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Take Action! The Past, Present, and Future of Sage-Grouse Conservation in Utah

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Abstract: Utah has a 10-year history of local conservation planning for sage-grouse populations. The San Juan County Gunnison Sage-Grouse Local Working Group (SWOG) was formed in 1996 and completed a local conservation plan in 2000; the Parker Mountain Adaptive Resource Management Local Working Group (PARM) was established in 1998 and has been a model for sage-grouse conservation planning throughout the state. In July 2006, most of Utah's 12 adaptive resource management local working groups completed local conservation plans for sage-grouse that address the unique issues affecting their respective areas. Each local working group is made up of diverse stakeholders including landowners, state and federal agency personnel, and nongovernmental organizations. This effort was achieved through the use of neutral facilitation and coordination provided by Utah State University Extension and The Nature Conservancy's Conservation Action Planning (CAP) process. We discuss how neutral facilitation and the CAP process contributed to the successes of local working group planning efforts and explore challenges faced along the way. Finally, we discuss the future of community-based conservation and Extension's role in local conservation planning in the state of Utah.

Key Words: Centrocercus spp., community-based conservation, conservation action planning, local working groups, sage-grouse, Utah

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Introduction

Utah has long recognized the importance of working collaboratively to face issues and solve problems of natural resources conservation and management. A recent partnership between the Utah Division of Wildlife Resources (UDWR) and Utah State University (USU) Extension highlights how a non-regulatory entity, USU Extension, can serve to help multi-stakeholder collaborations engage in a comprehensive public involvement process and develop actionable conservation plans.

History of Sage-Grouse Conservation

The state of Utah has a long history of community-based conservation planning for sage-grouse (*Centrocercus* spp.). In 1996, members of the local community and state and federal agencies teamed with USU Extension to form the San Juan County Gunnison sage-grouse (*C. mimimus*) Local Working Group (SWOG) to proactively manage declining populations of Gunnison sage-grouse near Monticello, Utah in the southeastern corner of the state. Members of SWOG worked together to develop a local conservation plan for Gunnison sage-grouse which was finalized in 2000 and signed by all partners (SWOG 2000). In 1998, following this model, another local working group, the Parker Mountain Adaptive Resource Management Local Working Group (PARM), was established under a multi-stakeholder Memorandum of Understanding. Members of PARM have been working together to identify research needs, collect information on local populations of greater sage-grouse (*C. urophasianus*), and adaptively manage the population and its habitats.

In 2002, Utah's Wildlife Board approved a statewide strategic plan for sage-grouse (UDWR 2002) that called for the establishment of 13 local working groups across the state (Figure 1) and the development of local conservation plans by those groups for sage-grouse and sagebrush habitats specific to each local

area. The approval of this plan marked the beginning of an established partnership between the UDWR and USU Extension now recognized as Utah's Community-Based Conservation Program (CBCP).

Both species of sage-grouse have been petitioned for listing (Webb 2000, American Lands Alliance 2003) under the Federal Endangered Species act (1973, as amended). In 2005, the US Fish and Wildlife Service (USFWS) denied three petitions to list greater sage-grouse (USFWS 2005). In the decision notice, the USFWS states that "… local conservation efforts are necessary to the long-term conservation of the species…" In 2006, the USFWS denied a petition to list the Gunnison sage-grouse and removed the species from the Candidate list (USFWS 2006a). Although the USFWS listing decision for Gunnison sage-grouse does not directly recognize the efforts local working groups, the USFWS did state that "…local conservation plans…represent important conservation actions that will help ensure the long-term conservation of Gunnison sage-grouse and we encourage their continued development and implementation" (USFWS 2006b).

Current Conservation Efforts Local Working Groups

Today, there are 12 adaptive resource management local working groups (hereafter referred to as local working groups) operating in the state of Utah (Figure 1). Utah State University Extension specialists are responsible for coordinating and facilitating local working groups; for organizing local working group meetings and events; for developing educational and outreach materials (web site, posters, brochures); and for providing technical expertise and technical writing and editing for conservation plans.



Figure 1. Geographic location of local working group boundaries in Utah, October 2006.

Why Extension

Extension specialists are ideally suited for this role because they lack the bias and responsibility of a regulatory agency (e.g., UDWR, USFWS, etc.), are able to tap into a network of county agents with strong ties to the local community and rural economy, and have established solid working relationships with local landowners and agricultural producers. In a recent statewide survey and forum listening sessions, 93% of respondents felt that helping homeowners, farmers, ranchers, and government agencies manage Utah terrain, including wildlife, are areas for Extension programs and research (Holmes 2006). In this same survey, 92% of respondents felt that USU should be involved in the development of programs and research that impact Utah communities' land use decisions at local, state, and federal levels. Respondents also felt that programs targeted at improving coordination and cooperation between federal, state, and local jurisdictions to achieve land management and resource conservation strategies were exceptionally important to reasonably important (Holmes 2006).

Partners

Local working groups vary in their specific makeup but, generally all have representation from state and federal land management agencies, county government, academic institutions, NGOs, and private individuals (ranchers, farmers, community members). In some groups, environmental organizations and private industry also participate. Groups that currently participate in one or more local working group in Utah are listed in Table 1.

Local Conservation Plans

The strategic management plan for sage-grouse approved by the Utah Wildlife Board in 2002 called for the development of local conservation plans for sage-grouse by each local working group in the state (UDWR 2002). Today, local working groups are in various stages of initiating, developing, finalizing, and implementing local conservation plans for sage-grouse. Each plan has the overall goal of maintaining, improving, and restoring local sage-grouse populations and habitats while taking into consideration historical land uses and long-term socioeconomic issues.

Each plan is divided into four parts: 1) conservation assessment, 2) threat analysis, 3) conservation strategy, and 4) priority evaluation. In the conservation assessment, general information about sage-grouse is reviewed; landownership, human population trends, and settlement patterns for the local area are analyzed; and information about the status of sage-grouse populations and habitats specific to the local area is

Group Name	Abbreviation
Brigham Young University	BYU
Bureau of Land Management	BLM
County Commissions	_
Local Landowners, ranchers, farmers	_
Local Sportsmen's Groups	_
Local livestock/grazing associations	_
Private industry	_
School and Institutional Trustlands Administration	SITLA
Soil Conservation Districts	SCDs
Southern Utah University	SUU
The Nature Conservancy	TNC
USDA Farm Services Agency	USDA FSA
USDA Natural Resources Conservation Service	USDA NRCS
USDA Wildlife Services	USDA WS
US Fish and Wildlife Service	USFWS
US Forest Service	USFS
Utah Division of Wildlife Resources	UDWR
Utah Farm Bureau Federation	UFBF
Utah State University	USU

Table 1. Agencies, organizations, and others involved in at least one local working group in Utah.

summarized. Threats identified in the listing petitions (Webb 2000, American Lands Alliance 2003), in rangewide conservation plans (Gunnison Sage-grouse Steering Committee 2005, Connelly et al. 2004), and by local working group partners as potentially impacting sage-grouse populations and habitats are reviewed and evaluated with the most current information available. The priority evaluation summarizes the current and potential impact of these threats on aspects of sage-grouse ecology identified by the group (sage-grouse population size and distribution, habitat quality, and landscape and population connectivity). Finally, each plan is designed to address the five listing factors the USFWS uses to determine listing status for any given species:

- 1. The present or threatened destruction, modification, or curtailment of its habitat or range;
- 2. Overutilization for commercial, recreational, scientific, or educational purposes;
- 3. Disease or predation;
- 4. The inadequacy of existing regulatory mechanisms; or
- 5. Other natural or manmade factors affecting its continued existence.

Conservation Action Planning

Local working groups in Utah have elected to use Conservation Action Planning (CAP), a planning process developed by The Nature Conservancy (TNC 2005). The CAP process is designed to help conservation projects develop strategies, take action, and measure success and then to adapt and learn over time; it is based on basic planning practices and adaptive management principals.

Conservation Action Planning is a stepwise process. Initially, groups fill out viability tables (Table 2) to document the expected range of natural variation for several "key attributes" and their respective "indicators" that the group intends to monitor to track the health and viability of the local sage-grouse population and shrubsteppe system. Local working groups then record the current conditions for each indicator and also set a "desired rating" to help determine how much improvement is likely required and to set priorities for conserving and recovering populations and habitats.

Groups then identify and rank threats according to their contribution to deterioration of the aforementioned key ecological attributes. Strategies and associated actions are identified next, and ultimately, in combination with threat rankings, help groups determine how best to abate threats, enhance viability, and reach desired conditions for local sage-grouse populations and habitats.

Flagship Projects

One key strategy already implemented by many local working groups in Utah is the initiation of a flagship project. Flagship projects underway include research on chick survival and population dynamics on Parker Mountain, inter-lek movement patterns of males in northwestern Utah, summer ecology and movement patterns of sage-grouse in the West Desert, evaluations of conservation practives implemented under the 2002 Farm Bill on sage-grouse habitat, efficacy of raptor perch discouragers, bird use of aspen regeneration sites on Parker Mountain, and translocation of sage-grouse hens to recover populations in the Strawberry Valley.

Future Conservation Efforts

Several local working groups have completed local conservation plans; several other plans will be finalized within the next 6 months. As local working groups move forward with plan implementation they will continue to meet regularly to conduct annual re-assessments using CAP to track progress on plan objectives, hold field tours to disseminate information and demonstrate project outcomes, and hold community dinner events to update neighbors and community members on the group's activities and increase local involvement. Research and monitoring will also continue to help fill information gaps, monitor indicators, and feed into an adaptive management framework. In the future, we feel that local working groups potentially have the capacity to move beyond sage-grouse to deal with conservation and management of all natural resources on an ecosystem and landscape level.

Challenges

Local working groups will face many challenges as they move forward. The politics of natural resources management, including the potential for species listing, will prove to be obstacles for some and incentives for others. Local working groups have already been, and will continue to be challenged to maintain and increase participation by all stakeholder groups. Private individuals, ranchers, farmers, and members of the local community will remain a critical constituency for local working groups as sage-grouse in Utah occur primarily on private land (UDWR 2002). As groups look to implement conservation and management actions, they will need to balance these within the economic and social realities of rural Utah, which may conflict with sage-grouse management objectives. To remain successful in all endeavors, local working groups must work to look for and build leadership within the immediate community.

Lessons Learned

Although local working groups face many social, ecological, economic, and cultural and political challenges, they are strengthened by lessons learned thus far and environmental and personal successes. Local working groups have learned:

- 1. To involve all stakeholders early, especially members of the local community;
- 2. Coordination and planning is a full-time job;
- 3. Neutral Extension facilitators help groups work through differences, maintain focus, and keep the process moving forward;
- 4. Flagship projects, especially those that involve graduate students living and working in the local area, help to maintain interest and increase ownership of the local community in the conservation planning process; and
- 5. Plans must be dynamic, adaptive, and actionable and must contain measurable conservation strategies.

Local working group successes include easements to protect critical habitat for both Gunnison's and greater sage-grouse, some of the largest Natural Resource Conservation Service (NRCS) Wildlife Habitat Incentive Progam grant ever awarded for habitat improvement projects, protection of critical Gunnison sage-grouse habitat through enrollment in the Conservation Reserve Program, and increased funding opportunities for all partners through cooperation and collaboration. In addition, local working groups are sharing their ideas with each other through a web site developed by USU Extension: www.cnr.usu.edu/cbcp and quarterly newsletter, The Communicator. In addition, they share experiences and information with an array of cooperative efforts throughout the west on www.RedLodgeClearninghouse.org. Partners have experienced increased communication, and awareness of local issues. Perhaps most importantly, local working groups are helping people to build relationships, build trust, and build bridges.

Participation by USU Extension specialists has been key to these successes and has helped fulfill the mission of Cooperative Extension and meet the expectations of our constituents, as mentioned earlier, to help homeowners, farmers, ranchers, and government agencies manage Utah's natural resources, develop programs and research that impact communities land use decisions at local, state, and federal levels, and improve coordination and cooperation between federal, state, and local jurisdictions to achieve land management and resource conservation strategies (Holmes 2006).

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Table 2. Example CAP viability table, modified from the West Desert Adaptive Resource Management Local Working Group, unpublished report.

	Date for Desired Rating	Jul-16	Jul-16	Jul-16
	Date of Current Rating	Feb-06	Feb-06	Feb-06
	Desired Rating	Good	Good	Very Good
	Current Rating	Good	Fair	Fair
	Current Indicator Status	Few barriers; generally contiguous sagebrush habitats	Lacking in insects and water; lack of sagebrush cover in Ibapah.	
Italics = Desired	Very Good	All habitat patches are within a similarmatrix and functionally connected.	not identified.	Vernon: "Good" plus leks in area of potential habitat; lbapah: "Good" plus all of lbapah Valley.
Ratings	Good	Seasonal habtiats are in close proximity mosty mosty connected barriers between.	Sagebrush cover 10- 25%; insect food resouces abundant; water sources abundant; sufficient forbs available.	Vernon: Current distribution plus leks in Rush Valley; Ibapah: "Fair" plus leks in on the bench.
Indicator	Fair	Seasonal habitats are isolated and/or narrowly connected with some batriers between.	Sagebrush cover <10% or >25%, insect food resources lacking; few water water sources; few forbs available.	Vernon: Current distribution; lbapah: Current Current plus leks west of the highway.
Bold = Current	Poor	Seasonal habitats are sparse and dispersed with many barriers between	Sagebrush cover <10% or >25%; no insect food resources; no perennial water forbs.	Vernon: Anything less than current distribution; lbapah: Current distribution
	Indicator	Proximity of seasonal habitat types and presence of barriers.	Sagebrush cover; availbility of insect food resources; availability of perenial water sources; availability of forbs.	Distribution of leks
	Key Attribute	Connectivity of seasonal habitat types	Late Summer/Fall Habitat Quality	Population Distribution
	Category	Landscape Context	Condition	Size
	nservation rget Enter of Target	West Desert	West Desert	West Desert
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