

## **Box Elder County Adaptive Resources Management (BARM) Sage-Grouse Local Working Group**

The Box Elder Adaptive Resource Management Plan (BARM) Sage-grouse Local Working Group (LWG) was organized in 2001 by Terry Messmer. In 2011 the West Box Elder Coordinated Resource Management (WBECRM) group was organized and the effect of the LWG combined into the WBECRM plan. The CRM provides overall direction and guidance for habitat projects within the conservation area and Sage-grouse Management Area (SGMA). The WBECRM established a sage-grouse subcommittee as part of the plan. The committee meets throughout the year to address and discuss sage-grouse specific issues of concern, management actions, and strategies. The subcommittee reports these to the WBECRM. Diane Tanner is the facilitator for the group. David Dahlgren is the WBECRM sage-grouse committee chairperson.



Brush hog – A major management effort in West Box Elder County has been the mechanical removal of conifers that have encroached into sagebrush. Research published by Utah State University confirmed that this management practice has improved sage-grouse nest and brood success. Photo by Todd Black.

## **Description of Area and General Population Information**

The WBECRM encompasses western Box Elder County from the Snowville area west to the UT/NV border and south to the shoreline of the Great Salt Lake. Sage-grouse habitat in this area is broken down into three sub regions, the Grouse Creek, Pilot, and Raft River range. See [http://utahcbcp.org/files/uploads/BARMSAGRPlan\\_Final.pdf](http://utahcbcp.org/files/uploads/BARMSAGRPlan_Final.pdf) for maps and figures.

Although our knowledge of sage-grouse populations in the area is incomplete, research efforts in the area continue to map sage-grouse movements and habitat-use patterns in the Grouse Creek and Raft River Mountains. These research efforts have identified important brooding and winter areas.

## **Recent Activities and Accomplishments**

The WBECRM meets quarterly. They have a local coordinator, Diane Tanner, who plans and supports meeting logistics. The WBECRM is a coalition building process that involves all groups/ownerships and integrates local wisdom and technical expertise in the development of conservation planning and project implementation. The Utah State University (USU) Community-based Conservation Program (CBCP) participates regularly but no longer facilitates the group. CBCP does continue to provide website support. The WBECRM is engaged with state, federal, and private partners in planning projects in the SGMA. There are multiple conifer

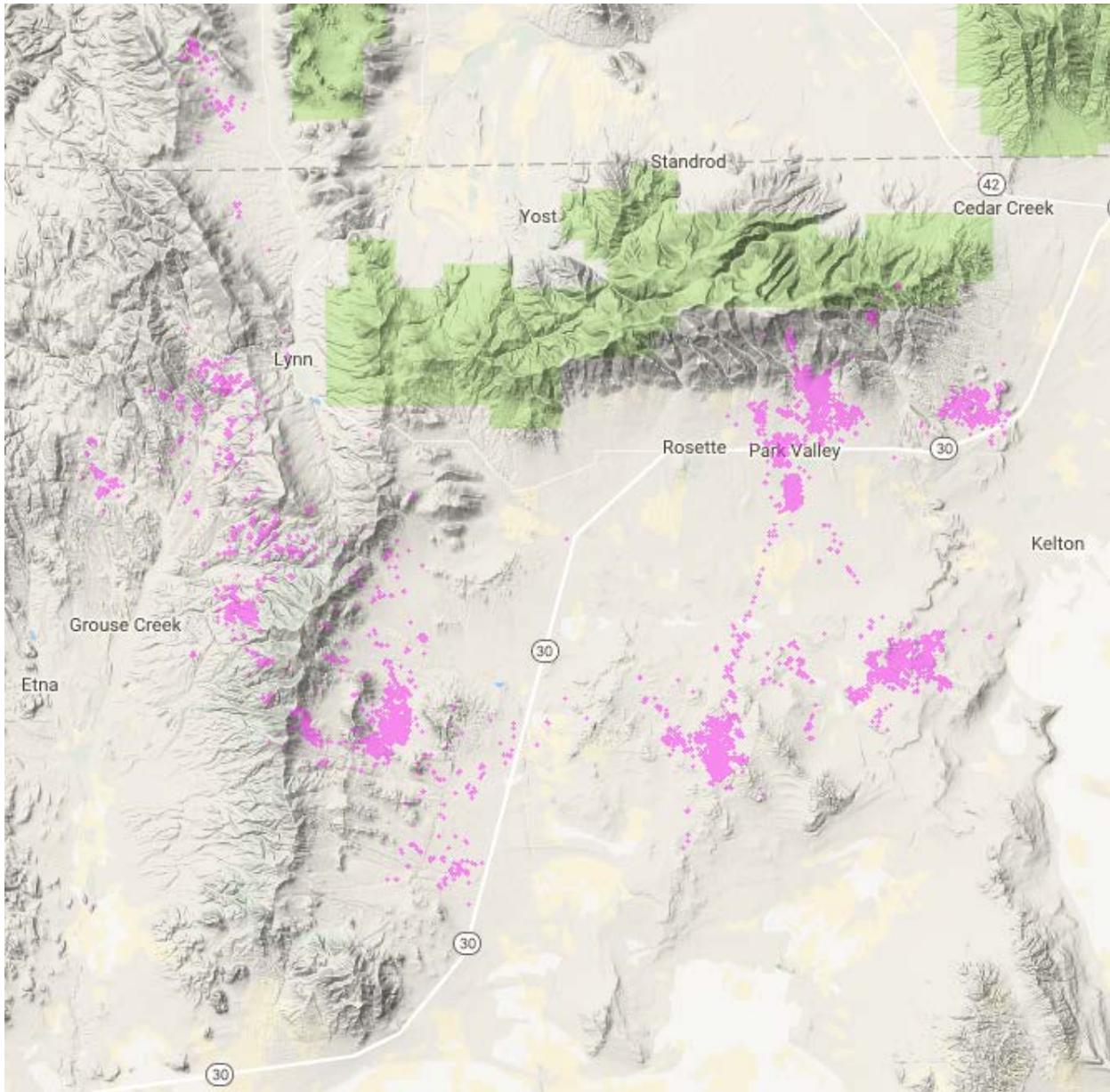
removal projects for sagebrush restoration. There is also a beaver reintroduction effort going on in the area as well as watershed restoration using beaver dam analogues (BDAs).

Utah State University Extension has hired a Sagebrush Ecosystem Alliance (SEA) coordinator for the WBECRM area. The SEA is a demonstration project which will assist in enhancing collaborative sagebrush conservation in northwest Utah. This partnership aims to: 1) build field-level capacity for collaborative sagebrush conservation, 2) improve cross-agency, cross-partner conservation and communication in sagebrush management, and 3) create efficiency in managing public land uses and implementing restoration projects in the sagebrush ecosystem. The SEA is supported by the Bureau of Land Management, Intermountain West Joint Venture, Pheasants Forever, INC, permittees, local governments, CBCP, USU Extension, U.S. Fish and Wildlife Service Partners Program, the National Fish and Wildlife Foundation, WBECRM, Utah Division of Wildlife Resources, the Utah Grazing Improvement Program, the Natural Resources Conservation Service (NRCS), the NRCS Sage Grouse Initiative program, the Mule Deer Foundation, and the Jack H. Berryman Institute.

The CBCP continues to conduct research in the SGMA to better understand sage-grouse responses to projects. The current project has incorporated GPS-PTT radios into a multiple-year effort to collect data on sage-grouse habitat selection (Figure 4). The primary objective of the study is to understand how sage-grouse use and are affected by the landscape-level management of conifers removed to restore sagebrush communities. This research is ongoing. Justin Small is the graduate student. His major professor is Dr. Terry Messmer, USU Extension Wildlife Specialist.

### **Upcoming Year Work Plan**

The WBECRM continues to evolve to focus on all of the natural resource and community needs in the SGMA. Habitat improvement projects, including those which address weed and wet meadow areas, will be a focus of work at and between meetings.



**Figure 4.** Map of greater sage-grouse locations obtained from GPS-PTT radio-marked female greater sage-grouse (*Centrocercus urophasianus*) in the Box Elder Sage-grouse Management Area. This map demonstrates the large landscapes necessary for sage-grouse populations. The data points represent a very small portion of the population, thus may not represent the entire population.