

The Problem



- Birds collide with windows, leading to injury and death
- 365 to 988 million bird/building collisions in the US yearly
- Atlanta is in the top 10 cities for bird collisions

Source: Georgia Audubon

Birds don't understand architecture like humans do

They are unable to perceive that an image is a reflection







Bird's view: a tree!

Our view: window frames and building edges

Our 3 Project Goals

Retrofitting Windows

Deters bird collisions via bird-safe film

Lights Out GT

Prevents disorientation of migrating birds

Georgia Tech Yellow Book

Regulates future construction to have bird-safe glass







dBird.org

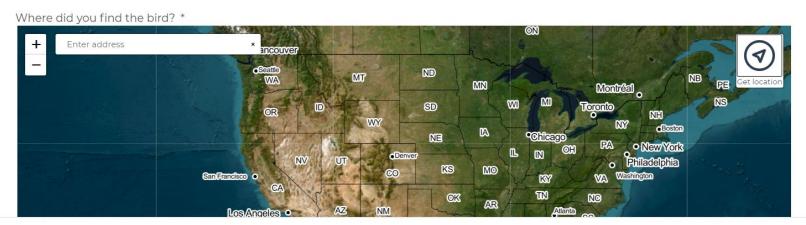
Data Collection

If you find a dead or injured bird, you can make an important contribution to bird mortality research by filing a report here.

In cases of multiple birds, please submit a separate report for each one.

Scroll down to start a report

1. Select location

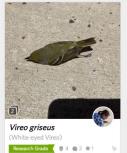


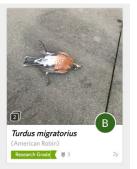


Research Grade



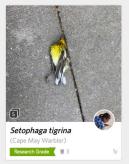


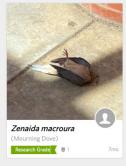




















Data Collection



Most Observed Species



Ovenbird 15 observations



Tennessee Warbler 11 observations



Common Yellowthroat 6 observations



Wood Thrush 6 observations



Swainson's Thrush 5 observations

Flyers posted around campus

PROJECT BIRD SAFE CAMPUS

Our project aims to reduce bird-window collisions on GT's campus thru bio data collection & advocating for installing bird-safe film on GT buildings.

Find a dead or injured bird on campus? Report it to

DBIRD.ORG

Join the GT bird community:

@gt.birds on Instagram



Questions: ktran96@gatech.edu



White-breasted Nuthatch 1 collision



SEE AN INJURED/DEAD BIRD ON CAMPUS? GO TO

DBIRD.ORG

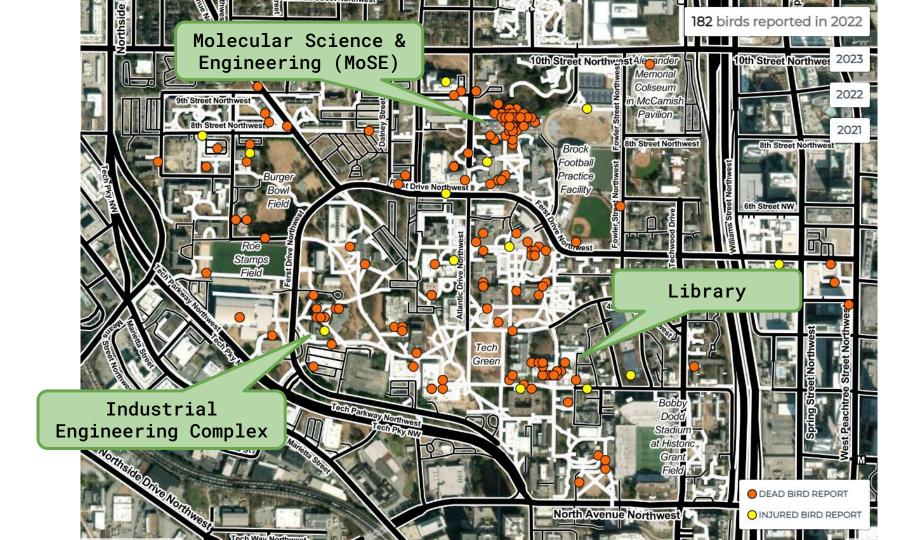


IT'S SIMPLE-JUST ENTER THE LOCATION, DATE AND TIME

Reporting bird strikes on Georgia Tech's campus will support the data collection for our bird-safe campus initiative.

Questions?
Contact ktran96@gatech.edu





Efficacy of Internal vs. External Bird Film

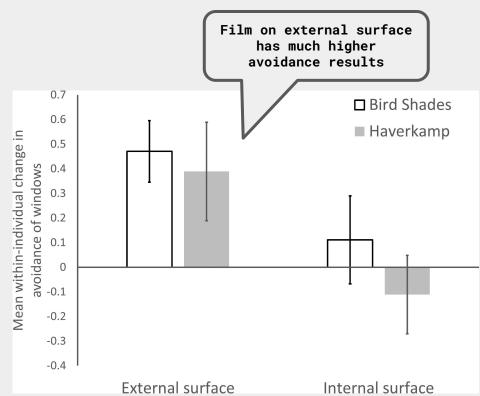
Installing film on the <u>outside surface</u> of glass is the most effective way to prevent bird collisions

*Sources:

Natalia Ocampo-Peñuela , R. Scott Winton, et al. 2016. Patterns of bird-window collisions inform mitigation on a university campus.

Christine D. Sheppard. 2019. Evaluating the relative effectiveness of patterns on glass as deterrents of bird collisions with glass, Global Ecology and Conservation, Volume 20.

Swaddle JP, Brewster B, Schuyler M, Su A. 2023. Window films increase avoidance of collisions by birds but only when applied to external compared with internal surfaces of windows.



Source: Swaddle JP, Brewster B, Schuyler M, Su A. 2023. Window films increase avoidance of collisions by birds but only when applied to external compared with internal surfaces of windows

Film options research



Thin extruded plexiglass

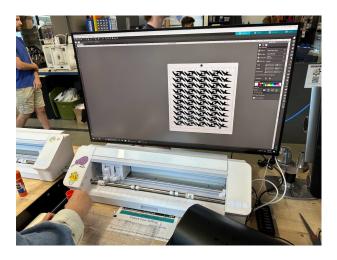




Outdoor, water-resistant vinyl adhesive

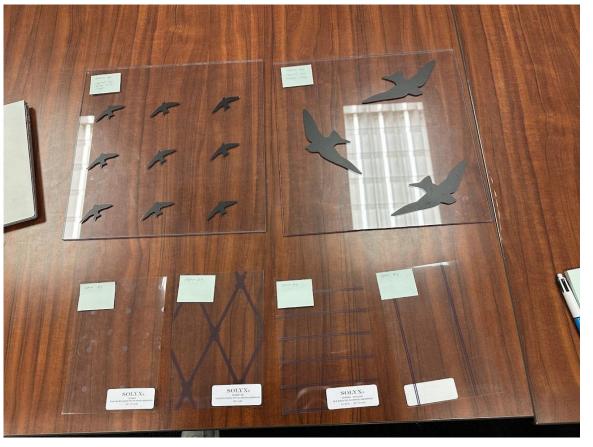


Polyvinyl chloride laminate sheets (non-adhesive)



Vinyl adhesives made at Invention Studio



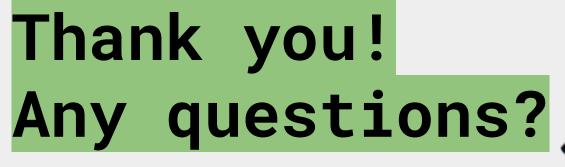




Next Steps

ISyE complex pedestrian bridges pilot program

- 1. Experimental installations of different film types complete by end of Fall 2023 semester
- Collect data on efficacy of each type
- 3. Install on other buildings







Red-shouldered

1 collision

Hawk