).” Little Fish Big Impact: <http://www.bsac.dk/Meetings/BSAC-meetings/BSAC-Joint-WG>

confirmed the inter-benchmark which had addressed the natural mortality and updated the reference points. New estimates of cod diet composition were included in the updated stock dynamics for the eastern Baltic cod and had led to a big change for the natural mortality of the herring, and a lesser change for the sprat. However, ICES is not necessarily forecasting the impact on or increase/decrease of the size of the cod stock. A benchmark for sprat and central Baltic herring is anticipated in 2022.

An OIG representative asked why the precautionary buffer was not applied to the herring in SDs 30+31. Colm Lordan replied that it was not necessary this year; the stock in relatively good shape, and downgrading to Category 3 was a short term measure.

Two fisheries representatives referred to discards and drew attention to high mortality of fish escaping from the fishing nets. In their view, mortality caused by discards should be taken into account in the advice. Colm Lordan referred to studies on fish survivability carried out in the past. These studies are complicated and expensive. The estimates of such mortality are not specifically taken into account in the assessment, but are implicitly taken into account as background natural mortality.

On the salmon stocks

With reference to salmon, some members of the OIG expressed concern about the effectiveness of the measure used to decrease misreporting and stated that more precaution is needed on TAC setting until there is published evidence that these measures are effective and suitably controlled. They also found it strange that ICES does not consider a more precautionary approach, since the advice (also in the special advice concerning a Baltic salmon MAP given earlier in May 2020) clearly states that current fishing on mixed stocks is making it impossible to reach MSY, and may lead to several stocks becoming extinct.

At the end of the first day, **the Working Group** thanked Colm Lordan for taking part.

The Working Group met on the second day to discuss and draft preliminary recommendations from the BSAC.

The Working Group reached consensus opinions on the Gulf of Riga herring and herring in the Gulf of Bothnia.

With reference to other stocks, the views amongst the BSAC members were varied and were noted by the Secretariat. Participants were invited to submit written comments to the BSAC recommendations for 2021 after the meeting.

The Working Group decided to recommend to the ExCom to strongly urge Member States to work on developing gears that are more selective and that enable the escape of cod. Fishers should have the legal possibility to use the selective fishing gears that are tested and where it is scientifically proved they are effective in eliminating cod bycatches. Such gears should be recommended by BALTFISH in a joint recommendation to the Commission.

The Working Group decided to recommend to the ExCom to make a strong call on BALTFISH to put pressure on the European Commission and STECF to deal with the joint recommendations coming out of BALTFISH and not to delay them.

The Working Group decided to recommend to the ExCom that plaice should become a targeted species. This will require an amendment to the Baltic MAP and will change the basis of the advice in terms of MSY and the provision of ranges.

The Working Group decided to recommend to the ExCom an evaluation of the measures implemented for cod protection in 2020.

The Working Group agreed that in view of the challenging situation of Baltic fisheries, there is a need to produce a package of measures:

- In order to recover and safeguard Baltic fish stocks, including eastern Baltic cod, setting a TAC must be supported with additional conservation measures.
- A rebuilding plan for eastern Baltic cod should be developed, taking into account all threats on the stock, including eutrophication, pollution, climate change, habitat loss and predators, as well as the general state of the Baltic Sea ecosystem.

The Working Group agreed on the continued need to focus on the overall ecosystem, and the other factors affecting the well-being of certain stocks (e.g. seals, lack of oxygen, etc.). There is a need to ICES to further develop its fisheries overviews, as well as taking into account ecosystem, multi-species considerations and food-web interactions. Science should include in the assessments regime shifts in the Baltic in a more dynamic way, and put more effort into age determination of cod. If there is a systematic reduction in productivity of the ecosystem, there may be a need for the adaptation of fishing capacity and the whole structure of the sector. There is a need for a more substantial reflection on socio-economic aspects and more kinds of aid to convert or adapt the sector.

The Working Group asked the Secretariat to produce, after the meeting, draft BSAC recommendations for the fishery in the Baltic Sea in 2021. Participants were asked to submit input to the recommendations. The draft would be sent to the WG and ExCom for comments and adoption through written procedure. The final recommendations will be sent to the Commission at the end of June.

4. Additional issues

With reference to stickleback and cod (*The issue was put forward by the Confederation of Fishermen and Fish Processors of West Lithuania. It was question about the stickleback fishery as a part of a plan to save cod*), Colm Lordan noted that there is some evidence that the population is increasing. Stickleback feeds on fish eggs. It is not taken into account in the ICES work due to the lack of data. Sweden and Estonia are carrying out research projects on stickleback.

Several fisheries representatives confirmed that the growing population of stickleback could be a problem, because they eat the same food as commercial fish. In their opinion, stickleback should be fished more intensively. They recommended the development of a stickleback fishery in the Baltic Sea.⁷

It was also informed that a Swedish study is ongoing and should be finalized end of this year. An Estonian study was finalized in 2017.⁸

An OIG representative noted that stickleback could be a problem to the ecosystem and suggested that the BSAC works on formulating questions.

The Working Group decided that this issue should be discussed in the EBM Working Group. The Working Group expressed general support for a pilot fishery project for stickleback, supported by a scientific programme. A stickleback fishery could have positive effects on the ecosystem and provide an opportunity for fishermen challenged by the current situation in the Baltic.

With reference to seals, a representative of German small-scale fisheries noted that the growing population of seals has an enormous impact on fishery. In particular, there is an urgent need for an assessment of the influence of parasites carried by seals on the nutritional status of cod caused by liver worm (skinny cod). For that, there is an urgent need to act and to have a seal management plan in place.

A representative of recreational anglers noted that the BSAC should advise the Commission to totally lift the ban on trade in seal products in order to facilitate the local seal management programmes of the Member States and avoid the waste of natural resources and money now connected to the disposal of seal carcasses.

After an exchange of views, **the Working Group decided** that the discussions on seal-fisheries interactions and ways to mitigate them should be discussed in the EBM Working Group.

The Working Group chairs thanked the participants for a good discussions. They also thanked the Secretariat, technicians and interpreters for their efficient work in the extraordinary circumstances of an on-line meeting.

⁷ Marine Ingredients refer to a report: The first large-scale assessment of three-spined stickleback (*Gasterosteus aculeatus*) biomass and spatial distribution in the Baltic Sea, ICES Journal of Marine Science and figures from Olsson et al. 2019. Stock biomass in the Baltic Sea 1974-2019. And Power point on biomass:
<http://www.bsac.dk/Meetings/BSAC-meetings/BSAC-Joint-WG>

⁸ Find the Estonian study on BSAC website: <http://www.bsac.dk/Meetings/BSAC-meetings/BSAC-Joint-WG>