

LIGHTS OUT FORT WORTH Spring 2023 Survey Highlights and Observations

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The first season of bird-window collision surveys in Fort Worth concluded after a 60-day effort from April 1st to May 31st. With the help of dedicated individuals and organizations, the Lights Out Fort Worth team successfully took action to save wildlife by connecting and collaborating with others. The data collected from this campaign provides valuable information for scientists to study migration and understand how to prevent bird-window collisions in the future. The first season of bird-window collision surveys in Downtown Fort Worth resulted in a total of 124 documented bird records, which included 85 mortalities, 20 rescued birds, and 19 stunned birds that hit windows and flew away.



Special Thanks: Volunteer Survey Leader Appreciation

Lights Out Fort Worth volunteer survey leaders committed to one or more mornings each week to lead the surveys. Those volunteers consistently go the extra mile by welcoming new volunteers and navigating groups around the downtown Fort Worth area. They are also trained on documenting bird-window collisions to the iNaturalist Lights Out Texas Monitoring project, as well as rescuing birds by capture and release or delivery to a licensed wildlife rehabilitator. Thank you to these wildlife heroes for their commitment to this project.



(Top row, left to right) Fort Worth Audubon Society Member and Volunteer Survey Leader Joy Havner, TCA Spring 2023 Intern Zachary Chapman, Volunteer Survey Leaders April and Bijan Pajoohi

(Bottom row, left to right) TCA Executive Director John DeFillipo and April Pajoohi, and TCA Lights Out Fort Worth Coordinators Mariah Campos and Madison Gover

Spring 2023 Highlights

New Species Documented

A Downy Woodpecker (*Dryobates pubescens*) was documented in Fort Worth during mid-May. Interestingly, a Downy Woodpecker was also found in late May by the Lights Out Dallas team. Further up north, Downy Woodpeckers may migrate short distances south, but they are a common resident backyard bird all across North America¹. However, their range is decreasing eastward, and may not be as common in Fort Worth in the future. The salvage partnership with Texas A&M Biodiversity Research and Teaching Collections ensures that no tiny bodies go to waste.



Downy Woodpecker documented by Lights Out Fort Worth Volunteer Survey Leaders Joy Havner and April Pajoohi

Increased Community Engagement

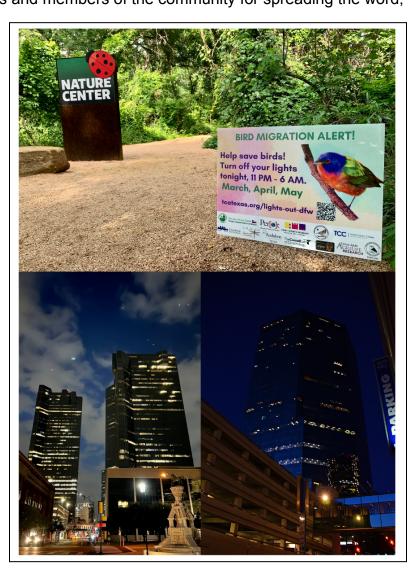
Just like a Fort Worth cattle drive, the Lights Out Fort Worth team managed to corral new partners and friendly neighbors such as the Greater Fort Worth Sierra Club, Cross Timbers Master Naturalists, River Legacy Nature Center, Friends of Tandy Hills Natural Area, and Wild Birds Unlimited in Arlington and Burleson. Thank you to all partners and members of the community for spreading the word,

distributing yard signs, and bringing Fort Worth closer together for our feathered friends.

(Top image: Lights Out Fort Worth Spring 2023 yard sign at the River Legacy Nature Center in Arlington).

Creating Darker Skylines

The Fort Worth skyline went Lights Out for Wildlife this spring that resulted in a darker night sky for birds passing through. Thank you to the Cornell Lab of Ornithology, City of Fort Worth, Downtown Fort Worth Inc., and

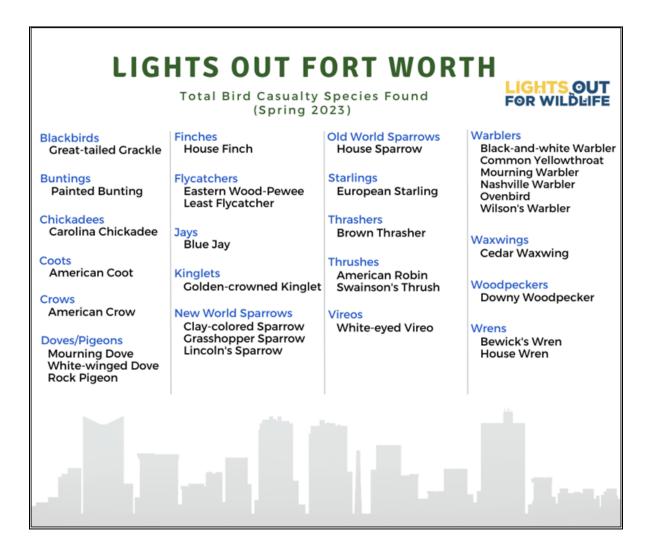


Amon G. Carter Foundation for facilitating this process. <u>("Birds on the move:</u> Fort Worth joins efforts to protect migratory birds", 2023).

(Bottom image: Exterior lights are off at the Bank of America and Wells Fargo Towers on the left, and the 777 Main Tower on the right. Thank you to all the buildings that participated in Lights Out!)

Survey Observations

The spring surveys were conducted over a 9-week period, resulting in a total of 124 recorded birds that encompassed 32 individual species and 20 families. All birds were documented and uploaded into the statewide iNaturalist monitoring project. The following survey observations summarizes the collision monitoring results and diversity of birds recorded throughout the season, including 1 species, the White-eyed Vireo, found during preseason surveys on March 22nd and 31st.



Composition of Bird Families Throughout Spring 2023 Surveys

A total of 32 unique species encompassing 20 families were recorded throughout the spring season. This includes the 1 species found during the two preseason surveys on March 22nd and 31st - the White-eyed Vireo (Family *Vireonidae*). The most abundant species observed, Mourning and White-winged Doves (Family *Columbidae*), make up 35% of recorded birds. More migratory species were

observed towards the end of week 2 (Apr. 8 - 14) and beginning of week 3 (Apr. 15 - 21) after finding a Golden-crowned Kinglet (Family *Regulidae*) and a Cedar Waxwing (Family *Bombycillidae*). Once the peak migratory period began, there was a sharp increase in species diversity. This included the first warbler of the season, a Nashville Warbler (Family *Parulidae*) and a pair of Painted Buntings (Family *Cardinalidae*) all documented in week 4 (Apr. 22 - 28). Warblers continued to be documented through mid-May, with the last warbler of the season documented on May 31st.

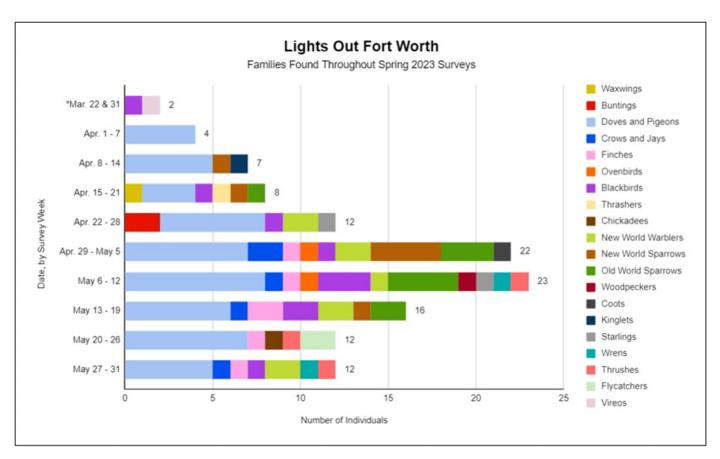


Figure 1.0: Bird Families Found Throughout Lights Out Fort Worth Spring 2023 Surveys by Number of Individuals Found per Week.

Frequency of Birds with BirdCast Migration Forecast

The spring migration season is from March 1st to June 15th, but the peak migratory period, which lasts from April 22nd to May 12th, is the critical period where the highest density of birds migrate through the area. Approximately 46% of all bird records were documented during this peak migratory period in downtown Fort Worth, and 72% of all of these birds were migratory species. The Lights Out Fort Worth team used the Cornell Lab of Ornithology BirdCast migration tool to determine the density of migrating birds before each survey. The

BirdCast migration tool forecasted 34 days of low migration, 22 days of medium migration, and 7 days of high migration. Despite high migration only occurring for a total of 7 days between weeks 5 and 6, those days contributed to almost 20% of all recorded birds. (See Figure 2.0)

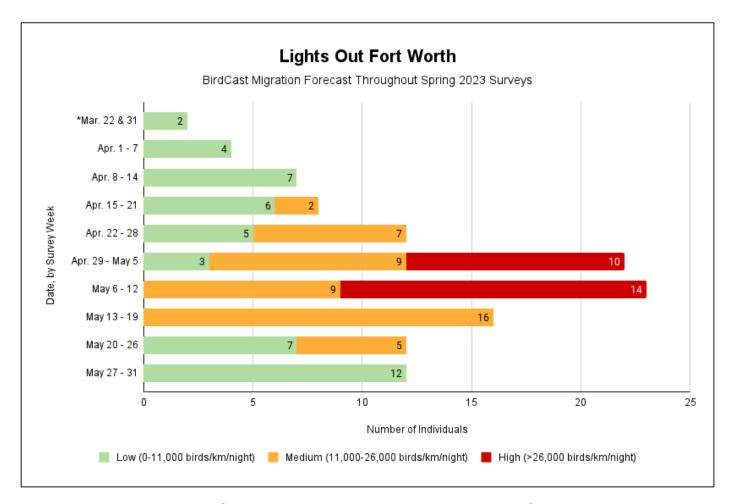
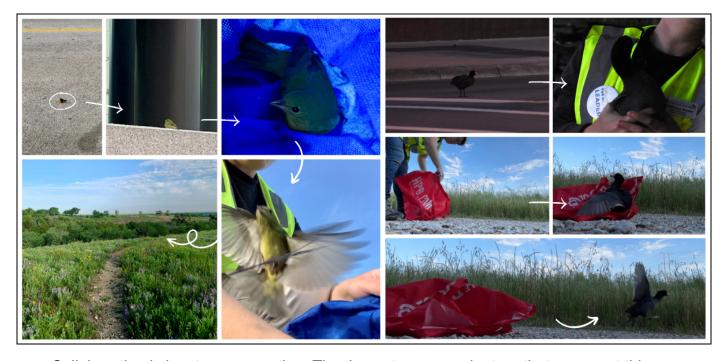


Figure 2.0: BirdCast Migration Forecast Throughout Lights Out Fort Worth Spring 2023 Surveys by Number of Individuals Found per Week. This graph shows the total number of birds found each week, divided by whether they were found on low, medium, or high migration days. For example, during week 5 (Apr. 29 - May 5) 3 birds were found on days that had a low migration forecast, 9 birds on medium migration days, and 10 birds on high migration days.

Despite all of the bird mortalities, rescued birds that were captured and released outside the city invoked a sense of activism, inspiration, and hope for the future. The following picture collage shows a Painted Bunting (left) rescued by Lights Out Fort Worth Coordinator Mariah Campos, and an American Coot (right) rescued by Lights Out Fort Worth Assistant Coordinator Madison Gover.



Collaboration is key to conservation. Thank you to every volunteer that came out this season and helped rescue injured birds and collect specimens for future research. Thank you to all the partners and organizations that helped make Lights Out Fort Worth a success, as this would not be possible without your passion and commitment to this program. The Lights Out Fort Worth Coordinators shared this quote to end the Spring 2023 survey season, which describes the repeated refrains of nature providing a sense of renewal and hope:

"There is symbolic as well as actual beauty in the migration of the birds, the ebb and flow of the tides, the folded bud ready for the spring. There is something infinitely healing in the repeated refrains of nature - the assurance that dawn comes after night, and spring after the winter."

- Rachel Carson, The Sense of Wonder

<u>References:</u> ¹ *Downy Woodpecker.* American Bird Conservancy. (2020, June 24). <u>https://abcbirds.org/bird/downy-woodpecker/</u>