



LIGHTS OUT AND YOU

Grade 4 | 45 Minutes Live Interaction

Teacher's Guide

Description

In this virtual experience your students will spend time with a professional wildlife rehabilitator! Before your lesson, study the migration map of Ohio and the east coast to develop reasons as to why Ohio is a key location for bird migration. This experience includes live animals and other animals. Learn how Lake Erie Nature & Science Center is involved in a global initiative called "Lights Out." Use your math skills to learn how the simple act of turning off your lights can impact bird migration.

Lake Erie Nature & Science Center is the only wildlife rehabilitation facility in Cuyahoga County. Wildlife rehabilitation is performed with permits from federal, state, and local agencies. The wildlife rehabilitation facility is not publicly accessible, so this is a special opportunity to show how subjects like science, math, and social studies are applied to real-life situations.

Technology Requirements: Zoom or Google Meet, materials will be distributed by Google Docs, Jamboard, etc.

Content Standards

Life Science	Grade 4
Standard	
<ul style="list-style-type: none">4.LS.1: Changes in an organism's environment are sometimes beneficial to its survival and sometimes harmful.	
Objective/"I can" Statements	

- I can explain why turning off lights on big buildings helps bird's survival.
- I can explain how big cities along the lakeshore impact bird migration.

Math

Grade 4

Standard

- 4.MD.4: Display and interpret data in graphs (picture graphs, bar graphs, and line plots) to solve problems using numbers and operations for this grade.

Objective/"I can" Statements

- I can use data to explain why turning off lights is a good way to help migrating birds.

Social Studies

Grade 4

Standard

- Social Studies.Geography.9: A map scale and cardinal and intermediate directions can be used to describe the relative location of physical and human characteristics of Ohio and the United States.
- Social Studies.Geography.12: People have modified the environment throughout history resulting in both positive and negative consequences in Ohio and the United States.
- Social Studies.Geography.20: Tables and charts organize data in a variety of formats to help individuals understand information and issues.

Objective/"I can" Statements

- I can tell why Lights Out Cleveland is important.
- I can point out on a map migration routes across Lake Erie and the United States.
- I can explain how big cities along the lakeshore impact bird migration.
- I can explain what I can do to help migrating birds.

Pre-Trip Activities

Migration Madness: Students will use flyway maps of northern Ohio and the United States to make a list of reasons why birds travel along specific routes.

Vocabulary

Wildlife rehabilitation (rehab)	Window strike	Flyways	Migration season
Wildlife Rehabilitator (rehabber)	Navigation	Migration	

Post-Trip Activities

Data Data Data! using data from Lights Out Cleveland, and the long time running Lights Out Chicago programs, students will make a graph to compare the long term impact of turning off big city lights during migration season.