Bird-Friendly Building

Solutions for a sustainable future

FACTS AT A GLANCE

OVER 1 BILLION
birds killed annually in the United States due to bird building collisions.

OVER 20 CITIES
have policies mandating bird-friendly building standards, including Portland, ME, Madison, WI, and New York, NY.

HUNDREDS
of effective strategies exist for preventing bird collisions.

1-POINT BIRD-FRIENDLY GLASS CREDIT
credit possible through the LEED Rating Program.

$107 billion
produced annually by bird-watching activities, involving over 47 million people.

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Chair, Lights Out CNY

Bird building collisions are a major cause of bird mortality in the U.S. Changes to the building envelope can help save bird lives, while providing important co-benefits such as enhanced energy efficiency, ecological resilience, and authentic connection to nature.

BIRD BUILDING COLLISIONS: A CLEAR PROBLEM

A bird building collision occurs when a bird mistakes transparent or reflective surfaces on a building envelope for habitat or another object and flies into it often at great speed, resulting in injury or death. The toll is staggering: Over one billion birds are killed every year in the United States after crashing into buildings.

Bird building collisions can happen to birds of any species, at structures of all heights and shapes, on glazing facing in all directions, during all seasons, and under all weather conditions. However, the amount of glazing on a building is the strongest predictor of its risk to birds. Lighting and landscaping also play a role in attracting birds to risky areas.

BIRD-FRIENDLY BUILDING DESIGN

Bird-friendly building design and materials reduce the risk of collisions for birds. lass and other transparent/reflective surfaces on a building envelope visible to birds drastically reduce collisions. These include glazing treatments that create contrast visual markers, such as ceramic fritting, acid etching, opacity, and textures. Architectural features like exterior shades, screens, shutters, stainless-steel detailing, wire mesh, and insect screens. Reducing the total amount and size of glass sheeting helps. Such “visual noise” should follow the 2” x 2” rule, to prevent collisions by the smallest birds.

Bird-friendly building standards should be followed for the first 100 feet above grade level or the top of the mature tree canopy.

“A building isn’t green until it’s bird friendly.”

-Michael Mesure,
Executive Director, FLAP Canada

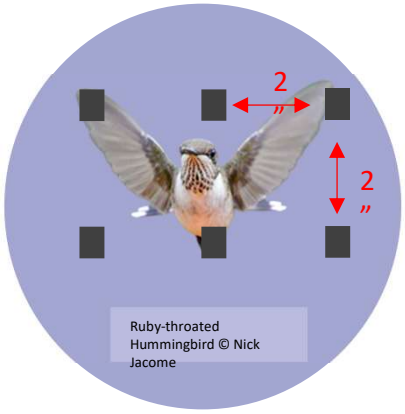
BIRD-FRIENDLY DESIGN SOLUTIONS

Patterned or etched glass

External screens, Including insect screens

Visual noise

Follow the 2" x 2" rule for contrast visual markers



Ruby-throated Hummingbird © Nick Jacome

Responsible Nighttime Lighting

Artificial light at night acts as a beacon for hundreds of North American migratory bird species, most of which migrate at night. Intensive indoor and outdoor light can attract them into head-on collisions with buildings or into areas where they are more likely to strike a building. Turning off unnecessary nighttime lights after 11pm is shown to significantly reduce bird building collisions,. This can be achieved with lighting controls and fully shielded exterior light fixtures.

Landscaping

Lush and vegetation-rich landscaping can provide important habitat for birds, but it can substantially increase the risk of bird building collisions when surrounding glazing is left untreated. Improving habitats for humans, birds, and other species *should not come* at the *expense of birds*. Carefully consider landscaping and glazing choices to minimize the risks to bird.

Eastern Bluebird . © Nick Jacome

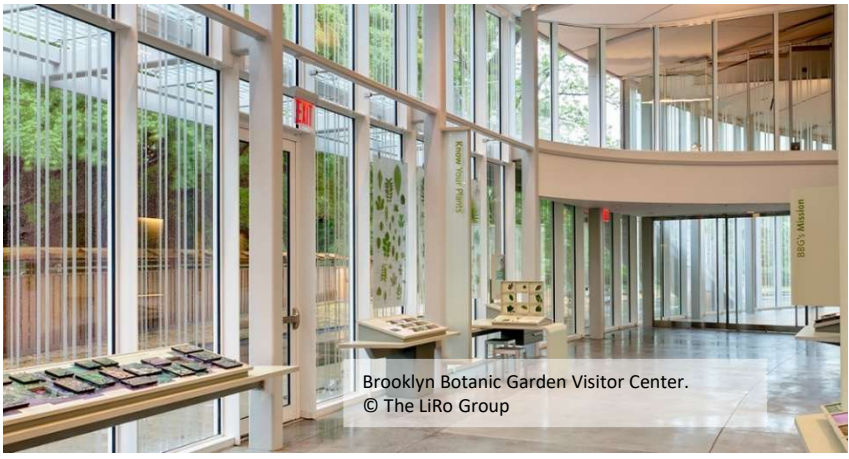
LEED "Bird-friendly Glass" Point

The LEED v5 BD+C offers one point for using "Bird-friendly Glass" through its "Biodiverse Habitat' credit. It sets standards for glass at the first 50 feet above grade and near green roofs, guardrails, and windshields.

EXEMPLARY
BIRD-FRIENDLY DESIGN

Brooklyn Botanic Garden

Brooklyn, NY



Brooklyn Botanic Garden Visitor Center. © The LiRo Group

Architect Firm: Weiss/Manfredi
Type: Visitor center
Sq ft: 22,000
Bird-friendly features: Patterned glass, abundant (native) landscaping
Green features: High-energy performance, natural light, green roof, rainwater harvest
Certification: USGBC LEED Gold