The Dark Night Project

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The Problem, The Vision

Migratory bird deaths due to light pollution is a problem. Nocturnal migrators use the stars and the moon to navigate in the night and bright lights disorientate them. Light pollution also causes birds to become exhausted and fall to their deaths or collide with obstacles. Cost and energy expenditures and detrimental effects on the natural cycles of both plants and animals also result. We aim to combat light pollution by cancelling one of its largest sources: stadium lights.

“Perhaps the largest number, however, will perish from exhaustion as they circle around the lit towers, struggling to escape.” – Kill the Lights, Save the Birds from Mass Audubon Newsletter 2009

Results

We have determined that an effort to reduced light pollution on the WPI campus is simple and beneficial to the school. Our plan is to turn off the stadium lights whenever not in use by using a signup option and then extending this solution to the Worcester Consortium. This will combat the multiple problems created by light pollution.

$23,515.73
Estimated money Saved per Year by Implementing Our Plan - More Savings Than a Semester of Tuition

$12.08
Cost to run the lights for 1 hour. (Based on 2014 data)

Methods/Process

- Research all of the impacts of light pollution
- Talk to facilities and athletics
- Determine lighting details
- Raise awareness
- Propose to WPI executives
- Extend to consortium

References & Acknowledgments

Thank you WPI Facilities and Athletics Departments, Professors Bakermans and Pfeifer, Rebecca Zino, John Ross and Ellen Thomson, FLAP Toronto and Lights Out Boston.


BCN. (2011) Bright Light, Big Cities: Lighting & Windows are Deadly Hazards for Birds.


