

Interactive comment on "Integrating network topology metrics into studies of catchment-level effects on habitat diversity" by Eleanore L. Heasley et al.

Eleanore L. Heasley et al.

eleanore.heasley@kcl.ac.uk

Received and published: 3 April 2019

Thank you very much for taking the time to read our manuscript and for your constructive comments.

You have highlighted some key concerns regarding the boldness of some claims made in the original manuscript (i.e. the novelty of the network metrics and our conclusions based on mid-weak strength correlations) and identify areas where the statistical analysis employed may be improved upon (i.e. your suggestion to use correlation for the stream order variable and to use median, 1st and 3rd quartile values) in addition to other comments.

C1

Based on your comments, we have revised the manuscript (see Supplement) and provide a table (see Supplement) detailing our specific response to each of your concerns, along with the concerns of our 1st referee. On occasion where we dispute part of your comment so that it is not fully rectified in the revised manuscript, it is indicated in the table with the phrase "Part-addressed". We have altered components of our statistical analysis at your suggestion and so the figures, results and discussion have been updated accordingly.

We believe the revised manuscript now adds more to the discussion surrounding the impacts of network topology on river reach characteristics and is of improved scientific rigor. We hope you share our view and that the changes we have made satisfy your concerns with the original manuscript.

Please also note the supplement to this comment: https://www.hydrol-earth-syst-sci-discuss.net/hess-2018-89/hess-2018-89-AC2supplement.zip

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2018-89, 2018.