

Dear Fellow Texans,

Spring bird migration will be underway soon, and from April 19 – May 7, Texas will welcome hundreds of millions of birds migrating through our state on their way back north from their southern wintering grounds.

I hope you will join us in supporting an important effort to protect migrating birds by turning off non-essential lights during the critical peak spring migration period. Each night and each light turned out helps save migrating birds.

Taking action now is vital because every spring and fall, nearly two billion birds – between a quarter and a third of all birds migrating at night through the United States – travel through Texas in one of the planet's great wildlife spectacles. Light pollution is a growing and underrecognized threat to birds. The light emanating from our cities disorients the birds, leaving them confused and vulnerable to collisions with buildings. In fact, nearly one billion birds die in collisions with buildings annually in our country.

The City of Chicago has been dimming downtown lights for the full spring and fall migration seasons since the early 2000s. Last year, the City of Dripping Springs, Texas, proclaimed August – October and March – May “Lights Out Migratory Months,” and the City of Dallas proclaimed September 29 – October 10, 2020 “Lights Out Nights.” The proclamations asked local residents and businesses, especially in downtown areas, to dim or turn off their non-essential lights from 11 p.m. until 6 a.m. And we were thrilled to see a contagious effect as dozens of individuals and companies joined together to darken our skies.

This spring, we hope to see cities across Texas take up the challenge and issue their own Lights Out proclamations in a state-wide effort to conserve birds. Though bird collisions can occur at any point during the full spring migration of March 1 – June 15, we suggest prioritizing the window of April 19 – May 7, when half of the total spring bird migration traffic passes through Texas. As an added bonus, turning off non-essential lights also saves energy for cities, local businesses, and homeowners!

The Lights Out Texas effort is led by a coalition that includes conservation non-profits, universities, governmental organizations, and Texans dedicated to the conservation of birds. A list of partners is listed on the next page, and I'm proud to share that it's growing daily. Additional information is also included with this letter.

I know that you and all Texans care deeply about protecting wildlife and the ecosystems that will sustain us for generations to come. Please join our efforts by turning out lights from April 19 – May 7. My vision is of a dark Texas sky, ensuring a safe flight for birds on their journey home.

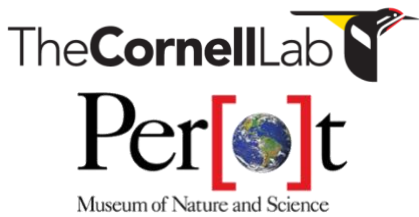
Sincerely,

A handwritten signature in cursive script that reads "Laura Bush". The ink is dark and the signature is fluid, with a large loop for the 'L' and a stylized 'B'.

Laura Bush
Founder, Texan by Nature

Lights Out Texas Founding and Coordinating Organizations

- The Cornell Lab of Ornithology
- Texas Conservation Alliance
- Perot Museum of Nature and Science
- Biodiversity Research and Teaching Collections, Texas A&M University
- Houston Audubon
- Texas Parks and Wildlife Department Nature Trackers
- Texan by Nature



Lights Out Texas Supporting Organizations

- *Austin*
 - City of Austin, Office of Sustainability
 - Hill Country Alliance
 - Travis Audubon
- *Dallas Fort Worth Metroplex*
 - City of Dallas, Mayor's Office
 - Dallas Zoo
 - Dogwood Canyon Audubon Center
 - Ellis County Master Naturalists
 - Fort Worth Museum of History and Science
 - Friends of Fort Worth Nature Center
 - Trinity River Audubon Center
 - University of Texas at Arlington
- *Houston & Gulf Coast*
 - City of Houston
 - Gulf Coast Bird Observatory
- The Houston Museum of Natural Science
- *San Antonio*
 - Bexar County Audubon Society
 - Mitchell Lake Audubon Center
 - The Witte Museum
- *West Texas*
 - Big Bend Conservation Alliance
 - El Paso Trans Pecos Audubon Society
- *Statewide*
 - Audubon Texas
 - Defenders of Wildlife
 - The Nature Conservancy
- *National*
 - Audubon
 - National Wildlife Federation



HERE'S HOW YOU CAN HELP MIGRATING BIRDS

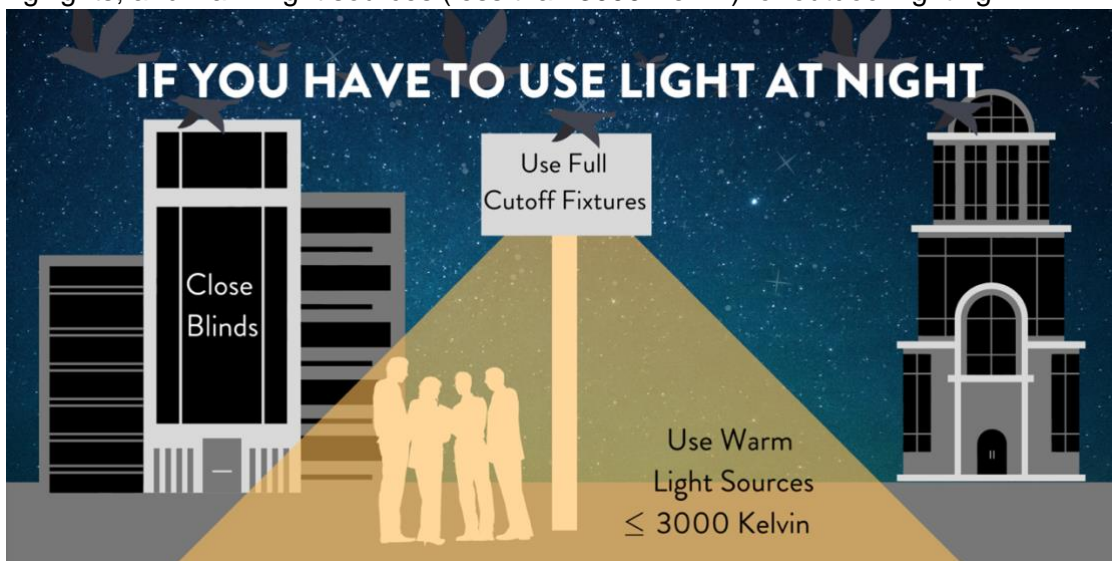
Whether you are a business or homeowner, help protect migrating birds passing through Texas by **turning off all non-essential nighttime lighting on buildings from 11:00 p.m. to 6:00 a.m. each night** during spring migration from March 1 - June 15. Where conflicts apply, **prioritize lights out from April 19 - May 7 during the peak of migration when the most birds are passing through Texas.** Visit the [BirdCast website](#) to learn more.

Guidelines for EVERYONE:

- Turn off all non-essential lights from 11:00 p.m. to 6:00 a.m. each night.
- Do not use landscape lighting to light up trees or gardens where birds may be resting.
- For essential lights (like security lighting) use the following dark skies friendly lighting practices:
 - Aim lights down
 - Use lighting shields to direct light downwards and to avoid light shining into the sky or trees
 - Use motion detectors and sensors so lights are only on when you need them
 - Close blinds at night to reduce the amount of light being emitted from windows
- Share your success on social media and with the press, your commitment to go lights out to save birds is newsworthy.

Additional Guidelines for Buildings Taller Than 3 Stories:

- Extinguish or dim: Exterior and decorative lighting (i.e. spotlights, logos, clock faces, greenhouses, and antenna lighting); lobby/atrium lighting; and lighting in perimeter rooms on all levels of the building.
- Avoid: Floodlights; illuminating interior plants or fountains, and unoccupied floors; scheduling cleaning crews after dark; and blue-rich white light emissions (lighting with a color temperature of over 3000 Kelvins).
- Use: Desk lamps or task lighting rather than overhead lights; blinking lighting in place of continuously burning lights; and warm light sources (less than 3000 Kelvin) for outdoor lighting.



CONTACT INFORMATION

Engagement Contacts:

APC Collective for Texan by Nature, Media:
fernanda@apccollective.com, 956-592-6619
Taylor Keys, Texan by Nature Manager:
taylor@texanbynature.org, 210-232-4191

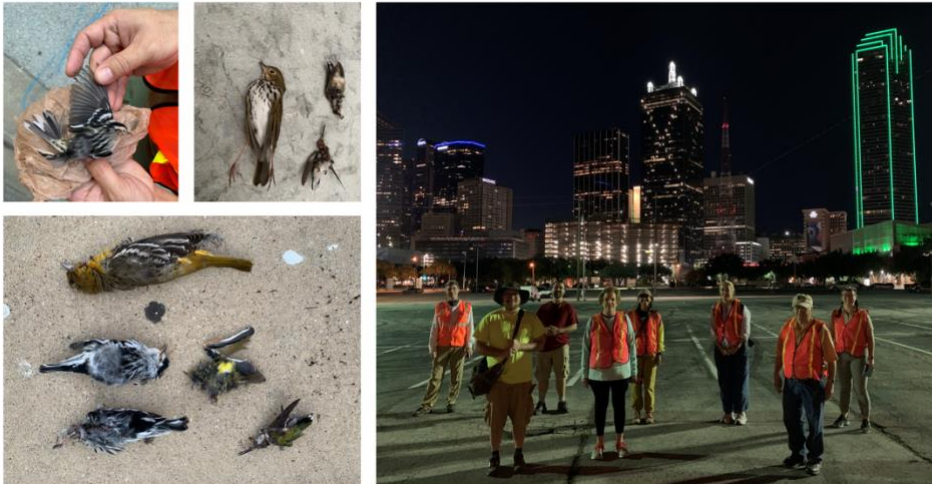
Research Contacts:

Pat Leonard, Media Contact:
pel27@cornell.edu, 607-254-2137
Julia Wang, BirdCast Project Leader/Lights Out Coordinator:
jw892@cornell.edu, 607-232-9084
Andrew Farnsworth, Research Associate/BirdCast Director:
af27@cornell.edu, 914-672-5971

FACTS ABOUT HOW LIGHTS AT NIGHT IMPACT BIRDS

DID YOU KNOW? Texas contains 3 of the top 20 U.S. cities in exposing migrating birds to hazards created by light pollution, with Houston ranked #2 and the Dallas-Fort Worth area ranked #3. Because most migratory birds fly at night, bright lights of commercial and residential buildings attract and disorient birds, causing collisions and leaving birds vulnerable to threats on the ground.

1. Texas is globally important for birds.
 - 1 of every 3 birds migrating through the U.S. in spring passes through Texas, meaning approximately one billion birds traveling through our state ^[2].
 - Protecting birds in Texas promotes conservation of bird populations across the Americas.
2. U.S. bird populations are declining rapidly, with 1 out of every 4 birds lost since 1970^[3].
 - An estimated one billion U.S. bird deaths occur annually from collisions with buildings and structures ^[4], with migratory species at most risk.
 - Attraction and disorientation resulting from light pollution concentrate migrant birds in cities ^[5].
3. Birds are essential to our planet's ecology – and our local economy.
 - Birds provide ecosystem services, act as benchmarks for environmental health, increase livability, and connect people of all ages and abilities to the natural world.
 - Birds also support the Texas economy. In the Rio Grande Valley alone, Texas A&M found that nature tourism – which is dominated by bird watching – contributes \$300 million and 4,407 full and part-time jobs annually.
4. Reducing light pollution directly reduces energy expenditures and carbon footprints.
 - Energy use is the single largest operating expense in commercial office buildings, representing approximately one-third of typical operating budgets and accounting for almost 20% of the nation's annual greenhouse gas emissions ^[6].
 - Office buildings waste up to one-third of the energy they consume ^[7].



Some of the birds killed in downtown Dallas during the fall 2020 migration, collected by volunteers led by the Texas Conservation Alliance (bottom right). Top left, Black-and-white Warbler; top center, Ovenbird and two Ruby-throated Hummingbird Birds; bottom left, Black-and-white Warblers, Baltimore Oriole, Ruby-throated Hummingbird, and tail feathers of a Magnolia Warbler.

[1] Van Doren, B.M., et al., High-intensity urban light installation dramatically alters nocturnal bird migration. *Proceedings of the National Academy of Sciences*, 2017, 114(42): p. 11175-11180.

[2] Dokter, A.M., et al., Seasonal abundance and survival of North America's migratory avifauna determined by weather radar. *Nature ecology & evolution*, 2018: p. 1, 4. / Horton, K.G., et al., Holding steady: Little change in intensity or timing of bird migration over the Gulf of Mexico. *Global change biology*, 2019, 25(3): p. 1106-1118.

[3] Rosenberg, K.V., et al., Decline of the North American avifauna. *Science*, 2019, 366(6461): p. 120-124.

[4] Loss, S.R., et al., Bird-building collisions in the United States: Estimates of annual mortality and species vulnerability. *The Condor*, 2014, 116(1): p. 8-23, 7. / Loss, S.R., T. Will, and P. Marra, Direct Mortality of Birds from Anthropogenic Causes, in *Annual Review of Ecology, Evolution, and Systematics*, Vol 46, D.J. Futuyma, Editor, 2015, p. 99-120.

[5] Horton, K.G., et al., Bright lights in the big cities: migratory birds' exposure to artificial light. *Frontiers in Ecology and the Environment*, 2019, 2. / Van Doren, B.M., et al., High-intensity urban light installation dramatically alters nocturnal bird migration. *Proceedings of the National Academy of Sciences*, 2017, 114(42): p. 11175-11180, 8. / Cabrera-Cruz SA, C.E., Smolinsky JA, Buler JJ, Artificial Light at Night is Related to Broad-Scale Stopover Distributions of Nocturnally Migrating Landbirds along the Yucatan Peninsula, Mexico. *Remote Sensing*, 2020, 12(3): p. 395

[6] La Sorte, F.A., et al., Seasonal associations with urban light pollution for nocturnally migrating bird populations. *Global Change Biology*, 2017, 10. / McLaren, J.D., et al., Artificial light at night confounds broad-scale habitat use by migrating birds. *Ecology letters*, 2018, 21(3): p. 356-364.

[7] Star, Energy, "Commercial Real Estate: An Overview of Energy Use and Energy Efficiency Opportunities." (2013).