

GLASS: REDUCING BIRD STRIKES

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THE STATISTICS...



PICTURE COURTESY OF BONNIE WITMER

- BUILDING GLASS IS INVISIBLE AND LETHAL TO BIRDS
- ESTIMATES RANGE FROM 100 MILLION TO **1 BILLION BIRDS** KILLED ANNUALLY IN NORTH AMERICA
- 1-10 BIRDS KILLED AT EACH BUILDING ANNUALLY
- 267 SPECIES HAVE BEEN DOCUMENTED STRIKING WINDOWS (28%)

BIRD STRIKES AGAINST GLASS ARE USUALLY FATAL. EVEN IF THE BIRD RECOVERS ENOUGH TO FLY AWAY, IT OFTEN DIES LATER OF INTERNAL HEMORRHAGING. ACCORDING TO DR. DANIEL KLEM, JR. OF MUHLENBERG COLLEGE, 1 BILLION BIRDS IS A CONSERVATIVE NUMBER.

...THE SCOPE

- COLLISIONS WITH BIRD GLASS SECOND ONLY TO HABITAT LOSS
- GLASS IS INDIS-CRIMINATE, KILLING HEALTHY AS WELL AS WEAK BIRDS
- THE USE OF GLASS WILL BECOME MORE FREQUENT NOT LESS



THE PROBLEM OF BIRD STRIKES IS COMPOUNDED WITH BUILDING LIGHTING AT NIGHT AND DURING MIGRATION IN URBAN AREAS.

HOWEVER, DR. KLEM BELIEVES THAT DAYTIME BIRD STRIKES DURING NON-MIGRATION IS A LARGER PROBLEM. THIS IS PARTICULARLY SO WHERE BIRD DENSITY INCREASES SUCH AS AT FEEDING STATIONS.

GLASS HAS MANY ENVIRONMENTAL ADVANTAGES IN GREEN BUILDING AND WILL REMAIN POPULAR AS A BUILDING MATERIAL IN THE FUTURE.

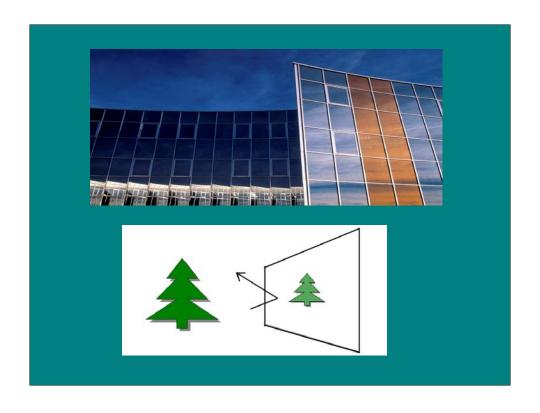
CATS KILL WEAK BIRDS.

WE WILL FOCUS ON PREVENTING DAYTIME WINDOW STRIKES FOR HOUSES.

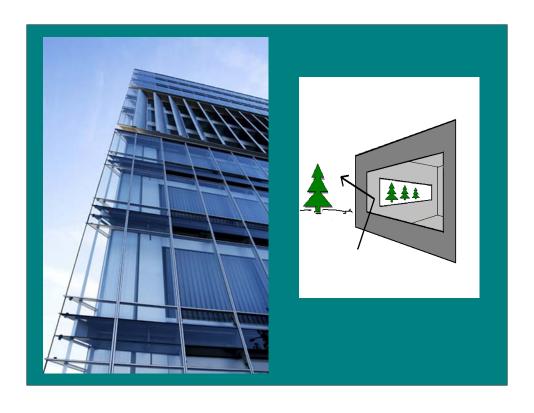
HOW

- GLASS IS INVISIBLE TO BIRDS <u>INCLUDING</u> PIDGEONS, SPARROWS AND STARLINGS
- THE MORE REFLECTIVE THE GLASS THE GREATER THE DANGER
- THERE ARE TWO BASIC PROBLEMS WITH GLASS IN BUILDINGS
 - REFLECTIONS OF DESIRABLE BIRD HABITAT
 - APPARENT 'FLY THROUGHS' TO DESIRABLE BIRD HABITAT

PIDGEONS, SPARROWS AND STARLINGS OFTEN PERCH ON LEDGES NEAR GLASS. THEY MAY FLY INTO THE GLASS BUT DO NOT HAVE ENOUGH SPACE TO BUILD UP LETHAL MOMENTUM.



BIRDS SEE A REFLECTION OF HABITAT AND FLY TOWARD IT.



BIRDS SEE HABITAT THROUGH TWO SETS OF WINDOWS AND FLY TOWARD IT.

PREVENTING WINDOW STRIKES I



- MAKE THE GLASS
 VISIBLE TO THE BIRDS
 - ETCHED OR FRITTED
 GLASS
 - PLACE FILM ON GLASS
 - PLACE DECALS ON GLASS
 - PAINT GLASS

PATTERNS ON THE GLASS ARE VISIBLE TO BIRDS AND REDUCE STRIKES, HOWEVER, PATTERNS MUST BE PLACED NO MORE THAN 4 INCHES VERTICALLY AND 2 INCHES HORIZONTALLY.

FILMS ON GLASS MAY BE OPAQUE FROM THE OUTSIDE AND ONLY SLIGHTLY NOTICIBLE FROM THE INSIDE DEPENDING ON THE PRODUCT

PREVENTING WINDOW STRIKES II

- SHIELD THE GLASS FROM THE BIRDS
 - PLACE A SCREEN OR NETTING OVER THE WINDOW TO SOFTEN IMPACT
 - PLACE PLANTINGS IMMEDIATELY NEXT TO WINDOW TO HIDE REFLECTIONS
 - PLACE BIRD FEEDERS LESS THAN 3 FT FROM WINDOWS



PLANTINGS NEXT TO WINDOWS IS RISKY SINCE BIRDS WILL BE ATTRACTED TO THE COVER AND WILL BE IN CLOSER PROXIMITY TO THE GLASS.

PLACING BIRD FEEDERS CLOSE TO THE WINDOWS PREVENTS THE BIRDS FROM BUILDING ENOUGH MOMENTUM TO BE FATAL.

PROBLEMS

- THERE IS NO PERFECT SOLUTION TO PREVENT WINDOW COLLISIONS
- MANY OF THE SOLUTIONS NEGATE THE BEAUTY AND FUNCTIONALITY OF GLASS
- GLASS COMPANIES ARE NOT INTERESTED IN DEVELOPING PRODUCTS UNLESS THERE IS A DEMONSTRATED MARKET

WITH ENOUGH DECALS, PAINTING OR FRITTING YOU MIGHT AS WELL BRICK UP YOUR WINDOWS.

ULTRAVIOLETOUR BEST HOPE FOR THE FUTURE?

- BIRDS SEE IN THE ULTRAVIOLET RANGE
- GLASS OR GLASS COATINGS THAT REFLECT A HIGH PERCENTAGE OF UV LIGHT MAY DETER BIRDS
- ORNILUX IS A EUROPEAN GLASS PRODUCT THAT ADVERTISES INCREASED VISIBILITY TO BIRDS

PROF. KLEM IS IN GENERAL SKEPTICAL ABOUT UV. BIRDS MIGHT SEE IT AS AN ATTRACTANT.

FILMS THAT ABSORB UV LIGHT ARE NOT EFFECTIVE; IT MUST BE REFLECTED.

ORNILUX HAS BEEN TESTED IN A LAB, NOT IN FIELD CONDITIONS. THEY ARE NOT RELEASING INFORMATION ABOUT THE GLASS.

WATCH FOR DR. KLEM'S ARTICLE IN AN UPCOMING ISSUE OF THE WILSON JOURNAL OF ORNITHOLOGY. IT PROMISES TO BE IMPORTANT.

AVAILABLE PRODUCTS NOW

APPROXIMATE COSTS TO COVER 72" x 72"

CollidEscape Removable film that adheres to the surface of glass (\$3 sq. ft.)	\$54. 3"stripe, 3"space \$108. Solid white \$180. Printed	CollidEscape www.lfdcollidescape.com 608-241-9533
BirdScreen Removable fiberglass screen that is Attached to exterior surface of glass (2 screens + 2 mid-screen frames)	\$70.	The Bird Screen Company www.birdscreen.com 717-445-9609
Decals 4" decals, use 6 per ft. sq. on exterior of the glass. (\$6.99/8 decals)	\$144.	Whispering Windows www.wpines.com 888-882-8344
Shading Compound Paint		
Diluted and applied to exterior of glass 1 gallon @ 1:15 gallons water covers 175 sq. ft.	Less than \$20, but requires one 5 gallon purchase @ \$100-150.	Greenhouse Megastore www.greenhousemegastore.com 1-888-281-9337
Bird B Gone Architectural Net Polyethylene knotted or polypropylene plastic netting.	Netting .30/sq. ft. but also requires corner and intermediate attachments; straining wire, turnbuckles, hog rings, special installation tools. Estimate requires quote from company.	Bird B Gone www.birdbeone.com 1-800-392-6915;949-472-3122

COMPILED BY BIRD CONSERVATION ALLIANCE



