




# **Peer Review: Goals-based species selection process for connectivity modeling and planning**

Leslie Bliss-Ketchum<sup>1,2</sup>, Catherine E. de Rivera<sup>2</sup> , Rachel E. Wheat<sup>3</sup> , Martin Lafrenz<sup>4</sup> , & Lori Hennings<sup>5</sup>

*Collaborators: Kathleen Carroll + 2 other reviewers*

---

<sup>1</sup> Department of Environmental Science and Management, Portland State University, Portland, OR, USA

<sup>2</sup> Samara Group LLC, Portland, OR, USA

<sup>3</sup> Oregon Department of Fish and Wildlife, Salem, OR, USA

<sup>4</sup> Department of Geography, Portland State University, Portland, OR, USA

<sup>5</sup> Conservation Program, Parks and Nature Department, Metro, Portland, OR, USA

Accepted by 2 of 3 reviewers

## Conflicts of Interest

The authors declare no conflicts of interest.

## Publishing History

Submitted January 17 2025

Accepted January 20 2026

Published May 29 2026

## Corresponding Author

Leslie Bliss-Ketchum  
leslie@samarapdx.com



Open Access



Peer-Reviewed



Creative Commons

## Transparent Peer Review

- [View reviewer summaries](#)
- [View resubmission with reviewer comments and author responses](#)
- [View initial submission with reviewer comments and author responses](#)

## Recommended Citation

Bliss-Ketchum, L., C. E. de Rivera, R. Wheat, M. Lafrenz, and L. Hennings. 2026. Goals-based species selection process for connectivity modeling and planning. *Stacks Journal*: 26006. <https://doi.org/10.60102/stacks-26006>.



# Reviewer Summaries

## Alyson East

### Initial Submission

**Do you have any conflicts of interest that could bias your ability to provide an independent review?**

No

**What did the authors do a good job with?**

The authors present a compelling workflow for a challenging prioritization and present a use case that highlights the implementation and need for the workflow very clearly

**How do you think this research will contribute to the field?**

This research has the potential to guide conservation planning processes across scales.

**Regarding the study design and methods, what do the authors need to fix or improve upon to be fit for publication?**

Given the format of the article, I am not sure this question is relevant, but there is some need for additional clarity in the introduction of the workflow. Specific comments in text.

**Regarding the analysis and interpretation of their findings, what do the authors need to fix or improve upon to be fit for publication?**

NA

**Is there anything else you think the authors need to fix in their article to be fit for publication?**

Clarity on the finer points of the "Goals-Based Species Selection (GBSS) Process" section, but the manuscript is very strong otherwise.

**Do you have any concerns about the ethics of this research?**

No

**Do you believe the article, in its current form, is fit for publication?**

This paper requires minor revisions but does not need further peer review

**Would you like to be listed as a Collaborator on the final publication?**

Yes, please list me as a Collaborator

### Revised Submission

**Do you have any conflicts of interest that could bias your ability to provide an independent review?**

No

**How well did the authors respond to your comments?**

5/5

**What - if any - feedback do you feel the authors did not adequately respond to?**

They opted not to add a conceptual figure, but that is fine as they clarified in text

**Based on your review, what should happen next?**

This paper requires minor revisions but does not need further peer review

**Would you like to be listed as a Collaborator on the final publication?**

No, I do not want to be listed as a Collaborator



## Eric Palm

### Initial Submission

**Do you have any conflicts of interest that could bias your ability to provide an independent review?**

no

**What did the authors do a good job with?**

I think they provide a good rationale for their research questions and include relevant background information.

**How do you think this research will contribute to the field?**

I think if they provide more methodological details about the approach they are proposing, and more clearly articulate how their approach will improve conservation planning based on connectivity modeling, this research could provide a useful framework for choosing representative species for connectivity modeling.

**Regarding the study design and methods, what do the authors need to fix or improve upon to be fit for publication?**

I think they need to provide more details on things like hierarchical clustering, perhaps using their case study as an example. I think a conceptual figure showing the different steps in their proposed approach would be helpful. I also would like to know how they would measure performance of their models/approach, since they emphasize in the Introduction that existing approaches perform poorly.

**Regarding the analysis and interpretation of their findings, what do the authors need to fix or improve upon to be fit for publication?**

I think there should be less emphasis on background information motivating the study both in the Introduction and Discussion, and more emphasis on explaining how their approach will improve conservation planning compared to the status quo. What new insights do we gain from this approach? Will this improve spatial predictions? How will we measure improvement?

**Is there anything else you think the authors need to fix in their article to be fit for publication?**

In general, I think the authors could identify portions of the Introduction and Discussion that are redundant and work to consolidate these sections to make these sections shorter and clearer.

**Do you have any concerns about the ethics of this research?**

no

**Do you believe the article, in its current form, is fit for publication?**

This paper needs major revisions and another round of peer review

### Revised Submission

**Do you have any conflicts of interest that could bias your ability to provide an independent review?**

no

**How well did the authors respond to your comments?**

2/5

**What - if any - feedback do you feel the authors did not adequately respond to?**



"I think much of the Introduction is still extremely repetitive and sometimes vague. I still do not understand how the hierarchical clustering works. The authors still do not provide any details on how well their approach performs (which is one of their main -- or the main -- criticism of past approaches) or whether or not their approach actually improves conservation outcomes.

I don't think the authors have adequately identified how their approach improves upon or adds to existing literature. There are two papers from the last decade (Meurant et al. 2018 and especially Dutta et al. 2023) that have already addressed the shortcomings of the single-species surrogate approach using umbrella/focal species. Both of these papers provide extensive quantitative assessments of how well their approaches perform, and why. The authors do not cite Dutta et al. 2023, which is alarming, given the similarity in study rationale and motivation."

**Based on your review, what should happen next?**

This paper needs major revisions and another round of peer review

**Why is this article not ready to be published?**

I don't think the authors adequately addressed my (and other reviewers') feedback. In addition, I think the authors need to more clearly articulate how their work contributes new information to connectivity planning, and they must provide some sort of quantitative indication of how well their approach performs.

**What do the authors need to change for you to accept this article for publication?**

Significantly streamline the Introduction. Provide discussion of the novelty of their work compared to existing studies (Meurant et al. 2018 and Dutta et al. 2023, among others). Provide some quantitative indication that their approach is effective, offers improvement over existing studies, leads to better conservation outcomes.

## Kathleen Carroll

Initial Submission

**Do you have any conflicts of interest that could bias your ability to provide an independent review?**

no

**What did the authors do a good job with?**

Their proposed framework provides a potentially interesting approach to assess connectivity for large species assemblages across habitat types.

**How do you think this research will contribute to the field?**

This framework, if refined, could help reduce the science-management gap.

**Regarding the study design and methods, what do the authors need to fix or improve upon to be fit for publication?**

There are insufficient details on the clustering analysis and the case study for reproducibility.

**Regarding the analysis and interpretation of their findings, what do the authors need to fix or improve upon to be fit for publication?**

The case study should be better tailored to highlight the strengths of their proposed framework

**Is there anything else you think the authors need to fix in their article to be fit for publication?**

I made comment throughout, but generally more details are needed in some areas and fewer in others (as noted by myself and other reviewers)

**Do you have any concerns about the ethics of this research?**



no

**Do you believe the article, in its current form, is fit for publication?**

This paper needs major revisions and another round of peer review

Revised Submission

**Do you have any conflicts of interest that could bias your ability to provide an independent review?**

no

**How well did the authors respond to your comments?**

4/5

**What - if any - feedback do you feel the authors did not adequately respond to?**

NA

**Based on your review, what should happen next?**

This paper requires minor revisions but does not need further peer review

**Would you like to be listed as a Collaborator on the final publication?**

Yes, please list me as a Collaborator