

## Birds and Ultraviolet Light

Birds can see ultraviolet (UV) light: a part of the spectrum in natural sunlight that humans can not see. Birds rely on their perception of UV light for success and survival when courting, reproducing or finding food. They are able to detect the reflected UV light from the feathers and bills of other birds, from a variety of berries and seeds, from the wings of insects, and (for raptors) in the feces and urine of some small rodents. This alerts the bird to the presence of a potential mate, or a possible food source, and aids them in their survival in the natural world.

There are several, new and promising window techniques available that use ultraviolet technology to help reduce bird-window collisions. Research indicates that birds are alerted to the presence of glass when they detect a UV pattern applied to a window.

When birds are alerted to the presence of glass they have a better chance of avoiding collision.

For more information and interesting discussions on UV as a collision reduction technique, as well as discussions regarding some of the other techniques mentioned above, please visit Sibley Guides at <http://www.sibleyguides.com>.

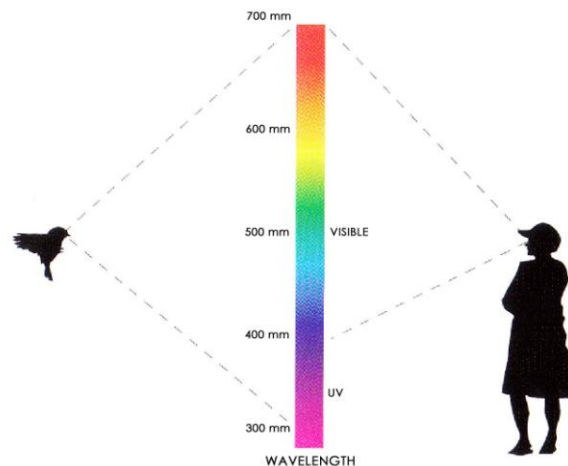


Illustration of UV daylight as a separate, enhanced color that is visible to birds but invisible to humans.  
Source: New York City Audubon's *Bird-Safe Building Guidelines*

## Evolving Bird-Window Collision Reduction Techniques

ArnoldGlas, a German company, has developed a bird protection glass called, "Ornilux" (<http://www.roeder-wd.com/ornilux-bird-safety-glass>) that they state prevents up to 71% of bird-window collisions. Ornilux earned ArnoldGlas the Innovation Award for Architecture and Building in 2006 and was recently selected as one of the top 10 most exciting Green Building Products during the 2010 Greenbuild conference in Chicago.



Photo: Röeder Windows & Doors

Ornilux glass adopts the mentioned ultraviolet (UV) concept by applying UV patterns onto the glass which are highly visible to birds and almost imperceptible to humans.

While Ornilux is still being refined, the current version is already in use by commercial builders in Germany and the United States. Current homeowners, and those who plan to build a home, can anticipate that this bird-friendly glass will soon be available for consumers.



Photo: Window Alert

WindowAlert window decals have also adopted this UV concept. WindowAlert states that these decals help reflect ultraviolet light. The reflected UV light is thought to be seen as a bright, iridescent glow to a bird's eye, but invisible to humans. The decal, defined by its glow, is designed to help alert birds to the presence of glass,

**Important Note:** As with all the other suggested techniques, it is important that WindowAlert decals are applied according to the rule-of-thumb: 5 cm (2 in) apart horizontally or 10 cm (4 in) apart vertically.

visit WindowAlert at <http://www.windowalert.com/> to read more about bird vision and ultraviolet light and to see pictures of WindowAlert decals in various applications.