

Resubmission: ORNITH-APP-24-135

Dear Dr. Szabo,

We would like to thank the reviewers and editorial team for their comments and suggestions on “Low migratory flight altitudes may explain increased collision risk for American Woodcock”, and the option to resubmit to Ornithological Applications. In this new version of the manuscript, we have made several important changes which address editor and reviewer comments:

- We have added justification for our decision to assume that diurnal locations are recorded on the ground. Several studies have created time budgets for American Woodcock and noted that woodcock spend <3% of diurnal time in flight, making it unlikely that a diurnal altitude reading would record a flight location. We have also conducted a sensitivity analysis and found that violations of this assumption would have minimal impact on our results.
- We have switched our parameterization of observation error from a Gaussian distribution to a Student's t-distribution as advised by Péron et al. (2017), which better models the heavy tails present in the data.
- We have made several modifications which increase the model's sampling efficiency, including switching from a gamma to a log-normal distribution for flight altitudes and implementing a stricter definition for potential flight locations. Due to this improved efficiency, we have been able to remove informative priors from the analysis which were unduly influencing results.
- We have added statistics describing the variance and skewness of woodcock flight altitudes to better describe the shape of the flight altitude distribution.
- We have made edits throughout to improve the clarity of the paper, with a particular focus on the methods section.

We believe that these changes have substantially improved the manuscript, and better prepared it for publication. Thank you for your continued consideration of this paper, and please contact me at (703) 888-8284 or at liamaberigan@gmail.com if you have any questions regarding this submission. We look forward to hearing from you.

Sincerely,



Dr. Liam Berigan