Dear Dr. Clements,

Thank you for the feedback on the draft technical report that we submitted for review back in June of 2021. I was very glad to receive such positive reviews from DFO colleagues, and trust that this extensively revised work is ready for publication.

We believe that all the comments and issues raised by the three reviewers have been addressed in the document being resubmitted for publication. Responses to all points raised by individual reviewers appear in the attached Word document. We thank the reviewers for their comments, the document is now clearer and some tangible positive changes were done on a number of figures and in the text.

If you feel that the revised report is satisfactory and wish to proceed with its publication, please let me know once the DFO Library issues a report number and an ISBN, and I will include them in the final PDF.

All the best.

Daniel Ricard and co-authors

**Responses to reviewer 1 (Koen-Alonso)**

We thank Mariano for his constructive comments and for his encouraging words.

* Figures 1 and 2 are now appearing in the same order as they are cited in the report.
* Table 1 (now Table 2) was modified to also include the depth range of each stratum in meters.
* More details were given about the standardization of catch data by trawled distance only, and an additional table (new Table 1) detailing the vessels and fishing gears was added to the document. This new table also reports the gear width of the trawls used in the survey, even though it is not used in the catch rate calculations.
* The taxonomic groupings used for the 104 species is now better described in section 2.3.
* The justification for using an exponent value of 10 for the IDW spatial interpolation was added to section 2.4.1.
* Section 2.4.4, a more complete description of stratified numbers-at-length has been added.
* The density-dependence habitat selection model equation in section 2.4.7 was corrected.
* The duplicated sentence in section 2.5.1 was removed.
* “Compliment” changed to “complement” in section 4.1.
* The classification of cusk (*Brosme brosme*) as category LI is based on the number of records (between 200 and 1000 records), not on its distribution. So the classification of this species as category LI is correct and remains unchanged.

**Responses to reviewer 2 (anonymous)**

We thank reviewer 2 for his/her constructive comments and for his/her encouraging words.

* The term “environmental preferences” was changed to “environmental associations” in the title of the report as well as in the text.
* What is meant by “number of records” was clarified in the text, it now explicitly states that it is the number of sets where a species was caught, to distinguish it from the number of individuals caught.
* The reason explaining why invertebrate species were not consistently identified prior to 1999 has been added to section 2.3.
* The relative fish condition defined in section 2.4.5 now cites LeCren (1951).
* Rewording in section 2.4.7 to “we implemented a generalized linear model” as suggested.
* The density-dependence habitat selection model equation in section 2.4.7 was corrected.
* Sections 3.1 and 3.2 were kept in the Results section as they describe the actual number of sets that were conducted and the cumulative frequency distributions of depth, bottom temperature and bottom salinity of those sets. The reviewer suggested moving these sections to the Methods section but they really are results.
* “wasd” changed to “was” in section 4.2
* The text was modified to include all the wording and editorial changes suggested by reviewer 2.

**Responses to reviewer 3 (Cook)**

We thank Adam for his constructive comments and for his encouraging words.

* Table 1 (now Table 2) and Figure 3 were modified, and some text was added to section 2.2 to address the reviewer’s comments about color-coding the strata map by depth, and the mixed depths encountered in strata 443, 444, 445 and 459. The revised map in Figure 3 is inspired by Figure 1 in Cook and Bundy (2012) and strata with mixed depths are now clearly identified.
* Two sentences were added to section 2.3 to document the change from spring scales to electronic balances, and how it changed the error structure of weight measurements.
* Table 2 (now Table 3) was changed so that category LI is described as “between 200 and 1000 catch records”.
* Stratum areas in square kilometers in Tables 4 to 6 (now Tables 5 to 7) were rounded to the nearest integer.
* Added “type=1” in the sentence about using representative tows in section 2.4.
* The fact that figure Types C, D, E and F are for Category LF species was added in section 2.5.
* We now cite the paper by Smith (1997), and additionally note in the text that the results presented could use overestimates of the true stratified variance. We also note that negative estimates are presented as zeros.
* An additional sentence was added to section 2.4.6 to provide more details about the Perry and Smith plots. However, for brevity, we decided not to repeat the equations appearing in Perry and Smith (1994).
* The density-dependence habitat selection model equation in section 2.4.7 was corrected.
* The caption for IDW figures now describes what P(occ) represents. Note that P(occ) is also described in section 2.5.1.
* The caption for the temporal evolution of distribution indices now describes the loess smoother. Note that this is also described in section 2.5.2.
* The condition plots were modified based on the reviewer’s comments, and are now clearer. The figure captions now describe all aspects of the plot.
* The “Perry & Smith plots” (Type E figures in our report), were indeed labelled incorrectly, the survey-level and the species-specific empirical cumulative distributions are now correctly labelled. Additionally the 5th, 25th, 50th, 75th and 95th percentiles are now drawn as lines on the plots.
* The caption of the density-dependent habitat selection plots now defines what the red and black lines represent.
* Line 484, the report by Serdynska et al. did use quintiles, and we have also updated the reference as the report was recently published.

To include some suggestions made by reviewer #3, the figure showing the indices of distribution was modified from the one that appeared in the draft document. It now includes the surveyed area, the design-weighted area of occupancy, D75% and D95%.