

Dear Dr. Fronhofer, reviewers, and the PCI Ecology Managing Board,

Thank you for providing this helpful feedback! We made the changes listed below (in blue) in response to your and the reviewers' comments. The revised manuscript and associated files can be found at

(pdf): <https://ecoevorxiv.org/t6beh/>

(html): http://corinalogan.com/Preregistrations/gdispersal_manuscript.html

Round #3

by Emanuel A. Fronhofer, 2021-03-02 10:15

Manuscript: <https://doi.org/10.32942/osf.io/t6beh> version v3.0

Dear Mr. Sevchik, Dear Dr. Lukas,

thank you for your revisions. As you will see the referee is globally satisfied with the changes. Before I proceed to the recommendation of your manuscript, I would like you to go through one last round of revisions to address the referee's remaining concerns as well as some minor points listed below. I am looking forward to receiving a revised version of your preprint.

Sincerely yours,

Emanuel A. Fronhofer

Minor comments:

Line 161: "GiHhub" should be "GitHub"

Thank you, we changed this.

Page 6: "Figure 1: Figure 1." should be "Figure 1."

Thank you, we changed this.

line 217: "loci" should be singular

Thank you, we changed this.

line 240: "(Wang 2002)" should be "Wang (2002)". Same comment holds for the two reference in lines 241-242.

Thank you for spotting this. We changed the text to have proper citation formatting.

line 244-245: Year missing after "Queller & Goodnight" and "Wang".

Thank you, we added this.

line 271: delete second bracket after "(Sutherland et al. (2000))". Same comment holds for a majority of reference in the paragraph lines 281-295.

Thank you, we changed this.

Reviews

Reviewed by anonymous reviewer, 2021-02-18 09:44

I have now read the third version of this manuscript which I reviewed twice in the past. The authors have taken in consideration all of our comments, and I find it particularly useful to have more natural history insight on the focal species. I am now happy to recommend this study.

Thank you so much for all of your useful feedback on this manuscript!

I do have two remaining regrets, that are however not major and should not interfere with a recommendation of this manuscript. First, I still think that there can be some confusion about what is 'expected at random' (line 23) when evaluating whether average relatedness among individuals from a given site is high or not.

We changed this sentence to more directly link our finding to the particular permutation analysis we performed:

Abstract > "the average relatedness among all female dyads is higher than average relatedness among other individuals at the site"

Second, if the theoretical context outlined in the abstract is the resource-defence based monogamous mating system it could be clearer how this context is linked to the prediction on sex-biased dispersal. In the introduction, it is explained that based on this hypothesis, the focal species might not display the usual female-biased dispersal found in birds (L64-65, L77-78) and yet 1. The main hypothesis is that the focal species will display female-bias dispersal (one could expect the reverse based on the Introduction), and

We had decided to have as the main hypothesis that great-tailed grackles follow the pattern observed in most other species because of the limitations of linking

specific factors in which great-tailed grackles differ from the resource-defence based monogamous mating system to sex-biases in dispersal. We added further explanations on this to the Hypothesis section:

Hypotheses: “We set these as alternative hypotheses because it is unclear which factors might be important. With the setup of our study, we cannot infer why or how dispersal patterns might have changed, therefore we present these hypotheses simply as alternatives.”

2. The main result that males disperse further than females could be looped back more explicitly to the species mating system in the abstract (e.g. L31 replacing ‘together with’ by ‘in line with’).

We made the change in the abstract as suggested. We also changed the first sentence of the discussion accordingly:

Discussion > “Our results show that in great-tailed grackles, unlike in most other bird species but in line with their divergent social and mating system, the majority of males are not philopatric...”