

BACKED BY SCIENCE

INDEPENDENT SCIENTIFIC RESEARCH AND TEST REPORTS



Study	Peer-Review Study	Setting		Birds		Bird approaches glass from		Success rate	Statistically significant (P ≤ 0,05)	Practical relevance
		Real world	Artificial	Wildlife	Aviary	Natural light	Dark enclosure			
Swaddle et al. 2020	✓	×	✓	✓	✓	✓	×	Forced choice (industry comparable): • Aviary birds: 91 %* • Wild birds: 75 %* No choice setup, reduction in collisions: • Aviary birds: 50 % • Wild birds: 30 %	✓	Not field tested – calibration missing
Zyśk-Gorczyńska et al. 2022	✓	✓	×	✓	×	-	-	>80 % less collisions	✓	
ABC test report 2022	×	×	✓	✓	×	×	✓	53 %*	×	Not field tested – calibration missing
Swaddle et al. 2023	✓	×	✓	×	✓	✓	×	Forced choice (industry comparable): • BirdShades: 90 %* • Visible product: 75 %* No choice setup, reduction in collisions: • BirdShades: 47 % • Visible product: 39 %	✓	
Verein Auring test report 2024 (Rössler, Böckle)	×	×	✓	✓	×	×	✓	64 %* statistically significant effect, but not evaluation scheme by Verein AURING (10 % rule, not databased)	~	

* flights towards untreated glass

STUDIES AND TEST REPORTS IN DETAIL



Zyśk-Gorczyńska et al. 2022
Ultraviolet film reduces bird-glass collision risk

<https://ornisfennica.journal.fi/article/view/115995>



Swaddle et al. 2023
Window films increase avoidance of collisions by birds but only when applied to external compared with internal surfaces of windows

<https://peerj.com/articles/14676/>



Swaddle et al. 2020
Ultraviolet-reflective film applied to windows reduces the likelihood of collisions for two species of songbird

<https://peerj.com/articles/9926/>



Verein Auring test report 2024
Vogelanprall an Glasflächen

<https://wua-wien.at/naturschutz-und-stadtoekologie/vogelanprall-an-glasflaechen/>



ABC test report 2022

Available per E-Mail
tweet@birdshades.com



WHEN IS A PRODUCT EFFECTIVE

in reducing bird-window collisions?



In scientific research, reviewed studies (peer review) and statistically validated results are key quality criteria.

The protective effect of BirdShades is supported by several independent peer-reviewed studies, both in daylight flight tunnel tests and under real conditions in the field. At the same time, effectiveness can be rated differently depending on the test system.

In industry, effectiveness can be defined differently.

The former Austrian technical standard ONR191040 (withdrawn in 2015) describes a flight tunnel test developed by AURING. Products are rated based on the rate of bird flights: below 10 % highly effective, above 10 % limited, and above 45 % ineffective. Another method is the Threat Factor™ used by the American Bird Conservancy. In this flight tunnel, products with 30 % or fewer flight rates are considered effective.

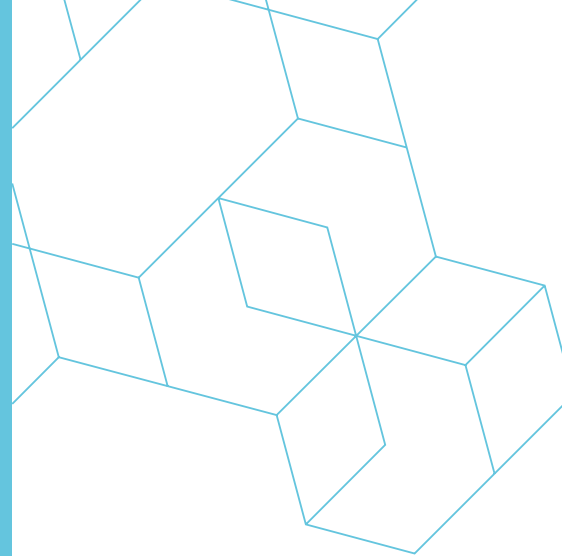
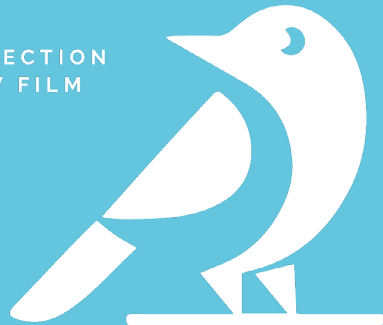
Current flight tunnel tests have significant evidence gaps.

Flight tunnel tests cannot yet provide a reliable prediction of how well products perform in real-world conditions. So far, no published field studies are available that confirm these results. It is also unclear at what point an assessment is considered positive, as this is not yet supported by real-world data. Flight tunnel tests only show how a product performs under the exact test conditions. These conditions differ from reality: in nature, birds approach glass from the outside, not from a dark indoor space under stress.

BirdShades is supported
by independent scientific studies and
contributes to ongoing research
on bird-window collisions
in collaboration with universities
WORLDWIDE.

INVISIBLE
FOR YOU
LIFESAVING
FOR BIRDS

BIRD PROTECTION
WINDOW FILM



AWARD-WINNING INNOVATION WITH INTERNATIONAL RECOGNITION

BirdShades was honoured with the **Austrian Standards Award – Future Environment** and is recognized as a **good-practice example** by **BOKU University Vienna** within the Austrian Action Plan for Sustainable Public Procurement.

International recognition has been achieved through successful projects and studies, including an aviary installation at WWT Slimbridge (UK) featured by the **BBC**. The product has also been presented on television programs such as **Science Busters**, **Galileo (ProSieben)** and covered by leading media outlets including **The New York Times**, **BBC**, **ORF Science**, **Der Standard**, **Die Presse**, **Salzburger Nachrichten** and **Kleine Zeitung**.

BirdShades® is protected by several patent applications, including pending applications, in various countries and is supported by the **European Union**, **Austrian Research Promotion Agency**, **European Space Agency ESA BIC**, **Austria Wirtschaftsservice**, **Science Park Graz** and **ZAT Leoben**.