# University of Nebraska - Lincoln DigitalCommons@University of Nebraska - Lincoln

Proceedings of the Eighteenth Vertebrate Pest Conference (1998)

Vertebrate Pest Conference Proceedings collection

1998

## Amendment 14-Colorado's Anti-Trapping Initiative, A History And Perspective on Impacts

Craig A. Coolahan
U.S. Department of Agriculture

Sandy Snider Colorado Woolgrowers' Association

Follow this and additional works at: http://digitalcommons.unl.edu/vpc18

Coolahan, Craig A. and Snider, Sandy, "Amendment 14-Colorado's Anti-Trapping Initiative, A History And Perspective on Impacts" (1998). *Proceedings of the Eighteenth Vertebrate Pest Conference* (1998). 38. http://digitalcommons.unl.edu/vpc18/38

This Article is brought to you for free and open access by the Vertebrate Pest Conference Proceedings collection at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Proceedings of the Eighteenth Vertebrate Pest Conference (1998) by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

### AMENDMENT 14—COLORADO'S ANTI-TRAPPING INITIATIVE, A HISTORY AND PERSPECTIVE ON IMPACTS

CRAIG C. COOLAHAN, U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services, 12345 West Alameda Parkway, Suite 210, Lakewood, Colorado 80228.

SANDY SNIDER, Colorado Woolgrowers' Association, 8833 Ralston Road, Suite 200, Arvada, Colorado 80002.

ABSTRACT: In November 1996, Colorado voters approved constitutional Amendment 14, an anti-trapping initiative, which prohibited the taking of wildlife with any leghold trap, any instant kill body-gripping design trap, or by poison or snare. Several exemptions were provided. This paper summarizes the history of events leading up to the introduction of the Amendment, and examines some of the initial impacts on the federal Wildlife Services program, the sheep industry, and the people of Colorado.

KEY WORDS: trapping initiatives, trap bans, initiatives, leghold traps

Proc. 18th Vertebr. Pest Conf. (R.O. Baker & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. 1998.

#### INTRODUCTION

In March 1994, the Colorado Division of Wildlife (CDOW) revised its Long Range Plan outlining broad direction and priorities for the Division over the next 15 years. Goal number 11 of the plan directed the agency to "develop and apply standards for trapping practices that are consistent with public expectations for humane treatment of animals" (Colorado Division of Wildlife March 1994). In August 1994, a multi-disciplinary team of policy analysts from the CDOW was assembled to review the Division's furbearer management policy and regulatory issues. One of the team's objectives was to increase the level of information to all players in the process so that the Division fully understood the perspectives and positions of stakeholders and citizens and vice versa. To help obtain human dimensions information related to trapping, the team requested Colorado State University's Human Dimensions in Natural Resources Unit (HDNRU) to conduct a telephone survey on public attitudes towards trapping. Sixty-one percent of those surveyed would ban trapping if given an opportunity; twenty-nine percent would allow trapping to continue; and ten percent didn't know. Fifty-three percent supported the use of traps to prevent damage to livestock or property.

In November 1994, the CDOW contracted with a private firm, CDR Associates of Boulder, Colorado, to facilitate a Furbearer Management Review Stakeholder's process. The Stakeholder Committee's charge was to develop recommendations on furbearer management for the Colorado Wildlife Commission to consider. Committee members included individuals from the Colorado Department of Agriculture, U.S. Department of Agriculture, CDOW, Colorado Trapper's Association, Colorado Cattlemen's Association, Colorado Woolgrower's Association, United Sportsmen's Council, Colorado Wildlife Federation, and various environmental and animal welfare/rights groups.

At about this same time voters in Arizona passed Proposition 201 amending state statutes making it unlawful to take wildlife with any leghold trap, any instant kill body-gripping design trap, or by a poison or

snare on any public land. This provided additional impetus to the effort being undertaken by the CDOW.

The Stakeholder's Committee was unable to reach consensus on a number of issues after five months of meetings; nevertheless, they developed four alternatives and presented them to the Wildlife Commission. The most restrictive of the alternatives allowed trapping only to protect human health and safety; the least restrictive alternative required few changes to regulations in place at the time. The Wildlife Commission directed the DOW staff to develop a preferred alternative to be presented to the Commission at their workshop scheduled for June. This was done, and final regulations were adopted by the Commission at their July meeting.

Some of the notable changes to existing regulations were: 1) the use of padded-jaw traps was mandated by March 1, 1997; 2) killing snares were made illegal, and new regulations required the use of restraining snares which had to be checked every other day; 3) aerial hunting permits were shortened from 90 to 30 days; 4) no preventive control was allowed; 5) the number of species that could be trapped was reduced from 18 to 8 (the 8 were species previously determined to be those most commonly involved in depredation or nuisance problems); and 6) a season was set for coyotes (November 30 to February 28; the season had been yearlong).

Following adoption of the CDOW regulations, the Department of Agriculture attempted to develop a Memorandum Of Understanding (MOU) with the CDOW to deal with some of their ongoing concerns. The CDOW backed away from this process in December saying that any further negotiations would have to include Furbearer Stakeholder Committee members.

On January 3, 1996 a group calling itself CPAWW (Colorado People Allied With Wildlife) presented language for Amendment 14 to the Secretary of State's office. Several individuals who had participated in the CDOW furbearer management review stakeholder process took the lead in getting the Amendment introduced. Amendment 14 language was very similar to that contained in Arizona's Proposition 201, with the

exception that the prohibitions on traps, snares, and poisons covered private as well as public land.

Following this action, in January 1996, agriculture decided to go to the legislature to clarify the authority of the Commissioner of Agriculture in predator control. The reason for the confusion was that there was an existing agriculture statute, Title 35-40-101, which gave the Commissioner of Agriculture authority to promulgate rules for the taking of predators. No rules had ever been promulgated under this authority.

Senate Bill 96-167 was introduced to the Colorado legislature in January 1996. SB 96-167 amended several sections of Title 33 and 35 of the Colorado Revised Statutes. The word predator was changed to depredating animal, a list of animals was established that the Agriculture Commissioner had authority to control, designees were allowed to assist landowners with damage problems, and several definitions were established. Contrary to some public opinion, SB 96-167 did not transfer authority to the Department of Agriculture to manage predators, it merely clarified existing authority. Senate Bill 96-167 was passed by the legislature in March and signed by the Governor in April of 1996.

Signatures to qualify Amendment 14 for the November ballot were gathered between January and July 1996. CPAWW obtained 54,000 (5% of the vote for the Secretary of State in the last election) valid signatures to qualify the initiative for the ballot. The opposition had two and a half months to mount a campaign against the initiative. The Colorado Woolgrowers headed the opposition spending nearly \$42,000 on their campaign. Amendment 14 backers spent nearly \$200,000.

In the meantime, the Department of Agriculture proceeded to develop regulations for taking certain depredating animals under authority clarified in SB 167. These regulations were developed by a roundtable committee and finalized on November 1, 1996. Many members of this committee had served on the CDOW Furbearer Management Review Committee.

Some notable changes were made to existing CDOW regulations. The CDOA regulations allowed: 1) the use of killing snares which could be checked once a week; 2) traps to be checked three times a week (this was critical to the Wildlife Services (WS) program considering that traps could now be left functional over weekends); 3) designees to assist landowners suffering damage from depredating animals; 4) extending aerial hunting authorizations to 90 days; 5) a trade-in program for unpadded traps; and 6) WS personnel to take depredating bear and lion without prior approval from the CDOW.

On November 5, 1996 the voters of Colorado passed Amendment 14 by a 52% to 48% vote. The Amendment passed in only 16 of 63 counties with 51% of the "yes" vote coming from four, mostly urban, counties: Denver, Jefferson, Boulder, and Arapahoe. On January 15, 1997 the Governor proclaimed Amendment 14 law.

Legislation to interpret and implement certain provisions of the Amendment was included in Senate Bill 97-52 which was introduced in January and passed in May 1997.

As instituted, Amendment 14 prohibited the taking of wildlife with leghold traps, instant kill body-gripping traps (conibears, etc.), snares (leg and neck), and poisons (M-

44s and denning cartridges) with the following exemptions: 1) for bird and rodent control other than beaver and muskrat; 2) for the taking of fish or other nonmammalian aquatic wildlife by the CDOW; 3) for the taking of wildlife for the purpose of protecting human health or safety by federal, state, county, or municipal departments of health; 4) for the use of nonlethal snares, traps not specifically designed to kill, or nets to take wildlife for the purposes of: (a) bona fide scientific research, (b) falconry, (c) relocation permitted in accordance with rules of the CDOW, or (d) medical treatment of the animal being captured; 5) for landowners and lessees of a parcel of private property used primarily for commercial agriculture, or their employees, to use these devices if other legal lethal or non-lethal methods failed to alleviate a particular problem. Before being allowed to use the prohibited methods, a property owner or lessee would have to present on-site evidence to the CDOW that ongoing damage to livestock or crops had not been alleviated by the use of methods other than those prohibited by the Amendment. Authorizations to use prohibited methods would not exceed one 30-day period per calendar year per parcel.

The Colorado WS program ceased using all leghold traps, conibear traps, neck snares, mechanically powered leg snares, large denning cartridges, and M-44s on January 23, 1997, but resumed using these devices in May 1997 following the signing of Senate Bill 52. All current use of these devices occurs on private property and during 30-day exempted periods.

This paper examines some of the impacts of Amendment 14 on the WS program, the sheep industry, and the people of Colorado.

#### **METHODS**

Data from the Colorado Wildlife Service program's Management Information System (MIS) were used to analyze impacts of Amendment 14 on program take of coyotes, black bear, and mountain lion with leghold traps, neck snares, mechanically powered leg snares, M-44s, and large denning cartridges. MIS information on confirmed (verified by Wildlife Services personnel) losses of sheep and lambs to covotes, black bear and mountain lion was also analyzed. The MIS system has been functional in Colorado since April 1994 and records a variety of information on program activities such as number of properties worked, time spent on these properties, status of these lands (e.g., federal, state, private), confirmed damage, control tools placed and removed, numbers and species of animals taken, and control recommendations given.

These data were organized by Agricultural Statistics Service district. There are six such districts established in the State of Colorado: 1) Northwest and Mountain; 2) Northeast; 3) East Central; 4) Southwest; 5) San Luis Valley; and 6) Southeast. The program is currently not operational in the Northeast or East Central Districts. The program in the Southeast District has not been in place long enough to be considered in this analysis. Personnel changes as well as changes in program emphasis in the San Luis Valley District also make it unavailable for analysis. Therefore, only information from the Northwest and Mountain and the Southwest

districts (Figure 1) was analyzed. The years analyzed were federal fiscal years (October 1 through September 30) 1995, 1996 and 1997.

decrease in coyote take with these devices in both districts during FY 1997. Although take had declined between FY 1995 and 1996, the decline was more dramatic between FY 1996 and FY 1997.

#### COLORADO AGRICULTURAL STATISTICS DISTRICTS

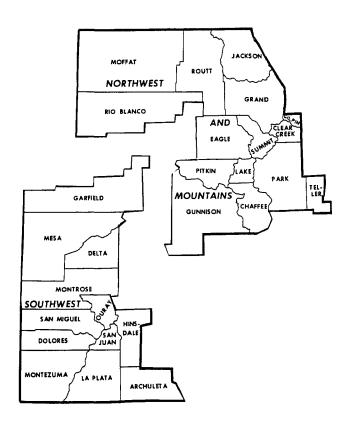


Figure 1. Colorado Agricultural Statistics Service Agricultural Districts, Northwest and Mountain and Southwest.

#### **RESULTS**

#### Impacts on the Use of Control Methods/Tools

Leghold Traps. Leghold traps have historically been used in the Colorado WS program primarily to capture coyotes. Leghold traps have been used on public and private land in both agricultural districts. Even though the WS program assisted landowners during an unknown number of 30-day exempted periods during fiscal year (FY) 1997, leghold trap take of coyotes decreased dramatically between FY 1996 and FY 1997 in both districts (Figure 2).

Neck Snares. Neck snares have historically been used by the WS program to take both coyotes and beaver. These devices have been used on public and private land in both agriculture districts. Figure 3 illustrates the

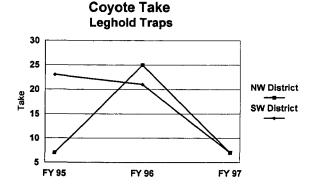


Figure 2. Leghold trap take of coyotes, Northwest and Southwest Agricultural Districts, Fiscal Years 1995 to 1997.

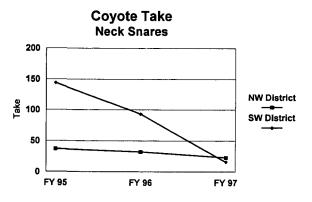


Figure 3. Neck snare take of coyotes, Northwest and Southwest Agricultural Districts, Fiscal Years 1995 to 1997.

M-44s. M-44s are registered in Colorado for the taking of coyotes, red fox, gray fox, and feral dogs that are depredating on livestock or federally listed threatened and endangered species. They are registered for use only by APHIS Wildlife Services personnel. Historically, they have been used only on private land. Even though coyote take with M-44s had declined between FY 1995 and FY 1996 in both districts, take in FY 1997 was dramatically lower (Figure 4).

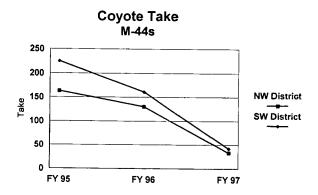


Figure 4. M-44 take of coyotes, Northwest and Southwest Agricultural Districts, Fiscal Years 1995 to 1997.

Mechanically Powered Leg Snares. Mechanically powered legsnares have historically been used by WS personnel to capture both black bear and mountain lion. These devices have been used on public and private land in both agricultural districts. During the two years preceding the passage of Amendment 14, program personnel in the Northwest District used legsnares to capture 15 and 11 black bear, respectively. They also took one mountain lion in FY 1996. In FY 1997, one black bear and one mountain lion were taken with legsnares. In the Southwest District personnel used legsnares to take 11 black bear in FY 1995, and three black bear in FY 1996. They also took three lion in FY 1995, and two in FY 1996. In FY 1997, one black bear and no mountain lion were taken with legsnares.

<u>Large Denning Cartridges</u>. Even though the WS program did not use these devices much prior to the passage of Amendment 14, many cooperators in the Northern and Mountain District used them extensively to control depredating red fox.

## IMPACTS ON LIVESTOCK DAMAGE, SPECIFICALLY SHEEP

#### Wildlife Services Confirmed Loss

Northwest and Mountain District. The Northwest and Mountain District encompasses a 14 county area (Figure 1) that has historically been the major sheep raising area of the state. Program personnel spent 553 staff days in FY 1995, 731 staff days in FY 1996, and 785 staff days in FY 1997 protecting sheep on rural properties within this district. Figure 5 shows the trend in WS confirmed sheep and lamb loss to coyotes, black bear and mountain lion during fiscal years 1995 to 1997.

Southwest District. The Southwest District is a 12 county area (Figure 1) of the state that has supported a WS program for a number of years. WS personnel spent 685 staff days in FY 1995, 608 staff days in FY 1996, and 455 staff days in FY 1997 protecting sheep on rural properties. Figure 6 shows the trend in confirmed sheep and lamb loss to coyotes, black bear and mountain lion during FYs 1995 to 1997.

#### 

Figure 5. Confirmed sheep and lamb loss/staff day, Northwest and Mountain Agricultural District, Fiscal Years 1995 to 1997.

## Southwest District Confirmed Sheep & Lamb Loss/Staff Day

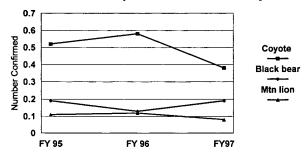


Figure 6. Confirmed sheep and lamb loss/staff day, Southwest Agricultural District, Fiscal Years 1995 to 1997.

#### DISCUSSION

#### Impacts on Control Methods

Leghold Traps. The Colorado WS program did not use leghold traps extensively prior to the passage of Amendment 14. Historically, personnel in the Southwest District depended more on these devices than personnel in the Northwest District. The reason for this seems to be related to workloads. The requirement that traps be checked every 48 hours hindered use in areas where workloads were heavy, like the Northwest District. When leghold traps were used, they were used to capture coyotes that had eluded other methods or because they were considered the ideal method for a particular problem.

Leghold traps are now used only during authorized 30-day periods on private land and are checked three times a week. As a result of Amendment 14, the Colorado program has lost some of its ability to selectively remove individual predators.

Neck Snares. Prior to Amendment 14, neck snares were one of the more important control tools for taking depredating coyote and nuisance beaver. These devices are now illegal to use on public land and can only be used during a 30-day exempted period on private land. One advantage of neck snares for coyotes is that they are not labor intensive. They can be set in a short period of time and checked once a week. In the hands of a skilled professional they are selective for the targeted animal. The Colorado WS program has lost some of its ability to selectively remove individual offending animals due to the restrictions imposed by Amendment 14.

M-44s. M-44s were the most important method used to deal with depredating coyotes in the Southwest District prior to the implementation of Amendment 14. In the Northwest they were the second most important tool. These devices had only been used on private land in Colorado and only by WS personnel. One important advantage of M-44s is the low cost to use them. Secondly, they are selective for the target species. Much of these advantages have been lost due to Amendment 14.

Mechanically Powered Leg Snares. Mechanically powered leg snares were the most important control tool used by the WS program to capture black bear and mountain lion prior to the passage of Amendment 14. These devices are now illegal on public land and can only be used during authorized 30-day periods on private land. The only effective methods now available to WS personnel, to deal with black bear and mountain lion on public lands, are trailing dogs and live traps.

Not all specialists have trailing dogs, and the use of trailing dogs is time consuming and, therefore, more costly than using leg snares. Dog packs must also be maintained yearlong. An average pack costs the WS program \$1,200/year and there are additional costs borne by individual houndsmen. In some areas the use of trailing dogs is not practical, such as areas where the dogs might be killed running across highways or through private property. Some WS specialists feel that trailing dogs are becoming less effective for bear in Colorado due to continual presence of guard dogs. Bears seem to be fighting the dogs more rather than treeing. This makes it more difficult for the houndsman to get to the animal to dispatch it. With the implementation of the new CDOA regulations, and prior to Amendment 14, it would have been possible for WS specialists to set legsnares near confirmed bear or lion kills immediately, thus increasing the likelihood of capturing the offending individual. With the delay associated with bringing in dogs from a remote location, or getting an authorization to set a snare on private property, selectivity decreases.

Live traps have not been used by the Colorado WS program historically, but several are on order and will be tried. Live traps are difficult to get into areas not accessible by vehicle.

<u>Denning Cartridges</u>. Denning cartridges were used infrequently by WS personnel, but their complete prohibition on public land may make it difficult to humanely dispatch coyote pups if the adults are taken by other means.

#### Impacts on Livestock Damage, Specifically Sheep

WS Confirmed Damage. Sheep damage as confirmed by WS personnel per staff day for black bear, coyote, and mountain lion declined slightly during FY 1997 in both agricultural districts. The only exception was bear damage in the Southwest District. Several factors may have contributed to this decrease. First, as far as black bear and mountain lion damage is concerned, the CDOW reduced some cooperative funding (\$36,600) at the end of FY 1996. This money had been used in FYs 1995 and 1996 to offset WS costs associated with investigating bear and lion complaints for the CDOW. Without this compensation, the WS program was not able to investigate as many bear and lion complaints during FY 1997 as in previous years. Also, the spring of 1997 was a very wet one, and this could have contributed to more feed for bears which may have impacted predation on sheep. The wet weather could have also had an impact on rodent populations and thus coyote damage to sheep. Delays associated with getting authorizations to use equipment may also have contributed to the decline. The change from using control equipment, which was typically set in the area of depredation and checked frequently, to using other methods such as calling and shooting, decoy dogs and aerial hunting may also have had an impact.

#### Colorado Sheep Industry Perspective

Colorado currently has about 1,100 sheep operations in the state. January 1, 1998 sheep inventory was 575,000 head that has a estimated value of over \$60 million. Colorado is the fourth largest state in total sheep and lambs, second in lamb feeding and seventh in production of breeding sheep. The sheep industry is important to the economy of Colorado and predator losses are a major economic factor for sheep producers.

The sheep industry in Colorado has been monitoring the losses to predators over the last four years. The trends for losses to bears and lions has been steady during that time frame with a slight increase in losses to bears. However, the losses to coyotes had been decreasing until 1997. Sheep losses to coyotes were 18,900 head in 1994, 16,100 head in 1995, 15,000 head in 1996, and up to 21,700 head in 1997, a 45% increase in one year.

It is the opinion of Colorado sheep industry leaders that there is only one reason for this spike in losses—the effects of Amendment 14. This amendment has extremely limited the use of the most effective tools available to take individual animals causing depredation damage. By not having year-round access to traps, snares and M-44s, sheep producers have suffered significant losses, which will probably increase during the coming years.

During this same time period, many of the producers have either begun using non-lethal techniques, such as guarding animals, scare devices, fencing or penning at night or increased the use of non-lethal methods. In 1994, 36% of sheep producers were reported as using some type of non-lethal predator control. In 1997, that number increased to 80%, yet losses were still escalating.

Sheep producers in Colorado now have little practical defense against predators. Calling and shooting is effective in some situations but most sheep people are not marksmen and do not have the skills or the time available to manage predators with this method.

The current law does allow producers to use traps or snares for one consecutive 30-day period for each individually recorded parcel of property. WS personnel can assist with those tools during that period and use M-44s as well. Many producers with large acreages are able to provide protection on almost a year round basis as they have several different parcels of property involved.

However, even with the exception, there is still a limited number of WS personnel available during the critical times of the year to prevent losses to depredating animals.

It is obvious to many people in Colorado that managing wildlife by public initiative is not only having a significant impact on the livestock industry but many other areas, including wildlife and pets. The Colorado Woolgrowers' Association will continue to monitor the losses to predators over the next several years and evaluate the effects of Amendment 14 on the livestock industry and wildlife.

In the meantime, producers are having to struggle with a small variety of legal methods to protect their sheep and cattle from predators. Hopefully, these people will not be forced into criminal activity in an attempt to protect their livelihood.

#### Human Health and Safety

Amendment 14 gave federal, state, county and municipal departments of health the authority to authorize the use of prohibited methods to take animals considered to be threats to human health and safety. Most health departments can recognize and deal with threats to human health from wildlife, but few have expertise in protecting human safety from wildlife. Although language in the amendment gave health departments the authority to authorize the use of prohibited methods, it gave them no statutory authority to set regulations. Attempts are now being made at the state level to draft guidelines for all county and municipal health departments to use in human health and safety situations. Because these are only unenforceable guidelines, there could be inconsistent statewide application which will ultimately cause confusion and frustration for the public.

#### Beaver Control

Due to the passage of Amendment 14 individuals suffering from beaver damage to property, not considered agricultural, are limited to shooting and live trapping. Shooting in many urban settings is not safe or practical and live trapping can be very expensive if a property owner has to purchase the traps.

#### Protection of Pets

One problem that has surfaced since the passage of Amendment 14 is coyotes killing urban pets, mostly cats and small dogs. In the past, private pest control operators handled many of these complaints using leghold traps. The only effective way now to deal with this type of problem is to shoot the offending animal. Live traps are

not considered effective for catching adult coyotes. In many situations firearms are not allowed, due to local restrictions, or safety considerations. It appears that health departments are not going to authorize the use of prohibited methods to take coyotes that are killing pets. It is believed that this problem will continue to escalate as people move into rural areas and as more coyotes become established in urban areas.

#### Threatened/Endangered Species

There are no exemptions provided in Amendment 14 for use of prohibited methods to take predators to protect threatened or endangered species. Colorado is planning to reintroduce black-footed ferrets into the northwest part of the state. If coyotes prey on these ferrets, only aerial hunting and ground shooting would be legal to protect them. Aerial hunting would probably not be practical during certain times of the year such as big game hunting seasons. If wolves were ever reintroduced into Colorado, Amendment 14 might cause some problems for management of this species as well.

### Cooperative Dollars Provided to the Wildlife Services Program

Cooperative support, in the way of dollars provided to the WS program, in the Northwest and Southwest Districts has remained relatively stable during the first year following implementation of Amendment 14. Support in other parts of the state, mostly the eastern plains, has actually increased since the passage of the Amendment. It is believed that this can be attributed to several factors. One is that cattle growers are expressing increased interest in cooperating with the WS program perhaps because of increased predation on calves. Many cattle and sheep growers also consider aerial hunting to be the only effective method left to deal with coyote problems, and WS is the only entity offering this service at this time.

#### CONCLUSION

Some of the short-term impacts of Amendment 14 on the federal WS program, the livestock industry, and the people of Colorado have been pointed out. Longer term impacts on the livestock industry will not be known for a number of years. It is the intent of the authors to revisit this forum in two years to report on whether WS has been able to continue providing an effective program for protecting livestock and other important resources in Colorado.

#### **ACKNOWLEDGMENTS**

The authors thank Guy Connolly for ideas on manuscript content and editing. They also thank Jeff Green for editing, and Barbara Recktenwald for editing and typing.

#### LITERATURE CITED

COLORADO AGRICULTURAL STATISTICS SERVICE. 1995. Sheep and Lamb Losses—1994. Colorado Ag. Stat. Serv., Lakewood, CO. 4 pp. COLORADO AGRICULTURAL STATISTICS

COLORADO AGRICULTURAL STATISTICS SERVICE. 1996. Sheep and Lamb Losses—1995. Colorado Ag. Stat. Serv., Lakewood, CO. 4 pp.

- COLORADO AGRICULTURAL STATISTICS SERVICE. 1997. Sheep and Lamb Losses—1996. Colorado Ag. Stat. Serv., Lakewood, CO. 4 pp.
- COLORADO AGRICULTURAL STATISTICS SERVICE. 1998. Sheep and Lamb Losses—1997. Colorado Ag. Stat. Serv., Lakewood, CO. 4 pp.
- COLORADO DIVISION OF WILDIFE (CDOW). 1994. Long Range Plan. Department of Natural Resources, Colorado Division of Wildlife, Denver, CO. 19 pp.