American Institute of Architects CES class:

ABCbirds101: 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 schedule a class, email collisions@abcbirds.org

Abstract: Birds provide billions to our economy, yet, bird populations are crashing. Collisions with glass are a primary cause. Birds take what they see literally, striking glass as they fly towards apparent resources. 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 and that has since been added to the primary credit system. Over 20 jurisdictions at levels from state to town, have now mandated 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. We illustrate how many strategies for controlling heat and light, and even security, 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. Resources, like American Bird Conservancy's searchable database of bird-friendly materials are reviewed.

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

Wat is a collision? 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)

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, New York, Washington DC and more LEED Credit: Reducing Bird Collisions

- 5. Bird-friendly Glass review
 - 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: materials database, bird-friendly buildings gallery, list of legislation