



NATIONAL WIND COORDINATING COLLABORATIVE

GRASSLAND AND SHRUB STEPPE SPECIES COLLABORATIVE

GS3C

Overview of Collaborative

What is the GS3C?

The Grassland and Shrub Steppe Species Collaborative (GS3C) is a voluntary cooperative endeavor to identify the impacts, if any, wind energy has on grassland and shrub steppe avian species. Established in 2005 as the National Wind Coordinating Collaborative (NWCC) Wildlife Workgroup Grassland/Shrub Steppe Species Subgroup, the GS3C includes representatives from state and federal agencies, academic institutions, non-governmental organizations, and the wind industry.

The GS3C members are interested in cooperating to achieve the following:

- Assist in identifying short- and long-term research questions on the interaction of wind developments with grassland and shrub steppe species and their habitats
- Collaborate in securing and administering cooperative funding for research priorities identified by the GS3C Oversight Committee
- Encourage collaborative research that is peer reviewed
- Identify potential impacts and mitigation strategies to address impacts.

Background

An emerging issue in wind power development is if and how wind facilities impact grassland birds and their habitat. Grassland birds have been experiencing significant declines in population numbers due to habitat loss and modification over the last few decades. Some regions within the Great Plains and Great Basin with grassland and shrub steppe avian species are being considered for development of wind energy facilities. Potential impacts of these

facilities on species such as prairie-chickens have been conjectured but not documented. An immediate need emerged to understand the potential and actual impacts, if any, of wind power projects on grassland birds.

GS3C Oversight Committee

The GS3C Oversight Committee is responsible for assuring that the purpose of the GS3C is achieved. The Oversight Committee is charged with: approving research proposals and what individuals and institutions conduct the research; reviewing and approving communications to the public; contributing strategic direction; providing advice on raising funds; and approving the annual workplan and products of GS3C.

Sectors and their representatives on the Oversight Committee are:

Federal Management / Research

Brian Connor, U.S. Department of Energy
John Hughes, U.S. Fish and Wildlife Service
Doug Johnson, U.S. Geological Survey

NGO

Clait Braun, Grouse Inc.
Rob Manes, The Nature Conservancy

Scientific/Academic

Robert Robel, Kansas State University (emeritus)

State Agency – Management / Research

Jack Connelly, Idaho Dept. of Fish & Game
Mike Mitchener, Kansas Dept. of Wildlife & Parks

Wind Industry

Rene Braud, Horizon Wind Energy
Christina Calabrese, BP Alternative Energy
Jim Lindsay, FPL Energy
Andy Linehan, PPM Energy

Research

To investigate the interaction between wind power sites and grassland birds, the GS3C is pursuing three projects:

Effects of Wind Power on the Demography and Population Genetics of the Greater Prairie-chicken

This is a four-year research project, with over a half million-dollars invested, to conduct pre- and post-construction monitoring of greater prairie-chickens in Kansas at proposed wind power sites. Proposed and existing wind farms are located on prairie-chicken habitat, but the effects of wind facilities on the species' fecundity are unknown. With prairie-chicken numbers in considerable decline, it is desirable to explore if and how wind power projects impact the species. If wildlife impacts are well understood, then planning and design of future wind power facilities and mitigation activities can be incorporated into effective management and development plans.

A diverse group has contributed funds for this effort. Major contributors include:

- BP Alternative Energy
- FPL Energy
- Horizon Wind Energy
- Kansas Department of Wildlife and Parks
- National Fish and Wildlife Foundation
- National Renewable Energy Laboratory
- PPM Energy

With additional support from:

- Iberdrola Renewable Energies USA
- The Nature Conservancy, Kansas
- The Nature Conservancy, Oklahoma
- U.S. Fish and Wildlife Service

Drs. Brett Sandercock and Samantha Wisely from Kansas State University are conducting the research in Kansas on land where wind energy projects are proposed; the experimental and control sites are currently undisturbed prairie rangeland. Karin Sinclair, NREL, is technical monitor of this work and serves as a liaison between the researchers and the Oversight Committee. NWCC staff at RESOLVE provides coordination and facilitation services to the group.

For additional information on this project, contact the following spokespeople:

Dr. Robert Robel, rjrobel@ksu.edu

Dr. Brett Sandercock, bsanderc@ksu.edu

Dr. Samantha Wisely, wisely@ksu.edu

Critical Literature Review of Wind Power Projects and Similar Anthropogenic Activities on Avian Populations in Grassland and Shrub Steppe Habitats

The Ornithological Council, subcontracting with NWCC, is conducting a literature review of wind power projects and similar anthropogenic activities on avian populations in grassland and shrub steppe habitats. The literature review will include both direct and indirect avian mortality, as well as address behavioral responses and impacts on vital rates of avian populations. Specific goals of the project are to document:

- The most critical research elements needed to determine impacts of wind power projects on avian populations.
- The vulnerability and sensitivity of different avian species and populations to impacts of wind power projects including: the most sensitive avian species, most vulnerable avian populations, and the most critical avian habitat areas.
- Limitations of past research to predict impacts of wind power projects on avian populations of grassland/shrub steppe habitats.

Protocol for Investigating Displacement Effects of Wind Facilities on Grassland Songbirds

The purpose of this document is to provide some guidelines for studies directed at assessing the influence of wind developments on breeding grassland birds, particularly passerines (songbirds). It is not intended to be definitive, but will need to be modified to meet particular study objectives and logistic constraints. The NWCC Wildlife Workgroup and Steering Committee are reviewing the songbird protocol for release as a NWCC resource document. Once this review process is complete (est. Spring 2007), the document will be available online at www.nationalwind.org.

About NWCC & RESOLVE

The National Wind Coordinating Collaborative (NWCC) is a collaborative formed in 1994 and comprised of representatives from the utility, wind industry, environmental, consumer, legislatures, and state, federal and tribal government sectors to support the development of an environmentally, economically, and politically sustainable commercial market for wind power.

RESOLVE, a non-profit environmental dispute resolution organization, provides a full range of facilitation services to the NWCC. RESOLVE creates opportunities for NWCC members and other wind stakeholders to raise and address issues. www.resolve.org.

For more information, or to receive copies of NWCC publications, contact:

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