



# Calvert County Environmental Commission

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## Reducing Bird Collisions with Buildings and Light Pollution

**Did you know more than 200 species of birds migrate over Southern Maryland? Peak bird migration happens between April to May and August to November in Maryland, with more than a million individual birds flying through the Calvert County nighttime sky.**



**Nighttime creates ideal flight conditions with a lower threat from natural predators, but creates a different hazard for birds: unseen building glass and disorienting lighting. Luckily, it is a preventable tragedy ([BirdCast, April 2025](#)).**

### **1. Why do birds collide with building glass?**

Birds do not see glass as a barrier. During daytime, glass can reflect the sky or surrounding habitat and birds will fly directly into glass. At night, birds may be drawn into lit areas, such as towns, cities and brightly lit buildings, where they can collide with structures ([Loss et al., 2014](#)).

### **2. Are birds killed or injured when they collide with building glass?**

Most birds die after colliding with glass. Studies estimate that more than one billion birds die each year from collisions with building glass, including birds that were able to fly away but later succumb to their injuries ([Kornreich et al., 2024](#)).

### **3. What do I do if I find a dead or injured bird?**

While dead birds are often quickly scavenged by other wildlife before people encounter them, you should avoid handling dead birds at any time. Disease outbreaks are common among wild birds, and while these diseases have low transmission risk to humans, bird-handling requires proper training and permits.

If you find an injured bird, do not try to catch it. Stay in the area to keep potential predators away. If, after 20 minutes, the bird has not recovered enough to fly, call a wildlife rehabilitator who can provide instructions for safely capturing and transporting the bird to them for care. The Maryland Department of Natural Resources maintains a list of licensed wildlife rehabilitators for each county and can be found at [https://dnr.maryland.gov/wildlife/pages/plants\\_wildlife/rehabilitators.aspx](https://dnr.maryland.gov/wildlife/pages/plants_wildlife/rehabilitators.aspx) or you may call Wildlife Services toll-free at 1-877-463-6497. You may also contact the Calvert Nature Society during business hours at [www.calvertparks.org/Wildlife](http://www.calvertparks.org/Wildlife).



#### **4. How should I monitor a building for bird collisions?**

Most collisions happen in the morning during spring and fall migration. Birds that hit windows make a ‘thud’ sound that can be heard from inside. Some windows may also have powder marks of a bird silhouette left behind, and, depending on the surroundings, the bird may be on the ground outside. Most bird strikes go unnoticed: if you notice one or two, more may be happening than you realize. Regular and consistent monitoring, along with good record-keeping, can help identify which parts of a building pose the greatest threats to birds. Collaborate with people in your office, school or family to make a plan of action if or when an injured or dead bird is found.

#### **5. What is light pollution?**

According to DarkSky International, light pollution is the alteration of outdoor light levels from those that happen in nature. This includes all forms of man-made light, including but not limited to floodlights, billboards, street lamps, lit vacant spaces or offices and any light source that produces light not pointed directly at the ground.

#### **6. How does light pollution affect bird collisions with building glass?**

Birds are easily disoriented and drawn to nighttime lighting. Once migrating birds are drawn off-course, they may continuously circle lit areas before becoming exhausted and falling to the ground. These birds may then linger on the ground until daytime, thus colliding with building glass or other infrastructure as they ascend upward to resume their migration ([Horton et al, 2023](#)).

#### **7. How can we reduce light pollution?**

- 💡 Limit and direct lighting only where and when it is needed. Timers and motion sensors not only reduce unnecessary glare but also help reduce your electricity bill.
- 💡 Use fixtures that block light from extending above the horizontal line of the fixture.
- 💡 Turn off interior lights when you’re not using them. If they must be on, use curtains or blinds to prevent light from spilling outside.
- 💡 Use dim and warm-colored lighting, which is less disorienting to wildlife.

## 8. How can I reduce bird collisions?

There are many simple, cost-effective and reliable window treatments. Whichever you choose, they must be placed on the window's exterior to be effective at preventing reflection of your surroundings. Solutions include:



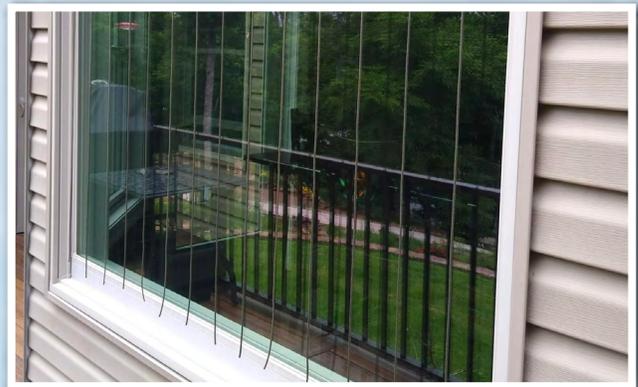
Decals, placed on the outside of windows in patterns or shapes, spaced two inches by two inches apart.



Transparent window films with patterns.



Window screens break up windows' reflections, are more visible to birds, and are a slightly more flexible surface in the event of a collision.



A series of vertical ropes, often called zen curtains, no more than four inches apart from each other.



Window film that is opaque on the outside but transparent on the inside.



Tempera paint or a bar of soap can be used to 'paint' designs that easily wash off. Designs should cover most of the window and be two inches or less apart.

Find more ideas at [www.fws.gov/library/collections/bird-friendly-home-toolkit](http://www.fws.gov/library/collections/bird-friendly-home-toolkit).



**9. Did you know that Calvert County has a lighting ordinance that protects the night sky?**

[Article 26 of the Calvert County Zoning Ordinance](#) addresses outdoor lighting and aims to provide a safe environment for using outdoor public areas while providing lighting that is dark sky friendly.

**For Environmental Commission questions or more information, contact the Department of Planning & Zoning at 410-535-1600.**

1. DesignLight Consortium's [Seven Strategies to Minimize Negative Impacts of Outdoor Light at Night](#).
2. Dark Sky International's [Five Principles for Responsible Outdoor Lighting](#).
3. Learn more about DarkSky International at [www.darksky.org](http://www.darksky.org) and their worldwide efforts to reduce the effects of light pollution.