



Audubon PENNSYLVANIA

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April 30, 2014

Kathleen Grady
Director of Sustainability
Temple University
Mitten Hall, Lower Level
1913 N. Broad Street
Philadelphia, PA 19122

Dear Ms Grady:

As a member of Audubon Pennsylvania's staff working in Philadelphia I have been interested in the problem of birds colliding with human structures for the last 8 years. While this problem is now estimated to kill 365 to 988 million birds in the U.S. each year - primarily because relatively few architects, builders, planners, building owners, sustainability offices and others involved in the construction and management of buildings have become aware of the problem, and because practical ways of preventing the problem have only recently begun to emerge - Temple University has bucked this trend. Temple is one the few American colleges or universities to have not only recognized that bird collisions were occurring on their main campus, but to have also begun to address the problem.

This work began in 2004 when the university's Grounds Department began to monitor the main campus for bird collisions. By 2010 custom made two-dimensional models of raptors had been placed on five collision prone campus buildings to discourage migrating birds from approaching these buildings. While the use of raptor models to prevent bird collisions did not prove to be successful in a two-dimensional format, this approach was completely novel, and should it be tried again using more realistic three-dimensional models it may prove to be successful.

Over the last three years the university has continued to address the bird collision problem in innovative ways. With the support of the departments of Biology and Sustainability, two undergraduate students majoring in biology used inexpensive materials to create experimental patterns on collision prone windows that combined

design principles known to prevent collisions with artistic creativity to produce collision preventing patterns that were more attractive and more easily accepted by people. This project was followed by a similar one that engaged several classes of art majors at Temple's Tyler School of Art to create even more detailed artistic collision preventing patterns. In 2013 when one of these patterns was printed on film and installed on a collision prone set of windows at the university this was the first time that the worlds of science, art, and industry had come together to create a practical solution to the bird collision problem that will have almost unlimited applicability. Because of the success of this interdisciplinary project the use of patterned film to reduce bird collisions will be greatly enabled.

Other recent projects that addressed bird collisions included the use of fritted glass (a building material known to reduce bird collision rates) on a portion of new student residence building that opened in 2013, and the installation of netting over some collision prone windows at the university. While netting has been used to prevent collisions on residential buildings Temple is perhaps unique in finding an attractive and effective way to apply this technique to the kind of large collision prone glass surfaces that exist on larger buildings.

Because of the university's leadership and innovative work on the bird collision problem I support the university's application to be recognized as one of the Sierra Club's Cool Schools.

Respectfully,

A handwritten signature in black ink, appearing to read "Keith Russell". The signature is fluid and cursive, with the first name "Keith" written in a larger, more prominent script than the last name "Russell".

Keith Russell
Urban Important Bird Area Coordinator
Audubon Pennsylvania