Department of Wildlife, Fisheries, and Conservation Biology



5755 Nutting Hall, Room 210 Orono, Maine 04469-5755 Tel: 207-581-2862 Fax: 207-581-2858 www.umaine.edu/wle

Dear Dr. Szabo,

My colleagues and I are excited to submit this manuscript, "Low migratory flight altitudes may explain increased collision risk for American Woodcock" for consideration at Ornithological Applications. Our study employs satellite transmitters attached to American Woodcock (Scolopax minor) to provide the first estimates to date of woodcock flight altitudes during migration. Woodcock have been presumed to be low altitude migrants since at least the 1940s based on their high rates of collision with airspace obstacles. They are among the most frequent species found after window collisions in Minneapolis and Chicago, especially during spring migration. Our results confirm early speculation that American Woodcock appear to fly at lower altitudes than many other nocturnal migrants, with a mean flight altitude of 362m above ground level. We also compared American Woodcock flight altitudes to the height distribution of common airspace obstacles throughout North America (low-rise buildings, wind turbines, and communication towers) to assess how woodcock flight altitudes might impact their potential collision risk. We found that 56% of woodcock altitude observations fell within the range of at least one type of airspace obstacle, with exposure to these obstacles increasing in the fall (62%) and decreasing in the spring (48%). We believe that woodcocks' lower flight altitudes are likely a causal factor in their increased rate of obstacle collisions, and that woodcock provide an example of how species-specific traits can mediate birds' exposure to collision risk during diurnal stopovers vs. nocturnal migratory flights.

We believe that this work provides valuable context for ongoing research and policy discussions regarding the impact of obstacle collisions on migratory birds and would be well suited to the audience of Ornithological Applications. If there are any questions regarding the submission, please contact me at (703) 888-8284 or at liamaberigan@gmail.com. Thank you for your consideration, and we look forward to hearing from you.

Sincerely,

Liam Berigan Dr. Liam Berigan



