### TENSION UtahState

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# THE COMMUNICATOR

A Quarterly Publication of the Utah State University Extension **Community-Based Conservation Program** 

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#### **July 2005**

## **Turning Challenges into Opportunities Through Community-Based Conservation**

By Terry Messmer

#### The Challenge In Utah, sage-grouse

(Centrocercus spp.) inhabit sagebrush habitats of the Colorado plateau and the Great Basin geographic regions from 4,000 to 9,000 feet in elevation. The Utah Division of Wildlife Resources (UDWR) believes that all of Utah's 29 counties once provided sagebrush habitat suitable for sage-grouse. The UDWR estimates that today sage-grouse occupy only 50% of their previous habitat and are one-half as abundant as they were prior to the 1850s. In response to similar sage-grouse population declines range-wide several organizations petitioned the US Fish and Wildlife Service to place the species on the endangered species list. This listing, which the Service decided

was "unwarranted," could have had significant impacts on local communities.

The Opportunity Approximately 30% of the sagebrush-steppe lands in the western United States are privately owned. The UDWR estimates that in Utah over 50% of the remaining sage-grouse populations occur on private land.

To address these declines and avert a listing. Utah citizens formed working groups to increase local ownership in the development of sage-grouse conservation plans. Several of these efforts are discussed in this newsletter. It is anticipated that implementation of these plans will assist state conservation efforts while achieving local, social, and economic objectives.

Utah State University Extension, the College of Natural Resources and the Jack H. Berryman Institute entered a cooperative agreement with the UDWR to develop a Community-based Conservation Extension Specialist (CCES) Program to assist local working groups in this effort. CCESs are working with the groups to develop, implement, and monitor plans and agreements for 13 geographic areas (see map on page 2). The partners believe this approach will assist in recovery and provide affected individuals and local communities with increased ownership of the conservation planning process and awareness of the incentives available to assist them in conserving sage-grouse while meeting the needs of their local communities. We look forward to working with you!

### New Faces of Community-Based Conservation

#### By Sarah Lupis

In January 2005, the Community-Based Conservation Extension Specialist program added three new faces: Nicole Frey, Sarah Lupis, and Leslie Elmore.

Nicole Frey received an M.S. and Ph.D. from Utah State University (USU), where she studied nest predators and now

wears several hats as a CCES Extension Specialist and adjunct professor at Southern Utah University in Cedar City. Nicole has had a busy first semester teaching, organizing sage-grouse research, facilitating the Southwest and Color Country Local Working Groups, and working with the Cedar Mountain Science Center (CMSC) to develop sagebrush-steppe monitoring programs for high school teachers, students, and other community organizations.

Sarah Lupis received a B.S. from the University of Massachusetts, Amherst, and an M.S from USU where she studied the summer ecology of Gunnison Sagegrouse in San Juan County,

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### **Carbon-Emery & Morgan-Summit Kick-Off Meetings**



Utah's Adaptive Resource Management Local Working Groups, June 2005; Carbon-Emery in gray, Morgan-Summit in darker blue.

By Sarah Lupis

Community-Based Conservation continues to spread throughout Utah! Several local landowners, DWR folks, and Farm Bureau personnel turned out for a successful kick-off meeting in the Carbon-Emery area on March 24<sup>th</sup>. At the meeting, CCES Program Specialist Todd Black gave an informational presentation about sage-grouse ecology and discussed Adaptive Resource Management efforts going on in other parts of the state. Mark Petersen, of the Utah Farm Bureau also spoke, stressing the importance of landowner participation in conservation of sage-grouse and sagebrushsteppe ecosystems. A follow-up meeting is scheduled for July

14, 2005 at 6:30 PM at the Fairgrounds in Price.

On June 23<sup>rd</sup>, concerned landowners met at the fairgrounds in Coalville to discuss the formation of the Morgan/Summit Adaptive Resource Management (MSARM) Local Working Group. Landowners listened to a presentation by Extension Specialist Sarah Lupis about sage-grouse ecology and some of the current conservation and management efforts ongoing in the state. A follow-up meeting was scheduled for Tuesday, November 1<sup>st</sup> at 7:00 PM. Please contact Summit County Extension agent Sterling Banks at 435–336-3219 or Sarah Lupis at 435-797-8876 for more information.

"Male grouse could be seen sliding across the ice to their lek..."

#### By Nicole Frey

The Color Country Adaptive Resource Management (CCARM) Local Working Group has just begun their second season of field work, no thanks to Mother Nature! They began trapping and radiocollaring Greater Sage-grouse in the Alton area last summer to determine the habitat use



Alton front yard favored by female sage-grouse.

and movements of this, Utah's southern-most, lek. After a rough winter, members began trying to trap more Greater Sage-grouse this spring. However, Mother Nature had alternate plans. When heavy snows started to melt at the start of this year's breeding season, previous breeding grounds quickly turned into ponds. Male grouse could be seen sliding across the ice to their lek—much to our amusement, I must admit!

**Color Country Research Season Has A Soggy Start** 

Yet, the working group marched onward. We finally caught a male and fitted him with a radio-collar. Technicians have followed him all spring, finding out interesting information on his use of the landscape. For example, he is usually found with at least 10 other males. These boys can frequently be found resting in a juniper stand near a small patch of sagebrush or hanging out near the pastures of Alton. It appears that the females like the atmosphere of Alton as well – one was sighted in a resident's front yard.

Trapping efforts will begin again shortly to get some females collared as well as more males. In the meantime, UDWR and BLM are working on some habitat improvements in the area. An SUU undergraduate technician is collecting vegetation and insect data on her planned project before the plan is implemented. Similar data will then be collected each summer following the treatments to chart the changes to the landscape.

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### Flagship Project: Parker Mountain

By S. Lupis, D. Elmore, D. Dahlgren, & M. Monson

What began nearly 10 years ago with a single graduate student and a couple of technicians has mushroomed this year—3 graduate students, 2 technicians, and 3 highlytrained bird-dogs have descended on the town of Loa and Parker Mountain to investigate all aspects of the sagebrush ecosystem, from aspen regeneration to survival of sage-grouse chicks.

The long-term research on Parker Mountain is part of an adaptive resource management effort lead by the Parker Mountain Adaptive Resource Management (PARM) Local Working Group, a public/private partnership of local landowners, ranchers, non-profits, industry, and state and federal agencies.

Dave Dahlgren, a graduate student at Utah State University (USU) began working on Parker Mountain in 2001 as a technician for masters student, Renee Chi, while she investigated the summer ecology of Greater Sage-grouse (*Centrocercus urophasianus*) and their response to habitat treatments.

This year, Dave is putting the finishing touches on his own masters thesis, based on a continuation of Chi's work, and has begun a PhD project investigating factors that effect the survival of sage-grouse chicks on Parker.

It has been a frantic spring, with nearly 60 radio-collared hens nesting all over the mountain, Dave and his crew are working long hours to keep up with the flock. This summer, with the help of Parker, Buddie, and Kate—the project's pack of bird dogs—Dave will seek out brood -rearing hens, capture and radio-mark several chicks from each brood (using a small transmitter attached to the chick's back using the "suture" method), and then follow those chicks to determine sources of mortality and gain a better understanding of population parameters. Mike Monson wears many hats: two as a husband and father to two beautiful little girls and another as a counselor in the



Buddie points a sage-grouse hen on Parker Mountain.

bishopric of his local church. Hat number three is that of USU graduate student—Mike is working on Parker this spring and summer as a master's student researching aspen regeneration. His study aims to evaluate the use of treatments and fencing on enhancing aspen regeneration with the hope of developing best management practices for aspen stands in the sagebrush-steppe ecosystem.

The Utah prairie dog (*Cynomys parvidens*) is considered a keystone species in the sagebrush-steppe ecosystem for its role in altering vegetation communities and soil structure and providing niches for other species.

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### **New Faces of Community-Based Conservation**

#### (continued from page 1)

Utah. After working closely with SWOG, she was excited to begin working with other groups in the state. Sarah works with the UBARM, SVARM, MSARM, and WDARM working groups and participates on the Rich County Cooperative Resource Management Monitoring Team. In addition, she has been working on outreach and education.

Leslie Elmore received an M.S. in

Wildlife and Fisheries Science from Mississippi State University where she studied red bat ecology. Leslie keeps the CCES program running behind the scenes, managing databases and mailings. She also works with graduate students on Parker Mountain, assists with the teacher training program with the CMSC, and develops technical publications and teaching tools for use by the Natural Resources Conservation Service. Lately, she has been developing the on-line portion of the Grants-In-Aid program designed to fund projects that evaluate the benefits of 2002 Farm Bill practices.

Nicki, Sarah, and Leslie are excited to be a part of the CCES team and look forward to working with agencies and landowners across the state. You can find their contact information on the front page of this newsletter—give them a call anytime with comments or questions!



Newest members of the CCES program: Nicki (top), Leslie (bottom left), and Sarah (bottom right).

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

### EXTENSION

### UtahState

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This publication is issued in furtherance of Cooperative Extension work Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jack M. Payne, Vice President and Director, Cooperative Extension Service, Utah State University.



#### Utah State University Extension Community-Based Conservation Specialist Program's Mission

The Utah State University Community-Based Conservation Program consists of Extension faculty and staff who are committed to public service and dedicated to promoting resource management education and facilitating dialogue and cooperation between representatives of local communities and public and private natural resources management organizations and agencies. The goals of the program are:

- To implement an interactive, dynamic local working group process that promotes education and enhances coordination and communication between representatives of local communities and public and private natural resources management organizations and agencies.
- To work with local working groups develop "seamless" conservation plans for designated Utah geographic areas that contribute to the conservation of sage-grouse and other wildlife species that inhabit Utah's shrub and sagebrush-steppe ecosystems while enhancing the economic sustainability of local communities.
- To work with communities, local working groups, and other partners to implement, evaluate, and report the contributions of range and habitat improvements and other wildlife management projects toward achieving the goals and objectives stated in conservation plans.

### Flagship Project: Parker Mountain

#### (continued from page 3)

In spite of their important ecological role, prairie dogs have been the nemesis of many ranchers. Dwayne Elmore's research is starting to change that. With the cooperation of local rancher Gary Hallows and his cows, Dwayne is researching the effect of grazing intensity on Utah prairie dogs. The grazing may also help enhance habitat for sage-grouse (brood-rearing habitat) and livestock (forage production) by increasing the grass/forb component. Dwayne is monitoring the response of the prairie dogs and the vegetation in the pastures to evaluate differences.



Cattle grazing a Utah prairie dog treatment pasture on Parker Mountain.