



## Nebraska Wind Energy and Wildlife News

September 16, 2014

### **Around Nebraska...**

**[State energy board gives initial OK to \\$140M wind farm near Blue Hill, Nebraska.](http://www.omaha.com/money/state-energy-board-gives-initial-ok-to-m-wind-farm/article_7282de5d-19ea-5fd0-b2b6-2d0900f26424.html)** A state energy board gave conditional approval Friday to a \$140 million wind farm that would rise south of Blue Hill in south-central Nebraska. The Cottonwood Wind Project would have 52 turbines and a capacity to generate 89.5 megawatts of power. NPPD is currently in the process of lining up industrial/manufacturing customers that are seeking to use “green” energy. ([http://www.omaha.com/money/state-energy-board-gives-initial-ok-to-m-wind-farm/article\\_7282de5d-19ea-5fd0-b2b6-2d0900f26424.html](http://www.omaha.com/money/state-energy-board-gives-initial-ok-to-m-wind-farm/article_7282de5d-19ea-5fd0-b2b6-2d0900f26424.html)).

**[13 wind energy projects in Nebraska, more under construction.](http://kios.org/post/13-wind-energy-projects-nebraska-more-under-construction)** Wind energy accounted for 4.8 percent of all electricity generated in Nebraska last year. A lecture Thursday in Omaha focuses on the benefits of wind energy to Nebraska’s economy and security. Dan McGuire is co-chairman of the Nebraska Wind and Solar Conference, and is speaking at Thursday’s event. He says changes to state law have allowed the private sector to build wind farms in Nebraska. (<http://kios.org/post/13-wind-energy-projects-nebraska-more-under-construction>).

**[Energy Department Awards \\$4.5 Million for Innovative Wind Power R&D Projects.](http://energy.gov/eere/articles/energy-department-awards-45-million-innovative-wind-power-rd-projects)** The Energy Department today announced \$4.5 million for four projects to help increase deployment of innovative wind power technologies by optimizing the operation, boosting efficiency, and improving the environmental performance of wind energy systems. The University of Nebraska-Lincoln will receive \$1.5 million to develop an online health monitoring system that uses the electric current signals produced by a turbine’s generator in order to track the generator’s performance and help determine when it needs to be repaired. This technology could reduce operating costs by decreasing unscheduled downtime due to unplanned maintenance. (<http://energy.gov/eere/articles/energy-department-awards-45-million-innovative-wind-power-rd-projects>).

**[Sandhills ranchers who oppose power line can speak against project.](#)** The Nebraska Power Review Board ruled Friday that a group of ranchers and business owners in the Sandhills, who oppose a proposed 220-mile transmission line on or near their land, have a right to be part of a hearing on the project.

**[Energy chat reveals color change may protect birds from wind turbines.](http://www.theindependent.com/news/local/energy-chat-reveals-color-change-may-protect-birds-from-wind/article_5d706db2-3326-11e4-b7a5-001a4bcf887a.html?_scoop_post=7e4f61b0-33bb-11e4-abdc-842b2b775358&_scoop_topic=338194#_scoop_post=7e4f61b0-33bb-11e4-abdc-842b2b775358&_scoop_topic=338194)** Those dazzling white wind turbine blades that are often seen being trucked across Nebraska highways may be up for a color change. “Less birds fly into black blades,” said Tim Frentz, the founder of the Helping Hands Network and co-owner of the Nebraska Green Fuels Co-op, both renewable energy organizations. However, the latest studies have revealed that the color of wind turbine blades can be altered to be more “bird friendly,” Frentz said. That’s why black turbines are now being seen in Colorado and in other states, he said. ([http://www.theindependent.com/news/local/energy-chat-reveals-color-change-may-protect-birds-from-wind/article\\_5d706db2-3326-11e4-b7a5-001a4bcf887a.html?\\_scoop\\_post=7e4f61b0-33bb-11e4-abdc-842b2b775358&\\_scoop\\_topic=338194#\\_scoop\\_post=7e4f61b0-33bb-11e4-abdc-842b2b775358&\\_scoop\\_topic=338194](http://www.theindependent.com/news/local/energy-chat-reveals-color-change-may-protect-birds-from-wind/article_5d706db2-3326-11e4-b7a5-001a4bcf887a.html?_scoop_post=7e4f61b0-33bb-11e4-abdc-842b2b775358&_scoop_topic=338194#_scoop_post=7e4f61b0-33bb-11e4-abdc-842b2b775358&_scoop_topic=338194)).

**[U.S. Fish and Wildlife Service Awards \\$1.3 Million in Grants to 30 States for Work on Deadly Bat Disease](#)**. The U.S. Fish and Wildlife Service today announced grant awards totaling \$1,276,088 to 30 states for white-nose syndrome projects. State natural resource agencies will use the funds to support research, monitor bat populations and detect and respond to white-nose syndrome, a disease that afflicts bats. Nebraska was awarded \$49,867. (<http://www.fws.gov/midwest/news/744.html>).

## **Around the Nation & World...**

### **Wind and Wildlife**

**[Wind turbines kill fewer birds than do cats, cell towers](#)**. Wind turbines kill far fewer birds in North America than do cats or collisions with cell towers, says a study out Monday. As wind power expands in the United States, critics often blame giant turbine blades for bird deaths. (<http://www.usatoday.com/story/money/business/2014/09/15/wind-turbines-kill-fewer-birds-than-cell-towers-cats/15683843/>).

**[A Comprehensive Analysis of Small-Passerine Fatalities from Collision with Turbines at Wind Energy Facilities](#)**. Wallace P. Erickson, et al. PLOS ONE, September 15, 2014. (<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0107491>).

**[How Many Birds Are Killed By Wind Energy, Solar Power, Oil, And Coal?](#)** In response to growing accusations from both [conservationists](#) and [conservatives](#) that renewable energy sources like solar energy and wind power kill too many birds, [U.S. News and World Report](#) has compiled data on which energy industries are responsible for the most bird deaths every year. (<http://www.evwind.es/2014/08/26/how-many-birds-are-killed-by-wind-energy-solar-power-oil-and-coal/47090>).

**[Agency Awards Grant To Study Wind Turbines' Impact On Birds And Bats](#)**. Research into how birds and bats interact with wind turbines is getting a boost, thanks to a grant from the U.S. Department of Energy. Last week, the agency announced a \$1.1 million grant to the [Biodiversity Research Institute](#) in Gorham, Maine, to help researchers develop a system of near-infrared cameras that will detect and document the flight behavior of birds and bats around wind turbines. The goal of the project is to better understand the impact wind turbines have on birds and bats, a topic that's become increasingly heated as more wind and large-scale solar operations go online in the United States. (<http://thinkprogress.org/climate/2014/09/08/3564328/wind-research-birds-and-bats/>).

**[Bat deaths down at wind farm](#)**. The number of bats killed by wind turbines at the Spring Valley Wind Farm in 2014 has been reduced by more than 75 percent compared to the same time frame last year. According to Ely's BLM Field Manager Paul Podborny the reduction comes as a result of changes put in place at the beginning of the year by the company that owns the wind farm, Pattern Energy. (<http://www.elynews.com/2014/09/05/bat-deaths-wind-farm/>).

**[Luther College studying wind turbine's impact on local bats](#)**. This summer, the Luther College Biology Department is investigating the Luther College wind turbine's impact on bats. Dawn Reding, Luther visiting assistant professor in biology, and students Mariah Crotty and Andrea Malek are using several methods to survey bat populations and estimate bat mortality caused by the sweeping rotor blades. (<http://www.decorahnewspapers.com/Content/News/Local-News/Article/Luther-College-studying-wind-turbine-s-impact-on-local-bats/2/10/35272>).

### **Wildlife**

**["State of the Birds" Report Assesses the Health of the Nation's Birds](#)**. The Good News: Conservation Efforts Work When Applied. The Bad News: Populations Are Down in Many Key Habitats. The State of the Birds 2014 is authored by the U.S. Committee of the North American Bird Conservation

Initiative—a 23-member partnership of government agencies and organizations dedicated to advancing bird conservation. The report is based on extensive reviews of population data from long-term monitoring. It looks to birds as indicators of ecosystem health by examining population trends of species dependent on one of seven habitats: grasslands, forests, wetlands, ocean, aridlands, islands and coasts. (<http://www.doi.gov/news/pressreleases/state-of-the-birds-report-assesses-the-health-of-the-nations-birds.cfm>).

**[The State of the Birds 2014: United States of America](#)**. One hundred years after the extinction of the Passenger Pigeon, the nation's top bird scientists from conservation groups and agencies have come together again to publish the fifth State of the Birds report. (<http://www.stateofthebirds.org/>).

**[Climate Change Will Disrupt Half of North America's Bird Species, Study Says](#)**. A report released on Monday by the [National Audubon Society](#) found that [climate change](#) is likely to so alter the bird population of North America that about half of the approximately 650 species will be driven to smaller spaces or forced to find new places to live, feed and breed over the next 65 years. If they do not — and for several dozen it will be very difficult — they could become extinct. ([http://www.nytimes.com/2014/09/09/us/climate-change-will-disrupt-half-of-north-americas-bird-species-study-says.html?action=click&contentCollection=Opinion&module=MostEmailed&version=Full&region=Marginalia&src=me&pgtype=article&\\_r=1](http://www.nytimes.com/2014/09/09/us/climate-change-will-disrupt-half-of-north-americas-bird-species-study-says.html?action=click&contentCollection=Opinion&module=MostEmailed&version=Full&region=Marginalia&src=me&pgtype=article&_r=1)).

**[Audubon's Birds and Climate Change Report and Website](#)**. 314 Species on the Brink. Shrinking and shifting ranges could imperil nearly half of U.S. birds within this century. (<http://climate.audubon.org/>).

**[The Invisible Prevalence of Citizen Science in Global Research: Migratory Birds and Climate Change](#)**. Citizen science is a research practice that relies on public contributions of data. The strong recognition of its educational value combined with the need for novel methods to handle subsequent large and complex data sets raises the question: Is citizen science effective at science? Our results suggest that the significance of citizen science to global research, an endeavor that is reliant on long-term information at large spatial scales, might be far greater than is readily perceived. (<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0106508>).

**[Endangered chicks face long, risky flight to Texas](#)**. The only wild flock of whooping cranes will begin its annual journey to Texas this month with 32 chicks in tow. Officials at Wood Buffalo National Park in Canada, where the birds breed, say about 40 percent of the nests counted in May successfully produced fledglings. (<http://www.victoriaadvocate.com/news/2014/sep/09/endangered-chicks-face-long-risky-flight-to-texas/>).

**[Bats change strategy when food is scarce](#)**. Echolocating bats have historically been classified into two groups: 'loud' aerial hawkers who catch flying insects on the wing and 'whispering' gleaners that pick up prey from the ground. While some bat species can forage in multiple ways, others have limited flexibility in the amplitude of their echolocation calls. The variability in source levels recorded was the most extensive change seen in any [bat species](#), indicating that perhaps bats are more flexible in their echolocation behaviour than previously understood. (<http://phys.org/news/2014-09-strategy-food-scarce.html>).

## Wind

**[Environmentalist tapped to lead wind industry group](#)**. A longtime senior official for the National Wildlife Federation has been selected to lead the Wind Energy Foundation, a nonprofit industry-funded group that promotes public awareness of wind as a clean energy source and supports research. (<http://www.governorswindenergycoalition.org/?p=10115>).

**[North Dakota requiring bonds for wind farm reclamation](#)**. A North Dakota regulatory commission has moved to require for the first time that companies post bonds to cover the cost of turning a wind farm site

back to its original state when a facility is shut down for good. ([http://bismarcktribune.com/bakken/north-dakota-requiring-bonds-for-wind-farm-reclamation/article\\_8c2892e4-33b0-11e4-a4d8-0019bb2963f4.html](http://bismarcktribune.com/bakken/north-dakota-requiring-bonds-for-wind-farm-reclamation/article_8c2892e4-33b0-11e4-a4d8-0019bb2963f4.html)).

### **Webinars & Workshops**

**[WINDEXchange September Webinar: Wind Energy and Eagles: The Problem, the Permit, and the Path Forward](#)**. September 17, 2014, 3 p.m. ET. Wally Erickson of WEST, Inc. will present on the conservation and permitting challenges associated with wind and eagles; Annie Mudge of Cox, Castle and Nicholson will discuss EDF Renewable Energy's experience receiving the first eagle take permit under the new permitting rules, and will discuss what they view as permitting challenges going forward; and Ian Evans of the American Wind Wildlife Institute will present on future eagle research needed to address permitting challenges. DOE Wind Energy Deployment Manager Patrick Gilman will moderate the webinar. (<https://www.mymeetings.com/nc/join.php?i=RW3109386&p=3869930&t=c>).

**[EISPC Energy Zones Mapping Tool Webinar](#)** was on **July 29, 2014, at 2 p.m. CT**. This one-hour demonstration featured Wind energy resource data and Land-based and Offshore Wind suitability models. The tool has many uses that are explained during the webinar. The webinar was recorded and can be accessed at: <http://anl.adobeconnect.com/p3794bbuz3d>.

### **Announcements**

**[Eagle Scoping Public Input Process](#)**. The U.S. Fish and Wildlife Service (Service) is analyzing various aspects of bald and golden eagle management as part of its responsibility under the National Environmental Policy Act (NEPA). Public input is an important part of this process. The NEPA analysis will evaluate the environmental effects of a range of alternatives for eagle management, including possible changes to permit regulations. The purpose of the public scoping process with regard to NEPA is to determine relevant issues that could influence the scope of the analysis, including alternatives, and guide the process for developing an environmental assessment (EA) or environmental impact statement (EIS) and related compliance efforts. (<http://eaglescoping.org/>).

### **Tools**

**[Soaring Bird Sensitivity Map: A planning tool for wind energy and other sectors](#)**. The Soaring Bird [Sensitivity Map tool](#) has been designed to provide developers, planning authorities and other interested stakeholders access to information on the distribution of soaring bird species along the Rift Valley / Red Sea flyway. This information can help to inform decisions on the safe siting of new developments, such as wind farms, ensuring that negative impacts on this important migration route are minimised. (<http://migratorysoaringbirds.undp.birdlife.org/en/sensitivity-map>).

**[Energy Department, NREL Release State and Local Energy Data Tool](#)**. DOE and the National Renewable Energy Laboratory (NREL) recently released [SLED, the State and Local Energy Data online tool](#) that provides state and local decision makers easy access to energy data specific to their location. The resources and data provided can be used to support strategic energy planning processes and deployment of clean energy projects. By entering a city and state or ZIP code into the SLED tool, users can see how their current electricity prices compare to the state and national averages, learn about applicable policies and incentives that could affect clean energy projects in their state, find available renewable energy resources, get details on alternative transportation fuel costs, and more. (<http://apps1.eere.energy.gov/sled/#/>).

**[WINDEXchange](http://energy.gov/eere/wind/windexchange)** is the U.S. Department of Energy (DOE) Wind Program's hub of stakeholder engagement and outreach activities. The purpose of WINDEXchange is to help communities weigh the benefits and costs of wind energy, understand the deployment process, and make wind development decisions supported by the best available science and other fact-based information. (<http://energy.gov/eere/wind/windexchange>).

**[National Assessment of Ecosystem Carbon Sequestration and Greenhouse Gas Fluxes](http://www.usgs.gov/climate_landuse/land_carbon/Data.asp)**. View and download the primary data that has been developed by the USGS team in a variety of formats using the [LandCarbon Data Tool](#). Visualize data products, view and interact with maps, charts, and statistics that summarize the results of the USGS assessment. ([http://www.usgs.gov/climate\\_landuse/land\\_carbon/Data.asp](http://www.usgs.gov/climate_landuse/land_carbon/Data.asp)). \*\*NOTE: Data on carbon sequestration for the ecoregions in Nebraska are not yet available. Other information is available to view at this time.

**[EISPC EZ Mapping Tool](https://eispc.tools.anl.gov/)**. The EISPC Energy Zones Mapping Tool is a free online mapping tool to identify potential clean energy resource areas within the Eastern Transmission Interconnection. (<https://eispc.tools.anl.gov/>).

**[National Climate Change Viewer](http://www.usgs.gov/climate_landuse/clu_rd/nccv.asp)**. The new tool gives citizens and resource managers the opportunity to look at climate-driven impacts on watersheds and map projected changes at the local, regional, state and watershed levels. ([http://www.usgs.gov/climate\\_landuse/clu\\_rd/nccv.asp](http://www.usgs.gov/climate_landuse/clu_rd/nccv.asp)).

**[National Wetlands Database, interactive mapping tool completed](http://www.fws.gov/wetlands/Data/Mapper.html)**. To coincide with American Wetlands Month, which begins May 1, the U.S. Fish and Wildlife Service is announcing the completion of the most comprehensive and detailed U.S. wetland data set ever produced, capping a 35-year effort by the Service to map the extent of the nation's wetlands. The Wetlands Inventory Mapper (<http://www.fws.gov/wetlands/Data/Mapper.html>) has digitally mapped and made publically available wetlands in the lower 48 states, Hawaii and dependent territories, as well as 35 % of Alaska. (<http://www.agprofessional.com/news/National-Wetlands-Database-interactive-mapping-tool-completed--257553181.html>).

**[National Wind Coordinating Collaborative \(NWCC\) Webinars on the Latest Wind-Wildlife Research and Tools](http://nationalwind.org/research/webinars/)**. NWCC/AWWI hosts quarterly webinars on the latest research and tools related to the interactions of wind energy, wildlife, and wildlife habitat. The webinars include time for questions after each presentation. To receive the access information for upcoming webinars, please sign up. If you are interested in sharing your work on a webinar, please contact [Ian Evans](#). (<http://nationalwind.org/research/webinars/>).

**[USGS Interactive Windfarm Mapper](http://eerscmapp.usgs.gov/windfarm/)**. The USGS created this publicly available [national dataset](#) and [interactive mapping application](#) of wind turbines. This dataset is built with publicly available data, as well as searching for and identifying individual wind turbines using satellite imagery. The locations of all wind turbines, including the publicly available datasets, were visually verified with high-resolution remote imagery to within plus or minus 10 meters. (<http://eerscmapp.usgs.gov/windfarm/>).

**[Developing a Research Framework for Increasing Understanding of Interactions between Eagles and Wind Energy](#)**. In this document, we outline a framework for a national, hypothesis-driven research program on eagles and wind energy. The principal goals of this framework are to guide research that improves our ability to predict and estimate take of eagles at wind energy facilities, to develop measures intended to avoid and minimize the take of eagles at operating wind energy facilities, and to compensate

for, or offset, remaining eagle take. ([http://awwi.org/wp-content/uploads/2014/01/AWWI-Eagle-Research-Framework\\_Final-01-23-14.pdf](http://awwi.org/wp-content/uploads/2014/01/AWWI-Eagle-Research-Framework_Final-01-23-14.pdf)).

**[Land-Based Wind Energy Guidelines Webinar Series](#)**. The USFWS has offered a number of webinars related to the Land-Based Wind Energy Guidelines. Recordings of the webinars, presentations, and transcripts are available at: [http://www.fws.gov/windenergy/wind\\_training/wind\\_training.html](http://www.fws.gov/windenergy/wind_training/wind_training.html).

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

### **[Upcoming Conferences](#)**

**[AOU•COS•SCO](#)** (American Ornithologists' Union, the Copper Ornithological Society, and the Society of Canadian Ornithologists) Joint Meeting will be **September 23-28, 2014** in Estes Park, CO. There will be a symposium on Avian Interactions with Energy Infrastructure: Challenges of Being Green (Chair: Jen Smith) and Effects on Birds of Unconventional Shale Gas Extraction and the New Energy Boom (Chair: Steve Latta) as well as sessions on migration, population ecology, and much more. (<http://birdmeetings.org/aoucossco2014/>).

**[Raptor Research Foundation 2014 Conference](#)** will be **September 24-28, 2014** in Corpus Christi, TX. Associated with the conference is an Avian Power Line Interaction Committee (APLIC) Workshop. (<http://www.raptorresearchfoundation.org/conferences/current-conference>).

**[The Wildlife Society Annual Conference](#)** will be in Pittsburgh, PA **October 25-30, 2014**. The **[Renewable Energy Working Group](#)** will be offering a **[field visit](#)** to the Casselman Wind Farm on October 25, 2014. For basic information about the field visit, go to: <http://wildlifesociety.org/learn/field-trips/>. For more detailed information, go to: <http://news.wildlife.org/the-wildlifer-2014-june/news-from-subunits-10/> and search for Renewable Energy Working Group updates.

Wind Wildlife Research Meeting X will be in Broomfield, CO, week of December 1, 2014. Dates TBD. The biennial Wind Wildlife Research Meeting provides an internationally recognized forum for researchers and wind-wildlife stakeholders to hear contributed papers, view research posters, and listen to panels that synthesize the most recent wind power-related wildlife research. (<http://nationalwind.org/save-the-date-wind-wildlife-research-meeting-x/>).

**[7th Annual Nebraska Wind & Solar Conference & Exhibition: Turning Challenges into Nebraska Opportunities](#)** will be on **October 29th and 30th** in LaVista, Nebraska. There are sponsor and exhibitor opportunities at varying price levels. If you have presentation ideas, you can submit them to: [admin@nebraskawindconference.com](mailto:admin@nebraskawindconference.com). (<http://nebraskawindandsolarconference.com/>).

Conference on Wind energy and Wildlife impacts will be in Berlin, Germany, March 10-12, 2015. (<http://www.cww2015.tu-berlin.de/>).

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>.