Interactive comment on “Macrofauna community inside and outside of the Darwin Mounds SAC, NE Atlantic” by N. Serpetti et al.

Anonymous Referee #3

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General comments:

MS. Macrofauna community inside and outside the Darwin Mounds SAC

This paper seems to do many things at once and thus has a problem addressing why the observed differences between inside and outside locations are there.

The introduction and discussion focus on fisheries impact in the Darwin Mound area. This area was protected due to occurrence of corals. However the study deals with small and short-lived infauna sampled with corers and not corals that might still carry signs of damage and of recovery.

The study compares an area fished 7 years ago with an area still fished.
Seven years would probably allow for many infauna species to recover from trawling impact but do we know what the reference conditions are?

The grain size differs in the sampled areas within and outside the SAM and thus this can very well explain observed differences in abundance, but we do not know, thus it is hard to see how this can be related to fisheries impact.

In conclusion: The study documents infauna within and outside the Darwin Mounds SAC but the sediment differs and the history of human pressure differs so it cannot tell us whether differences are due to recovery (reference point is lacking) or sediment differences.

This ms should not be published without substantial change of scope. It is mainly a small study of infauna in an area that varies in sediment condition and human impact history and it cannot provide conclusive results on patterns relating to the environmental setting.

Manuscripts rated 4 (poor)

Does the paper address relevant scientific questions within the scope of BG? Probably

Does the paper present novel concepts, ideas, tools, or data? No

Are substantial conclusions reached? No

Are the scientific methods and assumptions valid and clearly outlined? Yes

Are the results sufficient to support the interpretations and conclusions? No

Is the description of experiments and calculations sufficiently complete and precise to allow their reproduction by fellow scientists (traceability of results)? Yes

Do the authors give proper credit to related work and clearly indicate their own new/original contribution? Yes

Does the title clearly reflect the contents of the paper? No
Does the abstract provide a concise and complete summary? No
Is the overall presentation well structured and clear? No
Is the language fluent and precise? Yes
Are mathematical formulae, symbols, abbreviations, and units correctly defined and used? Yes
Should any parts of the paper (text, formulae, figures, tables) be clarified, reduced, combined, or eliminated? Yes
Are the number and quality of references appropriate? No
Is the amount and quality of supplementary material appropriate? Yes

Interactive comment on Biogeosciences Discuss., 9, 16907, 2012.