

Lights Out: Help Save Out Birds, Pollinators & Other Wildlife

Resources for Lights Out

Carol Woods Bird Club, January 13, 2025

Dark Sky:

DarkSky's mission is to work to restore the nighttime environment and protect communities and wildlife from light pollution.

DarkSky International.org: <https://darksky.org>

The DarkSky website is a comprehensive resource for science and best use of lighting fixtures to manage Artificial Lights At Night (ALAN).

Artificial Light at Night: State of the Science 2024: <https://darksky.org/news/artificial-light-at-night-state-of-the-science-2024/> This is a summary report for research from 2024 with footnotes for each citation in the report.

Artificial Lights at Night Research Literature Database: This is an ALAN searchable database by topic such as birds, pollinators, plants, etc. https://www.zotero.org/groups/2913367/alan_db/library

Book - Night Magic:

Henion, Leigh Ann. *Night Magic: Adventures Among Glowworms, Moon Gardens, and Other Marvels of the Dark*. New York, Algonquin Books of Chapel Hill, 2024.

Discover the magic of our Appalachian Mountains in Leigh Ann's nighttime explorations described in her book. It is a fascinating journey into our nighttime environment you won't want to miss. This Kirkus Reviews says it best: "A lyrical, fascinating story about exploring the secret world of darkness and the remarkable creatures within it. Henion writes with poetic grace."

World Atlas of Artificial Night Sky:

- Fabio Falchi et al. The New World Atlas of Artificial Night Sky: <https://www.science.org/doi/10.1126/sciadv.1600377>
- CIRES: Cooperative Institute for Research in Environmental Sciences at the University of Colorado Boulder <https://cires.colorado.edu/Artificial-light>

National Library of Medicine:

PubMed Central® (PMC) is a free full-text archive of biomedical and life sciences journal literature at the U.S. National Institutes of Health's National Library of Medicine (NIH/NLM)

<https://pmc.ncbi.nlm.nih.gov/>

Insects:

- Xerces Society for Invertebrate Conservation: <https://www.xerces.org/>
 - <https://www.xerces.org/blog/to-protect-pollinators-we-need-to-fight-light-pollution>
 - <https://xerces.org/blog/the-night-shift-moths-as-nocturnal-pollinators>
- National Library of Medicine:
 - The impact of artificial light at night on nocturnal insects: A review and synthesis: <https://pmc.ncbi.nlm.nih.gov/articles/PMC6262936/#ece34557-sec-0001>

- **Fireflies:**

NCSU Extension: “Discover the Secret Science of Fireflies” with Dr. Clyde Sorenson.

<https://homegrown.extension.ncsu.edu/2021/06/discover-the-secret-science-of-fireflies/>

- **Moths:**

- Dr. Sam Fabian, Imperial College London: “ ‘Like a moth to a flame’ — this strange insect behavior is finally explained”.

- Video of moth flying around artificial light:

https://www.youtube.com/watch?v=i7awa_WGI_o

- Research paper: <https://www.nature.com/articles/s41467-024-44785-3>

Plants:

Knop, E., Zoller, L., Ryser, R. et al. Artificial light at night as a new threat to pollination. Nature 548, 206–209 (2017). <https://doi.org/10.1038/nature23288>

Reptiles:

Emily S. Wooley, Louis E. Keiner, Scott L. Parker, H. Erin Rickard, and Eric T. Koepfler "The Effect of Artificial Light on Orientation of Hatchling Loggerhead Sea Turtles (*Caretta caretta*)," Ichthyology & Herpetology 112(3), 328-338, (9 September 2024). <https://doi.org/10.1643/h2020039>

Amphibians:

Alexander S. Hall "Acute Artificial Light Diminishes Central Texas Anuran Calling Behavior," The American Midland Naturalist 175(2), 183-193, (1 April 2016). <https://doi.org/10.1674/0003-0031-175.2.183>

Mammals/Humans:

National Library of Medicine - search by topic of interest. <https://pmc.ncbi.nlm.nih.gov/>

Birds:

- Cornell Lab, Living Bird, Winter 2024: “A Fifth of All Bird Species Occur in Cities. Could Urban Living Be Made Easier?”

<https://www.allaboutbirds.org/news/a-fifth-of-all-bird-species-occur-in-cities-could-urban-living-be-made-easier/>

- Lights Out North Carolina - <https://nc.audubon.org/conservation/lights-out-north-carolina>