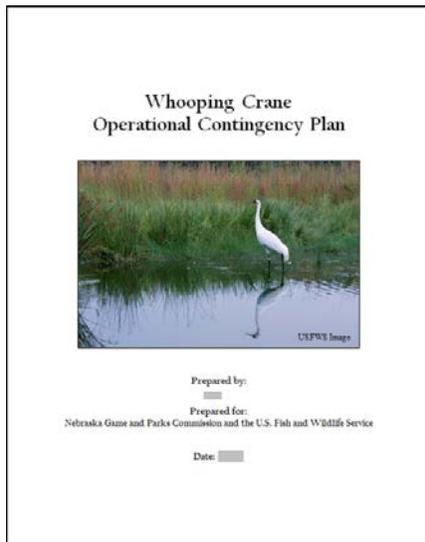


Nebraska Wind Energy and Wildlife News

August 5, 2014

Featured...

Whooping Crane Operational Contingency Plan



A [Whooping Crane Operational Contingency Plan](#) "template" was developed based on previous contingency plans and input from the Nebraska Game and Parks Commission (NGPC) and the U.S. Fish and Wildlife Service (USFWS). An operational contingency plan outlining what steps will be taken in the unlikely event a Whooping Crane is observed near a wind energy project can help reduce the potential for Whooping Crane-wind turbine collisions.

The Whooping Crane is [state and federally listed](#) as an endangered and is found in Nebraska during spring and fall migration.

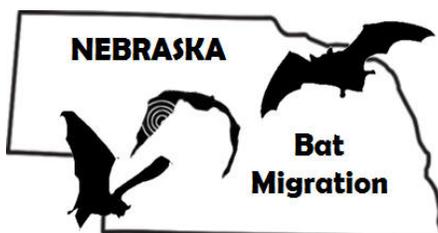
Although Whooping Cranes migrate at elevations higher than 1,000 feet, they rely on frequent stopover sites to rest and feed. It is in approach or departure to stopovers and during flights to feeding areas while at stopover locations that Whooping Cranes are more susceptible to collisions with structures, such as wind turbines.

It is highly recommended that wind energy developers and operators develop an operational contingency plan for Whooping Cranes for wind energy development projects in Nebraska. The ["template"](#) can be used to assist in plan development. Use of the "template" does not replace consultation with the NGPC and USFWS.

Multi-State Bat Blitz

This year, the Southeastern Bat Diversity Network is planning a Multi-State Bat Blitz and is inviting all states to mist-net 1-2 nights between September 4-10, 2014. If you are interested in learning more about the Nebraska event or helping organize an event in your area, contact windwildlife@unl.edu.

Information on the event can be found at: http://sbdn.org/blitz_info.html.



Nebraska Bat Migration Project

Project updates including the basics of echolocation and the effect of height on the number of bat echolocation sequences recorded during the project can be found at:

<http://snr.unl.edu/renewableenergy/wind/researchbat.asp>.

Around Nebraska...

[Broken Bow Wind II's 43 units will be running this fall](http://www.kearneyhub.com/news/agriculture/broken-bow-wind-ii-s-units-will-be-running-this/article_c9acf37a-1430-11e4-aed0-001a4bcf887a.html). The Broken Bow Wind II site is buzzing with activity as 43 new wind turbines are being erected. Officials of the new project's owner-developer San Diego-based Sempra U.S. Gas & Power hosted a ceremony last week at the Custer County Fairgrounds to officially kick off its construction. (http://www.kearneyhub.com/news/agriculture/broken-bow-wind-ii-s-units-will-be-running-this/article_c9acf37a-1430-11e4-aed0-001a4bcf887a.html).

[How a New Jersey Company Brought Wind Power to Operations in Nebraska](http://www.triplepundit.com/2014/07/new-jersey-company-brought-wind-power-operations-nebraska/). [Becton, Dickinson and Co.](http://www.triplepundit.com/2014/07/new-jersey-company-brought-wind-power-operations-nebraska/) (BD), a New Jersey-based medical devices and supply company, established a unique partnership with the [Nebraska Public Power District](http://www.triplepundit.com/2014/07/new-jersey-company-brought-wind-power-operations-nebraska/) (NPPD) to develop an option for renewable energy generation and usage in Nebraska, focusing on the needs of industrial and commercial businesses. Through an [unprecedented agreement with NPPD](http://www.triplepundit.com/2014/07/new-jersey-company-brought-wind-power-operations-nebraska/) focused on purchasing the green-attributes of renewable wind energy, BD ensured that the renewable energy it purchased was "additional" (i.e. newly created for this specific purpose), reached an important milestone in its own worldwide [sustainability program](http://www.triplepundit.com/2014/07/new-jersey-company-brought-wind-power-operations-nebraska/), and established a model for other industries interested in purchasing renewable energy within the state. (<http://www.triplepundit.com/2014/07/new-jersey-company-brought-wind-power-operations-nebraska/>).

[A Geospatial Approach for Prioritizing Wind Farm Development in Northeast Nebraska, USA](http://www.mdpi.com/2220-9964/3/3/968), Adam Miller and Ruopu Li, International Journal of Geo-Information, July 2014. In this study, a GIS-based multi-criteria approach was developed to identify the areas that are best suited to wind energy development in Northeast Nebraska, USA. Seven criteria were adopted in this method, including distance to roads, closeness to transmission lines, population density, wind potential, land use, distance to cities, slope and exclusionary areas. The suitability of wind farm development was modeled by a weighted overlay of geospatial layers corresponding to these criteria. The results indicate that the model is capable of identifying locations highly suited for wind farm development. The approach could help identify suitable wind farm locations in other areas with a similar geographic background. (<http://www.mdpi.com/2220-9964/3/3/968>).

[7th Annual Nebraska Wind & Solar Conference & Exhibition: Turning Challenges into Nebraska Opportunities](http://nebraskawindandsolarconference.com/) 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. (<http://nebraskawindandsolarconference.com/>).

Around the Nation & World...

Wind and Wildlife

[Bird casualties are an important concern for wind farm owners](http://www.windpowerengineering.com/policy/environmental/bird-casualties-important-concern-wind-farm-owners/). Regardless of industry, businesses face internal or external challenges that can be a speed bump to progress. This is especially true in regard to the wind turbine industry, an industry that is working tirelessly to find solutions to their avian dilemma. Put simply, the wind turbine industry is looking for ways to significantly decrease the number of bird (especially eagles) and bat casualties. In addition, it's important for the industry to learn more about how wind turbines affects the species, as farms could have a drastic effect on their migration and habitation habits, for example. (<http://www.windpowerengineering.com/policy/environmental/bird-casualties-important-concern-wind-farm-owners/>).

[Wind energy companies seek balance between production, protection](http://www.windpowerengineering.com/policy/environmental/bird-casualties-important-concern-wind-farm-owners/). On windy winter days, Duke Energy senior scientist Greg Aldrich likes to head to the sage-covered hills north of Glenrock to watch golden eagles ride the thermal air currents radiating off the sun-drenched earth. The eagles are the equivalent of tourists, migrating thousands of miles from the northernmost reaches of North America to Wyoming, where they will spend the winter months. Like many tourists, the birds often seek thrills. They

can often be seen floating in the wake of the giant wind turbines that populate these hills, Aldrich said, riding the breeze the blades create like a thrill-seeker rising and falling on a roller coaster ride. When wind operators turn the turbines off, the eagles frequently disappear, he said.

(http://trib.com/news/local/casper/wind-energy-companies-seek-balance-between-production-protection/article_2c80dfb8-12c8-5d11-a9cb-b48a69abe8e9.html).

Conservationists, wind-farm advocates clash over eagle safety. Conservationists and wind energy advocates from across the Midwest gathered in Bloomington on Thursday evening for a federal hearing on the best way to manage the often lethal mix of wild eagles and wind turbines. It was the second of five hearings that the U.S. Fish and Wildlife Service is conducting nationwide as it revises eagle protection regulations for wind farms and similar projects. (<http://www.startribune.com/local/268546332.html>)

Bird Safe Wind Energy Technology. The wind energy industry and wildlife researchers are working together to find a way to protect birds from harm. Wind turbines in North America kill hundreds of thousands of birds and bats every year. Some protected bird species, including the Indiana bat and the golden eagle, are being killed by wind turbines. While this is a tiny portion of wildlife killed by buildings, power plants, pesticides and other man-made things, this is still worrisome. (<http://www.surespanwind.com/bird-safe-wind-energy-technology/>).

Why Oklahoma's Wind Energy Future Could be Shaped by Osage County. Oklahoma is moving up the national ranks in wind-generated electricity. But as wind farms expand into northeastern Oklahoma, developers are facing a team of unlikely allies: oil interests and environmentalists. (<http://stateimpact.npr.org/oklahoma/2014/07/24/why-oklahomas-wind-energy-future-could-be-shaped-by-osage-county/>).

Research helps move discussion of energy impacts on wildlife, scientist says. Studying impacts of energy development on wildlife isn't necessarily a new thing. Research on how deer and pronghorn respond to coal mine reclamation dates to the 1980s. But application of the research has been more recent, said Scott Gamo, a staff terrestrial biologist for the Wyoming Game and Fish Department. He credits the increase in awareness with a potential listing of sage grouse on the endangered species list, something that could dramatically change industry across the state. (http://trib.com/business/energy/research-helps-move-discussion-of-energy-impacts-on-wildlife-scientist/article_7836749e-e4f5-5d82-ac29-ae02cbadac84.html).

Local wind farm interested in permit allowing unintentional eagle kills. Operators of the Stoney Corners Wind Farm in Missaukee and Osceola counties say they are considering obtaining a permit allowing the "taking" of a bald eagle if an eagle hits or is killed by one of its wind turbines. (http://www.cadillacnews.com/news_story/?story_id=1820239&year=2014&issue=20140802).

Wildlife

A functional role of the sky's polarization pattern for orientation in the greater mouse-eared bat, Stefan Greif et al 2014, Nature Communications. Animals can call on a multitude of sensory information to orient and navigate. One such cue is the pattern of polarized light in the sky, which for example can be used by birds as a geographical reference to calibrate other cues in the compass mechanism. Here we demonstrate that the female greater mouse-eared bat (*Myotis myotis*) uses polarization cues at sunset to calibrate a magnetic compass, which is subsequently used for orientation during a homing experiment. This renders bats the only mammal known so far to make use of the polarization pattern in the sky. (<http://www.nature.com/ncomms/2014/140722/ncomms5488/full/ncomms5488.html>)

Wind

AWEA backs Clean Power Plan. The proposed federal regulations on carbon pollution from existing electric power plants under the Clean Power Plan can be an economic boon to wind-rich states if they meet them by developing more wind energy, according to the American Wind Energy

Association. Electricity generated from a wind farm in one location allows a utility to reduce generation from fossil fuels and therefore carbon output in another, said the trade body's vice president for federal regulatory affairs Tom Vinson. (<http://renews.biz/71471/awea-backs-clean-power-plan/>).

Other

[Biological fallout of shale-gas production still largely unknown.](http://smithsonianscience.org/2014/08/biological-fallout-shale-gas-production-still-largely-unknown/) In the United States, natural-gas production from shale rock has increased by more than 700 percent since 2007. Yet scientists still do not fully understand the industry's effects on nature and wildlife, according to a report in the journal [Frontiers in Ecology and the Environment](http://smithsonianscience.org/2014/08/biological-fallout-shale-gas-production-still-largely-unknown/). (<http://smithsonianscience.org/2014/08/biological-fallout-shale-gas-production-still-largely-unknown/>).

[Biotic impacts of energy development from shale: research priorities and knowledge gaps,](http://www.esajournals.org/doi/abs/10.1890/130324) Sara Souther et al 2014, *Frontiers in Ecology and the Environment*. (<http://www.esajournals.org/doi/abs/10.1890/130324>).

[U.S. Wildlife Authorities Join State in Investigation of Owl Deaths at Oil Field Site.](http://publicradiotulsa.org/post/us-wildlife-authorities-join-state-investigation-owl-deaths-oil-field-site) Officials found several dead birds in this open saltwater tank at an oilfield site in northwest Oklahoma. Federal authorities have joined state officials in an investigation of [bird deaths](http://publicradiotulsa.org/post/us-wildlife-authorities-join-state-investigation-owl-deaths-oil-field-site) at a neglected oil field site in northwestern Oklahoma. (<http://publicradiotulsa.org/post/us-wildlife-authorities-join-state-investigation-owl-deaths-oil-field-site>).

Webinars & Workshops

[EISPC Energy Zones Mapping Tool](http://anl.adobeconnect.com/p3794bbuz3d) 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

[Proposed CRP Changes Open for Comment.](http://news.wildlife.org/featured/proposed-crp-changes-open-for-comment/) The Farm Service Agency announced this week that it is accepting comments on a draft [Supplemental Programmatic Environmental Impact Statement](http://news.wildlife.org/featured/proposed-crp-changes-open-for-comment/) (SPEIS) for the Conservation Reserve Program (CRP). The SPEIS addresses changes to CRP mandated by the recently passed 2014 Farm Bill. (<http://news.wildlife.org/featured/proposed-crp-changes-open-for-comment/>).

[Department of Energy, Wind and Water Power Technologies Office: Wind Energy Bat and Eagle Impact Minimization Technologies and Field Testing Opportunities.](#) The U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) invites public comment on its Request for Information (RFI) regarding a potential funding opportunity to advance the readiness of bat and eagle impact minimization technologies through investments in technology development and field testing.

In its RFI, EERE requests comments, information, and recommendations on the current state of wildlife impact minimization technologies, conditions under which technology vendors or developers would consider participating in a demonstration and validation campaign, and the conditions under which wind farm owner/operators would consider participating in a campaign to demonstrate, field-test, and validate such technologies. Additionally, EERE seeks input on a proposed framework for funding the advancement of wildlife impact minimization technologies aimed at reducing impacts to bats, eagles and other wildlife of concern, and on how to prioritize funding for research within this framework. The RFI is

available at: <https://eere-exchange.energy.gov/>.
([http://www.ofr.gov/\(S\(p1j5zp3ymogd5wy3l45k1whv\)\)/OFRUpload/OFRData/2014-15258_PI.pdf](http://www.ofr.gov/(S(p1j5zp3ymogd5wy3l45k1whv))/OFRUpload/OFRData/2014-15258_PI.pdf)).

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/>).

U.S. Fish and Wildlife Service Extends Decision Deadline for Final ESA Listing Decision on the Northern Long-eared Bat as Endangered. The U.S. Fish and Wildlife Service will extend for six months the deadline on its decision whether to list the northern long-eared bat as endangered under the Endangered Species Act (ESA), providing additional time to resolve questions received during the public comment period regarding the species' population and white-nose syndrome, a disease that has killed millions of bats and poses the greatest threat to this species.
(<http://www.fws.gov/midwest/endangered/mammals/nlba/BulletinNLEBexten24June2014.html>).

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 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. 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). **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://eispctools.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://eispctools.anl.gov/>).

[Counties with Zoning Regulations in Nebraska](http://snr.unl.edu/renewableenergy/wind/windenergydevelopment.asp#zoning) has been added to the Nebraska Wind Energy and Wildlife Project website. Several counties have zoning regulations or ordinances for wind energy facilities. Several of the counties with zoning have setbacks for commercial scale wind turbines of 600 feet from Wildlife Management Areas, State Recreational Areas, and Wetlands (USFW Types III, IV, and V). Links to all county zoning regulations found through internet searches are available on the website. Please feel free to contact me at windwildlife@unl.edu with edits, suggestions, etc. (<http://snr.unl.edu/renewableenergy/wind/windenergydevelopment.asp#zoning>).

[Nebraska Rare Species Education for Conservation](http://rarespecies.nebraska.gov/) website launched! This new website features images, descriptions, range, habitat, population status, information pamphlets, and more on the 27 threatened and endangered species in Nebraska. The website is a great way to access information on Nebraska's listed species. (<http://rarespecies.nebraska.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).

[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 publicly 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 [lan Evans](mailto:lan@evans.com). (<http://nationalwind.org/research/webinars/>).

[USGS Interactive Windfarm Mapper](http://eerscmap.usgs.gov/windfarm/). The USGS created this publicly available [national dataset](http://eerscmap.usgs.gov/windfarm/) and [interactive mapping application](http://eerscmap.usgs.gov/windfarm/) 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://eerscmap.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).

[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.

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.

[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. (<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>.

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In the Message Field (NOT Subject): UNSUBSCRIBE wind_wildlife