



18 March 2016, Friday

Association for the Advancement of Sustainability in Higher Education (AASHE)

Reference: Submission of Innovation Credit for the Sustainability Tracking Assessment Rating System (STARS): Protecting Free-flying Wild Birds from Sheet Glass Worldwide.

Dear AASHE and STARS Review Team:

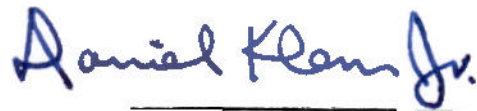
It is estimated that approximately one billion birds are annually killed flying into window in the United States (U.S.) alone. Institutions of higher learning of all sizes have human dwellings that are often lavishly covered with glass that have predictable fatal consequences for free flying wild birds.

For 43 years to the present, and specifically for the last 37 years at Muhlenberg College, I have studied collisions between birds and windows as a principal part of my overall research program. These investigations have resulted in over 14 peer-reviewed scientific publications that represent the foundation of our collective knowledge about bird-window strikes and how to prevent them. This body of knowledge is used to guide design and building practices worldwide to ensure buildings containing sheet glass are safe for birds that occur in the human built environment. Muhlenberg College merits an innovative credit for supporting this important research that includes the theoretical and applied academic disciplines of architecture, biology (specifically ornithology and environmental science), economics, law (specifically environmental and wildlife legislation), psychology, sociology, and sustainability. Research results on bird-window collisions from Muhlenberg College was essential to justify the development and implementation of the U.S. Green Building Council to adopt their Pilot 55 Credit of their Leadership in Energy and Environmental Design (LEED) system that specifically addresses bird-safe building practices. The recently (January 2016) release of *Reducing Bird Collisions with Buildings and Building Glass Best Practices* by the Division of Migratory Bird Management of the U.S. Fish and Wildlife Service is based on the ground breaking and current innovative research at Muhlenberg College addressing retrofitting existing windows and installing novel bird-safe sheet glass in remodeled and new construction.

For decades Muhlenberg College has been innovative in deferring indirect cost payments to manufacturers offering my research program grants to develop products to prevent bird mortality at sheet glass. The results of these studies have resulted in several methods to keep sheet glass safe for birds. Involving our students and those elsewhere (U.S. and several internationals), we continue to investigate the latest innovative methods to address this environmental and sustainability problem, on our campus, campuses elsewhere, and literally wherever human structures occur the world over.

Muhlenberg College has a long and distinguished documented record to justify its innovative contribution to this extremely important avian and overall environmental and sustainability issue for birds and people. Without reservation I believe we can claim we are the principal world's leader addressing these unintended and unwanted deaths of innocent birds, having no voice to protect themselves, a natural resource having unlimited practical utility for mankind.

I am sincerely and respectfully yours,

A handwritten signature in blue ink that reads "Daniel Klem, Jr." with a horizontal line underneath the name.

Daniel Klem, Jr., Ph.D., D.Sc.
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