Pathways to Success:

Integrating Human Dimensions into Fish and Wildlife Management
Livestock protection dogs as a predator management tool: A survey of sheep producer’s attitudes
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- Federal restrictions on the use of predacides
- Inability of existing techniques to provide adequate relief from predation
- Desire by some to use a non-lethal approach
“Where are we now?”
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Lethal methods of predator control are continuously under fire, and in some cases, have been completely eliminated.

Livestock Protection Dogs have become an extremely important means to reduce predator attacks on sheep.
Sheep and Goats
Death Loss


Sheep and Lambs
Predator losses

US
247,200
39% of total losses
$20.5 million
ASI Survey (Dec 2009)

The ASI Livestock Protection component was written with the intention of:

- Identifying research needs to increase effectiveness and applicability of LPDs along with other management/prevention tools presently available

- Establish economic values of LPDs (Cost/benefit, Loss Compensation)
According to the 2004 NASS Sheep and Goats Death Loss report, producers throughout the United States spent 9.8 million dollars on non-lethal methods to control predators. Shed lambing, fencing, night penning, and livestock protection dogs were the most commonly employed non-lethal methods.

The ASI survey included these methods, and two lethal methods employed by producers, to evaluate the cost and perceived effectiveness of producer employed predator control methods.
Producer costs to implement predator control methods (US)

<table>
<thead>
<tr>
<th>Method</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shed Lambing</td>
<td>$18,000</td>
</tr>
<tr>
<td>Fencing</td>
<td>$8,000</td>
</tr>
<tr>
<td>Trapping/Capture Devices</td>
<td>$2,000</td>
</tr>
<tr>
<td>Livestock Protection</td>
<td>$2,000</td>
</tr>
<tr>
<td>Call/Shoot</td>
<td>$2,000</td>
</tr>
<tr>
<td>Other</td>
<td>$4,000</td>
</tr>
</tbody>
</table>
Protecting People
Protecting Agriculture
Protecting Wildlife

Cost and Effect of Predation Prevention Measures (US)

- Shed Lambing
- Fencing
- Trapping/Capture Devices
- Livestock Protection Dogs
- Call/Shoot

Cost to Implement
Very Effective
Somewhat Effective
Not Effective

Wildlife Services
Protecting People
Protecting Agriculture
Protecting Wildlife
Percentage of respondents utilizing LPDs reporting change in predation

- Increased, 10%
- Decreased, 90%
Percentage of predation reduction

Decreased 62%
Would you recommend the use of LPDs?

Yes, 95%

No, 5%
## LPD “negative experience” results

378 problems were reported in 13% of the 1,891 responses. Twenty people reported a problem but also praised the dogs. Nine wrote in simply to praise LPDs.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Incidents</th>
<th>% People Reporting</th>
<th>% Problems Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roaming</td>
<td>93</td>
<td>37.5%</td>
<td>24.6%</td>
</tr>
<tr>
<td>Attacking Non-predators</td>
<td>92</td>
<td>37.1%</td>
<td>24.3%</td>
</tr>
<tr>
<td>Neighbors/Barking</td>
<td>39</td>
<td>15.7%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Training</td>
<td>28</td>
<td>11.3%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Other</td>
<td>24</td>
<td>9.7%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Don’t Work</td>
<td>23</td>
<td>9.3%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Cars &amp; Roads</td>
<td>18</td>
<td>7.3%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Guarding Additional Area</td>
<td>10</td>
<td>4.0%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Strangers</td>
<td>9</td>
<td>3.6%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Trapping/Hunting</td>
<td>8</td>
<td>3.2%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Cost</td>
<td>7</td>
<td>2.8%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Becoming Pets</td>
<td>6</td>
<td>2.4%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Digging</td>
<td>5</td>
<td>2.0%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Sheep Eating Dog Food</td>
<td>4</td>
<td>1.6%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Destroying Property</td>
<td>4</td>
<td>1.6%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Breeding</td>
<td>4</td>
<td>1.6%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Injury</td>
<td>4</td>
<td>1.6%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Praise</td>
<td>29</td>
<td>8.1%</td>
<td></td>
</tr>
</tbody>
</table>
“Where are we going?”
Where are we going?

- Education
- Producer Responsibility
- Research

Protecting People
Protecting Agriculture
Protecting Wildlife
Education
Livestock protection dogs are an important component of managing predation on both small-farm flocks, and on large landscapes, including US Forest Service (USFS), and Bureau of Land Management (BLM) grazing allotments.
As more people have sought to use public lands for a variety of purposes, including hiking, biking, and horseback riding, in areas historically utilized for livestock grazing, increasing amounts of land use conflict have resulted.

Furthermore, increasing urbanization has led to a number of conflicts between livestock protection dogs and neighbors.
Ranching, recreation collide in the great outdoors

The mountain biker was excited about her big race in Colorado's wilderness. And nothing irked the shepherder like the sports crowd. It was a disaster waiting to happen.

By Nicholas Riccardi

November 27, 2009

Reporting from Camp Hale, Colo.

As soon as Renee Legro saw the sheep, she screamed.

The herd, 1,300 strong, has been coming for 30 years to graze in this valley on the backside of the Continental Divide. But as Colorado has become an adventure sports destination, the once-empty valley has filled with hikers, campers and mountain bikers like Legro, and she was about to tragically embody the collision of the old West with the new.

Legro, 33, screamed because she knew what came with the herd -- guard dogs. Shortly after she rolled down a hill and came upon the sheep, a dog leaped at her, locked its jaws on her hip and yanked her off her bike.

A second dog pounced as she fell. The two enormous canines, powerful enough to fend off bears, tore at her until her cries drew two campers who drove them off. The emergency-room doctor lost count of how many stitches she required.

To Legro and her husband, Steve, there was one person responsible -- Sam Robinson. One of a dwindling number of sheepherders in Colorado's mountains, Robinson, 54, turned to guard dogs a decade ago, after the state banned the use of traps to prevent mountain lions, coyotes and bears from destroying herds.

"We don't have any other option," Robinson said.

The Legros see things differently. In their years of hiking, biking and skiing the magnificent open spaces near Vail, they have fled from ranchers' dogs several times. "I cannot bring my dog up to the forest and let it run wild and attack people," said Steve Legro, 37. "Neither should anyone else."

They wanted Robinson charged with a crime.
Bikers call for safer trails

Mountain bike racer suffers fractured ankle, 68 stitches

• EAGLE COUNTY, Colorado — After livestock dogs attacked a mountain biker during Wednesday’s Camp Hale Hup race, some are calling for action to better protect bicyclists and others who are on the trails.

Vail resident Renee Legro was nearing the end of the race in Camp Hale when two Great Pyrenees dogs, weighing about 100 pounds and 125 pounds, attacked her, knocking her off the bike.

“She never even saw the dog till it was right up close to her,” said her husband, Steve Legro. “She didn’t really have time to do much,”

Other racers and bystanders reported that the dogs would not stop attacking Legro, and one bystander had to get his car and drive toward the dogs honking in order to chase them away.

Renee Legro suffered a fractured ankle and was released from Vail Valley Medical Center with 68 stitches. She wanted to get home to be with her 14-month-old baby, her husband said.

“She’s going to be OK, but 68 stitches isn’t something you just get over, and it’s a mental thing, too,” Steve Legro said. “How do you recover from being mauled by dogs?”

• Sheepdog run-ins

• The owner of the dogs has been identified, and the dogs are being held at the animal shelter for a 10-day observation period, said Eagle County Animal Services Director Natalie Duck.

She declined to give more information until Animal Control and the U.S. Forest Service finish investigating the attack.

Livestock guard dogs such as great Pyrenees are often used by ranchers to protect sheep from coyotes and other predators. It is common for Forest Service land to be used by both recreational, ranching and grazing purposes, and trail users are advised to take precautions when there are sheep in the area, said Acting District Ranger Cary Green. In Renee Legro’s case, she was not riding through a flock. She and a flock were headed toward the same road when the dogs attacked, her husband said.
ATTENTION
Sheep Grazing in This Area

FROM: [ ] TO: [ ]

Livestock Protection Dogs in Use

Sheep Operators use dogs to manage and protect their sheep by scaring off predators. The dogs are here to protect the sheep. If you do not appear to be a threat to the sheep, many times the dogs will just watch you.

Please Avoid Conflict With Protection Dogs.

DON'T:
- Allow your dogs to run free of your vehicle or barn yard.
- Make sudden movements around the dog(s) or sheep.
- Approach the dog(s) or sheep at a distance less than the height of the dog(s) or sheep.
- Walk or gallop towards the dog(s) or sheep as they approach.

DO:
- Keep a safe distance from the dog(s) or sheep.
- Be aware of the dog(s) or sheep's approach.
- Watch for the dog(s) or sheep's actions and the handler.
- Assume the dog(s) and their handler are aware of your presence.

If you have questions about livestock protection dogs or other wildlife damage management issues, please call Wildlife Services—Agronomic Wildlife in the USDA, the Animal and Plant Health Inspection Service (APHIS), or the National Wildlife Research Center (NWRC) at 1-800-905-9986. Learn more about us on the APHIS website at www.aphis.usda.gov or the NWRC website at www.nwrc.usda.gov.

Producer Responsibility
Livestock Protection Dog
Best Management Practices
What are BMPs?

Recommendations to enhance the professional qualifications and judgment of livestock producers utilizing LPDs.

- Optimizes the use of LPDs
- Minimizes conflicts
Research
Research Needs

➢ LPDs and Wolves
Wolves kill 120 sheep at ranch near Dillon

By EVE BYRON of the Helena Independent Record | Posted: Friday, August 28, 2009 6:30 am

HELENA - While the debate about how many wolves are enough to ensure a healthy population will again come to a head in a federal courtroom Monday, a Dillon-area ranch is picking up the pieces from the largest known wolf depredation in recent history.

In a highly unusual move for wolves, they killed about 120 adult male sheep in one incident on the Rebish/Konen Livestock Ranch south of Dillon last week.

That compares with a total of 111 sheep killed by wolves in Montana in 2008, according to Carolyn Sime, the statewide wolf coordinator for Montana Fish, Wildlife and Parks.

"This is one of the most significant losses that I've seen," Sime said. "That situation is really unfortunate."

Suzanne Stone with Defenders of Wildlife added that in the 20 years she’s been working toward ensuring healthy wolf populations, this is the first time she’s heard of such a mass killing.

"I've heard of bears or mountain lions doing that, but what usually happens is the sheep panic and jump on top of one another or fall into a ditch and suffocate," Stone said. "I've never heard of any situation where wolves killed so much livestock in such a short period of time.

"... This is the most extreme case I've ever heard about."

The ranch has suffered confirmed wolf depredations twice in three weeks. In late July, three wolves - two blacks and a gray - killed at least 26 rams. The gray wolf was lethally shot by a federal wildlife manager, and one of the blacks was injured. They thought that would scare off the rest of the pack.

Last week, wolves struck again. This time, they took out 120 purebred Rambouillet bucks that ranged in size from about 150 to 200 pounds, and were the result of more than 80 years of breeding.

"We went up to the pasture on Thursday (Aug. 20) - we go up there every two or three days - and everything was fine," rancher Jon Konen said. "The bucks were in the pasture; I had about 100 heifers with them on 600 acres."

He had some business to attend to in Billings, so Konen told his son to be sure to check on the livestock while he was gone. "He called me, and said it was a mess up there. He said there were dead bucks all up and down the creek. We went up there the next day and tried to count them, but there were too many to count," Konen recalled.

"I had tears in my eyes, not only for myself but for what my stock had to go through," he added. "They were running, getting chewed on, bit and piled into a corner. They were bit on the neck, on the back, on the back of the hind leg. "They'd cripple them, then rip their sides open."
Livestock producers who endured increasing losses to wolves have no doubt the predator needs to be managed by hunting.
Jeff Siddoway, a sheep producer and state senator from Terreton, Idaho, suffered $40,000 in losses this summer due to wolf predation. He said wolves killed more than 100 rams, ewes and lambs and six guard dogs in 11 separate incidents in his grazing areas in Eastern Idaho and western Wyoming. He lost an additional 15 to 20 sheep to black bears and coyotes because the wolves killed the guard dogs.
"I've had problems before," he said. "But this year, it just kept coming."
The wolves kept striking the same areas, even though Wildlife Services killed two wolves from one pack and two from another. "When a pack starts to prey on livestock, they'll keep coming back. They need to give us permission to kill the whole pack," he said.
"Biologists are trying to tell you they just kill the lame, the sick and the poor. That's bunk. They're killers; they kill for the fun of it," Siddoway said.
Research Needs

- LPDs and Wolves
  - Dogs attracting wolves?
  - Effective pack size?
  - Most effective breed(s)?
  - Protective apparatus?

- Human Conflicts
  - Socialization?

- Virtual Fencing (farm flocks)
  - Reduce wandering?

- Economics
  - Survey
Protecting People
Protecting Agriculture
Protecting Wildlife
Questions?