

WITNESS REGISTRATION

Oregon Fish and Wildlife Commission

August 1, 2014, Oregon Department of Fish and Wildlife, Salem, Oregon

EXHIBIT B

PUBLIC HEARING ON: EXHIBIT B: 2015-2017 Proposed Agency Budget

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NAME (Please Print)	MAILING ADDRESS (Please Print)	AFFILIATION (Please Print)	TELEPHONE (Please Print)
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Necanicum Watershed Council

The Necanicum Watershed Council is a 501 (c)(3) non-profit organization of community volunteers who work to ensure that our watershed is a healthy and functioning ecosystem. Through community outreach and education, landowner partnerships, and on-the-ground habitat development projects, we work to further understanding about the Necanicum Watershed and to make sure it has a sustainable future.

August 1, 2014

Madame Chair Bobby Levy
Oregon Department of Fish and Wildlife Commission
4034 Fairview Industrial Drive S.E.
Salem OR 97302

Re: Exhibit B - 2015-2017 PROPOSED AGENCY BUDGET

Dear Madam Chair and Commissioners:

I am writing and speaking to you today to express my concern over the potential loss of the Western Oregon Stream Restoration Program (WOSRP), and the profound repercussions this decision will have on the habitat restoration efforts in western Oregon.

I am no stranger to agency reductions and the State layoff process. After graduating from Oregon State University with a bachelors of science in Fisheries and Wildlife, I immediately went to work for ODFW. After years of seasonal employment, I found a full time position within the Department of Forestry. Then, 5 years ago, ODF experienced similar agency wide reductions and my position was eliminated. I know firsthand how this process works, and how difficult decisions have to be made. I don't envy the managers and staff that are tasked with deciding what programs stay and what programs will go. I very clearly understand that this is a complicated process and there is no good, clear answer. Yet, I plead with you to re-evaluate the budget and look for General Fund reductions that are equitable across the state, don't include cutting an entire program limited to a specific region, and where these reductions won't have lasting effects.

Lack of trust

One of the biggest effects from this cut I see is the loss of trust from partners. I was one of the watershed council representatives on the agency's multi-species plan. I participated through the whole process, from the beginning. A number of other organizations and agencies participated as well, and we worked under that operating assumption that "habitat is important, but specific actions will not be considered during the stakeholder process" because habitat was addressed by the Oregon Plan for Salmon and Watersheds. Partners trusted that ODFW would be true to their word, and now feel lied to. By eliminating the WOSRP, you are sending a clear message to partners that ODFW is not committed to, and can no longer support, the future of salmon habitat restoration.

Commitment to the Oregon Plan & ODFW Conservation Strategy Goals

The Oregon Plan for Salmon and Watersheds was created in 1997, "with the support and participation of a wide spectrum of stakeholders from all sectors and regions of the state, the Oregon Legislature and then-Governor John Kitzhaber. Motivated at first by the conviction that the state must devise its own home-grown response to listings of coho and other salmon species under the federal Endangered Species Act, Oregon expanded the plan into an unprecedented statewide program to preserve and profit from Oregon's natural legacy" (Oregon Plan Brochure). The ODFW Conservation Strategy was created in 2006 by a Stakeholder Advisory Committee "which helped the Department identify six key conservation issues, large-scale issues that present the greatest threats to fish and wildlife populations and their habitats throughout Oregon. These formed the framework for the Conservation Strategy" (pg 7, Conservation Strategy). By eliminating WOSRP, ODFW is effectually saying they no longer support the Plan or Strategy, and will look to other agencies and organizations to implement the identified actions and goals.

Ability to leverage funds to increase effectiveness

It is simply not enough that other agencies and organizations are performing habitat restoration. Many depend on the WOSRP to provide the technical assistance necessary to leverage additional foundation funds, or qualify for other state and federal funds. Without the key support from the WOSRP, the ability to leverage funds or implement projects will be significantly reduced, and for some watersheds could mean the end of funding and executing complex, yet necessary, habitat restoration efforts.

Technical Assistance

Watershed Council Coordinators wear a variety of "hats" to be effective at their jobs; so many councils have compiled technical advisory committees or teams of state and federal staff who provide critical assistance with a variety of task. By cutting the WOSRP, along with many of the assistance district fish biologist positions, and the watershed council liaison positions, councils' abilities to address many issues will be significantly reduced, which will in turn increase implementation timelines along with increased project budgets.

These positions to provide critical technical assistance in a variety of areas, from grant writing, to designing and/or vetting our projects and plans. WOSRP and District staff also often helps us through the permitting process, or allows our restoration work to happen under existing ODFW permits, which saves us valuable time and grant resources so we may put more of our dwindling funds into direct habitat restoration efforts. These biologists also help coordinate on-the-ground activities including implementation and project management. Staff also assists councils and other organizations with intra and inter-agency contacts and relationships. They provide a direct link to ODFW's Fish Passage & Screening programs, Restoration & Enhancement, and Corvallis Research monitoring and data collection crews. They also assist us in working with other departments and agencies, including BLM, NOAA/NMFS, USFWS, ODOT, ODF, and the list goes on.

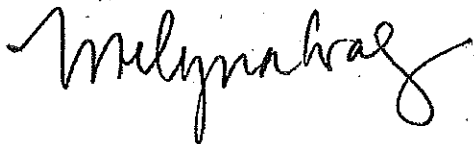
Losing the WOSRP biologists would also mean losing a wealth of institutional knowledge & assistance in cross-watershed, basin-wide coordination. In addition to the technical assistance, the staff in these positions has also often aided watershed councils experiencing their own staff transitions, ensuring restoration activities are continued or completed, and valuable conservation dollars are not wasted in the interim.

Long-term Effects

While eliminating the Western Oregon Stream Restoration Program may alleviate immediate budget shortfalls, and minimize the effects felt state-wide across the Department, the lasting and long-term effects on western Oregon salmon habitat will impact future salmon populations, which will then impact harvest rates, which will continue to negatively impact license and tag sales. If healthy salmon populations and habitat isn't addressed now, there won't be salmon to fish for in the future, which is exactly what the Oregon Plan for Salmon and Watersheds was created to avoid.

Please, see that the burden of reduced staff is not felt so intensely in the western region of the state, and particularly along the coast. Please, demonstrate a commitment to the Governor-directed Oregon Plan and continue to fund a program that allows for *"coordinated state and federal agency and tribal actions to support private restoration efforts, effectively administer regulatory programs, soundly manage public lands, and promote public education and awareness about watersheds and salmon."* Please.

Sincerely,



Melyssa Graeper
Executive Director
Necanicum Watershed Council



**Nestucca, Neskowin & Sand Lake
Watersheds Council**

PO Box 86 Pacific City, OR 97135 ☒ (503) 965-2200 fax: 965-2200 ☒ nnwc@oregoncoast.com

July 31, 2014

Council Board Members

Guy Sievert, Chair

Guy Holzworth, Treasurer

Sherry Vick, Secretary

Mike Walsh

Mike Wynands

Melanie Ferguson

Commission Members

**Oregon Department of Fish & Wildlife Commission
4034 Fairview Industrial Drive SE
Salem, Oregon 97302**

Dear Commissioners,

The Nestucca-Neskowin Watersheds Council is a Non-Profit organization established in 1996 to do three things: 1) provide a forum for watershed enhancement and protection, 2) work with landowners to address factors that affect fish and habitat in the local watersheds, and 3) actively pursue activities that support a healthy ecosystem within our watersheds. Our work has been successful for 20 years, success that could not have happened without a key partner: ODFW fisheries habitat staff.

We are writing to express our grave concern regarding the agency proposed budget cuts affecting fish restoration staff. We were informed only late this month that ODFW management is proposing Western Oregon Stream Restoration Program staff reductions. These local watershed council liaisons and habitat biologists at ODFW provide valuable assistance on Council stream restoration work. These same ODFW field fisheries biologists have many years of critical knowledge of the coastal basins. That assistance includes identifying, developing and implementing salmon passage and habitat restoration projects

Watershed councils rely on the technical assistance and field experience provided by ODFW and grant funds to design and complete native salmon population recovery projects. A loss of the essential assistance provided by key ODFW staff will materially affect Oregon's on-the-ground native salmon population recovery efforts. It is not in the best interest of the Oregon Plan for Salmon and Watersheds and the Oregon Coast Coho Conservation Plan to eliminate the ODFW positions identified in the ODFW proposed budget. It would be in the best interests of Oregonians to spread any cuts necessary equally across regions and programs of the agency. We encourage Commission to reconsider the legitimate need and high priority of this work and restore these positions.

Thank you for your support in this critical matter.

Respectfully,

Guy Sievert
Chair

Nestucca/Neskowin Sand Lake Watershed Council



Association of Northwest Steelheaders
6641 SE Lake Rd. • Milwaukie OR 97222 503-653-4176 • 503-
653-8769 (fax)
office@anws.org • www.nwsteelheaders.org Established 1960

August 1st, 2014

Re: ODF&W Budget

Dear Chair Levy and Members of the Commission:

Representing 1,600 members and 12 chapters in Oregon and SW Washington, the Association of NW Steelheaders wishes to comment on a few issues presented here today. The Association Board of Directors has no official position on the overall ODF&W budget at this time.

There are two problematic issues with the current proposal we wish to address:

- The current budget proposal calls for the elimination of 69% of the Stream Restoration and Habitat Conservation Program Staff on the North Oregon Coast.
- We are appreciative of the level of protection Oregon's hatchery programs have maintained through this problematic budget period. It's imperative that the widely accepted Coastal Multi-Species Conservation Plan receives the dedicated funding to implement the programs promised to the sportfishing public.

It seems that 69% is a gross misrepresentation of staff cuts to a region of our state that sees the greatest economic output for fishing, hunting and wildlife viewing. Visitors to this region spent nearly \$140 million dollars, the largest in the state, for recreating in this area. Being so close to Oregon's major metropolitan area makes this a priority region for our membership. With the runs of salmon and steelhead that we've witnessed here in recent years and the elimination of monitoring programs such as the life-cycle study, it's critically important that one of Oregon's most diverse eco-regions gets recognized for its intrinsic value for fish and wildlife restoration.

Countless volunteer hours and challenging negotiations finally led to the adoption of Oregon's Coastal Multi-Species Management Plan. Largely dictated by recently filed frivolous lawsuits that the Association is also defending against, the sportfishing community climbed on board with the Department and partnering conservation organizations with the expectation that some sacrifice would lead to some benefit. On the north coast, that benefit was additional hatchery smolt production to offset hatchery programs that suffered in other watersheds within the district. This new management strategy is ready for implementation and it's our desire that the agency fulfills its promises to improve hatchery strategies and protecting wild stocks of fish for future generations.

We will remain engaged in this conversation as it progresses into the legislative assembly but hope you can address these concerns of ours before you adopt a disastrous strategy. We also hope to work more closely in the future with the department to grow a stable, long-term funding source so Oregonians don't have to continue to cut important programs that this agency implements. Growing the base is the means to the end. Opportunity drives participation, participation sells licenses and secures the long-term viability of the agency.

Thank you for your time and consideration of our comments. Respectfully,

Bob Rees
Executive Director

Protecting and Enhancing Wyoming's Livestock & Wildlife Resources

Taking on the challenge of managing predators and predation in an ever changing environment

Public Testimony Exhibit B

The Wyoming Animal Damage Management Board

A Story of Success & Partnerships Created

The Wyoming Animal Damage Management Program was created by the 1999 Legislature as a pilot project for the purposes of mitigating damage caused to livestock, wildlife and crops by predatory animals, predacious birds and depredating animals or for the protection of human health and safety.

The ADMB is administered by a 15 member (12 voting, 3 ex-officio non-voting members) board, commonly referred to as the Animal Damage Management Board, or simply the "ADMB".

The ADMB's mission, as defined by

the Legislature, is to "coordinate and implement an integrated animal damage management program, based upon the best available science, for the benefit of both the human, as well as the natural, environment.

The Wyoming Legislature, in creating the ADMB, stated, "It is important to the economy of the state, to maximize agricultural production and at the same time to promote, protect and conserve the wildlife resources (of Wyoming).

The 2007 Legislature, recognizing the tremendous success of the ADMB and the partnerships it has created,



removed the sunset provision for the pilot project and made the ADMB and its functions permanent. In doing so, the Legislature recognized what a true success the ADMB had become!

County Predator Management Programs

Working on-the ground everyday to protect, preserve and enhance Wyoming's agricultural and wildlife resources

Wyoming has a unique system, unlike any other state in the Union, through which it manages the effects of predatory animals, predacious birds and depredating wildlife, as well as certain aspects of human health and safety.

Each county in Wyoming is authorized to have within it a predatory animal management program, overseen by a locally elected or appointed predator management Board (PMB). Each

PMB is comprised of 6 locally elected livestock producers, chosen to represent the interests of producers in the county who have paid into

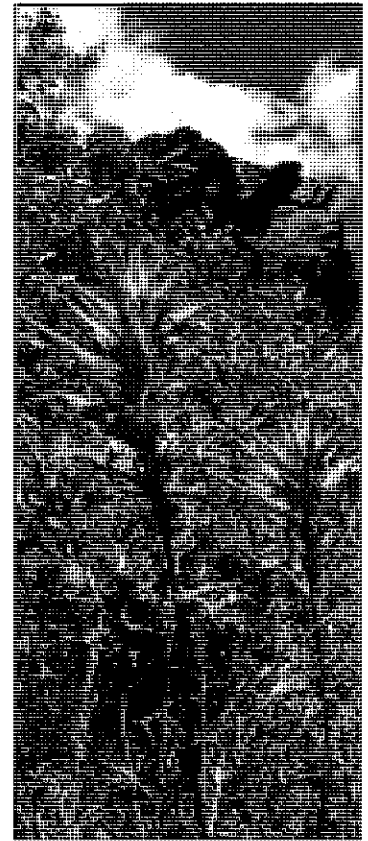
Wyoming has a unique system, unlike any other

the program through locally assessed predator management fees. In addition to the six livestock producers, each board of county commissioners is authorized to appoint one member to the Board if the county commissioners have elected to provide additional funds to the Board.

In 2004, the Wyoming Legislature took a bold and forward

looking step and approved general fund appropriations to the ADMB, which then pass through it and onto the local county PMB's. If the local PMB request these funds from the ADMB, the Board then is increased by 3 local residents, appointed by the county commissioners, who represent the interests of hunters and sportsmen on the Board.

In 2009, nineteen (19) counties applied for and were awarded grant funds from the ADMB. One of the many positive results of this is that 57 sportsmen and hunters joined with 114 livestock producers and 19 county commissioner appointees to work together at the local level to identify and solve problems within their local area. A tremendous example and testament of how diverse interests, who may have been at odds in the past, can come



together and work proactively and cooperatively to solve problems right at home. That's what Wyoming's all about!!!

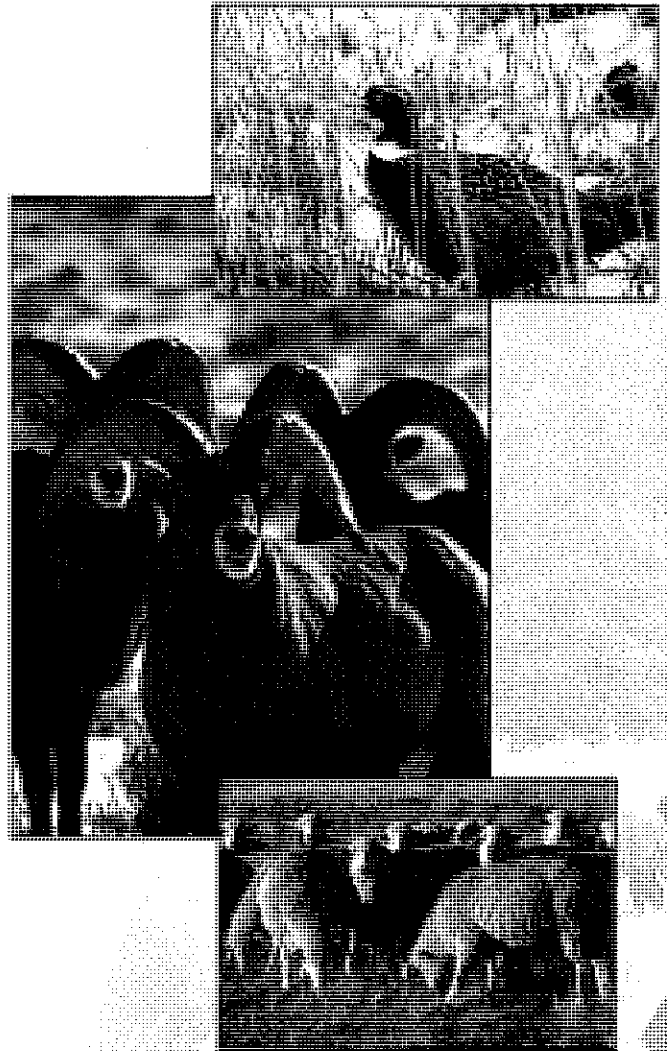


The following "report" is broken into two main sections. The section entitled "ADMB funded projects" discusses and highlights a few of the many projects that the Animal Damage Management Board itself has funded over the past few years. These are projects that have gone through the ADMB's review process, judged against other proposed projects, and then funded with the somewhat limited resources of the ADMB itself.

The second section dealing with county predatory management boards (PMB's) contains a short review from every county PMB that received legislative funding through the ADMB. These reviews

are intended to highlight and discuss in their own words, in the limited amount of space afforded each county herein, some of the many activities each county PMB has been involved in over the past few years. Also included on every county's page is a listing of the most current Board members, as far as we have been able to determine, for every county. Readers wishing more specific information about a individual county and its program are encouraged to contact one or more of the Board members directly. These Board members can provide much more detailed and "site-specific" information about activities undertaken by each Board.

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Publication Design by Ginger Ludtke,
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This report/brochure was prepared under contract for the Animal Damage Management Board by the Wyoming Association of County Predatory Animal Boards (WACPAB). Responsibility for errors, omissions, inaccuracies, etc., to the extent that they are applicable, reside with the WACPAB.

A note on the pictures found in this publication. Many, if not most, of the pictures found within this publication did not arise directly from the projects or activities they may be associated with. They are intended for illustrative purposes and to aid in drawing the reader's attention to the subject matter to which they refer or are associated with. Many of the pictures originated or were derived from the internet. The authors of this publication have made every attempt to source "open" or non-copyrighted material, or to make sure that we have received permission to use material which is copyrighted and has appropriate attribution.

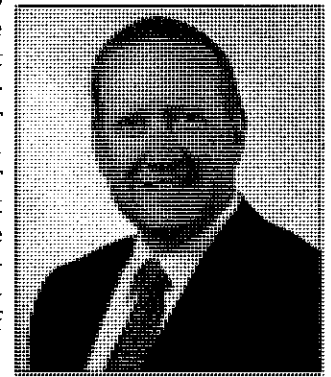
If, however, we have inadvertently utilized photos which do not fall under these guidelines, we (1) apologize to the owner/photographer; (2) make assurances that the photos were not utilized in any commercial manner whatsoever; and (3) ask that any such owners/photographers notify us so that we may correct our error and/or omission.

Introductory Remarks: Jason Fearneyhough, Director, Wyoming Department of Agriculture, Steve Ferrell, Director, Wyoming of Game & Fish Department, Gerry Geis and Mark Semiek, Co-Chairs, Wyoming Legislature Joint Agriculture Committee

Predator Management is working hard for the livestock, wildlife and citizens of Wyoming. Thanks to the financial contribution from the State of Wyoming, we have seen lower death loss in cattle and sheep, concentrated efforts for increased wildlife populations, and a greater understanding and surveillance of rabies, tularemia and other diseases affecting animals as well as humans. Research on the effect wolves have on elk and cattle, raven and fox predation on sage grouse, bear/human conflict prevention, and rabies education and testing have all provided us with a better understanding of how to deal with these important state issues. In addition, a recent study from the University of Wyoming shows that there is a financial return to the state of \$3-\$30 for every dollar used for predator control. These have been dollars well invested. As the ADMB Co-Chairs we would like to take this opportunity to thank past and present ADMB board members and local District Predator Management District board members who volunteer their time to make the program work to the best of its abilities in the state and in the individual counties. We look forward to continued efforts for the people of Wyoming.



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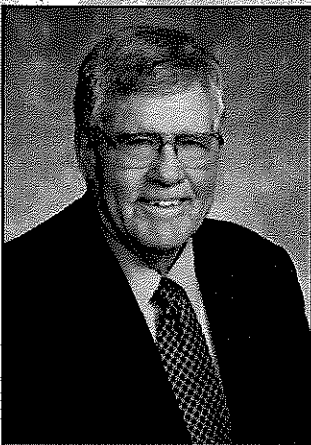


As the current Co-Chairs of the Legislature's Joint Agriculture, State and Public Lands & Water Resources Committee, we have been intimately and actively involved with the development of the Animal Damage Management Board through its inception by the Legislature and implementation by the Wyoming Departments of Agriculture and the Wyoming Game and Fish Department. Additionally, due not only to the fact that each of our home counties have active predator management boards, but also due to the fact that county PMB's are provided for within that part of the statute that our Committee has jurisdiction over, we are keenly interested in and aware of the important work of these entities. Both the ADMB, as well as local PMB's, provide invaluable service to our state.

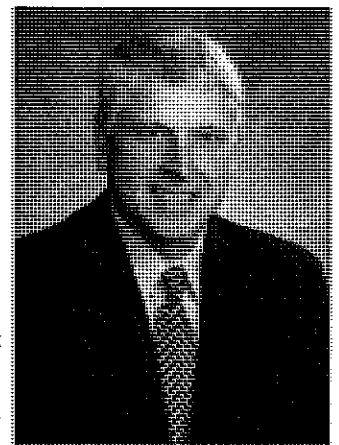
ment issue. Even the most conservative predictions for growth in large predator populations foretell an ever increasing number of conflicts, and it is imperative that we have an entity such as ADMB to focus on these issues and design research to develop new and improved techniques to manage these conflicts. The ADMB is allowing Wyoming to take a leadership role in the management of conflicts between humans and predators and is foraging new dialog and new partnerships in areas where conflict was the norm.

The ADMB has provided a forum to discuss the continually growing number of conflicts between humans and large predators throughout Wyoming. These conflicts involve many segments of the public outside of traditional livestock producers, where most expect those conflicts and damages to occur. Rural homeowners, recreationists of all types and commercial operators such as lodge owners and others who are working in occupied bear and mountain lion habitat face challenges. Additionally, we are continually approached by hunters and sportsmen that are concerned over impacts to Wyoming's premier big and trophy game herds from excessive and unmanaged predation.

In much the same way, many of our county PMB's have evolved into entities far different than what they had traditionally been. When the Legislature stepped to the plate and provided state funds to help address these issues, it also required the county PMB's to evolve. While change is a "buzzword" on the national level, change does not come easy in a tradition oriented state such as Wyoming. Nineteen of the 22 county PMB's agreed with the legislative suggestion, however, and now one of the many positive results of this increased state funding is that 57 sportsmen and hunters have joined with 114 livestock producers and 19 county commissioner appointees to work together at the local level on these statutorily created and empowered Boards to identify and solve problems within their local areas. As is pointed out in this report, this is a tremendous example and testament of how diverse interests, who may have been at odds in the past, can come together and work proactively and cooperatively to solve problems right at home. As is also stated, that's the way we do things in Wyoming.



Gerry Geis
Chair, Senate Agriculture, State and Public Lands & Water Resources Committee Senate District 20 (South Big Horn/Hot Springs/SE Park/Washakie counties)



Mark Semiek
Chair, House Agriculture, State and Public Lands & Water Resources Committee House District 01 (Crook/Weston counties)

Animal Damage Management Board Projects

The ADMB receives an annual appropriation (outside of the funding directed to local county PMB's) from the Legislature through which it funds projects and activities which it determines meet the Mission and Goals and Objectives of the ADMB.

These are:

MISSION STATEMENT:

The Animal Damage Management Board (ADMB) mission is to coordinate and implement an integrated animal damage management program, based on best available science, for the benefit of human and natural resources throughout Wyoming.

It is impossible to outline and present every one of the results of the myriad of projects that the ADMB has funded over the past several years. In the following pages, several of the most noteworthy projects are detailed here in order to demonstrate the type and breadth of the projects and programs the ADMB has deemed worthy of support. For a more complete and detailed report, contact the ADMB directly.



Goals

- To implement a Wyoming Animal Damage Management Policy.
 - To implement a coordinated, accountable, animal damage management program.
 - Obtain and distribute funds for the implementation of animal damage management programs.
 - Develop a public education and involvement plan.
 - Obtain credible information to enhance the Wyoming Animal Damage Management Program.
 - Develop and implement legislative strategies.
- Following are synopsis of various notable ADMB projects which have received funding from the ADMB. It should be noted that these are only summary's of just a few of the many projects the ADMB has sponsored and funded since its inception. For a more complete description of the projects described here, or to review the entire portfolio of ADMB projects, please contact the Wyoming Department of Agriculture, which provides administrative functions for the ADMB.

Wyoming Animal Damage Management Board

Co-Chairs (2):

Jason Fearneyhough, Director
WY Dept. of Agriculture

Steve Ferrell, Director
WY Game & Fish Dept

Domestic Sheep Producer Representative:

Bob Innes
Gillette, WY
Term - 8/01 to 8/2013

Cattle Producer Representative:

John Espy
Rawlins, WY
Term: - 7/2007 to 8/2011

State Director, USDA/Wildlife Services:

Rod Krischke
Casper, WY
Term: Indefinite

Sportsmen/Outfitters/Hunters Representatives (2):

Jim Collins
Thermopolis, WY
Term: 8/01 to 8/2013
John (Dale) Leatham
Casper, WY 82601
Term: 8/07 to 8/2011

President, Predatory Animal Advisory Board:

Gene Hardy
Douglas, WY
Term: Indefinite

Urban Representative:

Amanda Hulet
Buffalo, WY
Term: 8/07 to 8/2011

WY Game & Fish Commissioner:

Ronald "Jerry" Galles
Casper, WY
Term: 5/09 to 3/2011

WY Board of Agriculture:

Shaun Sims
Evanston, WY 82930
Term: indefinite

Non-consumptive User of Wildlife

Representative:

Jim Schellinger
Sheridan, WY
Term: 8/01 to 8/2013

Ex-officio Nonvoting Members

U.S. Forest Service Representative:

Dave Fogle
Cheyenne, WY
Term: Indefinite

U. S. Fish and Wildlife Service

Representative:
Currently vacant
Term: Indefinite

U.S. Bureau of Land Management

Representative:
Dennis Saville
Cheyenne, WY
Term: Indefinite

Fremont County Sage Grouse/Mule Deer Project

The goals of this project were 3-fold:

1. Identify which predators/animals depredate sage grouse nests. Infrared trail cams were used to record animal activity around artificial grouse nests.
2. Measure if possible, the differences in nesting success of sage grouse in areas of little predator control as opposed to an adjacent area with intense predator control.
3. Enhance a struggling mule deer population in the area.

The project was conducted in Wyoming Game and Fish deer hunt area 90. The Gas Hills highway (Wyoming State 136) provided an ideal and almost identical split of the project for the purpose of having both a "treatment" and "control" area.

During the spring sage grouse nesting season of 2008, the following data was collected. Out of 40 different artificial grouse nest sites (ten cameras moved 4 times at one-week intervals), 14 nests were raided. 3 of these nests had re-occurring damage, giving us a total of 17 nests raided. The following is a list of the species recorded at the damaged nests:

- Common raven – 15 damaged nests
- Magpie – 1 damaged nest
- Red fox – 1 damaged nest

*Both trail cam pictures and animal tracks present were used to make determinations.



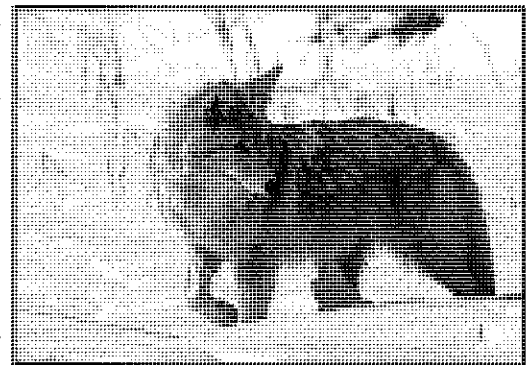
In late December 2007 we conducted our yearly mule deer count in the treatment area of the project. We used a fixed wing aircraft with Wildlife Services personnel. Care was taken to schedule 2 good weather days in a row to do the count so as to not count any animals twice during normal movements and travel. 489 total mule deer were counted in the two day period. This is significant as our original count when the project started was 232 mule deer.

As a general overview, after 3 years of this project, we believe that items 1 and 3 have shown great success. A vast amount of data has been collected on

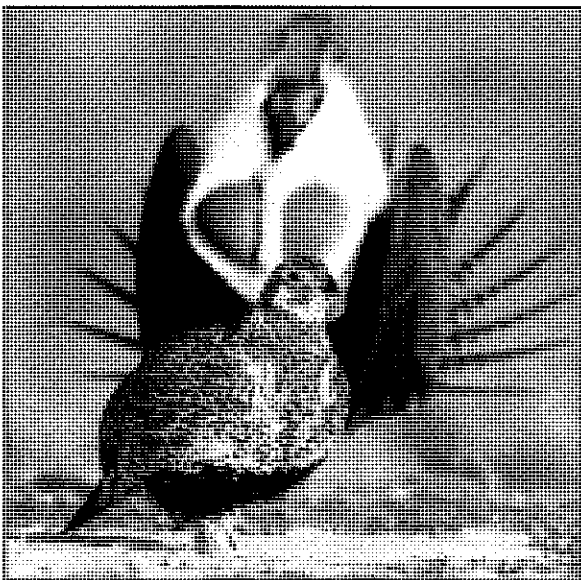
the depredation of grouse nests and a struggling mule deer herd has seen a resurgence even in the face of a severe drought.

Goal #2 has been harder to quantify. It was originally thought that possibly a high coyote population was having a negative effect on sage grouse nesting success. The first year only 20% of nests had any damage. The second year 40% of nests had damage. The third year 60% of nests had damage. This is a significant increase in damage to nests. We are currently working on identifying the predator control in the area

has been mostly on coyotes as they are the dominant predator with very little red fox, raccoons or skunks present. In this particular area, it is impossible to say that this control work benefited nesting, as we simply



haven't documented large numbers of coyotes depredating nests themselves. Coyotes may very well be taking chicks and adult grouse, but that was beyond the scope and purpose of this particular project.



Counting the costs: Study Investigates Benefits, Costs of Predator Management In Wyoming

By Tom Foulke and David "Tex" Taylor
(reprinted from the Wyoming Livestock Roundup)

Wyoming farmers and ranchers know well the costs predators can impose on their operations. They are also aware of the benefits of local predator boards; but trying to put a number on benefits and costs statewide is more challenging.

A University of Wyoming College of Agriculture team responded in 2007 to a request from the Wyoming Animal Damage Management Board to conduct a baseline study and investigate the costs of predator management in Wyoming. Board members were interested in not only the benefits of the program to agriculture but to wildlife as well.

The UW team, comprised of researchers in the Department of Agricultural and Applied Economics, presented its final report to the board in July.

Predator management has been part of Wyoming's history since its territorial days and part of human existence since time immemorial; however, in the modern era of tight budgets and competing interests, it is easy for important functions of government to become just another line item. Generating a Dollar Value

Putting a dollar value on costs is relatively easy; information is available from the agencies involved. A rancher's benefits and costs can be estimated from various agricultural statistics sources, but wildlife benefits are a different matter. Since Wyoming has always had predator management, how would we know what the situation would be without predator management? And, which predators should be considered since some, such as wolves, were here and then gone and now back again? And, more fundamentally, what are the benefits of predator control to wildlife, and how would we measure them?



The study lasted two years and started with a look at trends in sheep and lamb predation from 1965 to 2006. The reason for this focus is because there is long-term data available for sheep and lamb losses to predators and because

they suffer a higher death loss to predators.

Other parts of the study included the benefit-cost analysis, an investigation into the financial effects of predator loss on a model ranch (computer simulations), the economic impacts of predator control on the Wyoming economy, and a literature review of predator control.

The study was designed to give as complete a picture of the economic effects of predator control as possible given available resources. Researchers on the project included Professor David "Tex" Taylor, Assistant Professor Ben

Rashford, Associate Professor Roger Coupal, and Associate Research Scientist Tom Foulke.

A benefit-cost analysis is accomplished by adding up the dollar value of the benefits and dividing by the dollar value of the costs. The resulting number is the benefit-cost ratio, which is used as a measure of the effectiveness of the effort. A number greater than one indicates the benefits are greater than the costs, and the higher the number, the bigger the benefits relative to costs.



Benefits to Producers \$15.5 Million

Total benefits of predator management in Wyoming is estimated to provide about \$15.5 million per year to the state's agriculture, based on the estimated reduction in the number of sheep and cattle lost each year. This estimate encompasses livestock predation from all sources and all efforts at predator management, including non-lethal means.

Due to data limitations, the wildlife analysis was limited to coyotes and their impacts on mule deer and pronghorn antelope. This was done with the understanding there are other wildlife species affected by predators; however, the impact on these other species could not be addressed in the analysis.

In addressing the benefits of wildlife, the researchers quickly ran into some fundamental questions that continue to confound wildlife managers. A major issue with wildlife is that, since there is no market price for antelope or mule deer as there are with cattle and sheep, it is difficult to estimate their value. In the analysis, values for antelope and mule deer were based on three different estimates. The Wyoming Game and Fish Department (WGFD) issues a "restitution value" used to assign value to wildlife for legal purposes.

The restitution value for antelope is currently \$3,000 per head and is \$4,000 per head for mule deer. WGFD also esti-

Absaroka Wolf-Cattle Project

The first objective of this project is to characterize the shift in habitat selection by wolves from winter to summer months, as cattle move onto their summer range. The second objective of this study is to determine summer and fall prey selection by wolves, and to identify landscape patterns that predispose cattle to a high risk of depredation by wolves.

Upon initial observation of the data, it appears that wolf movements in the three focal packs are more constricted in winter (Fig. 1A), and expand slightly in the summer (Fig. 1B), possibly due to the influence of snow depth and elk distribution. We are also examining the seasonal differences in home range size for each study pack.

To meet the second objective of determining high-risk areas for wolf-livestock conflicts, two remotely downloadable GPS Lotek collars were deployed in 2008 (with the help of US Fish and Wildlife and USDA Wildlife Services) in the Crandall pack and the Beartooth pack. Elk (i.e., prey) distribution is known to drive wolf habitat selection and to influence the location and patterns of wolf depredations on livestock.

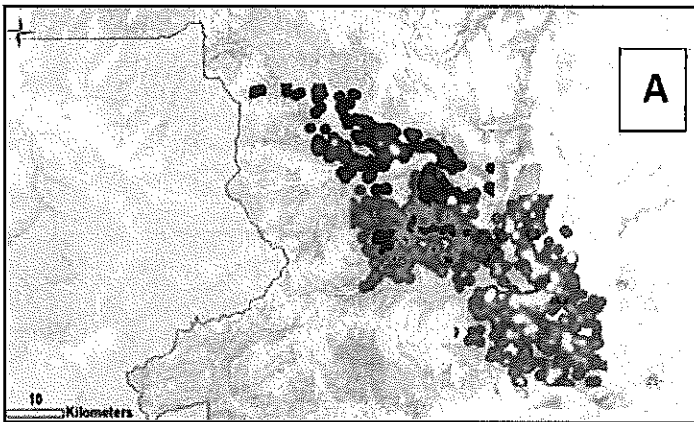
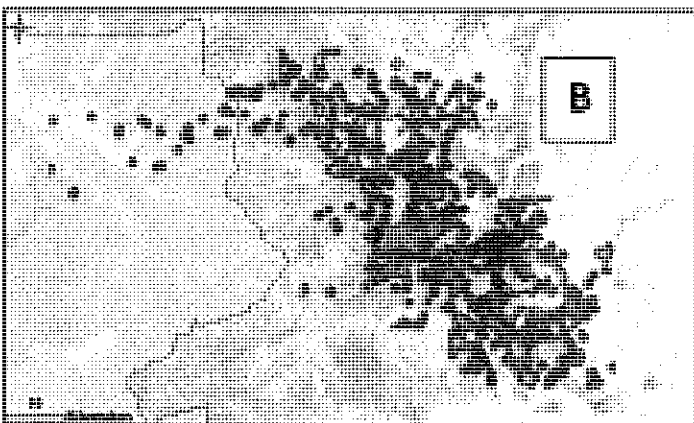


Figure 1. Seasonal wolf locations from the Absaroka (southern), Sunlight (middle) and Beartooth (northern) packs in winter (A) and summer (B).



Within our study area, there are wolf packs that hunt migratory elk in the winter (Sunlight, Crandall, Beartooth) and a pack that hunts resident elk in the summer and winter (Absaroka).

The total number of wolf-killed cattle found within the study period including reports from ranchers and cattle found at GPS clusters was 23 cattle (Fig. 3). Wolves killed a greater proportion of elk in the resident elk area of the Absaroka pack (2007), whereas in areas with migratory elk wolves appeared to kill an equal amount of deer and elk, and a few wolf-killed cattle (Figs. 4 & 5; see Table 1). We also observed three wolves (from both migratory and resident elk portions of the study area) take large extra-territorial forays into Yellowstone National Park (YNP; Fig. 6). With the completion of the final field season in 2008, we will conduct the habitat selection and kill site analyses in winter and summer of 2009.

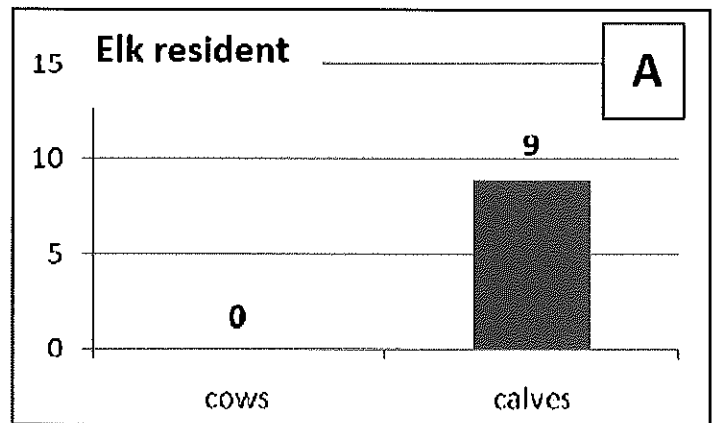
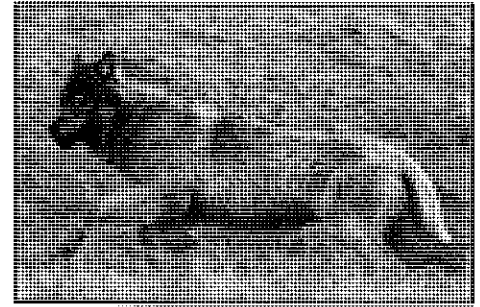
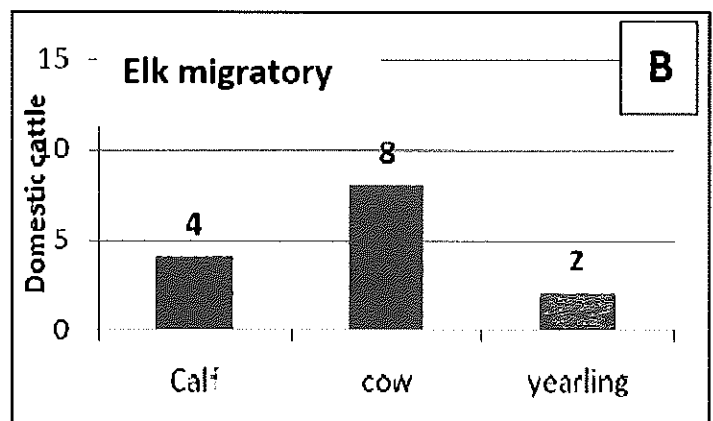


Figure 2. Wolf depredations on cattle in summers 2007 and 2008 in habitats where elk populations are resident (A) and migratory (B).



Absaroka Elk Ecology Project

The Wyoming Game & Fish Department, the University of Wyoming, and the U.S. Fish & Wildlife Service initiated the Absaroka Elk Ecology Project in January 2007. Objectives of this project include:

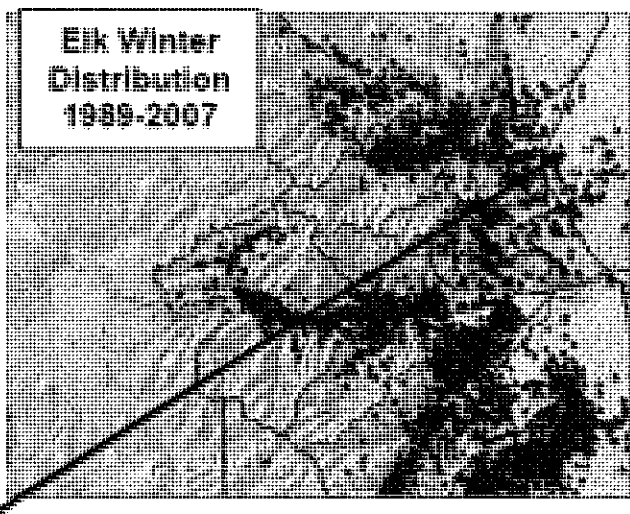
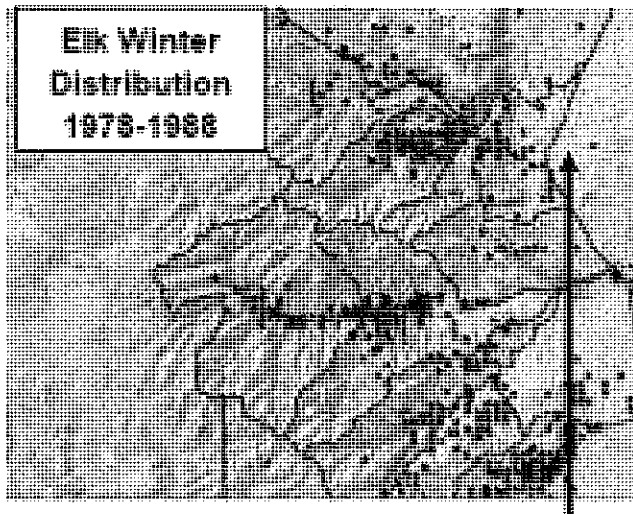
- Determine the status of migratory and non-migratory elk in the Clark's Fork Herd Unit
- Determine the timing of migrations and routes used by migratory elk
- Increase understanding of elk use of private lands
- Determine adult female survival rates
- Develop habitat selection models to determine critical habitats for migratory and non-migratory elk
- Evaluate the influence of wolves on elk habitat selection and movements

Along with information being collected on elk habitat selection and wolf pack movements, data is being gathered

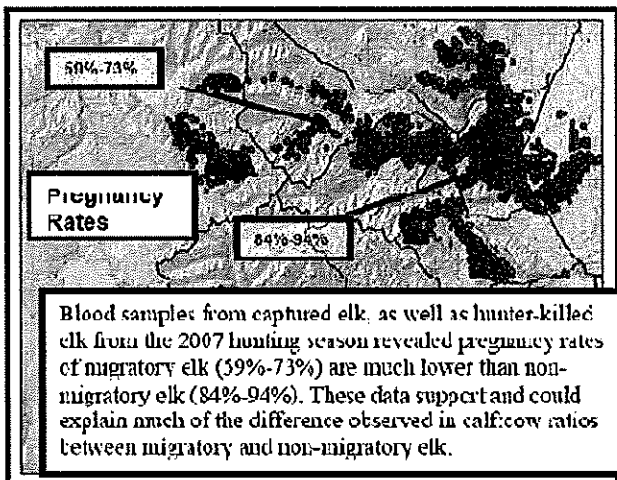
on the forage quality of habitats that elk seek. This will make it possible to determine the relationship between elk habitat selection, habitat/forage quality, and elk body condition (and thus pregnancy rates), and the possible influences of wolves and weather upon these relationships.

Data collection will continue through April 2010 when elk GPS collars are programmed to fall off. The addition of more data as the project continues should help shed light on the many complicated relationships between elk, their habitat, and wolves with the ultimate goal of increasing understanding and improving elk population and habitat management in the Absaroka Mountains in Wyoming.

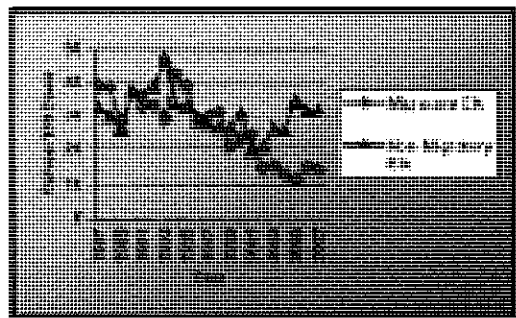
RESULTS: (note: only a few of the many results of this noteworthy study are highlighted here, for a more complete report contact Kent Drake at the Wyoming Animal Damage Management Board or Matt Kaufman at the Wyoming Game and Fish Department.



In the last 30 years a dramatic shift in elk distribution has occurred, with more elk frequenting low elevation areas along the Absaroka Foothills. Most of these areas are on private land.



Blood samples from captured elk, as well as hunter-killed elk from the 2007 hunting season revealed pregnancy rates of migratory elk (59%-73%) are much lower than non-migratory elk (84%-94%). These data support and could explain much of the difference observed in calf:cow ratios between migratory and non-migratory elk.



When compared to migratory elk, non-migratory elk on private lands are more productive with higher calf:cow ratios in recent years.

Absaroka Elk Ecology Project — cont.

September body condition sampling revealed that most (80%) migratory elk sampled were not lactating, while most (80%) non-migratory elk were lactating, again supporting other data collected on pregnancy rates and calf:cow ratios. Body weights increased compared to March, with migratory elk weighing an average of 228kg (502 lbs) and non-migratory elk weighing an average of 216kg (476 lbs). Heavier weights for migratory elk are mostly a result of the larger sample of non-lactating (therefore fatter) cows.

Body-fat levels of lactating cows were 10.5% for migratory elk and 11.3% for non-migratory elk. At this level, delays in breeding, delays in birthing, reduced growth rates of calves and yearlings (and smaller-sized adults) would be predicted, but not the reduced pregnancy rates observed. The effect of good growing season precipitation in 2008 upon forage conditions, and the interaction of summer calf predation and adult nutrition could explain these findings



Enhancement, Education and Promotion in the Use of Livestock Protection Dogs as a Non-Lethal Tool to Prevent Predation of Livestock

The origins of livestock protection dogs can be traced back nearly 6000 years, possibly to the upland region of present-day Turkey, Iraq and Syria. It was not until the late 1970's, however, that the use of this ancient form of sheep protection was utilized in the United States. Several factors contributed to this phenomenon, including Federal restrictions on the use of substances to kill predators, the relative inability of existing techniques to provide adequate relief from predation in certain situations, and a desire by some to use nonlethal methods of reducing the loss of livestock to predators.

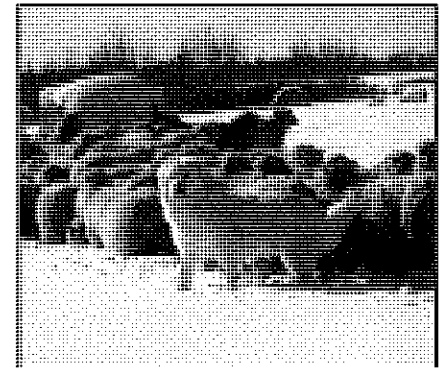
In general, acquiring a protection dog does not offer immediate relief from predation because mature and effective guardians are not available to most producers. Ginsberg and Macdonald (1990) believed that livestock protection dogs continued to represent "perhaps the most cost effective method of non-lethal predator control". Several US studies have noted that guard dogs can greatly reduce livestock depredation by carnivores (see USA LPD evaluation). Green et al (1984) reported the greatest benefit of LPD's was in reducing predation, but 87% of producers also felt greater peace of mind with their dogs present, 53% said they reduced reliance on other forms of predator control and 47% said they eliminated the need for night confinement. These authors concluded that there are few limitations to the type of conditions under which a good dog can be a benefit.

Since the mid 1980's and throughout the 1990's and on to this date, there had been very little or near little information or educational efforts generated on LPD's. While many producers have become proficient and accomplished at the raising and handling of LPD's, many producers have either no formal training or educational efforts directed towards them on LPD's, while many others have an interest in utilizing this resource but have not been afforded the opportuni-

ty to become informed and educated on their use and how to incorporate them into new or existing livestock operations.

The other factor which has now come into play in Wyoming is the use, and problems associated with that use, of LPD's in areas which have become occupied by wolves. Reports have been received which indicate that, in fact, LPD's may actually be a detriment to livestock operations in areas where wolves are either established or are transiting through due to the wolves innate desire and tendency to hunt and kill other canids. New ideas and strategies need to be brought forward, researched and discussed if this valuable tool is going to be utilized in those areas of the intermountain west which have become endemic with wolves.

The Wyoming Wool Growers Association (WWGA) received funding from the ADMB in order to host and sponsor a major regional symposium on Livestock Guarding Dogs. The symposium was to focus on both reacquainting producers and others about the use and utilization of LPD's, but would also bring forward new information and new areas of research which are applicable to livestock producers from the intermountain west. The symposium would



Continued on Page 10

North Fork Human/Bear Conflict Resolution

This goal of this project is to minimize human/bear conflicts in the North and South Forks of the Shoshone River area through (1) minimizing and properly managing bear attractants; (2) employing bear resistant waste management systems; (3) managing bears/attractive bear habitat where potentials for conflicts and risks to human safety are high; and (4) employing a public outreach program for education about preventing conflicts with bears.

To date, this project has accomplished the following utilizing the indicated fund amounts:

1) \$5,242.00 for the purchase of 30 additional 95-gallon bear-resistant garbage carts. These carts are available to anyone living in bear habitat for the reduced price of \$50.00 per cart. The funds collected go directly back to the same budget in order to purchase additional carts.

2) \$580.00 for the modification of a donated horse trailer into a mobile, bear-resistant garbage storage shed for a restaurant/campground owner located in occupied bear habitat. The garbage carts currently available did not meet the specific needs of the business.

3) The ADMB awarded \$10,000 in FY09 to be directed toward educational initiatives for the purpose of minimizing human-bear conflicts in western and central Park County. A total of \$6,415.12 has been utilized for the purchase of the following:

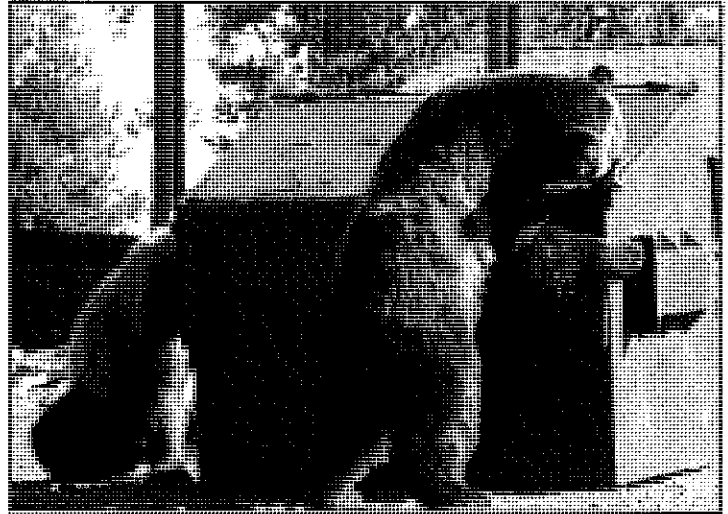
1) 7000 "Be Bear Aware" children's coloring books, 2) 140 inert bear spray training canisters, 3) A "Be Bear Aware" highway billboard posted on the North Fork highway in Wapiti, Wyoming,

ENHANCEMENT — Continued from Page 9

target livestock producers from the five state area of Wyoming, Montana, Idaho, Utah and Colorado, but it is anticipated that producers from other states would also be interested and attend.

In preparing for the symposium, it became apparent to the WWGA that the problem of lack of expertise and resources available to producers on the use and integration of LPD's was larger and more endemic than first thought. The WWGA was forced to change tactics and plans, and shifted its focus into two main areas. The first was to plan, prepare and present a symposia on the use of LPD's here in Wyoming for livestock producers to attend. This was done and completed as part of the WWGA/Wyoming Stock Growers/ Wyoming Association of Conservation Districts Joint Convention, held in December 2008. Over 500 livestock producers and others were in attendance, and the LPD symposia was well received and attended.

The second area that the WWGA directed efforts towards was on a national level. The WWGA, along with the American Sheep Industry Association (ASI) petitioned at the national level, the USDA/APHIS/Wildlife Services (WS) agency, the primary and premier federal agency charged with "all things predator", to re-establish a program within the agency on the promotion of, and education about, LPD's. USDA/WS answered the WWGA and ASI call, and established a new position and program within the agency



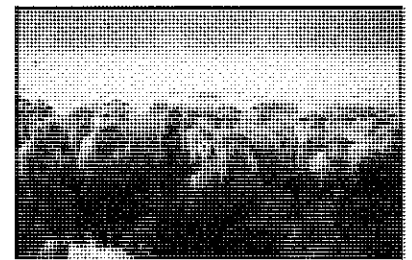
4) 300 "Be Bear Aware" refrigerator magnets used in an informational mailing to North Fork residents,

5) Technical equipment for the "Be Bear Aware" public library display including a hard drive, 22" touch screen monitor, and headphones, 7) Preservation of a grizzly bear skull as well as front and back paws for use in the public library display and

6) Fall 2008 Hunting in Bear Country, 2009 Black Bear, Grizzly Bear ID, and 2008/2009 Living in Bear Country public service announcements that ran seasonally on 3 radio stations in 2-3 week increments.

and charged it to work with livestock producers across the United States on the use and utilization of LPD's. The program is based at WS's research facility in Fort Collins, CO, and professional staff have been hired and are in place and working with producers, and producer groups, on this tremendously important tool.

The first major effort undertaken by this new program was to work to develop, in conjunction with the WWGA, ASI and the Colorado Wool growers Association, a set of recommended voluntary protocols and procedures that livestock producers can use in order to effectively and productively utilize LPD's. These "best management practices" have been developed and are due to be presented for review and possible ratification to the delegates to the ASI annual convention, scheduled for late January 2010. Tremendous interest and support for this type of program have come from many sources, including federal land management agencies, wildlife groups and animal welfare advocates. If adopted by the industry, the new protocols and program is expected to begin to be implemented as early as the 2010 grazing season.



Whiskey Mountain Bighorn Sheep Predator Project

This project was funded by the Wyoming Chapter of the Foundation for North American Wild Sheep (Wyoming FNAWS) and the Wyoming Animal Damage Management Board (ADMB).

Whiskey Mountain bighorns have been a crown jewel for Wyoming's wildlife for over 50 years. This sheep herd has been the source for trap/transplant activity and herd establishment throughout Wyoming and 5 other western states. No sheep have been available for transplant since 1995, due to poor herd performance and low recruitment. This high profile bighorn herd is one of Dubois, Wyoming's main tourist draws. With a population estimated at over 1,450 the Whiskey Mountain bighorn sheep herd unit suffered a die off in 1991, with several causes being suspected.

Historically, major bighorn dieoffs are followed by several years of poor lamb recruitment. After 5 years the alarm was sounded by the Wyoming Game and Fish Department (WGFD) and the inter-agency Whiskey Mountain Technical Committee (WMTTC), proposing "The Whiskey Mountain Lamb Survival Study" to determine why lamb ratios were not rebounding.

In 1998 the second year of the study analyses led to the possibility of a selenium deficiency causing symptoms similar to white muscle disease (WMD) in domestic sheep. Since that time bighorn ewes have supplemented with mineral blocks in an attempt to relieve this deficiency.

The Whiskey Mountain Lamb Survival Study brought up lamb health concerns and additional concerns of summer migration to mineral salt licks and predation during these movements. The problems were all addressed and solved by increasing selenium and salt in their diets. Four Years of providing selenium



blocks, while beneficial did not improve lamb survival and yearling recruitment.

Beginning in 2003 the Foundation for North American Wild Sheep, Wyoming Chapter and the Wyoming Animal Damage Management Board funded a coyote project to enhance production on the Whiskey Mountain Bighorn Sheep herd as a partial solution to relieve the "predator pit" problem and raise lamb survival, once again giving this historically important bighorn herd a chance to rebound.

The ewe lamb ration from 1991 thru 2002 averaged 13.2 lambs per 100 ewes the average from 2003 thru present is almost 30 lambs per 100 ewes. We have also seen a great increase in the number of young rams in the population. In addition to this a great increase in the number of sheep now living north of the highway east of Dubois. For many years there was small population of 15 - 25 in this herd. This year Game Warden Cole Thompson reported 105 sheep using this meadow.

Many residents feel the coyote control program has lot to do with these increases. Wildlife Service's removed a total of 151 coyotes with this program. Stomach contents for over 30 coyotes examined proved to be sheep or deer, no mice or rabbits were found. The total cost of this program thru June 30, 2007 is \$52,635.50 as of July 1, 2007 the Fremont County Predator Board has taken over the funding of this program. The cost per coyote may seem high, but from the beginning we wanted to target mainly just coyotes living near the sheep, not just numbers of coyotes. Many of us think this was a very worthwhile project. The Wyoming Chapter of FNAWS would like to thank the ADMB for all they have done to make this project a success.



County Predator Management Boards

Wyoming livestock producers have experienced predation on their herds and flocks since domestic livestock were brought to Wyoming in the 19th century. Early efforts to control predators were initiated by individual ranchers or small local groups. The first federal involvement in wildlife damage control in the United States occurred in 1885. By 1915, Congress was appropriating funds for federal predator control operations directed at wolves and coyotes. In 1931, Congress passed the Animal Damage Control Act authorizing the control of injurious animals, which is still in effect today. The State of Wyoming has also been actively involved in predator management during most of its history.

Coyotes have been and remain the most significant predator and are responsible for 66 percent of sheep lost to predators. Increasing populations of grizzly bears, wolves, and other species also contribute to increased incidents of livestock depredation. Wyoming Agriculture Statistics Service (WASS) reported that in 2007, Wyoming sheep producers lost 19,600 sheep and lambs to predators, valued at approximately \$1.4 million. Cattle producers also lose significant numbers of new calves and some cows to predators. WASS estimates the value of cattle and calves lost to predation in 2007 to be more than \$1.5 million. Research has shown that without a professional, accountable wildlife damage management program in place, livestock losses could be two to three times greater.

Today, USDA's Wildlife Services (WS), the Wyoming Animal Damage Management Board (ADMB), County Predator Management Boards (PMB), and individual livestock producers work cooperatively to manage predators in Wyoming.

Predators are statutorily defined in Wyoming as a "Coyote, jackrabbit, porcupine, raccoon, red fox, skunk or stray cat"; and (once delisted) wolves outside of those areas in Wyoming that they are classified as a trophy game animal. To effectively address and manage problems associated with the effects of predation, Wyoming has a program and structure unlike any other state.

Each county is empowered by state statute to have a predator management district (W.S. 11-6-201), which is over seen by a district board (PMB) that is charged under state statute with the following duties:

(i) Exercise general supervision over the control of predatory animals and predacious birds that prey upon and destroy livestock, other domestic animals and wildlife;

(ii) Devise and put in operation those methods that best manage or control damage caused by predatory ani-



mals or predacious birds;

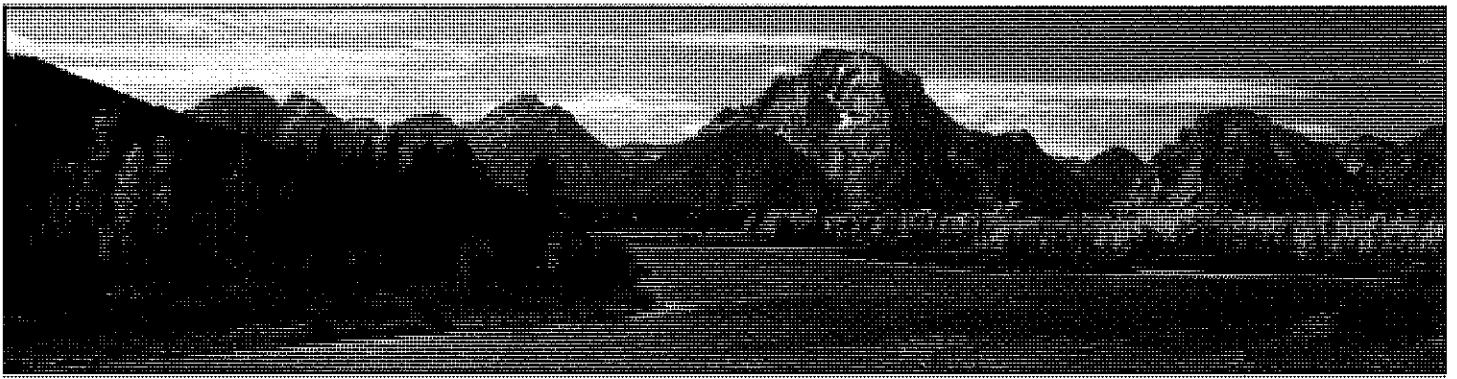
(iii) Administer funds received from predator management fees and from other sources to carry out the predator management program;

(iv) Coordinate with affected individuals and entities to develop a comprehensive predator management program for each respective predator management district which addresses livestock, wildlife and public health concerns.

Up until 2005, most if not all PMB's operated solely upon funds derived from a local "head tax" or predator fee which is assessed by each Board upon livestock within the county. In 2006, the Wyoming Legislature came to understand that predation was having negative effects upon not only the state's livestock industry, but also upon



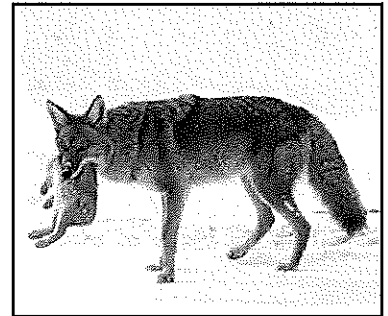
the state's wildlife resources, and appropriated \$6 million to the Animal Damage Management Board through which such funds were to be distributed to county PMB's if they met certain criteria. The criteria to receive state funding includes appointing 3 sportsmen representatives to the district board, and assessing the full amount assessable on the livestock "head tax" or predator fee. In 2009, all 23 counties had county PMB's and 19 counties had elected to avail themselves of state funds.



One of the many positive results of this increased state funding is that 57 sportsmen and hunters have now joined with 114 livestock producers and 19 county commissioner appointees to work together at the local level on these statutorily created and empowered Boards to identify and solve problems within their local area. A tremendous example and testament of how diverse interests, who may have been at odds in the past, can come together and work proactively and cooperatively to solve problems right at home. That's what Wyoming's all about!!!



In the following sections, each of the 19 counties WHICH RECEIVED state funding have been asked to describe their activities for the purposes of this brochure/report. As the majority of the information contained within this publication has been derived from statutorily required reports that must



be submitted if a PMB receives state funding, the other counties which have not requested state funds were not asked to contribute to this report/brochure. For more information on those programs in counties which are not detailed here, please contact the counties directly.

Counting the costs - Continued from Page 6

mates an "economic return per animal," and its data can be used to estimate an "economic return per recreation day" value for these species.

The researchers used all three values to estimate a range of benefits supplied by wildlife. The estimated net benefits to wildlife from predator management ranged from \$2.4 million all the way up to \$188.1 million depending upon which value of wildlife was chosen.

Cost of Management is \$6.1 Million

On the cost side, it was estimated the total cost of predator management in Wyoming was \$6.1 million. This amount includes expenditures by the livestock producers, county predator management boards, U.S. Department of Agriculture's Wildlife Services in Wyoming, and state government. It is estimated 70 percent of these costs are borne by the producers.

By combining the estimates for agricultural benefits and wildlife benefits and dividing by the costs, the benefit-cost ratios were obtained. These ranged from 2.9 to 33.4 - meaning that for every dollar spent on predator management in the state, the people of the state receive between \$3 and \$33 dollars of "benefits" in return. Although this is a very wide range of values, even at the lowest ratio it is estimated predator management in Wyoming generates nearly \$3 of benefits for each dollar of expenditures.

In addition to the benefit-cost ratios, the project also esti-

mated the economic contributions of predator management to Wyoming. Predator management contributes an estimated 400 to 600 jobs to the state's economy with an average income of \$28,000 per job and total labor earning of \$11 to \$17 million per year.

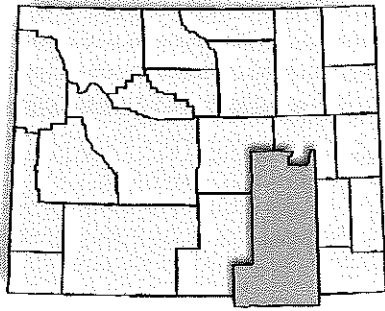
...the benefit-cost ratios were obtained. These ranged from 2.9 to 33.4 - meaning that for every dollar spent on predator management in the state, the people of the state receive between \$3 and \$33 dollars of "benefits" in return.

Predator management has been a part of Wyoming for more than a century and will likely be for the foreseeable future. Understanding its benefits and costs is important not only for agriculturalists and decision makers but ordinary citizens as well.

For a downloadable copy of the complete 69-page report, please go to <http://agecon.uwyo.edu/EconDev/Predators01.htm>.

Tom Foulke can be reached at 307-766-6205 or foulke@uwyo.edu, and Tex Taylor can be reached at 307-766-5682 or ttaylor@uwyo.edu

Albany County



Wildlife Protection/Enhancement:

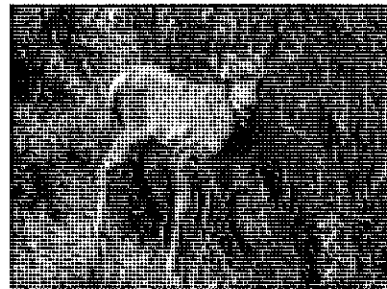
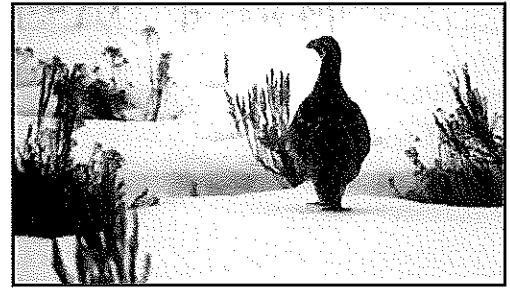
The Albany County PMD has focused on reducing coyote depredation on mule deer and sage grouse.

The Mule Deer Population for this area has been below objective for the past 13 years (2005 Job Completion Report WY. G&F). While the fawn crop averaged 87% as of July 16, 2008; or 87 fawns per 100 adult females, since 2001 the WY G&F's post hunt counts (2005 Job Completion Report) shows a juvenile to adult doe ratio of: 2001 - 55%; 2002 - 56%; 2003 - 76% ; 2004 -; 64%; 2005 - 69% (Average = 64%). Using the 2008 average of AT LEAST an 87% fawn crop in the middle of July, and by December when the G&F counts are recorded, it appears that predation losses between July and December are running between 11% and 23%.

Intense aerial hunting during April, May, June, and July 2008 was conducted in an effort to reduce coyote depredation on mule deer fawns, antelope fawns, and sage grouse. Up to this point we have found mule deer, antelope, rabbit, marmot, bobcat, elk calf, and gopher/rodents. During late fall we found more mule deer than antelope until about mid- May when we started finding more antelope than mule deer. And, with gophers and marmots coming out of hibernation in the spring, we found them in the stomachs more frequently. 64 coyote stomach's sampled contained -7 mule deer (5 in winter), 11 antelope, 23 rabbits, 11 gophers, 4 marmots, 1 elk calf,

1 bobcat, and 6 were empty. An extremely large male coyote was taken during May that had eaten a bobcat and a local rancher in the area found a coyote den in mid-July with a partially eaten bobcat carcass.

Also, while performing aerial operations, we noted a surprisingly high number of bobcats around the coyote denning areas. We also observed a bobcat trying to catch an antelope fawn on July 15th while flying in the area.



While working on the project to enhance wildlife within this area, personnel also checked coyotes for heart worm, retrieved plague and tularemia samples, researched yearly precipitation within the ACWP, and surveyed wildlife numbers. This was done in order to get a better understanding of whether or not removal of coyotes has any effect on the recruitment of mule deer and sage grouse.



Livestock Protection:

The Albany County Predator Management Board, in conjunction with USDA Wildlife Services, worked on 64 properties totaling 1,049,963 acres in 2008. Surveys and feedback to the Board have indicated that all cooperating ranchers within the wildlife project have reported very positive results and are very satisfied with the program and its effectiveness. At this point, losses to livestock and wildlife have not been totally eliminated, but have been reduced by a significant number.

Albany County "Fast Facts"

PMB Members:

Name	Representing	Office
T.C. Page	Cattle	President
Roger Newkirk	Sheep	Vice Pres.
David Kalco	Cattle	Treasurer
Brett Moline	Sheep	Secretary
Lawrence Atkinson	C.C.*	
Brett Moniz	Sportsmen	
William Guy Warpness, Jr.	Sportsmen	
Gavin Sneathen	Sportsmen	
Ron Heward	Cattle	

*indicates "At Large" member appointed by county commissioners

Land Distribution (acres)¹

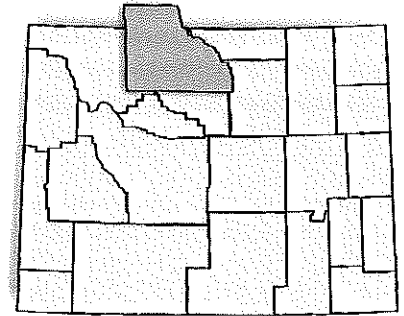
Private.....	1,816,180
State.....	227,408
Federal.....	755,987
Total.....	2,799,575

Ag Stats:²

Number of Farms & Ranches	320
Total Acres in Farms & Ranches	2,384,318
Average Size Farm or Ranch	7,451
All Cattle (head):	46,000
Rank in Cattle of WY Counties	16
Breeding Sheep & Lambs (head)	3,000
Rank in Sheep of WY Counties	20
Cash receipts from livestock marketing (2007)	\$ 26,332,000

¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY
² 2007 Albany County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office

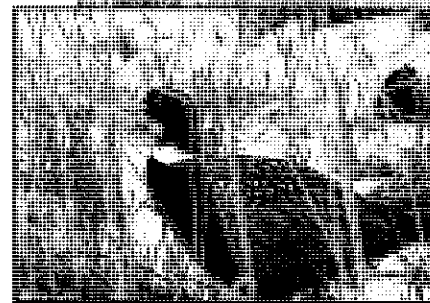
Big Horn County



The Big Horn County Pheasant Enhancement Projects have been conducted with great success since April of 2007. In 2008 it was decided to begin a second project due to the overwhelming success and positive results from the first. Field activities begin April 1st – June 30th 2009. These projects are conducted under the direction of the Big Horn County Predator Management District (PMD) with the cooperation of United

Department (WGFD), and the Animal Damage Management Board (ADMB). As predators are removed, samples are collected for plague, tularemia, and rabies which provide information on zoonotic disease. Coyotes removed during the project have been examined for the presence of canine heartworm as well.

Success of the projects are determined by analyzing information gathered by WS specialists in the field and Wyoming Game and Fish Department information collected from sportsmen and field studies conducted in the project areas. Damage information was tracked by the MIS program (WS Database) as problems were reported with damage



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There have been numerous reports from farmers and sportsmen about the positive impacts the project has had with reducing crop damage and improving pheasant production in both areas.

States Department of Agriculture - Wildlife Services (WS), State Veterinary Laboratory, Wyoming Game and Fish

confirmed where control actions were taken. Control actions were carried out using the best and most humane tools that provided immediate desired response for each situation and location. Live traps were the tool of choice by WS specialists due to the presence of pets and hobby animals in the areas.

The Big Horn County PMD has received positive feedback from both wildlife projects. There have been numerous reports from farmers and sportsmen about the positive impacts the project has had with reducing crop damage and improving pheasant production in both areas. Many farmers in the project areas have commented that since the first year the projects were initiated they have raised a quality crop of sweet corn without extensive damage and have observed a noticeable decrease in the

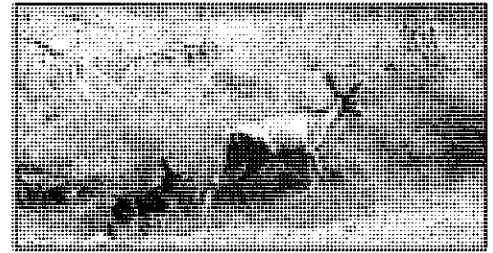
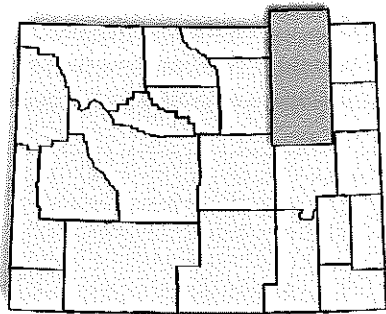
amount of damage and consequent maintenance to irrigation systems. Farmers and sportsmen have noticed more pheasant broods in the areas throughout the summer and into the hunting season. For all these reasons, the Big Horn County PMD feels the projects are beneficial to farm production and wildlife protection and the projects should continue county wide.

Big Horn "Fast Facts"		
PMB Members:		
Name	Representing	Office
Fred Barnett	Sheep	Chairman
CJ Duncan	Sportsmen	
Shannon Ellis	Sportsmen	
Greg Flitner	Cattle	Sec./Treas.
Randall Jones	Sheep	
John Kelso	Sportsmen	
Lisa Kimsey	Cattle	Vice Ch.
Kay Neves	Sheep	
Carl Nielsen	Cattle	
Todd Stoelk	Sportsmen	
Land Distribution (acres) ¹		
Private.....	339,822	
State.....	71,640	
Federal.....	1,598,534	
Total.....	2,009,997	
Ag Stats: ²		
Number of Farms & Ranches	501	
Total Acres in Farms & Ranches	411782	
Average Size Farm or Ranch	822	
All Cattle (head):	50,000	
Rank in Cattle of WY Counties	15	
Breeding Sheep & Lambs (head)	8,000	
Rank in Sheep of WY Counties	14	
Cash receipts from livestock marketing (2007)	\$ 30,044,000	

¹ Wyoming Rangeland Resources, UW Agriculture Experiment Station, Laramie, WY

²2007 Big Horn County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office

Campbell County



The funding that Campbell County has received from the Animal Damage Management Board has allowed the county to greatly increase its effectiveness as a predator control agency. After receiving our funds, we hired a Wildlife Biologist. He has been busy serving the City and County needs in the Public Health issues. He has established a great working relationship with many agencies and organizations in Campbell County. Most of his contacts and calls are referred by the Campbell County Sheriff's Department, City of Gillette Police Department, City of Gillette Animal Shelter, Campbell County Weed and Pest, Wyoming Game and Fish Department, Campbell County Department of Public Health, and the City of Wright. He is on call 24 hours a day, 7 days a week and he assists Campbell County residents and businesses in a wide variety of human / wildlife conflict issues.

The Biologist is also responsible for the rabies monitoring for the county. The Airport Board has also called on him for animal control.

Along with direct control work, Wade assists with information about wildlife nuisance issues that include exclusion and harassment of damage or nuisance causing wildlife. He has conducted enhanced surveillance activities and public education in reference to rabies in Campbell County. He has written public service announcements for radio and for the newspaper that run for several months during the summer. He has also conducted interviews

for the newspaper and did a public access show on the local television station. He also assists the City of Gillette/Campbell County Animal Shelter during their rabies clinics.

Along with the rabies issue, he has also tested 125 birds for the avian influenza and he has had some positive findings. He has also been working with the Wyoming Wildlife Service's Disease Biologist in Casper by opportunistically providing him with raccoons that he catches to participate in a state-wide raccoon roundworm study. He has

Game and Fish has increased the number of licenses in every area in Campbell County and it is largely due to predator control.

also been assisting the county coal mines with their wildlife issues that include controlling pigeons, badgers, raccoons, and skunks.

Due to the addition of our Wildlife Biologist, we have been able to concentrate the efforts of our veteran trappers toward predator control. Our two county trappers have been busy helping the livestock producers and wildlife sportsman. Along with the trappers, we have had 13 various Wildlife Service's employees participate in activities in Campbell County. According to the Wildlife Service's report, Campbell County has 226 active agreements that are held between landowners and the Wildlife Services. Out of those agreements, our trappers have serviced 81 of them. Those agreements cover 1,195,563 acres. We increased our flying budget last year and our trappers flew 194 fixed wing hours and 31.9 helicopter

hours. Trappers examine animals for canine heartworms. Wildlife health populations have been enhanced in the targeted areas.

The addition of the three sportsmen on the Campbell County Predatory Board has improved our versatility. Game and Fish has increased the number of licenses in every area in Campbell County and it is largely due to predator control. Ranchers have seen an increase in sage grouse, Hungarian partridge, and sharp tail grouse. The Rochelle hills area have been growing in turkey numbers and more and more young antelope have been recorded. Local sporting goods sales have been good, with more sales of doe/fawn licenses.

Campbell County "Fast Facts"

PMB Members:

Name	Representing	Office
Dan Reimler	Cattle	President
Tom Mills	Sheep	Vice Pres.
Jerry Dilts	Sheep	Sec/Treas.
Gib Bell	Cattle	
Tom Edwards	Sheep	
Ken Ford	Sportsmen	
Jason Oedekoven	Cattle	
David Daigle	Sportsmen	
Pete Quinzel	Sportsmen	
Shawn Terry	Sportsmen	

Land Distribution (acres)¹

Private.....	2,450,208
State.....	199,759
Federal.....	384,647
Total.....	3,034,614

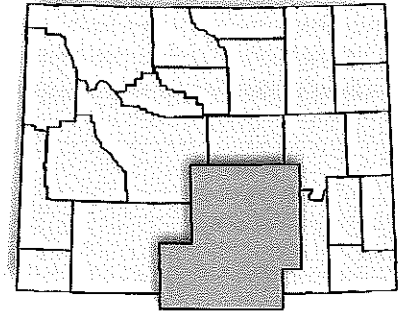
Ag Stats: ²

Number of Farms & Ranches	532
Total Acres in Farms & Ranches	2,985,945
Average Size Farm or Ranch	5,613
All Cattle (head):	85,000
Rank in Cattle of WY Counties	4
Breeding Sheep & Lambs (head)	25,000
Rank in Sheep of WY Counties	5
Cash receipts from livestock marketing (2007)	\$ 50,972,000

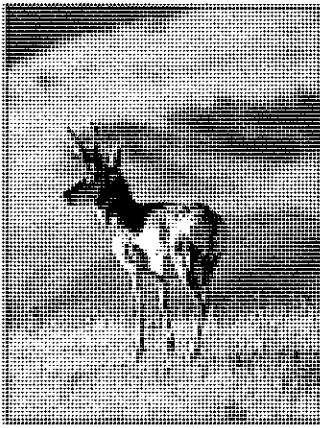
¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY

² 2007 Campbell County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office

Carbon County



In the past two years, with the help of the ADMB funds, the number of local participating agricultural producers which have signed predator management contracts



with Wildlife Services has increased more than 35%. Last year, twelve separate Wildlife Service employees serviced 2,342,508 acres in Carbon County with a total of 5,372.36 total man hours. The result of this increased management activity is that reported losses DECREASED approximately 36% between 2008 and 2009. As many losses go unreported, this is an underestimated total, but still a significant savings to the economy of Carbon County.

We believe that there needs to be a natural "preda-

tor/prey" relationship for a healthy wildlife ecosystem. Questions arise, and conflict occurs, however due to the fact that Wyoming has chosen to manage game populations with hunting, but until the implementation of the legislative funding through the ADMB, allowed predator numbers to escalate beyond control. This leads to the next question –

Should we manage the balance between predators and prey, and does predator management pay?

A key measurement of big game

the Benefit Cost Ratios (BCRs) indicate that in 2001 the benefits were 122 times the costs and in 2002 the benefits were 138 times the costs.

herd health in Wyoming is the number of fawns per 100 does after hunting season. It has long been held by livestock producers, some wildlife managers, and sportsman that high concentrations of coyotes can have an adverse affect on antelope fawn recruitment.

In 2002, we began a project designed to start to answer some of these questions. The ADMB provided critical financial resources to aid us in developing a complete and comprehensive integrated predator management program. The five year project, which was designed and intended to be a joint livestock/wildlife protection/enhancement project, was completed by Rod Merrell, a Carbon County Predatory Animal Board trapper, in 2007. This project created partnerships between wildlife managers, sportsmen and agricultural representatives. Amber Travsky of Real West Natural Resource Consulting of Laramie, Wyoming was hired to monitor, record and report the progress of this project as an unbiased third

party. Dr. Stephanie Swift, an economist from the Natural Wildlife Research Center through CSU, was brought in to analyze the final figures. The project was published by authors Swift and Merrell in the Sheep and Goat Journal, and the findings are under review by the Journal of Wildlife.

The results were astounding and showed definitively that predator management performed in key fawning grounds and adjacent areas definitely paid off. Overall results showed the number of pronghorn fawns surviving in the hunt areas used for the study increased from 42% before to 68% after treatment. In terms of economics, the authors of the study stated, "Even at the lowest value for both antelope and cattle, the net benefit to the Wyoming economy is approximately \$200,000 for each year. Using the Wyoming Game and Fish value of \$3,000 for antelope and the conservative value of \$600 for cattle, the cumulative net benefits of this program are \$1,178,009 for 2001 and \$1,384,321 for 2002." The authors further stated, "Using the Wyoming Game and Fish value of \$3,000 for antelope and the conservative value of \$600 for cattle, the Benefit Cost Ratios (BCRs) indicate that in 2001 the benefits were 122 times the costs and in 2002 the benefits were 138 times the costs. These BCRs show the extraordinary success of this program."

John Strand, PAB chairman at the time, said, "The program was a great success in Carbon County! We were very excited to see the official results prove what most local ranchers have thought for years – predator control does make a difference – for both livestock and wildlife."

Carbon County "Fast Facts"

PMB Members:

Name	Representing	Office
Robert Vorn	Sportsmen	President
George Williams	Cattle	V. President
Jerry Johnson	Cattle	Treas.
Jeff Corson	Sportsmen	
Larry Kmoch	Sportsmen	
Sharon O'Toole	Sheep	
Josh Peterson	Cattle	
John Strand	Cattle	
Dave Morgan	Sheep	
Roger Cox	C.C.*	

*indicates "At Large" member appointed by county commissioners

Land Distribution (acres)

Private.....	1,991,084
State.....	324,974
Federal.....	2,731,727
Total.....	5,047,785

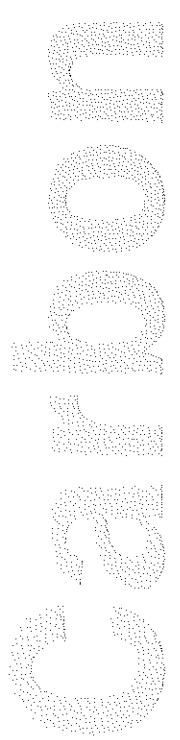
Ag Stats: ²

Number of Farms & Ranches	290
Total Acres in Farms & Ranches	2,329,571
Average Size Farm or Ranch (acres)	8,033
All Cattle (head):	83,000
Rank in Cattle #'s of WY Counties	5
Breeding Sheep & Lambs (head)	13,000
Rank in Sheep of WY Counties	8*
Cash receipts from livestock marketing (2007)	\$ 48,093,000

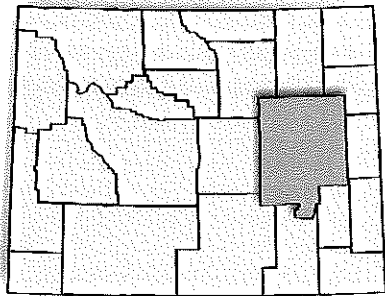
*tied with another county

¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY, 1975

² 2007 Carbon County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office



Converse County



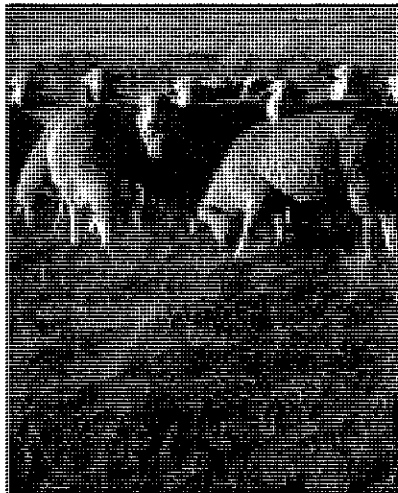
Converse County is located in the east-central part of Wyoming and has a land area of approximately 4200 square miles. Converse county livestock numbers in 2005 were 37,500 sheep, 36,400 cattle. The Cheyenne River runs through the North part of the county, exiting the North East Corner. This drainage is a natural conduit for coyotes into the county. The mission of the Converse County Predator Management District (CCPMD) is to provide predator management for wildlife protection/enhancement and to provide protection to livestock herds/operators within Converse County.

Wildlife Protection / Enhancement:

The CCPMD Board is committed to the preservation and growth of our counties wildlife populations by working to protect and enhance the wildlife of Converse County from excessive loss due to uncontrolled or unmanaged predator populations. Increased wildlife populations result in economic growth in Converse County and the state of Wyoming through increased revenue through hunters, sportsmen, wildlife enthusiasts and tourism.

With the addition of three sportsmen to the CCPMD in 2005, our ability to identify and target problem areas as regards wildlife populations was dramatically heightened. We also work closely with landowners and our local Game and Fish Department person-

nel to identify areas in the county through which we can apply direct and targeted predator control activities which help to maximize the growth and preservation of both game animals and waterfowl. To accomplish these goals, trappers and aerial hunting are the primary methods used to control predatory impacts on wildlife. CCPMD contracts with



APHIS and the ADMB to fill our trapper positions, and we in turn then utilize these trained wildlife professionals to aid us in monitoring wildlife numbers in the area we have identified as being in need of predator management.

Livestock Protection:

The goal of the CCPMD is to work to protect all livestock resources in Converse county from excessive predation, which in turn protects and enhances the economic base of Converse County. The CCPMD currently contracts with W.S. for two trappers to work primarily on livestock issues. Converse county is a very large county with diverse topography and a large wildlife population. Our current trappers tend to be over loaded with problem calls

and typically work to address immediate depredation events, most of which are on sheep operations.

CCPMD monitors livestock losses through a survey that has been sent to our producers for many years. We also utilize a bounty program for coyotes, and believe our program has proven to be effective for our situation (no state funds are used for the bounty program). Finally, CCPMD's trappers coordinate with local government to put management practices in place to address the needs and protect the citizens from human health and safety concerns due to problem wildlife under our purview. In 2009, this included working with the Wyoming Department of Health, the Wyoming State Veterinary Laboratory and the Wyoming State Veterinarian on surveying raccoons to assess roundworm loads, which is of concern to both human, as well as other domestic animals, health and safety.

Converse County "Fast Facts"

PMB Members:

Name	Representing	Office
Bob Hageman	Cattle	Tres.
Troy Scott	Sheep	Chairman
Tim Pexton	Cattle	
Earl Reed	Sheep	
Gene Hardy	Cattle	
Jeff Boner	Sheep	Vice Ch.
Dave Sheetz	C.C.*	Sec.
Kathi Hensen	Sportsmen	
John Wolfe	Sportsmen	
Matt Rasmussen	Sportsmen	

*indicates "At Large" member appointed by county commissioners

Land Distribution (acres)¹

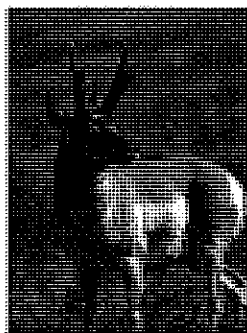
Private.....	2,048,319
State.....	260,638
Federal.....	344,327
Total.....	2,653,284

Ag Stats:²

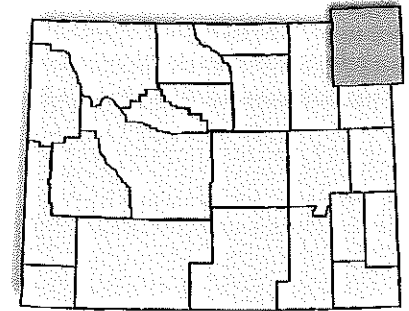
Number of Farms & Ranches	339
Total Acres in Farms & Ranches	2,517,920
Average Size Farm or Ranch	7,427
All Cattle (head):	60,000
Rank in Cattle of WY Counties	9
Breeding Sheep & Lambs (head)	65,000
Rank in Sheep of WY Counties	1
Cash receipts from livestock marketing (2007)	\$ 40,561,000

¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY

² 2007 Converse County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office



Crook County



The mission of the Crook County Predator Management District (PMD) is to provide predator control for the benefit of live-stock producers and wildlife populations within our 2800 square miles of northeastern Wyoming. Since the inception of the grant program through the ADMB, we have seen dramatically increasing support and cooperation from landowners, which indicates to us great satisfaction with our program.

Coyotes are our main concern when addressing predation on both livestock and wildlife. Mountain lion and bobcats follow in order of importance and impact. Coyotes remain the most significant predator and are responsible for 66 percent of sheep lost to predators in Crook county. Due to the increased level of funding we have received through the ADMB grant process, we have been able to increase our take of coyotes by over 40% annually. The additional funding has also increased the efficiency of

our program, as well as our ability to quickly respond to conflicts and find resolution to problems. We have also been able to provide our trappers with sorely needed upgrades in equipment and technology, which has also led to increased efficiencies within the program.



Crook County had a program in place prior to the current Legislative granting process and had some impact maintaining local predators. Sustaining those program levels would not have been possible much longer. The current contract system with the Wyoming Department of Agriculture and USDA/APHIS have allowed additional man hours, help with tracking numbers for measuring successes, and have allowed us to address health and human safety issues. Health issues such as rabies, along with testing for plague and tularemia are now being addressed. Trappers also examine for canine heartworm as part of a nationwide surveillance program to detect highly pathogenic avian influenza (HPAI). These services are made available to the public more readily since program implementation.

Enhanced wildlife health / populations are apparent throughout our targeted

areas. Landowner / operators are reporting an increase of seven to eight percent in seasonally booked hunters. Visual counts by local trappers of fawn/kid numbers are showing approximately five percent increases. Increased grouse, sage hens and turkey populations, primary food sources of targeted predation animals, show management of predatory animals is keeping bal-



ance with their primary food sources and in some areas allowing a come-back of species that were previously heavily preyed upon.

Crook County "Fast Facts"

PMB Members:

Name	Representing	Office
Dennis Williams	Cattle	President
Jerry Ista	Cattle	V. President
JW Nuckolls	Sheep	Treas.
Jim Dacar	Sheep	
Larry Folks	Sheep	
Brad Greba	C.C.*	
Gerald Bunny	Cattle	
Lloyd Jolley	Sportsmen	
Miles Shaun	Sportsmen	
Mike Smith	Sportsmen	

*indicates "At Large" member appointed by county commissioners

Land Distribution (acres) ¹

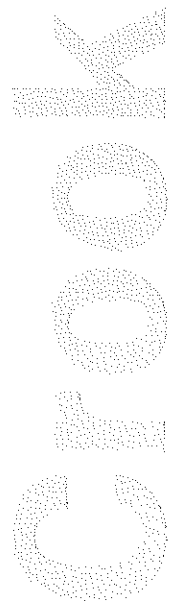
Private.....	1,406,495
State.....	125,490
Federal.....	272,352
Total.....	1,804,338

Ag Stats: ²

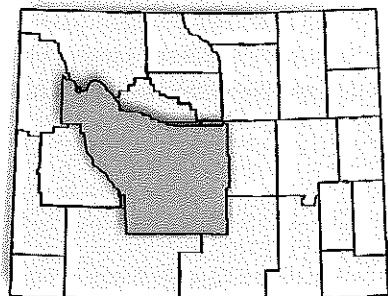
Number of Farms & Ranches	440
Total Acres in Farms & Ranches	1,523,198
Average Size Farm or Ranch (acres)	3,462
All Cattle (head):	65,000
Rank in Cattle #'s of WY Counties	8
Breeding Sheep & Lambs (head)	15,000
Rank in Sheep of WY Counties	7
Cash receipts from livestock marketing (2007)	\$ 38,477,000

¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY

² 2007 Crook County Agriculture Statistics; National



Fremont County



Fremont County has what is likely the most aggressive and ambitious wildlife enhancement programs of all county PMB's. Extensive time and financial resources have been invested in three main areas, which are detailed here:

SAGE GROUSE/MULE DEER PROJECT ANNUAL REPORT

- The Goal of this project is 3-fold.
1. To identify which predators/animals depredate sage grouse nests.
 2. Measure, if possible, the difference in nesting success of sage grouse in areas of little predator control as opposed to and adjacent area with intense predator control.
 3. Enhance a struggling mule deer population in hunt area 90.

In spring/early summer of 2009 trail cams were once again put out on artificial nests in both the "control" and the "treatment" area. This is the 4th year of this project. Of 40 nests observed, 7 were raided this year. This is significantly lower than previous years. Late snows and higher than normal spring rainfall resulted in a noticeable increase of grass/foilage compared to the much drier years previously. Increased nesting cover may have been a contributing factor to less nest predation this year as the nests were much harder to physically see from both above (good-sagebrush canopy) and at ground level (higher than normal grass heights). The common raven was the species that depredated all of the nests this year. In years past both magpies and red foxes depredated nests also.

A struggling mule deer herd in hunt area 90 has been another

focus of our PMB. The main predator of the mule deer in this part of Wyoming is the coyote. Coyotes are removed year round from the "treatment" area of the project. A coyote stomach analysis is done and a yearly deer count in late December-early January is conducted by USDA Wildlife Service's personnel and aircraft through funds provided by the Fremont PMB. Stomach content analysis on coyotes thus far indicates the top four prey species for coyotes in our area are (in descending order): Cottontail/jackrabbit, livestock, mule deer and antelope (note: some coyote gut contents were such that no determination could be made as to origin, and horse contents were found in some coyotes, likely from carrion that had been scavenged)

In late December 2008 our yearly mule deer count resulted in 652 total deer being counted in the treatment portion of hunt area 90 and adjoining reservation land. This is up from 489 in 2007. We believe that our projects have proven to be extremely beneficial by collecting data that should prove beneficial in making sound and accurate management decisions, but have also boosted our county and state's economy through an increasing deer population.

DUBOIS BIGHORN SHEEP PROJECT

The Dubois bighorn sheep project is ongoing through the Fremont County PMD, Wyoming Game and Fish Department and Federation for North American Wild Sheep (FNAWS). The purpose of the project is to help increase bighorn sheep numbers and ewe/lamb percentages in the Whiskey and Spring mountain areas near Dubois, Wyoming. Control work is done on coyotes around the sheep herds both on the ground and with aerial hunt-



ing. Reports from area residents and sportsmen indicate that the PMB efforts are well received and are yielding positive results.

OCEAN LAKE PHEASANT PROJECT

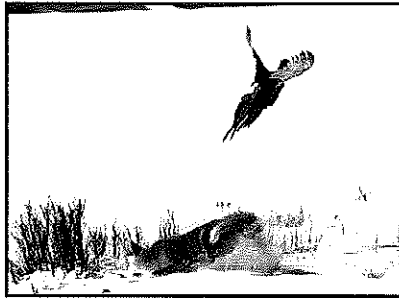
The ocean lake pheasant project was started in cooperation with the Fremont County PMD and the Wyoming Game and Fish. Ocean Lake lies west of Riverton, Wyoming and is a public land resource owned by WGFD. In the fall, WGFD releases pheasants for bird hunters on the property at different times. This projects aim is to reduce predators just prior to the open bird season. This helps to keep more birds in the field for hunters. Red foxes are the dominant predator in the area. Coyotes, raccoons, skunks and feral house cats are also present and are controlled by Fremont County PMB trappers.

Fremont County "Fast Facts"

PMB Members:		
Name	Representing	Office
Shane Sanderson	Cattle	President
Rob Philp	Sheep	V. President
Thad Dockery	Cattle	
Hearly Dockham	Sheep	
Colleen Jennings	Sheep	
Doug Lemm	Sportsmen	
Mark Leonhardt	Cattle	
Scott Maller	Sportsmen	
Alan Simner	Sportsmen	
Land Distribution (acres) ¹		
Private.....	748,370	
State.....	253,547	
Federal.....	5,238,660*	
Total.....	6,240,578*	
* Includes Indian Trust Lands of the Wind River Indian Reservation in Fremont County (2,086,160 A.)		
Ag Stats: ²		
Number of Farms & Ranches		1,019
Total Acres in Farms & Ranches		2,503,853
Average Size Farm or Ranch (acres)		2,457
All Cattle (head):		90,000
Rank in Cattle #'s of WY Counties		3
Breeding Sheep & Lambs (head)		11,000
Rank in Sheep of WY Counties		11
Cash receipts from livestock marketing (2007)		\$ 54,166,000
¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY ² 2007 Fremont County Agriculture Statistics; National		

Goshen County

Wildlife: We currently have two wildlife projects in Goshen County, a pheasant and waterfowl enhancement project started in May 2007 and a mule deer project started this spring. According to crow count surveys for pheasants this spring conducted by Wildlife Services and Wyoming Game and Fish, there was a 27.7% increase from last year in our targeted areas. There was also an increase in crow count numbers outside the targeted areas. The pheasant project has been a success not only in the wildlife numbers as we have found a significant reduction in property damage as well. The primary targeted predator is the raccoon which is responsible for a considerable amount of damage to cornfields, buildings, stored grain, and irrigation equipment. We have



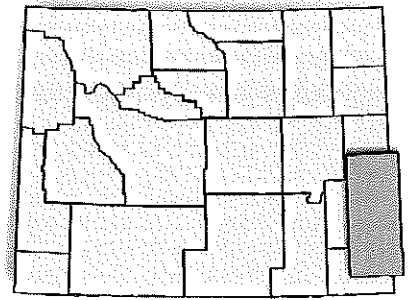
found a significant decrease in the amount of damage in the targeted areas. We are also conducting a study to quantify the dollar damage done by raccoons to corn fields in the targeted areas compared to non-targeted areas. Our trappers and WS personnel are working with the National Wildlife Research Center in Ft. Collins to conduct this study

which will be the first in the nation focusing on raccoon damage. The manpower, equipment, and models developed to accomplish this would not have been possible without the ADMB funding.

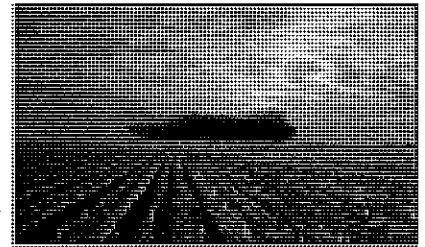
This spring, we developed a mule deer enhancement project that will target designated areas along the Goshen Hole Rim where the deer population is below G&F herd objectives due mainly to low fawn to doe ratios.

The predator targeted will be coyotes. We will coordinate this effort with livestock protection efforts in order to efficiently utilize time and money. We plan to increase flying time and spend extra time on the ground in these areas. Records will be collected regarding deer and antelope counts as well as coyote data including stomach content, sex, age, and GPS locations. The main objective is to see a direct increase in the number of surviving fawns.

Livestock: With the additional state funding, the Goshen Country Predator Management District (PMD) has been able to hire an additional employee, increase aerial time, and acquire additional and improved equipment for our projects. This has given us a greater degree of diversity with our program. When there are problems at both ends of the county on the same day, our trappers can respond accordingly



and stop the damage quickly. There are several feedlots in Goshen County that have problems with European starlings. The winter before last, one large feedlot was plagued with an estimated 100,000 starlings, causing several thousand dollars a week damage to feed supplies. With the help of WS personnel, our trappers have been able to decrease the starling numbers significantly. The control method must be done in a timely manner which would have been difficult to accomplish without the increased manpower, equipment, and bait made possible by the ADMB funding.



The average livestock losses two years prior to the state funding compared to the two years after we received funding show a 19.4% decrease. This is a notable difference which we believe is due to the additional state funding. Predator issues are being handled in a timely manner with efficiency. Our trappers, PMD, and WS cooperate with Laramie County and individual landowners in Laramie County who suffer predator losses. The ability to utilize helicopter hours in rougher mountain habitat which cannot be worked with a fixed wing airplane has resulted in the lowest predator losses these producers have had in years. We need the annual ADMB funding to keep the level of livestock protection from predators at the level that it is currently.

Goshen County "Fast Facts"

PMB Members:

Name	Representing	Office
Art Davis	Sheep	President
Ron Miller	Sportsmen	V. President
Stan Smith	Cattle	Sec./Treas.
Bob Daily	Cattle	
Ron Kaufman	Sheep	
Justin Lovercheck	Sportsmen	
Gerald Notman	C.C.*	
David Neider	Sportsmen	
Scott Yetter	Sheep	
Jennifer Scheer	Cattle	

*indicates "At Large" member appointed by county commissioners

Land Distribution (acres)

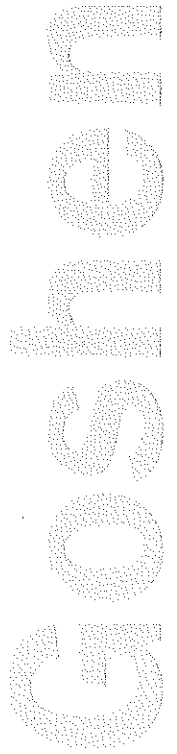
Private.....	1,293,952
State.....	87,654
Federal.....	27,293
Total.....	1,408,900

Ag Stats: ²

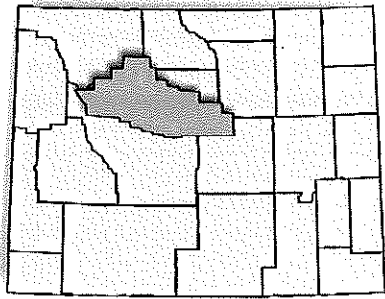
Number of Farms & Ranches	665
Total Acres in Farms & Ranches	1,258,171
Average Size Farm or Ranch (acres)	1,892
All Cattle (head):	120,000
Rank in Cattle #'s of WY Counties	1
Breeding Sheep & Lambs (head)	2,000
Rank in Sheep of WY Counties	21
Cash receipts from livestock marketing (2007)	\$69,279,000.00

¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY

² 2007 Goshen County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office



Hot Springs County



The Hot Springs County Predator Management district (HSCPMD) has responded to the requests for predator control from the largest ranches to backyard chicken and egg producers, and from large corn farmers to urban gardeners. According to the National Agricultural Statistics Service (NASS), there are 147 farms and ranches in Hot Springs County, with total sales in 2008 of over \$15,000,000.00. The largest agricultural commodity is cattle, with 23,000 being raised in the county in 2008 (NASS).

Cattle numbers have been increasing slowly after being reduced because of the drought conditions of the last few years. Inversely, the reported calf losses due to predators have been decreasing. The funding provided by the State of Wyoming has made this possible by allowing the HSCPMD to hire additional personnel and increase aerial time when targeting problem animals.

The HSCPMD has seen a marked change in the attitude of sheep producers in the county. The increased protection of the area flocks has resulted in more sheep being raised. In 2005, Hot Springs County was home to about 1300 sheep.

Today that number has



increased to about 6000(NASS). There are several new producers who have shown a desire to start new flocks or add to their numbers. The HSCPMD control personnel have been contacted several times to discuss the future plans of these producers. Predator control is a major consideration to these producers when they decide to expand their operations.

While predator control projects implemented for livestock protection usually benefits wildlife also, the HSCPMD has initiated several projects specifically for wildlife protection. In response to requests by area sportsmen, and Upland Bird project was started in 2008. This multi-year project was designed to reduce Pheasant mortality, but the Sage Grouse, Hungarian Partridge, Turkey and Chukar within the project area have also increased due to fewer predators. A survey was mailed to Hot Springs County sportsmen in early 2009. The result of that survey was that while bird numbers had increased, they were still not at what was considered by the respondents to be the historical levels. Another survey will be sent out in the fall of 2009 to record the numbers of birds seen after the spring hatch and summer rearing period.

To initiate the Upland Bird project, the HSCPMD purchased 30 new live

traps in 2009. These traps can be used around farms and along the watercourses where a higher density of housing exists, and in situations where a non-target catch is possible. These traps can be used throughout the year, and any pets that are caught can be released unharmed. The number of predators taken in 2009 using these traps are; Raccoons, 587, Skunks 179, and Feral cats 26.

Hot Springs County "Fast Facts"

PMB Members:

Name	Representing	Office
Jack Baird	Sheep	V. President
Jason Nosworthy	Cattle	Sec./ Treas.
Brett Belden	Sheep	
Ellen Baird	Sheep	
Cindy Jones	Cattle	
Mike Kimsey	Sportsmen	
Jim Lash	Sportsmen	
Art Hunter	C.C.*	
Bob Blacketer	Sportsmen	
Randy Weif		

*indicates "At Large" member appointed by county commissioners

Land Distribution (acres)

Private.....	398,742
State.....	82,496
Federal.....	772,803*
Total.....	1,254,041*

* Includes Indian Trust Lands of the Wind River Indian Reservation in Hot Springs County (237,575 A.)

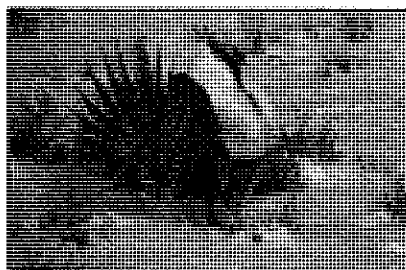
Ag Stats: ²

Number of Farms & Ranches	147
Total Acres in Farms & Ranches	876,560
Average Size Farm or Ranch (acres)	5,963
All Cattle (head):	23,000
Rank in Cattle #'s of WY Counties	21
Breeding Sheep & Lambs (head)	6,000
Rank in Sheep of WY Counties	15*
Cash receipts from livestock marketing (2007)	\$ 13,569,000

¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY

² 2007 Hot Springs County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office

*Tied with another county



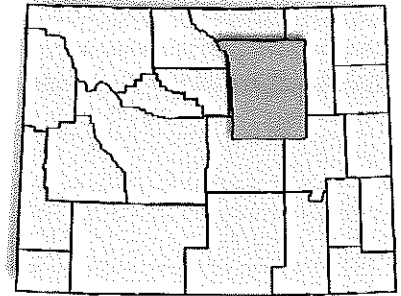
Johnson County

Johnson County is one of the county's in Wyoming that is highly dependent upon the livestock industry for its economic, cultural and historical base. While our minerals industry supplies the largest percentage of our economic base, ranching is the "backbone" of Johnson County and many of our residents live here because we have maintained a viable and active ranching community and

lifestyle. Management of predation is critically important to maintaining this industry and the corresponding lifestyle, particularly in light of the fact that wolves have now been documented several times in our county. The Johnson County Predator Management Board continues to be very active promoting control measures and continuing programs with direct benefit to not only our ranching constituents, but to all of the citizens of our county who have problems or concerns that are under our purview and ability to control.

The state management grant fees that we have received from the state legislature through the ADMB have enabled us to not only carry out an active program as spelled out in our management plan, but in fact have allowed us to expand and strengthen our program.

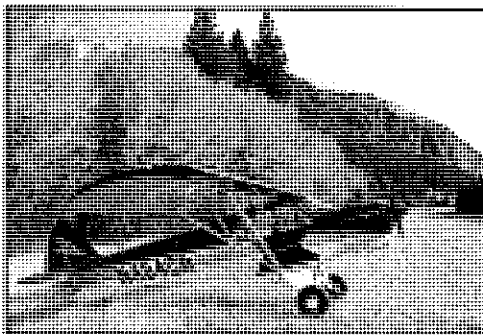
Aerial hunting has been very successful with good numbers of coyotes taken from the air. Aerial control is our primary method of controlling an ever burgeoning coyote population and while it is the most expensive method of control, it is also the most effective and selective method at our disposal. Many coyotes were taken just before or during the denning season, thus population control was achieved by good timing. This is not only advantageous to livestock producers, but great for the wildlife populations, county-wide. Some problems getting aircraft when conditions were right were incurred, which limited us at some times. Cooperative efforts are being used with USDA Wildlife Services as we have seen recent wolf activity in our district. Meetings to coordinate overall efforts with the



Wyoming Game & Fish have occurred, and we have been able to strengthen our relationship with the WGF, which is beneficial to all of us.

Johnson County continues its Rabies Mitigation Program with continued success. We have two seasonal employees for this program, one in Buffalo and one in Kaycee. Our contract employees also control and document rabies targeted animals. We've seen numbers lower and level off which might indicate a level of control. Both Buffalo and Kaycee city officials are very satisfied with the success of this program and have promised financial help for the upcoming fiscal year.

In summary, the livestock and wildlife of Johnson County as well as the residents of Buffalo and Kaycee are much safer due to the dedication of the members of the district board and the employees of the Johnson County Predator District. The success of the program is due, in great part, to the grant funding through the Wyoming Animal Management Board.



Aerial control work, performed from small, light weight, highly maneuverable planes similar to this with highly trained and experienced pilots, is the mainstay of most of the predator control efforts in Wyoming



Above: In this rare type of picture, wolves feed on recently killed lambs in Oregon. Johnson County saw a rash of wolf attacks during the spring and summer of 2009 which yielded similar results.

Johnson County "Fast Facts"

PMB Members:

Name	Representing	Office
Peter John Camino	Sheep	President
Peter Dube	Cattle	V. President
Barry Bauer	Cattle	
John Curuchet	Sheep	
Jim Forbes	Sheep	
Dave Hall	Cattle	Sec./Tres.
Scott Hokanson	Sportsmen	
Tom Jones	Cattle	
Rod Litzel	Sportsmen	
Bob McCann	C.C.*	
Rande Money	Sportsmen	

*indicates "At Large" member appointed by county commissioners

Land Distribution (acres)

Private.....	1,575,642
State.....	217,247
Federal.....	827,928
Total.....	2,620,817

Ag Stats: ²

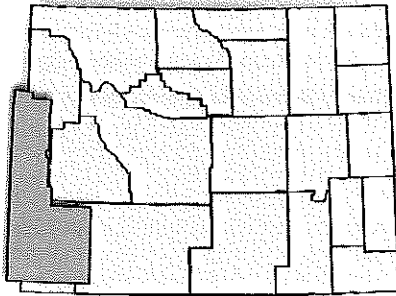
Number of Farms & Ranches	272
Total Acres in Farms & Ranches	2,155,277
Average Size Farm or Ranch (acres)	7,924
All Cattle (head):	57,000
Rank in Cattle #'s of WY Counties	13
Breeding Sheep & Lambs (head)	35,000
Rank in Sheep of WY Counties	3
Cash receipts from livestock marketing (2007)	\$ 36,284,000

¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY

² 2007 Johnson County Agriculture Statistics; National

JOHNSON COUNTY

Lincoln County



Lincoln County Predator Management Program: Progress Report

Since the inception of state funding to county predator management boards, great progress has been made in Lincoln County through the Lincoln County Predator Management District (PMD).

Livestock Protection: Livestock continues to be one of the most important economic sectors for Lincoln county, generating tens of millions of dollars annually in economic activity. While there is a small farming presence in Lincoln county, livestock production is far and away the dominate agricultural activity in Lincoln county. Ranching is also the cultural "backbone" of our county, and when coupled with our minerals industry, production and utilization of our natural resources is far and away the predominate economic, social and cultural centers of Lincoln county.

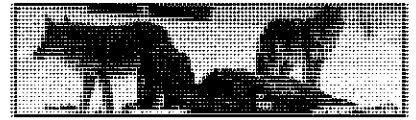
Predation continues to be a major concern to our livestock producers. Lincoln County is, unfortunately, home to every major predator of livestock in the state of Wyoming, including documented wolf kills, so a professional, fully functional and funded predator control program is crucial to the continuation of a livestock industry in Lincoln county. The funds that we were able to secure from the state through the ADMB have allowed us to enhance both the quality of our services, along with increasing the level of service to our constituents. We are now employing two full time trappers and share a third with Sweetwater County. Prior to the state providing the resources it has, we were only able to fund one trapper position. In that Lincoln County encompasses nearly 3 million acres spread out over 4,000 square miles, it is virtually impossible for one person to adequately and efficiently service our entire county. With the additional funds, we have been able to provide better service with highly trained and skilled professionals, and we have been able to equip them with better equipment that has result-

ed in a more efficient and a safer program.

Wildlife Protection / Enhancement: The Lincoln County PMB has undertaken two major, multi-year research projects that should have great importance to not only our area, but Wyoming and the West. Both studies are being conducted through the Berryman Institute at Utah State University. The first study is designed to study the impact of raven predation on the nesting success of sage grouse. We are comparing the proportion of nests that are successful (i.e., at least one egg hatched) in areas where USDA/Wildlife Services is controlling raven for livestock protection (control areas) to areas where there is no raven control.

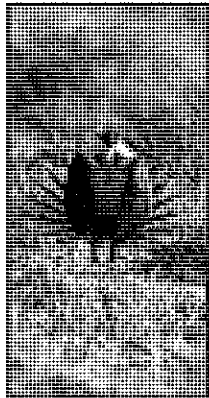
During 2009, we found 13 sage-grouse nests in three control areas; seven of these nests were successful (54%). We found 22 nests in five areas where ravens were not controlled, less than half of the nests were successful. Nearly all unsuccessful nests were depredated by ravens. These results suggest that raven control is beneficial to nesting sage-grouse. However, our research will continue for at least two more years in order for definitive results to be obtained.

The second study is designed to look at the impacts of coyote removal on local wildlife populations primarily by examining whether or not removal of coyotes increases pronghorn and mule deer densities. We conducted our initial study during 2007 and 2008 on ten study-sites. USDA/Wildlife Services removed coyotes on five sites, and five sites were left untreated as a control. Our initial results indicated that removal of coyotes through aerial gunning was strongly positively correlated with pronghorn fawn:doe ratios. In our initial results we were unable to make the same determination as relates to mule deer, but believe that part of the problem lies in the timing of control. Mule deer are much more sensitive in terms of their fawning areas as compared to antelope, and it appears that broad scale predator removal on a large area does not significantly increase mule deer fawn survival in our area. Given the fact that other research in Wyoming has demonstrated that targeted, site specific coyote removal has great benefit, one of the conclusions that can be made from our study



would be that any program whose goal is to increase mule deer numbers through coyote removal must be well thought out, site specific to known mule deer fawning areas and timed so that removal occurs immediately prior to fawning and continues only until such time that fawns are old enough to evade predators on their own.

In summary, because of the legislative funding Lincoln County has received through the ADMB, we have dramatically increased our predator management program which is providing positive results and impacts to both our livestock industry, as well as to our wildlife populations. We are also developing good scientific data which should be of benefit to wildlife managers, land management agencies and private landowners that are concerned about the impacts of predation on given wildlife species. Finally, due to the rural nature of our county and the fact that much of our economic activity is based upon the use and enjoyment of the natural resources we have been blessed with, strengthening both our agriculture and our hunting economies has strong benefit to many of our other business sectors.



Lincoln County "Fast Facts"

PMB Members:

Name	Representing	Office
Truman Julian	Sheep	President
Stanley Thompson	Cattle	V. President
Fred Roberts	Cattle	Sec./Treas.
Jody Bagley	Cattle	
Dale Clark	Sportsmen	
Jon Child	Sheep	
Max Fritzel	Sportsmen	
Albert Harmon	Sportsmen	
Willie Huggins	Sportsmen	
Dave Julian	Sheep	

Land Distribution (acres)¹

Private.....	571,802
State.....	107,577
Federal.....	2,049,777
Total.....	2,729,157

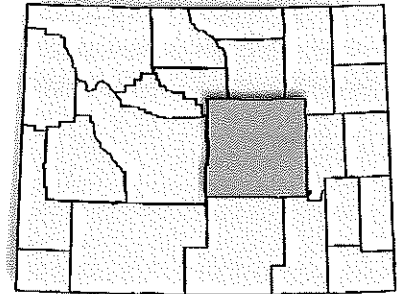
Ag Stats:²

Number of Farms & Ranches	495
Total Acres in Farms & Ranches	364,837
Average Size Farm or Ranch (acres)	737
All Cattle (head):	36,000
Rank in Cattle #'s of WY Counties	19
Breeding Sheep & Lambs (head)	32,000
Rank in Sheep of WY Counties	4
Cash receipts from livestock marketing (2007)	\$ 29,862,000

¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY

² 2007 Lincoln County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office

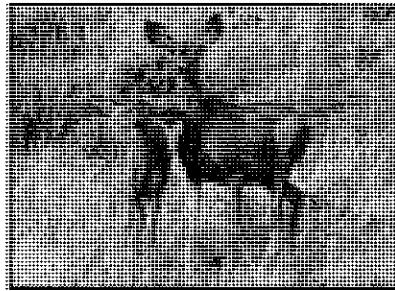
Natrona County



The mission of the Natrona County Predator Management District (NCPMD) is to provide predator control primarily for livestock producers. The NCPMD has contracted with two full time trappers who cover a very large geographical area. Natrona County is such a large county that we opted for more aerial control. Aerial hunting is an extremely effective method for predator control. Other control methods used to remove predators that are preying upon or threatening livestock and are creating hazards to public safety, or are damaging crops or property is the use of leg hold, cage traps, foot snares, neck snares, shooting, trail and decoy dogs and M-44 devices.

The NCPMD has utilized aerial time and the trappers for the hunting of predators before critical fawning and nesting periods. The activity for this has been concentrated in areas within the county that the Wyoming Game and Fish Department has

designated as critical fawning, nesting, and lek areas. Areas designated by the Wyoming Game & Fish Department for aerial and ground coyote removal are Northwest of Casper in deer unit #34. NCPMD meets annually with Wyoming Game and Fish



Department representatives and biologists to discuss predator control and its effect on wildlife populations, especially antelope within Natrona County. NCPMD is also working with Wildlife Services and our two (2) trappers carry tests with them to take samples of coyote's blood so it can be tested for Rabies and Tularemia.

Natrona County is experiencing regular depredation to livestock as a result of a healthy coyote population. The NCPMD has minimized the loss of livestock to predation, thereby enabling viability of the local producers. In 2007, NCPMD removed 2,658 coyotes, in 2008 2,188 coyotes were removed and through 11/30/09, 1669 coyotes have been removed. While these numbers appear large, we know that this is only a small percentage of the overall population of coyotes in our county. What is important is the fact that since this program has been established, nearly 6,000 coyotes have been removed in Natrona County, all of which were either threatening livestock or important wildlife herds.

The Natrona County

Predator Management District purchased a booth to display at various sport shows within Natrona County. The booth has a variety of pictures of livestock and wildlife killed by coyotes, various traps used by the trappers, statistics and predator control methods. The booth has been displayed at the Wool Growers banquet, Mule Deer Foundation banquet, SCI Natrona Chapter banquet and Wyoming Stock Growers Association banquet. The NCPMD also participates in the Wyoming Game and Fish Expo where the booth is displayed. Displaying the booth is a way of educating the community on how important predator control is for livestock and wildlife in Natrona County.

Without legislative backing and the ADMB money, the NCPMD would not be able to



function to the capacity it is because there is not enough revenue generated from livestock predator fees to run that type of program, with the breadth and scope, that we are now operating with.

Natrona County "Fast Facts"

PMB Members:

Name	Representing	Office
Charles Harlan	Sheep	President
Don Dodds	Sheep	V. President
Tyler Crimm	Cattle	Sec./Treas.
Curt Simpson	Sportsmen	
Keith Forgey	Cattle	
Don Garrison	Sportsmen	
Sy Gilliland	Sportsmen	
J.W. Hendry	Cattle	
Brad Neville	Sheep	
Bill Reed	C.C.*	

*indicates "At Large" member appointed by county commissioners

Land Distribution (acres) ¹

Private.....	1,551,093
State.....	384,401
Federal.....	1,778,269
Total.....	3,713,764

Ag Stats: ²

Number of Farms & Ranches	380
Total Acres in Farms & Ranches	2,871,009
Average Size Farm or Ranch (acres)	7,555
All Cattle (head):	58,000
Rank in Cattle #'s of WY Counties	10*
Breeding Sheep & Lambs (head)	21,000
Rank in Sheep of WY Counties	6
Cash receipts from livestock marketing (2007)	\$ 34,871,000

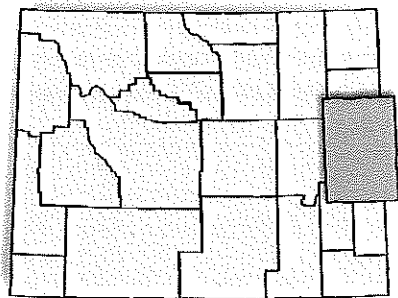
*tied w/another county

¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY, 1975

² 2007 Natrona County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office

Natrona County
 Predator Management District

Niobrara County



The goal of the Niobrara County Predator Management Board has always been to run an extremely efficient program and devise ways to get the "most bang for our buck" from the funds available to our Board. Prior to the availability of legislative funding through grants administered by the ADMB, our program was very small and focused almost entirely on livestock protection due to the fact that the only funds available to us were from livestock predator fees paid at the time a brand inspection was issued. Even with the increased administration required by ADMB for grant funding, we are proud of the fact that we still send 95¢ of each dollar directly to the field. Virtually all of the ADMB grant money goes toward field operations.

Wildlife Protection / enhancement

The Rawhide Buttes make up a scenic area of Niobrara County comprised of rough and timbered country surrounded by open plains. In 2000, ADMB funding was obtained for a cost-shared project to enhance mule deer population using no other tool than predator (coyote) control. Landowners requested the project, and the board decided the project was warranted when the chairman toured the area and counted more coyotes than deer. The Rawhide Recovery project ran for four years, from Fall 2000, through Spring 2004.

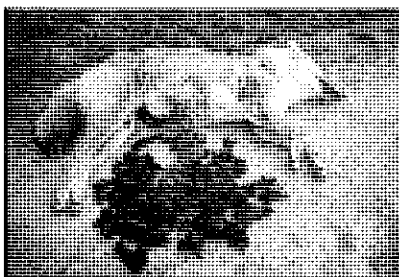
At the beginning of the project landowner surveys indicated a fall-counted fawn-to-doe ratio of 20%. By the end the fawn-to-doe ratios were near 100%. Landowner estimates showed total deer numbers increased from 550 at the beginning of the project to at least double in just

four years. Using the 2002 Game & Fish value of \$1200 per antelope (even though mule deer value should be higher), the benefit of predator control in this small area was at least \$660,000 in wildlife enhancement alone. Less than \$29,000 of state money was used to achieve these results, a return of approximately \$23 per \$1 invested.

At the conclusion of the project, predator control activities were reduced as funds were dedicated to other priorities. Little predator

...the benefit of predator control in this small area was at least \$660,000 in wildlife enhancement alone.... a return of approximately \$23 per \$1 invested...

control was carried out in the Rawhides during the time period of 2004-06. Landowners reported that coyotes had multiplied and fawn survival dropped during the relatively brief period of low control. With the new grant funding received in 2006, wildlife enhancement became possible countywide. The Rawhides and the northwestern portion of the county were selected as special mule deer emphasis areas. The November 2008, report showed fawn-to-doe ratios of 66% in the Rawhides. The north area showed gain of 11%, from 23% in 2007 to 34% in 2008.



Niobrara county trappers routinely inspect stomach contents of coyotes taken through control operations in order to determine impacts from coyote depredations. This photo shows the gut content of this coyote is comprised of virtually nothing but sage grouse chicks. Trappers also collect blood samples for disease monitoring purposes, including huponic plague and sarcoptic mange. Photo courtesy of Wildlife Services



The Rawhide Buttes, where the Niobrara County PMB mule deer study was conducted, are seen in this photo.

Livestock

With the fees livestock producers pay for predator control, the Niobrara County PMB has strived to provide maximum livestock protection. Wildlife has always incidentally benefited from predator control for livestock, but now, through the integration of the wildlife program, both program provide mutual benefit. Legislative funds have allowed us to expand to a two-trapper program. Priorities and operations cycle according to critical times for wildlife and livestock. Producers have been hard hit by drought and herd reductions; minimizing additional loss to predators is of paramount concern. Further complicating things, we have had to contend with a rabbit cycle peak and widespread mange in coyotes over the past three years.

Niobrara County "Fast Facts"

PMB Members:

Name	Representing	Office
Shannon Bruegger	Cattle	President
John Thurston	Sheep	
Dan Tadewald	Cattle	V. President
Barb Kilmer	Sheep	Treasurer
Phil Walduck	Sheep	Secretary
Clyde Peterson	Cattle	
Dick Baker	C.C.*	
Gary Bayne	Sportsman	
Jack Hammond	Sportsman	
Gene Kupke	Sportsman	

*indicates "At Large" member appointed by county commissioners

Land Distribution (acres)¹

Private.....	1,364,100
State.....	162,927
Federal.....	136,489
Total.....	1,663,516

Ag Stats: ²

Number of Farms & Ranches	243
Total Acres in Farms & Ranches	1,599,730
Average Size Farm or Ranch	6,583
All Cattle (head):	58,000
Rank in Cattle of WY Counties	10*
Breeding Sheep & Lambs (head)	6,000
Rank in Sheep of WY Counties	15*
Cash receipts from livestock marketing (2007)	\$ 33,303,000

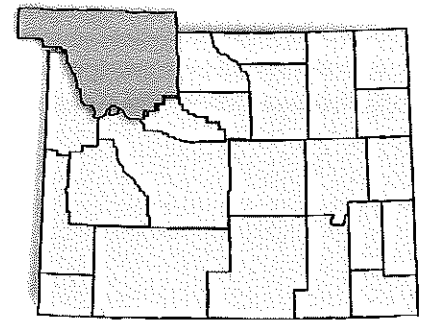
*indicates tied with another county

¹ "Wyoming Rangeland Resources", UW

Agriculture Experiment Station, Laramie, WY

² 2007 Niobrara County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office

Park County



The Park County Predator Management program is focused in 2 main areas—protection of livestock and enhancement / protection of wildlife. The highlights of these two broad areas are as follows:

Our wildlife project has been very successful in the reduction of the coyote population in the area east of Carter Mountain located in the south half of Park County. This area has had numerous reported and confirmed complaints by residents and livestock producers suffering from the large number of coyotes in the past. Complaints include, but are not limited to, pet harassment and predation, calf depredations, calving ground harassment, and wildlife depredation on fawns of mule deer and antelope.

In 2008, we removed 254 coyotes in this area using a variety of techniques and methods to achieve optimum results. The increase in state funding allowed us to have more WS employees on the ground and improve our effectiveness from the previous year's coyote total of 80 during the same time frame the year

before. Due to increased funding and personnel, coyotes were removed before they had opportunity to mate and den, which provides the most effective relief for wildlife and livestock due to the fact that paired coyotes feeding pups cause the most damage.

With the increased personnel and aerial budget we were able to diminish the number of complaints by livestock producers to the lowest level known in this area in the past. Due to inclement weather we were unable to fly the hours in this area we hoped for, but found that utilizing a helicopter was a very valuable technique in rough terrain and higher altitudes that held very educated coyotes. On the ground specialists were able to respond quickly and effectively to wildlife conflict which resulted in reduced depredations and a small number of harassment situations. Another benefit of the increased personnel was allowing more specialists to conduct day and night ground searches for target predators and their travel paths which enabled the air methods better success when utilized. This activity also was performed in a time period when we could make the most impact on the coyote population in and around the fawning deer and antelope.

Our specialists have recorded large numbers of strutting sage grouse and leks in this area and this information is provided to both the Wyoming Game and Fish Department (WGFD) and the Bureau of Land Management (BLM). This information should be of value to both agencies as the track and document populations of this species. In addition to all the above, our employees collect samples of coyotes taken in the area for bubonic plague, tularemia, and heartworm. The results are forwarded to the Park county health board and the state health department as they are received. This information is invaluable in tracking and monitoring these diseases which have deleterious

effects on humans and other animals.

The last element of our wildlife project involves our providing assistance in the wolf management efforts to control wolf predation and tracking wolf packs in chronic depredation areas, mainly outside the trophy game area designated by the State. Due to wolf depredation management efforts by the United States Fish and Wildlife Service



USF&WS) and the United States Department of Agriculture – Wildlife Services (USDA-W) in reducing the wolf population as a result of livestock depredations last fall, there was a decrease in depredation on livestock by wolves this spring. Increased aerial funding allowed us to monitor and survey seven known packs wolf packs in Park County as well as our identifying three possible new packs not previously known to the USFWS and the WGFD. USDA-W took six wolves by aircraft and three from the ground immediately after wolf conflicts were identified and confirmed under the direction of the USF&WS and WGFD. In addition, our increased personnel allowed USDA-W, under the direction of the USF&WS and the WGFD, to capture and collar six new wolves from the ground that will provide future information on packs, locations, and numbers.



Park County "Fast Facts"

PMB Members:

Name	Representing	Office
Tod Stutzman	Sheep	President
Ken Beer	Cattle	V. President
Larry Larsen	Sportsmen	Sec./Treas.
Zane Bryan	C.C.*	
Craig Griffith	Cattle	
Allen Hogg	Cattle	
James "Rocky" Orgill	Sportsmen	
Regan Smith	Sheep	
Joe Tilden	Sportsmen	
Shane Smith	Sheep	

*indicates "At Large" member appointed by county commissioners

Land Distribution (acres)

Private.....	725,462
State.....	155,411
Federal.....	2,428,366*
Total.....	3,309,269*

*includes 2,310,637 acres of National Park lands in Park and Teton Counties

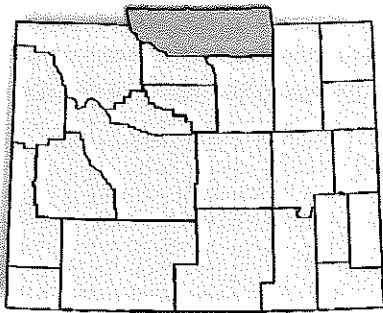
Ag Stats:

Number of Farms & Ranches	711
Total Acres in Farms & Ranches	810,302
Average Size Farm or Ranch (acres)	1,140
All Cattle (head):	52,000
Rank in Cattle #'s of WY Counties	14
Breeding Sheep & Lambs (head)	4,000
Rank in Sheep of WY Counties	19
Cash receipts from livestock marketing (2007)	\$ 35,002,000

¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY, 1975

² 2007 Park County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office

Sheridan County



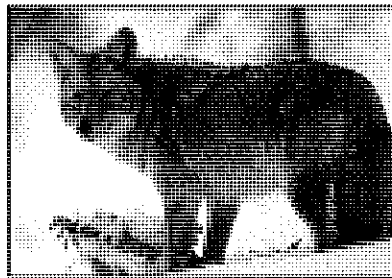
Sheridan County – The Sheridan County Predator Management Board has set aside six areas around the county for intensive predator management for the benefit of wildlife. The results so far have been encouraging, with deer numbers in Hunt Areas 1-5 responding well to predator control methods. The doe/fawn ration in these areas has increased by 65 fawns to 100 does. The young buck, 2 points or better, has increased dramatically. In Hunt Area 6, the mule deer seem to be making a comeback with numbers being up dramatically over the last year. Whitetail deer numbers in this area appear to be about the same with possibly a slight increase.

The Sheridan County Predator Management Specialist has reported that he has counted more sage grouse this past winter than previously. He has observed groups of 15 to 35 birds in areas that had been devoid of grouse for several years, and believes that the additional predator management in those areas has been a major factor in helping to reestablish populations.

According to the Sheridan County Predator Management

Board, livestock producers have greatly benefited from the predator control efforts. No cattle losses due to coyote predation were recorded in the time period that the Board has had additional funds and sheep losses from coyote predation are the lowest they have been in the past 5 years.

During 2006-2007, the Wyoming Game and Fish Department (WGFD) received



several reports of dead rabbits from throughout Sheridan County. The WGFD investigated various methods to document and monitor wildlife diseases. It was decided to collect blood from coyotes to test for diseases known to affect rabbits and other small mammals. An advantage of using coyotes to monitor plague and tularemia is that they are generally immune to these diseases; when exposed to either disease, they rarely develop clinical symptoms but do develop specific antibodies to each pathogen, which can then be detected in blood samples.

Plague is a bacterial disease of mammals generally transmitted by fleas. Rodents are very susceptible to plague and have a high mortality rate. In Wyoming, prairie dogs and ground squirrels are likely the most affected wildlife species.

Tularemia is a bacterial disease primarily of lagomorphs (rabbits) and rodents. Cottontail rabbits are very susceptible to tularemia and likely the affected species in Sheridan

County. Exposure to tularemia appears to have dropped off significantly from the spring of 2007 when 5 of 6 samples (83%) tested positive. This is an extremely small sample and may not be representative of the true conditions so caution must be exercised when drawing conclusions. Since the summer of 2007, exposure to tularemia has ran about 25%, very similar to exposure rates recorded around Wyoming.

The WGFD partnered with the Predator Management Board (PMB) of Sheridan County and the Wyoming Wildlife Disease Laboratory for this effort. The county trapper collected blood samples from coyotes taken during predator control activities. As of June 1, 2009, 112 usable samples have been submitted to the Lab. Of that, 51% (n=57) have tested positive for exposure to plague and 28% (n=31) have tested positive for exposure to tularemia.

Sheridan County "Fast Facts"

PMB Members:

Name	Representing	Office
Ralph Foster	Sheep	President
Cole Benton	Cattle	V. President
Mike Connell	Cattle	Treasurer
Tucker Carroll	Sheep	
Robert Hamilton	Sportsmen	
Bob Krumm	Sportsmen	
Regina Leath	Sheep	
Terry Cram	Sportsmen	
Arty Thomas	Cattle	
Robert Thuesen	Sportsmen	

Land Distribution (acres)¹

Private.....	1,020,462
State.....	125,903
Federal.....	452,046
Total.....	1,598,195

Ag Stats:²

Number of Farms & Ranches	561
Total Acres in Farms & Ranches	1,638,163
Average Size Farm or Ranch (acres)	2,920
All Cattle (head):	70,000
Rank in Cattle #'s of WY Counties	6
Breeding Sheep & Lambs (head)	5,000
Rank in Sheep of WY Counties	17*
Cash receipts from livestock marketing (2007)	\$ 40,188,000

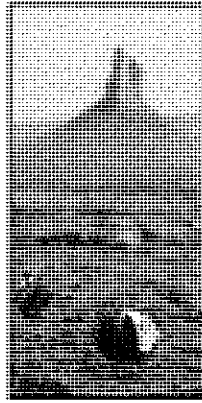
*tied w/another county

¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY, 1975

² 2007 Sheridan County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office



Sweetwater County continues to have a viable livestock industry, despite recent reductions in both cattle and sheep numbers. While livestock's contribution to Sweetwater County's economy is small as compared to our minerals industry, almost all of the private land in Sweetwater County (nearly 2 million acres of the 6 million acres total) is used for, and owned by, ranching and ranchers. Most importantly, these 2 million acres (outside of one major river and a couple of federal water projects) give rise to, or contain, nearly all of the water necessary for either agricultural or wildlife purposes within the county. These lands are also crucial as winter habitat for almost all of the big and trophy game species found in Sweetwater County. Due to these factors, maintenance of the ranching base and community



of our county is critical to maintaining a number of important societal and cultural values of Sweetwater County.

Due to the decline in livestock numbers over the past several years, revenue to fund our predator management program had declined to such a level that mounting any type of effective program was bordering on being impossible. The influx of state dollars from the legislature through the ADMB saved our traditional program, while at the same time opening up new opportunities and new partnerships through the addition of the sportsmen representatives to our Board.

Immediately after receiving the state funds we did, we changed our program and, instead of being focused strictly on livestock protection, we incorporated both a program to enhance and increase trophy and big game species through targeted predator management, plus we also initiated two research projects designed to delve into, and answer, questions regarding the effects of predators on mule deer and antelope, as well as looking at the effects of predation on sage grouse survival.

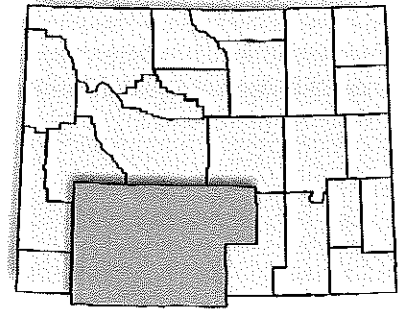
Our district continued to protect domestic livestock throughout the county by cooperating with USDA/Wildlife Services by contributing funds for trappers on the ground and aircraft, which together have been fairly successful in removing predators preying on livestock. During 2008 and through early 2009, we also had a program to study and remove predators from certain antelope and deer areas to try and ascertain what the predation impacts on these species and their fawns were, but unfortunately, due to state funding

cuts ordered by the Governor, the second year of this study and most of the special wildlife predator control will be halted until we are able to once again secure necessary funding.

We continue to have one wildlife study that will be ongoing, due to special funding from the Animal Damage Management Board, and that will be to continue looking at predation on Sage Grouse. This study is being conducted by Dr. Al Conover from the Berryman Institute at Utah State University. Dr Conover's early work has clearly shown that due to predation, primarily from ravens, the local Sage Grouse populations are



only averaging about one chick per nest per year survival rate. Again, we intend to continue this study long term, but this is wholly dependent upon the continuation of state funding to and through the ADMB and on out to the local predator management boards.



Sweetwater

Sweetwater County "Fast Facts"

PMB Members:

Name	Representing	Office
Bill Taliaferro	Sheep	Chairman
Fred Roberts	Sheep	Vice Ch.
Gary Zakotnik	Cattle	Tres.
Jim Burnett	C.C.*	Sec.
John Eversole	Cattle	
Eric Adams	Sportsmen	
Cliff Folkerts	Sportsmen	
Dick Thoman	Sheep	
Clark Weber	Cattle	

*indicates "At Large" member appointed by county commissioners

Land Distribution (acres)¹

Private.....	1,824,381
State.....	195,607
Federal.....	4,729,360
Total.....	6,749,348

Ag Stats:²

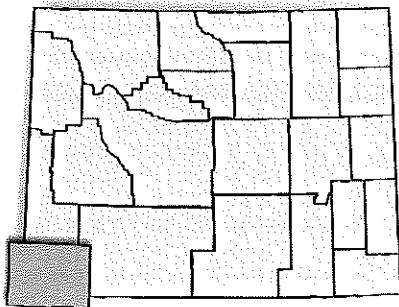
Number of Farms & Ranches	170
Total Acres in Farms & Ranches	1,480,246
Average Size Farm or Ranch (acres)	8,707
All Cattle (head):	13,000
Rank in Cattle #'s of WY Counties	22
Breeding Sheep & Lambs (head)	9,000
Rank in Sheep of WY Counties	12*
Cash receipts from livestock marketing (2007)	\$ 8,258,000

*tied with another county

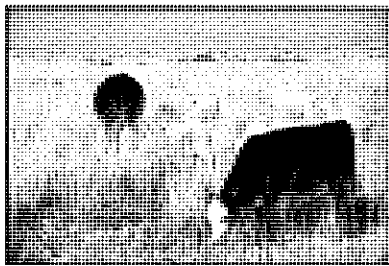
¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY, 1975

² 2007 Sweetwater County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office

Uinta County



The Uinta County program focuses efforts in two main areas: protection of livestock and enhancement and protection of wildlife populations in our area. For the benefit of Uinta County livestock producers, our trappers attempted to clear designated areas of coyotes before sheep were moved into those areas and in areas before cattlemen brought cows into calving grounds. We were successful in reducing the number of predators during the winter before lambing and calving.



During the summer of 2008, livestock losses were estimated at average for the summer months. Last fall, losses were below what we normally anticipate. Our board believes this was in part due to efforts made during the spring prior to entry into the spring-fall ranges. Due to a mild open winter, livestock producers were able to utilize more of the winter range. This provided more exposure for producer losses. Our trappers implemented a policy of trying to work certain key areas prior to livestock arrivals. This benefited us tremendously as reported losses showed levels at or below normal loss rates on the winter ranges.

We also implemented and conducted several raven control

projects that benefitted the producers in our county. We have had problems to both cattle and sheep producers regarding raven predation, which continues to grow and escalate. Our efforts have provided an additional measure of control.

Our Board began working this year with the Wyoming Game and Fish Department, and the Sweetwater and Lincoln County Predator Management Districts on a long term project to study the effects of predator control on sage grouse populations. The project is being conducted by the Jack Berryman Institute at Utah State University and we have provided funding for part of the project. Our program of selective control in certain years and of intensive control in other years has been undertaken and results on numbers and locations are being collected and evaluated.

We have focused some of our predator control work in known deer and antelope wintering ranges to provide benefits during stressful times (late winter, fawning, etc.) on these populations. We are receiving reports of both increased deer, and especially antelope, numbers and attribute that in large part to a reduction in predator numbers during those key times when wildlife are most vulnerable.

We are currently targeting raven and fox predation

near known sage grouse leks and nesting sites as derived from Wyoming Game and Fish Department information and data. We are hopeful that by applying selective and targeted predator control during key times of the year that we will provide benefit to sage grouse in these areas and increase numbers and density of the birds. We will continue to monitor and assess numbers and effectiveness of our efforts over time.

Uinta County "Fast Facts"

PMB Members:

Name	Representing	Office
Joe Hickey	Cattle	President
Wade Larson	Sheep	Sec./Treas.
Bruce Aimone	Sheep	V. President
Curt Bindl	Sportsmen	
Steven Cheney	Sportsmen	
Brad Fearn	Sheep	
Garie Henry	Cattle	
Steve Sims	Cattle	
Dave Wynn	Sportsmen	
Brandon Roberts	Sportsmen	

Land Distribution (acres)¹

Private.....	763,602
State.....	49,913
Federal.....	498,150
Total.....	1,311,666

Ag Stats: ²

Number of Farms & Ranches	335
Total Acres in Farms & Ranches	917,734
Average Size Farm or Ranch (acres)	2,740
All Cattle (head):	40,000
Rank in Cattle #'s of WY Counties	18
Breeding Sheep & Lambs (head)	40,000
Rank in Sheep of WY Counties	2
Cash receipts from livestock marketing (2007)	\$ 8,258,000

¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY, 1975

² 2007 Uinta County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office

Washakie County

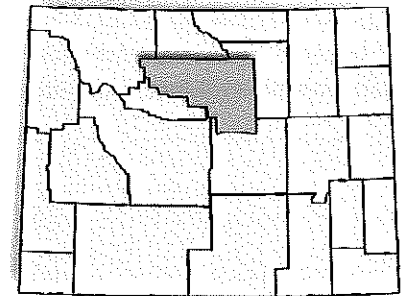
Washakie County is a large county (~1.5 million acres) that is dependent upon natural resources to drive much of our economy. Agriculture has been a primary industry, with livestock production a major component. The majority of the land base of Washakie County is held by either the federal or state government, which results in a large and never-ending supply of predators which can and do impact our livestock producers and their animals. In 2008-09, Washakie County Predator Management District had 58 agreements with livestock producers covering over 990,000 acres.

We contract with USDA /Wildlife Services (WS) for most of our program needs due to the fact that WS personnel are professional, highly trained and extremely proficient. WS selectively utilizes trapping, snaring, denning, call/shoot and aerial hunting to accomplish the objectives set out by our Board.

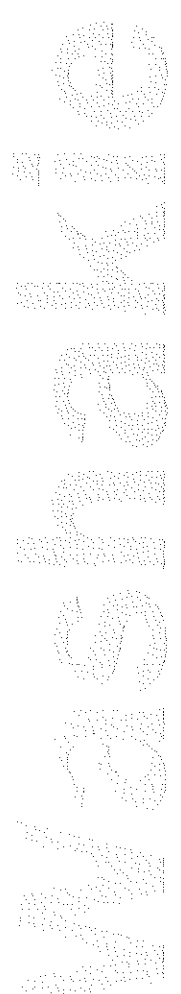
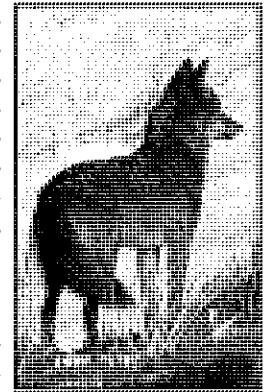
In order for us to better utilize the state funding we received, we partnered with our neighboring county to establish and operate our wildlife enhancement program. The Washakie and Park County Cooperative Wildlife Enhancement Project is designed to improve mule deer and antelope recruitment in deer hunt area 125, which is not only important to the Wyoming Game and Fish Department (WGFD) and hunters, but also agricultural producers and other wildlife enthusiasts as well. It has been documented in Wyoming that predator management can be used, in some cases, to limit mortality in ungulate populations and enhance fawn recruitment, doe survival, and increase the percentage of breeding bucks in problem areas. Although predation is rarely the sole factor limiting populations, it can play a significant role in suppressing populations below herd objectives. This intent of this project is to boost deer and antelope populations to sustainable levels. The project will be evaluated after two years to determine whether it warrants continuation.

Wildlife Services personnel have identified and quantified predation on mule deer and antelope in 2008-09. For example, on five different occasions this past year, coyotes were taken by aircraft while in the act of killing fawns. In several other situations, WS documented fawn deer and antelope remains at or near coyote den sites. Upon examination, 1/3 of the coyote stomachs contained either antelope or deer remains. In addition, stomach contents of coyotes included: mice, snakes, cottontail rabbits, ground squirrels, marmots, sage grouse, sheep, and beef calves.

There has been an increase in the total number of antelope observed during the



2008-09 classification surveys. This has been the first significant increase detected during the previous ten years. Mule deer survey data were not available for the project area at the time this report was prepared. Anecdotally, however, WGFD personnel have noted a definite increase in the mule deer population in this particular area. Additionally, large numbers of coyotes were observed during classification flights prior to 2008, with a significant reduction during the 2008 & 2009 flights. As predation was reduced on deer and antelope populations, fawn survival has increased. Our Board has determined that project results to date warrant continued efforts to clarify trends and the long-term effects of predator removal on mule deer and antelope populations in this area.



Washakie County

"Fast Facts"

PMB Members:		
Name	Representing	Office
Aaron Anderson	Sheep	
Rolly Redland	Cattle	President
Chris Schmeltzer	Sheep	Sec./Treas.
Mark Dooley	Sheep	V. President
Larry Heiser	C.C.*	
Kent Hensman	Sportsmen	
Mark Brewster	Cattle	
Jeff Stocklin	Sportsmen	
Kirk Tolman	Cattle	
Joe Winkler	Sportsmen	

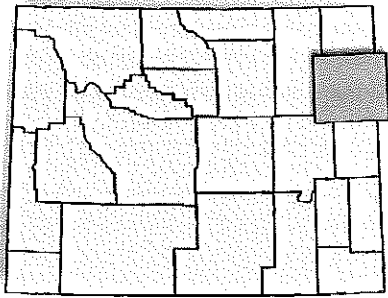
*indicates "At Large" member appointed by county commissioners

Land Distribution (acres) ¹	
Private.....	341,006
State.....	102,654
Federal.....	964,486
Total.....	1,408,147

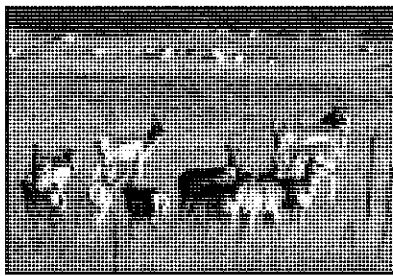
Ag Stats: ²	
Number of Farms & Ranches	184
Total Acres in Farms & Ranches	426,500
Average Size Farm or Ranch (acres)	2,318
All Cattle (head):	30,000
Rank in Cattle #'s of WY Counties	20
Breeding Sheep & Lambs (head)	13,000
Rank in Sheep of WY Counties	8*
Cash receipts from livestock marketing (2007)	\$ 19,578,000

*tied with another county
¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY, 1975
²2007 Washakie County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office

Weston County



Weston county's predator program is focused in three broad areas, livestock protection, wildlife protection/enhancement and human health and safety. Following is a brief synopsis of our program and the vital work we believe we perform.



Livestock Protection: The District trappers continue to receive increasing numbers of calls from private cooperators in the District as more livestock producers are learning that the District has the personnel to do the work that is required to remove predacious animals that are affecting livestock. Control of depredating coyotes has been difficult over the past year, as the trappers are seeing no end of coyotes moving into the sheep and calving areas. The rapid decrease of rabbits and mice over the last two years is thought to have caused livestock to become a more essential prey base for the coyotes in certain areas. Additionally, in that our county is bordered on one side by a state which does not have as active predator control program as do we, we believe that the excess coyotes which are produced across the state line flow into our county when they are forced out of their original environment because of over

population. This adds to our work load.

The District has not been able to do as much aerial work as we had predicted and hoped for due primarily to the lack of airplane availability. The district finds that the greatest need of flying conflicts with surrounding counties and their needs for the plane. This is not a problem that will go away and we work around the availability problem the best we can. District representatives from across the county are reporting receiving favorable comments and reaction from citizens on the increased visibility, rapid response times, and overall prompt, efficient services provided by the district livestock protection programs.

Wildlife Protection / Enhancement

General numbers of antelope across the county are in an upward trend and many antelope are being found in their historical areas where for the last 20 to 30 years few were found. The Mule deer population seems to be holding steady to increasing after several years of drought and high predation. Formal counts on mule deer have not been made however and population estimates are only observations made by trappers and sportsmen in the field.

Observations of sage grouse leks are being made and recorded as they are found. Adult Sage grouse numbers seem to be in an upward trend as many are found loafing along the roads throughout the district. Coyote and skunk removal continues to be targeted around the known sage grouse lek areas in an effort to provide protection to the grouse during their most vulnerable time, nesting and early brood rearing.

Human Health and Safety: The Striped Skunk populations exploded during the spring of 2008 and skunk removal calls have been up significantly in the district, particularly in the urban



areas. This is a major concern, as rabies outbreaks generally occur with major population surges of the skunk population. Conversations with individuals throughout the district indicate extremely large numbers (one individual mentioned 'herds') of skunks in the rural areas of the district. Many of the skunks in the rural areas are being removed privately with District assistance. During the fall, trappers in the district make a concerted effort to remove skunks from populated areas in an effort to reduce the potential for rabies transmission during the winter months. Ranchers and those who have out buildings are encouraged by District personnel to "skunk proof" buildings and reduce possible skunk habitat.

Weston County "Fast Facts"

PMB Members:

Name	Representing	Office
Donley Darnell	Cattle	V. President
Jerry Shepperson	Sheep	President
Alan Todd	Cattle	Sec./Treas.
Gary Lawrence	Sportsmen	
Terry Groenewald	Cattle	
Homer (Sam) Harvey	Sportsmen	
Tom Sewell	Cattle	
David Manzer	Sportsmen	
Lynn Watt	Sheep	
Sam Haptonstall	Sportsmen	

Land Distribution (acres)¹

Private.....	1,065,498
State.....	112,406
Federal.....	300,204
Total.....	1,478,109

Ag Stats:²

Number of Farms & Ranches	221
Total Acres in Farms & Ranches	1,605,637
Average Size Farm or Ranch (acres)	7,265
All Cattle (head):	43,000
Rank in Cattle #'s of WY Counties	17
Breeding Sheep & Lambs (head)	5,000
Rank in Sheep of WY Counties	17*
Cash receipts from livestock marketing (2007)	\$ 24,905,000

*tied with another county

¹ "Wyoming Rangeland Resources", UW Agriculture Experiment Station, Laramie, WY, 1975

² 2007 Weston County Agriculture Statistics; National Agricultural Statistics Service, Wyoming Field Office