You can easily stop birds from hitting your building's windows!

Scientists recently found that the U.S. and Canada have lost almost three billion birds over the last 50 years. Like many bird species, we have lost 2 out of 5 Baltimore Orioles since 1970. There is hope and everyone can do their part to help. Every year nearly one billion birds collide with glass in the U.S., with than one-half of those collisions happen at low-rise buildings less than 4 stories tall.

Birds often don't see glass, so collisions happen when they fly towards natural reflections in the glass, like clouds, sky, or plants, or even house plants they can see through windows. During spring and fall migration, birds are attracted to lights—from landscaping or shining through windows. Many birds that seem fine following a window collision may later die from related head injuries. Prevention is the best option.

Fortunately, you can stop birds from hitting your windows using inexpensive and attractive solutions-- a small change can make a BIG difference for birds! Whether you own buildings or are a building occupant, there are several measures you can take to make your building safer for birds. Some measures reduce energy costs, and most are aesthetically acceptable to building tenants. People often welcome aesthetic changes when they know they protect birds. Also, not all windows are equally hazardous. By listening for the sounds of collisions, and looking for bird crash marks on windows, you can help you decide which windows need attention.

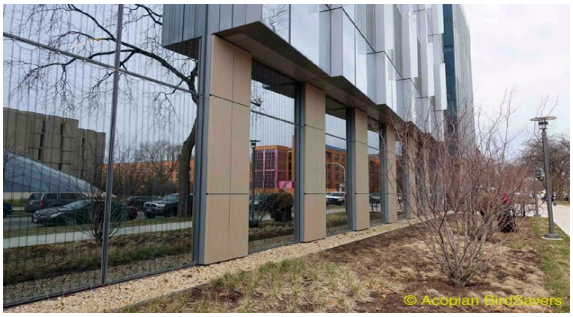
Lighting options

Blinds and shades can reduce the amount of interior light that escapes into the environment during the night and create a visual barrier during the day. External awnings and shutters can reduce escaping light and window reflection, as well as conserve energy. Extinguishing unnecessary lights manually or with lighting timers and motion sensors can also reduce energy costs and bird attraction to buildings. Indoor cleaning can be conducted during the day to reduce nighttime lighting and eliminate nighttime overtime wages.

Window options

Hawk silhouettes are a popular, but mostly ineffective, tool to reduce bird collisions; they only prevent birds from hitting glass when applied in high densities. Vertical stripes or patterns (at least 1/4 inch-wide, maximum spacing of 4 inches), or horizontal stripes (at least 1/4 inch-wide, maximum spacing of 2 inches) are effective at preventing window collisions for most birds (see the last image). To reduce hummingbird collisions, closer spacing is necessary (2 x 2-inch grid). Dark colored patterns may be difficult for birds to see if dark colors reflect on the glass. Patterns applied to the outside of windows will prevent more bird collisions than inside.

Zen curtains (11 cents ft^2). This elegant, inexpensive option uses 1/8-inch paracord pieces spaced less than 4 inches apart, hanging outside from the top of the window. These curtains can be purchased pre-made or constructed of readily available and inexpensive materials.



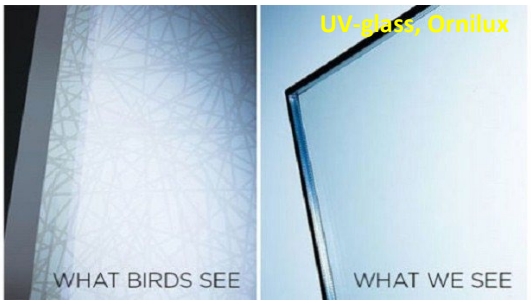
Tempera paint (13 cents ft^2). Non-toxic tempera paint patterns or artwork applied to exterior glass can reduce bird collisions for many years. Tempera paint is easily removed using vinegar and water.

Screens and netting ($1.83 ft^2). External insect screens reduce bird collisions by minimizing window reflections and alerting birds that windows are barriers. Netting prevents injuries to birds if it's placed inches in front of the window and stretched tight to prevent birds from hitting the glass. Net openings should be ½-inch or smaller, so birds aren't captured. Several companies sell screens that can be attached with suction cups or eye hooks.

Tape, decals, and external films ($2.50-8.00 ft^2). Products are available in many colors, tints, and patterns.

Glass options

A variety of glass and window types create visual barriers for birds thereby reducing mortality from collisions. Acid-etched, fritted and frosted glass include a pattern and allow natural lighting while increasing energy efficiency and bird safety. Some ultraviolet (UV)-reflecting glass options are available with patterns generally not visible to humans but visible to some bird species. Channel glass has demonstrated the ability to reduce bird collisions, reduce energy costs, and is often made of recycled materials.



Your actions can make a big difference for birds. Start making changes today! For more information please contact: Joelle_Gehring@FWS.gov or Eric_Kershner@FWS.gov or visit www.fws.gov and search Glass Bird Collision.

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