

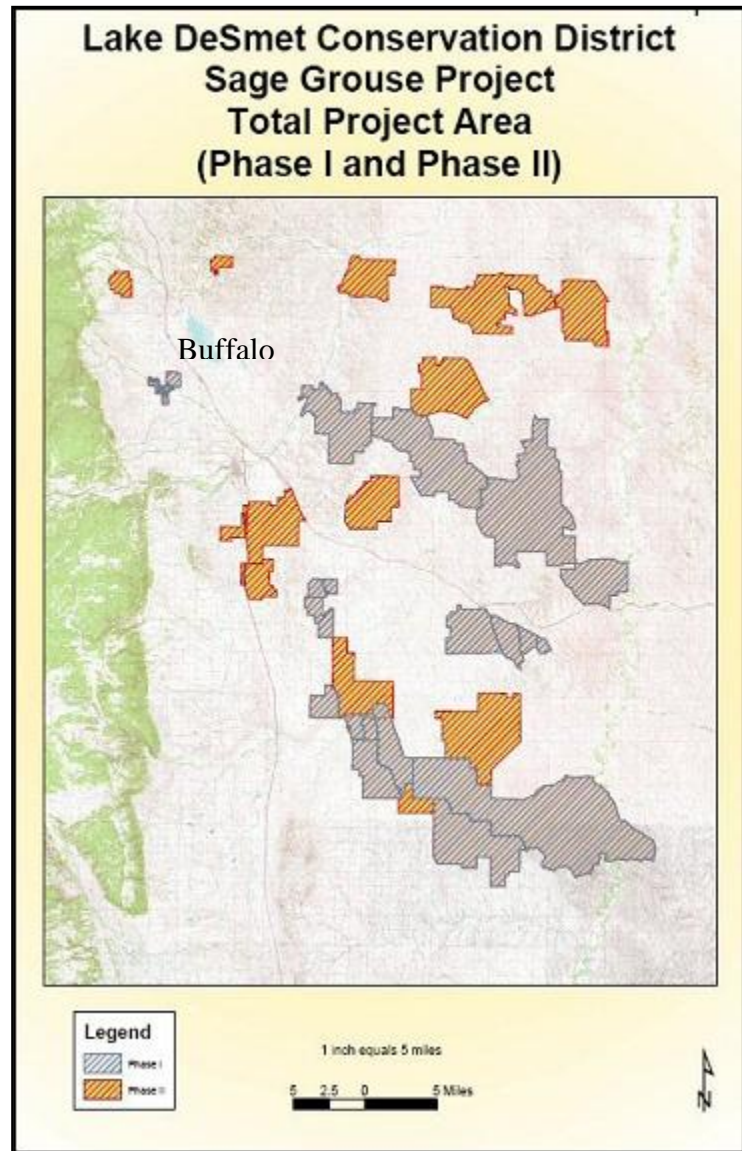
LAKE DESMET CONSERVATION DISTRICT'S SAGEBRUSH/GRASSLAND HABITAT RESTORATION PROGRAM
2006 Annual Report to Cooperators

The Lake DeSmet Conservation District (LDCD) has partnered with private landowners, Natural Resource Conservation Service (NRCS), Wyoming Game and Fish Department (WGFD), oil and gas industry, conservation groups and federal and state governments to restore the productivity of sagebrush/grassland communities in northern Johnson County. This community-based program has had tremendous success. So far, 234,661 acres are enrolled to enhance important habitats for sagebrush obligates, mule deer, pronghorn antelope, other wildlife, as well as livestock.

The first phase of this program involved seven landowners comprising 143,501 acres. Ranch management plans have been prepared for these livestock producers, which includes; resource inventories, conservation strategies, infrastructure needs (to implement conservation strategies), grazing procedures and monitoring needs. Dr. Roy Roath, a Colorado State University range extension specialist, and other experts in the field have been employed to assist with progressive plans that will benefit both livestock and wildlife.

In addition, 4,950 acres have been treated with the Lawson Pasture Aerator. This implement aerates and drops seed in the clay-dominated soils and favors rizominous grasses, sagebrush habitat, winter fat and fourwing saltbush. The aerator is being used to enhance overflow and riparian sites for sage grouse brood rearing. On these sites, dryland alfalfas, yellow prairie coneflower, American vetch, fourwing saltbush and other forbs are being planted.

The aerator is also used to reclaim go-back lands (previously farmed) to restore the structure and productivity of these lands for livestock, mule deer and antelope. In addition to interseeding forbs and select grasses, we're also planting



The first ranch units to sign up for the program involve 143,501 acres (Phase 1). The second enrollment (Phase 2) added 91,160 acres to the program. A third signup period is presently underway. If all are approved, the total project area will exceed 320,000 acres.

fourwing saltbush to improve the structure of rangelands and browse for wild ungulates. By improving herbaceous production and maintaining conservative livestock stocking rates, we expect to reserve more forage and cover for wildlife. These changes are also expected to improve habitat for sage grouse and sagebrush obligates.

Phase two involves another seven landowners comprising an additional 91,160 acres

(for a total of 234,661 acres). The ranch conservation plans have been initiated and we're beginning to seek funding for their implementation.

Presently, the NRCS/LDCD has received applications for another six ranches that control more than 90,000 acres of sagebrush/grassland communities. If all are approved, the total project area will



Almost 5,000 acres were treated with the Lawson Pasture Aerator. This implement aerates and drops seed into the clay-dominated soils and favors rizominous grasses, silver sagebrush, winter fat and fourwing saltbush.



The papers *Sage Grouse Ecology and Management in Northern Utah Sagebrush-Steppe*, a *Deseret Land and Livestock Wildlife Research Report, 2002* by R. E. Danvir, and the *Parker Mountain Adaptive Resource Management Plan* provide documentation of benefits to sage grouse and other sagebrush obligates, as well as mule deer, pronghorn antelope and other wildlife from their ranch management operations. Increases in wildlife populations associated with sagebrush/grassland communities have been documented and are the result of their innovative ranch conservation

technologies and approaches. These include, timed livestock grazing, forb plantings and mechanical and fire treatments. Due to Deseret's success at increasing wildlife populations while maintaining a working ranch, the LDCD and collaborators initiated this program to replicate and implement this "win-win" management model on private and public lands in northern Johnson County.

Specific objectives of the program include:

- Implementing and testing methods to rapidly produce inventories and information for livestock producers. From this, producers and partners can develop land management plans that benefit livestock, sage grouse and other wildlife. All resource information, including soil, range, wildlife distribution, improvements and water inventories will be managed in a GIS database to supply a rapid decision-making tool for producers. A Wyoming NRCS conservation incentive program called the Grazing Lands Initiative is the basis of this work.
- Utilization of tested and proven Best Management Practices (BMPs), as well as adjusting and modifying BMPs, will help develop a template that could be replicated for management of sagebrush habitats for livestock enterprises and wildlife.

➤ Monitoring improvements to rangeland production and biodiversity that result from improved grazing systems, mechanical treatments and forb plantings. The WGFD will quantify changes in sage grouse populations by comparing male grouse attendance at leks within and outside the program area.

The Federal government has contributed considerable funding for this restoration effort. So far, the total exceeds \$1.76 million. The bulk of these funds need a non-federal match. Although livestock producers will shoulder much of this match (\$281,073), conservation practices having specific benefits for sage grouse need “outside” matching dollars to make this work. To date, producers, state agencies, non-government organizations, and industry have provided \$607,785 to match these federal dollars, most of which have 50/50 to 75/50 match ratios. See Table 1 for the list of contributors and the dollars they granted.

Table 1. Contributors to the LDCD’s sagebrush/grassland restoration effort (as of 12/31/06).

<i>NRCS (Wyoming) EQIP, WHIP, etc.</i>	<i>\$1,425,136.00</i>
<i>NRCS (National) Conservation Innovation Grant</i>	<i>\$240,500.00</i>
<i>US Fish and Wildlife Service, Private Lands Program</i>	<i>\$40,000.00</i>
<i>BLM</i>	<i>\$64,278.00</i>
<i>Private Landowners Enrolled in Program</i>	<i>\$281,073.00</i>
<i>Oil and Gas Industry (Anadarko Petroleum, Lance O&G, Kennedy Oil).</i>	<i>\$75,762.00</i>
<i>Wyo. Governor's Sage Grouse Fund- Northeast Wyo. Sage Grouse Local Working Group.</i>	<i>\$90,000.00</i>
<i>Wyoming Wildlife and Natural Resource Trust Account</i>	<i>\$60,000.00</i>
<i>Wyoming Game and Fish Department</i>	<i>\$47,950.00</i>
<i>Sheridan/Johnson County Chapter of Pheasants Forever</i>	<i>\$15,000.00</i>
<i>Wyoming Governor's Big Game License Coalition</i>	<i>\$10,000.00</i>
<i>Eyas Foundation</i>	<i>\$10,000.00</i>
<i>Lake DeSmet Conservation District- Science Summit workshops</i>	<i>\$10,000.00</i>
<i>Wyoming Private Lands Grazing Team</i>	<i>\$3,000.00</i>
<i>Bighorn Environmental Consultants</i>	<i>\$3,000.00</i>
<i>Water for Wildlife Foundation</i>	<i>\$2,000.00</i>
GRAND TOTAL	<i>\$2,377,699.00</i>

Other achievements this year include the purchase of 100 escape ramps for small animals, which will be placed in existing and newly developed water troughs. The cost of these pre-fabricated ramps was split between The One-Shot Antelope Hunt Foundation's Water for Wildlife Program and the WGFD. The goal is to reduce sage grouse drowning mortalities. A secondary benefit will be improved water quality for large animals that use the facilities, such as livestock, pronghorn antelope and mule deer.



Sage grouse watering from rubber-tire water trough (Photo courtesy of Tom Maechtle).



Escape ramps are being installed in troughs to reduce sage-grouse deaths due to drowning. Note the dead sage grouse behind the pickup truck that were pulled from the tank.



The NRCS and State of Wyoming have provided interns during the summer months to help collect data.

Interns with the NRCS and WGFD spent much of the summer mapping sage-grouse habitats and determining the ecological condition of sagebrush communities. Sage-grouse sign, such as pellets and nest locations were mapped to allow seasonal ranges to be determined. Data were installed in a GIS to produce inventories and information for livestock producers. From this, producers and partners can develop land management plans that benefit both livestock and sage grouse.

In order to map and delineate sage-grouse winter habitats, a local sage-grouse specialist and his trained dogs are hired to search enrolled properties. These English setters are trained to search large areas. Because they range long distances, the dogs are fitted with radio collars that transmit their location and activity, or lack thereof. When it's determined that the setter is on point (no activity), triangulation is used to locate the point. The consultant can then flush and

classify the sage grouse. These locations are collected by a global positioning system (GPS) and installed in a geographic information system (GIS). At that time, the sagebrush patch is searched and sage-grouse pellets are examined to verify the level and season of use (pellets containing mostly sagebrush are from wintering sage-grouse).

These efforts are needed because sage grouse have specialized habitat requirements (e.g., nesting cover, brood-rearing cover, winter cover, etc.) that should be taken into consideration when planning grazing systems and mechanical

treatments. For instance, sage grouse will select different habitats based on sagebrush canopy cover, plant diversity and forb abundance. Although it's not practical to measure and map all enrolled lands, it is possible to collect these data within occupied grouse habitats. It's expected that the bird dog survey technique will help provide this information.

Other accomplishments include:

- The BLM purchased replacement drums and teeth for the Lawson aerator. Two sets of teeth have been worn off the aerator so far. The new teeth are eight inches and "hardened" (rather than 6 inches and not surfaced with hardened steel).
- Presentations have been given to participants of the Lake DeSmet Conservation District's Science Summit. This year the theme of the conference focused on what local communities can do to preserve and enhance sage-grouse habitats.
- Bert attended a few Northeast Wyoming Sage Grouse Local Working Group meeting to update members on the accomplishments of the LDCD sage-grouse program and the hiring of a new WGFD extension service biologist to help implement their plan.
- NRCS and LDCD gave a presentation at the Grazing Land Conservation Initiative (GLCI) national conference in St. Louis, MO.
- Phil Gonzales, NRCS District Conservationist in Buffalo, has been assigned a collateral duty as Sage Grouse Coordinator for the State of Wyoming. Presentations have been given to the NRCS employee meeting, NRCS Leadership meeting, along with a transfer of information via newspaper releases in the Casper Star Tribune and the Buffalo Bulletin.



A contractor uses specially trained dogs and transmitters to search large expanses of sage-grouse habitat. This information is used to delineate and map important winter habitats.