THE MINUTES OF THE JOINT MEETING OF THE AGRICULTURE COMMITTEES
February 18, 1981

The joint meeting of the Senate and House Agriculture Committees was held on February 18, 1981 at 7:30 p.m. in the auditorium of the Scott Hart Building.

Roll call was taken with all members present.

SENATOR GALT opened the hearing on HJR 16. He explained that the reason for the joint meeting was to alleviate the problem for the people from out of town who must travel so far for the hearing and thus another hearing would not be necessary.

REPRESENTATIVE SMITH resumed the chair.

CONSIDERATION OF HJR 16: REPRESENTATIVE SMITH called upon REPRESENTATIVE GERRY DEVLIN, House District 52, who introduced HJR 16 as: A JOINT RESOLUTION OF THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA REQUESTING RONALD REAGAN, THE PRESIDENT OF THE UNITED STATES, TO REVISE THE EXECUTIVE ORDER OF FEBRUARY 1972, BANNING THE USE OF TOXICANTS FROM PREDATOR CONTROL, TO ALLOW THE SUPERVISED USE OF 1080 TO CONTROL PREDATORS, (EXHIBIT A).

REPRESENTATIVE DEVLIN stated that since the ban of 1080 in 1972, more and more growers have given up and quit the sheep business. He stated that last year he lost 130 lambs at a value of $160 per unit and that this loss indicated a 10% loss of his lamb crop to coyotes. That he and his sons take their lives into their hands each time they have to fly in their airplane to keep watch over their livestock.

REPRESENTATIVE DEVLIN introduced his PROPONENTS.

GORDON MC OMBER, Director of the Department of Agriculture said that the department has a legislative responsibility to supervise the use of pesticide in Montana, including 1080. That they should be used under careful control. Pesticides came into their own shortly after world war II and were hailed a boon to mankind and were widly used, and indiscriminately. 1080 was taken away in 1972, but was available in the west and still being used in cities.

Excuses that the coyote would be eliminate were unwarranted because you would have to kill 75% of the coyote population for fifty years to come close. It is not the intent to eliminate, but to control.

One method of control was fences and to pen the sheep but that this was violating conservation practices because the grass is worn out for miles around. There are other methods of killing coyotes other than 1080 but the coyote is just as dead.

DR. JAMES GLOSSER, State Veterinarian, Department of Livestoc, stated the Department's support of HJR 16. Statement attached.

REPRESENTATIVE DEVLIN introduced several letters in support of HJR 16. Copies attached.

MR. JOE HEELEY, Montana Woolgrowers, stated that his losses have gone to 14% of his lamb crop. The problem is state wide. He had met with Cecil Andrus, Secretary of the Interior, who was aware of the problem and had done a study on the problem. He also stated that they were studied to death.

After the Secretary of State had the 2 1/2 year study and the fact that the recommendations coming from the study were good ones it was suggested that they continue the research and uses of 1080. Mr. Andrus elected not to listen to his experts and came up with the policy on predator control. Twenty eight scientists reported to the Secretary of Interior that no other non toxicants can replace 1080. The sheepmen and Montana Woolgrowers urge passage of HJR 16 and asking for the use of 1080 with a good supervision such as the Fish and Game possibly.

BILL HICKS, Wolfcreek, Montana Stockgrowers Assoc., testified in favor of HJR 16. He had been a member of the Governor's Advisory Committee in 1960. After the President's order came, they lost ground as far as control of coyotes. That 1080 was considered inhumane but he assured those listening that there was nothing more inhumane than the way the coyotes kill the sheep. That coyotes also like veal.

ALICE FRYSLIE, National Farmers Organization, WIFE, and Montana Cattlemen's Association, said the economic loss is a large factor and felt the control of coyotes must return to the Department of Agriculture. She asked for the support of 1080.

DONALD JOHANNSEN, President of the National Farmers Organization stated that the sheep business is being depleted rapidly. Prepared statement attached.

JO BRUNNER, W.I.F.E. submitted a prepared statement and asked for support of HJR 16.

PAUL RINGLING, President of the Montana Cattlemen's Association urged a 'do pass' on HJR 16. (Statement attached)

GENE CHAPEL of Lewistown, Mt. and representing the Montana Farm Bureau Federation, stated that they would like to express their whole-hearted support for HJR 16. (Statement attached)

GARY DYER, Brady, Mt., Montana Farmers Union, testified that the MFU strongly supports HJR 16.

GUY CONNOLLY, Wildlife Research Biologist, U.S. Department of the Interior, Fish and Wildlife Service of Denver, Colo., presented a slide presentation on the uses of 1080. He tated that 1080 is being used in other countries and also being used in the cities to get rid of rats.

The slides showed controlled experimental work with 1080. (Prepared statement attached)

REPRESENTATIVE RYAN, spoke in favor of HJR 16 and offered names and statements from growers that had contacted him in favor of HJR 16. (See attachment)

ROBERT VAN DE VERE, Citizen lobbyist, said several hundred members of the Montana Trapper's Association and himself, supported the resolution.

REPRESENTATIVE JIM SCHULTZ and twenty eight members of the Snowy Mountain Woolgrowers were in support of HJR 16.

OLE OIESTAD, sheep rancher and County Commissioner in Sweetgrass County stated his support for HJR 16. (Statement attached)

BERNARD VAN EVERY, Columbus, Montana and representing the Stillwater County Legislative Organization, went on record as supporting HJR 16 and stated that 1080 is cheaper than helicopters for preditor control.

DON MC KAMEY of Great Falls, Montana, said that he has lost about 8% of his lamb crop in the last year and was in favor of the passage of this bill.

GORDON DARLINGTON, Agriculture Preservation Association, Park County Legislative Association and Sweetgrass Agriculture Preservation Association, said the association had approximately 6,000 ewes to start, with a predator loss of less than 1% before the Presidential ban on 1080. They went to 1400 ewes with 4 producers and are this year down to 500 ewes belonging to 2 producers. They strongly support HJR 16.

LIZ JONES, representing the Beaverhead County Wool Pool, Inc., she stated that the coyotes eat off of cattle just as well as ewes. That she has a 200 crop each year and lose about 30 lambs each year and when she sells her lambs they start in on the ewes. She presented pictures showing the distruction.

LYNE GROBEL, First National Bank, Glasgow, said he encourages sheep production in the banking community. He felt it was a question whether they are raising coyotes or sheep. He strongly supported HJR 16.

LOUIE NELSON, Harlowton, Montana, buys lambs, wool and cattle. He went out of the sheep business two years ago because of coyote predatation.

There being no opponents, Committee questions followed.

SENATOR AKLESTAD asked how close bait traps were placed. Biologist Connolly told him that one bait station is placed in every twonship, but no closer than six miles from the next bait station.

REPRESENTATIVE DEVLIN closed in saying "we have come here to save an industry and to take this into serious consideration when considering HJR 16".

There being no further questions, the meeting adjourned at 10:30 p.m.

Carl M Smith

CARL SMITH, CHAIRMAN

lmw

HOUSE JOINT RESOLUTION NO. 16

INTRODUCED BY

A JOINT RESOLUTION OF THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA REQUESTING RONALD REAGAN, THE PRESIDENT OF THE UNITED STATES, TO REVISE THE EXECUTIVE ORDER OF FEBRUARY, 1972, BANNING THE USE OF TOXICANTS FROM PREDATOR CONTROL, TO ALLOW THE SUPERVISED USE OF 1080 TO CONTROL PREDATORS.

WHEREAS, the sheep industry of Montana is suffering heavy losses due largely to coyote predation; and

WHEREAS, the cattle industry in Montana also is suffering the loss of calves to coyotes; and

WHEREAS, wildlife in Montana also suffers from increased depredation.

NOW, THEREFORE, BE IT RESOLVED BY THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA:

That Ronald Reagan, President of the United States, is urged to revise the executive order of February, 1972, that banned the use of toxicants for predator control, in order that toxicant 1080 be allowed for use under a strictly supervised program of predator control.

BE IT FURTHER RESOLVED, that the President is urged to direct the Environmental Protection Agency and the United States Department of the Interior to revise their rules to allow the use of toxicant 1080 to control predators.

BE IT FURTHER RESOLVED, that the President is urged to recognize the importance of a national policy of maximizing food production and recognize that the sheep industry, which is capable of producing choice red meat and a superior fiber from forage without depleting either food grains or petroleum supplies, is an important part of that policy which presently requires the aid of the President to alleviate the economic crisis caused by predators.

BE IT FURTHER RESOLVED, that the Secretary of State is directed to mail copies of this resolution to Governor Ted Schwinden, President Ronald Reagan, the Environmental Protection Agency, the U.S. Department of the Interior, and members of the Montana Congressional delegation.

-End-

HJR 16

TESTIMONY IN SUPPORT OF HJR 16
by
James W. Glosser, D.V.M.
Department of Livestock

The Department supports HJR 16 as there is a well documented need for a more cost-efficient, practical and safe method for predator control than presently exists.

Governmental costs, in controlling predator populations that are devastating livestock numbers, are increasing daily, due largely to inflation and high energy costs. For example, the cost of removing one coyote with ground control methods, such as trapping or shooting, was $70 in 1970. Today, the estimated cost ranges between $250-$350 per animal. The cost per animal for aerial hunting is between $80-$100 today. Therefore, it is quite obvious that viable alternatives must be sought in order to protect Montana's livestock from those wildlife predators that are inflicting such heavy losses. We believe that reinstating the use of 1080 is a very viable alternative.

Unfortunately, too much of the controversy concerning 1080 and its uses in the past was predicated on emotion, embellishment of half truths or lack of understanding as to its intended uses. 1080 as a predacide is an extremely effective toxicant and is extremely safe as it has a wide margin of safety in non-target species with respect to acute oral toxicity as expressed in mgm/lb. Using this criterion with respect to the coyote, the margin of safety is increased 6 to 10 times for species such as cattle, elk, or horses; cats either domestic or wild; 40 times for humans and 200 times for birds, either domestic or wild.

In urban areas 1080 is registered as a rodenticide and has been widely used in large metropolitan areas for many years. When the chemical is not used properly, the so called secondary poisoning effect in dogs can occur since it takes 100 times more 1080 per pound to kill a rat than a dog. However, in well designed

and strictly supervised programs using individual baits 1080 has caused little or no problems in non-target species since the dose is adjusted to the carnivore. The only problem that has existed is the destruction of wild dogs or owned dogs whose owners ignored the warnings to confine the animals.

The key to the successful and safe use of 1080 is a strictly supervised program to guarantee the judicious application of the toxicant. It has been done in the past and could be again providing the ban on 1080 is reconsidered at the federal level.

MONTANA BANKERS ASSOCIATION
mba

ARCADE BUILDING SUITE 4H
HELENA, MONTANA 59601
PHONE 406/443-4121

February 17, 1981

Montana House of Representatives
Agriculture Committee
State Capitol Building
Helena, Montana 59601

RE: HJR-16

Gentlemen:

The Agriculture Committee of the Montana Bankers Association recognizes the importance of the sheep and wool industry to the economy of the State of Montana.

Predators continue to cause this industry heavy losses of production. Some of the land in Montana is best adapted to the production of sheep and wool and cannot be utilized for this purpose because of predators.

We support HJR-16, which provides for the use of 1080 to control predators.

Very truly yours,

P. A. Schummer
Chairman, Agriculture Committee

PAS/mc
cc: Representative Carl Smith
Representative Jerry Devlin
Senator Jack E. Galt
Mr. Robert Gilbert
Montana Bankers Association

Teddy Thompson
Box 283 976
Phone (406) 932-2551
Big Timber, Montana 59011

To all the members of the joint Montana House-Senate Agriculture hearing on H.J.R. 16

My name is Teddy Thompson from Big Timber. I am here to speak in favor of H.J.R. 16. As a sheepman and outfitter I feel we will never have a better chance to get back 1080 for coyote control. 1080 control of coyotes makes more sense than running airplanes and helicopters all over the country shooting every coyote that comes in sight. When a stockman has a predator problem 1080 baits can be placed in his area and that will take care of the meat eating coyotes, who have quit living on mice and ground squirrels. There will also be a great saving on valuable fuel that our country so desperately needs.

I would also like to mention the great benefits that deer and antelope will have from a 1080 program. I started hunting during the 1930's. Those were the days when you saw a deer track you came home and bragged about it. There were always plenty of coyotes to be seen. In the early 1940's, when 1080 was first used, the deer and antelope increased dramatically. We do not need biologists to tell us that coyotes do not have an effect on game numbers. When 1080 was banned in early 1970's our game harvest dropped very badly. In the meantime the coyote numbers grew and prospered.

I would urge that you all support HJR 16 and vote in favor of the resolution.

Thank you.

Teddy Thompson

National Farmers Organization
P. O. Box 613 Helena Montana 59624

February 13, 1981

Mr. Bob Gilbert
Montana Woolgrowers Assoc.
P. O. Box 1693
Helena, Montana 59624

Dear Bob:

The National Farmers Organization counts among its membership many sheep producers. We have the best program of providing producers with a fair return on their investment through our nationwide bargaining and sales program.

An economic loss of the nature of predation is a very real factor in establishing a profit or loss for a year's production efforts.

It is impossible for the Federal government to provide any other economically feasible method of predator control at this time. Neither can it provide local evaluation and precise placement and control of 1080. It is our feeling that such control must be returned to state departments of agriculture wherein lies full and sufficient expertise for the use and control of 1080 and evaluation of its failure or success in each instance of use.

Coyotes are running in packs and decimating calf crops and wild game young. It has been proven that 1080 will aid in reduction of such losses.

We support the passage of HJR16 as a step towards returning to a reasonable attitude in Federal intervention in local agricultural policy.

Sincerely,

Donald A. Johannsen
President

DJ/a

NFO COLLECTIVE BARGAINING

NAME [illegible] BILL No. AJR 16

ADDRESS [illegible] DATE 2/15/81

WHOM DO YOU REPRESENT Wyoming Farmers Union

SUPPORT X OPPOSE _____ AMEND _____

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

Prepared comments to follow

FORM CS-34
1-81

NAME Jo Brunner BILL No. HJR 16

ADDRESS Helena DATE 2/18

WHOM DO YOU REPRESENT W.I.F.E.

SUPPORT X OPPOSE AMEND

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments: Women Involved in Farm Economics wishes to on record as being in support of HJR 16. The sheep industry is a very important segment of Montanas economy and is beingdepleted rapidly. Sheepmen can not stand the loss due to the ~~xxx~~ heavy coneentration of coyotes in many areas, consequently they are going out of the business. Other methods of trying to controll the coyote have not been successful. If the industry is willing to request strict supervision for the use of 1080, they realize the importance of proper application and use. Certainly, the time has come when we must put this situation in its proper perspective and allow the sheep people the same protection for their livlihood that we have given the predator in the past.

We ask your support for HJR 16.

FORM CS-34
1-81

MONTANA CATTLEMEN'S ASSOCIATION INTL

WITH A LARGE "Steak" IN MONTANA'S FUTURE

Exec. Sec'y: Alice Fryslie

P. O. Box 613
Helena, Montana 59601

February 14, 1981

Chairman Carl Smith and
Members of the Agriculture
Committee; Montana House of
Representatives:

The Montana Cattlemen's Association urges do pass on HJR 16 requesting that President Ronald Reagan rescind the executive order banning 1080 for predator control and that he direct Interior and EPA to make the necessary rule changes to allow for for its use.

Paul Ringling
President

Paul Ringling Jr.

PR/a

NAME Gene Chapel Bill No. HJR 16

ADDRESS Lewisstown, Montana DATE Feb 18, 1981

WHOM DO YOU REPRESENT Montana Farm Bureau Federation

SUPPORT X OPPOSE AMEND

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

Members of -the Agriculture Committee:

On behalf of the Montana Farm- Bureau Federation I would like to express our whole-hearted support for- HJR # 16.

The sheep industry which at one time was a very viable industry in the state is for practical -purposes out of business, and this has been due to the lack of an effective tool to control coyotes such as the compound 1080. Within our organization we have very few sheep producers left.

Our membership is reporting more and more experiences of calf loss. We have a depressed enough cattle industry without the operators having to suffer economic - loss to coyotes.

1080 is the most misunderstood chemical that has ever been exposed to the public. 1080 when used for coyote control is the most specific tool that can be used for the elimination of any predator (the coyote).

We know that when you members of the committee look into the background of 1080, the effects of the use of 1080 and the risks of using 1080 that you will give HJR # 16 the green light.

Thank you

Gene Chapel, Vice President
Montana Farm Bureau Federation

CS-34
1-79

House

Statement of GUY CONNOLLY, Wildlife Research Biologist, U.S. Department of the Interior, Fish and Wildlife Service, Denver Wildlife Research Center

Before the 47th Legislature, State of Montana, Hearing on House Joint Resolution No. 16, at Helena, Montana, February 18, 1981.

Mr. Chairman and ladies and gentlemen, my name is Guy Connolly. I am a wildlife research biologist with the Section of Predator Management Research at the Denver Wildlife Research Center. The DWRC is headquarters for nearly all Animal Damage Control research of the U.S. Fish and Wildlife Service. We have about 20 people working on various aspects of predator control and management. Our program is the research arm of the Federal--Cooperative predator control program that is headed here in Montana by Bill Rightmire.

My headquarters is at Twin Falls, Idaho. My job is to develop and test new ways of dealing with coyote predation on sheep and goats. I am here tonight at the request of Gerry Devlin, your representative from Terry. My appearance at this hearing has been approved by the Director of the Denver Wildlife REsearch Center. However, my statement should not be interpreted as official Fish and Wildlife Service policy, but only as the findings and opinions of a professional wildlife researcher. I am not here to testify for or against your HJR No. 16, but to present information about the history of Compound 1080 and our current state of knowledge of its effectiveness and safety for use as a predacide.

Incidentally, I am a Montana native. I grew up on the Yellowstone River near Billings and am a graduate of the Forestry School at the University of Montana. I have researched coyotes for about 10 years and have published 11 technical or semitechnical articles dealing with predator management.

Very few people are studying Compound 1080 these days, and still fewer are researching its use as a predacide. All of my experience with 1080 relates to its

use in the toxic collar, which is a new way of delivering toxicants directly to coyotes that attack livestock. This collar was invented by Roy McBride of Alpine, Texas, and our work has been aimed at developing the information needed to get EPA registration of the collar for use as a predacide. In this connection we have studied the effectiveness of the collar in killing depredating coyotes, and also the hazards of this technique to nontarget animals and man.

I know that your interest here tonight is not with the toxic collar, but with Compound 1080 itself. Some of our research on the collar relates to other uses of 1080, but before I describe this research I would like to give you a brief history of Compound 1080.

Compound 1080 is a manmade form of monofluoroacetic acid, which occurs in nature as the toxic principle in 40 or 50 species of poisonous plants. None of these poisonous plants occur in North America. Most of them are found in western Australia, and there they cause serious losses of livestock. Centuries before the toxic chemical was identified, warring African tribes reportedly poisoned each others' water supplies with plants containing monofluoroacetic acid.

Compound 1080, or sodium monofluoroacetate, is the sodium salt of monofluoroacetic acid. This sodium salt became Compound 1080 in 1944 when it was logged in at the Denver Wildlife Research Center as compound number 1,080 on the list of new chemicals to be screened as potential rodenticides. The term "Compound 1080" was later registered as a trade name by various manufacturers of the chemical.

In the United States, 1080 was used in predator control from the late 1940s until 1972. It was used mostly in large meat baits in winter, and was quite

effective in reducing coyote populations on sheep ranges. A 1948 research report estimated that lamb losses on 3 study areas in Colorado and Nevada had been reduced by about 90 percent through the use of 1080 bait stations. The same report showed that several nontarget species were poisoned, and that nontarget poisonings could be minimized by careful placement of baits.

The use of 1080 for coyote control reached its peak in the early 1960s, when 15 to 16,000 bait stations were placed each winter in the western United States. [Predatory Animals, US House of Reps. Serial 93-2:328]. Beginning in 1965, the Fish and Wildlife Service placed fewer and fewer stations each year. In autumn of 1971, only 7,289 stations were put out.

You would never know it from the publicity, but Compound 1080 has always been used mostly against rodents rather than predators. During the peak years with 1080 bait stations, about 50 pounds of 1080 were used each year against predators in the United States. The amount used in 1971, the last year before the Presidential ban, was about 17 pounds. But total sales of 1080 for use in the United States averaged 2,000 pounds annually from 1963 through 1972 [Op. Cit:79]. Most of this material was used to control rodents. These figures show that, in the early 1970s, 2% or less of the 1080 used in the United States was used against predators. It has always been a curiosity to me that the relatively small amount of 1080 used in predator control generated so much more controversy and opposition than the 50 times as much used against rodents.

The 1972 ban against predacides, of course, did not apply to 1080 used in rodent control. Ten-eighty is still being used against rodents, although EPA has been reviewing rodenticidal uses since 1976 and may try in 1981 to cancel these uses.

An EPA spokesman recently told me that about 610,000 pounds of 1080-treated rodent bait were used in 1977-78, the latest year for which any figures are available. About 95% of this bait was used on field rodents and 5% on commensal rodents; that is, rats and mice living in close proximity to man. Based on the usual concentrations of 1080 in rodent bait, 0.05% to 0.11%, 610,000 pounds of bait would contain 305 to 671 pounds of 1080. Five percent of these amounts would equal 15 to 34 pounds of 1080 per year used against commensal rodents in the latest year of record. I interpret these figures to mean that, according to the best available information, the amount of 1080 being used against rodents in our cities, towns, dumps, and sewers is approximately equal to the amount that was used against coyotes back before 1972.

I might mention that 1080 is widely used around the world. There are no comprehensive statistics, but I do have a couple of examples. In western Australia, about 50 pounds per year are used in small baits to control the dingo, a wild dog that preys on sheep. But the most concentrated use I know of occurs in New Zealand, where about 4,400 pounds of 1080 are used each year to control rabbits and opossums. New Zealand is about 70 percent as big as Montana [NZ 103,736; MT 147,138 sq. mi.]. Apparently the 1080 used in New Zealand has not produced environmental disaster.

Let me give just one other statistic on 1080 use. Earlier I mentioned that some 305 to 671 pounds of 1080 were used against rodents in the U.S. in the latest year for which data are available. In comparison with this 300 pounds or more, our research use of 1080 in toxic collars has released a total of

about one ounce of 1080 into the environment. That is the total for all 28 field tests completed through March 1980. This shows that a little 1080 goes a long way. I regard 1080 as a chemical with potential for good or bad, depending on how it is used. Like electricity or gasoline, the misuse of 1080 can be disastrous. But when it is properly used, 1080 is one of the most beneficial chemicals ever developed for vertebrate pest control.

Now, let me turn to our recent studies of 1080. Earlier I mentioned that all recent Fish and Wildlife Service research on 1080 relates to its use in the toxic collar. The highlights of our findings are:

(1) The 1080 collar is the most effective tool ever devised to selectively kill individual coyotes that are preying on sheep. Based on our pen test results, every coyote that bites a collar dies. But it is not practical to collar every sheep on the ranch. A relatively small number of "Target" lambs is collared, and uncollared sheep must be moved or penned at night so that coyotes will attack the collared ones. Other targeting strategies are under development, but right now it appears that considerable livestock management is needed to use the collar effectively. Like other predator controls, then, the collar is more practical in some situations than others. At present, I see the collar as a valuable tool that has given some dramatic results, and it should be used more widely, especially on farm flocks. Field testing is being expanded by state agencies in Texas and New Mexico, and the University of Wyoming recently applied for an experimental use permit as well.

(2) The 1080 collar appears to be safe for humans to use. No human hazard has been seen in tests to date.

(3) The 1080 collar appears to present little hazard to nontarget animals. Here I need to distinguish between primary and secondary poisoning hazard. Any animal poisoned by direct exposure to a toxicant would be a victim of primary poisoning. With the 1080 collar, the most likely candidate for primary poisoning is a depredating coyote. Other possible candidates are magpies, skunks, vultures, dogs, or other birds or mammals that might scavenge on a dead collared sheep or goat.

Secondary poisoning, in contrast, would affect animals that scavenge the remains of a primary poisoning victim. If a coyote bites a 1080 collar or eats a 1080 bait and then dies, that coyote has died of primary poisoning. If a magpie then feeds on the dead coyote and is poisoned, the bird is a victim of secondary poisoning. The distinction between primary and secondary poisoning is very important, and I stress it here because there is wide public misunderstanding of this subject. Much has been written about secondary poisonings by people with no first hand knowledge, with the result that misinformation has been put forward as fact.

In our studies, we have only made a start toward assessing the nontarget hazards of 1080 in the collar. Further work will be needed to support a registration, but our results to date are very encouraging. In field observations and controlled pen tests, we have yet to poison a single nontarget animal through simulated primary or secondary hazards of 1080 as used in the collar.

As mentioned earlier, scavengers on dead, collared livestock are at risk of primary poisoning. This is especially true when the collar has been punctured, as only then is toxicant exposed. Whether punctured or not, scavengers show no interest in the collar. In pen tests, we confined 5 magpies for 7 days with the

carcass of a coyote-killed lamb with punctured collar. The birds scavenged heavily, since they had nothing else to eat, but no bird was poisoned. Similarly, we allowed 3 domestic dogs to feed at will on 3 different coyote-killed goats with punctured collars. No dog was poisoned, even though dog #3 fed 8 times over a 9-day test period for a total of 225 minutes. In the field, coyote-killed, collared sheep or goats were seen to be scavenged by vultures, magpies, ravens, red-tailed hawks, and other species but no evidence of poisoning was seen. The reason is not lack of hazard, but scavenger feeding habits. Scavengers showed no interest in the collars. Instead, they fed on viscera and muscle that had been exposed by killer coyotes. No scavenger fed on sheep parts contaminated with the toxicant, and therefore no scavenger has been poisoned.

Secondary hazards were investigated by feeding tissues from poisoned coyotes to captive magpies. Some birds died from the rigors of confinement, but none was poisoned. In our most challenging test, a coyote was dosed with the entire contents of a 1030 collar through a stomach tube. This was a massive overdose, since one collar contains about 200 lethal doses for the coyote. The dose was over 300 mg of Compound 1080, far more than a coyote could get by biting a collar or eating a 1080 bait. As soon as the coyote died, it was skinned and boned out, and all the soft tissues fed to magpies. No bird showed any ill effect, even though lab analyses showed the coyote tissues to contain much more 1080 than we've seen in any coyote killed with a 1080 collar. Replication of this work is planned, but at this point we do not see secondary poisoning as a significant hazard. In my opinion, the risk of primary poisoning is greater than that of secondary poisoning in any predacidal use of 1080.

(4) Our chemists at Denver have made substantial progress in analytical procedures to measure 1080 residues in animal tissues. Only in the last few years have reliable analytical methods become available for detecting the low concentrations that are typical of 1080 poisoning. Our analyses of tissues from coyotes poisoned by 1080 collars shows that the levels are too low to present significant hazard to scavengers. Further work is needed to refine and further validate the analytical method, and to make full use of its capability in assessing secondary poisoning hazards.

(5) A frequent criticism of 1080 is that it lacks an antidote. This is true, but it is also true of most other registered pesticides. There is a physicians' treatment for 1080 poisoning, and it apparently was successful in about half of 1080 poisonings documented in a recent report from California. An antidote is not needed for EPA registration of compound 1080, but it would be nice to have.

Dr. Ernest Kun of the University of California recently reported a significant breakthrough that has generated some optimism about the prospects for an antidote to 1080 poisoning. However, successful trials have yet to be performed on live animals. In my judgement, it would be premature at this time to guarantee that an antidote will be found. I regret to report that Fish and Wildlife Service support for Dr. Kun's work ended in 1979.

(6) An important part of our research program is a search for alternate toxicants, by which I mean chemicals that are superior to 1080 in terms of effectiveness, selectivity, safety, nontarget impacts, and so on. We are working on several promising compounds, but so far have not found one that is clearly superior to 1080. Until improved compounds are developed, I hope to continue working with 1080.

TO REPRYAN

THESE PEOPLE HAVE CALLED ME STATING THEY WANTED IT KNOWN THEY JOIN IN SUPPORT OF HJR 16,... MANY OF THEM ARE BUSY LAMBING OR CALVING; AND IT IS QUITE A DISTANCE TO HELENA..

JIM MAXWELL OF MELSTONE SAID HE HAS LOST 1,158 LAMBS SINCE 1972 AND HE SAYS HE KEEPS GOOD RECORDS. MR. MAXWELL NOTES THAT THESE ARE LOSSES AFTER DOCKING SO MOST ARE PREDATOR. MR. MAXWELL LAST YEAR LOST ABOUT 20% OF HIS TOTAL LAMB CROP OFF OF 1,000 EWES... HE ALSO STATES THAT MANY OF HIS NEIGHBORS IN MUSSELSHELL AND SWEETGRASS COUNTIES HAVE COMPLETELY SOLD THEIR SHEEP BECAUSE OF COYOTE LOSS...

WALT WILKINS OF MELSTONE ALSO SAYS HE LOSES TOO MANY LAMBS TO PREDATORS AND HE DOES EVERYTHING HE CAN TO KEEP THE COYOTES AWAY FROM HIS SHEEP. THE ONLY THING THAT KEEPS HIM IN BUSINESS IS THE TRAPPER AND THE AERIAL HUNTING OF PREDATORS.

BILL MC CAFFEREY OF MUSSELSHELL COUNTY SAYS HE SOLD OUT COMPLETELY SO HE DON'T HAVE THE PROBLEM OF COYOTES EATING HIS SHEEP ANYMORE.

STAN WIGGINS OF WINNETT SAYS HE LOSES LAMBS TO COYOTES. AND IF YOUD DON'T BELIEVE IT HE HAS ALOT OF PICTURES THAT SHOW THE DEATH WASN'T A HEART ATTACK.

LOU HILL OF WINNETT CALLED TO SAY THAT IN 1974 HE LOST 375 LAMBS; 75 300 LAMBS; 76-250 LAMBS; 77-200 LAMBS; 78-220 LAMBS; 79-200 LAMBS AND LAST YEAR ONLY 100 LAMBS. THE REASONS FOR NOT LOSING SO MANY LAST YEAR WAS BECAUSE THE AIRPLANE HUNTED HIS RANGE ALMOST DAILY. THEY TOOK NEARLY 40 COYOTES OFF HIS RANCH ALONE. MR. HILL SAID HE RUNS ABOUT 650 EWES NOW, BUT IN 1974 HE RAN ABOUT 1,200. HE HAS CUT DOWN ON HIS NUMBERS SO THAT IS THE REASON FOR SOME DECLINE IN THE NUMBER OF LAMBS THE COYOTES KILLED.

MR. HILL ALSO NOTED THAT MANY OF HIS EWES PROBABLY ABORT BECAUSE OF COYOTE ATTACKS ON THE SHEEP. HE POINTS OUT THAT A HUNGRY COYOTE LOOKING AT YOU COULD ONLY CAUSE YOU STRESS AND CONCERN. MR. HILL SAID HIS RANCH HAD 1080 BAITS WHEN THEY WERE USED AND HE DID 'T SEE ANY KILLS OF ANIMALS NOT PREDATORY.

NAME OLE OIESTAD BILL No. HJR 16

ADDRESS 229 MELVILLE RT DATE 2-18-81

WHOM DO YOU REPRESENT self

SUPPORT x OPPOSE AMEND

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

I feel we need 1080 as a practical solution for the control of coyotes.

There is a grave problem of coyote predation in the Livestock Industry.

We are not trying to promote something that would destroy coyotes as a whole, but only a means of control.

1080 is the only truly effective means of control.

FORM CS-34
1-81

Fun River, Mont.

Montana Wool Growers Association, Feb. 16 1981

Helena, Mont.

Dear sirs:

We're sorry that we are unable to be present at the meeting on Feb. 18

We have trouble with coyotes during the summer, and if it were not for the good government trapper, Bill Perry, our losses would be quite high.

It certainly would be of great value and importance if the 1080 could be brought back.

The sheepman's losses would be considerable less.

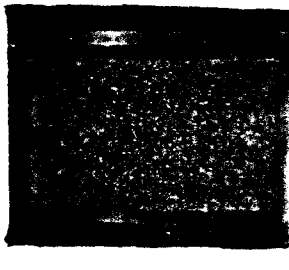
Wishing you good luck with this resolution, we remain

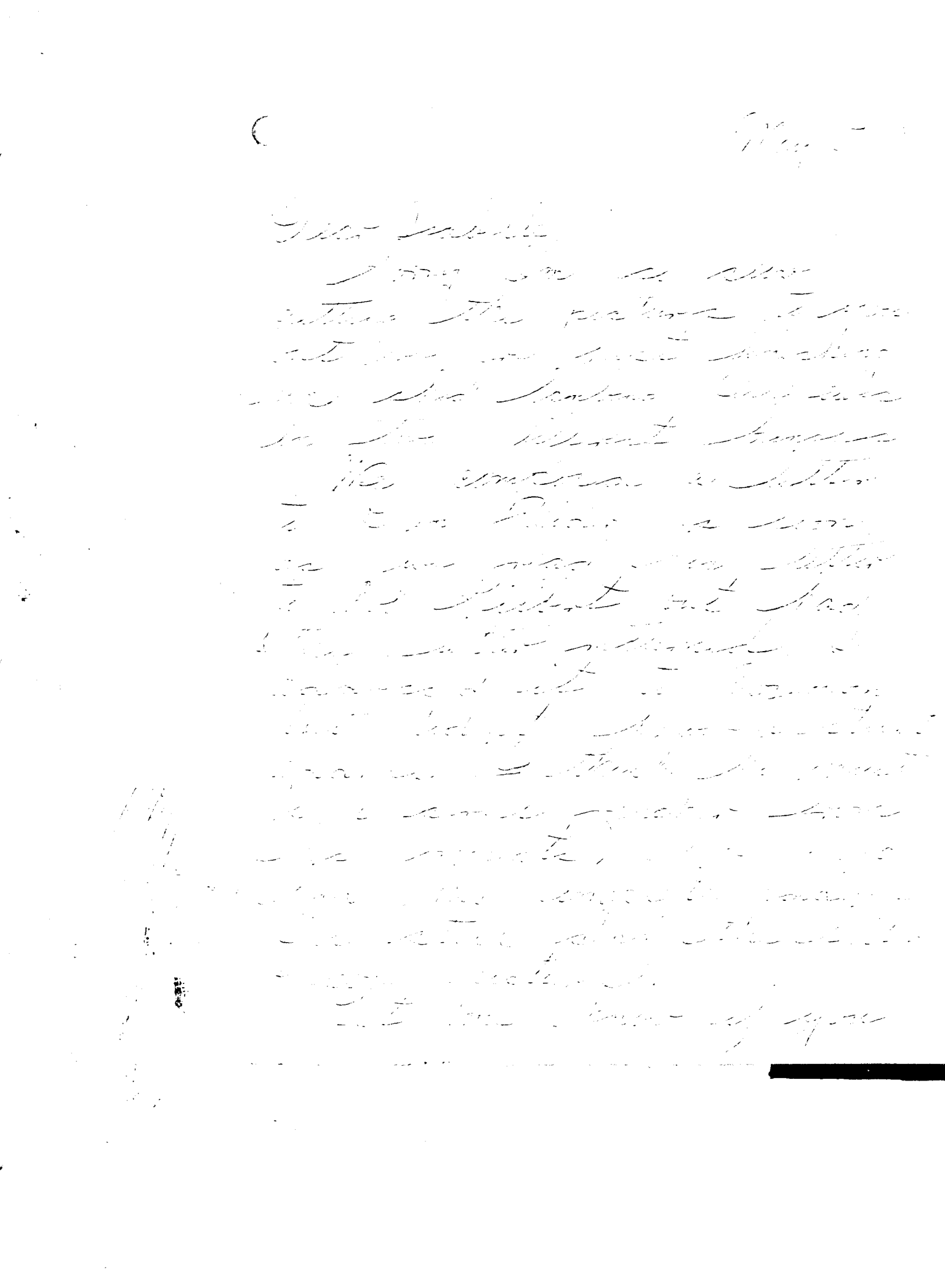
Sincerely

Cascade Colony

NAME TOWN

USE OTHER SIDE ALSO





KIRBY SUMMERS

EKALAKA MT 59324

Mailgram

4-039720S047 02/16/81 ICS IPMMTZZ CSP HELA
! 4067756212 MGM TDMT EKALAKA MT 72 02-16 0755P EST

BOB GILBERT, SECRETARY
MONTANA WOOL GROWERS ASSOCIATION
PO BOX 1693
HELENA MT 59601

DEAR SIR

I WOULD URGE YOUR SUPPORT FOR HOUSE JOINT RESOLUTION 16 REQUESTING THAT PRESIDENT REAGAN RESEND ORDER BANNING 1080. 1080 IS A USEFUL AND ENVIRONMENTALLY SAFE PREDATOR CONTROL METHOD THAT IS "EXTREMELY" IMPORTANT SHEEP PRODUCERS, ESPECIALLY IN SOUTHEASTERN MONTANA. IT HAS BEEN SHOWN IN THE PAST THAT NO OTHER METHOD IS AS EFFECTIVE.
NED SUMMERS
EKALAKA MT 59324

1957 EST

MGMCOMP MGM

Cohagen, Mt.

Feb 12, 1981

Dear Johns:

Please try with every way possible to get the H J R 16 resolution acted upon.

Every since 1080 was banned I have lost more & more lambs to predators. My loss is running about 1/20 of 1% or 1300 lambs in 1980 more. I have seen too many sheep producers go out of business because of the predator losses.

Good Luck.

Sincerely,

Babe McClure

February 12, 1981
Jordan, Montana 59337

John Ryan
State Capitol Bldg.
Helena, Montana

Dear John:

We are experiencing a large build up of coyotes on the Charles M. Russell Game Range, and they are coming onto our private land, killing our sheep. The lake has frozen over and provides a bridge for them to come over from the north side, which has very few sheep and very little predator control, if any.

We are aware of the necessary budget cuts the Regan administration is trying to make, and it looks like predator control is in for some of the cuts. If we could get 1080 released for predator control we could cope with this problem on a very limited budget.

As it now stands , our sheep raising time is limited, we can't continue raising sheep just to feed coyotoes, they have already killed one grown ewe for us this year, and when we start lambing I hate to think what the loss will be as we are seeing two and three coyotoes in a bunch.

John-- we certainly appreciated your phone call the other morning, and your concern about our problems here at home. Thank you much.

Sincerely,

John E. Trumbo

A G R I C U L T U R E

My name is David Kasten, I am a rancher in McCone and Prairie counties. I support House Joint Resolution #16 as it will help put some of us back in the sheep buisness. In this area the numbers have beam dropping drasticaly. Personaly I had to cut doun to a small farm flock so I could keep them around the farmstead and away from the coyotes. One more thing is we can sure use more wool with the cost of fuels going up every day.

Thank you for considering my few words

Sincerely

David K. Kasten

David K. Kasten

Elmo P.R. Dreyer
Box 137
Circle, MT 59215

February 6, 1981

To the Agriculture Committee on House Joint Resolution # 16.
Helena, Montana

Gentlemen:

I am Elmo Dreyer, a former sheep rancher from Circle, Montana. My dad started raising sheep in Mc Cone county in 1905 when he came from Norway. The sheep losees were terrible from blizzards, very little hay, and predators. I became in involved in the late 30's and on. During lambing we put out scarecrows, and lanterns every night. One man rode from hill to hill all night and shot a 12 gauge shotgun. Still they killed. I remember the coyotes killed 11 lambs in one little bunch one night. They killed for fun. They killed sheep when they were on water at noon. The herder couldn't be everywhere.

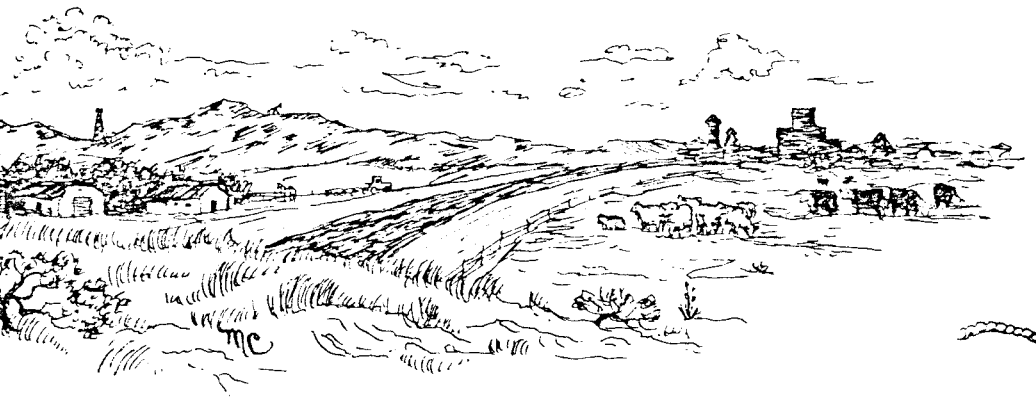
In the early 1940's when I was in World War II 1080 came to Montana and saved the sheepman. When I got back in 1946 was the first time we could hunt deer, there was just so few before 1080 came.

Gentlemen, why does the government let them use 1080 in Chicago and New York City to kill rats in 1981, when the sheepman can't have it?

Is it because of the votes there, or is it because 1080 does such a much needed job. We need 1080 in Montana to save the sheepman, who are one of our major industries.

Thank you.

Elmo Dreyer



CIRCLE
CHAMBER
of
COMMERCE
and
AGRICULTURE
CIRCLE, MT.
59215

Representative John Ryan,
Capitol Station
Helena, Mt. 59601

Dear John,

Please consider this letter from the Circle Chamber of Commerce and Agriculture as the members of this organization being in favor of House Joint Resolution 16 to allow the supervised use of 1080.

Many of our members are sheepgrowers and the others understand the problems that confront sheepmen if predator control is available to them and 1080 has been effective in previous times.

We would appreciate your strong support of the resolution.

Sincerely,

Cloey S. Scheer, Sec-treas.

Cloey S. Scheer, Sec.-Treas.

Hi-Line Wool Pool, Inc.

"If It's Genuine, It's Wool"
~~HARLEM~~ CHINOOK - MONTANA

Chinook, Montana
February 16, 1981

Robert Gilbert
Secretary Montana Wool Growers
Box 1693
Helena, Montana 59601

Dear Bob:

The annual meeting of the Hi-Line Wool Pool and the Milk River Sheep Association was held jointly at Chinook on February 3, 1981. There were 68 present representing members in Blaine, Hill, and Phillips counties.

During the meeting the subject of Predatory Animal Control came up for discussion. Members of the Pools requested that the Secretary write you concerning their thinking on this matter.

They want to encourage legislation for all Predatory Animal Control possible and strongly feel that 1080 should be allowed to be used for coyote control for sheep producers.

Sincerely,

Rosella Higgins

Rosella Higgins
Secretary of
Hi-Line Wool Pool
&
Milk River Sheep Ass'n

cc Paul Kropp
Swede Hammond
Francis Bardanouve

FEB. 16 - 1991

MR. BOB GILBERT, SEC. TRES.
MONT. WOOLGROWERS ASSN.
BOX 1693 HELENA, MT.

DEAR BOB:

IN ANSWER TO YOUR LETTER REGARDING THE 1080 ISSUE - OR RATHER THE HEARING ON HJR 16 FEB. 18th 7:30 P.M. OUR SEC. AND MYSELF CALLED A NUMBER OF MEMBERS AND INFORMED THEM OF MEETING - MANY OF US ARE WELL INTO CALVING & LAMBING OR BOTH, AND CAN GET NO SURE COMMINTMENT OF AN EVENING MEETING - SO IN EVENT NOT TO MANY SHOW UP BOB I WROTE LETTERS TO THE REP. & SENATORS OF THE 2 COUNTYS, TO THIS EFFECT BELOW.

DEAR - SEN. OR REP.

I AM WRITING TO GAIN YOUR SUPPORT AND ASSISTANCE AT THE HEARING ON HJR 16 REQUESTING PRESIDENT REAGAN RECIND THE ORDER BANNING THE TOXICANT 1080 FOR THE USE OF PREDATOR CONTROL.

I AM REQUESTING YOUR SUPPORT ON BEHALF OF THE 80 MEMBERS AND MYSELF OF THE MAD.-JEFF. SHEEP ASSOCIATION.

LACK OF MONEY FOR FUNDING THE HELICOPTER PROGRAM IN THIS AND OTHER AREAS OF THE STATE, COUPLED WITH THE CURRANTLY DEPRESSED LONG HAIRED FUR PRICES - IN PARTICULAR THE COYOTE, HAS SEEN A MARKED INCREASE IN LIVESTOCK LOSS - PRIMARILY SHEEP IN THE TWO COUNTYS TO THESE PREDATORS.

THIS SHOULD ALSO BE OF CONCERN TO THE SPORTSMANS GROUPS AS WELL, FOR IF COYOTE NOS. CONTINUE TO INCREASE - DEER AND ANTELOPE FAWN ALSO ARE GOING TO FALL EASY PREY AS WELL.

I HAVE HAD 1080 BAITS USED ON MY OWN

PROPERTY IN YRS. PAST WITHOUT ANY DETRIMENTAL EFFECTS ON NON TARGETED SPECIES.

MANY OF US ARE WELL INTO CALVING AND LAMBING NOW AND MAY NOT MAKE THIS HEARING 7:30 P.M. FEB. 18th AND WOULD DEEPLY APPRECIATE YOUR SUPPORT OF THE HJR 16 RESOLUTION.

SINCERLY:
Jewell J. Werner
PRESIDENT- MAD-JEFF.
SHEEP ASSOC.

I HOPE BOB THIS LETTER WILL DO MORE GOOD THAN HARM.

Jewell

Ex

NAME Reward S Van Fleet BILL No. HJR 16

ADDRESS Columbus MT. DATE Feb 18 1981

WHOM DO YOU REPRESENT Stillwater County Agriculture Legislative Assoc

SUPPORT ✓ OPPOSE AMEND

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

We go on record as endorsing the previous testimony and support the passage of HJR 16

FORM CS-34
1-81

NAME Dan McKamey BILL No. _____

ADDRESS Great Falls DATE _____

WHOM DO YOU REPRESENT Mt. Range Rock Co.

SUPPORT ← OPPOSE _____ AMEND _____

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

FORM CS-34
1-81

How Coyotes Kill Sheep

Robert M. Timm and **Guy E. Connolly**
Wildlife and Fisheries Biology
University of California, Davis

Reprinted from *Rangeman's Journal*
Vol. 4, No. 4, August 1977, p 106-107

Coyote predation is a serious problem for many sheep ranchers in North America, but the act of predation is seldom witnessed under range conditions. Therefore, the sheep-killing behavior of wild coyotes has received little study. In recent experiments with captive animals,[1] we obtained photographs which illustrate what we believe to be the usual mode of coyote attack on sheep. The resulting wounds are characteristic of coyote predation, even though dogs or other predators may sometimes inflict similar wounds.

The 12 coyotes used in this study were either captured as pups or born in captivity. At the time of these trials, eight of the animals were 2 years old and four were yearlings; none had had previous hunting or prey-killing experience. Nevertheless, five of these coyotes killed and fed upon lambs at the first opportunity. Three more coyotes, which did not attack sheep at first, did so in later tests. Of the 11 coyotes which were tested singly against individual 30 to 70-lb lambs, eight killed the lambs.

In our tests, one to four coyotes were released into a 0.4-acre pen with 1 to 6 sheep, usually for 2 to 5 hours. The coyotes killed one or more sheep in 22 of the 46 tests. For the tests in which a fatal attack occurred, the time from release of coyotes to onset of attack varied from 1 to 154 minutes, with an average of 47 minutes. Of the coyotes tested individually with single lambs, the dominant animals (2-year-old males and the females paired with them) attacked most frequently. Yearling males attacked less frequently, and the two unpaired females did not attack sheep.

Connolly at present is Wildlife Research Biologist, U.S. Fish and Wildlife Service, P.O. Box 593, Twin Falls, Idaho 83301.

The report is a contribution of Western Regional Research Project W-123, "Evaluating Management of Predators in Relation to Domestic Animals." The work was supported in part by the USDA, Agricultural Research Service, Western Regional Laboratory. Authors thank D. A. Wade, W. E. Howard, W. M. Longhurst, R. Teranishi, and E. Murphy for advice and support; A. H. Murphy, D. T. Torell, and A. Hulbert for sheep; M. Vann and C. Berry for coyote pups; J. Fammatre for assistance; and M. Beaucage for photograph number 4.

[1] Connolly, G. E., R. M. Timm, W. E. Howard, and W. M. Longhurst. 1976. Sheep killing behavior of captive coyotes. J. Wildl. Manage. 40(3):400-407.

While we cannot be sure that wild coyotes kill sheep in exactly the manner we observed with captive animals, the wounds resulting from our tests resembled those reported by many workers who studied coyote predation under range conditions. Therefore, we believe that the killing patterns we saw are generally representative of coyote predation on sheep.

On ranges where mountain lion, black bear, and bobcat predation is improbable, tissue damage, tooth marks, and hemorrhage in the larynx region on sheep carcasses is commonly indicative of coyote predation. However, coyotes sometimes attack the hindquarters of sheep. Dog-inflicted wounds seem to be more variable than those caused by coyotes. It is reported that dogs tend to attack the hindquarters, flanks, head, and/or abdomen of the sheep and seldom kill as cleanly as do coyotes. Wounds caused by dogs can usually be recognized as such, but at times they are indistinguishable from those made by coyotes. In such cases, tracks and other evidence at the scene often indicate which species of predator caused the damage.

Photo 1. In our tests, any sheep which ran from coyotes usually were pursued and attacked. Coyotes generally select lambs over ewes if they have a choice.

Photo 2. Our coyotes usually attacked by running alongside fleeing sheep and biting them behind and below the ear. Then they braced their feet to stop the sheep from running. In this picture two 2-year-old coyotes are attacking a 90-lb ewe.

Photo 3. As soon as the coyotes arrested the flight of the sheep, they shifted their bite toward the sheep's throat. Once a firm grip was secured in the larynx region, the coyote simply held on and waited for the sheep to succumb. This manner of attack appeared to cause death primarily by suffocation, although blood loss and severe tissue damage also occurred. The time from onset of attack to death of the sheep or beginning of feeding, whichever occurrred first, averaged 13 minutes. In 24 of the 25 fatal attacks, the neck and throat region was the main point of attack.

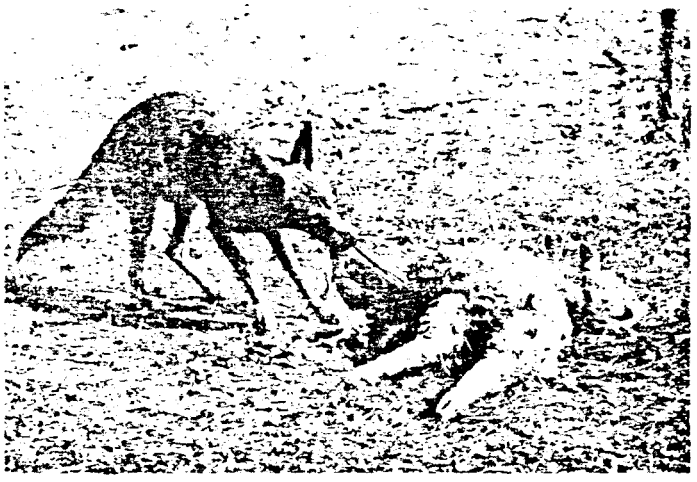


Photo 4. As soon as the sheep stopped struggling, the coyote(s) began feeding. On 9 of 21 kills where feeding was observed, the coyotes entered the body cavity and ate intestines and other viscera. They also fed upon the rump or hind leg (10 cases), the neck (7), front leg and shoulder (7), head (6), and other sites. On the average, each coyote fed for 25 minutes and ate about 4 pounds. Coyotes fed just before tests killed sheep but did not feed on them. (Photo by M. Beaucage, Agricultural Research Service, Albany, CA.)

Photo 5. The throat attack pattern of coyotes leaves characteristic lesions which may or may not be externally visible. This coyote-killed ewe showed few external wounds, but subcutaneous examination revealed extensive tissue damage and hemorrhaging in the larynx region. Tooth punctures can often be found in the overlying skin.

Photo 6. A coyote consumed about 5 pounds from the rump of this 70-lb lamb without killing it. We have seen range sheep with similar wounds. Of 25 coyote kills we observed, this was the only case in which the attack was not directed primarily to the neck and throat area of the sheep. Extensive feeding on the rump and hind leg, as shown here, also occurred on about half of the sheep killed with the customary throat hold.

NAME Dorothy Anderson BILL No. HJR 16

ADDRESS Springdale, MT 59082 DATE 2/18/81

WHOM DO YOU REPRESENT

SUPPORT X OPPOSE AMEND

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

I support this resolution. We raise sheep and need this control for our operation to be profitable.

We have needed this control for a long time.

If the coyotes problem was under proper control, there wouldn't be all this hassle.

Thank You.

FORM CS-34
1-81

NAME Elaine Allestad BILL No. HJR 16

ADDRESS Big Timber Mt. DATE 2/18/81

WHOM DO YOU REPRESENT Self

SUPPORT X OPPOSE AMEND

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments: I am in support of this resolution for we are sheep ranchers and need 1080 to help control the coyote population, so the sheep business can be feasable. If it is under controled conditions by educated trapers there should be no crip from anyone. If sportsmen want to see a better deer population they will have to thin out the coyotes. Thank you.

FORM CS-34
1-81

✓

NAME Robert Van Der Veer BILL No. HJR 16

ADDRESS Helena DATE

WHOM DO YOU REPRESENT Self

SUPPORT X OPPOSE AMEND

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

FORM CS-34
1-81

NAME Larry Capser BILL No. _____

ADDRESS Hillsboro DATE _____

WHOM DO YOU REPRESENT _____

SUPPORT _____ OPPOSE _____ AMEND _____

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

FORM CS-34
1-81

NAME Gary Dyer BILL No. HJR 16

ADDRESS Brady MT DATE

WHOM DO YOU REPRESENT Montana Farmers Union

SUPPORT ✓ OPPOSE AMEND

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

Montana Farmers Union endorses this resolution. (HJR 11)

FORM CS-34
1-81

NAME [illegible] BILL No. [illegible] 16

ADDRESS [illegible] DATE [illegible]

WHOM DO YOU REPRESENT [illegible]

SUPPORT ________ OPPOSE ________ AMEND ________

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

FORM CS-34
1-81

EX.

NAME Raleigh Road Inc. Ray Jones BILL No. _____

ADDRESS West Point DATE _____

WHOM DO YOU REPRESENT Diversified Wood Products Self

SUPPORT ✓ OPPOSE _____ AMEND _____

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

FORM CS-34
1-81

NAME James W. Grosser BILL No. HJR 16

ADDRESS Helena, Mt. DATE 2/19/81

WHOM DO YOU REPRESENT Mt Dept of Livestock

SUPPORT V OPPOSE _____ AMEND _____

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

Prepared statement submitted

FORM CS-34
1-81

NAME Gordon Darlington BILL No. HJR 16

ADDRESS Three Forks DATE 2-18-81

WHOM DO YOU REPRESENT Agriculture Preservation Assn!

SUPPORT ✓ OPPOSE _____ AMEND _____

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

Park County Legislature Assoc.
Sweetgrass Agriculture Preservation Assn.

FORM CS-34
1-81

NAME _____ BILL No. _____

ADDRESS _____ DATE _____

WHOM DO YOU REPRESENT _____

SUPPORT X OPPOSE _____ AMEND _____

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments:

FORM CS-34
1-81

NAME Chris Frank BILL No. HJR-16

ADDRESS Helena MT DATE 2/18/81

WHOM DO YOU REPRESENT Montana Farmers Union & Montana Stockgrowers Assn.

SUPPORT X OPPOSE _____ AMEND _____

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Comments: Thanks

FORM CS-34
1-81