Final Report from Defenders of Wildlife

Project Title: Turbo-fladry Experimental Project
NRCS CIG cooperative agreement number 68-0211-10-028

Project Director: Suzanne Asha Stone, Western Gray Wolf Conservationist, Defenders of Wildlife, Intermountain Office, P.O. Box 773, Boise, Idaho 83701

Project Collaborator(s):

- Mike Henslee, Plateau Farms Sheep Producer
- Mike Stevens, Lava Lake Land & Livestock Sheep Producer
- John Peterson, Sheep Producer
- Rick Williamson, USDA/APHIS Wildlife Services
- Kurt Nelson, U.S. Forest Service – Ketchum Ranger District
- Jerome Hansen, Idaho Department of Fish and Game
- Larry Schoen, Blaine County Commissioner
- John Faulkner, Faulkner Livestock
- John Peavey, Flat Top Sheep Ranch

Project Purpose: To reduce conflict between livestock and wildlife by testing the efficacy of turbo-fladry and complementary technology in central Idaho areas with historic high losses of livestock and wolves.

Project Activities:

- Defenders of Wildlife purchased and deployed four complete sets of the turbo-fladry night corrals, which included the fladry itself, poles, clips, an insulator, a gate closer, a solar energizer and a waterproof bag to store and move the kit. Three of these were distributed to Faulkner Land and Livestock, Plateau Farms, and Lava Lake, along with field technicians who assisted these and other livestock operators with installing and removing these corrals. One spare corral kit is on stand-by as a replacement. The equipment can be used for a maximum of three grazing seasons before it needs to be replaced.

A field crew sets up a fladry corral for the Faulkner Livestock herd, 2011.

- We tested the use of SPOT GPS units before purchasing them but found that they were not always applicable for the project area. We purchased high power spot lights and radio receivers which we also distributed to producers and to our field crew. Additionally, we purchased remote motion sensitive cameras to monitor wolf and livestock activity.

- Defenders provided training in nonlethal deterrent techniques for the agencies and livestock cooperators. This included the use of radio telemetry monitoring, turbo-fladry, spot lighting, radio activated alarm systems, removal of attractants and more. Carter Niemeyer, former Idaho U.S. Fish and Wildlife Service Wolf Coordinator, Rick Williamson, former Idaho State Wildlife Services wolf control coordinator, and Suzanne Stone, Defenders' wolf coexistence specialist, led the training. In August 2011, Defenders and the Blaine County Commission also co-sponsored a wolf and livestock coexistence workshop for area ranchers to learn more about the Wood River Wolf Project and the successful measures that have led to the near-zero losses of livestock in the project area. Those attending the demonstration workshop included representatives of the Idaho Governor's Office of Species Conservation, Idaho Department of Fish and game, the U.S. Fish and Wildlife Service, the owners of Lava Lake Land and Livestock with other area ranchers, and international researchers studying nonlethal methods. Idaho Public Television and the University of Montana filmed the event for programs on wolf coexistence efforts. The methods highlighted included turbo-fladry, livestock guard dogs, nonlethal ammunitions, sound and light deterrents, livestock carcass disposal and others.

Demonstrating a turbo-fladry carcass barrier.

- Our field technicians assisted with providing the night corrals, as well as helping the herders to set up and remove them. The corrals have been 100 percent effective so far in preventing sheep losses to wolves when used appropriately. The greatest limiting factor in their practical use is terrain – if the sheep herds are using steep, rugged and heavily wooded bed grounds, the use of the night corrals is often impractical. Fortunately, the herders can often select terrain that is more suitable for the use of night corrals and have even found that the corrals often help reduce the overall time spent managing the herds. The attached map [Figure 1] depicts the June through August 2011 grazing season, and the red lined circles delineate pack core territory and the rest are sheep grazing bands as they travel through the project area.

Results/Deliverables:

After three years of testing these methods, we have found that turbo-fladry, increased human presence, the use of multiple guard dogs after denning season, and scare devices such as high density spotlights and alarms are highly effective in reducing livestock losses to wolves in the Sawtooth Challis National Forest.

Over the course of the project to date, a total of 40,000 sheep have utilized the project area. Before the project was initiated, sheep and livestock guard dog losses to wolves were a common occurrence, and wolves were killed to reduce losses. When wolves are killed, it does not prevent future losses of livestock. As research has indicated, new wolves rapidly fill in vacant habitat, and if the livestock remains vulnerable to wolf predation, the cycle of depredations and loss will continue.

Since our project began, there have only been two incidents of multiple sheep losses to wolves. In both cases, the sheep were unprotected, and nonlethal methods were not used to prevent

depredation. Even with these two incidents, less than 20 sheep have been killed by wolves, and no wolves have been killed as a result of losses with the project area.

The project team developed a new brochure for herders translated into Spanish, explaining the use of turbo-fladry and other deterrents. We are also working on a site analysis system that will provide a method for collecting data and prescribing "best practices" recommendations for individual ranchers.

The greatest obstacle to the use of nonlethal deterrents to prevent wolf-related livestock losses is their lack of use by the majority of livestock producers. Projects like this are essential in providing proof of the effectiveness of these tools, but more needs to be done to help inform producers of their availability and correct application. Additionally, this project has been limited primarily to sheep protection. In 2011, the Blaine County Commission and area ranchers requested the expansion of this project to a county-wide level. We initiated this expansion of our project this year by co-sponsoring a training workshop for Blaine County livestock owners at the agricultural fair in Carey.

A training for ranchers in nonlethal wolf deterrents during the Carey, ID agricultural fair.

Another important element that restricts the use of these tools is funding. Blaine County and local residents are providing some financial support for this project, but the majority of funding has been provided by Defenders of Wildlife, including through generous grants provided by NRCS. New funding sources will be critical to the expanded use of these preventative methods.

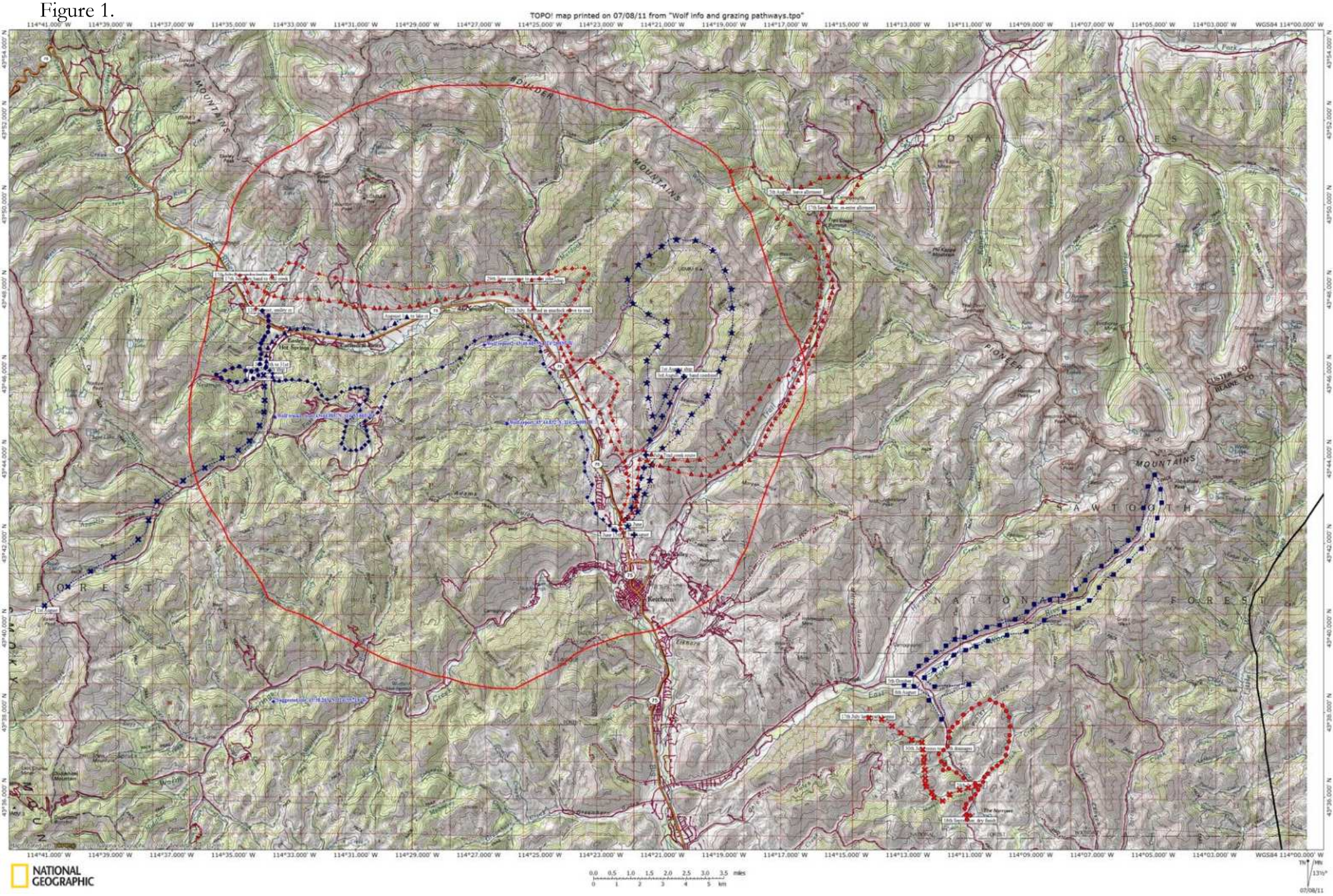
Potential for Transferability:

The Wood River Wolf Project has served as an excellent demonstration project that offers great potential for transferability to other areas where wolves and livestock are present. As a result of this project's success, agencies in adjacent states, including Oregon and Washington, and researchers from Europe and even Australia, are testing the use of turbo-fladry to help reduce livestock losses to wolves and other wild canids. This type of stakeholder-driven project is also encouraging the development of similar projects in Northwest Oregon and Washington.

Conclusion:

We deeply appreciate the support of the Natural Resources Conservation Service, and hope that the NRCS team will consider visiting the project area and hosting a presentation of the project's achievements with our participants, as well as discuss ideas for expanding our efforts beyond the initial project area.

Figure 1.


TOPO! map printed on 07/08/11 from "Wolf info and grazing pathways.tpo"
BOULDER MOUNTAINS
SAWTOOTH NATIONAL FOREST
PIONEER MOUNTAINS
Ketchum
Hot Springs
NATIONAL GEOGRAPHIC

Key


Faulkner Lamb and Livestock, Fairfield lamb band


Faulkner Lamb and Livestock, Baker Creek lamb band


Faulkner Lamb and Livestock, Baker Creek dry band (no lambs) to Smiley Creek


Faulkner Lamb and Livestock, Baker Creek dry band (no lambs) to Lake Creek


Lava Lake Lamb and Livestock, North Fork/Boulder/Trail Creek lamb band


Lava Lake Lamb and Livestock, North Fork/Boulder/Trail Creek dry band (no lambs)


Henslee, Owl Creek lamb band


Faulkner Lamb and Livestock, Lake Creek lamb band


Faulkner Lamb and Livestock, Lake Creek dry band (no lambs)


Peavey, Coral Creek/ pioneer cabin north lamb band


Peavey, Lower Hyndman/ pioneer cabin south lamb band


Peavey, Fisher-grays/Porcupine Creek dry band


Faulkner Lamb and Livestock, east fork dry band


Lava Lake Lamb and Livestock, Cove Creek lamb band


Lava Lake Lamb and Livestock, Cove Creek dry band (no lambs)


Kowitz, warm springs dry band (no lambs)


WOLF ACTIVITY INFORMATION, TELEMETRY LOCATION, SCAT, SIGHTING, TRACKS ETC.


Rough territory estimation circle, 8.4 mile radius consistent with average territories in 2010 as used in: Holyan, J, Holder K, Cronce J and Mack C (2011) *Wolf conservation and management in Idaho; progress report 2010* Nez Perce Tribe Wolf Recovery Project, P.O.Box 365, Lapwai, Idaho