



White-crowned sparrows, an avian symbol of mountain meadows in the West, are one of the species most positively impacted by Lights Out efforts. Photo by Will Elder/NPS.

Help ensure safe travels for migratory birds

Every year, billions of wild birds migrate south in the fall and north in the spring. Haven't seen these billions of birds? Don't feel bad—most people don't get to witness this marvel. The majority of these migratory birds pass overhead after we have lit out for dreamland.

Unfortunately, we're not always good about turning out our lights before bedtime. The artificial lights left on all night throughout our towns and cities pose significant threats to migrating birds. This only multiplies the risks to birds when combined with the other significant threats from urbanization.

In addition to disrupting migration pathways, this excessive light in the night sky confuses and "traps" birds, preventing their normal movements and wasting precious calories. Some birds die directly from exhaustion, while others become more vulnerable to other urban threats. (Imagine trying to outrun a predator in an unfamiliar location, after sprinting for 6–8 hours straight, while also dodging traffic and buildings. That is no easy obstacle course.)

BirdCast

Partnering new technologies with existing infrastructure can help identify the highest-traffic days, weeks, and months during migration. In 2018, the Cornell Lab of Ornithology, Colorado State University, and the University of Massachusetts Amherst tapped into the NOAA radar network and taught computers to filter out weather and clutter, creating a tool called BirdCast.

BirdCast predictions can be paired with existing knowledge of counties and cities responsible for the greatest light offenses to create a “Lights Out Alert” during peak nights of migration. To learn more, visit birdcast.info.

The “Lights Out” movement

The largest migratory pathways in eastern states are also filled with the largest concentrations of urbanization. The Lights Out movement hatched in Chicago, a major offender of overly bright skies. The strategy of Lights Out is simple: by convincing building owners and managers to turn off excess lighting during the months that migrating birds are flying overhead, humans can help provide them safe passage between their nesting and wintering grounds.

Wyoming consists of a lot of “The Big Empty.” We don’t have a lot of people, buildings, roads, cell service, beaches, malls, regular flights to other states, and many other modern boons (though we do have plenty of pronghorn!). Fortunately, we also lack the artificial light at night (ALaN) that typically accompanies those modern amenities. Wyoming’s skies are not illuminated by light escaping skyscrapers, lighted advertising, streetlights, and other man-made light sources.

Lights Out has gained serious momentum across North America in the past decade, but some might consider Wyoming “late to the party.” I would argue that Wyoming was one of the first to arrive. We were so early to this movement that the lights were never even turned on.

While our state is mostly unaffected by ALaN, adding motion detectors or downward-facing shielding can further protect our celestial-strewn resource.

Bird collisions

The main tenet of Lights Out is shutting off lights, but there is a secondary focus on reflective surfaces (a.k.a. windows). Wyoming’s lack of artificial light at night may be a saving grace for birds higher in the sky, but the second tenet of Lights Out leaves room for improvement for the people of Wyoming.

Windows in our state still kill hundreds to thousands of birds every migration. However, these mortalities are not often witnessed by homeowners. Scavengers scoop carcasses, leaving an unidentifiable crime scene, and sometimes birds are able to fly away, only to succumb to their injuries in nearby cover.

As residents of one of the greatest havens for wildlife in the U.S., what can we do? Cover our windows! Screens are one of the most effective ways to keep birds from colliding with glass. Shutting blinds and curtains also reduces window collisions.

Interested in other options? There are a variety of window treatments that minimize viewing impacts while reducing window collisions by more than 85%. Many tested window treatments have been studied by the American Bird Conservancy and results can be seen on their site, but you can also make your own!

For the DIY-ers and thrifty folks, mimicking the products listed by the American Bird Conservancy can be achieved with window chalk, fishing line, or tempera paint. If you have bird feeders in your yard arrangement, you can mitigate against collisions by either moving feeders within 3 feet of the glass surface, or moving the smorgasbords more than 30 feet away from the surface.

Wyoming does not need a large-scale Lights Out effort, as we hold the patent on having lights out. We can still help migrating birds in our state by minimizing window collisions and continuing our efforts to improve habitat in Wyoming’s wild spaces. Next time you travel to a more populated state, you can hold your head up and let the big city folk know, “Wyoming is lights out at Lights Out.”

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Zach Hutchinson is a community naturalist, master bird bander, and the community science coordinator for Audubon Rockies. He offers his apologies to any Alans who may feel scapegoated by the “artificial lights at night” acronym. To learn more about the Lights Out movement, contact Hutchinson at zach.hutchinson@audubon.org.