Response to RSOS

Thank you very much for your close review and for catching these inconsistencies/errors. Please see our responses to each of your questions below. Responses are in italics after “\*\*\*”. We do have a few additional changes outside of the questions that you provided. They mainly deal with information in table 1 of our manuscript and changes within the text to reflect these. Please let us know if these changes warrant further review.

SQ1 Your supplementary material will be published online alongside your article and on

rs.figshare.com exactly as the file(s) are provided. Therefore, please could you either

confirm that your supplementary material is correct, or – if you have any changes to make

to these files – email these along with your proof corrections to the journal inbox. Your ESM

files are listed here for your convenience: “Supplementary information.pdf”

\*\*\*

*In this email, we have attached a new pdf file to be included, “Supplementary information\_Gaweletal.pdf.”*

Q1 As per RS style, only six keywords are allowed. So please retain any six keywords and

delete the rest.

\*\*\*

*Keywords: ungulates, novel ecosystems, seed dispersal, herbivory, Guam, Mariana Islands*

Q2 Reference [12] (in the author file) has been repeated and hence the repeated version has

been deleted and then re-numbered. Please check.

\*\*\*

*This is correct, it was repeated. Thank you for catching it and renumbering.*

Q3 Please provide editors name, printed pages and publication details for ref. [24].

\*\*\*

*This is a technical report or gray paper from an agency, not from a peer-reviewed journal, the name of the agency is Division of Aquatic and Wildlife Resources, Guam Department of Agriculture. They are located in Mangilao, Guam.*

*Conry, P.J. 1986. Ecology of the wild (feral) pig (Sus scrofa) on Guam. Technical Report for the Division of Aquatic and Wildlife Resources, Guam Department of Agriculture. Mangilao, Guam. 60 pp.*

Q4 Please supply the page number for ref. [31].

\*\*\*

*This is a book. It is 120pp, and is cited twice in the text: the first, on line 146, referring to information on pages 1 -2; the second, on line 439 referring to information on page 22.*

Q5 Please provide printed pages for ref. [50].

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*The pages for Kessler 2002 are 132-141.*

Q6 References [56,57] are provided in the list but not cited in the text. Please supply citation

details or delete the reference from the reference list.

\*\*\*

*[57] is not used in the text, and can be removed. [56] needs to replace [39], but only at line 448 after the sentence “Small seed size may also provide a mechanical advantage that promotes dispersal over predation.” This may shift numbering.*

Q7 The author name does not match with that in the reference list. Please check.

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*That was our mistake, the reference at line 428 should be [33], not [30].*

**Additional requested changes**

As mentioned in our email, we caught an error at the last minute. Those numbers have been corrected in the data. In addition, after consulting with a statistician, we realized that model selection and not hypothesis-testing with nested models better presented our findings while still addressing our reviewer’s previous concerns. Please consider the following changes that have resulted from this:

L. 190 – 194, which currently reads: “As planting dates were staggered for each species, we first tested whether the effect of treatment (fenced or unfenced) depended on the length of time a seedling was growing by comparing a model including data from all species and a time by treatment interaction, with relevant submodels. After determining that the effect of the treatment was not dependent upon the duration of time seedlings were growing, we analysed seedling survival for each species separately.”

*Should be changed to:*

*“As planting dates were staggered for each species and the duration of growing time varied by species, we first used model comparison to test whether the effect of treatment (ungulates or no ungulates) was better explained by the length of time in the ground or by species. After determining that duration of time in the ground was a poor predictor of treatment effects compared to species, we assessed treatment effects for each of the six species individually.”*

L. 248 – 251, which currently reads “In a full model with data from all six species, the effect of treatment did not depend on growing time (the best-fit model did not include a time by treatment interaction; table 1), but the effect of treatment differed by species.”

*Should be changed to:*

*“In a model with data from all six species, the model including a species by treatment interaction was a much better fit than the model including a time by treatment interaction (table 1).”*

Subsequently, the changes to Table 1, L. 322 – 325, which currently reads:

|  |  |  |  |
| --- | --- | --- | --- |
| model | no. parameters | AICc | ΔAICc |
| treatment, species, time, treatment:species | 31 | 593.59 | 0 |
| treatment, species, treatment:species | 13 | 612.89 | 19.3 |
| treatment, species, time, treatment:species, treatment:time | 49 | 664.25 | 70.66 |

*Should be changed to:*

|  |  |  |  |
| --- | --- | --- | --- |
| *model* | *no. parameters* | *AICc* | *ΔAICc* |
| *treatment, species, treatment:species* | *13* | *612.89* | *0* |
| *treatment, time, treatment:time* | *5* | *770.99* | *158.1* |

*We also noticed a formatting error in the proofs in table 3, (L. 415-416). The scientific names are italicized, but so are the rest of the values in those two lines. These should not be italicized.*

On L. 529, there should be the word “negative” before impacts, so right now, it reads:

“We recognize pigs would likely have a greater impact in areas, such as secondary forest or volcanic forest, with more soil.”

Should be changed to:

*“We recognize pigs would likely have a greater negative impact in areas, such as secondary forest or volcanic forest, with more soil.*

*Again, thank you for working with our manuscript. Please let us know if you need any further clarifications or have any additional questions.*