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## U.S. FISH AND WILDLIFE SERVICE DETERMINES LISTING GREATER SAGE-GROUSE FOR ESA PROTECTION IS UNWARRANTED

Adapted from USFWS New Release

On September 22, 2015, the U.S. Fish and Wildlife Service (USFWS) announced that the greater sage-grouse did not warrant protection under the Endangered Species Act (ESA). In the announcement the USFWS credited on-going range wide landscape-scale conservation efforts with significantly mitigating the threats to the greater sage-grouse across 90 percent of the species' breeding habitat. The USFWS reached this determination after evaluating the bird's population status, along with the collective efforts by the BLM and U.S. Forest Service, state agencies, private landowners and other partners to conserve its habitat. Despite long-term population declines, sage-grouse remain relatively abundant and well-distributed across the species' 173-million acre range. After a thorough analysis of the best available scientific information and taking into account ongoing key conservation efforts and their projected benefits, the FWS has determined the bird does not face the risk of extinction now or in the foreseeable future and therefore does not need protection under the ESA.

Department of Interior Secretary Sally Jewell made the announcement at the Rocky Mountain Arsenal National Wildlife Refuge alongside Colorado Governor John Hickenlooper, Nevada Governor Brian Sandoval, Montana Governor Steve Bullock, Wyoming Governor Matt Mead, U.S. Department of Agriculture Under Secretary for Natural Resources and the Environment Robert Bonnie, FWS Director Dan Ashe, Bureau of Land Management (BLM) Director Neil Kornze, U.S. Forest Service (USFS) Chief Tom Tidwell, Natural Resource Conservation Service (NRCS) Chief Jason Weller, and U.S. Geological Survey Acting Director Suzette Kimball.

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The USFWS's September 30, 2015, deadline to review the status of the species spurred numerous federal agencies, the 11 states in the range, and dozens of public and private partners to undertake an extraordinary campaign to protect, restore and enhance important sage-grouse habitat to preclude the need to list the species. This effort featured: new management direction for BLM and Forest Service land use plans that place greater emphasis on conserving sage-grouse habitat; development of state sage-grouse management plans; voluntary, multi-partner private lands effort to protect millions of acres of habitat on ranches and range-lands across the West.

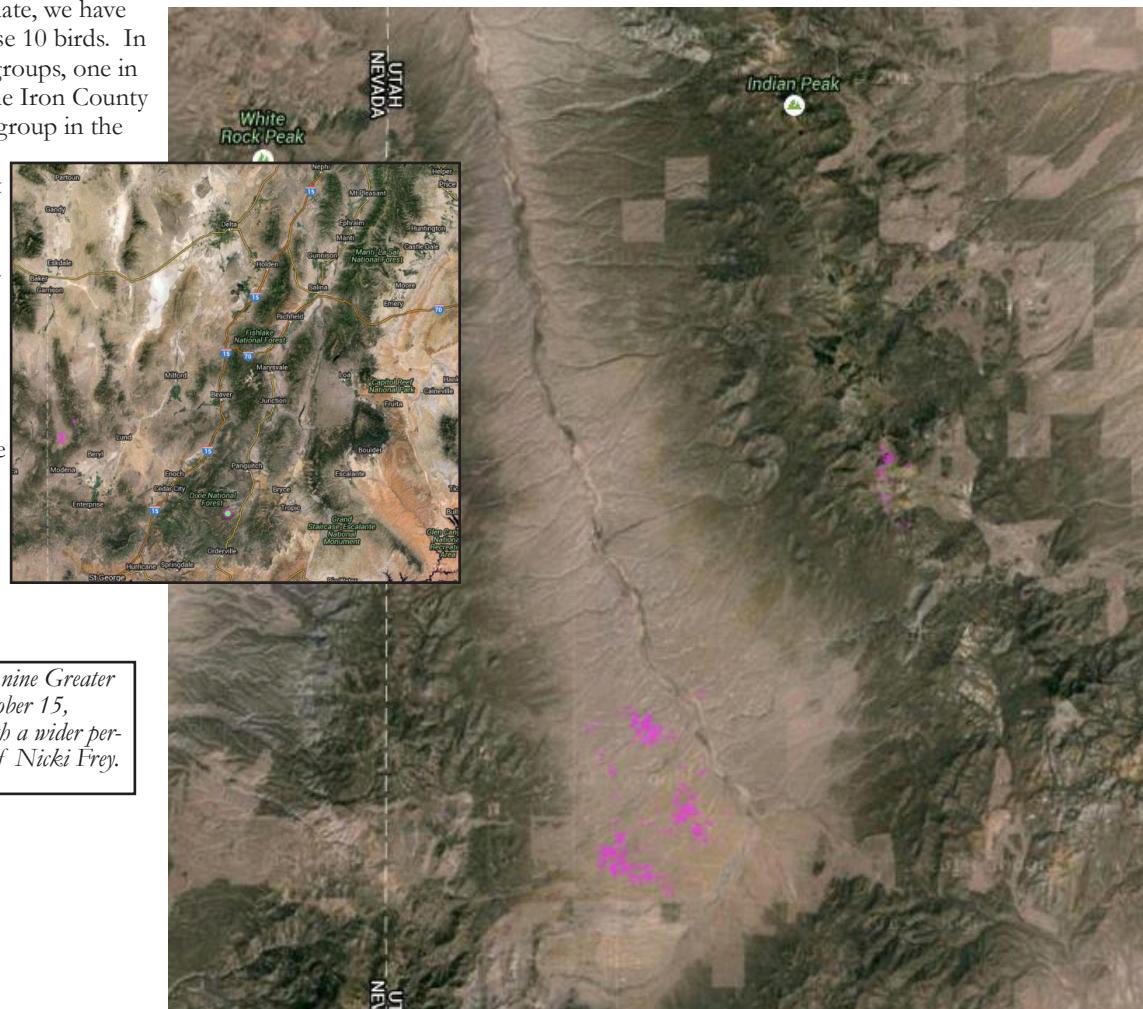
The future of the sage-grouse depends on the successful implementation of the federal and state management plans and the actions of private landowners, as well as a continuing focus on reducing invasive grasses and controlling rangeland fire. The USFWS has committed to monitoring all of the continuing efforts and population trends, as well as to reevaluating the status of the species in 5 years. The final listing decision was published in the Federal Register on October 2, 2015. The 12 month finding can be accessed at the website address provided below.  
<https://www.federalregister.gov/articles/2015/10/02/2015-24292/endangered-and-threatened-wildlife-and-plants-12-month-finding-on-a-petition-to-list-greaterer/>

## SAGE-GROUSE RESEARCH IN HAMLIN VALLEY

By Nicki Frey, Utah State University

This spring, the Southwest Desert Local Working Group continued their research of sage-grouse by initiating a project in the Hamlin Valley Sage-grouse management area. We placed 10 solar-powered PTT transmitters on sage-grouse at three leks within Hamlin Valley. This data will bolster data collected using VHF telemetry 2011-2012. Hamlin Valley is a very remote part of Utah, and historically data collection in this region during fall, winter and early spring has been difficult. The satellite transmitters will provide year-round data collection four times a day on each bird. Our objective was to gather information on sage-grouse habitat use prior to the initiation of several habitat treatment projects in the area. This prior information will assist us in determining sage-grouse response to these treatments, which include both tree removal and sagebrush-steppe vegetative community improvements. To date, we have acquired over 7,000 locations on these 10 birds. In the spring, birds were found in two groups, one in the north, associated with a lek on the Iron County and Beaver County border; and one group in the southern portion of Hamlin Valley.

We noticed that the birds spent most of the summer in the southern end of Hamlin Valley and we are looking forward to doing some habitat analysis on this area. Now that it is Fall, the birds will begin to move around a bit. You can see that one bird has already left the group and is spending time on the eastern edge of the valley. We are excited to see what the birds do this winter!



*Photo of the last 2 weeks of locations for nine Greater sage-grouse in Hamlin Valley, Utah, October 15, 2015. The inset depicts these locations with a wider perspective of Utah for reference. Courtesy of Nicki Frey.*

## COLOR COUNTRY LOCAL WORKING GROUP FIELD DAY

By Nicki Frey, Utah State University

In August, CCARM had its first field day. We combined our efforts to remove pinon and juniper “whips” from previously treated sage-grouse habitat southwest of Panguitch. Participants included employees of USU Extension, Bureau of Land Management, Utah Division of Wildlife Resources, Garfield County, Natural Resource Conservation Service, U.S. Fish and Wildlife Service and local residents. Combined we volunteered 20 hours of labor to improve Greater sagebrush habitat. We had a terrific time and look forward to doing it again!



*Nicki Frey, Lisa Church, Curtis Roundy, Rhett Boswell, Clinit Wirick, and Norm McKee.*



*Brian Bremner, Garfield County, and Lisa Church, BLM, working hard in the field. Photos courtesy of Nicki Frey.*

## HOME ON THE RANGE: COWS, SAGEBRUSH, AND SAGE-GROUSE

By David Dahlgren, Utah State University

Aldo Leopold is largely recognized as the father of conservation and modern wildlife management. He is most famous for his last book, "A Sand County Almanac," accepted for publication just before his death in 1948. But his most famous quotation, frequently quoted in land management circles, was from his first book, "Game Management," published in 1933. He said: "The central thesis of game management is this: game can be restored by the creative use of the same tools which have heretofore destroyed it—axe, plow, cow, fire and gun."

In Leopold's time, the axe was used for clearing brush from areas where it had become too dense or to remove understory shrubs from forests to minimize the intensity of wildfires. The plow was used to grow crops that provided food for wildlife. The cow was used to mimic the effects of buffalo grazing the prairies to reduce the height of the grasses and allow forbs to grow, which provided better green groceries for wildlife including sage-grouse.



*Photo courtesy of Todd Black.*

Contemporary land managers still use the same tools in much the same way. We use fires, chainsaws, chains, plows (the Dixie harrow) and bullhogs to manage sagebrush to maintain habitat. Cows, and yes sheep, can also be used to manage the rangelands to optimize the habitat for all native species. Of these tools, livestock may constitute the most effective tool to manage sagebrush rangelands to benefit sage-grouse. Livestock grazing is, by far, the dominate use of sagebrush rangelands, and of all the tools, the most controversial. This controversy has been largely fueled by a lack of experimental evidence on sage-grouse response to livestock grazing.

A long-term case study using data from northern Utah and southwestern Wyoming, recently published in the *Journal of Range Ecology & Management* (Dahlgren et al. 2015), has shed new light on this controversy. Of three study areas, two consisted of mostly federal public lands with limited sagebrush management and either season-long or simple rotational grazing within allotments. The remaining study area was the privately-owned Deseret Land and Livestock (DLL) Ranch which followed a prescriptive grazing system emphasizing growing-season rest throughout the study period. In the mid-1990s DLL managers initiated small-scale sagebrush management that did not exceed 20% of the sage-grouse breeding habitat. The authors analyzed 25 years (1989-2013) of lek data across three large breeding populations (hundreds of thousands of acres) within the study areas, decades of ranch-wide ( $>200,000$  acres) brood count information, and years of sagebrush treatment monitoring to determine which management system was best for sage-grouse.

Shortly following the initiation of the small-scale sagebrush removal projects, males per lek on DLL almost doubled and for nearly 15 years remained higher than the surrounding populations studied. However, under severe winter and spring weather conditions in 2010 and 2011 all three populations declined to approximately the same levels (i.e., males/lek). On average, chicks per brood on DLL increased only slightly in years following the initiation of treatments. Though across all years, chicks per brood averaged over four on DLL, which is relatively high compared to reported information in other studies. The authors concluded that the high chick numbers on DLL may have been due to the grazing strategies which began prior to the study's evaluation period. The study also reported that sage-grouse, and especially broods, preferred using treatment areas over untreated reference areas during the brooding period (July and August). The birds also preferred to be near the edges ( $< 80$  m) of treated areas.

Although the study was not done within an experimental design, because it encompassed large landscapes and a relatively long time period, the authors concluded it provided evidence that grazing, which emphasizes rest and range management practices at small scales, can be compatible with sage-grouse populations. However, if too much sagebrush is removed it could be detrimental to sage-grouse, especially during times of severe weather. Generally, annual sagebrush removal rates should not exceed sagebrush recovery rates and wintering and nesting areas should maintain adequate amounts of tall sagebrush canopy cover. While controlled experimental studies are the standard in science, case studies such as this can provide insights regarding Leopold's vision of the role of tools such as sagebrush management and livestock grazing that impact sage-grouse populations.

Reference cited: Dahlgren, D.K., R.T. Larsen, R. Danvir, G. Wilson, E.T. Thacker, T.A. Black, D.E. Naugle, J.W. Connelly, and T.A. Messmer. 2015. Greater Sage-Grouse and Range Management: Insights from a 25-Year Case Study in Utah and Wyoming. *Range-land Ecology and Management* <http://dx.doi.org/10.1016/j.rama.2015.07.003>

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

## Man's Best Friend: a Biologist's Best Tool



Photos courtesy of David Dahlgren.

By David Dahlgren, Utah State University

I picked up the pup at 10 weeks old in Utah County. He could have fit in a purse he was so small. He was the last puppy with his littermates all at their new homes. I was working on a sage-grouse project on Parker Mountain, Wayne Co., Utah, so his official pedigree name became Parker Mountain Sage Boomer, but he went by Parker. Parker always wanted to please from the very beginning. At 14 weeks old he was already pointing and retrieving training pigeons. I knew I had a good one. Two months ago I buried him in tear-soaked mountain soil near the spot where he had his first real point, a ruffed grouse in the aspen. Parker, who had kidney failure in the end, was almost 13 years old and had spent most of his life working on grouse research projects during the summer field seasons and hunting most of North America's upland birds in the fall.

Parker was not a flashy dog like his kennelmates, but he was steady day in and day out. He was thorough in his search and obedient to the end. These traits made him especially good for research detection work because he would cover the specific area of interest and his obedience kept the birds safe as he held point or stayed put on command. In 2010 we published an article "Evaluation of Brood Detection Techniques: Recommendations for Estimating Greater Sage-Grouse Productivity" in which we compared chick detection rates for spotlight, dog, and an observer-walking methods on sage-grouse broods with radio-marked chicks. Parker carried the majority of that workload demonstrating dogs can detect 96% of chicks in a brood. In one way or another Parker will always be with me as I continue to conduct research on grouse.

Dogs have been used in wildlife research and management for many decades because of their scenting abilities and ground speed. They simply offer a skill set human observers cannot duplicate. In many areas dogs are used to detect rare or scarce species contributing to worldwide conservation. Scat detection has become an increasingly popular method for mammalian predator studies and dogs provide an increased detection rate for these efforts. For grouse research they have been used to detect chicks, nests, unknown lekking areas, wintering areas, estimate bird density, assess management techniques and grouse response, and more.

Annually in the late summer since 2003, volunteers from the Utah Chukar and Wildlife Foundation have journeyed to Parker Mountain with their pointing dogs and helped in sage-grouse research. We have been able to evaluate brooding areas and habitat management projects using dogs to detect broods and grouse in general. We can also obtain chick per brood data and chick:adult ratios to measure the productivity of the population each year. Man's best friend truly provides an asset to our research and an intangible quality increasing the joy in the work.

R.I.P. Parker, you were a good boy!



### 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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