



Three Years of Monitoring Window Strikes on the SUNY Oswego Campus

Brooke D. Goodman¹, Danielle M. Marichal¹, Talyn Faulkner¹, Daniel T. Baldassarre¹

¹SUNY Oswego Department of Biological Sciences

Background

- We have lost three billion breeding adult birds in Canada and the United States since 1970 (Rosenberg et al., 2019).
- Up to **one billion birds are killed annually** in the United States and Canada after colliding with windows (Loss et al., 2014).
- Oswego's place on the Atlantic flyway means we host large volumes of migrating birds.
- Birds use the SUNY Oswego campus as a stopover point before crossing lake Ontario.
- These factors lead to **spikes in window collisions on the SUNY Oswego campus** during peak migration, which, until this project, have not been monitored.



Figure 1: A volunteer holds four campus window strike victims (From L:R, Golden-crowned Kinglet, Common Yellowthroat, White-throated Sparrow, Black-capped Chickadee)

Goals

- Understand which species are most vulnerable to collisions, and which buildings pose the greatest threat to birds.
- Locate live window strike victims and transport them to a wildlife rehabilitation center.
- Use our data to push for the retrofitting of windows to **make Oswego a bird-safe campus**.
- Integrate bird-friendly design into campus construction standards.
- Educate students and staff on bird-friendly design.

Methods

- Student volunteers informally monitored buildings on the SUNY Oswego campus from 2020 to 2023, with focused monitoring during Fall and Spring migration.
- Buildings known to have large amounts of strikes were monitored closely, creating bias in our dataset.

Results

- 74 collision victims have been located.
- Six live collision victims were rescued and survived their injuries with intervention from a wildlife rehabilitator.

Collision Totals by Family

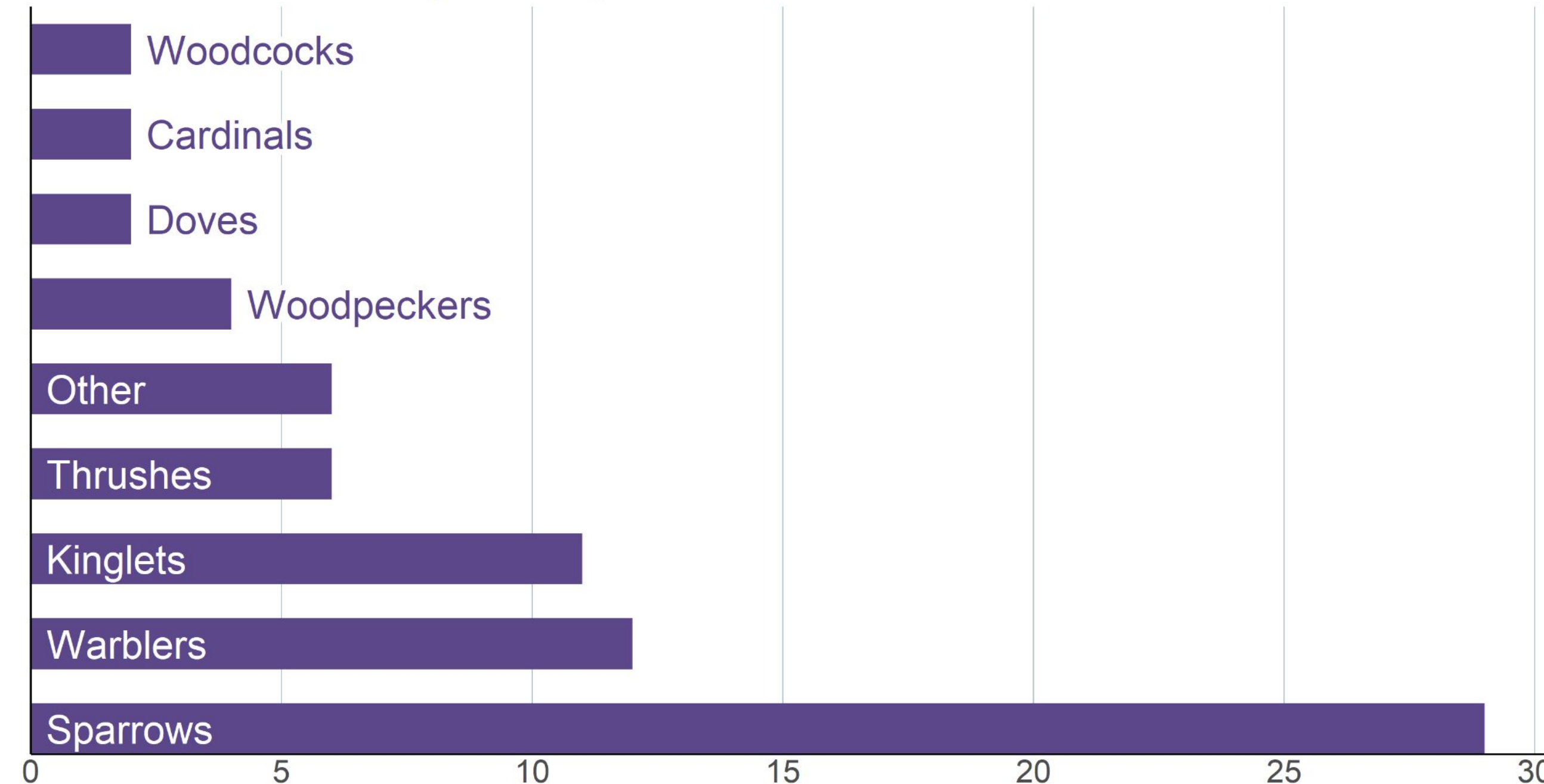


Figure 2: Collision totals by family using data collected from Main Campus and Rice Creek Field Station during informal monitoring walks

- The family most vulnerable to window collisions on our campus is sparrows (*Passerellidae*), with warblers (*Parulidae*) close behind.

Collision Totals by Building

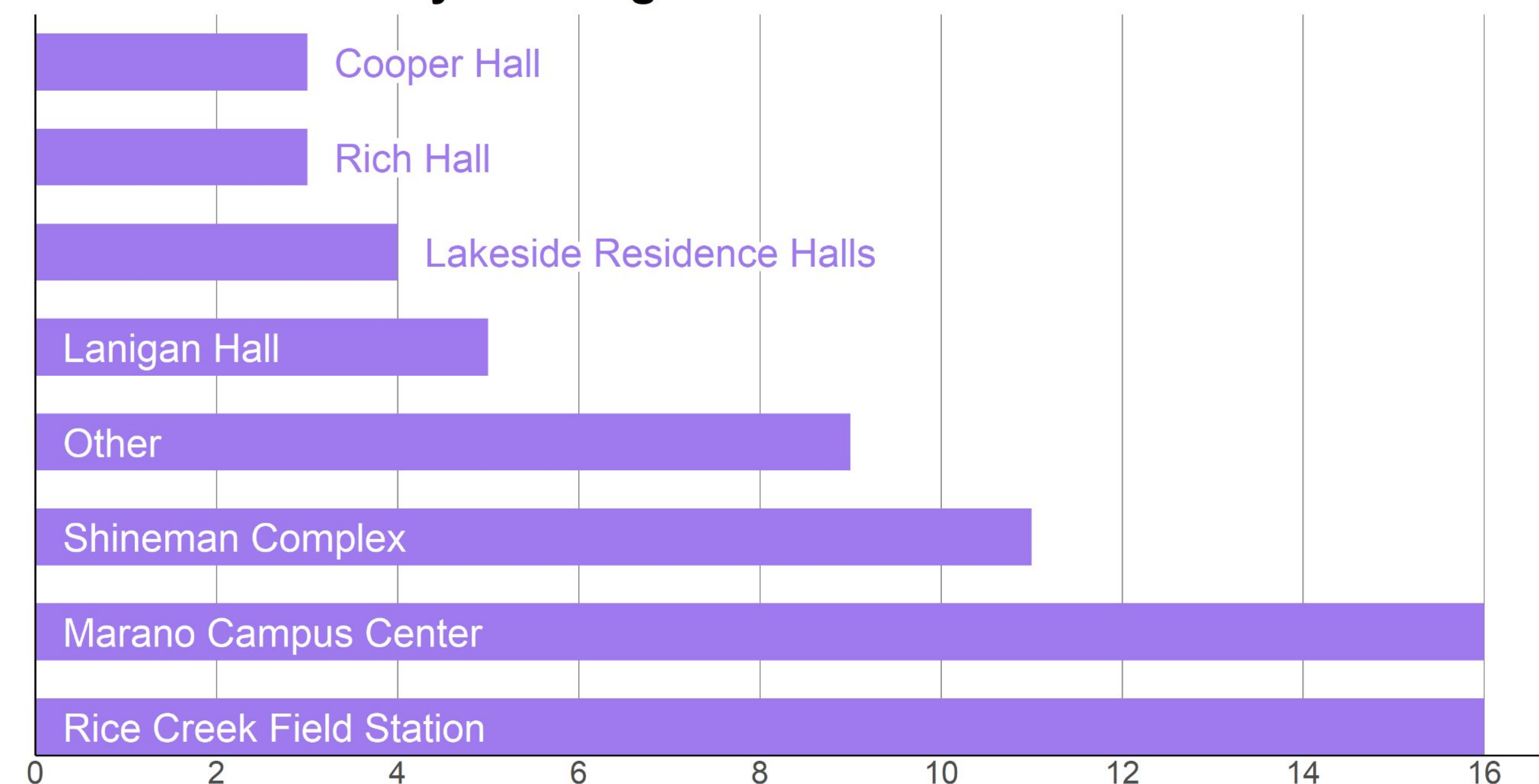


Figure 3: Collision totals by building using data collected from Main Campus and Rice Creek Field Station during informal monitoring walks

- Marano Campus Center (MCC) and Rice Creek Field Station (RCFS) are in the most need of collision deterrents, accounting for half of all recorded collisions.

Prevention

- Collision deterrents must be placed on the outside of a window to break up reflections, no less than 2x2 inches apart.
- Feather Friendly[®] stickers have been applied on the south side of RCFS.
- With the help of the Sustainability Office and Facilities, Acopian Bird Savers will be applied on the lower portion of the large MCC window facade.
- **Collisions have decreased at the treated windows** of RCFS compared to the untreated windows.



Figure 4: Feather Friendly[®] stickers applied by volunteers to the windows of Rice Creek Field Station

Future work

- Continue monitoring collisions on campus
- **Treat problem windows** with our tested deterrents.
- Integrate bird-friendly design into campus construction standards.

Thank You!

Dozens of students who have monitored and alerted us to collisions around campus
Rice Creek Field Station staff
The Sustainability and Facilities offices

Citations

Loss, Scott R., Tom Will, Sara S. Loss, and Peter P. Marra. "Bird-Building Collisions in the United States: Estimates of Annual Mortality and Species Vulnerability." *The Condor* 116, no. 1 (January 2, 2014): 8–23. <https://doi.org/10.1650/condor-13-090.1>.
Rosenberg, Kenneth V., Adriaan M. Dokter, Peter J. Blancher, John R. Sauer, Adam C. Smith, Paul A. Smith, Jessica C. Stanton, et al. "Decline of the North American Avifauna." *Science* 366, no. 6461 (September 19, 2019): 120–24. <https://doi.org/10.1126/science.aaw1313>.