

Interactive comment on “Diets of the Barents Sea cod from the 1930s to the present day” by Bryony L. Townhill et al.

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Dear authors, according to the now long lasting difficulties to find reviewers, I add this review on your manuscript.

Within your manuscript you describe and present a very impressive dataset spanning the period of 90 years of fishery ecology and feeding behaviour. The data from stomach analysis are tremendously valuable to the ecological community and modeling community. While the diet of cod as a very important species within the Barents Sea system is a quantified connection between the components of this ecosystem and the possible effects any change in stock size might have on the directly connected components or the system as a whole. This dataset is valuable and should be published after some

C1

revision. However the value of the data set should be emphasized with some more detailed informations on the dataset and its usability. Bringing the data to the foreground and having it ready for reuse is right at the heart of ESSD. The availability of the data is great a CC4 license and a flexible landing page at the repository directly pointing to the download of the dataset, well chosen.

General comments: A table breaking the most important key data about the data set into digestible format would be great. Consider time slices as rows per dataset combined with the country of origin. Columns could be years or period, total number of samples, % empty stomachs, area of sampling (ICES rectangles or natural areas), Pooled data or individual samples, and other fields such as most important prey species or average number of prey species, fishing gear,

Within the section 2 of the text you present very well the methodology for the UK dataset. You do mention the fishing gear for that particular dataset (actually the oldest set, but you do not present this important information for the other datasets. I also have to say, that the structure of the section 2 is for me while reading a kind of puzzling. May be the already mentioned table and/or the leaving the Russian data out of the description at all could bring some clarity or structure to the text as well. Please find a structure what you think is required to describe the datasets by and then keep to the structure in all subsections describing all the individual datasets.

The Russian data are not part of the published dataset and they are not available at all by the here publishing authors. Why are these data then mentioned to such great extent within the manuscript? Mentioning the data is important and a valuable information to the reader where to find more data if accessible. Just keep the focus more to the published dataset and not dilute the message of the published data by mentioning the unavailable data.

The figures presented to describe the datasets could have more resolution to increase information content. The Russian data could be removed or colored differently in the

C2

figures.

It would be nice to have representation of the most important prey species distribution maps

Figure 2 the scales at the y axis are all in the same order of magnitude, but drawn differently, this should be avoided

Figure 3 could include information per time period on the ice extent, which would give some information on why there are only in the later years data from the east of Svalbard Is there a reason in figure 3 why the maps represent the decades and no other time periods? Anyway, it is good to stick to the chosen periods in all figures, which you did in the current status of the manuscript, but I would consider a different spacing in time or changing from points to like convex hulls to represent the sampling area to make the extent of the data more prominent Since all the points are not distinguishable from each other either figure size or type could help.

Maps on the stomach content could be summarized by pie charts representing the ICES rectangles this would also reveal if there were areas of increased number of empty stomachs.

All these comments and suggestions do cause number of changes to the manuscript and I suggest that i will have a more detail oriented look at the manuscript after these revisions, which I consider only minor revisions.

Regards Dirk Fleischer

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