

Foreword

TO ALL BIRD-LOVERS, IT IS a sickening noise – that loud thump on a windowpane, sometimes accompanied by a smear of bird snot or blood and/or a tiny feather. According to the author of this book, now widely regarded as the world’s expert on window strikes by birds, we are losing per year between 100 million to 1 billion birds in the U.S. and 16 to 42 million in Canada to collisions with an unseen enemy. And because window collisions basically “set the table” for the millions of free-ranging pet and feral cats looking for easy prey to capture, and thus, biasing the staggering mortality figures associated with them, glass may well exceed our feline friends as being the highest form of human-related mortality for birds!

In recent years, the author has documented that 1,348 (12.8%) of the approximately 10,500 bird species in the world, and closer to home, 267 (29.7%) of the 898 species in North America, are known to be window strike casualties. And the worst news is that, despite its sophistication, the avian eye is simply not capable of detecting the difference between unobstructed air space and clear glass. It is an indiscriminate killer, killing fit or unfit, common or rare, big or small, male or female, or young or old birds. Victims are usually startled by loud noises, passing cars or arrival of a larger bird at the feeder, while others are involved in tail chases with their own kind or escaping the talons of hawks.

Some are killed instantly or knocked unconscious only to die later either from their injuries or from scavengers, some recover to fly off weakly, and the lucky ones are just shaken up but unaffected. One should not always assume that if a bird recovers in one’s hand and flies off, then all is okay. The damage to the inner ear structures, the brain, neck muscles, and/or nervous system can be very debilitating and in many cases, deadly in the long term. If you find this hard to believe, take a run at a thick plate glass window without protective head gear and you will understand! On second thought, take my word for it.

Overall, the author has determined that birds are particularly vulnerable to clear or reflective large (> 2 m²) windows at ground level and at heights above 3 meters. It doesn’t matter whether the windows

face north or south during migration times. Especially bad are glass corridors, stairways or rooms that create the illusion of clear passage. Most people do not realize that placing large plants inside glass-enclosed lobbies or expansive living spaces creates a false habitat that regrettably attracts unwary birds.

There are two somewhat separate issues involving window strikes – collisions with windows on city buildings and birds striking windows on residential buildings. Hopefully, business owners, building managers, architects, and landscape planners, now more cognizant of the problem, are taking the necessary steps to minimize window strikes in downtown cityscapes by using special fritted glass, avoiding mirror buildings, and turning off lights that attract migrating birds at night that in turn expose them to the window illusions that result in their death. But what can you do to minimize bird collisions around your home or apartment or your cottage?

First, one doesn't have to shut down a backyard feeder operation to stop birds from hitting your windows. Just use a little common sense. Place your feeders within a meter of any window surface to minimize any momentum a bird might gain when startled; close feeder placement eliminates the window threat. Alternatively, considering feeder placement at greater distances, study the landscaping around your windows and then put your feeding stations in places that guide visitors away from the glass; your goal should be to direct the coming and going of birds to the feeder in such a way that they move away not toward your windows. As for deterrents, here's what is worth trying and what is useless, according to the author. Forget using single wind chimes, blinking lights, hanging plants, large eye patterns, falcon silhouettes, or owl decoys. Uniformly covering windows with these very objects or others like cloth or silver mylar strips on or near the glass surface and separated by 5 to 10 centimeters will transform windows into barriers that birds will see and avoid. Even keeping white cloth drapes or sheer curtains closed during daylight hours work well, but only when the sun is shining through the window to make these coverings visible and permit birds to see and avoid the glass they cover. At other times, without the sun falling directly on these window coverings, the outside surface of the window reflects the facing habitat and sky, and projects a deadly illusion of unobstructed space. For serious "problem" windows, install insect

screening or black plastic garden-protection netting mounted on frames away from the window. A more permanent solution entails adding strips of bird-friendly adhesive tape about 10 centimeters apart; see <http://abcbirds.org/program/glass-collisions/> and <http://flap.org> for details about this and other cost-effective bird-window deterrent methods. As I always like to quip, let's remove the pain from our windowpanes for our feathered friends!

But don't take it from me! If you are reading these words, then you have right here in your hands the very means to learn much, much more about the subject from no less than the world expert on the subject – Daniel Klem Jr. himself!

Dan and I have been friends for three decades or more. While I cannot say that we are so close as to be weekend warriors sharing a beer or two on a frequent basis, we do know each other well enough to hold a solid mutual respect for one another and to share a love for birds. He has lived, breathed and studied the subject of bird collisions with windows for virtually his entire career, and he is a big believer in public outreach about wildlife conservation. I have happily served as one of Dan's disciples spreading the word about the subject for all those years.

As you will read in the Prologue, Dan first obtained his B.A. at Wilkes University in Wilkes-Barre, Pennsylvania and his M.A. at Hofstra University in Long Island, New York. After a brief stint in the military, Dan not only survived the horrors of the Vietnam war but also earned a Bronze Star Medal. And, as so often seen in many life stories of students starting out in the world of academics, he was serendipitously inspired by his interactions with Dr. William G. George of Southern Illinois University at Carbondale to undertake his doctoral studies on window collisions by birds. Dan made good use of his degrees and he currently serves as the Sarkis Acopian Professor of Ornithology and Conservation Biology at Muhlenberg College in Allentown, Pennsylvania. According to Wikipedia, his research has actually influenced building architecture, and he holds several patents related to window design. He also received an honorary doctorate from Wilkes University, where he is also a trustee.

Through his meticulous research and study trials over his entire career, Dan rose to fame in the worlds of both the ornithological and wildlife conservation communities as the reigning expert on bird collisions with glass and how to prevent them. Just like those biologists

who choose to study cat predation on birds and find themselves as the targets of vitriolic rants and even worse behavior by misguided folks who simply and selfishly do not want to face the truth, Dan was thrust into that very same sphere. You see, no matter where they live in the world, even today, most people just do not want to know that the large expanses of glass in the windows of their homes and workplaces kill a heckuva lot of birds – and needlessly so. Sadly, these same folks will probably not read, let alone purchase a copy of this book. But fortunately for the billions of potential feathered victims in the future, other biologists, conservationists, and even better, media experts will pay attention to the wise words penned in this comprehensive very first volume published on this subject.

On a personal note on Dan's character, I do not think that I have ever met a more humble, modest and gracious person in the field of biology throughout my entire professional life. During a phone conversation with him while I was preparing this Foreword, Dan confessed to me that I had apparently helped him immensely in his early career by being supportive of both him and his cause, something I had long forgotten with these aging gray cells of mine. But you know something, folks, I am glad that I did. And so are the birds.

---- **David M. Bird, Emeritus Professor of Wildlife Biology,
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