Drivers of bird-window collisions in Florida International University’s Modesto A. Maidique Campus by Adam W. Hernandez | Andrea M. Ohanian | Hans Gonzembach | Oliver Ljustina | Elizabeth A. Lago | Claudia B. Gonzalez | Gabriel de la Iglesia | Dr. John Withey

Abstract Details

Bird-window collisions are among the top leading causes of death for birds in North America. Studies have found primary drivers of bird-window collisions to be window area, building size, and presence of vegetation around the buildings. We hypothesized that higher window area and vegetation would increase bird-window collisions, with an inverse relationship between number of stories and bird-window collisions. Surveys were conducted for 21 consecutive days around six buildings at Florida International University (FIU) in October 2014. Using ArcGIS, 50m buffers were created around each building to calculate percent vegetation and ImageJ was used to calculate percent window cover. We collected 10 bird carcasses and 13 feather piles assumed to represent bird-window collisions. Most of the collisions (8 out of 21) occurred at the building with the lowest percent vegetation and low window area. Our sample size limits our ability to make general conclusions, however, our data is a part of a larger collaborative project that includes over 30 campuses across North America. Results from this larger project could provide insight on whether the magnitude of bird-window collisions relates to landscape structure and functional connectivity.

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