



# LAVA LAKE

Sharing the Range:

≈ Co-existing with Wolves ≈

Presentation to Idaho State Legislators

February 25<sup>th</sup>, 2016

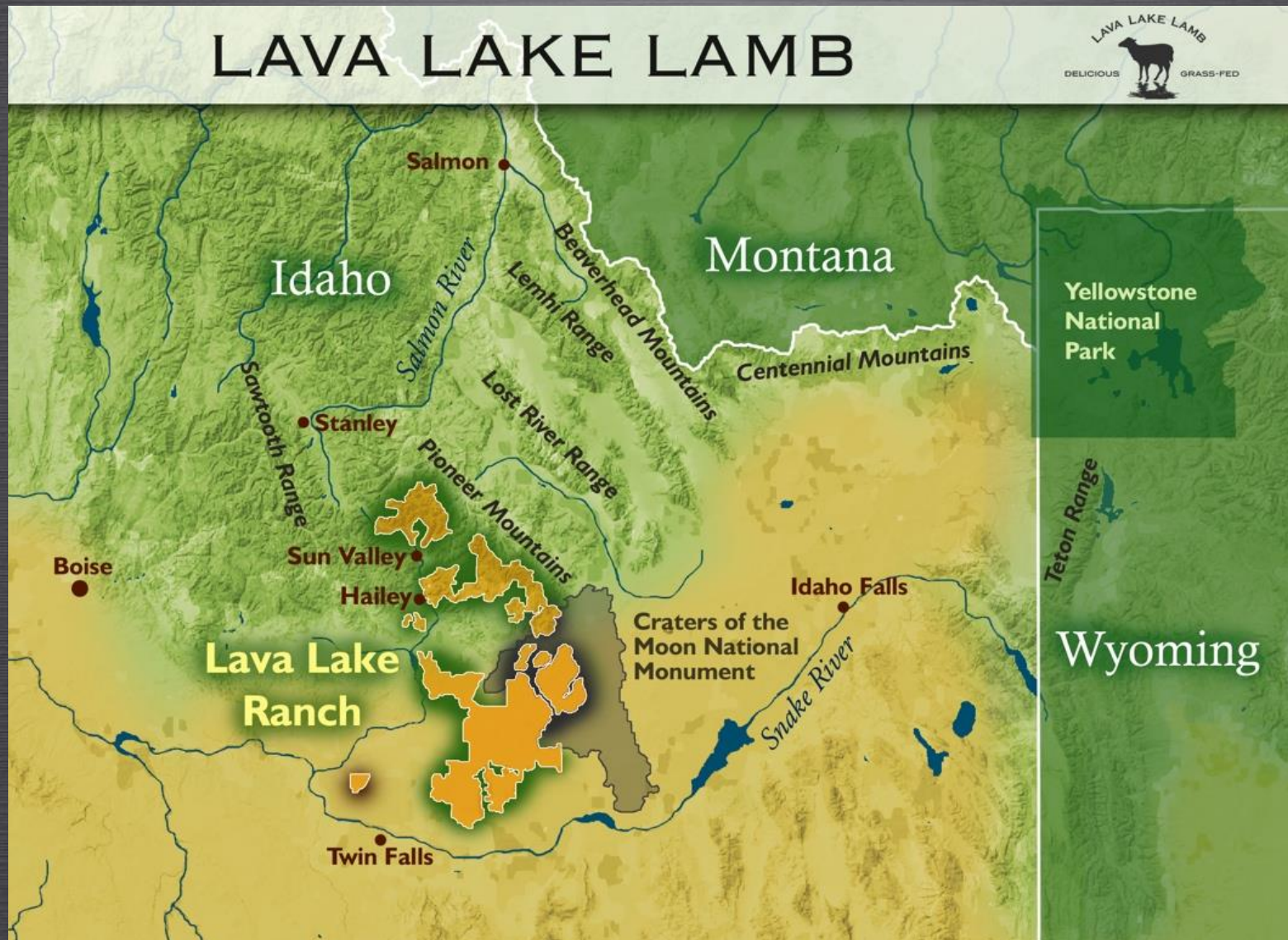
# LAVA LAKE RANCH



Bell Rock and the Little Wood River Watershed, photo by Glenn Oakley

- Family ranch in Idaho
- Homestead Act settlement history
- Public and private rangeland
- Several historic sheep ranches
- 875,000-acre operating area
- Founded 1999

# Lava Lake Ranch Operating Area



Lava Lake Land & Livestock operates on the Snake River Plain, in the "intermediate country" north of Craters of the Moon National Monument and Preserve, and in the Pioneer, Smoky and Boulder Mountains of south-central Idaho

# Transhumance Range Operator

Our sheep bands graze north for 125 miles in the spring...



Mario and his band in sagebrush steppe on the way to the high Pioneers, photo by Glenn Oakley



➤ Snake River Plain



➤ Intermediate Country

## ➤ High Country

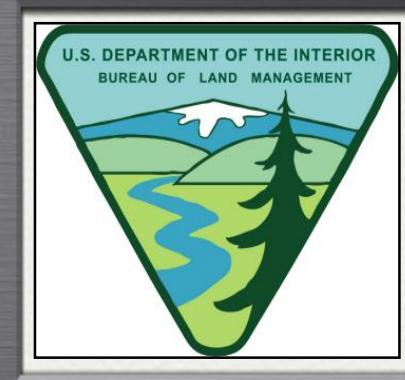


Devil's Bedstead, the High Pioneers and the Big Lost River Watershed

# Landscape-scale Conservation



National Award for Outstanding  
Achievement in Rangeland  
Management



National Rangeland  
Stewardship Award



Cecil D. Andrus Leadership  
Award for Sustainability and  
Conservation

# LAVA LAKE LAMB



Bell Rock and the Little Wood River Watershed, photo by Glenn Oakley

## *Grass-fed Goodness from the Northern Rockies*

Lava Lake Lamb is grass-fed summer lamb raised sustainably and humanely on family ranches in the Northern Rockies. Our lamb comes from high mountain pastures and is lean and tender with a delicate flavor of mountain grasses and herbs. Nutritionally rich, Lava Lake Lamb is 100% grass-fed and never given any hormones or antibiotics.



# LAVA LAKE AND WOLVES

- *Canis lupus* has been a Lava Lake target conservation species since 2001
- Wolves were first seen on Lava Lake deeded ground in the fall of 2002 in Copper Creek
- Early depredation events included 36 ewes and lambs killed in one day and 25 ewes and lambs, two rams and one guard dog killed in one night

# LAVA LAKE AND WOLVES

- We reached out to **Defenders of Wildlife** to see how we might protect our animals
- With Defenders' help, Lava Lake became expert in the application of **non-lethal tools and techniques** to keep wolves and our livestock separated
- Lava Lake is one of the **original collaborators** in the **Wood River Wolf Project**

# WOOD RIVER WOLF PROJECT

- The WRWP collaborative **began operating in 2008**
- This month, on February 8<sup>th</sup>, the Project held its first Collaborators' Meeting of 2016 to prepare for the first full operating season with the **Lava Lake Institute for Science & Conservation** acting as fiscal agent
- Idaho's Blaine County is the **first county in the U.S. to adopt policy supporting nonlethal deterrents for wolf - livestock conflicts** across a wide area
- In January 2016, members of the Project submitted a **paper describing Project results** to the Journal of Mammalogy for peer review

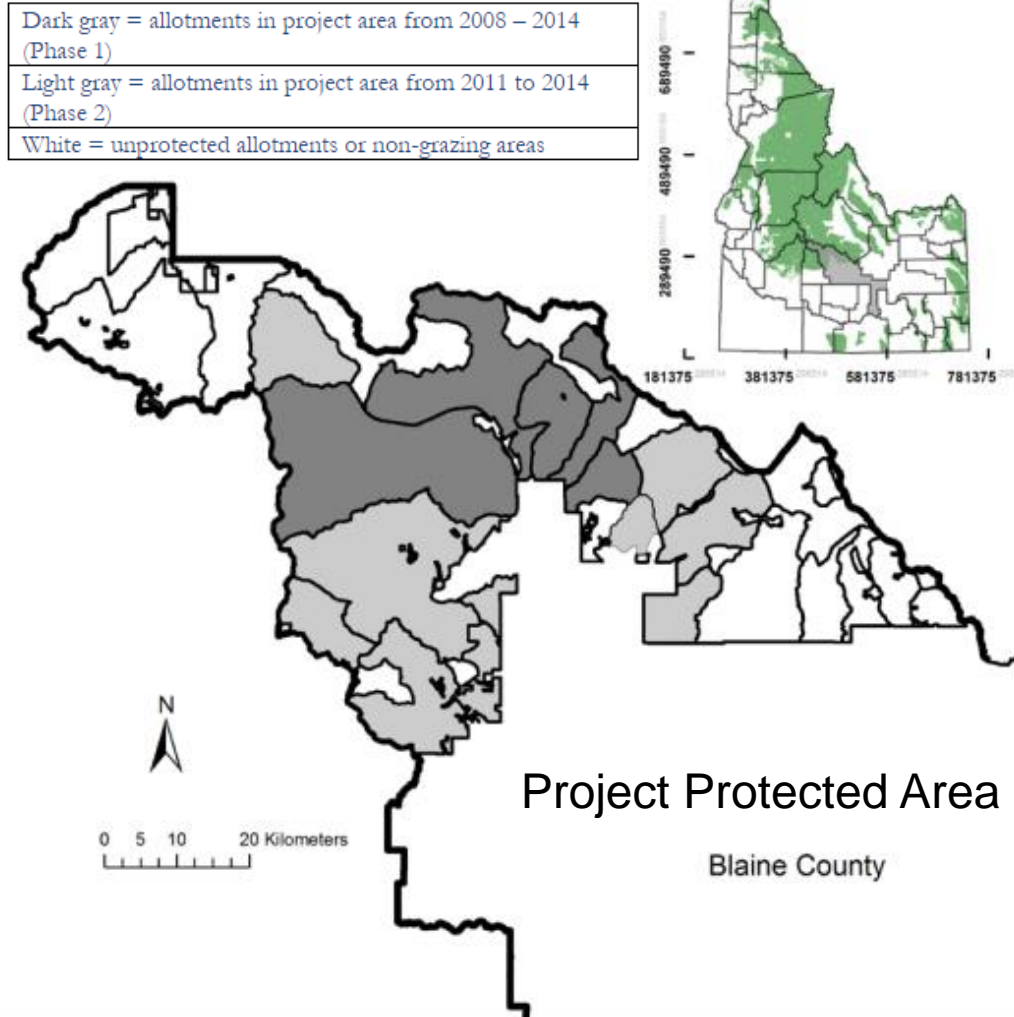
# WOOD RIVER WOLF PROJECT

## ➤ Project Goals

- Minimize or eliminate the **number of sheep depredation events** involving wolves
- Minimize or eliminate the **number of sheep lost** to wolves
- Minimize or eliminate the **lethal control of wolves**
- **Save producers Money**

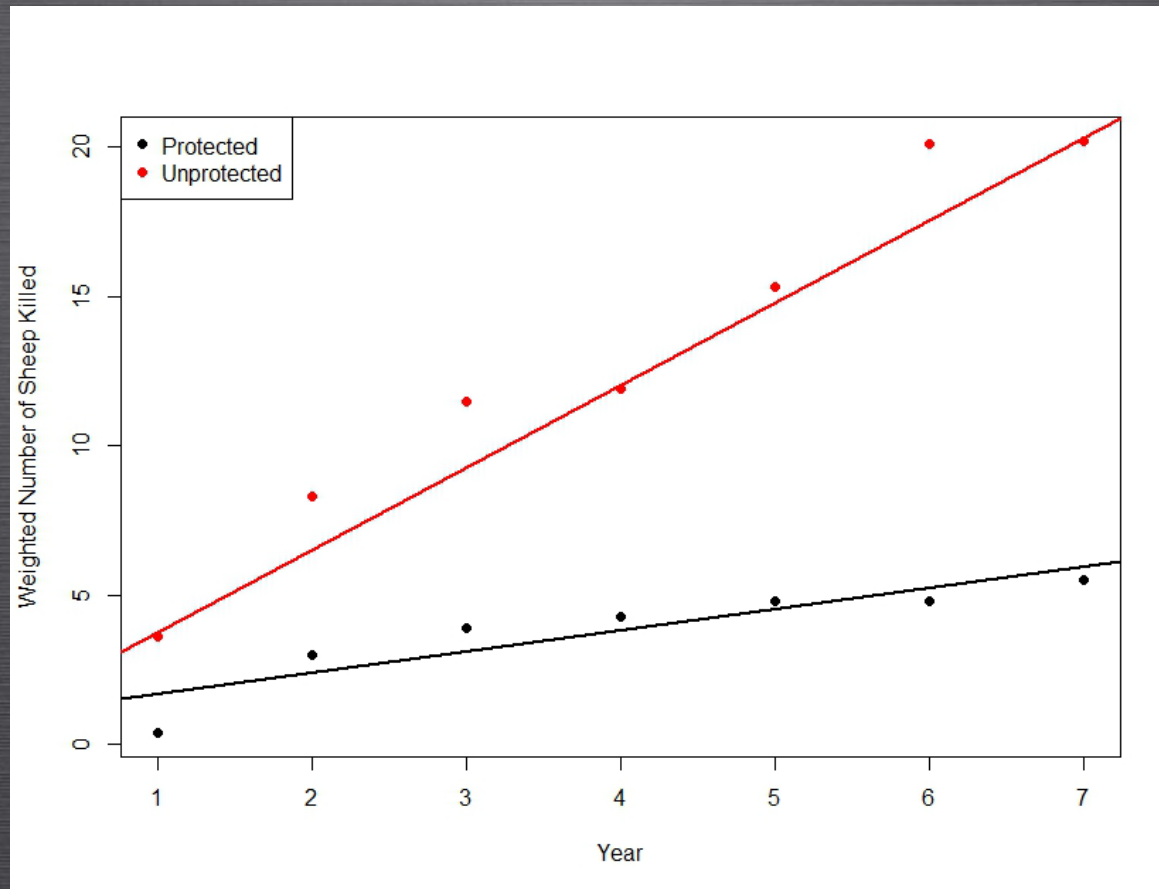
# WRWP PROTECTED AREA

Figure 1b. Grazing allotments in northern Blaine County.



# WOOD RIVER WOLF PROJECT

RESULTS



Wolves Killed = 0

- 3.5 times lower wolf depredation loss in the Protected Area than in the Adjacent Area
- Presence-weighted sheep loss is lowest in Idaho at 0.02%

# WRWP BAND KITS

- Starting in 2016, the Project will provide nonlethal deterrent equipment - “Band Kits” - for participating producers’ sheep bands grazing in the WRWP Protected Area
- Band Kit contents cost > \$3,000 at MSRP, but the Project is able to procure them for < \$2,000
- Band Kits are checked out to producers each season
- Band Kits are placed with herders!
- There is no charge for the use of Band Kits other than replacement / refurbishment costs in case of loss or damage



➤ Avery assembling Band Kits in Hailey

# WRWP COLLABORATORS

- U.S. Forest Service
- Bureau of Land Management
- Idaho Department of Fish and Game
- Wildlife Services
- Idaho Governor's Office of Species Conservation
- Blaine County
- Kowitz Sheep Company
- Flat Top Sheep Company

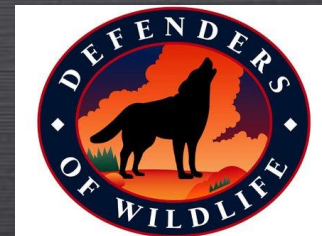


# WRWP

## COLLABORATORS

Living with Wolves

- Plateau Farms
- Faulkner Land and Livestock
- Lava Lake Land & Livestock
- Living with Wolves
- National Wolfwatcher Coalition
- Lava Lake Institute for Science & Conservation
- Defenders of Wildlife



# TOOLS AND TECHNIQUES

- Human Presence
- Livestock Guarding Animals
- Fencing
- Lights
- Noise
- Satellite Communication Tools
- Other Tools and Techniques

# TOOLS AND TECHNIQUES

## ➤ Human Presence

- Herder stays in **close proximity to band** at night
- Add a **second herder**, if available, in wolf country
- Herders **alternate on-duty** times
- Herder **sleeps inside bedground** perimeter with sheep
- Herders **urinate around bedground** perimeter



# TOOLS AND TECHNIQUES

## ➤ Livestock Guardian Animals (LGAs)

- Llamas, donkeys and other LGAs are effective at guarding farm flocks on open, flat ground from predation by coyotes
- Livestock Guardian Dogs (LGDs) are effective at guarding sheep from wolf depredation in rough country
- We use Great Pyrenees and Akbash LGDs
- Pyrenees are bigger and “nicer”
- Akbash are somewhat smaller and more aggressive
- Double or triple the guard dog contingent in wolf country (maximum of five or six LGDs per band)

# TOOLS AND TECHNIQUES

- Temporary Fencing
  - Fladry

# TOOLS AND TECHNIQUES

## ➤ Temporary Fencing

- Fladry
- \*\* Turbofladry \*\*



➤ Hector shows how it's done



➤ North Fork Big Lost River

# TOOLS AND TECHNIQUES

## ➤ Lights

- Very bright **hand-held lights**
- **Foxlights** (complex pattern, unpredictable discharge, colors)

## ➤ Noise

- Cracker shells (this is now a DHS issue...)
- **Starter Pistol**
- Shotgun discharge
- “Boom Box”
- **Air horns**



# TOOLS AND TECHNIQUES

## ➤ Communication Tools

### ■ Satellite phone

- ✓ Voice communication!
- ✓ Can (usually) be activated for the grazing season
- ✓ Herder can call for reinforcements!
- ✓ Improves herder safety

# TOOLS AND TECHNIQUES

## ➤ Communication Tools

### ■ SPOT device

- ✓ Transmits one of several pre-composed messages
  - ❖ To rancher
  - ❖ To agency, e.g., USFS
- ✓ Less fickle, more dependable and simpler to use than satellite phone
- ✓ Not very flexible...

# TOOLS AND TECHNIQUES

## ➤ Communication Tools

### ■ DeLorme inReach devices

- ✓ Real texting – to anyone, anywhere
- ✓ More flexible than SPOT device
- ✓ Yet, like SPOT device, inReach devices are less fickle, more dependable and simpler to use than satellite phone
- ✓ Two flavors:
  - ❖ inReach Explorer (more features than needed)
  - ❖ **inReach SE** (just right)

➤ Optaciano listens for wolves



# TOOLS AND TECHNIQUES

## ➤ Other Tools and Techniques

### ■ Telemetry

- ✓ Requires collared wolves
- ✓ Operator needs access to collar frequencies
- ✓ Minimizes potential for ambush
- ✓ Enables operator to take action pro-actively vs. reactively
- ✓ Reduces losses
- ✓ Sheep, dogs, ranchers, agencies, wolves, public...

All Win!

# TOOLS AND TECHNIQUES

## ➤ Other Tools and Techniques

### ■ Carcass removal

- ✓ **Dead and sick sheep attract wolves** (and bears and coyotes and foxes and everyone else that's looking for easy protein...)
- ✓ If a carcass can be removed reasonably, it should be
- ✓ If it can't, it should be bagged and covered with rocks and/or logs
  - ✧ Bio-degradeable carcass bags are being developed
  - ✧ Jury is out on bagging efficacy (a “sous vide MRE”)

- Wolves will travel miles to investigate and scavenge dead livestock
- Carcass removal or barriers help reduce loss of live sheep nearby



# TOOLS AND TECHNIQUES

## ➤ Other Tools and Techniques

### ■ Animal management

- ✓ Don't trail your sheep over the top of known wolf den or rendezvous sites!
- ✓ If possible, and range conditions permit, avoid areas of current and recent historical wolf activity during the grazing season
- ✓ Temporarily reduce the number of guard dogs per band during the wolf pupping season to avoid predator protective response

# TOOLS AND TECHNIQUES

- Wolves will become **habituated** to individual deterrents
- Do not deploy deterrents **unless needed**
- Do not use any **single deterrent** for an **extended period**
- Use a **mix** of deterrents
- **Don't use all your deterrents** at the same time
- **Change the mix** regularly
- Adjust the mix to **suit the situation**

# LAVA LAKE RESULTS

- Lava Lake now experiences depredation on sheep by wolves once every two to three years on average
- When wolf depredation events occur, livestock loss is typically one to three animals
- Lava Lake has never requested a lethal control action on wolves

➤ There is no substitute for a well-trained herder!



# FINAL THOUGHTS

- Herder training is critical
- Communication among the *herder*, his *camptender* and his *foreman* at HQ is important
- Make sure the cognizant land and wildlife management agencies understand your objectives and protocol – communicate and collaborate!

## ➤ Collaboration...!



# CONCLUSION

➤ We believe this...

*The application of nonlethal control measures can significantly reduce the interaction of sheep and wolves, thereby greatly reducing livestock loss and obviating the need for lethal control*

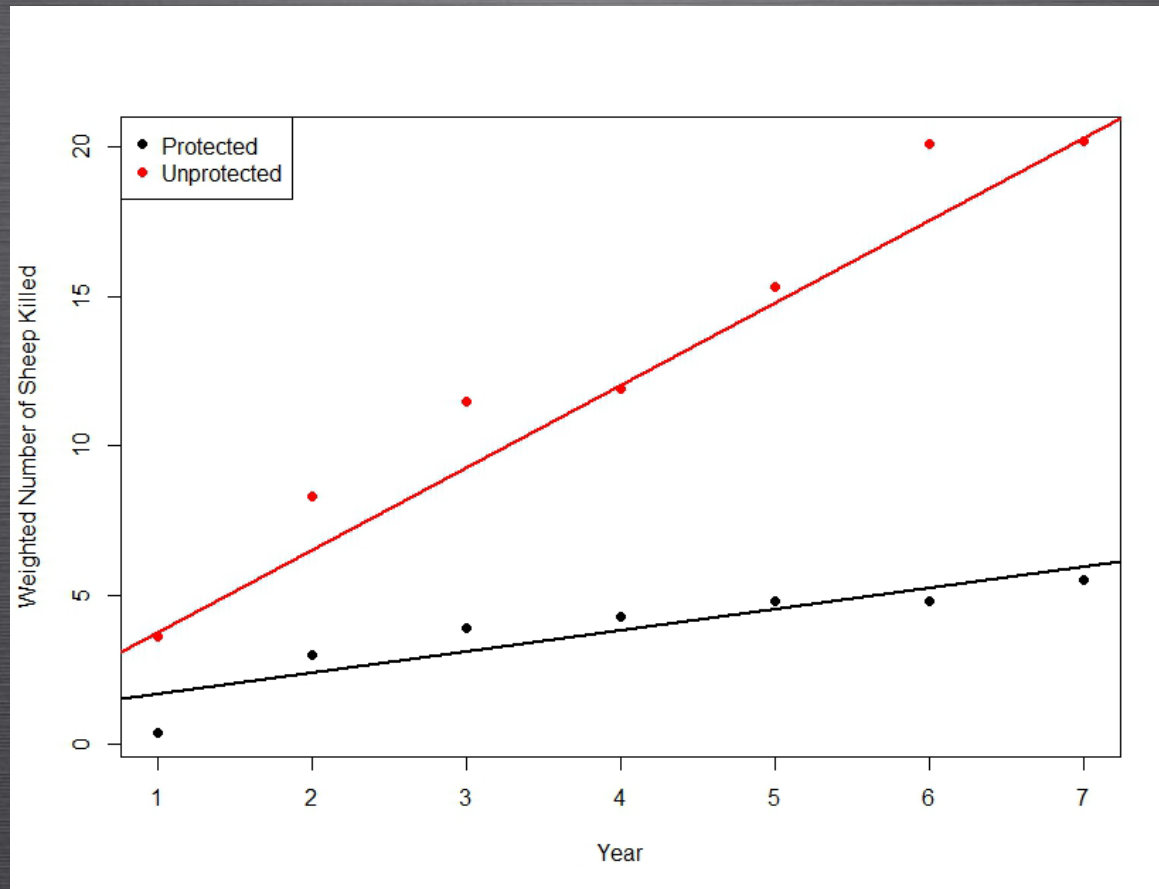
# THANK YOU!



photo of West Fork Fish Creek by Glenn Oakley as it appeared in Sunset Magazine, February 2011

# WOOD RIVER WOLF PROJECT

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