Nebraska Wind Energy and Wildlife News

November 19, 2014

Around Nebraska…

JOIN US NEXT MARCH DURING SPRING MIGRATION

Experience why wind energy is not a great fit everywhere in Nebraska. The Nebraska Wind Energy and Wildlife Project is coordinating an event complete with observing thousands of waterfowl and cranes in the rivers, wetlands, and fields of Central Nebraska, lectures from area biologists, and time to learn more about how and why guidance materials are developed and projects are reviewed in Nebraska. See attached handout for more information. Send comments/suggestions to windwildlife@unl.edu.

Details regarding the event will be sent out soon!

COMMENTS REQUESTED: MITIGATION GUIDELINES FOR WIND ENERGY DEVELOPMENT IN NEBRASKA

The Mitigation Guidelines for Wind Energy Development in Nebraska were developed to standardize the mitigation process.

Wind energy developers will be provided a better idea of what mitigation, if any, will likely be recommended for wind energy facilities developed in different parts of the state. The Guidelines were developed by representatives from a variety of stakeholder groups and now, we want your input.

[Map of Mitigation Areas]
The Nebraska Wind & Solar Conference Wildlife Session Presenter Information Available.
A big Thank You to the wildlife session presenters and to all of you who attended. A brief biography and contact information is available for each of the presenters on the attached handout.

Jennifer A. Smith, *Indirect impacts of a wind farm on predation risk and survival of Greater Prairie-chickens*

Daniel R. Howard, *The effect of sensory pollution on animal reproductive behavior; wind turbine seismic environment influences burial latency in the American burying beetle*

Brian B. Boroski, *Utility-scale Solar Development: Achieving Sustainability and Conservation through Collaboration and Teamwork*

Sempra U.S. Gas & Power, Consolidated Edison Development Partner On Nebraska Wind Project. San Diego, CA and Valhalla, NY /PRNewswire/ - Sempra U.S. Gas & Power and Consolidated Edison Development (ConEdison Development) today announced an agreement to partner on the 75-megawatt (MW) Broken Bow II wind project in Custer County, Neb. Under the sales agreement, Sempra U.S. Gas & Power and Consolidated Edison Development holding companies will each own a 50-percent interest in the wind facility. (http://www.poweronline.com/doc/sempra-u-s-gas-power-partner-on-nebraska-wind-project-0001).

Letter, 11/5: Wind development. I was glad to see your recent coverage of the Broken Bow wind project (*"Officials dedicate Broken Bow II wind farm,"* Oct. 28). Energy from renewable sources such as wind can be a great economic boon to all of Nebraska. (http://journalstar.com/news/opinion/mailbag/letter-wind-development/article_d05aba8e-23f9-5cc3-be83-73553dc7c147.html).

7th Annual Nebraska Wind & Solar Conference a Success. The seventh annual Nebraska Wind and Solar Conference and Exhibition held last week in La Vista, Nebraska enjoyed 375 attendees for the conference, 43 sponsors and exhibitors, and 53 speakers covering issues ranging from the status of the federal Wind Energy Production Tax Credit (PTC); to the challenges and opportunities involved with upgrading the transmission infrastructure, to the role of the Federal Energy Regulatory Commission (FERC) on regional transmission policy. (http://kticradio.com/agricultural/7th-annual-nebraska-wind-solar-conference-a-big-success-over-375-attendees-and-major-wind-energy-issues-addressed/).

Learn About Playas. Playa lakes are biodiversity centers of the region; vital to Central Flyway waterfowl, shorebirds and waterbirds; and the primary recharge mechanism for the Ogallala aquifer, the water source for much of the region's agricultural production. But modifications, such as pits, destroy the playas' hydrological and ecological functionality. Learn more about playas and the Playa Lakes Joint Venture at: http://pljv.org/.

Around the Nation & World…

Wind and Wildlife

Wind energy firm sues to block bird death data release. A company that operates at least 13 wind-energy facilities across three states is suing in federal court to block the U.S. government from releasing
Feds call for no coastal turbines — unless county thinks otherwise. The U.S. Fish and Wildlife Service says it is confident that land area within three miles of the Lake Huron and Saginaw Bay shorelines needs to be protected from wind energy development. So confident, in fact, that the federal conservancy agency recommends Huron County include in its wind energy ordinance a “three-mile buffer inland from the shoreline that precludes development of wind power projects,” according to an Oct. 20 letter sent to the county. (http://www.michigansthumb.com/news/local/article_a579ba9c-6e58-11e4-8def-7368c1e1599c.html).

Agency urges greater wildlife protection from wind turbines. Land area within three miles of the Lake Huron and Saginaw Bay shorelines deserves to be protected from wind energy development, the U.S. Fish and Wildlife Service said in a letter addressed to county commissioners. The federal conservancy agency has submitted data for nocturnal migration of birds and bats in Huron County, which it says may be of value as officials revise the county’s wind energy ordinance. (http://www.michigansthumb.com/news/article_bab717ae-6789-11e4-a7cc-d3d8491a1921.html).

District Judge Orders Approval For Wind Farm Development In Osage County. The Board of Adjustment refused earlier this year to grant a permit for TradeWind Energy Inc.’s Mustang Run project, which would build 68 wind turbines in the northeastern Oklahoma county. The Tulsa World reports the company sued the board, and District Judge Robert Haney sided with them on Wednesday. Haney said previous board members had approved a separate wind farm that’s now under construction in the county. The judge says it seems inconsistent for one board to OK one wind farm and then a subsequent board to not OK another. (http://kgou.org/post/district-judge-orders-approval-wind-farm-development-osage-county).

ND wind farm project revived after lawsuit concerning endangered birds. A North Dakota wind farm proposed in the migration route of an endangered bird has been revived after the developer unsuccessfully sued Xcel Energy for pulling out of the project in 2011. (http://www.prairiebizmag.com/event/article/id/21594/group/Energy%20and%20Mining/).

Altamont Pass poised to usher in next 30 years of wind power. In what Alameda County officials are calling a historic milestone, the framework for the next 30 years of wind energy on the Altamont Pass has taken a step forward, with hopes it will help reduce deaths of birds, bats and other animals. (http://www.contracostatimes.com/contra-costa-times/ci_26940235/altamont-pass-poised-usher-next-30-years-wind).

Wind farms: Are they killing wildlife? Wind farms are popping up all across our region. In Idaho alone, there are around 600 turbines generating energy. The alternative resource could be endangering local wildlife, including many species of birds. In fact, it’s estimated that 2,500 birds die each year in Idaho from wind turbines. (http://www.ktvb.com/story/news/investigations/2014/11/17/wind-farms-wildlife/19206063/).


Will renewable energy ruin an ‘irreplaceable’ Mojave desert oasis? The federal Bureau of Land Management describes the Silurian Valley as an "undisturbed, irreplaceable, historic scenic landscape." Now, a Spanish energy firm is proposing a wind and solar project that would cover 24 square miles of the Mojave Desert oasis. Iberdrola Renewables wants to build a 200-megawatt wind farm that would sprout as many as 133 turbines reaching heights of 480 feet. Next door would be a 200-
megawatt solar facility with 400 pairs of photovoltaic panels. The industrial facility would operate around the clock and be visible from nearly every point of the valley. (http://www.latimes.com/science/la-me-solar-silurian-20141109-story.html#page=1).

Romance May Have Derailed Science in California Energy Development. A newly released report by the Interior Department’s investigative office reveals that a high-ranking department official may have intervened on behalf of a renewable energy firm while dating an executive in that firm, and pressured federal scientists to soften their opposition to renewable energy development. (http://www.kcet.org/news/redefine/rewire/government/romance-may-have-derailed-science-in-california-energy-development.html).

Wildlife

A Wildlife Awakening. The World Wildlife Fund’s recently published Living Planet Report 2014 brings some alarming news: wildlife numbers have halved over the last four decades. In response to the growing number of species threatened by habitat destruction, poaching, pollution, and climate change, representatives of governments from around the world are convening in Quito, Ecuador, to determine the fate of nearly three dozen species, and to negotiate new measures to safeguard many more. (http://www.project-syndicate.org/commentary/international-agreements-protecting-migratory-species-by-achim-steiner-and-bradnee-chambers-2014-11).

A fraction of the global military spending could save the planet’s biodiversity. A fundamental step-change involving an increase in funding and political commitment is urgently needed to ensure that protected areas deliver their full conservation, social and economic potential, according to an article published today in Nature by experts from Wildlife Conservation Society, the University of Queensland, and the IUCN World Commission on Protected Areas (WCPA). (http://www.sciencecodex.com/a_fraction_of_the_global_military_spending_could_save_the_planets_biodiversity-144965).

The performance and potential of protected areas, by James E.M. Watson et al., November 2014, Nature. Originally conceived to conserve iconic landscapes and wildlife, protected areas are now expected to achieve an increasingly diverse set of conservation, social and economic objectives. The amount of land and sea designated as formally protected has markedly increased over the past century, but there is still a major shortfall in political commitments to enhance the coverage and effectiveness of protected areas. Financial support for protected areas is dwarfed by the benefits that they provide, but these returns depend on effective management. A step change involving increased recognition, funding, planning and enforcement is urgently needed if protected areas are going to fulfill their potential. (http://www.nature.com/nature/journal/v515/n7525/full/nature13947.html).


When Fish Shout. Animals use acoustic signaling for many purposes—to attract and court mates, to claim territory and frighten enemies, to find prey and warn others that a predator is near. But nature is noisy. Rain and wind, or a sudden cicada plague, can drown out a call, and there may be a survival advantage for animals that can make themselves heard above the racket. A wide range of creatures, from killer whales to nightingales, demonstrate the Lombard effect—and, according to a recent paper in Behavioral Ecology, some fish do, too. (http://www.newyorker.com/tech/elements/when-fish-shout).
Bats change their tune to cope with human noise pollution. Bats “see” their world through sound. So what do they do in the fog of noise created by humans? It appears some seek out quieter spots and change their calls. Scientists trying to decipher how bats cope with the racket of modernity went to natural gas fields in northern New Mexico. Some wells are equipped with compressors that create a constant din, while other wells are quieter. During 2 months of listening for the calls that bats use to locate prey, researchers found that Brazilian free-tailed bats spent 40% less time near compressors. These bats also altered their cries to a narrower acoustic range near the machinery. (http://news.sciencemag.org/plants-animals/2014/11/bats-change-their-tune-cope-human-noise-pollution).


Wind


**Wind energy reaches greater heights.** Wind turbines across the globe are being made taller to capture more energy from the stronger winds that blow at greater heights. But it's not easy, or sometimes even economically feasible, to build taller towers, with shipping constraints on tower diameters and the expense involved in construction. Now Keystone Tower Systems is developing a novel system that adapts a traditional pipe-making technology to churn out wind turbines on location, at wind farms, making taller towers more economically feasible. (https://newsoffice.mit.edu/2014/on-site-fabrication-for-taller-wind-turbines-1106).

Use the Web? Congrats, you're an environmentalist. Google, Yahoo, and Microsoft are part of a growing number of tech and other major companies that are entering into long-term "power purchase" agreements (PPAs) with wind farms to ensure a steady stream of power, at a fixed cost, over a period as long as several decades. (http://www.washingtonpost.com/blogs/wonkblog/wp/2014/11/06/like-kite-surfing-the-internet-why-google-microsoft-and-yahoo-are-buying-up-wind-energy/).

Other

**FACT SHEET: U.S.-China Joint Announcement on Climate Change and Clean Energy Cooperation.** Building on strong progress during the first six years of the Administration, today President Obama announced a new target to cut net greenhouse gas emissions 26-28 percent below 2005 levels by 2025. At the same time, President Xi Jinping of China announced targets to peak CO2 emissions around 2030, with the intention to try to peak early, and to increase the non-fossil fuel share of all energy to around 20 percent by 2030. (http://www.whitehouse.gov/the-press-office/2014/11/11/fact-sheet-us-china-joint-announcement-climate-change-and-clean-energy-c).

**Chevrolet buys carbon credits to help N.D. ranchers.** About 11,000 acres of grasslands in North Dakota will remain in production while eliminating about 40,000 tons of carbon dioxide emission through a variety of conservation practices. (http://www.freep.com/story/money/cars/general-motors/2014/11/17/chevrolet-buys-carbon-credits-help-n-d-ranchers/19139589/).

**Nearly 100 birds dead after landing in Alberta tailings ponds.** The Alberta Energy Regulator is investigating after nearly 100 birds landed in tailings ponds operated by three oilsands companies on Tuesday and died. (http://cnews.canoe.ca/CNEWS/Canada/2014/11/06/22055001.html).
Webinars

Tools For Sharing Information and Mapping Biodiversity. NWCC/AWWI hosts quarterly webinars on the latest research and tools related to the interactions of wind energy, wildlife, and wildlife habitat. Previous webinars are available online. ([https://nationalwind.org/research/webinars/#sthash.VZD7CYid.dpuf](https://nationalwind.org/research/webinars/#sthash.VZD7CYid.dpuf)).

MOWII Webinar: Case Studies of Wind related to Migratory Bird Treaty Act and Bald and Golden Eagle. Brooke Barnes from Stantec Consulting and Juliet Browne from the law firm of Verrill Dana will review the permitting and legal issues regarding the Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act. This webinar was held on October 22, 2014. Recordings will be available. ([http://www.mainewindindustry.com/Webinars](http://www.mainewindindustry.com/Webinars)).

Announcements

U.S. Fish and Wildlife Service reopens comment period on proposal to list the northern long-eared bat as endangered. The U.S. Fish and Wildlife Service is reopening the public comment period on a proposal to list the northern long-eared bat as endangered under the Endangered Species Act (ESA). Comments will be accepted through Dec. 18, 2014. The Service is reopening the comment period to alert the public to additional information provided by state conservation agencies within the range of the species. The Service will consider this information, and all information received previously, while determining whether the northern long-eared bat warrants listing under the Endangered Species Act. Reopening of the comment period will allow the public to provide comments on the proposed rule in light of that additional information. A final decision on the proposal is due on April 2, 2015. ([http://www.kxlo-klcm.com/site/index.php?option=com_content&view=article&id=3785:u-s-fish-and-wildlife-service-reopens-comment-period-on-proposal-to-list-the-northern-long-eared-bat-as-endangered&catid=9:sports-news-pod&Itemid=116](http://www.kxlo-klcm.com/site/index.php?option=com_content&view=article&id=3785:u-s-fish-and-wildlife-service-reopens-comment-period-on-proposal-to-list-the-northern-long-eared-bat-as-endangered&catid=9:sports-news-pod&Itemid=116)).


DE-FOA-0001209: NOTICE OF INTENT TO ISSUE FUNDING OPPORTUNITY ANNOUNCEMENT NO. DE-FOA-0001181: WIND ENERGY BAT IMPACT MINIMIZATION TECHNOLOGIES AND FIELD TESTING OPPORTUNITIES. The Office of Energy Efficiency and Renewable Energy (EERE) intends to issue, on behalf of the Wind and Water Power Technologies Office, a Funding Opportunity Announcement (FOA) entitled “Wind Energy Bat Impact Minimization Technologies and Field Testing Opportunities.” To address and minimize the regulatory and financial risks associated with wind power development in locations with sensitive bat species, the Department of Energy’s Wind and Water Power Technologies Office (WWPTO) seeks through this FOA to fund projects that advance the technical and commercial readiness of bat impact mitigation and minimization technologies including, but not limited to, bat deterrents and operational changes that have a high likelihood of reducing bat mortality at a facility. ([https://eere-exchange.energy.gov/default.aspx#Foald3002686f-4076-4afc-a1c9-44dda5ddf688](https://eere-exchange.energy.gov/default.aspx#Foald3002686f-4076-4afc-a1c9-44dda5ddf688)).

BLM Seeks Comments on Competitive Offering Lands Processes for Solar and Wind Energy Development Regulations. Please submit comments on or before December 1, 2014. The Bureau of Land Management (BLM) proposes to amend existing regulations to facilitate responsible solar and wind energy development and to receive fair market value for such development. The proposed rule would promote the use of preferred areas for solar and wind energy development and establish competitive processes, terms, and conditions (including rental and bonding requirements) for solar and wind energy development rights-of-way both inside and outside these preferred areas. ([http://www.renewablesbiz.com/article/14/10/blm-seeks-comments-competitive-offering-lands-processes-solar-and-wind-energy-development-regulations](http://www.renewablesbiz.com/article/14/10/blm-seeks-comments-competitive-offering-lands-processes-solar-and-wind-energy-development-regulations)).
Upcoming Conferences

**NWCC Wind Wildlife Research Meeting X** will be in Broomfield, CO on December 2-5, 2015. ([https://nationalwind.org/research/meetings/research-meeting-x/](https://nationalwind.org/research/meetings/research-meeting-x/)).


**Midwest Fish and Wildlife Conference** will be in Indianapolis, IN on February 8-11, 2015. ([http://www.midwestfw.org/index.html](http://www.midwestfw.org/index.html)).

**AWEA Wind Project Siting Seminar** will be in Austin, TX on March 10-11, 2015. ([http://www.awea.org/events/Event.aspx?EventID=30886&SubSectionID=6678&navItemNumber=666](http://www.awea.org/events/Event.aspx?EventID=30886&SubSectionID=6678&navItemNumber=666)).


**The Effects of Noise on Aquatic Life.** The fourth International Conference on "The Effects of Noise on Aquatic Life" will take place in Dublin, Ireland, July 10-16, 2016. ([http://www.an2016.org/](http://www.an2016.org/)).

Tools

**U.S. Climate Resilience Tool.** The U.S. Climate Resilience Toolkit provides scientific tools, information, and expertise to help people manage their climate-related risks and opportunities, and improve their resilience to extreme events. The site is designed to serve interested citizens, communities, businesses, resource managers, planners, and policy leaders at all levels of government. ([http://toolkit.climate.gov/](http://toolkit.climate.gov/)).

**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](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/#/](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](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.** 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/](https://eispctools.anl.gov)).

**National Climate Change Viewer.** 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.** 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](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](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.** 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/](http://nationalwind.org/research/webinars/)).

**USGS Interactive Windfarm Mapper.** 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://eerscmap.usgs.gov/windfarm/](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](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).
