

Protecting Ecology While Promoting Wind Energy

The American Wind Wildlife Institute hopes to hit the ground running with mapping and research initiatives to protect wildlife and promote wind.

By Deston Nokes

s a National Audubon Society director and the American Wind Wildlife Institute's (AWWI) inaugural board chair, Julia Levin wants to make sure wind development proceeds in the most responsible way possible ... but she remains steadfast in her view that renewable energy development has to move forward quickly.

"People need to understand that this is not a choice between having a pristine environment and renewable energy development – it's a choice between clean energy and dirty energy," said Levin. "At AWWI, we don't propose shutting down and not building wind farms while we study impacts, but we do need to have a better understanding of where these impacts occur the most."

AWWI was created last year with support from the American Wind Energy Association board of directors and the AWEA siting committee to address regional – rather than site-specific – issues related to wind development, and wildlife and habitat protection.

"It's not a choice between having a pristine environment and renewable energy development – it's a choice between clean energy and dirty energy."

> Julia Levin National Audubon Society and AWWI Board Chair

However, AWWI intends on becoming more than just an earnest, well-intended discussion group. Members have formed a working collaboration between wind developers and nongovernmental conservation groups to develop tools for building wind generation facilities that have the least impact on native species.

AWWI is starting with an operating budget of \$3 million for its first two years to conduct wildlife research, promote sustainable development, fund biodiversity protection and educate the public about the interplay between wildlife and wind turbines.

"The formation of AWWI is partly a reaction to our attempt to achieve a 20 percent penetration of renewable energy," explained Andy Linehan, Iberdrola Renewable's director of

wind permitting and a member of AWWI's board of directors. "To grow wind generation at that scale, there are impediments in terms of transmission, siting and environmental impacts. While

we believe wind power is relatively benign, nobody will deny that there are some wildlife issues associated with its development."

Casselman bat studies

Currently, Iberdrola is studying the impact of wind turbines on bats at its Casselman Wind Power Project in Somerset County, Pa. Iberdrola has retained conservation scientists at the Bats and Wind Energy Cooperative (BWEC) to collect data about bat behavior.

Ed Arnett, BWEC's conservation biologist, says that taking a collaborative approach is much better than doing things in a vacuum.

"Working together at Casselman has allowed us all to leverage resources and credibility," Arnett said. "Iberdrola has provided us with the study sites to conduct the research we need to do, and we have implemented a scientific peer review of the results."

At Casselman, the first experiment in the U.S. was conducted, in which selected wind turbines were stopped during certain wind conditions to study whether it would reduce bat deaths.

"Most wind facilities are being required to do some level of wildlife monitoring," said Arnett. "But we're not just doing the basic monitoring requested by agencies. We're asking for biggerpicture studies and asking more specific questions."

While these site-specific studies are important, AWWI's formation is an important next step in conducting wildlife research efforts on a much grander scale. "There's a need to have a large-scale understanding of the impacts on grassland birds, gray grouse and other species. That's where AWWI comes into play."

Forming a balanced leadership

According to Iberdrola's Linehan, the formation of AWWI's leadership team required delicate negotiations regarding a balance between nongovernmental conservation groups and members of the industry. Currently, the National Audubon Society's Levin as the chair of the organization, and its vice chair is Jan Blittersdorf, chief executive officer of NRG Systems.

"I've been in negotiations with [Levin] over California siting guidelines and she's no pushover," remarks Linehan, adding that AWWI Board Members

Julia Levin - Chair National Audubon Society

Jan Blittersdorf - Vice-Chair NRG Systems

Alan Pollom - Treasurer The Nature Conservancy

Ed Lowe - Secretary GE Energy

Jim Eisen BP Alternative Energy

Peter Frumhoff Union of Concerned Scientists

Andy Linehan Iberdrola Renewables

Jeff Vonk Association of Fish and Wildlife Agencies

Johanna Wald Natural Resources Defense Council

James Walker enXco

another member of the board, The Nature Conservancy's Alan Pollom, is also a strong advocate for environmental issues in the Midwest.

"Next term, we might see the chair switch to an industrial representative, with an conservation group representative as vice chair," he said.

"AWWI's board is evenly balanced between wind industry and conservation group representatives, which is critical to its credibility and its success as a practical, science-based organization," Levin said. "Over the next few years, I think AWWI will make a real contribution to wind power development and wildlife protection, and it will set a high standard for truly green energy development."

AWWI already has agreed to start on four initiatives:

- *Wildlife research.* AWWI will work toward a better understanding of wind development's impact on wildlife, which will help wind developers make more informed facility siting decisions.
- *Landscape mapping*. Maps will be developed to identify sensitive wildlife areas at potential wind development sites. AWWI also wants to identify large areas with low wildlife risk in which wind development could be prioritized for future projects.
- Biodiversity banking. Cost-effective and predictable regional mitigation banking solutions will be developed to address the impacts of large-scale growth – particularly in prairies – in order to acquire large blocks of habitat that can be restored to offset impacts elsewhere.
- *Education/outreach/training*. As part of its collaborative approach, AWWI will educate regional wind industry trade associations, conservation and environmental organizations, and government agencies on its mission and the results of its wildlife research findings.

Levin stresses the importance of education in the organization's initiatives. "We need to separate the "not in my back yard" concerns from the legitimate concerns. We can't say 'no' to all energy development. We need to decide where it is low impact and then proceed – but we need more research to make sure it doesn't have serious impacts. There are positive ways to develop wind, but it doesn't get a free pass."

According to Lineahan, "The mapping effort is key. One of our frustrations is that we want to avoid sensitive areas – such as intact habitats, rare habitats, and areas of known endangered and threatened species. However, today there is not a single place to go for that information. There are a multitude of databases from different states, and we'd like to have one database to reference."

Both the mapping and research initiatives will move forward this year. AWWI already has a request for proposals out for the mapping initiative, and the project should commence in a matter of months. Having a new executive director on board will help facilitate progress, Levin said.

The importance of mitigation

The studies being conducted should answer a lot of questions about how wind interacts with wildlife. "There is so much we don't know about how the wildlife interact with wind turbines," Levin said. "Would altering operational methods help? Changing locations? We know that regularly scheduled shutdowns are not desirable from an industry perspective."

enXco, a wind energy developer, builder and operator, studied California condors in order to mitigate any potential impact on the birds' habitat. The company "consulted with Audubon, condor experts and biologists early in the development stage," Levin recalled. "In the end, the turbines didn't have an impact on the birds. [enXco] implemented a very strict trash removal policy at the site to minimize the presence of animals that attract the condors. It was just a simple, low-cost measure that has paid off."

Preserving wildlife is a critical ecological and the economic concern. According the Levin, there are millions of bird watchers – people who leave their homes and communities for the expressed purpose of viewing different birds. Then, there's the need to preserve birds for sportsman and hunters.

"Birds and bats are critical for so many ecological reasons," added Arnett. "They are important for insect and pest control, for pollinating crops and for being a part of the chain of life. We really can't afford to disrupt it."

"This isn't esoteric," agreed Levin. "We don't know what spoke in the wheel we can pull out without the wheel collapsing. That's why this is such important work."

###

Deston Nokes is an energy and environmental writer living in Portland, Ore. He can be reached at deston@destonnokes.com.