

ALDERPERSON AGENDA ITEM MEMO

To: Community Affairs Committee

From: Andrew Meindl and Joseph Makhlouf

Date: 01/15/2025

Subject: Bird-Friendly Building Ordinance

A. Background/Rationale

Bird collisions with glass are a major environmental issue, killing up to 1 billion birds annually in the United States (Loss et al., 2014). This figure represents a significant portion of the bird population, exacerbating declines already caused by habitat loss, climate change, and other human-related factors. Nearly 56% of collision-related deaths occur at low to mid-rise buildings, with another 44% at residential buildings (American Bird Conservancy, 2023). These collisions disproportionately affect migratory bird species, many already under threat due to shrinking habitats.

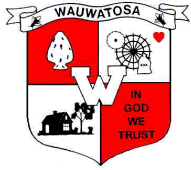
Wisconsin has been at the forefront of addressing this issue. In a landmark case, the Wisconsin Court of Appeals (Appeal Number 2022AP1468) upheld Madison's bird-safe building ordinance, affirming a lower court ruling by Judge Nia Trammell. The plaintiffs argued that the ordinance conflicted with the state's uniform building code. However, the court sided with conservation organizations, including the Southern Wisconsin Bird Alliance, which had filed an amicus brief. With the plaintiffs opting not to seek the Wisconsin Supreme Court review, this decision sets a significant precedent, enabling cities like Madison to save countless birds from collisions through bird-friendly building designs (Wisconsin Court of Appeals, 2024). This landmark decision affirmed that local governments can require bird-friendly building designs, recognizing the significant environmental and economic benefits such ordinances provide (Wisconsin Court of Appeals, 2024).

Madison's ordinance reduced bird collisions in targeted areas through measures like patterned glass and solar shading (City of Madison, 2023). The University of Wisconsin-Madison also demonstrated the effectiveness of bird-safe measures through its Ogg Hall Bird Strike Mitigation project. By applying visual markers to windows and incorporating bird-friendly design features, the initiative successfully reduced bird collisions on campus buildings by a measurable margin (University of Wisconsin-Madison, 2020). This study highlights the practicality and success of implementing these measures in diverse building types.

Other Midwest cities have bird-friendly ordinances; for instance, Minneapolis implemented bird-friendly design guidelines for public buildings in 2009, significantly reducing bird mortality rates (City of Minneapolis, 2023). These success stories demonstrate that bird-friendly design is both practical and achievable.

In addition to the environmental impact, birds contribute billions of dollars annually to the U.S. economy through eco-tourism and pest control services. Birdwatching alone generates over \$40 billion in revenue, while natural pest control services provided by birds save farmers approximately \$4 billion per year in reduced pesticide use (U.S. Fish and Wildlife Service, 2013; Sekercioglu, 2006).

By adopting this ordinance, Wauwatosa can join other forward-thinking cities in addressing this critical issue. The initiative protects avian wildlife and aligns with the city's broader goals of environmental sustainability, economic innovation, and community quality of life.



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B. Key Issues for Consideration

- **Environmental Impact:** Bird-friendly building design reduces avian mortality, preserving biodiversity and supporting ecosystems.
- **Economic Considerations:** Bird-friendly measures can be cost-effective when integrated into the design phase and may enhance the city's reputation for sustainability.
- **Legal and Compliance Requirements:** The ordinance aligns with best practices and precedents established by other municipalities, such as Madison's bird-safe glass ordinance.
- **Community Support:** Public interest in conservation and wildlife protection supports this initiative, enhancing the city's environmental stewardship credentials.

C. Fiscal Impact

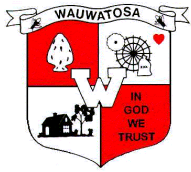
The fiscal impact is expected to be minimal. For new construction and major renovations, compliance costs are marginal when integrated during the design phase. No additional costs to the city are anticipated, as the ordinance enforcement will leverage existing zoning review processes. Long-term benefits include reduced environmental remediation costs and enhanced eco-tourism opportunities.

D. Requested Action

Approve the ordinance creating Section 24.09.120 of the Wauwatosa Municipal Code to establish bird-friendly building requirements. Direct the Zoning Administrator to incorporate these standards into existing review processes.

E. Strategic Plan

- **Priority Area One: Economic Development & Financial Resilience**
 - Integrating bird-friendly building practices promotes sustainable urban development, contributing to Wauwatosa's reputation for innovation and environmental responsibility.
 - Encourages environmentally conscious businesses to invest in Wauwatosa, fostering economic diversity.
- **Priority Area Two: Public Safety**
 - Enhances pedestrian and cyclist safety by reducing bird collision risks near glass structures in public spaces.
 - Builds trust and communication with the community through visible actions prioritizing wildlife conservation and public awareness.
- **Priority Area Three: Infrastructure**
 - The proposal supports infrastructure sustainability by integrating bird-friendly materials and reducing maintenance costs from bird collisions.
 - Advances watershed management by ensuring sustainable practices in new developments, aiding climate resilience.
- **Priority Area Four: Housing**
 - Promotes environmentally responsible building codes in housing projects to encourage inclusionary housing.
 - Facilitates ecological balance and livability through bird-friendly materials in multi-family housing.



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- **Priority Area Five: Quality of Life**

- Reduces the ecological impact of urban development, aligning with environmental adaptation goals.
- Enhances greenspaces and ecological preservation through bird-friendly policies in public parks and shared spaces.

This ordinance is a step toward aligning Wauwatosa's built environment with its strategic goals, ensuring the city remains a leader in sustainability, innovation, and quality of life improvements.

References

1. American Bird Conservancy. (2023). Bird-smart glass and collisions. Retrieved from www.abcbirds.org
2. City of Madison. (2023). Bird-friendly building ordinance. Retrieved from www.cityofmadison.com
3. City of Minneapolis. (2023). Bird-safe building guidelines. Retrieved from www.minneapolismn.gov
4. Loss, S. R., Will, T., & Marra, P. P. (2014). The impact of free-ranging domestic cats on wildlife of the United States. *Nature Communications*, 4(1396). <https://doi.org/10.1038/ncomms2380>
5. Sekercioglu, Ç. H. (2006). Increasing awareness of avian ecological function. *Trends in Ecology & Evolution*, 21(8), 464–471. <https://doi.org/10.1016/j.tree.2006.05.007>
6. U.S. Fish and Wildlife Service. (2013). Birdwatching in the United States: A demographic and economic analysis. Retrieved from www.fws.gov
7. University of Wisconsin-Madison. (2020). Ogg Hall bird strike mitigation project. Retrieved from <https://sustainability.wisc.edu>
8. Wisconsin Court of Appeals. (2024). Appeal Number 2022AP1468: Ruling on Madison Bird-Safe Building Ordinance. Retrieved from Wisconsin Court System.

F. Attachments

Draft Ordinance

AN ORDINANCE CREATING SECTION 24.09.120 OF THE WAUWATOSA MUNICIPAL CODE REGARDING BIRD-FRIENDLY BUILDINGS

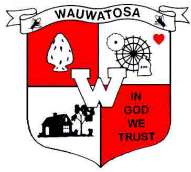
The common council of the City of Wauwatosa do hereby ordain as follows:

Part I. Section 24.09.120 of the Wauwatosa municipal code of ordinances is hereby created to read in its entirety as follows:

Section 24.09.120 Bird Friendly Buildings

A. FINDINGS/STATEMENT OF PURPOSE

1. Collision with glass claims the lives of hundreds of millions of birds each year in the United States. It is second only to domestic cats as a source of mortality linked directly to human action. Reduction of transparent and glass surfaces has been shown to significantly reduce death and injury to bird populations.
2. The Bird-Friendly zoning requirements in this section are intended to reduce the heightened risk for bird collisions with glass on specified building designs and configurations.



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3. Bird-friendly zoning requirements apply only in commercial, industrial and special purpose districts as defined in this code, as these districts tend to have larger buildings and structures with more expansive glass areas and features creating concern for bird collisions.

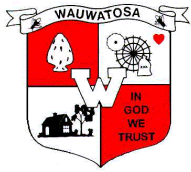
B. REQUIREMENTS

1. Within the Commercial (Chapter 24.03), Industrial (Ch. 24.04) and Special Purpose (Ch. 24.06) districts, not less than 85% of the glazing for all building types must be Bird-Friendly Glass for the following projects, except as defined in sub. 2, below:
 - a. New construction over 10,000 square feet in the Bird Activity Zone, if more than 50% of the exterior surface in the Bird Activity Zone is composed of glazed materials;
 - b. All glass panels over 50 square feet in size in the Bird Activity Zone on exterior surfaces where the glazed surfaces within the Bird Activity Zone are comprised of less than fifty percent (50%) glazed surfaces;
 - c. Renovations increasing glazed surface area by 50% or more in the Bird Activity Zone;
 - d. All High-Risk Auxiliary Structures;
 - e. All High-Risk Building Features.
2. Notwithstanding the requirements in sub. 1, above, 100% of glass on qualifying projects must be treated in the following circumstances:
 - a. within fifteen (15) feet of a building corner;
 - b. when see-through conditions exist.

C. DEFINITIONS

Within this Section 24.09.120, the following definitions shall apply:

1. Glazed surface: All glass, including spandrel glass, as well as any other materials that are transparent or highly reflective, including but not limited to: plexiglass, polished metal, or materials.
2. Bird Activity Zone: The zone that falls between 0-60' feet above grade.
3. High-Risk Auxiliary Structures: Structures that pose significant collision risks to birds wherever they are found, including but not limited to:
 - a. Transparent or highly-reflective railings (including balconies), noise barriers or wind barriers;
 - b. Small, stand-alone buildings that present conditions that are either transparent and reflective;
 - c. Any other free-standing glass, plexiglass, or other clear, transparent, or highly-reflective free-standing structure.
4. High-Risk Building Features:
 - a. Skyways/skywalks;
 - b. Building connectors;
 - c. Parallel glass walls 50 feet apart or less;
 - d. Courtyards, including internal atria;
 - e. Atria, open and enclosed;
 - f. Three floors of glazed surfaces adjacent to and above green roofs
5. Major Renovations Involving Glass: Any renovation in the Bird Activity Zone that increases a structure's existing glass or other transparent or reflective materials by 50% or more within the Bird Activity Zone.
6. Bird-Friendly Glass: Glass or materials that meet any of the following conditions:



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- a. Any product with an American Bird Conservancy Material Threat Factor Rating of 30 or less. (Visit www.birdsmartglass.org to view the continuously-updated database.)
- b. Glass with exterior surface obstructed and effectively covered by building-integrated structures that do not have gaps larger than 12" in any dimension, including non-glass double-skin facades, metal screens, fixed solar shading, exterior insect or solar screens, and other features that meet these conditions.
- c. Un-tinted glass with an outer total reflectance of $\leq 15\%$ that contains a pattern of visual markers that are on the surface of the glass that conforms to the following rules: a) dots or other isolated solid shapes that are $\geq \frac{1}{4}$ " in diameter and are \leq two-inches (2") apart in any direction or b) lines that are $\geq \frac{1}{8}$ " in width and spaced ≤ 2 " apart.

D. CERTIFICATION AND ENFORCEMENT

1. When submitting plans for purposes of zoning review, all applicants for buildings or projects in the Commercial, Industrial and Special Purpose zones must provide the certification of a Wisconsin-licensed design professional that the plans meet the requirements herein.
2. In the absence of such certification by a Wisconsin-licensed design professional, in addition to other remedies available pursuant to this code, the Zoning Administrator shall withhold approval for the project as provided in Section 24.17.010 D.1. of this code.

Part II. This ordinance shall become effective on and after its date of publication.