

# Written Testimony.pdf

Uploaded by: Baker, Kevin

Position: FAV

## Energy-Conserving Standards: Maryland Sustainable Buildings Act of 2021 (HB 0236)

### TESTIMONY OF KEVIN BAKER

I am a student in HCPSS (a sophomore at Marriotts Ridge High School) with an interest in helping the planet I am growing up to live in be both habitable and sustainable.

When I was in fifth grade, I remember reading a story about the American Carrier pigeon and its migrations. I don't remember much of it today, but one thing has stuck with me. I didn't know that the pigeon was hunted to extinction until the end, where I read the author's note that provided historical context. Ten-year-old me was crushed by this knowledge; knowing that Americans willfully killed every single bird was not a happy thought, so naturally hearing about this bill today made me want to prevent the possible extinction of other migratory birds by our buildings.

I understand that others testifying can provide the facts needed to prove scientifically *why* this bill should be passed, but I am writing to provide another view of the problem: the view of the people who are going to experience the aftereffects of causing the unnecessary deaths of all these birds. This view demands that this bill be passed as quickly as possible. Here's why:

- The time for action came and went a long time ago. The health of the planet and all of its organisms has been in decline ever since the industrial revolution, so it's time that we picked up the slack and get on the road to recovery.
- In school you always hear the idealism of "be a leader", or "set an example". Maryland could certainly be a leader by passing this bill.
- The Trump Administration has weakened the EPA. Hopefully we will make environmental progress with President Biden, but we need to make up for the disastrous effects this has caused (ex. Reinterpretation of the Migratory Bird Treaty Act, selling federal land to oil companies, leaving the Paris Climate Agreement)
- I have spent lots of time in Patapsco State Park in the last couple years, and love its scenery. I want other people to be able to experience its beauty for years to come. Some of this has already happened; many more people are using the trails as a way to get exercise while social distancing. They have come to appreciate Maryland's natural beauty and will most likely support this bill.
- Nobody likes finding a dead bird outside his or her window; it happened to me this winter and was a saddening sight.
- This bill is part of an easy solution to a serious problem. It demands to be passed as quickly as possible.

People my age care greatly about the environment, but teenage cynicism makes it hard to see a way out of the mess we have made. I think young people will support this bill, as any action is infinitely better than none. I dearly hope that the state of Maryland will pass this bill, not only to help the birds and reduce energy consumption, but also to give the younger generation some hope about the future state of their planet.

# **HB236Senate\_IndivisibleHoCoMD\_FAV\_RichardDeutschma**

Uploaded by: Deutschmann, Richard

Position: FAV



## **HB236 – Energy Conserving Standards (Maryland Sustainable Buildings Act of 2021)**

**Testimony before**

**Senate Education, Health and Environmental Affairs Committee**

**March 31, 2020**

**Position: Favorable**

Mr. Chair, Madame Vice Chair and members of the committee, my name is Richard Deutschmann, and I represent the 750+ members of Indivisible Howard County. We are providing written testimony today in **support of HB236**, to increase energy efficiency in State buildings while protecting a bio-diverse bird population. Indivisible Howard County is an active member of the Maryland Legislative Coalition (with 30,000+ members).

This bill will require state of Maryland, for any buildings constructed, renovated, or acquired, to apply more stringent energy efficient standards, principally by utilizing bird-safe design. HB236 follows Howard County CB11-2020, which passed in 2020 and was signed into law by the County Executive. It also follows other states like New York, which has passed similar legislation with much success. Besides the obvious benefits of building more energy efficient structures and the associated positive effects to our contribution to climate change, this bill will reduce bird collisions with buildings, improve biodiversity, and support eco-tourism in the state.

Thank you for your consideration of this important legislation.

**We respectfully urge a favorable report.**

Richard Deutschmann  
Columbia, MD 21045

# **HB236- National Aquarium - MD Sustainable Building**

Uploaded by: Fredriksson, Ryan

Position: FAV



Date: March 31, 2021

Bill: HB 236 – Department of General Services – Energy- Conserving Standards (Maryland Sustainable Buildings Act of 2021)

Position: Support

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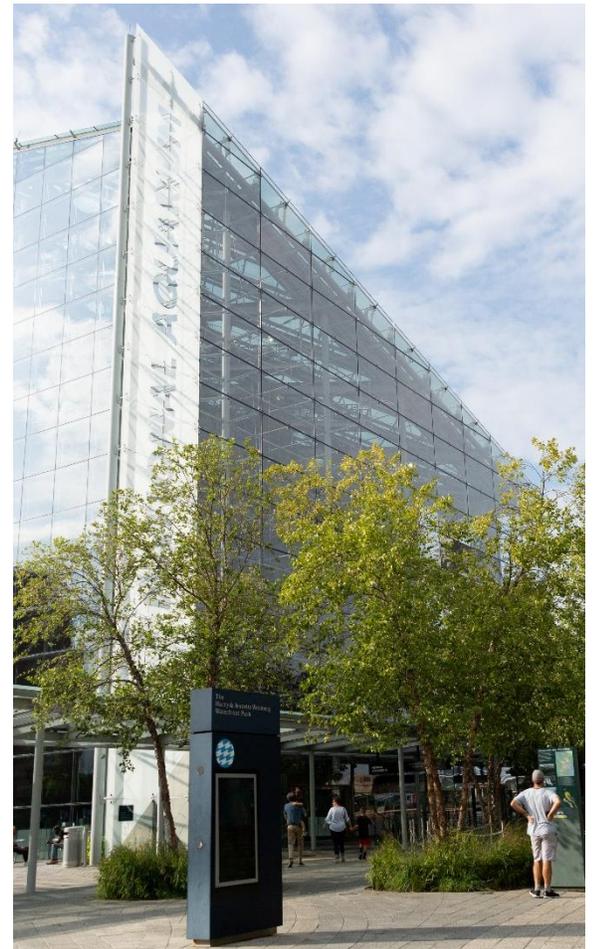
Dear Chair Pinsky and Members of the Committee:

The National Aquarium respectfully requests a favorable report for **House Bill 236, Maryland Sustainable Buildings Act of 2021**, which will help minimize fatal bird strikes across Maryland and increase energy savings.

It is estimated that window strikes are a leading cause of bird population decline, second only to habitat loss. Baltimore and much of Maryland lie within a major migratory pathway for birds, some flying from as far away as South America. Thankfully, steps can be taken to dramatically limit fatal bird strikes and preserve bird populations through building design, installation of bird-safe glass and films, and limits to interior lighting at night.

Over the last few years, the National Aquarium has worked with our animal care experts to design and cover over 3,000 sq. ft of existing glass with bird-safe dot patterns. This includes the 1,300 sq. ft “wing wall”, pictured here, that was responsible for over 70 percent of all bird strikes at the Aquarium. The wing wall film serves a dual purpose by using the bird dot patterns to display the National Aquarium’s name on the building. This simple approach created new highly visible signage and has significantly reduced bird strikes on the building.

HB 236 would help mitigate bird strikes across the state by requiring similar strategies be utilized on state buildings or that bird-safe building and design standards be considered from the start of new projects. Our experience shows that many of the methods used to prevent bird strikes not only make a significant difference but also have several benefits beyond decreasing bird fatalities. **We urge the Committee to issue a favorable report on HB 236.**



National Aquarium “wing wall”. Design credit: Ayers Saint Gross

Contact:

**Ryan Fredriksson**

Vice President, Government Affairs

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# **Written Testimony from Aaron Heinsman on HB236.pdf**

Uploaded by: Heinsman, Aaron

Position: FAV

Senate Education, Health & Environmental Affairs Committee

Testimony from Aaron Heinsman of Baltimore City, re: **HB236  
Maryland Sustainable Buildings Act of 2021**

March 31, 2021

**I offer this testimony in support of proposed HB236.**

I will not attempt to paraphrase expert testimony from scientists, conservations, and architects as to the real and tangible benefits of this bill through energy reduction and mitigation of wildlife casualties. Others are providing that vital context in support of this bill.

Instead I am writing as an active volunteer with Lights Out Baltimore, an official program of the Baltimore Bird Club, a chapter of the Maryland Ornithological Society. I first became aware of the scale of the problem of bird injuries and deaths from window collisions in early 2014, when I was exposed to the Baker Artist Award-winning photography of Lynne Parks at an exhibition at the Baltimore Museum of Art. Seeing her sensitive portraits of birds who had perished after colliding with windows of office buildings, street-level retail, and our convention center in downtown Baltimore moved me profoundly, spurring me to discuss the Lights Out Baltimore program with its coordinator (and my former colleague), Lindsay Jacks. She explained the goals of the program: to make Baltimore and beyond safe for migratory birds during spring and fall migration by turning out decorative and non-essential lighting daily between 10 p.m. and 6 a.m. and to advocate for bird-safe design in both current and new buildings.

I joined her for my first volunteer shift soon after, and I still vividly recall discovering the first casualty on the Saturday morning in March 2014: a yellow-billed cuckoo on its back with wings splayed open, which had died after striking a west-facing window of the Baltimore Convention Center.

Since that day, I have been galvanized by this issue, and have in my seven years as a volunteer thus far personally found nearly 1,500 injured or dead birds on my six-mile route through Mount Vernon, Downtown, and the Inner Harbor of Baltimore. Last fall during migration season, I found nearly 300 alone. I enclose a recent feature article from The Baltimore Sun spotlighting our work for your reference.

**I respectfully ask the members of the committee to approve this bill and support it in a subsequent floor vote.**

Sincerely,

Aaron Heinsman

BALTIMORE CITY MARYLAND

# A consequence of the coronavirus pandemic for these Baltimore activists? Freezers full of dead birds.

By CHRISTINE CONDON  
BALTIMORE SUN | NOV 17, 2020



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FEEDBACK



Lights Out Baltimore volunteers collect dead and injured birds in an effort to monitor how many birds die after striking windows during migration season.



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The Ziploc bags are tucked into a shoebox in Aaron Heinsman's freezer, near pouches of frozen vegetables and a cauliflower pizza crust.

Inside are birds. Hundreds of them. Common yellowthroats and American woodcocks and ovenbirds, avian ice cubes tightly sealed in plastic.

Each met a devastating end in Baltimore City during this year's migration season, at the hands of glass buildings they didn't see coming. The birds are collected by [Lights Out Baltimore — a group that advocates for making buildings “bird-safe,”](#) and collects data on bird collisions along the way.

And frozen those carcasses will remain — at least for the time being. Normally, the frosty songbirds would be bound for a museum collection or a laboratory. But because of the coronavirus pandemic, Heinsman and the group's other bird-gathering volunteers have nowhere to take them.

“This is sort of uncharted territory for us,” Heinsman said.



FEEDBACK

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Lights Out Baltimore volunteer Aaron Heinsman walks along the outside of the Federal Courthouse in search of dead or injured birds that have struck the windows overnight. (Jerry Jackson/Baltimore Sun)

Washington's Smithsonian Museum of Natural History, where Baltimore's birds usually land, is closed to donations. Plenty of scientific research that might make use of them remains on hold.

And so, for Lights Out volunteers, there is yet another strange coronavirus complication: birds in freezers. And lots of them.

"When people come over to my house: 'Oh, do you need some ice for your drink? I'll get that for you,'" said Lynne Parks, one of the group's volunteers, who also stores fallen birds at home.

Heinsman added: "Explaining the dead birds has been interesting to friends, potential romantic partners and cat sitters."

The pandemic struck before Lindsay Jacks, the group's director, could donate the 2019 haul, some 500 birds. And so they, too, fill a large standalone freezer in her basement, awaiting a return to relative normalcy alongside their human collectors. Soon, Jacks will buy a new freezer, the temporary resting place for another several hundred birds that died this year on city streets.

[\[More Maryland news\] Husband and wife found dead after apparent murder-suicide at Columbia home, Howard police say »](#)

Practically every day during migration season, Lights Out volunteers scour downtown Baltimore beginning around 5 a.m., and circle the perimeters of skyscrapers in search of dead and injured birds. The dead are Ziplocked and placed into a waiting bucket, and the wounded are swept into paper bags, which are binder-clipped to the bucket's lip. At the walk's conclusion, the dazed songbirds — and sometimes bats — are brought to the Phoenix Nature Center in Baltimore County for rehabilitation.

question. They keep the birds to ensure they won't have died in vain, and in the hopes that they'll contribute meaningfully to research by eventually adding to the Smithsonian's collection.

In May, Johns Hopkins University School of Medicine researchers published a study they conducted using bird specimens from Lights Out.

Birds use up lots of oxygen when they fly, and despite the stress this exerts, they live remarkably long lives. Through their study, researchers discovered that a gene mutation — a deletion scientists haven't observed in other vertebrate animals — helps them do so, said researcher Gianni M. Castiglione, who worked alongside Hopkins ophthalmology professor Elia J. Duh.

Most of the project's research took place before COVID-19 halted laboratory work, Castiglione said.

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The genome research could shed light on how to slow human aging using antioxidants. It also could help with the development of drugs to treat cancer and certain diseases of the eye. For cancer, it's ideal to flip off the body's antioxidant response; for certain ocular diseases, it's ideal to kick it into overdrive.

For one month during three different migration seasons, Castiglione woke up around 4 a.m. to await word from Lights Out volunteers on their morning walks. Often, the injured birds they brought had lain outside for too long, and some tissue samples that Castiglione needed from their livers, lungs, hearts and skin weren't viable. But most of the time, the birds could be used somehow to further the research.

FEEDBACK

“I think I could have probably found another way, through bird rescues or something like that, where they have deceased birds. But I don't know if I'd be able to get them as quickly. They might have been frozen carcasses.” Castiglione said

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of course, I don't think I would have been able to do the same rigor of research if it wasn't for Lights Out Baltimore. I think I can say that unequivocally."

At the end of the migration season, when Lights Out's dead birds are typically dropped off at the Museum of Natural History an hour's drive down Interstate 95, they are carefully logged and entered into the museum's collection. Then, under normal circumstances, they're available for researchers to borrow and examine.

"It's hard because we can't go in and check the collection, protect the collection or add to the collection," said Christina Gebhard, a museum specialist in the division of birds. "Above all else, we cannot contribute to science."

[\[More Maryland news\] Jessica Rothermel, Milan Gupta garner Player of Week honors | Howard Sports Notebook »](#)

Researchers have been doing their best to organize and catalog photos of the collection from home, but they're itching to return to the museum.

Officials say no such return is in sight.

"The Smithsonian is reopening its facilities to the public and essential staff where and when it can safely," wrote spokesman Ryan Lavery in a statement. "I hope the lack of clarity on a projected timeline is understandable given the uncertainty around the coronavirus."

So far, there are 165 birds from Lights Out Baltimore in the collection, and some of those are likely to feature in a Natural History Museum exhibition tentatively planned for fall 2022.

Called "Dark Skies," the exhibit will focus on the "global issue of how man-made light is influencing nature and our relationship with the night sky," Lavery said.

[\[More Maryland news\] Pandemic paradigm: Baltimore County mental health therapists. clients adapt to new dynamic »](#)

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The birds haven't just contributed to scientific research, but to a changing landscape in downtown Baltimore. Thanks in part to Lights Out's recordkeeping, a few of the city's worst offenders when it comes to bird collisions have taken steps to become "bird-safe."

Perhaps most notably, the National Aquarium covered a glass wall surrounding its Australia exhibit in a dotted film a few years back, so that birds could detect it. On the film, a collection of dense and sparse dots spell out "National Aquarium" vertically along the building's edge.

"That's what's kind of so amazing about it is, it's doing, you know, this really great work, and it just looks like it was meant to be there," said Jacqueline Bershada, the aquarium's vice president of planning and design.

The aquarium plans to redo the glass on its rainforest exhibit in a few years, and it will use frosted glass instead this time, Bershada said, so that the pane is visible to birds.

There are also plans to rid the aquarium's courtyard of lighting that shines upward, since such fixtures can confuse migrating birds.

[\[More Maryland news\] Baltimore prosecutor Marilyn Mosby purchased two Florida homes for more than \\$1M combined, property records show »](#)

It's a constant battle, and a uniquely morbid hobby, but volunteers say it's rewarding, too.

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“One out of four is a rescue, and that one out of four can really keep you going,” Jacks said. “You started your day at 5:30 in the morning and you rescued a bird. How many people can say that?”

An injured Silver-haired bat found along Pratt Street reacts as Lights Out Baltimore volunteer Aaron Heinsman tries to scoop it into a bag to be taken to Phoenix Wildlife Center. (Jerry Jackson/Baltimore Sun)

FEEDBACK

On a recent walk, Heinsman discovered his one out of four — a fallen silver-haired bat, huddled in a ball beside a stoop on Pratt Street. Though the bat may have looked dead to the average passerby — it was in fact very alive, and when prodded,

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Quickly, it was brushed into a lunch bag and toted around the city, before a volunteer came by to haul it to Phoenix.

When bats collide with buildings and fall to the ground, a major worry is that they will become dehydrated. But bats also can have a rather difficult time taking flight from land.

But this bat was one of the lucky ones.

About a day after it arrived at the nature center, it was released back into the wild.

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As Heinsman said of his first rescue: “It’s magical.”

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Christine Condon



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Christine Condon is a breaking news and environment reporter for The Baltimore Sun. Christine is a recent graduate of the University of Maryland, College Park. She's also worked as a reporting intern for McClatchy's Washington D.C. Bureau and Baltimore's The Daily Record.

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# **HB236 Senate Sponsor Testimony tlh .docx.pdf**

Uploaded by: Hill, Terri

Position: FAV

**TERRI L. HILL, M.D.**  
*Legislative District 12*  
Baltimore and Howard Counties

Health and Government Operations  
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**House Bill 236**  
**Department of General Services – Energy – Conserving Standards**  
**(Maryland Sustainable Buildings Act of 2021)**

March 21, 2021

Dear Chairman Pinsky, Vice-Chair Kagan, and Committee Members,

HB236 presents us with the rare opportunity to save money while addressing a significant problem by requiring the Maryland Department of General Services to develop Green Building Council LEED Pilot Credit 55 architectural standards for application “to the extent practicable and within budgetary constraints” in newly constructed, acquired, or substantially altered state buildings, and “considering the physical health and mental health of building occupants” in development of operational standards for conservation of energy and minimization of adverse impacts on migratory birds. Allowable and aesthetically pleasing designs and materials include ultraviolet patterned, matte, opaque, etched, stained, or frosted glass/Plexiglas®. The current bill does not require monitoring of bird-building collisions.

Incorporation of LEED 55 architectural elements in the design and planning stage is cost-neutral and will reduce energy consumption substantially, making State buildings more sustainable. Compliance with the architectural and operational standards is consistent with the State’s mandate under the High Performance Building Act of 2008 and Governor Hogan’s 2019 “Maryland Leads by Example” initiative. The bill puts into statute and accelerates the initiative’s goal of achieving a 10% reduction in energy consumption of State-owned buildings by 2029, over FY 2018. (I like to think that the initiative was a direct outgrowth of our work with the Department in our efforts to get the 2019 version of this legislation through the General Assembly.)

The economic contribution of birding and other avian-related industries and activities to Maryland’s Total Industrial Output is calculated by the Maryland Ornithological Society as over \$909 million annually, generating 10,807 full and part-time jobs, and producing \$88.4 million in state and local revenue. Birds enhance our quality of life, control insect and other vermin populations, are key players in seed dispersal and pollination, serve as nourishment, and provide comfort, companionship, entertainment, protection and employment.

Passing HB236: The Maryland Sustainable Buildings Act of 2021, is a win-win-win-win. By requiring the incorporation of LEED 55 standards in the planning, design, and construction of new and renovated State buildings and being more responsible about the use of outside and externally transmitted light from dusk to dawn, we can save taxpayer dollars, support our ecological sustainability goals, sustain Maryland’s multi-million dollar avian-related activities and industries, AND meet our obligations as a signatory to the Migratory Bird Treaty Act of 1918.

I respectfully request you return a favorable report.

A handwritten signature in black ink, appearing to be "T. Hill", written in a cursive style.

# **HB 236 Maryland Sustainable Buildings Act testimon**

Uploaded by: Hummel, Lani

Position: FAV

TO: Education, Health and Environmental Affairs Committee

FROM: Lani Hummel

RE: HB 236 Maryland Sustainable Buildings Act

POSITION: SUPPORT

I have been a bird lover for nearly 60 years. I am very concerned about the loss of large numbers and diversity of birds in my lifetime. More specifically, North America has lost 20% of its bird populations since 1970. This amounts to 3 billion birds. Given this drastic decline, it is very disturbing to learn that window collisions now kill an estimated 1 billion birds in North America each year.

The good news is that most of these deaths are preventable. There are many cost-neutral solutions that can be implemented in the design phase to make buildings more visible to birds. These same features can also make buildings more sustainable, conserving energy by decreasing solar heat gain and glare in the summer and maintaining heat in the winter.

Birds are important to humans for a variety of reasons. They pollinate, disperse seeds, and provide pest control. For example, they help farmers save money by using fewer chemicals while producing a greater crop yield that would otherwise be lost to pests.

Birds are also great dispersers of seeds. For instance, Blue Jays bury 3,000 – 5,000 acorns in a single season, far more than they can eat. Some of these acorns will germinate and sprout into new oak trees. Because the Jays fly a considerable distance away from their nest to bury their acorns, they regenerate forests in some areas and start new forests in others. This is of growing importance in a landscape of increasingly isolated fragments of woodlands. As we spend more and more money to plant trees to mitigate the negative consequences of climate change, we should appreciate the economic value of the ecosystem services provided by Blue Jays.

Birds offer other benefits to the economy. They are important to tourism. Many people vacation in Maryland to enjoy bird watching. This contributes more than \$300 million to the state economy and provides many opportunities for employment.

In summary, bird-friendly design will protect birds and save energy. For these reasons, I respectfully request a FAVORABLE report from the Committee on HB 236.

Thank you for your consideration.

# **HB236 Testimony.pdf**

Uploaded by: Jacks, Lindsay

Position: FAV



Lindsay Jacks  
11 Leeway  
Dundalk, MD 21222  
lightsoutbaltimore@gmail.com

March 29, 2021  
Senate Education, Health, and Environmental Affairs

I am encouraging you to support HB0236 Maryland Sustainable Buildings Act of 2021. This bill will require state buildings to adopt sustainable building standards that ensure energy efficient practices, cost-saving installations, and ultimately reduces glass collisions that kill up to 1 billion federally protected migratory birds per year. I am asking you to support this bill because these same building standards have already been passed in many other states and cities. Passing this bill benefits the community, environment, and wildlife.

I am supportive of these measures to finally recognize sustainable building standards that reduce the negative impact on the environment such as migratory birds, bats, sea turtles, and more. Light pollution has been linked to migratory birds being thrown off their navigational path, fledgling sea turtles going towards hotels instead of the ocean, and insects flocking to cities instead of wild areas and their normal habitat.

The lighting standards proposed in HB0236 are standards fully supported by wildlife conservation organizations such as the National Aquarium. In 2010, the aquarium changed exterior lighting to green colored lights and downward facing light fixtures to reduce light pollution. All interior lights at the aquarium have been updated to timers greatly reducing energy use and costs. The Aquarium has also recognized the need for sustainable building standards by installing bird-safe film to prevent bird collisions. The film covers the first 40 feet from the ground of the Australia exhibit. The National Aquarium installation hopefully encourages state-wide buildings to adopt bird-safe design in future projects.

In my role as the Director of Lights Out Baltimore, I have seen the negative impact that poorly designed buildings have on the local community as well. Birds found dead or injured from building collisions in downtown Baltimore inspired members of the community to form Lights Out Baltimore (LOB), an all-volunteer based organization of the Baltimore Bird Club that rescues birds from glass collisions during spring and fall migration. Local businesses that too became disheartened by finding dead or injured birds have started monitoring their own buildings and installing retrofits that provide a safe environment for migratory birds. Many schools in Baltimore city and county have reached out to LOB to provide educational programs that teach students about wildlife and the need to conserve our native species. LOB has worked with these schools by



hosting bird-safe workshops where students design window retrofits and install them on problem windows at their schools.

Due to the overwhelming support from the local community, U.S. Fish and Wildlife now recognizes Baltimore as an Urban Bird Treaty City by creating bird habitats and mitigating hazards for migratory birds such as light pollution and glass collisions. As LOB works with the community there is a need for state support on creating the surrounding environment next to bird habitats safe for birds.

Your support for this bill will do exactly that-incorporate truly sustainable design that considers light efficient practices and bird-safe elements to reduce glass collisions. Since 2008, LOB has found over 4000 dead birds in the downtown area, rescued 1000, and reported 102 species, 66 which are listed on the Department of Natural Resources Maryland Species of Greatest Conservation Need. One rescued bird was a Yellow Rail, a bird last documented in 1893 in Baltimore city. An average of 400 birds are found dead in downtown Baltimore monitoring 20 buildings only 4 months a year. Can you imagine how high the average number is across the state of Maryland year around? With an increase of glass features in development, abundance of exposed lighting fixtures, the annual number of bird mortality will see a significant and alarming increase.

Voting in favor of this bill is an example of Maryland's leadership in building the community, conserving energy, saving money, and conserving native wildlife. I urge you to support this important bill to ensure a vital future for these migratory birds and the Maryland community to enjoy them.

Sincerely,

Lindsay Jacks

# **HB236.pdf**

Uploaded by: Kalbfleisch, Josephine

Position: FAV

My name is Josephine Kalbfleisch, and I am 15 years old student from Baltimore county. I am writing to you in regards of House Bill 236, the Maryland Sustainable Buildings Act. I have been following this bill for a long time, going back to 2020 when it was HB192, and was unable to be fully passed. Now that it has been given a new life, I am directing all my efforts to ensure that it is not struck down. It would be much appreciated if you could take a few minutes to read what I have to say:

To be straightforward, I fight for this bill because of my love of birds and my passion to protect them. I believe that it is one of the most important pieces of legislation in terms of wildlife conservation, because even though it mainly focuses on energy reduction it also helps to prevent window strikes of migrating species.

For the past 6 years, birding has been a major part of my life. It has been a place of comfort that I always turn to whenever things feel out of place, or when I feel like my stress has taken over. It has exposed me to incredible opportunities, connecting me with different people from all around the state and country and leading me to develop a love for the outdoors. When you are first exposed to the spectacle of birds, is when you really start to appreciate the biodiversity around you. To set your eyes upon the grand flocks of pumpkin-colored American Avocets in summer or witness the magic of spring and fall migration is a true blessing. Additionally, discovering birding has shown me how many people there are that care just as much as I do. Many only see it as a weird, and uncommon hobby, and do not realize the importance it has in so many communities. It is a way for people of all ages, genders, sexualities, races, and abilities to get together to experience something they love, and a way to truly appreciate nature. For children my age especially, birding is a way to improve someone's mental and physical health, and it help them to establish an identity as an activist. It is my utmost goal to keep these birds safe, and I can guarantee that I am not alone. We must do all in our effort to preserve them, because the health of the organisms in an environment translates to the health of the environment itself. People seem to forget that birds were here before us, and they made this land their home before us. Therefore, it is our responsibility as human beings to care enough to try and protect them.

1 billion birds per year die due to collisions, and 5500 birds have been found both dead in injured in the streets of Baltimore since 2008. If this piece of legislation is passed, we may be able to reduce these numbers, and decrease the pattern of bird deaths in the United States overall. So many people, including myself, my friends, and my family, find joy in birdwatching, and we want to able to give that same joy to future generations. So, with all my utmost respect, I ask you to please give your support to this bill, in hopes that it will have an important impact on our community.



# **Maryland Sustainable Buildings Act- Testimony of A**

Uploaded by: Lewis, Anne

Position: FAV

Testimony of  
Anne Lewis, FAIA  
President, City Wildlife, Inc.  
in support of the  
Maryland Sustainable Buildings Act of 2021 - HB 0236  
MD General Assembly  
Wednesday, March 31, 2021

**City Wildlife is pleased to have this opportunity to support passage of the Maryland Sustainable Buildings Act of 2021.** As a non-profit organization in the District of Columbia, our mission is to protect wildlife and wildlife habitat in our region. We run the District's *Lights Out DC* program, which documents bird/glass collisions in downtown DC. **Since 2010, our volunteers have documented more than 3,700 bird strikes in a small downtown area, 84% of which were fatal.** After picking up the dead birds, we then photograph them and donate their carcasses to the Smithsonian Migratory Bird Center for research. **Our goal is to prevent these fatal collisions and save birds' lives.**



Part of an annual bird collision count  
City Wildlife, Inc.  
Washington, DC

The birds we find are overwhelming neo-tropical migrants -- beautiful birds -- many of whose populations are in serious decline. Bird/glass collisions are one of the most significant sources of fatality for these valued and dwindling species. **Nationally, up to one billion birds are killed each year by colliding with glass.**

**These strikes take a human toll, too.** Two years ago at a DC elementary school, 53 Cedar Waxwings collided with glass along a corridor over a period of several days during their spring migration. The teachers said the children were so traumatized that they had to be kept away

from the corridor because it upset them too much to see the birds hitting the glass and dying on the ground. Many adults, too, have described how disturbing it is to see a bird hit a window -- an all-too-common experience that can disrupt a work environment.

**The techniques to prevent these collisions are now well-known. There are simple and effective means of reducing bird/glass collisions through design, and -- especially if included during the initial construction phase -- need not add any additional cost to the project.**

**Many jurisdictions have now passed laws or resolutions mandating bird-safe design**, including New York City, San Francisco, Portland, Toronto, and others. The District of Columbia's Department of Energy and Environment has addressed this problem by adding two optional bird-safe building credits to its Green Construction Code. These credits are based on the LEED Pilot Credit 55 and will apply to all construction covered by the Green Construction Code. These credits have been widely supported in our community.

In 2016, one of DC's problem buildings, the Washington Convention Center, installed bird-safe film at its L Street glass overpass, a feature that was killing many birds. The results have been dramatic: to date, we have seen an 85% reduction in bird strikes at this overpass. What's more, the film is nearly invisible.

**In addition to reducing collisions, the lighting reductions that are part of all bird-safe standards can significantly reduce energy costs.** The DC Court of Appeals, which now dims its atrium lights during migratory seasons, has reduced its atrium lighting costs by 15%. And the Thurgood Marshall Judiciary Building now dims its atrium lights at night all year, for a lighting cost reduction of 28%. Energy reduction will be influenced by the efficiency of the current light fixtures: the more inefficient the existing fixture, the greater the energy reduction by dimming. But even with efficient fixtures such as the those at the DC Court of Appeals, the savings can be substantial even if the lights are only dimmed four months a year. **Many buildings will find that dimming the lights all year can produce substantial savings with no loss of safety or functionality.**

We are thrilled that Maryland is considering this legislation and strongly support its passage. Establishing requirements for state owned or operated buildings will be highly effective, setting an important and highly visible standard for private construction to follow.

I am pleased to have been able to write in support of this legislation would be glad to provide any information that might be helpful about our bird-collision data or experiences.

Respectfully submitted,  
Anne Lewis, FAIA  
President, City Wildlife, Inc.  
[anne.lewis@citywildlife.org](mailto:anne.lewis@citywildlife.org)

**sustainable buildings.pdf**

Uploaded by: Parks, Virginia Lynne

Position: FAV

To Whom It May Concern:

Regarding the Department of General Services—Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2021, please understand my strong support of the bill.

I've been the Outreach Coordinator for the bird conservation and wildlife rescue organization Lights Out Baltimore for eleven years. In that time, I've come to fully understand one of the leading causes of bird mortality, window collisions.

Bird populations are plummeting. This saddens and disturbs me considering how much beauty and song we are losing, but also the vital roles birds play in our ecosystems. As well as loving birds, we need them to help pollinate, disperse seeds, and control insect populations—both disease bearing and crop pests.

In the midst of our biodiversity crisis which is intertwined with climate change, please require bird-friendly and energy efficient guidelines.

Birds most often strike buildings from the ground up to thirty feet. This is the danger zone. It's what's being reflected in windows—trees and other greenery—that attracts them to the killing glass. Use a bird-safe glass/fritted pattern in the lower portion of buildings, and you'll keep most birds from striking.

In a small monitoring area of downtown Baltimore which includes twenty to twenty-five buildings, I've personally rescued and transported hundreds of birds. If you extrapolate, you'll understand why we know that a billion birds are dying annually in the United States.

I've heard the terrible sound they make when they strike. I've seen how badly they suffer. Please keep this from happening.

Thank you, respectfully--

Lynne Parks  
2522 Saint Paul St.  
Baltimore, MD 21218  
443-416-6180

# **HB0236 - AIA MD Support in Senate.pdf**

Uploaded by: Parts, Chris

Position: FAV



**AIA**  
**Maryland**

*Promoting Maryland Architecture Since 1965*

29 March, 2021

The Honorable Paul Pinsky  
Chair of the Education Health and Environmental Affairs Committee  
2 West  
Miller Senate Office Building  
Annapolis, Maryland 21401

Re: Letter of Support for HB 0236  
Department of General Services – Energy Conserving Standards  
(Maryland Sustainable Buildings Act of 2021).

Dear Chairman Pinsky:

I am writing to voice AIA Maryland's support of House Bill 0236. AIA Maryland represents nearly 2,000 architects in the state of Maryland and advocates for the profession and the quality of the built environment. As we work to be good stewards of the built environment, we are equally cognizant of the natural environment that we interact with and we aim to minimize our impact on the natural world. This bill's primary purpose is clearly to reduce the number of bird strikes on buildings and we believe this bill takes practical measures that can help reduce the likelihood of these collisions from happening. This issue is particularly important in Maryland where we are on the Atlantic flyway, a heavily traveled path for migratory birds.

A couple member firms from our state chapter have tested the tool this bill implements, LEED Sustainable Sites pilot credit 55 on a couple of new 2-story sample projects. The process required for both projects only required a little extra design time. The process enables sufficient flexibility to be able to meet the design criteria without any undue hardship and we do not expect it would have any significant project cost impact. We also acknowledge that there may be some energy reduction through window criteria, screening and opacity of materials that may reduce heat gain on buildings in addition to limiting night-time illumination of interior glass-enclosed spaces and exterior lighting. Based on the testing of projects that were completed, we believe such accommodations can be made on new designs, or when existing buildings are being substantially renovated. In either case, the building skins and systems can be designed to respond to the proposed criteria.

Maryland is not acting alone in adopting guidelines like these. Given our geophysical presence along the coast and the Chesapeake Bay, it is particularly important to provide an accommodating migratory path for birds. Other states and jurisdictions have already enacted regulations similar to this bill, those include the state of Minnesota, New York City, San Francisco, Oakland, Chicago, Toronto and others. Building codes continue to move toward developing buildings with a more efficient building envelope and the bird friendly criteria can be incorporated into the design parameters. Studies have shown that by implementing bird friendly design parameters, bird collision deaths can be reduced by up to 90 percent.

The American Institute of Architects

AIA Maryland  
86 Maryland Avenue  
Annapolis, Maryland 21401

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We recommend that the regulations be incorporated in the Maryland Green Building Council's program requirements documents so they are in a location where design professionals will reference criteria they need to meet. Starting with these measures early in the design process enables the design team to incorporate elements in the building design from the beginning where they may have limited to no effect on building cost.

AIA Maryland cares deeply about the quality of Maryland's natural and built environment. Sensible measures that diminish the impact of our built environment on the natural world are valuable to all of us. We therefore respectfully ask your committee to vote in favor of HB 0236 that provides thoughtful, responsible paths to bird-friendly design and may provide some added benefits of diminishing energy use.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Parts", with a long horizontal line extending to the right.

Chris Parts, AIA  
Director, Past President, AIA Maryland

cc: Education Health and Environmental Affairs Committee:

Cheryl C. Kagan – Vice Chair

Jason c. Gallion

Obie Patterson

Mary Washington

Mary Beth Carozza

Katie Fry Hester

Edward R. Reilly

Arthur Ellis

Clarence K. Lam

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**Letter to MD Senate abt HB 236.pdf**

Uploaded by: Rollfinke, Brian

Position: FAV

March 29, 2021

Dear Members of the MD Senate EHEA Committee,

I am the Director of Education at Irvine Nature Center in Owings Mills and have been an avid birder for over four decades. I'm writing to urge you to vote in favor of **House Bill 236, the Maryland Sustainable Buildings Act of 2021**, when the Health & Government Operations Committee meets next week. This bill makes good sense on so many levels; it corrects for one of the myriad ways in which we humans are wreaking havoc on the natural world around us, it reduces energy usage in this era of out-of-control fossil fuel consumption, and that, in turn, will both save our state government money on the costs of heating and cooling its buildings and reduce Maryland's carbon footprint, lessening our impact on the climate. Of course, all of these are desirable results, whose benefits far outweigh any small increase in construction costs associated with using less glass at lower levels of buildings and 'bird-friendly' glass higher up. However, I don't need to convince government officials that using less energy, saving state funds, and slowing global warming are goals worth pursuing. So, let me share just a bit about the cause with which you may be less familiar: the positive impact this bill would have on the avian life of Maryland.

You've probably heard of the bombshell that ornithologists dropped in the fall of 2019, releasing data, based on a massive summary of continent-wide research, which showed that the total number of birds living in North America had dropped nearly 30%—just since 1970. Locally, of the 250 or so bird species that occur regularly in Maryland, well over half are on the decline. While habitat loss/fragmentation, due to suburban sprawl and development, is known by scientists to be the #1 cause of these decreases, far more surprising are their findings that outdoor cats (both feral and pets that are allowed to roam outside) are the second leading cause of avian mortality and, incredibly, windowpanes are third.

I am an occasional blogger about environmental issues on Irvine's website. Over the past year, I've written three blogs related to the dangers that migrating birds face in today's modern world. The links are below; I encourage you to take a look, as the data is beyond alarming. In short, ornithologists estimate that close to 10% of North America's bird population dies each year due to injuries succumbed by flying into windows. Stated another way, on average *every single building* in the U.S. takes the life of two birds annually. The Maryland General Assembly has a critical opportunity, in **House Bill 236**, to set an example--for other states, for future builders in the private sector, and for citizens everywhere who care about nature, specifically birds. We clearly have a long way to go to make amends with Mother Nature, and not much time to do it, but this bill would be a positive step in that direction and would make the statement that responsible, environmentally-conscious development will be the new norm for future generations of Marylanders. Please support the **Sustainable Buildings Act** and help Maryland show that construction projects and environmental concerns can, in fact, go hand-in-hand. That's a hopeful, optimistic message that our young people need—and deserve—to hear at a time when the planet they are inheriting faces many significant challenges.

- <https://www.explorenature.org/blog/the-increasing-number-of-hazards-that-migrating-species-face/>
- <https://www.explorenature.org/blog/how-to-rid-your-home-of-pane-killers/>
- <https://www.explorenature.org/blog/whats-with-the-dots-on-the-windows/>

Thank you for your time and consideration,

**Brian Rollfinke**  
**Director of Education**  
**Irvine Nature Center**

11201 Garrison Forest Road | Owings Mills, MD 21117  
443-738-9212 Office | 410-902-8210 Fax  
[RollfinkeB@ExploreNature.org](mailto:RollfinkeB@ExploreNature.org)

# Hello Senate EHEA Committee.pdf

Uploaded by: Schreiber-Pan, Payton

Position: FAV

Hello Senate EHEA Committee,

My name is Payton Schreiber-Pan, and I am reaching out to you concerning the upcoming vote on House Bill 236, the Maryland Sustainable Buildings Act. I understand you have a busy schedule, so I will keep this as short as possible.

I am 16 years old, and attend Dulaney High School as a junior. As a teenager, I have often heard it said that solving the climate crisis is up to the younger generation, but I don't believe this to be true. We need to start now, and in this case, the power is in your hands.

This bill is crucial on so many levels. Firstly, protecting our birds. Over a billion birds die every year in North America alone from glass collisions (*Audubon*). This is simply unacceptable when there is such an easy solution. So many of your constituents have a deep connection and personal love for these birds, that to find thousands of them at the foot of Baltimore buildings each year is heartbreaking. HB236 will prevent this in any future buildings, by minimizing glass used on lower floors of any state funded buildings.

And this has implications far beyond the birds. Glass is known to be the worst material for insulation, and we can only attempt to estimate the ridiculous amount of energy lost through this glass. And simply turning the heat up will not suffice. Climate change is only worsening and with your vote on this bill, you can do your part to mitigate it, by saving more amounts of energy than any constituent could by turning off their lights when they leave the house.

But I'm well aware that money makes the world go round, so to put it plainly: less energy wasted = more money saved. It's not every day that environmental interests align with economic gains, but we've gotten lucky here. I hope it sounds as easy to you as it does to me; vote yes on the bill, save the birds, save the climate, and save some money. It just makes sense. If taxpayers pay for these buildings, they should be built safely for native wildlife and benefitting of future generations.

The bill also concerns a reduction in lighting regarding these same buildings. The current light pollution had adverse effects on not only birds but also bats, insects, and PEOPLE. The excess light has been linked to several negative health effects in humans, including sleep disorders and mental decline (*NCBI*). Well, good thing HB236 takes care of two birds with one stone (but really thousands of birds). This bill is overwhelmingly positive for your constituents, climate, wildlife, and even reputation. You have the opportunity to make the right decision. How do you want to be remembered?

Thank you so much for reading this message. I trust that you will keep our planet and your constituents in your interest when you vote.

Payton

**MOS HB0236 Sustainable Bldg Senate March 2021.pdf**

Uploaded by: Schwarz, Kurt

Position: FAV



March 31, 2020

**HB0236: Department of General Services - Energy-Conserving Standards  
(Maryland Sustainable Buildings Act of 2021)**

**Position: Support: HB0236**

The Maryland Ornithological Society (MOS) asks that the Senate Education, Health, and Environmental Affairs Committee give a favorable report of HB0236 and move it to the full Senate.

As you are aware, it is estimated that up to a billion birds a year die in collisions with glass on buildings and other structures.<sup>1</sup> While birds face many threats to their survival, the dramatic increase in the use of glass as a building material need not pose the unsustainable threat to birdlife that it currently does. We can use glass and still help our migrating and resident birds be able to navigate safely in and through our state.

Maryland sits in a vital position along one of the four major migration flyways, Maryland, the Atlantic Flyway, and billions of migrating birds pass through our state each migration season. Our State bird, the Baltimore Oriole, is one such migrant that returns yearly to breed and departs in Fall for wintering grounds in Central and South America. It is also a frequent victim of collisions with the glass that has become increasingly and more widely used in our state. Many otherwise successful fledgling young of the year will also perish in what would have been their first migration when they become confused by glass. Indeed, according to the Maryland Bird Conservation Partnership (MBCP), "Maryland (has) features that support an impressive diversity of ecosystems, habitats, and species...(and) due to a variety of threats, some 143 species of birds have been recognized as 'Species of Greatest Conservation Need'". The MBCP further notes that, "Over 200 species of birds breed in Maryland, more than half of which are considered to be Species of Greatest Conservation Need. Many species that breed in the state migrate to other areas outside of breeding season, (and) given the mobility of birds, planning at the landscape level and considering species needs during their full life cycle is important. (Further), working with a variety of partners will be critical to minimize mortality due to collisions."

While many man-made factors challenge birds, perhaps none is as immediately fatal and artificial as a collision with glass. Birds have evolved to make decisions at flight speed and given the chance to avoid an object they can see, make quick decisions to

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<sup>1</sup> Loss, Scott et al, Bird-building collisions in the United States: Estimates of annual mortality and species vulnerability, *The Condor*, Volume 116, Issue 1, February 2014, <https://academic.oup.com/condor/article/116/1/8/5153098>

do so. The air is their habitat, and the lightweight frames of birds enable them to fly that also makes them horrifyingly vulnerable to collision with glass. It is noteworthy that people cannot see glass and frequently walk into glass doors and other objects unless an added feature alerts them to its presence. We can also alert birds to the presence of glass and for many reasons, it is incumbent upon us to do so.

The diversity of bird species and their habitats is under increasing threat. Unless concerted efforts are taken in the near future Maryland will lose some of its greatest assets – healthy natural systems and the wide range of birds, plants, and other wildlife that they support. Maryland risks economic impact as well as a decrease in quality of life. An estimated 900,000 residents and non-residents enjoy birding in the state. While Marylanders generated \$483 million from wildlife-watching activities in 2011, the Total Industrial Output (TIO), which includes, direct, indirect, and induced effects, totaled over \$909 million, produced 10,807 full- and part-time jobs, and generated \$88.4 million in state and local tax revenue. Nationally, Americans who watch and feed birds contribute \$41 billion to the nation’s economy every year.<sup>2</sup>

Birds provide invaluable ecological services in areas of pest control, seed dispersal, and pollination. The immediate threats to their survival and a disruption to our symbiotic relationship with them are matters of great importance for a variety of reasons. It wasn’t that long ago that people were shooting birds out of the sky at a faster rate than they could reproduce. In our modern times the same affect will be achieved by continuing to erect glass buildings without incorporating reasonable measures to help the bird see the glass and avoid collisions with it. Both scenarios are directly responsible for removing birds at a faster rate than be sustained by reproduction.

Sustainable growth in Maryland is very important and incorporating reasonable features to prevent unsustainable loss of bird life benefits current and future residents of our state. We therefore ask you to support and pass the Maryland Sustainable Building Act of 2021 (HB0236).

MOS is a Maryland-based volunteer organization of some 1200 members, with 15 chapters in Maryland. We are devoted to the study and preservation of birds and their habitat.

Sincerely,

Kurt R. Schwarz

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<sup>2</sup> US Fish and Wildlife Service, Economic Impact: Birds, Birdwatching and the U.S. Economy, November 16, 2017, <https://www.fws.gov/birds/bird-enthusiasts/bird-watching/valuing-birds.php>

Conservation Chair  
Maryland Ornithological Society  
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# **Dr Mark Southerland Testimony in Support of HB236**

Uploaded by: Southerland, Mark

Position: FAV

## **Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2021) – HB 236**

### TESTIMONY OF DR. MARK SOUTHERLAND

I am a professional ecologist who has served on the boards of Maryland Academy of Sciences' Science Council, Maryland Water Monitoring Council, Howard County Environmental Sustainability Board, Howard County Conservancy, Patapsco Heritage Greenway, and Safe Skies Maryland.

Two events brought me to conceiving and advocating for this bill:

1. Glass Buildings as Energy Sinks. As a scientist working in the fields of energy conservation and green buildings, I was struck by the exponential growth of buildings with extensive glass facades. I realized that these majority glass buildings would be an energy sink and erode the energy conservation gains from decades of green building policies. While the extensive use of glass was originally considered green, because it reduced the need for artificial lighting, technological advances in LED lighting meant that the heat gain from windows and the need for additional air conditioning far outweighed the benefits. If future building was dominated by extensive glass facades, then we were setting up society for increasing energy costs and greenhouse gas emissions for decades.

2. Glass Buildings as Killers of Birds. As a consultant to Maryland DNR on the licensing of windpower turbines, I learned that, while we could avoid major bird mortality at windpower turbines (with proper lighting and siting), building glass was a thousand times much larger killer of birds. Then I witnessed the construction of the first of several new large glass buildings being built in Downtown Columbia and realized that we were creating a deathtrap for birds migrating through our community. I realized that, as the number of glass buildings statewide and nationwide was growing rapidly, bird deaths from building collisions was about to become much worse. Then, in September 2019, scientists reported that we have lost 29% of all birds in North America since 1970, confirming the dire state of this treasured resource.

Win-Win Solution. Most importantly, I learned that both problems were easily solvable. The building standards embodied in this bill would both conserve energy and reduce bird mortality by 90%. So, I was compelled to act and, working with Senator Guzzone and others, began efforts to solve this problem at the local and state level.

I leave it to the national expert, Dr. Chris Shepard, and others to provide the technical details, but here is a summary of the problem and the solution:

#### **This is an important problem with existing solutions and a diverse concerned citizenry**

1. The number of majority glass buildings is increasing exponentially, setting up society for long-term energy costs as building envelopes will be in place or at least 50 years.
  - There are no daylighting or energy benefits with window-to-wall ratios over 60 percent, and in most cases an area of 25-40 percent is optimum, i.e., lowest energy consumption
  - When glass treated to be bird friendly is used, energy loss is much reduced

2. 1 billion birds die in the U.S. every year colliding with transparent or reflective building glass (and the number of glass-dominated buildings is growing exponentially)
  - People walk into glass when they don't see the frame; birds never recognize a frame
  - Nearly all species are affected; even the best and brightest birds collide and die
  - Declining populations of migratory songbirds are significantly attributable to this non-sustainable loss
  - Birds are both an ecological mainstay and an economic driver through factors such as pest control and tourism (Maryland receives \$333 million in revenue from bird watching each year)
3. Building design and treated glass are an existing solution
  - Flight tunnel tests have demonstrated the degree of safety provided by different kinds of glass
  - Green Business Council LEED program has codified a bird-friendly building pilot credit 55
  - Building façade, screens, and shades work
  - Glass with UV or visible patterns of narrow lines or dots in 2x4" arrangement work
  - Bird-friendly design is generally cost neutral at the design phase
  - Bird-friendly designs and glass are energy efficient and saves dollars over time
4. Bird Safe Building designs and retrofits are being implemented
  - Many beautiful glass buildings are bird friendly such as Anchorage Museum and the Inuit Headquarters in Mountainview CA
  - Expansive Jacob Javits Conference Center in NYC was retrofitted to be bird friendly and has reduced bird deaths by 90% and energy consumption by 25%
  - Locally the Maryland DNR Tawes Building, National Aquarium, Fort McHenry and others are retrofitting their glass to be bird friendly
5. Bird Safe Building laws are being implemented
  - Minnesota has had a mandatory bird safe building law since 2013 and Howard County MD passed a comprehensive law this July 2020
  - Mandatory laws are also in place in New York City, San Francisco CA, Oakland CA, Palo Alto CA, Highland Park IL, Cook County IL, Ontario Province, Toronto, and Markham, Canada, with voluntary laws in other places
  - US House passed a bi-partisan bill, HR 919–Bird-Safe Buildings Act, as part of HR 2, this session

**Maryland has a chance to act locally to save money, fight climate change, and reduce the unsustainable deaths of economically important birds. Waiting even one year will see more glass buildings built and more money lost, more greenhouse gas emissions, and more birds dying.**

# **HB236 - MD Sustainable Buildings Act - EHEA - Hill**

Uploaded by: Tulkin, Josh

Position: FAV



7338 Baltimore Ave  
Suite 102  
College Park, MD 20740

**Committee: Education, Health, and Environmental Affairs**

**Testimony on: HB236 “Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2021)”**

**Position: Support**

**Hearing Date: March 31, 2021**

The Maryland Sierra Club urges support for this legislation, which will require the Department of General Services to promulgate standards for state buildings to better protect our bird population and promote energy efficiency. In 2020, Howard County became the first county in Maryland to pass similar legislation addressing this issue, CB11-2020.

There are many challenges to the survival of both residential and migratory birds. Nearly one third of the 800 species of birds in the United States are endangered, threatened, or in serious decline. In Maryland, there are 436 documented species of birds, which is over half of the birds documented in the United States; 72 of these species are rare, threatened, or endangered. Maryland is located along the Atlantic flyway, where billions of birds migrate seasonally north to south and back again. There are some birds that are especially vulnerable and have been identified by the Audubon Society as priority birds to protect. These include the Golden-Winged Warbler, the Wood Thrush, the Black-Throated Blue Warbler, and many others.

As good stewards of our natural world, it is our responsibility to help preserve biodiversity when we can. It is estimated that up to one billion birds die by collision with glass in America, and we also know through research and practice that these deaths are preventable. The buildings we construct (or significantly renovate) can and should use bird-friendly design.

Importantly, when this is done, buildings also are more energy efficient. While well-placed windows are critical to a building design, and allow for natural lighting, the overuse of windows is detrimental to overall energy efficiency. Windows are the weakest link in the building envelope, and therefore the greater the surface area of windows in a building, the more energy is needed to keep it cool in the summer and warm in the winter. In state-owned and managed buildings, the taxpayers are paying for extra heating and cooling costs when windows are overused. Also, the extra energy comes at a cost to the environment and contributes to climate change when it relies on fossil fuels.

In sum, incorporating bird-friendly design will save energy and protect birds. Maryland should take this first step to lead the way by adopting this legislation. Please support this bill.

Carolyn Parsa  
Chair, Howard County Group  
Carolyn.Parsa@MDSierra.org

Josh Tulkin  
Chapter Director  
Josh.Tulkin@MDSierra.org

Founded in 1892, the Sierra Club is America’s oldest and largest grassroots environmental organization. The Maryland Chapter has over 75,000 members and supporters, and the Sierra Club nationwide has over 800,000 members and nearly four million supporters.

# **2021 Audubon testimony FOR HB0236 Sustainable Build**

Uploaded by: Wilson, David

Position: FAV



**State Office**  
**Patterson Park Audubon Center**  
**Important Bird Area Program**  
2901 East Baltimore Street  
Baltimore, MD 21224  
Tel: 410-558-2473  
md.audubon.org

March 29, 2021

**The Maryland Senate**

**Education, Health, and Environmental Affairs**

**HB0236 Maryland Sustainable Buildings Act of 2021**

**Position: Support HB0236**

This letter is to express our strong support for HB0236 and to underscore just how important this legislation is for declining bird populations, and also for energy conservation, and thus mitigating impacts of climate change. Audubon Maryland-DC is one of 22 state programs of the National Audubon Society with approximately 19,000 subscribers in Maryland.

Building collisions, including window strikes, are responsible for around 1 billion wild bird deaths each year in the United States, which is a significant mortality factor on their populations. Migratory bird species are particularly vulnerable to building collisions because twice each year they travel through unfamiliar territory between their breeding and wintering areas.

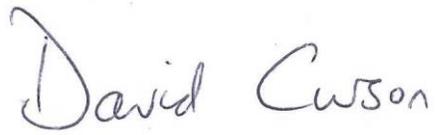
And it is migratory species that are most in need of conservation. In Baltimore, birds such as Baltimore Oriole and American Woodcock are among the species more often encountered killed or injured by volunteers of Lights Out Baltimore, a project of the Baltimore Bird Club, who regularly patrol buildings known to act as death traps for migratory birds.

Birds are important not only because they have recreational value for birdwatchers but also due to the contribution their popularity makes to the economy. Birds and birding are big business in Maryland. Each year Maryland residents and tourists from out of state spend millions of dollars on wildlife and bird watching in the Free State, as individuals and on organized ecotourism ventures such as the Baltimore Birding Weekends and Delmarva Birding Weekends. Some 20% of Marylanders identify as birdwatchers, according to the US Department of the Interior.

Nationwide, 47 million birders spend nearly \$107 billion annually on travel and equipment-related expenditures associated with birding. This generates \$13 billion in local, state, and federal tax revenue. These dollars are in addition to the more than 500 million tons of insects birds eat every year, and the pollination and seed dispersal they provide.

Bird-safe building designs not only reduce bird mortality but also reduce energy costs to building owners through energy conservation. The new technology has become very affordable and New York City has already adopted similar legislation. This also has the added benefit of mitigating climate change by reducing carbon emissions. Please support this bill.

David Curson, PhD

A handwritten signature in black ink that reads "David Curson". The letters are cursive and fluid, with a large initial 'D'.

Director of Bird Conservation  
Audubon Maryland-DC