



Lesson: Assessing School Windows for Migratory Bird Safety

**Note*:* This lesson requires students to be able to view school windows from the outside. Plan in advance for weather.

Outcome: *I can* assess our school windows to determine if they are harmful to migratory birds. *I can* design and create a solution for those deemed harmful.

Time Needed: 1 hour

Materials: LOB Slideshow/PowerPoint and means to project, LOB window assessment worksheet, clipboards, pencils

Main Standard Addressed: **NGSS MS-ESS3-3:** Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

Anticipatory Set: Help students understand the problem migratory birds face when they encounter reflective surfaces by reviewing the LOB PowerPoint with students.

Activity: Guide students on a tour of external school windows, using the LOB window assessment worksheet. This can be done in multiples ways, depending on your class structure and the size of your school building: students can work as teams and look at specific assigned sections of the school; students can work as teams, but still assess all school windows; students can work as individuals; this can be completed as a teacher-led, whole-class activity. The clipboards will be helpful in giving students a surface to write on as they tour the outside of the building.

Before beginning the assessment, it will be helpful to decide on how you will define each set of windows to differentiate one set from another (ex. "east wing outside cafeteria"). This gives students common vocabulary when the assessment is completed.

Students will be deciding whether or not they can see the reflection of the surrounding environment. They can also note any other factors that would make the windows bird-safe: consistently drawn blinds, properly placed bird-safe decals, bird feeders placed within five feet of the window, painted windows, motion-sensing lights (that would be off at night).

Once students have decided whether or not they can see a reflection and noted any other factors, they need to decide whether the window is bird-safe. If students are completing this in groups, allow them to decide this on their own. This is a great discussion point for later!

Assessment: Gather students back together in the classroom and develop a class version of the chart. Ensure students understand what makes a window bird-safe by using targeted questioning. When students disagree on whether or not a set of windows is bird-safe, have both viewpoints present the evidence as they see it, and have the class vote.

Closure: Review reasons for making windows safe for migratory birds. Review the importance of migratory birds to the ecosystem.

Possible extensions:

- Develop and carry out a plan for making some or all of the windows in the school safe for migratory birds.
- Have students look for buildings in their community that need bird-safe enhancements and develop a plan of action. Solutions could include writing to building owners/management companies about the importance of bird safety.
- Allow students to research current building requirements for bird safety. If current building requirements do not support bird safety, students can research standards for bird-safe buildings in communities that have them (for example, San Francisco's Planning Department has bird-safe requirements). Students can then write to their legislators with proposed updates that would keep birds safe.



Name _____

Date _____

Location	Can I see a reflection?	Other Factors	Is this window bird-safe?

Other factors that make a window bird-safe: Closed blinds or curtains, a bird feeder that is very close to the window, windows that are painted, windows that have decals that are close together