

**American Institute of Architects CES class:**

**ABCbirds300: An Overview of Bird-Friendly Building Design One hour, one LU/HSW credit**

**American Bird Conservancy CES provider number: 50111108**

**Green Building Council 0920006847  
Bird-friendly Building Design 1 credit**

There is no fee for this class but we encourage a donation to American Bird Conservancy's Glass Collisions Program to defray the costs for face to face presentations.

To schedule a class, email [collisions@abcbirds.org](mailto:collisions@abcbirds.org)

**Abstract:** Birds provide billions to our economy in ecoservices, playing fundamental roles in ecosystems, including habitat regeneration and acting as natural controls for insects. Yet, we allow hundreds of millions to die yearly in the US alone, from collisions with glass. Humans understand 'glass' as a concept, and learn cues that indicate its presence. Birds are unable to learn about glass as a category of material. Taking what they see literally, they strike glass as they fly towards reflections of sky or vegetation, or as they try to reach habitat seen through glass. Birds collide with glass on structures of every size, from shacks to skyscrapers, in urban, suburban and rural areas. Advances in technology are increasing use of glass curtain walls and other large glass features, increasing the rate of mortality. However, we now have materials that can make buildings safe for birds without sacrificing light, appearance or view clarity.

In 2011, San Francisco was the first U.S. city to require bird-friendly design for some new construction. The LEED Pilot Library added a credit for reducing bird collisions the same year. Since then, over 20 jurisdictions at levels from state to town, have legislated bird-friendly construction and more are pending. Notably New York City, in 2019, adopted code requiring bird-friendly design for all new construction. We review use of the LEED credit and important features of legislation across the U.S. and Canada.

This class explains how to recognize and remediate hazards to birds in the built environment. Case studies and a slide show illustrate how many sustainable strategies for controlling heat and light can also reduce bird mortality. Techniques now in use for evaluating the relative threat level to birds of different materials are described, along with typical results.

**Goals**

**Participants will learn to**

1. Recognize hazards to birds in the built environment and understand how to remediate them
2. Identify and apply current best practices in creating bird-friendly new design
3. Integrate bird-friendly architecture with other aspects of green design
4. Understand existing and potential legislation mandating bird-friendly design
5. Use LEED Pilot Credit #55: Reducing Bird Collisions
6. Find and utilize resources on bird-friendly construction, including research reports, case studies, materials and guidelines.

## **Outline**

- 1. Introduction**
  - Why birds matter**
  - Why birds can't see glass**
- 2. Bird/Glass Collisions**
  - The magnitude of the problem: how do we know?**
  - Causes of Bird Collisions**
    - Glass reflectivity**
    - Glass transparency (fly-through effect)**
    - Passage effect**
    - Light pollution**
- 3. Can 'bird-friendly' be defined objectively?**
  - Research**
  - Tunnel testing and rating glass**
  - How much does this cost?**
- 4. Mandates and guidelines promoting bird-friendly design – what you need to know**
  - Legislation: San Francisco, Oakland, Minnesota, Toronto, Ontario and more**
  - LEED Pilot credit #55: Reducing Bird Collisions**
- 5. Case studies**
  - University of Minnesota**
  - Center for Global Conservation**
- 6. Beautiful bird-friendly buildings around the world**
- 7. Conclusion**
  - There is an increasing mandate for bird-friendly design**
  - Bird-friendly construction is compatible with other goals of green design**
  - New materials and information make bird-friendly design an achievable goal**
  - Resources are readily available**