

TO: Potential co-authors

FROM: Lead author

RE: Authorship of manuscript titled: XXXX

The XXX collaborative group has drafted a list of responsibilities for manuscript co-authors. The goal is to have an open dialog regarding authorship and to clearly define each co-author's responsibilities and accomplishments throughout the effort. Below are common contributions made by co-authors. We feel that co-authorship requires roughly 2-3 contributions below, the appropriate minimum depending on individual circumstances. We also feel that these contributions need to occur within the timeline established for each paper. Note that some contributions often relegated to the acknowledgments section are included, but that those who contribute in only one category would be placed in the acknowledgments.

We recognize that some co-authors may be employed by agencies that have agency review requirements, and we will respect that requirement as long as 1) co-authors are not obligated to accept proposed changes, especially those that are more political than scientific, and 2) review doesn't introduce unreasonable delays. Thus, co-authors that work for agencies requiring reviews must take responsibility for scheduling and marshalling the review process, and getting the review comments back to the co-authors within 3 weeks of the request for the review. Finally, we clarify that only authors have editorial control over the paper, and agency review will not be used to suppress findings that the working group has collectively decided should be published. Should an agency review attempt to either prevent publication or significantly alter findings in ways that are not acceptable to the remainder of the co-authors, then the agency co-author will have the option to withdraw their name from the paper.

We highlight one view on this distinction below.

Weltzin et al. 2006: *"Drawing the line between acknowledgements and co-authorship can be challenging and one way of thinking about the differences may be to consider whether or not the participant is responsible and accountable for the article. A contributor receiving credit for the article should be willing to be held accountable for its contents and not be just responsible for a portion of work involved. In contrast, an acknowledgement may contribute formal or informal ideas to ongoing projects, collect enormous amounts of data, and develop and/or conduct statistical analyses, but may not be accountable for the final contents of all or even portions of the final manuscript."*

We ask that you fill in the following table with the description of your contributions for each activity that applies.

These documents will be archived on our team's collaborative website with each manuscript.

Author contributions by: *Insert your name here and fill in table below*

Activity	Your specific contributions
Conceived of the idea for the MS – e.g., framing the question or objectives, overall idea	
Designed the MS – help determine structure of the MS, the intellectual content and scope, etc.	
Supervised – oversight and responsibility for the organization of the project and manuscript	
Performed research - Data collection	
Performed research - Data analysis or modeling	
Contributed new methods or models	
Drafted figures and tables	
Wrote parts of the MS -- selected portions of the manuscript	
Performed critical reviews – reworking the manuscript for intellectual context before submission, not just spelling and grammar checking, within three weeks of receiving the draft.	
Other – other contributions not listed above, please specify.	

Modifications of documents in:

Cheruvilil, K. S., Soranno, P. A., Weathers, K. C., Hanson, P. C., Goring, S. J., Filstrup, C. T., & Read, E. K. (2014). Creating and maintaining high-performing collaborative research teams: The importance of diversity and interpersonal skills. *Frontiers in Ecology and the Environment*, 12(1), 31-38. DOI: 10.1890/130001

Citations and guidelines

Weltzin, JF, RT Belote, LT Williams, JK Keller and EC Engel. 2006. Authorship in ecology: attribution, accountability, and responsibility. *Front. Ecol. Environ.* 4(8):435-441.

Contributor Roles Taxonomy (CRediT): http://dictionary.casrai.org/Contributor_Roles

The Ecological Society of America guidelines provided in its Code of Ethics (ESA 2006):

1. Researchers will claim authorship of a paper only if they have made a substantial contribution. Authorship may legitimately be claimed if researchers
 - (a) conceived the ideas or experimental design;
 - (b) participated actively in execution of the study;
 - (c) analyzed and interpreted the data; or
 - (d) wrote the manuscript.
2. Researchers will not add or delete authors from a manuscript submitted for publication without consent of those authors.
3. Researchers will not include as co-author(s) any individual who has not agreed to the content of

Panel 3. Guidelines for authorship, *Proceedings of the National Academy of Sciences of the United States of America* (PNAS 2006)

Authorship should be limited to those who have contributed substantially to the work. The corresponding author must have obtained permission from all authors for the submission of each version of the paper and for any change in authorship.

All collaborators share some degree of responsibility for any paper they co-author. Some co-authors have responsibility for the entire paper as an accurate, verifiable report of the research. These include co-authors who are accountable for the integrity of the data reported in the paper, carry out the analysis, write the manuscript, present major findings at conferences, or provide scientific leadership to junior colleagues. Co-authors who make specific, limited contributions to a paper are responsible for their contributions, but may have only limited responsibility for other results. While not all co-authors may be familiar with all aspects of the research presented in their paper, all collaborators should have in place an appropriate process for reviewing the accuracy of the reported results.

Authors must indicate their specific contributions to the published work. This information will be posted online as a footnote to the paper. Examples of designations include:

- Designed research
- Performed research
- Contributed new reagents or analytic tools
- Analyzed data
- Wrote the paper

An author may list more than one contribution, and more than one author may have contributed to the same aspect of the work.

Modifications of documents in:

Cheruvellil, K. S., Soranno, P. A., Weathers, K. C., Hanson, P. C., Goring, S. J., Filstrup, C. T., & Read, E. K. (2014). Creating and maintaining high-performing collaborative research teams: The importance of diversity and interpersonal skills. *Frontiers in Ecology and the Environment*, 12(1), 31-38. DOI: 10.1890/130001