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#### RE: U.S. Atlantic Winter Skate Scope Extension to the U.S. Atlantic Spiny Dogfish Fishery Marine Stewardship Council Certification Public Comment Draft Report

Dear Ms. Stern-Pirlot,

Thank you for accepting our stakeholder comments on this assessment report to extend certification of the US Atlantic spiny dogfish fishery to include winter skate in its scope of certified species. To our knowledge, this would be the first skate species to be certified under MSC. It is, therefore, important that the scoring and rationale used are robust and the precedent set is a high standard for certification of such inherently vulnerable species.

As a member of the subclass Elasmobranchii, winter skates possess life history characteristics that make them especially vulnerable to exploitation and leave them with little capacity to recover from heavy fishing pressures. Many of these life histories relate directly to the winter skate's ability to rebuild populations in the face of commercial harvesting. These characteristics include late maturation of adults, long generation time, and low reproductive potential, which all translate to slow population growth in general. Considering their life history, winter skate management needs to be approached through a precautionary lens, especially given our limited understanding of current stock health.

We are concerned about the uncertainty and gaps in data for this species that has been accepted for the certification. The information which informed the assessment for winter skate is now a decade old and is based on data poor frameworks. As such, definitions and reference points determined from this information may not reflect winter skate stocks in their current state. We do not think the uncertainties are properly accounted for in the current assessment and the management framework should be more precautionary.

Further taxonomic confusion also presents challenges for how well we understand winter skate stock. and health, as there are few ways of differentiating winter skate from its cryptic sibling species, little skate, especially at smaller lengths (TL). Considering this overlapping morphology, as well as their overlapping distribution along the Northwest Atlantic, assumptions and estimates for winter skate are subject to inaccuracy when identification is not determined genetically.





There is an assumption that winter skate have recovered and are no longer in a depleted state, however, relying on this assessment, given the data gaps and concern about accurate representation of historic catch and landings that are species specific, warrant precaution. We do not think the information available passes MSC scoring posts.

## **Specific Scoring notes**

### PI 1.1.2 Reference Points

The reference points used are proxies based on agreed definition of overfishing of winter skate and are subject to significant uncertainty. These reference points are also based on a definition of overfishing for the species that is now a decade old and is in need of updating if it is to accurately reflect the true limit and target reference points appropriate for the species. With the limited data available for winter skate, there is much uncertainty around the health of the stock and whether the stock assessment, which is also now a decade old, represents the actual health of winter skate stocks. For this reason, we do not actually know whether these reference points are appropriate for the species, thus not warranting a PI score of 80 for 1.1.2a. Furthermore, we know winter skate, along with their Elasmobranch relatives, possess life history characteristics that make them especially vulnerable to exploitation and heavy fishing pressures, and these characteristics significantly impact winter skate's capacity to recover from these pressures. As such, winter skate management needs to be approached through a precautionary lens.

Certifying this fishery prematurely undermines incentives to improve the assessment framework and reference points.

### 1.1.2 b and c

Scoring and justification for 1.1.2 b & c are overly optimistic, as justification assumes stocks have recovered to a healthy state. The reference point appropriateness is already called into question given the lack of species specific data in the historic timeline and data poor assessment framework and, as is noted for scoring, does not pass 100 when considered with 'precautionary issues'. As noted above, such inherently vulnerable species should warrant a high level of precaution to pass even the SG 60 level.

### 1.2.1 and 1.2.2 – Harvest Strategy

Justification for giving winter skate a score of 100 in 1.2.1 & 1.2.2 largely hinges on the fact that a buffer of 25% will reduce the Annual Catch Limit, however, the assessment report notes that this buffer will be reduced to 10% in the soon-to-be amended Fisheries Management Plan. So much of what we know about winter skate is assumed using old data which has seen minimal updating. For this reason, a harvest strategy which reduces buffer by over half before we have sufficient time to determine the capacity of this species to recover is inappropriate, and does not warrant a score of SG100, let alone a score of SG80. Furthermore, this reduction also reduces consideration for uncertainties, which was a main criteria for SG80 in 1.2.2b. Overall, justification for scoring is unclear and inconsistent with criteria the fishery was assessed against.





1.2.1 and 1.2.2 were given average scores of SG90 and 80 respectively, and we fear this does not capture the significant threat of overexploitation on winter skate stocks. There is concern for the slow growth and maturation of winter skate relative to the rate at which they are harvested. Winter skate are one of the largest shelf-dwelling skates found the Atlantic, and are targeted largely for their wing meat. Other large skate species found in the Atlantic, including the Barndoor skate (currently prohibited in the US), the Common skate and the White skate, have all experienced significant decline in population due to skate wing fishing, and these species are listed as 'Endangered', 'Critically Endangered' and 'Endangered' respectively. The Barndoor skate provides an example of the implications of overexploitation when it comes to skates. The species was fished to a point of near extinction in 1998 and was almost the first well-documented extinction event in marine fish species. Extinction was narrowly avoided, and Barndoor skate were prohibited in US fisheries in 2004. Almost 15 years later, Barndoor skate populations are now stable in the Atlantic, however this example helps to illustrate not only how sensitive skates are to exploitation, especially the larger growing ones, but also how long it takes for these populations to recover in the face of heavy fishing pressures.

Skates in general have been identified as ecologically significant to demersal fish communities when considering their abundance and biomass. Trophic position as well as wide distributions make winter skate a key player in maintaining balance within these communities, and these have also suggested that skates could provide valuable insight as indicators of ecological change. For this reason, it is imperative that stocks are not fished to an extent that would compromise the essential role they play in maintaining a healthy demersal ecosystem

Additionally, the CAB report notes that fisheries targeting winter skate in the bait fisheries will target juvenile winter skate. This is a major concern in the harvest strategy. Winter skate become very cryptic in their morphology as juveniles and young adults. The winter skate share almost identical morphology with their sibling species, little skate. Winter skate can primarily be differentiated from little skate at larger sizes, as winter skate have a significantly larger maximum size than little skate. However, at smaller sizes, below 35cm TL, which encompasses the juveniles bait fisheries would target, it becomes impossible to differentiate between the two species in the field. The only known, fool-proof way to differentiate the two species below 35cm TL is through genetic testing. Therefore, not only could the actual catch of winter skate be skewed as a result, but fisheries could begin to have an unintentional impact on the health of little skate stocks, and these impacts could run the risk of going unnoticed as a result of cryptic morphology at these smaller TL ranges.

### 1.2.3 a

Before passing the 60 scoring post for winter skate under 1.2.3, the assessment should be updated. The data poor stock workshop took place in 2009 and is not a sufficient substitute for more updated assessment

The extent of data gaps in the understanding of this species is incredibly underestimated in the assessment scoring rationale. Skates are an understudied groups of elasmobranchs in comparison to their charismatic relatives the sharks and rays. The cryptic morphology of winter skate presents another challenge when it comes to assessing the health of stocks, as winter skate share almost identical morphology with a sibling species, the little skate. Currently, there are very few ways of

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differentiating these species in the field. As a result, accurate ID of these species largely relies on genetic sampling or size comparison, since winter skate grow considerably larger than little skate who reach a much lower maximum TL of approximately 53-59 cm. Issues arise for individuals caught at a length of 30-35 cm for both winter and little skate, as they appear nearly identical in these lower TL ranges. Accurate species identification has remained a major challenge across the Northwest Atlantic Skate Complex, when the misidentification and confusion between four species in this complex, the European Common skate, White skate, Norwegian skate and Longnose skate, which were documented under two taxonomic ID's, led to the critical endangerment of the European Common skate.

# 1.2.3 b

Justification for SG80 under 1.2.3b requires that stock abundance and removals of the fishery are regularly monitored at a level of accuracy and coverage consistent with harvest strategies, however, we argue that this is not the case with winter skate. Up until 2014, species-specific data was not required to be collected for skates. Relying on this assessment, given the data gaps and concern about accurate representation of historic catch and landings that are species-specific, does not meet the MSC scoring bar. Additionally, the implications of taxonomic confusion and inability to differentiate species clearly can be severe, and overlapping distribution of winter and little skate along the northwestern Atlantic make accurate identification and data collection a serious concern. This cryptic morphology between the two species means biomass and abundance estimates from surveys where genetic identification did not take place may not capture the true state of the populations from surveys. As a result, although monitoring has taken place in the past, we argue it has not been sufficient enough to capture the true state of winter skate stocks currently, nor to support the harvest control rules put in place. Furthermore, assumptions about winter skate stocks based on abundance surveys need to consider the possible overlap between the morphologically identical little skate.

What is the observer coverage for this fishery and the requirements for reporting winter skate both in log books and in fishery-dependent sampling to ensure species accuracy?

### 1.2.4 a and c

The perceived health of winter skate stocks is based on an assessment that is now a decade old and was conducted using data-poor workshopping/frameworks. Reporting for winter skate has historically been low, and it should be noted that species-specific data collection was not introduced until 2014, meaning that our understanding of winter skate stocks is even more limited. The NEFSC surveys indicate winter skate has experienced dips below the biomass threshold historically, and when taking into consideration the life history traits for the species, the risk of exploiting the species beyond their capacity is high. Based on the uncertainty and weak nature of the assessment used in determining the health of winter skate stocks in assessing it for certification, as well as considering their history of decline and troublesome life history traits, further consideration needs to be made prior to certifying winter skate as sustainable. Most importantly, our assessment of this species needs to be updated if we are to even begin to make decisions about the best way to manage and harvest winter skate responsibly and sustainably.

4





As a member of the subclass Elasmobranchii, winter skates possess life history characteristics that make them especially vulnerable to exploitation and leave them with little capacity to recover from heavy fishing pressures. Many of these life histories relate directly to the winter skate's ability to rebuild populations in the face of commercial harvesting. These characteristics include late maturation of adults, long generation time, and low reproductive potential, which all translate to slow population growth in general. Of particular concern is this late maturation in females relative to the maximum age observed, which results in very few spawning episodes in a single individual's life. These characteristics have already proven to play a role in the winter skate's ability to recover from heavy fishing pressures.

The level of assessment the CAB has accepted here, even with a data poor lens, is very low compared with Principle 1 stock assessments across the wide variety of MSC certifications we have been stakeholders in. In comparison to spiny dogfish, the other target species component of this fishery, which received an in-depth assessment in 2018 according to NOAA, the assessment used to score winter skate is way out of date. Not only is it out-dated, but it is also riddled with uncertainties due to the lack of species-specific data collected until recently, as well as the taxonomic confusion that exists between winter skate and little skate. The assessment does not address these uncertainties sufficiently, and as such, proposed management is not precautious enough to reflect the vast uncertainties that remain in this assessment.

We do not feel a pass of the SG 60 on this PI is justified for this species at the present time.

Thank you for your consideration of our comments. Sincerely

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5



#### References

COSEWIC. (2015). COSEWIC Assessment and Status Report on Winter Skate, Leucoraja ocellata. Retrieved from https://www.sararegistry.gc.ca/virtual\_sara/files/cosewic/sr\_Winter%20Skate\_2015\_e.pdf April 10, 2019

Dulvy, N.K., Notarbartolo di Sciara, G., Serena, F., Tinti, F. & Ungaro, N., Mancusi, C. & Ellis, J. 2006. Dipturus batis. The IUCN Red List of Threatened Species 2006: e.T39397A10198950. http://dx.doi.org/10.2305/IUCN.UK.2006.RLTS.T39397A10198950.en.

Dulvy, N. K., Metcalfe, J. D., Glanville, J., Pawson, M. G. and Reynolds, J. D. (2000), Fishery Stability, Local Extinctions, and Shifts in Community Structure in Skates. Conservation Biology, 14: 283-293. doi:10.1046/j.1523-1739.2000.98540.x

Iglésias, S. P., Toulhoat, L. and Sellos, D. Y. (2010), Taxonomic confusion and market mislabelling of threatened skates: important consequences for their conservation status. Aquatic Conserv: Mar. Freshw. Ecosyst., 20: 319-333. doi:10.1002/aqc.1083

Fisheries and Oceans Canada. (n.d.). Little Skate, Leucoraja erinacea. Retrieved from http://www.dfompo.gc.ca/species-especes/profiles-profils/littleskate-raieherisson-eng.html April 10, 2019.

Sulak, K.J., MacWhirter P.D., Luke K.E., Norem A.D., Miller J.M., Cooper J.A., and Harris L.E. 2009. Identification guide to skates (Family Rajidae) of the Canadian Atlantic and adjacent regions. Can. Tech. Rep. Fish. Aquat. Sci. 2850: viii + 34 p.

Whidden, J. A. (2015). Population demographics and species identification of two at-risk skates, Little Skate, Leucoraja erinacea, and Winter Skate, Leucoraja ocellata, in Minas Basin, Bay of Fundy. Retrieved from http://scholar.acadiau.ca/islandora/object/theses:381

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