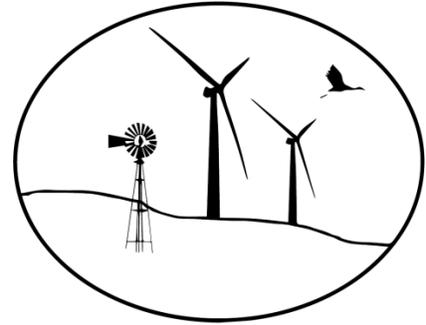


Wind Energy and Wildlife News

January 26, 2016



Around Nebraska...

Nebraska Legislative Bills

[LB736](#) - *Change provisions relating to electric utilities and electric suppliers under the Rural Community-Based Energy Development Act.* Introduced by Senator Friesen on 1/6/16; Referred to Natural Resources Committee on 1/7/16; Notice of Hearing for 2/4/16.

[LB824](#) - *Exempt privately developed renewable energy generation facilities from regulation as prescribed.* Introduced by Senator McCollister on 1/8/16; Referred to Natural Resource Committee on 1/11/16; Notice of Hearing for 1/27/16.

[LB863](#) - *Adopt the Wind Energy Expansion Act.* Introduced by Senator Schilz on 1/11/16; Referred to the Natural Resources Committee on 1/12/16; Notice of Hearing for 2/4/16.

[LB881](#) - *Change provisions relating to energy financing contracts.* Introduced by Senator Schilz on 1/11/16; Referred to the Natural Resources Committee on 1/12/16; Notice of Hearing for 1/28/16.

[LB1012](#) - *Adopt the Property Assessed Clean Energy Act.* Introduced by Senator Mello on 1/15/16; Referred to Urban Affairs Committee on 1/20/16. Notice of Hearing for 2/2/16.

[LB1047](#) - *Change sales tax exemption provisions relating to purchases of energy and fuel.* Introduced by Senator Harr on 1/20/16; Referred to Revenue Committee on 1/22/16.

[LB1069](#) - *Provide duties for the state investment officer relating to investment in energy-related companies or funds.* Introduced by Senator Haar on 1/20/16; Referred to Nebraska Retirement Systems Committee on 1/22/16.

[LB1071](#) - *Adopt the Solar Energy Economic Development Act.* Introduced by Senator Haar on 1/20/16; Referred to Natural Resources Committee on 1/22/16.

[LB1085](#) - *Change a renewable energy tax credit.* Introduced by Senator Davis on 1/20/16; Referred to Revenue Committee on 1/22/16.

News

[Invenergy delivers Nebraska wind.](#) Invenergy Wind's 73MW Prairie Breeze II wind farm in Nebraska has been officially opened following completion of construction. The wind farm is located in Antelope and Boone Counties about 100 miles northwest of the city of Lincoln and work wrapped up at the tail end of last year. "We're

pleased to begin operating the second phase of our Prairie Breeze Wind Energy Center,” said Invenergy’s Vice President Mick Baird. “When complete, Prairie Breeze will provide more than 300MW of clean energy to our customers in Nebraska, a state with tremendous wind resources.”

[IANR establishes Nebraska State Climate Office.](#) The Institute of Agriculture and Natural Resources at the University of Nebraska-Lincoln has established the Nebraska State Climate Office within the UNL School of Natural Resources. The office will serve as the primary source of climate information for Nebraska.

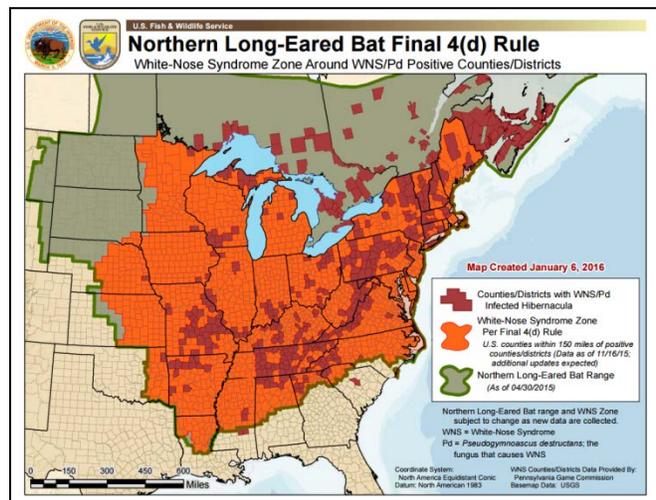
[Scientists take step toward perfecting solar cells.](#) Three University of Nebraska-Lincoln researchers describe an innovation that could help make perovskite-based solar cells more competitive with those made from silicon.

[Broken Links on Nebraska Wind Energy and Wildlife Project Website.](#) The Nebraska Game and Parks Commission has created a new website (<http://outdoornebraska.gov/>), so many of the links to their website on the Nebraska Wind Energy and Wildlife Project website no longer work. I am in the process of updating the links, but it may take until the end of January. My apologies for the inconvenience.

Around the Nation & World...

Wind and Wildlife

[Protections Finalized for Threatened Northern Long-Eared Bats.](#) In an effort to conserve the northern long-eared bat, the U.S. Fish and Wildlife Service has announced a final rule today that uses flexibilities under section 4(d) of the Endangered Species Act (ESA) to tailor protections to areas affected by white-nose syndrome during the bat’s most sensitive life stages. The rule is designed to protect the bat while minimizing regulatory requirements for landowners, land managers, government agencies and others within the species’ range. The final rule appears in the Federal Register on January 14, 2016 and takes effect on February 16, 2016. For more information on the special rule for the northern long-eared bat, go to <http://www.fws.gov/midwest/endangered/mammals/nleb/index.html>.



[Factors Influencing Winter Mortality Risk for Pronghorn Exposed to Wind Energy Development,](#) Taylor et al. 2016, Rangeland Ecology & Management. Pronghorn winter survival was not influenced by exposure to wind energy infrastructure; however, pronghorn survival may be impacted by larger-scale wind energy developments than those examined in our study. We recommend wildlife managers focus on conserving sagebrush stands in designated pronghorn winter range.

[Conflicts Between Birds and On-Shore Wind Farms,](#) Zwart et al. 2015, Chapter in Problematic Wildlife. Currently, we do not fully understand the interaction between birds and wind farms and thus our predictions of potential effects are limited. Therefore, further research is needed to improve our understanding of both the causes and consequences of collision mortality and displacement effects on bird populations before we can prevent these in the future.

[Mortality Survey Shows Leading Causes of Bat Deaths](#). White-nose syndrome (WNS) and wind turbines have killed the largest number of bats in the world since 2000, according to a new study. “Many of the 1,300 species of bats on Earth are already considered threatened or declining. Bats require high survival [rates] to ensure stable or growing populations,” said Tom O’Shea, a USGS emeritus research scientist and the lead author of the [study](#) published in *Mammal Review* in a release. “The new trends in reported human-related mortality may not be sustainable.”

[Multiple mortality events in bats: a global review](#), O’Shea et al. 2016, *Mammal Review*. Collectively, over half of all reported MMEs were of anthropogenic origin. The documented occurrence of MMEs in bats due to abiotic factors such as intense storms, flooding, heat waves, and drought is likely to increase in the future with climate change. Coupled with the chronic threats of roosting and foraging habitat loss, increasing mortality through MMEs is unlikely to be compensated for, given the need for high survival in the dynamics of bat populations.

[Characterization of the magnitude of bat activity at the proposed Amherst Community Wind Farm Project, Cumberland County, NS 2014-2015](#). This pre-construction survey report contains a detailed introduction, methods, results, discussion, and recommendations.

[Impacts to Birds and Bats Due to Collisions and Electrocutions from Some Tall Structures in the United States: Wires, Towers, Turbines, and Solar Arrays—State of the Art in Addressing the Problems](#), Manville 2015, Chapter in *Problematic Wildlife*. The indirect effects to migratory birds and their habitats and direct and indirect negative impacts on bats (Microchiroptera) caused primarily by land-based wind turbines are evaluated. Suggested mitigation tools are based on innovative scientifically supported best practices, best available technologies, and accepted conservation measures.

Wind

[Risk scorecard concept in wind energy projects: An integrated approach](#), Kucukali 2016, *Renewable and Sustainable Energy Reviews*. The proposed risk assessment tool quantifies economic, environmental, political, and societal risks in wind energy projects. The risks are quantified based on the measured data and document evidence. An important component of the proposed methodology includes converting different external risks into a common scale and these scales express the level of risk factors.

[Radar-activated obstruction lighting system for wind turbines](#). Following Federal Aviation Administration (FAA) testing and introduction of new performance guidelines, [Laufer Wind](#) is now making its patented Aircraft Detection System (ADS) available in the U.S. The ADS is a radar-activated obstruction lighting system designed to turn blinking lights atop wind turbines and tall towers on or off, based on the presence or absence of aircraft in the vicinity. This technology allows lights out for up to 98% of the night which significantly reduces the towers’ visual impacts on surrounding communities.

[Bill aims for long-term extension of renewable energy tax credits](#). In mid-December, Sen. Bernie Sanders, I-Vt., who is seeking the democratic presidential nomination, introduced legislation that aims to enact long-term extensions of several clean energy tax credits that benefit the bioenergy and biofuel sectors.

Other

[*A Retrospective Analysis of the Benefits and Impacts of U.S. Renewable Portfolio Standards*](#), Wiser et al. 2016, NREL/TP-6A20-65005. This is one report in a series that explores the costs, benefits, and other impacts of state renewable portfolio standards (RPS), both retrospectively and prospectively.

[*How drought and heat threaten global electricity supply*](#). Power plants need freshwater to produce electricity. But the future of our planet's freshwater resources is murky. Increasingly common droughts and heat waves because of climate change will reduce the electricity production capacity of most of the world's power plants. The good news is that plant operators could adopt various strategies to combat this capacity reduction.

[*Power-generation system vulnerability and adaptation to changes in climate and water resources*](#), van Vliet et al. 2016, Nature Climate Change. Hydropower and thermoelectric power together contribute 98% of the world's electricity generation at present. Here we present a global assessment of the vulnerability of the world's current hydropower and thermoelectric power-generation system to changing climate and water resources, and test adaptation options for sustainable water-energy security during the twenty-first century.

[*Secretary Jewell Launches Comprehensive Review of Federal Coal Program*](#). Secretary Sally Jewell announced today that the Interior Department will launch a comprehensive review to identify and evaluate potential reforms to the federal coal program in order to ensure that it is properly structured to provide a fair return to taxpayers and reflect its impacts on the environment, while continuing to help meet our energy needs. This is another step along the path that President Obama announced in Tuesday's State of the Union address to improve the way we manage our fossil fuel resources and move the country towards a clean energy economy.

Webinars

Golden eagles: Estimating mitigation credits from voluntary lead abatement & reducing vehicle strikes.

Wednesday, January 27, 2016 at 1-2 p.m. ET. Presented by Tabor Allison. Register at:

<https://www.nationalwind.org/research/webinars/>

[*Species Conservation & ESA Initiative Webinar: Voluntary Species Conservation Incentives and Collaboration*](#) – recording available.

[*How to Prioritize Key Areas for Conservation Efforts in a Changing Climate: A Look at "Climate Refugia"*](#) webinar - recording available.

Upcoming Conferences, Trainings & Events

[*Rainwater Basin Joint Venture Informational Seminar*](#), February 9, 2016, Grand Island, NE. The one-day seminar is an opportunity for landowners, agriculture producers, natural resource professionals, and other interested individuals to learn about and discuss conservation issues, research, and habitat work in the Rainwater Basin and Nebraska's mixed-grass prairie region.

[**Nebraska Chapter of the Wildlife Society Annual Meeting**](#), March 8-10, 2016, Kearney, NE. The theme for the meeting is “50 Years of Wildlife Conservation and Management”. The meeting will include a student-professional workshop, oral presentations, a student poster competition, our regular business meeting, banquet, auction, and a Student-Professional Quiz Bowl.

[**Nebraska Planning and Zoning Association Conference**](#), March 9-11, 2016, Kearney, NE. NPZA Celebrates 50 years as an organization supporting local planning in Nebraska!

[**Audubon's Nebraska Crane Festival**](#), March 17-20, 2016, Kearney, NE. We are already anticipating with great excitement the internationally celebrated migration of 500,000 Sandhill Cranes through central Nebraska. Thousands of people from all over the world come to witness this amazing, life-changing wildlife event. We hope this year you will choose to be part of this experience.

[**AWEA Wind Project Siting and Environmental Compliance Conference**](#), March 22-23, 2016, Charleston, SC. where leaders from the wind industry, environmental permitting and compliance sector, the scientific community and regulatory officials come together for a robust discussion about the current state of siting and environmental compliance, and network.

The Wildlife Society Renewable Energy Working Group – LinkedIn. Connect with other resource professionals involved in renewable energy – wildlife work. To join, go to:

http://www.linkedin.com/groups?gid=4433729&trk=my_groups-b-grp-v, click Join.

Check out the Nebraska Wind Energy and Wildlife Project website at: <http://snr.unl.edu/renewableenergy/wind/> and Wind Energy and Wildlife news at: <http://www.scoop.it/t/wind-energy-and-wildlife>.

To unsubscribe to this listserv:

Send an e-mail message to: LISTSERV@UNL.EDU

In the Message Field (NOT Subject): UNSUBSCRIBE wind_wildlife