



Teacher Guide

UNIT 4 LESSON 2: URBAN DEVELOPMENT - AVIAN WINDOW COLLISIONS

Theme

It is key to also identify solutions after identifying the issues surrounding urban development.

Missouri Science Standards: LS2.C.2; ESS3.C.1

Article: "Why Birds Hit Glass" by American Bird Conservancy

Description: Article explains why birds hit windows and the effect of artificial light on collisions and bird migration.

Link: <https://abcbirds.org/glass-collisions/why-birds-hit-glass/>

Teacher Notes:

- Article covers the basics, but you can encourage to read the other resources the American Bird Conservancy has on this issue.
- You can have the students answer questions after reading article or while they are reading.

Follow-Up Questions:

1. What are the two primary reasons birds hit windows?
2. True or False? Glass presents problems to both people and birds.
3. Fill in the blanks. Birds tend to collide with glass at _____ speeds and their small bodies, composed of hollow bones, leave them particularly vulnerable to injury.
4. Fill in the blanks. Collisions in the U.S. are most frequent during _____ and _____ migration.

Video: Birds, Brained - Window Collisions and How to Prevent Them

video Description: Windows are tricky for birds! Learn why that's true and what we can do to help as BirdSafe Kansas City Coordinator, Theresa Enderle, shares some important tips for keeping birds from striking your windows. Video produced by the Missouri River Bird Observatory as a part of their virtual Birds and Bees Festival.

Video Link: <https://www.youtube.com/watch?v=fI2Z5lQeBKI>

Teacher Notes:

- *Video is approximately 32 min in length total. However, students only need to watch through 17:47.*
- *Start video at 0:40 to skip Zoom intro stuff.*

Follow-Up Questions:

1. What are two reasons birds hit windows stated in the video?
2. Why is light pollution a problem for migrating birds?
3. Fill in the blank. Building collisions kill an estimated _____ million birds per year in the United States.
4. True or False? Most of the building collisions occur on high-rise buildings.
5. What solution to preventing window strikes involves some fun art?
6. What are two other mitigation (preventative) strategies mentioned?
7. Fill in the blank. _____ are what hope looks like to a bird.

Activity: Plastic Scavenger Hunt

Activity Summary: In this activity students will use their knowledge about window strikes to prevent birds hitting the windows around them. They will conduct a study to determine which windows birds are hitting in their classroom, school, or home and implement preventative solutions.

Teacher Notes:

- *If working in a classroom setting, it may be best to split the class into groups to conduct their study. Or work as an entire classroom depending on the size of your class.*
- *The students may also need to host a fundraiser of some sort to acquire the funding needed for their particular window treatment.*

Concluding Questions/Assessment

*Student worksheet included in packet.

1. Explain why glass/window collisions are an issue for birds.
2. Describe three possible solutions to prevent birds from hitting a window.
3. What did you find most challenging about your window collision study? How did you solve this challenge?
4. Have you ever witnessed a bird colliding with a window? What was the experience like?

