

Mount Wachusett Community College Wind Energy Project Avian and Bat Impact Assessment and Wildlife Impact Mitigation Overview

Mount Wachusett Community College proposes to build a one or two turbine wind energy project on the college campus. As part of the development of that project and the ongoing development of the college's Renewable Energy Initiative and Curriculum, the college proposes to engage in studies that would establish insight on the impacts on birds and bats from the proposed wind project that will help establish baseline scientific data for similar small wind projects in New England. The college also proposes to implement pro-active wildlife impact mitigation strategies.

For assessing the potential impact on bats and designing mitigation strategies, the college has engaged North East Environmental Services, one of the leading bat biology consulting firms in the region.

The college has engaged Curry and Kerlinger as avian consultants based on their excellent reputation and deep experience in the field of analyzing avian impacts of wind projects generally and their specific experience with projects here in the northeast, including one project in Princeton Massachusetts, just a few miles from the college site.

These highly regarded professionals will lead the studies and analysis on the impacts of the wind project on birds and bats. The college plans to have these experts work in conjunction with the faculty and students of the biology department at the college to do more comprehensive post construction data collection than is typically done for projects of this scale and to help incorporate training for these types of studies into the college curriculum. Curry and Kerlinger has done such studies in conjunction with students on several other projects. The principal of North East Environmental Services also works actively with Biology students.

The initial plan for wildlife impact studies and mitigation efforts regarding the project so far include:

Pre-construction Impact Studies:

- a) Phase 1 Avian Impact Assessments
- b) Breeding bird censuses Spring 2008 (completed) and Spring 2009
- c) Phase 1 Bat Impact Assessments
- d) Full year monitoring for bats utilizing Anabat sonar technology (Summer and Fall 2008 data collection completed)

Post-construction Impact Studies:

- e) Post construction mortality studies of birds and bats at the project site (2-3 years)
- f) Post construction breeding bird census (2-3 years)
- g) Post construction monitoring for bats utilizing Anabat sonar technology (2-3 years)

Pro-active avian and bat impact mitigation efforts:

- h) Alter hay mowing schedule at wind project site to reduce impact on field nesting species.
- i) Create favorable avian and bat habitat on other parts of the college's 300 acre campus to increase local populations and offset potential impacts of the wind turbines.

Other measures:

- j) Along with seeking guidance from its principal consultants, the college plans to invite representatives from the following organizations to review the technical details, parameters and methodologies of the proposed post construction impact studies and mitigation efforts and to provide feedback and suggestions regarding how these efforts could be improved:

Mount Wachusett Community College Facilities Department
Mount Wachusett Community College Biology Department
Massachusetts Division of Fisheries and Wildlife
Massachusetts Executive Office of Energy & Environmental Affairs
Massachusetts Audubon Society
Forbush Bird Club
Town of Gardner Conservation Commission
US Department of Energy
US Department of the Interior - Fish and Wildlife Service
Massachusetts Technology Collaborative Renewable Energy Trust
University of Massachusetts Renewable Energy Laboratory

We anticipate that these organizations will have other good suggestions to enable this effort to document the actual impacts of wind power projects on birds and bats here in New England and to mitigate any potential wildlife impacts of the wind project at the college.

The college, located in the heart of New England is eager and well suited to serve as the site for the proposed study.

Along with many wildlife experts, leaders at the college believe that wind power can play a critically important role toward the long-term protection of bird and bat species. Behind the meter wind projects like that planned for Mount Wachusett Community College significantly reduce the need for fossil fuel generators, along with the inherent wildlife impacts of those fossil fuel generators and their fuel supplies. By consuming the power generated on site, they significantly decrease or eliminate the need for additional electrical transmission lines, with their many towers and the habitat impacts that their construction and maintenance entail over hundreds of miles.

The college is hopeful that the proposed studies will make a significant contribution to scientific knowledge regarding the interaction of bat and avian species with wind turbines, especially on the avian and bat impacts of small wind projects like that being planned for the college. It is also expected that engaging the biology faculty and students at the college as part of these efforts will lead to important long term additions to the college's Renewable Energy Initiative and Curriculum. The college plans to make the reports from all such studies publically available for use by wildlife agencies and organizations.