Examining Ages of Birds That Have Fatally Collided With Windows at USU's C&SS building, Brigham City, UT.

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Introduction

Window collisions are the second highest anthropogenic cause of bird death in the United States. Window collisions kill around 365,000,000 and 988,000,000[3] birds each year in the US. We investigated the question: Do different age groups fatally collide with windows at different rates?

In a 2013 study, conducted in northwestern Illinois, researchers found juveniles were more likely to fatally collide with windows than adults[1]. Likewise, in a 2016 study in San Francisco, more juveniles fatally collided with windows than adults[2] In our study we investigated if we could find similar results in Brigham City, Utah.

For this study juvenile birds are those that are in their hatching year.

Study Location (shown below):
Utah State University, Classroom and Student Services Building.

Methods

After performing a walk around the C&SS. If a bird, or a part of a bird indicating a collision, was found we applied proper protective equipment and picked up the specimen from the place it was found. The specimen was then placed in a cooler to await further analysis of age and identification. Birds were aged by plumage condition and skull development.
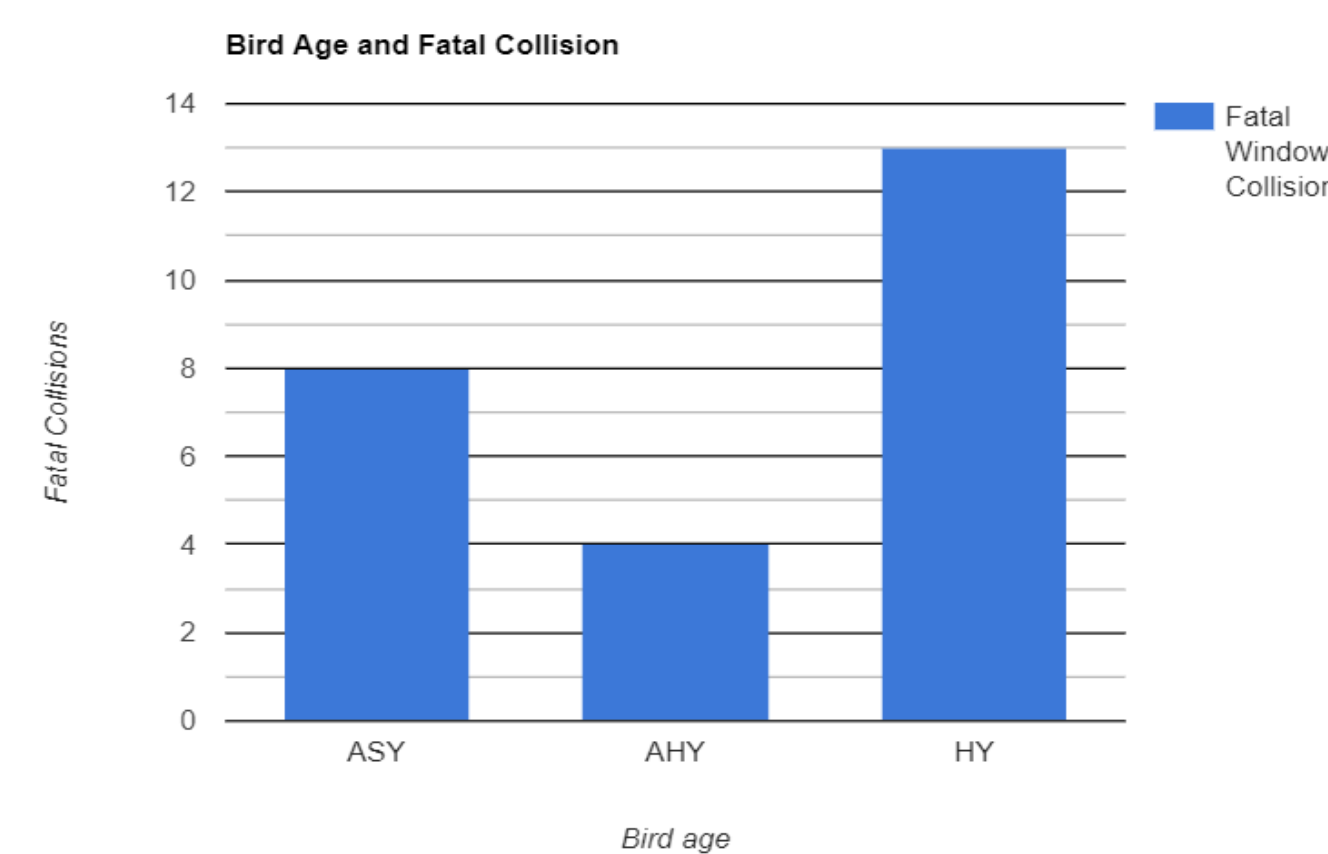

Figure 1. Lincolns Sparrow   Figure 2. Brown Eyed Junco

Results

Upon examining the birds collected, we found that more birds in their hatching year, fatally collided with windows.

The graph below shows how many birds in their hatching year (HY), after hatching year (AHY), and after second year (ASY).

Conclusion

From this study we found that like the 2013 and 2016 studies[1,2], more juvenile birds fatally collided with windows at the C&SS building.

Future Directions

Future studies could focus on why more juvenile birds collide into windows. Possible predictions could be that there were more juvenile birds in the area at the time of recording. Several twelve-month studies could be conducted to find hatching times of local birds.

Another prediction could be that juvenile birds are less visually acute thus more likely to collided. Visual acuity test could provide evidence for that prediction

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