



# The University of Georgia

Odum School of Ecology

20 April 2009 ← date

article title → Re: Experimental demonstration of accelerated extinction in source-sink metapopulations

Dear Editor:

Please find enclosed with this letter our manuscript "Experimental demonstration of accelerated extinction in source-sink metapopulations" which we submit for publication as an article in *American Naturalist*.

article type ← journal

This manuscript reports a rare experimental test of factors affecting population extinction and describes a new pattern of accelerated extinction in source-sink metapopulations. While a few extinction experiments with replicated populations have been reported, this study is unique in that populations are comprised of both source and sink subpopulations. Accordingly, we are the first to provide evidence for the simultaneous action of both classical metapopulation phenomena (e.g., fragmentation) and source-sink dynamics (e.g., resource concentration) and to show that time-to-extinction depends on both. Additionally, we document a new phenomenon – a non-monotonic relationship between habitat fragmentation and population persistence such that persistence was greatest at intermediate levels of fragmentation. Given that source-sink dynamics are ubiquitous in natural systems, these findings are relevant not only to the study of population dynamics in a variety of systems, but also have the potential to be important in guiding future research needed for making sound management decisions about populations of conservation concern.

summary

rationale for publication: innovativeness, first data, new method, etc.

generalization and/or intended audience

I assert that these results are original and not under consideration for publication elsewhere.

[occasionally I insert paragraph with recommended reviews, but nowadays this usually done online form]

I can be reached by email ([jdrake@uga.edu](mailto:jdrake@uga.edu)), phone (706-583-5539), or post (Odum School of Ecology, University of Georgia, Athens GA 30602). Thank you for your consideration.

contact info

Sincerely yours,  
John Drake

This paragraph key, especially for high impact journals. Sentences should be strong, accurate, and concise. Typically 3 points.

assertion of ethics, including any requirements by journal concerning authorship, animal welfare, etc.