
TEXT: RENÉ DE VOS

TRANSLATION: FRANK WARENDORF

'Killing walls' and mirror-glass surely claim 100,000 collision victims

Nobody knows how many there are. Maybe a million, but surely a hundred thousand. So many birds die from collision with sheet glass in The Netherlands. It is not necessary: the loss can be reduced by 80%. But before there is a way, there must be a will.

The greenest memorial park of The Netherlands it is called: the *Nieuwe Ooster* in Amsterdam. Cemetery, crematory and beautiful park of 81 acres, the grounds include a real arboretum and a rich flora and fauna. A park of art also, where famous artists exhibit. One of the more recent additions to the *Nieuwe Ooster* is a mirror building, a small building the size of a garage box, almost completely covered with mirrored panes. The day before Christmas 2011 members of the Amsterdam Birding Organization discovered this small building and noticed blood stains on the walls and small feathers on the ground. Even as a human visitor you feel beguiled; what is reality, what is image? For birds it is a deadly combination; large mirrored panes in the middle of lush hedges, shrubs and trees.

Summary proceedings 'window-kills'

The problem was solved; the organization covered the walls in a rush. First with building canvas, later with planking. A great gesture, because a work of art degenerated to a small shed this way. An exception moreover; owners of mirroring buildings usually do not appeal to 'some dead birds'. Legal grounds to force owners to take measures are lacking.

That was Frank Warendorf's experience as well. He is coordinator of the Protection Committee of the Amsterdam Birding Organization. "In 1993 I was working as an attorney in The Hague. On my way from home to the train station I always came past a large building with reflective panes. At the foot of that building I found dead, mostly young birds - clearly victims of window-collisions."

Good deterring methods exist!

On behalf of the neighborhood committee and the Dutch Society for the Protection of Animals, Warendorf summoned the owner of the building in summary proceedings. He demanded the attachment of silhouettes of birds of prey on the windows to prevent casualties. The demand was rejected because of lack of proof of the effectiveness of the demanded means. Shortly afterwards, the librarian of the Netherlands Society for the Protection of Birds provided research by the American Dr. D. Klem Jr. In his report, Dr. Klem cites preventive techniques that do proove effective. After that, the respondent in appeal offered five thousand Dutch guilders to the Society for the Protection of Animals to do a literature study regarding bird collisions at (reflective) windows. This study was published in the magazine *Het Vogeljaar*, but did not change the situation. By the way, the next owner of the building replaced all the window panes with panes of non-reflective glass.

Daniel Klem Jr. is researcher and lecturer in the Department of Biology at Muhlenberg College in Allentown, Pennsylvania, United States. He has about ten scientific publications to his name regarding collisions between birds and windows. Internationally he is known as the greatest expert in this field. Klem acquired data on victims from many countries, including the Netherlands. In our country collisions cause the deaths of many tens of thousands birds among more than ninety species.

Klem also did research on the effectiveness of deterrent techniques. The most obvious mean is to apply images on the window panes or to make opaque, mainly acoustic screens. American, Canadian, German, Swiss and Italian research has shown that such interventions could work very well, but that it requires great precision to apply effective patterns. In a brochure of the Road and Hydraulic Engineering Institute (DWW) of *Rijkswaterstaat*, the executive body of the Dutch Ministry of Infrastructure and the Environment, the results are summarized. Stripes oriented vertically work better than stripes oriented horizontally. The stripes must be 2 cm-wide and may not have a gap of more than 10 cm. Images also work, but here again, the distance between images may not be too large. The collision risk could be reduced further by avoiding or eliminating shrub and trees from areas in the vicinity of the glass object. The mirror building of the *Nieuwe Ooster* was a classical example of a wrong combination of green and glass.

Mortality can be reduced by three quarters

The brochure of the Road and Hydraulic Engineering Institute is not a provisional information folder. *Rijkswaterstaat* was aware of the collision problem with acoustic screens. The Regional Department South-Holland of *Rijkswaterstaat* did a literature study of its own. With the right adjustments, asserts the conclusion in the brochure, the amount of fatal collisions can be reduced by three quarters. Therefore, DWW issued directives: 'They can be used in the planning stage but also to adjust existing situations. Moreover, the directives can be used at defining the type of acoustic screen.'

Legislation does not offer support

"People just do not think about it," says Hanna Hirsch, member of the Amsterdam Birding Organization and Urban Birds Advisor of the Netherlands Society for the Protection of Birds. "Now it appears that the walls are killing walls. An insane design." Ms. Hirsch's remarks are aimed at the glass walls on the premises of the Science Park. They must exclude railway noise and cold drafts – a daily phenomenon in this type of high-rise building complexes – and at the same time allow a maximum of light to the student dormitories. At the foot of the glass walls the Organization regularly finds collision casualties. By the way, only a third of the window victims are found; the bulk is taken by scavengers and cats.

Time to join forces

Tiring negotiations with the operator regarding adjustments drag along for a year or three now. A report with recommendations by Jip Louwe Kooijmans (Netherlands Society for the Protection of Birds) - a proposal of the municipality - was not carried out. The consultant Daniel Klem suggested a much promising product of a Canadian manufacturer: film that deters birds, but that is not annoying for people inside. "To our great disappointment the manufacturer can or does not want to supply Europe for the present" Hirsch says. "Possibly a matter of patent."

Always lagging behind events, receiving very little audience, also not able to provide a simple solution, you don't get very cheerful as Urban Birds Advisor or Birding Organization.

"However we occasionally have a successful outcome," Hirsch hastens to say. For example, the Party for the Animals, a Dutch political party, has accomplished the inclusion of a regulation in the building appearance requirements for the high way A10-East and the South Axis, a developing business district, that will prevent window-casualties. How the problem is tackled in other large cities is not known to the Amsterdam protectors. The potential joining of forces might not be a bad idea to acheive something on a national level. "Abroad they are making much more progress," Hirsch knows; in Germany there are miles of acoustic screens with the correct markings. They also have special glass there of a kind of spider's web structure. Indeed, in Germany they are much more progressive with everything that concerns nature and environment..."