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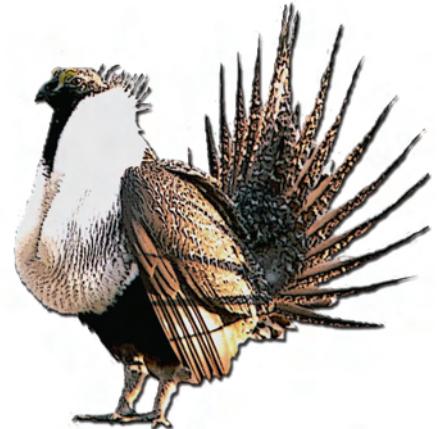
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US FISH AND WILDLIFE SERVICE DELAYS LISTING DECISION ON GREATER SAGE-GROUSE: WHAT DOES THIS MEAN FOR LOCAL SAGE-GROUSE WORKING GROUPS?

by Terry Messmer

In the April 2008 issue of The Communicator, we published a notice on the front page regarding the U. S. Fish and Wildlife Service's (USFWS) intent to review their 2005 decision to not list greater sage-grouse under the Endangered Species Act. Then Director Steve Williams cited positive recent trends in population number and the work of local sage-grouse working groups and their conservation partners as the basis for the decision. The USFWS was sued by the Western Watershed Project regarding this decision.

In December 2007, a federal judge overturned the USFWS decision and remanded the USFWS to reconsider the decision. The judge did not overturn the decision based on the science presented, but rather that the USFWS failed to follow specific procedures. In response to this decision, the USFWS and the state wildlife agencies in the 11 western states inhabited by greater sage-grouse embarked on an extensive process to document



and update both the science and status of management efforts to conserve the species. The information was compiled by the USFWS and a decision was expected in December 2008.

In early December 2008, Ken Mayer, the Director of the Nevada Department of Wildlife and lead contact for the Western Association of Fish and Wildlife Agencies' (WAFWA) effort to respond to the data call, was informed by USFWS Director Dale Hall that the decision would be delayed until mid-2009. So what does this mean for greater sage-grouse and the local working groups?

In essence, it is business as usual. Utah's greater sage-grouse local working groups, in support of the data call, submitted a lengthy report to the Utah Division of Wildlife Resources. This report chronicled the multi-year effort of the 10 local working groups to develop detailed, objective-based conservation plans for greater sage-grouse. These groups now have each completed conservation plans which are serving as their guide to implement conservation strategies and management actions to benefit greater sage-grouse, other sagebrush dependent species, and local communities and economies. Rather than rest on their laurels, the local working groups are rolling up their sleeves and getting busy with the conservation work at hand. They welcome your elbow grease. To find out what the local working groups are doing in your area and how you can participate, check out www.utahcscp.org.

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SCIENCE, SAGE-GROUSE, AND “GREEN” ENERGY: WHAT DO WE NEED TO KNOW?

by Todd Black



With increasing concerns about global warming, human impacts, and the rising costs of fossil fuels, the world is turning its attention to green energy. Green energy is the term that is used to describe energy alternatives which are believed to be more environmentally friendly and less polluting than traditional fossil fuels. The major sources of green energy are geothermal, solar, and wind. According to Department of Energy statistics, wind power is the fastest-growing energy technology in the United States, expanding at an annual rate of 30 percent to 40 percent. Total wind energy capacity in the United States has more than doubled since 2002.

Efforts to locate areas with enough wind to support a green energy industry also have intensified. Utah's first true “wind” farm was built at the mouth of Spanish Fork Canyon in December 2007. Additional sites have been selected around the state. And more recently, private landowners have begun to express increased interest in investing in wind energy. A recent Web search yielded numerous Web sites that provide information for homeowners, landowners, and others on how to get started on the road to building their own wind energy operation.



At the heart of wind energy operations is the wind turbine. This turbine converts wind's kinetic energy into mechanical energy. To capture the wind's kinetic energy the turbines must be mounted high enough for the blades to move in the wind. In most cases the minimum height of the structure supporting the turbine must be at least 35 feet. To maximize the wind's potential to move the turbine blades, the towers are typically placed on the highest points of the landscape.



Photo courtesy of Todd Black

Sounds like a win-win situation for everyone. Or is it? Another Web search of the phrase “wind energy and wildlife” yielded additional sites which expressed concerns about the impacts of spinning wind turbine blades and the supporting infrastructures on wildlife.

As early as 2004, the U.S. Fish and Wildlife Service (USFWS) issued a statement about their concerns that increasing energy demand and the nation's desire to tap into wind power could have on wildlife, in particular prairie grouse species. **They recommended avoiding placing wind turbines within 5 miles [8 km] of known leks in known prairie grouse habitat.** In the statement, the USFWS reported on research that documents prairie grouse avoidance of new vertical structures placed in habitats they occupy.

So, what does this have to do with sage-grouse? Sage-grouse management guidelines published in 2000 state that “tall structures” (in general) are a threat to sage-grouse. Other statements published include the following: *“Wind energy developments may pose a threat to recovery if sage-grouse avoid nesting and brood rearing within 1 mile of wind turbines”* (Washington State's sage-grouse plan). The American Bird Conservancy, discussing energy development and threats to sage-grouse, states, *“in addition, wind farm development in Wyoming and elsewhere in sagebrush habitat may soon add to the problem”*; Oregon's Department of Game and Fish states, *“the agency recommends against building wind turbines within three miles of sage-grouse leks.”* Utah's recommendations for mitigation of wind farms in and around leks range from a **quarter of a mile to 2 miles** depending on sightability.



Utah's sage-grouse local working groups have identified “tall structures” as a potential threat and identified possible ways to mitigate potential threat by working with the industry, local governments, and landowners on a case-by-case basis. Research ongoing at Utah State University suggests that sage-grouse can be impacted by new fence lines, power lines/power poles and other ‘tall structures’ are used by raptors looking for food (maybe even sage-grouse). Having these “tall structures” in sage-grouse habitat can also impede natural migration routes or cause impacts to birds flying in and out of lekking areas. Given the status of sage-grouse populations range wide, small impacts magnified over the range of the species could be dramatic. What is clear is that the demand for green energy is increasing. What is also clear is that more information is needed regarding the relationship of wind energy to sage-grouse and what can be done to mitigate potential effects. Until that happens, caution may be sage-grouses' best ally.

Windmill photos courtesy of R. Wharf

WHAT MAKES A SAGE-GROUSE POPULATION STABLE: LESSONS FROM PARKER MOUNTAIN

By David Dahlgren

As managers, landowners, and Utah's local working groups begin implementing projects and actions designed to conserve sage-grouse populations, questions surface regarding how much is enough. All involved certainly want to improve conditions for those Utah sage-grouse populations that are struggling as well as maintain those that are "healthy." A better understanding of the dynamics within "healthy populations" may help us understand how to help those that are struggling.

For the past decade, graduate students and technicians from Utah State University, in cooperation with the Parker Mountain Adaptive Resource Management working group (PARM), have been radio-marking and monitoring female sage-grouse and their broods to learn more about what makes them tick. They have monitored survival, reproduction, and how the birds responded to various management efforts to provide more groceries, so to speak. All of this information has now been compiled into one database. This past year we used this information to determine the status of the Parker Mountain sage-grouse population.

So what did we find out? First and foremost, adult hen survival was essential to sustaining a healthy population. Sage-grouse hens have relatively high survival and longevity, and as they transition from the yearling to adult stage, they contribute more young to the population. The second most important factor was production, or the number of chicks that survive to become adult hens. This told PARM and the Utah Division of Wildlife Resources (UDWR) that to maintain a healthy and growing population on Parker Mountain, management actions that result in better adult hen survival and production have to be the top priority.

In recent years, the Parker Mountain sage-grouse populations, as evidenced by the increased number of males counted during annual lek surveys, appeared to be increasing dramatically. However, based on our analysis of the survival and reproductive rates from our studies, the population was stable to slightly increasing. Part of the explanation for the difference in these numbers may be the increased effort we have been putting into spring lek counts. Another possible explanation is by radio-marking and monitoring we are "disturbing" the individual grouse, resulting in biased (possibly lower) estimates of survival and reproduction. However, without such monitoring, we would have little information on which to base management decisions. The good news is the Parker sage-grouse population is healthy, and the research and knowledge we are gaining is teaching us how to better manage sage-grouse throughout Utah.

Continued support of sage-grouse research will help investigators tease out differences in local populations. Thanks to the efforts of UDWR and working groups like PARM, future generations will have the opportunity to visit the ritualistic dancing grounds of the sage boomers in the vast sagebrush country of the West.



Adult hen
survival was
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population



Photos courtesy of Todd Black

If it's not good for communities, it's not good for wildlife.

Utah's Community-Based Conservation Program Mission

Utah's Community-Based Conservation Program is dedicated to promoting natural resource management education and facilitating cooperation between local communities and natural resource management organizations and agencies.

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UINTAH BASIN SUMMER FIELD TOUR IMPRESSIVE IN MANY WAYS

By Lorien Belton

In July 2008, the Uintah Basin Adaptive Resource Management (UBARM) sage-grouse local working group and Partners for Conservation and Development (PCD) met jointly to discuss sage-grouse conservation.

Nearly 40 people toured projects that had been completed to benefit sage-grouse and other wildlife. Stops included the Currant Creek wildfire rehabilitation site, Santaquin sagebrush and pinyon-juniper chaining sites, and several stops on Anthro Mountain where the group discussed a lop-and-scatter project and prescribed burn sites.

At the Currant Creek wildfire site, which burned in August of 2007, participants were able to observe where the fire burned 140 acres near two leks and impacted both winter and brood-rearing habitat for sage-grouse. Invasive plants are an issue in the site, so in addition to seeding efforts, 24 acres were also sprayed to treat Russian knapweed.



Photos courtesy of Lorien Belton

