

# COLORADO BIGHORN SHEEP SEASON-1953



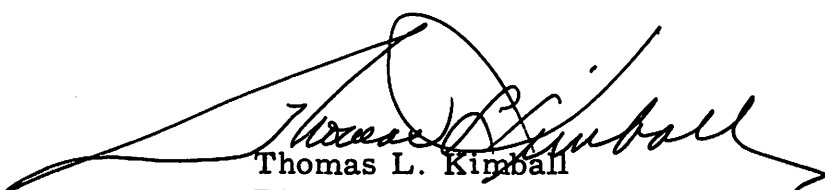
*State of Colorado*  
DEPARTMENT OF GAME AND FISH  
DENVER 3, COLORADO

Cover Photo: Walt Larsen of Denver, and Bighorn  
ram killed during 1953 season in Grant area. (Photo  
by Department Photographer, George D. Andrews.)

## FOREWORD

Until 1953, the hunting season on bighorn sheep in Colorado had been closed for 68 years. During that period of time, there had been three successive build-ups then die-offs in bighorn populations. I strongly suspect that if the mature animals had been taken through sportsmen's hunting and the herds limited in number to the carrying capacity of the ranges we would still have as many or perhaps more bighorn in Colorado than we have at the present time. Yet, when the season was proposed to harvest only a few of the mature rams, there was such an adverse public reaction that the matter became front-page news. We thus found that unless the general public understands the full meaning of the term "Game Management" and the reasoning behind such recommendations for hunting considerable difficulty is experienced by the Department in properly managing the State's wildlife resource.

A great deal of the credit for the success of this first year's bighorn hunt in Colorado in 68 years is due in a large measure to the cooperation of those individuals who secured the first permits to hunt. Each of these individuals should be commended for the understanding which has been evident and for the cooperation which the published letters show. I am sure that as the years go by and as hunting seasons come and go the Department will prove its ability to manage the bighorn in such a manner as to benefit the photographer and the tourist, as well as the hunter, by providing healthy, stable populations of bighorn to be enjoyed by all.



Thomas L. Kimball  
Director

## HUNTING AS A TECHNIQUE IN STUDYING LUNGWORM INFESTATION IN BIGHORN SHEEP

Gilbert N. Hunter, State Game Manager  
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Colorado is credited with having one of the largest Rocky Mountain bighorn populations in the United States. In 1952-53, a total of 3,991 sheep were actually counted in 115 separate herds (see Fig. 1 for distribution). Even though a heavy die-off was experienced in three large herds in 1952 and 1953, an estimated 5,000 mountain sheep still remain in the State.

### Disease Background

The loss that occurred in the three herds was attributed indirectly to lungworm infestation. In the Tarryall region, located in South Park approximately 100 miles southwest of Denver, 376 dead sheep were found by Department personnel in 1952 and 1953. In the Kenosha area, adjoining the Tarryall Range, 66 dead sheep were found; and to the south of these areas near Pikes Peak, 57 dead sheep were found. All the above are within the same general locality. It is believed that the counted loss represents only a small part of the actual loss, which probably involved about two-thirds of all the animals in the three herds in question. Prior to this loss, the estimated population of these herds was approximately fifteen hundred animals.

This trend is not unusual for Colorado, as early records indicate losses as early as 1859, 1885, 1903, 1923 (Cary, 1902; Seton, 1927; Carhart, 1938; Spencer, 1943; Packard, 1946). These earlier losses were attributed to scabies and hemorrhagic septicemia, and it was not until 1931 that the lungworm was identified as a factor in the decline of Colorado sheep (Dickmans, 1931). Naturally, these periods of decline cannot be pin-pointed to a particular year, since studies indicate that they may have continued over at least a 10-year period. Reports of early writers are contradictory, though it would appear that the dates mentioned represent the years in which the heaviest losses probably occurred.

History indicates that the rise and fall of Rocky Mountain bighorn herds has followed a fairly definite pattern, rising to a peak population then declining to a low; and these peaks and lows are approximately 10 to 30 years apart (Rush, 1928; Marsh, 1939; Honess and Frost, 1942).

In analyzing the early sheep die-offs, it is our opinion that even though they were attributed to hemorrhagic septicemia and scabies, the losses may have been caused indirectly by lungworm. Symptoms described, such as rough coat, nasal discharge, coughing, uncertain gait, and a pneumonic condition, are similar to those now known to accompany a heavy lungworm infestation. Lungworm is now accepted in Colorado as one of the important factors in the decline of our sheep herds, and apparently has always been. Verminous pneumonia losses, approaching

epidemic proportions, have only been observed in three herds; however, the information gained from the hunt in September, 1953, would indicate that probably most of our bands are infested with this parasite. The presence of lungworm was detected in 13 of the 14 areas where sheep were killed in 1953, Table 2.

### Design and Operation of Hunt

Nine years ago the Game Management Division of the Colorado Game and Fish Department realized that action should be taken to properly manage our bighorn sheep herds and, through the Director and the Commission, administrators were successful on March 3, 1945, in getting the Legislature to establish a resident bighorn license. Getting the license established was merely the start of the battle for good game management of our herds, as a season was opposed by the public as well as some Department personnel.

Prior to the setting of a season, the Department concentrated its efforts to gain public support. This effort was made before there was any knowledge of disease loss, and the primary reason then given in justification was to harvest surplus rams. Such a harvest, it was argued, would better balance the sex-ratio, thereby increasing productivity of the herds. When it became evident that three of Colorado's major herds were sustaining serious disease losses, over-crowding was stressed as a major factor in disease spread. In all cases examined, these losses were attributed to verminous pneumonia. The importance of determining the degree of infestation

in other herds by obtaining specimen material through hunting was also emphasized. The Colorado Game and Fish Commission, in 1953, thus set a season in 18 sheep areas, and issued 169 licenses for rams with one-half curl horn or better. This number was predicated on a hunting success ratio of 33 per cent. The dates of September 3 to 13, inclusive, were selected because the sheep are then in the high country and well scattered. Furthermore, good weather, which can generally be expected at this time, would directly benefit the hunter. This time was decided upon even though the pelage was too short for the best trophies.

The season in 1953 was the first since 1885, and as soon as the opening was announced it aroused one of the liveliest controversies that the Game Department has experienced in many years. The opposition was led by one of the largest Denver newspapers, purely for sentimental reasons; and as a result, all sentimentalists and persons having a complaint against the Department flocked to its support. The controversy became so heated that it was carried to the Governor and a group of influential Legislators in an effort to stop the season. Threats were even made that if the season was held the Department would suffer materially when the next appropriation was made. Sportsmen throughout the State, however, due to a very effective educational program, were strong in their support of the Department. As a result, the Commission stood firm and accepted the recommendations of the field men.

As previously stated, the primary objectives of the season were: (1) to improve the sex-ratio; (2) to ascertain the extent and intensity of the lungworm infestation; and (3) to relieve concentration. Two of these objectives were accomplished to a degree, as the hunters were very cooperative, and lung samples were obtained from every area in which sheep were harvested. Naturally the removal of a limited number of rams was a benefit, since the sex-ratio prior to the season was about one-to-one in all herds.

Originally it was planned to remove a specific number of rams from each herd. This number varied from 20 to 60 per cent. Had this been possible, an excellent study could then have been conducted as to the most desirable sex-ratio. Due to the controversy over the season, it was thought good policy to reduce the number taken the first year, and work towards this objective in the seasons to follow.

The third objective, relief of concentration, did not materialize as the number of hunters in the field was too small to cause a permanent movement of the sheep.

Prior to the sheep season, the Department concentrated on an educational program primarily to inform sportsmen that sheep hunting was very difficult and expensive. Hunters not in good health, or not thoroughly versed in woodcraft, were advised not to apply for a license. The result of this program was very gratifying, as only 237 persons applied, even though every resident in Colorado was eligible. All applicants were



required to send a certified check or money order in the amount of \$25 with their application. As applications were received, an IBM card was key punched, and the 169 successful applicants were chosen mechanically by the IBM statistical machine. Successful applicants were generally of a high calibre, who later proved themselves to be good sportsmen.

As this was the first sheep season in Colorado in 68 years, the hunt was strictly supervised. Base camps for Department personnel were established in every hunting area, and as experienced sheep hunters were exceptions, State men were instructed to assist them in every possible way. Seventy-one Department men were assigned, and ranged in number from three to five per camp. Before the season, all men were instructed as to the manner in which lung tissue, bile duct, and stomach samples should be taken. As a result, usable samples from 47 sheep were obtained. Another factor which enabled the State to gain more information regarding the condition of the sheep was the regulation which required all animals to be checked by Department personnel.

All successful applicants were sent a personal letter of instructions as to how the base camp could be reached, the names of packers and guides in the area, and what in the way of specimens the Department desired. A few tips on how to hunt bighorns, equipment needed, and probable success that could be expected, were included in the letter. The favorable results of this personal touch were reflected in answers

to a questionnaire which was sent the hunters after the season, and which will be discussed later.

Since one successful applicant was unable to hunt, the 168 hunters killed 58 rams, for a success ratio of 34.5 per cent. One violation occurred, as a lamb was shot by mistake; and seven animals were wounded and not obtained. Practically all hunters reported the sheep difficult to find. This fact was gratifying to the Department, as the opponents of the season made an issue of the tame sheep that would be slaughtered; hunter reaction, however, definitely disproved this theory.

Following the season, the Department, in order to gain knowledge of hunter reaction, sent questionnaires to the 169 successful applicants. It was felt that information, such as we expected to receive, would be very valuable in setting future sheep seasons. The response was very good, and 144, or 85 per cent, of the hunters returned their completed questionnaires.

The results of this survey are given in Table 1. In Table 2, the caption, "Number of sheep seen by", was recorded both by wardens and hunters, which explains the discrepancy in numbers. In the warden count, duplication has been eliminated, and hence represents the most accurate figure. It will be noted that in both counts the number of ewes and lambs far outnumber the rams. While it is our opinion that this is not entirely true, it must be remembered that Colorado bighorns have not been hunted for 68 years, and field studies show approximately a

one-to-one sex-ratio. Apparently there were many more rams in the areas than were seen.

It is also interesting to note that only seven per cent of the hunters reported that they were not pleased with the hunt, Table 1. Naturally the men composing this seven per cent, unsuccessful in the field, were in areas where hunting was difficult. Even so, complaints in the amount of seven per cent are small when it is considered that 66 per cent of the hunters were unsuccessful.

One other question, not shown in Table 1, referred to cost to the hunter. This averaged \$203.66 per man, plus the \$25 license fee, or a total of \$228.66. A further analysis showed that 71.4 per cent of the successful hunters used horses.

Prior to the season it was thought that some record heads would be taken. This did not prove to be true, but measurements of three of the largest heads are given below. All measurements were made by Department personnel.

Horn circumference		Outside Curve		Spread
Right	Left	Right	Left	
14-1/2	14-3/4	34	36	21-1/2
15-1/2	15-1/2	36	31-1/2	23-1/2
15-3/4	15-3/4	34-1/2	34-1/2	21-3/4

Table 1--Summary of bighorn sheep questionnaire,  
(144 hunters reporting).

Did not hunt	Kill reported		Days Hunted	Sheep seen per hunter		Did you get a shot at a bighorn sheep		Where was Kill made		Where were most sheep seen		Sheep hunting, Compared to Elk		
	Yes	No		Rams	Other	Yes	No	Above Timberline	In Timber	Above Timberline	In Timber	More Difficult	Same	Less
1	56	88	729	525	1,684	66	78	43	13	80	38	111	19	10
			5.06	3.65%	11.69%	45%	54%	76.79%	23.21%	67.80%	32.20%	79.28%	13.57%	7.15%

Were horses used				Rifles used by successful hunters		Guides used		If guide used, was service satisfactory		Were you satisfied with this season	
Owned	Borrowed	Hired	Didn't use	Calibre	No. hunters reporting	Yes	No	Yes	No	Yes	No
43	11	58	27	300 Sav.	6	13	131	11	2	134	10
30.94%	7.91%	41.73%	19.42%	300 Mag.	25	9.03%	90.97%	84%	16%	93%	7%
				7MM	4						
				270	12						
				30-40	1						
				8MM	1						
				348	2						
				30-30	1						
					56						

### Role of Hunting in Management

Hunting appears to be the best method of alleviating over-crowding in bighorn populations; but how effective this tool is in bringing about the dispersal of sheep over a wide range remains to be seen. Certainly, adjacent unoccupied range suitable for sheep is a major factor; also, whether or not the factors responsible for present concentrations are the result of habit or some environmental requirement must be considered. If hunting pressure is effective in moving sheep, then great care must be taken to assure that it is spreading them out and not concentrating them in smaller, more inaccessible, areas. If no suitable adjacent range is available, and the population is limited by this factor, then the problem is one of manipulating the size of the population through harvest of all surplus animals; or a combination of harvest and control may achieve the desired result. Determination of safe carrying capacity for a given range is difficult, and the manager may have to resort to trial and error in attaining the most satisfactory level.

The use of the hunting season in obtaining study material was emphasized to gain support for the bighorn season, and much can be said for, as well as against, this technique. Obviously, success in obtaining tissue samples is dependent upon the cooperation of both field personnel and the hunters, and to obtain this cooperation these men must have some understanding of the problems being studied. For example, they must know precisely what material is needed and how to obtain and preserve it; and they must be

provided with the necessary equipment. Past experience has indicated that the amount of return is also dependent on the type of hunter, and the accessibility and roughness of the terrain.

The greatest advantage in employing the hunting season as an opportunity for obtaining study material lies in the relatively large sample which can be obtained in a short time from widely distributed areas. The taking of large samples by other means might arouse public animosity. Another value lies in the fact that it does carry some weight in gaining support of the public, when followed up with a report on the results obtained. However, it does not give the information which can be obtained by a trained man with the whole carcass at his disposal.

We believe that personal contact with the hunter before he starts his hunting is very important in getting his cooperation. To be able to explain what you want to the hunter is far more certain than expecting him to get it from a handful of literature which he may or may not read, though printed instructions, in addition to personal explanation, are desirable. It is also important to require that any animal bagged be checked by Game Department personnel before leaving the hunting area.

Probably the greatest disadvantage, other than the fact that it does not supply everything that could be desired (the whole carcass), is that additional control is necessary, which increases the cost of operating the hunting season.

### Lungworm Studies

Obviously, all of the information needed for managing bighorn sheep in Colorado cannot be obtained by permitting a season and collecting study materials from the animals killed. Studies are needed to provide information on the status of individual herds, their productivity, and other factors which control their increase and decrease.

The Federal Aid Division of the Colorado Game and Fish Department has undertaken these studies in its bighorn sheep project. Part of these studies involve the investigation of the life-history and ecology of the lung nematodes of bighorn sheep. There are two species of lungworms known in Colorado -- Protostrongylus stilesi, which is regarded as being pathogenic (Marsh, 1938; Honess, 1942), and P. rushi, which is much less pathogenic (Honess, 1942).

These studies cannot be conducted on a state-wide basis with the hope of accomplishing very much; consequently, the Pikes Peak region, since it was the type locality for Protostrongylus stilesi, as well as an area sustaining heavy losses, was selected as one study area. Most of the preliminary work on the life-cycle of these parasites has been confined to this region.

We hoped to obtain information on the incidence and degree of infestation in the other herds of mountain sheep, and with this information, select other strategic areas for study. Two such areas have been selected on the basis of information obtained as a result of the hunting season, summarized in Table 2. The area north of the Arkansas River, between the

Table 2--Bighorn license sales; kill; lungs samples; number of animals seen, Colorado, 1953

Bighorn hunting areas		Licenses Sold	Legal Kill	Lungs Sampled	*Positive evidence of Lungworm found	Number of sheep seen by						
						Wardens			Hunters			
						Rams	Ewes, Lambs	Unclass-ified	Rams	Ewes, Lambs	Unclass-ified	
1	Poudre	5	2	2	2	10	9	42	13	9	2	
2	Clark's Peak	5	3	2	2	22	13		15	17		
3	Gore Range	10	0	0	0	4	3		2	6		
4	Georgetown	10	3	2	1	22	46		41	78		
5	Mt. Evans	5	0	0	0	3	63		0	89		
6	Grant	5	1	0	0	6	32		6	108		
7	Kenosha	15	7	4	3	18	18		23	42		
8	Tarryall	25	1	0	0	12	31		7	69		
9	Pikes Peak	10	6	6	5	30	28		50	1		6
10	Lower Arkansas	10	8	7	0	32	96		132	259		
11	Cottonwood	10	3	2	2	14	17		34	46		
12	Crestone	10	5	3	3	25	35		57	289		
13	Taylor	7	4	3	3	11	3		23	0		
14	Sopris	5	0	0	0	0	19		0	41		
15	Glenwood	7	2	2	2	4	20		15	45		
16	Pole Mountain	10	4	4	4	14	22		21	52		
**17	Cimarron	10	0	1	1	6	36	0	100			
18	Buffalo Peaks	10	9	9	9	32	153	86	425			
	Totals	169	58	47	37	265	612	42	525	1,676	8	

\*Identification by Dr. Griner.

\*\*1 Illegal kill.



towns of Parkdale and Cotopaxi, was selected because none of the lung samples obtained here during the season showed any evidence of lung-worm infestation. The Buffalo Peaks area, farther up the Arkansas River drainage, was selected, on the other hand, because all of the lung samples obtained here were infested.

Preliminary investigations indicated that the life-cycle of P. stilesi and P. rushi followed the same general pattern as reported for related species (sub-family: Protostrongylinae) by Hobmaier and Hobmaier (1930), and other subsequent authors. The life-cycles of these lung nematodes may be summarized as follows: eggs, laid by the females within the lungs, hatch, giving rise to first-stage larvae. These migrate up the trachea to the region of the throat, where they may be swallowed and then pass out of the animal in the feces, or possibly leave the animal in respiratory discharges. In order to reinfect the host animal, the first-stage larvae must penetrate the tissues of a suitable intermediate host which, in all cases so far investigated, have been pulmonate snails. Within these snails they reach the infective stage by an increase in size followed by two cuticular molts. The shed cuticles form a sheath or case about the larvae. Completion of the cycle is dependent upon the ingestion, by the host, (sheep) of the infected snail. Infective larvae are released from the tissues of the snail by digestive processes, or possibly through mastication, whereupon they may penetrate the intestinal walls and make their way to the lungs via the lymphatics and blood vessels.

To date, only Pupilla blandi, P. muscorum and possibly P. hebes, have been found, by experimental infection, to be suitable intermediate hosts for the protostrongylid larvae obtained from the droppings of Pike's Peak sheep. Although several hundred snails have been examined from this range, only one instance of naturally infected snails has been noted. This was in P. blandi (Moser and Pillmore, 1954), collected about the bases of tufted-hair grass (Deschampsia caespitosa). It may be of interest that these snails were found on a west-facing slope below a rocky outcropping on which sheep sign was evident.

It is well known that susceptibility to parasitic infestation varies with individuals of the same species, and that this resistance to parasites seems to be associated with factors such as age, state of nutrition, kind and number of parasites already present, and other factors. The degree of infestation in susceptible host animals is determined by the number of infective larvae picked up. Large numbers of infective larvae taken over a short period of time may also help to break down resistance to infection. The effect of lungworms upon the bighorn sheep is probably largely de-

pendent on the degree of infestation. This, in turn, is a manifestation of crowding, where climatic and other conditions, including the presence of intermediate hosts, favor the survival, development, and transmission of the larval stages of these parasites.

The cause of death in the more recent losses has been attributed to pneumonia or hemorrhagic septicemia, while those of the late 1800's and early 1900's were thought to have been associated with scabies or psoroptic mange.

Investigations on the three study areas already mentioned are designed to evaluate density and distribution of the snail as the intermediate host, in relation to the density, distribution, and habits of bighorn sheep.

Factors which control the density of sheep and snails will also be studied. It seems that in the case of bighorn sheep, the usual determination of carrying capacity on the basis of the quantity and quality of available forage is inadequate, and other factors controlling sheep density may be of greater importance in determining the carrying capacity of a particular range. Certainly if a good dispersion of environmental requirements exists there is little necessity for crowding, unless it is a gregarious habit.

In future bighorn sheep seasons, much attention will be devoted to planning so as to obtain as much information as is possible from the animals taken. Since there is apparently a difference in pathogenicity between Protostrongylus stilesi and P. rushi, information is needed as to which species is present, or whether both occur in combination. It is also important to determine the degree of infestation. If preliminary life-cycle investigations of these parasites involve first-stage larvae of both, it then appears that the larvae of the two species are indistinguishable. Some information on the kind, number, and pathogenicity of other parasites would be of value. Perhaps fecal-sample analysis would be the simplest approach. Formalin seems to be about the best preservative for this type of work, but it is difficult to find suitable containers, for neither cardboard nor glass is very satisfactory. Some type of metal or a non-brittle plastic, however, may be suitable. One of the field men had excellent success by issuing plastic bags to the hunters, then preserving the material in formalin when they returned to camp.

Certainly the information obtained by questionnaire and hunter report cards is always useful to management. This hunter and hunting information, together with laboratory and ecological studies, should make for better management of the bighorn resource in Colorado.

## Summary

1. During 1952-53, serious disease losses (involving about two-thirds of all sheep present), occurred in three Colorado bighorn sheep herds.
2. This represents about the third major decline for which there is some record.
3. These declines have been attributed to scabies, hemorrhagic septicemia, and for the more recent decline, verminous pneumonia.
4. A limited bighorn sheep season, the first since 1885, was held in Colorado during September, 1953, in spite of some bitter opposition to such a season.
5. Much of the success of the season may be attributed to personal explanation and written instructions given each hunter.
6. One hundred and sixty-nine licenses, for the taking of bighorn rams of more than one-half curl, were selected from 237 applicants by an IBM machine. Of these, 58 killed rams, for a success ratio of 34.5%.
7. The species of lungworm involved in the diagnosis of verminous pneumonia as the cause of decimation is P. stilesi; although a less pathogenic species, P. rushi, is known to occur in Colorado.
8. Out of 18 areas in the State open to hunting, lung tissue samples were obtained from 14, and in 13 of these areas there was evidence of lungworm infestation.

9. Preliminary investigations indicate that the snails, Pupilla blandi, and P. muscorum, are suitable intermediate hosts for Protostrongylid larvae, obtained from droppings of bighorn sheep in the Pikes Peak area.
10. It is suspected that sheep density, as a major factor in the spread of parasites and disease, is of great importance in producing periodic declines. Studies of the relationship between, and the factors affecting the density, distribution, and habits of snails as the intermediate hosts, and bighorn sheep as definitive hosts for lungworm, are planned. Three study areas have been selected, largely on the basis of information gained as a result of the hunting season.

#### Acknowledgments

We are indebted to the Colorado Game and Fish Commission, and the Director of the Colorado Game and Fish Department, Thomas L. Kimball, who made this 1953 bighorn sheep season possible; to all field men assigned to the bighorn hunt, whose efforts did much to make this season a success; to Dr. Lynn A. Griner, Pathologist for the School of Veterinary Medicine; and to Dr. O. Wilford Olsen, Head of the Department of Zoology, Colorado A and M College, for their diagnoses and identifications.

To all sheep hunters whose excellent cooperation did much to help the Department.

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## GLOSSARY

Cuticular moult. Shedding of the cuticle or outer body covering of lungworm larva.

Definitive host. The species of animal harboring the mature form of a parasite.

Ecology. The study of the relations of one animal or plant to others, and also to their surroundings.

Host. An animal harboring parasites is host to the parasites. See definitive host, and intermediate host.

Infection, experimental. Snails infected by exposure to first-stage larva of lungworm in laboratory.

Infection, natural. Snails containing infective larvae found on big-horn sheep range.

Intermediate host. Some parasites utilize other kinds or species of animals to harbor the immature forms of the parasite. These are termed intermediate hosts, and they may be essential to further development of the parasite.

Larva, lungworm. Immature worm, frequently very different in appearance from mature form.

First stage larva. Designation of the form which hatches from egg in lungs and is found in feces. This form usually must penetrate snail for further development.

Infective stage larva. Designation of the form found in the snail after a period of growth and changes, and capable of invading the sheep host. Protostrongylid larvae refers to larvae of the lungworm genus Protostrongylus.

Life-cycle. The succession of stages in development from egg to maturity.

Life history. The study of habits, mortality, productivity, food, etc. of an animal.

Mastication. Chewing.

Nematode. A round worm of the broad classification phylum Nematoda, which contain the parasitic as well as non-parasitic round worms.

Pathogenic. Causing disease.

Pulmonate snails. Snails, typically land snails, breathing by means of a type of lung rather than gills.

Answers to #11, 1953 Bighorn Sheep Questionnaire, which was: "Were you satisfied with the hunt?"

**AREA #1 - Poudre River**

License #101 (Successful). "Dear Sir: I was one of the lucky holders of a license for Rocky Mountain Big Horn Sheep for 1953. I also was LUCKY in being able to fill.

"I wish to make some comments regarding the three Wardens your Dept. assigned to the area No. 1 in which I hunted, which is located in The Poudre Canyon West of Fort Collins. These men were: Clois E. Till, Fort Collins, Dennis G. Mutz, Castle Rock, and Robert Hoover of Eaton.

"I have been a residence of Colorado thirty seven years and in that time I have come in contact with a number of Wardens while Fishing, Hunting, and at checking stations here and there over the state. However this is the first time that Real honest to goodness cooperation and fellowship, has been felt by me from men in your organization, which might not mean so much.

"I did not need as much help as some of the younger men, that were hunting as to 'knowing the country and ect.' as I grew up in Fort Collins, and know the Poudre Canyon as perhaps few do, as I have fished and hunted from the mouth of the canyon to Chambers Lake & beyond for years. Your three boys did everything possible to help all of us secure a Ram. They gave us constructive advise, drew maps, and hunted right with some of the hunters. They compared notes with all of us at various times, and made suggestions from time to time, to really try and help us, in any way possible.

"I know how I felt about all this and from comments from some of the other hunters they seemed to feel the same way. These Department men were more like good helpful companions than just an arm of the law watching every single move that we made, and we felt at ease with them.

"I wish very much to commend your Department for the type of men assigned to the territory that I hunted, and I can whole heartily feel that if and when I meet any or all of the above three men again I can say a cheery 'Hi Friend' to them, as a friend and mean it.

"My very BEST wishes to your good work and to the high type of men under your command. ...."

(Signed) Fred A. Hiigel  
9800 E. 10th Ave.  
Aurora, Colo.

License #104 (Successful). "Very well satisfied even if I had not been successful it opened up a new kind of hunting and country I would have otherwise probably never seen. I bagged my sheep at noon the last day which was naturally a climax to a wonderful hunt but even if I hadn't I wouldn't have regretted. The three wardens in charge of our Camp #1 did everything expected and far more to be helpful and cooperative. It was a pleasure to have them with us and your dept. is to be congratulated for having 3 such fine employees, out definitely doing their job plus wonderful public relations work at the same time. I hope that as a result of this season other sportsmen will be able hunt in future years as I am sure we will not do damage to our herds by hunting out the mature rams under careful supervision such as this hunt."

(Signed) Bob Noffsinger - Greeley

License #102 (Unsuccessful). "No. I was not satisfied with the hunt. I don't think there should of been a season in the Poudre area. In the first place, out of all the hunting the 5 hunters did and the help of three game officials only two man saw any sheep. And they killed two. But we hunted from one end of the area to the other from dawn to dark with out seeing a thing. Now this is with the exception of a few young sheep that came down in the meadow every day about 7 A.M. Those sheep are pretty tame. But as far as the hunting went nobody but two men saw any sheep."

(Signed) W. F. Vigor

"P.S. I do think haveing a Big horn hunt was the best thing the Dept. could do. And as for me I'll keep trying for sheep until I get mine. I think the game officials did all they could to make our hunt a success. I hope you have another hunt next year, and many more."

License #105 (Unsuccessful). "Yes. The Game & Fish Dept. personnel were most helpful, kind, and went out of their way to assist in anyway they could.

"I enjoyed this hunt very much. The area in which I hunted, Area #1, had no sheep above timberline. Both rams were taken in a timbered location. They were the only two legal-sized rams seen. Therefore, when the Big Horn Sheep season is scheduled next time, may I suggest that hunters in timbered areas work the timber more. Also when the next season is scheduled, may I suggest that when licenses are issued, the unsuccessful hunters of this season be given another license in the areas they hunted this year if they so desire."

**AREA #2 - Clarks Peak**

License #106 (Successful). "Yes. I took my son along for company & help. A man should not go ram hunting by himself as the altitude and hazards of hunting at 12,000 to 13,000 feet are too great, Hunted in Area (2) killed the animal in Jackson Co., was camped in Larimer Co. and had to drive to Walden and back to the Jack Dickers ranch east of Walden then with a horse to about 10,000 ft then we two let the ram down about 3,000 ft. on a rope to where he could be loaded on a horse. "Mountain sheep hunting is great sport but it is only for men with stout hearts & lots of courage. The danger of rock slides at the very top & strong winds are something that the average hunter knows nothing about. I have hunted elk in Colorado ever since there was an open season from north to south & west & I consider that mild hunting as compared to sheep hunting. The only place we could find any sheep was at the top, I mean on the top rock of the top. In regards to future seasons I think one thing should be stressed and that is, that only men of best physical condition should consider applying for a license. I would put the cost at about \$200.00 for the two of us. We took many pictures of the hunt including the kill, if they are good would you like some?"

(Signed) W. C. Graves  
Bellvue Colo.

License #108 (Successful). "Very much satisfied, cooperation of Game Wardens was very cooperative, I am entirely in agreement with the Departments stand they took on this hunt."

License #109 (Successful). "Extreamly satisfied things Meaning weather could not have been better"

License #107 (Unsuccessful). "Yes, I found that the altitude was too high for me & the fellow that was with me. I could not eat or digest my food right. The wind & sun were bad & I burned my nose & lips quite bad."

(Signed) Ralph L. L.

License #110 (Unsuccessful). "Yes. In my particular case (Area 2) I would have like to know the Wardens address. They came in from Walden side & had I known that I would have come in from that side also. Another thing they (wardens) did not give specific enough info to the pack outfitter (Red Vernon) in placing our camp close to theirs for convenience sake."

### AREA #3 - Gore Range

License #111 (Unsuccessful). "No. I am in favor of a post season. To my knowledge not one of the 10 hunters seen a ram. I also don't believe the Game Dept. knows too much about this herd of sheep. There are a lot of people get into that country fishermen, D. sheepmen, and miners and I think there is poching going on, on the bighorn sheep. Some of the sheepmen couldn't understand why the herd didn't get bigger They said every ewe had a lamb when they get to see them"

License #112 (Unsuccessful). "I was not satisfied with the hunt. I don't think the sheep were in the area at the time of the hunt. The department was at fault for having us move into an area where there were few sheep if any.

"I do want to say that the Game and Fish men in charge of the area are very fine men and did everything they could to help us. "

License #113 (Unsuccessful). "No So far as I know, none of the ten hunters in Area three (Gore Range) ever saw a legal ram or fired a shot. Only 3 or 4 sheep were seen by all hunters.

"I was led to believe by Game & Fish Dept. personnel that the camp would be located within reasonable distance of rams, which was not the case. I would suggest a post season hunt by the same hunters if any big rams are to be eliminated from the herd. I consider the hunt in many areas very successful. "

(Signed) K. H. KNORR

License #114 (Unsuccessful). "Yes. It was unfortunate that there were so few sheep in this area of course. However I enjoyed the country, the Wardens on Duty were most helpful and should be commended. "

License #115 (Unsuccessful). "Dear Sirs: Our Sheep hunt in area 3, Gore rang, was a bad deal. 10 of us hunters never even saw a sheep of any kind except 1200 domestic sheep. 5 department officials moved into a canyon two days before season, in the canyon we were in 1000 yards wide at the top. There were 3 sheep herders 22 horses 10 hunters 5 wardens 4 visitors. Camps all over 22000 sheep Domestic. "9 of us hunters were mountain boys and good hunters.

"Our hunt was very a bad deal. Some thing ought to be done the band of sheep need some of the old Rams killed out of the Band. Our State sheep hunt is the Best thing the department has done in many years. We all need to learn something about the Bighorn. We have started, Is there any way we could have a Post season on the Gore Range, after some of People and domestic sheep were moved out. "

(Signed) Clayton Hill

License #116 (Unsuccessful). "Yes, but I wish there would have been more sheep in the country. We saw several signs of sheep, but what the ten hunters in area #3 disliked most was that eleven days before season opened Katsos put several hundred head of domestic sheep in the same country as we were supposed to have hunted and never took them out until the second day of season. The game wardens were very nice."

License #117 (Unsuccessful). "The hunt was O.K. but rather think there were very few sheep in Area 3. Although I didn't get to hunt more days than four due to obligations before leaving home I would like to know if any rams were killed in Area 3 & how many were seen. Would thank you very much for this information. Would like to try it again sometime."

License #118 (Unsuccessful). "Very worthwhile Met some swell fellows, saw a lot of new country. Hunted hard and enjoyed it. It was worth much more than the cost. Surely would liked to have had a chance for a shot."

License #119 (Unsuccessful). "I was one of the unfortunates that hunted in area 3. None of the Ten Hunters in that area have seen any sheep. I pulled out the first day. My Partner hunted 4 days in 2 other gulches, no luck."

(Signed) Louis Altberger

#### AREA #4 - Georgetown

License #121 (Successful). "Well satisfied, though I never worked harder for any game. I wish to express my appreciation for the co-operation and assistance afforded by the wardens in my area. It was their advice on the habits and characteristics of the bighorn ram which led to my success in finding & getting a shot at them. I found that these animals require a different kind of hunting from deer, elk or antelope or any other game I had previously hunted. I am looking forward to another chance, if ever possible."

License #122 (Successful). "Definitely Yes. Game & Fish Dept. personal at Empire Check Station extended themselves to help hunters in area no. 4. Might be well to have higher ratio of experienced hunters in field Several good hunters in this area Others not qualified Sheep hunting is a game of its own Requires more skill than average deer or elk hunt. Several mature heads were found in this area. Dead 1 or more years from natures elements. A well conducted season is O.K."

(Signed) Byron Guanella

License #125 (Successful). "I was very happy to get a ram and appreciated the fine cooperation of the wardens at Empire. A lot of hard work could have been saved if I had known more about sheep and the country where we found them. I saw two ewes above timberline the first day and never saw another sheep until I found the herd of about 10 including 3 small rams of which I shot the largest. Fresh sign was mostly in the timber."

(Signed) John Cross

License #123 (Unsuccessful). "I believe this is the hardest kind of hunting I have ever experienced. If there were any sheep around that wanted to eat out of my hand I sure couldn't find them. I hope there will be more hunts of this type next year."

License #124 (Unsuccessful). "Hell no I didn't get him. All the Game & Fish personnel I met were very cooperative & helpful. They assisted in every way possible to cause our hunt to be successful. Without acting as guides. The area hunted was most difficult due to the necessity of going over peaks from camp & hunting from top and not allowing sidehill hunting, or spotting from the bottom. All rams were at timberline or below & could only be seen when out of heavy timber. The terrain also made spotting difficult from above. In my case the use of horses was a waste of time as it actually limited the hunt in area covered and prevented hunting in area where the rams actually were."

License #126 (Unsuccessful). "Enjoyed the hunt very much but of course sorry not to have made a kill."

License #127 (Unsuccessful). "I believe the camp in area four should be at timberline. Too much time lost traveling from camp to hunting ground & impossible to travel in darkness. I am sorry I didn't hunt entire season. Would like another chance in spite of bad publicity. Game wardens very cooperative."

License #128 (Unsuccessful). "Yes, just didnt have time to stay."

License #129 (Unsuccessful). "I was very well satisfied with the hunt even though I did not kill a sheep. It was a very different & memorable experience."



AREA #5 - Mt. Evans

License #131 (Unsuccessful). "Yes. Reason did not hunt more than 3 days caught cold - camped at Summit Lake. Warden very cooperative. Would like to go again."

(Signed) Lud Rettig

License #132 (Unsuccessful). "I have hunted area 5 for elk for the past 6 years, and I found that sheep hunting is much harder because of the foot work required to get high in the rock slides and cliffs. I was particularly satisfied with the price of the license and the difficulty in hunting as it seperated the dudes and tourists from the hunters and sportsmen."

(Signed) C M Clark

License #133 (Unsuccessful). "Yes, I found that the hunting was more difficult than I expected, and that I should have gotten in condition with some hikes above 12000 ft previously. Although I was unsuccessful in my hunt, I am very well satisfied, if given another opportunity I would have paid for another license a week latter and been ready to go again. Although no one made a kill in my area I would wish to return to the same area if given another opportunity at a latter date. What with the knowledge of sheep and their habits gained on this hunt plus being familiarized with the Mt. Evans area now, I feel that I would take a trophy the next time.

"It is a pleasure to have been afforded the opportunity of this hunt. All of the game commission personel were extremely cooperative in every way during the hunt, actually rendering assistance in addition to that required by virtue of there official duties. I particuilarly wish to commend Mr Bill Forgett, for the exceedingly fine job he did in managing the hunt in the Evans area, who more than exserted himself in his advice and physical effort in aiding each individual hunter, playing no favorites and assisting equally each hunter regardless of his economic or social position. Thanking you."

(Signed) C L Merrill

License #135 (Unsuccessful). "I was, of course, disappointed by my failure to kill a ram, however I feel that the hunt was well conducted and that the members of the Game and Fish Department who supervised the hunt, in my area, were very cooperative, and all factors considered I greatly enjoyed the hunt. Let's have more of them.

"Question: Out of fairness to the average hunter is the fee of 25.00 quite justified? I believe many more people would be interested in the hunt if it were lowered somewhat."

AREA #6 - Grant

License #139 (Successful). "Very much satisfied and pleased with the results. Hope the sheep season can be a continuous season for sportsmen in Colorado. It rates as the finest of all big game hunting. "Don't let anybody kid you that Colorado sheep are tame. They are as wild as any sheep in Wyoming or Canada."

License #136 (Unsuccessful). "This hunt, to my estimation was a flop. We had every turn of bad luck that I think a hunter could have. First our horses got loose & we were afoot. Then we were informed we would have to have a Guide at \$5.00 per day. Mr. Keyes at the Tumbling River Ranch informed us that he was the only person who had a right of way through Mrs. Porters property (at the foot of Three mile.) We ended up having to pay him \$10.00 so we could get through the property. We later found out that Mrs. Porter would let us through for nothing, and that she didn't tell Mr. Keyes he was the only one who could go through the property.

"Then there was the business of every Dude in the Tumbling River Ranch to ride up and down the trail, making as much commotion as a circus, scaring everything in the vicinity plumb out of the County. There was supposed to have been 5 Hunters in the area. The first 2 days I'll bet there were 25 people combing the hills in our area including dudes, photographers, & etc. My partner & I were thoroughly disgusted, and thought we were on 16th & Curtis St. for awhile. We ended up catching our horses on the 13th, thanks to a Mr. Hastings of Surprise Valley Ranch. The 2 Sheep I saw were old ewes. My partner Mr. Tanko saw a herd of about 30 & they were all ewes & lambs. We saw only one elk, a cow & no fresh sign."

(Signed) George E. Hbranchak

License #137 (Unsuccessful). "No. The limited number of rams in the area, (6 observed) plus the presence of guests from the Tumbling River Ranch riding the area during & prior to the season. Mountain climbers in the area, Life Magazine staff camped in the area, Cranks on Mt. Evans firing pistols near Mt. Rosalie (the location of the bedding ground) etc. all made chances of a successful hunt rather slim.

"Nota - Guide service \$25.00 per day - Guide served two hunters, hence \$12.50 day."

License #138 (Unsuccessful). "Yes. Am looking forward to the next one with fewer photographers. The hunt was very well run in our area and the G. & F. men were helpful and pleasant to work with."

AREA #7 - Kenosha

License #141 (Successful). "I don't think the hunt was as satisfactory as it would have been two or three year ago. In the seven day's I spent in the field I found nine died sheep. I think that the state should keep having seasons on the big horn sheep. I think the hunters that got a premit to hunt this should'nt be able to get another license for two or three years. This would give the other hunter a shot at a sheep. Keep the season on rams only."

License #143 (Successful). "It was the most enjoyable hunting trip I have ever experienced. The game wardens & technicians in charge of my area were very cooperative in helping to locate the game and generally were of great assistance to all hunters. They maintained order in a friendly manner. I believe, from what I saw, that the hunt was completely justified and I earnestly hope that similar seasons, adjusted to the size & condition of the herds, will be held in succeeding years. By way of side comment I want to compliment the G. & F. Dept. on its patience and steadfast purpose in the face of all the hysterical pre-season opposition. I hope that the practically complete silence of the Rocky Mountain News after the season actually began is an indication of a more reasonable point of view on their part next year. While I may never be lucky enough to draw a license again I feel that the mere fact of holding the season is one of the most exciting opportunities ever made available to the sporting public.

"I am sure that the G. & F. Dept. will learn a great deal about the condition, numbers & distribution of the animals as a result of the combined observations of all the hunters and Dept. employees.

"Congratulations on a very well organized season!"

License #145 (Successful). "Yes. I cannot give you very little comment as I was fully equiped with a Jeep, horse & trailer, and rode my horse above timberline, and made my kill 9.45 A.M. first day. And as I made my kill the first morning, It was less difficult than hunting elk. I would like to try another hunt for the Big Horn."

License #146 (Successful). "Yes - other than not able to get horses. Although game wardens were very helpful in packing out and in any way they could."

License #147 (Successful). "I was very satisfied with the hunt. Mr. Bill Jones, who was in charged of the State G & F. Camp, was most cooperative. I would suggest the future Bighorn Sheep hunters spend some time in reading up on the habits of these animals before attempting to hunt them. Also that they spend some time looking the country over or at least get a detail map showing trails etc! I spent about 3 days after the season opened learning what I should have known before I started hunting."

License #150 (Successful). "I was very pleased with the hunt. "I am afraid you cannot get an accurate account from this report, as I was very lucky and drew a permit in an area adjoining my ranch, so I was hunting in home country and using my horses and saddle I use in every day use."

License #151 (Successful). "Yes, extremely. Bill Jones ran a very good camp. C. Jordon Lee, Wm. Berger & myself were the 'subjects' for Arthur Carhart's Colliers article, which was added enjoyment. "As an 'enlightened' conservationist first, and as a hunter second, I see no reason why annual Bighorn hunts shouldn't take place where consistent with herd management. If you would agree with this thinking, a strong statement about the success of this hunt, and your plans for the future, might help prevent the Rocky Mt. News from getting emotional next year!

(Signed) E. H. Hilliard Jr.

"Dear Mr. Hunter: I'm enclosing the Big-Horn sheep questionnaire and I'm writing you this letter to further emphasize my comments at the bottom of the questionnaire. Thanks for returning my call the other day and I'm sorry we had trouble contacting.

"Of course, we had a lot of fun hunting and I was lucky to get a good full curl ram. He seemed to be entirely healthy or if he had lung worm, it was in a very early stage. Bill Jones certainly ran a fine camp and I think all the hunters there will agree there certainly couldn't be a better man in charge of the Colorado sheep herds. I hope the Colliers article works out and is beneficial to your public relations.

"Although my knowledge of game management is in its infancy, I look on myself as a conversationist of the 'management' type rather than 'leave-her-lay' type. In view of this I certainly see no reason for not having seasons on Big-Horn sheep where its consistant with their management. As to the Rocky Mountain News and other emotional and uninformed sources of resistance, wouldn't it be helpful in quieting them

if you made a strong statement now to the effect that the season was a success, which I assume it was, and they may well be held again in the future? I think the public needs more of your side of the picture.

"I might end by saying that I think your department handled itself well in view of the opposition and certainly gained the respect of anyone who attempted to read beneath the surface of the Rocky Mountain News.

"I would very much like to meet you someday."

(Signed) E. H. Hilliard, Jr.

License #142 (Unsuccessful). "Yes. A fine hunt. I saw 14 (fourteen) dead bighorn sheep and believe that because they have no enemies that they have concentrated too much and that a limited hunt will help them as it has the antelope. I was pressed for time or believe I could have got a Ram."

License #144 (Unsuccessful). "Game Warden were very helpful, made our hunt as plesent as possable, Not enough time between time License was issued and opening day didnt give us time to prepear for hunt, like looking the country over, and getting horses. I think it was a good idea to kill off some of the Rams, hope you have another season next year."

(Signed) F. T. Reedy

License #148 (Unsuccessful). "I was very satisfied with the hunt and the cooperation given us hunters by the Game Department Although I was not successful in getting a Ram the sight and getting a shot at one was a great thrill to me. I learned a great deal as to what the Game Department has done and are doing for our sheep from Bill Jones who was in charge of our camp.

"I hope that Colorado will have many more open seasons on Bighorn sheep and that I may be succesful next year.

"Thank you for what you are doing for this great sport."

(Signed) Gus Polich

License #152 (Unsuccessful). "It is my opinion that we who of neces-sity hunted on foot were at a definat disadvantage. The mounted hunters could get to the top an hour and a half or two hours ahead of the rest and had the advantage of being there fresh. It seems that

the reason for our being unable to get horses from the local ranchers was due to the rabid and senseless campaign put on by the News, prior to the season. I believe if we were able to get mounts at the start of the hunt we would have filled. At any rate we would have been a good deal happier about the whole thing. In closing, I wish to state that Bill Jones and his entire staff were entirely cooperative and helped and counseled us in every way possible.

Sincerely, Geo. A. Cooney"

License #153 (Unsuccessful). "The hunt was difficult, inasmuch as there were no horses available for the first three days. I do believe that perseverance for the remainder of the hunting season would have brought success. There was every indication of many sheep in the area but my time was limited and I had to return Tues. Sept. 8. 1953. I believe if the unsuccessful applicants were to try again that almost 100% kill could be registered because in my case all of the mistakes I made during those 4 days are now very apparent to me."

License #154 (Unsuccessful). "Yes - very much! The reason I checked no on question 9, Part d, is - the horses were not available: as the Game Comm. info had said. I tried to call Mr. Cooper 4 times. The reason I am satisfied with the hunt is - I think the hunt was good for the sheep herd & I enjoyed every minute of my hunt. "I have hunted many (17) yrs. But never had more enjoyable weather. "The Game Wardens were all very helpful:- exp. Mr. Bill Jones."

(Signed) A happy hunter  
B. W. Moss

#### AREA #8 - Tarryall

License #156 (Successful). "The bighorn sheep hunt was excellent as far as I am concerned. The game wardens were very cooperative and cordial and to my opinion very fine gentlemen. May I express especially, my gratitude to Game Warden Al Colley who was in charge of the Tarryall Camp ground. He performed his duties in a most courteous manner. These words can be relayed to the Wardens themselves if you so desire. I enjoyed every hour of my hunt."

(Signed) Al F. Rebello  
"P. S. I had not had the pleasure of meeting the game wardens before this hunt."

License #157 (Unsuccessful). "No. The lack of game in the Tarryall Range (Area 8). In my opinion the area should never have been open. The signs that were in the area were last years. The Game department should have taken a better game count of that area, before opening that area."

License #158 (Unsuccessful). Ditto of above. Father & son.

License #159 (Unsuccessful). "No. Natives uncooperative. Horses not available for hire as indicated in letter of instructions. No guides available. Apparently Game had been spooked or not present in Tarryall District. Hunting with two good hunters & failed to sight any sheep nor any traces of sheep."

(Signed) H. J. McMahon

License #161 (Unsuccessful). "Yes. Good exercise Beautiful scenery. I suggest a hunt every year. Plenty of sheep - difficult to find Issue 150 licenses a year."

License #162 (Unsuccessful). "Yes. I think the game wardens, Frank Colley and Frank Cordova, and other wardens, treated us the best I have ever been treated on any hunt. I crippled one (sheep) but could not find it."

(Signed) Glen Preston

License #163 (Unsuccessful). "Not entirely. It is very discouraging when game cannot even be sighted, even after hours and days of intense hunting and searching, both above and below timberline. Including use of binoculars, estimate I covered 50 square miles of country in detail. Success ratio in my area (Tarryall) indicates that sheep were either non-existent, or badly spooked out of the area completely. I feel there is some truth in the latter, due to Game Commission survey parties that combed the area for two weeks prior to the hunt, plus use of airplanes at low altitude to 'count' rams, etc. Also, we had no help whatsoever from local wardens and/or other experts in telling us where the game might be located, or had last been seen, etc. Initially, we were sent out 'cold' into country that very few of the hunters knew. In the closing days of the hunt, we had some help, but did not produce any results. It was a wonderful, but disappointing, experience."

License #164 (Unsuccessful). "Yes. Entirely satisfactory. Very well organized with complete cooperation from Game Dept. personnel on hand. Bighorn hunting is difficult & unless sheep are located & known to be living permanently in one area it is always tough to find them. Outfitters in B.C., Alberta & Yukon Territory will not even discuss a sheep hunt of less than 14 days. I believe many Colorado hunters had a very mistaken impression as to the ease of finding & killing their ram!"

"Dear Mr. Kimball: I want express my sincere appreciation for the very efficient, fair and business like manner with which your organization handled the recent bighorn hunt.

"Mrs. Dabney and I hunted the Terryall Area, from both the Tarryall Creek side and the Shaft House side. The cooperation and help given us and all the hunters by the game department men was invaluable and it was a pleasure to work with Messrs. Jones, Colley, Cordoua and Morgan.

"The unfair and in most cases grossly ignorant criticisms of the hunt were quickly proved to be unfounded and I hope we continue to have big horn seasons in years to come. We will certainly be in there pitching for a permit!"

(Signed) W. C. Dabney, Jr.

License #166 (Unsuccessful). "From my own observations & from the number of legal rams seen by other hunters I believe that there were not enough rams in that area during the season to provide satisfactory hunting."

License #170 (Unsuccessful). "No. In comparison to area seven & overall hunt the percent of sheep sighted & shot was abnormally low. For area eight. Whether this was due to all the activity in the area before the season or other causes can be best explained by your Department.

"I would appreciate hearing your comments as to the number of sheep killed in this area, the number of killed as compared to other areas and the reasons for the same.

"I would suggest that more time be given between the announcement of successful applicants and the opening of the season. We found that there was no time to line up hunting partners, horses, guides, and information before the hunt. I appreciated the courtesy shown by the member of the Department that I met during the course of hunt."

(Signed) Rudy Hampf.



License #171 (Unsuccessful). "My hunting experience for sheep was very interesting not only for the privilege of hunting The Big Horn, but also to learn that the animal does not need the protection that some people seem to think. If our flocks continue as they are now it would be great to have a limited no of hunters each year but not limit those hunters to any area. If one could be fortunate enough to bag a trophy for 250.00 an some more it doesn't compare to the cost of going out of the U.S. to hunt sheep."

License #174 (Unsuccessful). "No - apparently the rams have died out - hunt should have been 2 or 3 years ago."

License #175 (Unsuccessful). "Yes, although I believe the lung worm had already done a thorough job of eliminating the old rams."

License #176 (Unsuccessful). "I was satisfied with the hunt, or at least with the way the Department handled the hunt. I never hunted so hard in all my life with less results. I would like to make a suggestion, though, on next year's season. I think it is the desire of the Department to eliminate the older rams rather than the younger ones. Why can't we have the season a little bit later next year, say just before deer season, when the sheep are gathered more closely so the hunters will have a better chance of getting a big ram."

License #177 (Unsuccessful). "Yes."

License #178 (Unsuccessful). "The Game Wardens were very helpfull to us and pointed out areas where the sheep might be. Where I hunted in the Tarryalls it seemed that the sheep had been scared out of the area."

License #179 (Unsuccessful). "I was very satisfied with the hunt, but feel that the tarrall district was surely over estimated. That the largest part of the Bighorns were dead in the Tarrall district, and feel that the unsuccessful hunters should have another chance at a later date."

(Signed) G. W. Brock

License #180 (Unsuccessful). "Satisfied just didn't hunt long enough."

AREA #9 - Pikes Peak

License #182 (Successful). "It was the best organized and most successfully executed project the Game and Fish Dept has yet undertaken. My congratulations to you who made the hunt decision and stuck by it even though confronted by overwhelming protest. My wish is that those protesting politicians could have followed me on the first day when I climbed an estimated 10,000 feet and walked 15 miles in pursuit of those 'friendly, helpless lambs'!"

(Signed) Sam Colt

License #185 (Successful). "Everything was manage very nice the expense didn't amount to very much sheep seemed like was around where the most rockes and quakies. Took a little time to find them at first. I spent three days looking the country over and finding sheep for the pleasure. Really haft to look close to find them. They wasn't sick either seen a few that had been dead a long time. All seem to be old sheep. I killed mine where there seemed to be the most sick ones about four miles from camp, where it was just about impossible for horses. They seem to run in twos or more. Dark glasses also help to spot them better.

"There is no sloughter to it you have got to work for your sheep unless you are very luck. I really believe it is a good thing to have a short season every year, say 10 or less license for sheep with a half curl or more because that is the ones that seem to die. I would like to be out looking them over in mateing time. That seems to be the time the sick ones are. Thank you."

(Signed) Merritt W. Bauer

License #186 (Successful). "Yes. In Area 9 the hunt was well supervised by good men. The hunt was easier than elk hunting due to the early season and mild weather. Game wasn't spooked by numerous hunters. Drawing for license is much better than first come first served basis. The meat is delicious. Claude White & his crew did a very good job supervising this area."

License #187 (Successful). "Yes. The largest expense was the 2 days lost from work app. \$38.00 please open all hunting and fishing on saturdays Not only because of the time lost but it is awfully hard to get a vacation starting on the middle of the week."

(Signed) A. B. Mutchler

License #188 (Successful). "Would like to have hunted longer."

License #190 (Successful). "Yes. Of all dead rams that were seen, they all had a three quarter curl or more, so if there should be another season it should be for rams with a three quarter curl."

License #181 (Unsuccessful). "Yes."

License #183 (Unsuccessful). "Yes, the Game & Fish personnel assigned to Area 9 were very helpful and friendly. Game was plentiful, but of course became very wary after the first couple of days of being shot at. I believe that the department should definitely continue the Bighorn hunts. An annual hunt, perhaps restricted to 3/4 curl or more, would be beneficial to the game. I saw at least two very large dead rams. Their horns indicated that they were old and probably died of old age. The older animals such as these could just as well be harvested each year during a regular hunting season. "A curious thing about the sheep was that they did not always react as expected. They frequently ran downhill and into the timber when spooked instead of up into the rocks."

License #184 (Unsuccessful). "I sprained my ankle the first day and lost most of the first Three days hunting. This was, of course, the best days to hunt. After these days the animals became very spooky and stayed in the timber where it was almost impossible to get a shot at them. They are the hardest and smartest animals I have hunted. I do hope that I can get another permit next year."

License #189 (Unsuccessful). "Yes. I had a shot and misd.  
"The boys that were looking after things were fine boys."

(Signed) Henry Brockhurst

#### AREA #10 - Lower Arkansas

License #191 (Successful). "I was satisfied with the hunt and the way it was conducted. I thought the game wardens in charge were a fine group of men."

License #192 (Successful). "The hunt was satisfactory in every way. The supervision of the Wardens and Technicians was most excellent. Area 10 should be able to stand 10 rams killed each year. The railroad kills that many ewes or lambs every year, and there is, as yet, a very nice band of sheep. I consider it a very special privilege to be fortunate enough to get to hunt Bighorns and hope that the Game & Fish Dept. will KEEP such privileges for Colo. Residents. I moved to this State 15 years ago to be able to hunt here. Crazy-- -yes. "Again I wish to thank the Dept. and its personnel."

(Signed) Robert E. Killion

License #193 (Successful). "Yes very much. These big horns are truly a big game animal, harder to get than elk or deer. I walked about 30 miles covered a lot of country. Stepped on a rattlesnake. Fell off a cliff bruised myself all up, scratched my rifle up. Blisters on all ten toes. Still it's the best hunt I ever went on. Got a nice trophy. I only seen one dead sheep it was a ewe, dead about 2 years. Area 10 is infested with bobcats, I think they get the young sheep. I don't think there is enough lambs, for the amount of ewes I seen. 1 lamb for 5 ewes. My ram was fat and in good shape."

License #194 (Successful). "I was well satisfied with the hunt in every way. I can think of no improvement to suggest as to the way the hunt was managed all the way through.

"Since I am a resident rancher living adjacent to Area 10, the expenses of hunting was very little outside of license.

"I hunted with Nelson Taylor, whose cattle range takes in a greater part of the Area 10 Bighorn range. We, no doubt, had the edge on all the other hunters in the State. We knew right where a big bunch of Rams stayed.

"We each rode a saddle horse and had one pack horse for our equipment, which consisted of two sleeping bags, a tarp, enough groceries for two nights out, 2 gals water (as we had a dry camp) a skillet, coffee pot, 2 cups and paper plates.

"We left Taylor's home at Texas Creek at 2 o'clock the 2nd and at 6 o'clock that eve were making camp within half mile of where we expected to hunt.

"Half hour after we left camp we found large bunch of Rams and Taylor killed his at 7.50 o'clock first morning. I got mine later the same day.

"We had some difficulty getting out the meat as they were in very rough country. We saved all the meat and it is fine meat. Both were prime Rams about 7 yr. old, I think, and were fat as buck deer in season.

"As you know, Area 10 is low altitude and we experienced different conditions from the timberline hunters. Except for their range being exceptionally rough I found them no harder to hunt than deer. In my case I will say they were much easier to hunt than elk.

"There has been much difference of opinion on the size of this band of sheep by local people who think they are acquainted with the situation. For instance, the men on the highway maintaince through the Arkansas Canon see the sheep almost every day especialy in winter. They had told me there was about 100 sheep and only about 15 of them rams.

"I have lived hereabouts for 32 years and have been familiar with this herd all that time. About 1922 a disease about wiped them out. They were very slow makeing a showing until the last 10 years. The last five years there has been a great increase and small bands and individuals are showing up along the River and back in hills all the way to Salida -

"I would say that 300 head would be a conservative estimate of the number in Area 1Q and at least 1/3 of them Rams.

"I think we can issue 20 permits for this area next year and it would be beneficial to the herd. I believe the high percent kill for this Area bears out my statement as to the number of Rams.

"I have been a biggame hunter all my life and have lived back in the hills where I have had a better chance than most people to observe the big game situation.

"I will say that taking 20 Rams per year from this herd is much less liable to do harm to the herd than killing does is to our deer herd in this particular area.

"I refer to the area on the north side of River from Parkdale to Badger Creek at Howard, to Park county line on north.

"There are not too many deer here and the doe take is fairly heavy. A years rest for them is in order I suggest.

"I think most of us that hunted Bighorn would like to see published the names of those that got, say, the five best heads, or perhaps the best for each area, give measurements and where killed.

"Hope this will be some help to you and wish to thank you for the privilage of hunting Bighorn in 1953."

(Signed) Victor W. Miller

License #195 (Suuccessful). "Victor Miller of Cotopaxi and myself were together on this hunt. We were well pleased and had a very successful hunt. These rams were on my winter cattle range and it was not difficult to get one as I have seen them many times where we hunted. However it is very rough country and very difficult to get out with one after you get him.

"I certainly did appreciate getting a license."

(Signed) Nelson Taylor

License #197 (Successful). "Yes."

License #199 (Successful). "Yes, I would be very happy if our governor & Senator would let the game & Fish Dept. run the dept. as they see fit. I feel the game managers know much more about problems of fish & game than our governor & senators know. I do feel that the big horn sheep season was opened 30 days too soon as all the big rams were back on summer range and too difficult to reach. The large old rams were the ones the dept. wanted killed. I also feel deer & elk season is opened by 2 weeks too early due to dry weather conditions, making the forrest fire hazard much greater, but I feel the game managers know more about this than the general public, as there may be reasons for opening the season early, beyond my knowledge. I do feel this big horn ram season was a very good idea and the hunters I contacted, were, like myself well satisfied with all aspects."

(Signed) C. C. Strunk

License #200 (Successful). "I was more than satisfied with the hunt. It was the first time that I have ever hunted Bighorn and I find that most everything which standard texts on big game hunting have to say about this sport was true. They say; 'Get above them if possible, the best of field glasses are none too good, use a powerful rifle, sheep hunting is tough, hard, work, sheep meat is excellent.' I am in a position to say 'Amen' to all of this. However I believe that area no. 10 is a little out of the ordinary in that, here, the sheep are found at a lower altitude and, I believe, in some of the steepest, roughest country in the State. We found it very hot, almost as hot and dry, in fact, as if we were hunting Desart sheep in Arizona or Northern Sonora. This fact struck the writer because he is an old Arizonian. However all gulches which enter the sheep area do have good springs and the sheep are using them. The sheep can get from the ridge tops to the canon bottoms a lot faster than the hunters so hunters need canteens. Horses are allmost useless in the area. My pardner and I had a horse which ate hay at camp while we packed out our meat and trophies on a pack board. Two near accidents which parties which used horses had taught us the wisdom of this decision. Sheep were found both in pinon and cedar timber and on open cliffy slopes. More rams were seen in the cliffs and slide rock."

"Gentlemen: I am adding this letter to the Bighorn Sheep Questionnaire which I am returning herewith. The comments section did not allow me enough space.

"First I wish to begin by thanking the department and its representatives, the party at area no. 10 consisting of Messrs. Stiehm, Brock, Smith, and Mink for the unfailing courtesy and assistance which they showed us and gave us during the hunt. Second I wish to commend the Department for it's courageous stand in this matter of sheep hunting. You have proved that you were right and that the various shouters and letter writers and screamers were wrong. Some of them should have known better but they didn't act like it. The hunters of Colorado, and, after all, they are the ones to which the game really belongs, since they pay the bill for keeping it up with their license fees, owe you a vote of thanks.

"In going over the questionnaire question no. 5 is difficult for we who hunted in this area to answer. All this country is below timberline and the timber is mostly cedar and pinon. My observation was that during the time I hunted the game was feeding in the timbered slopes in the early morning and then moved into the cliffs and slide rock slopes to bed at about ten AM and that they got up and started to feed again at about four. Every gulch has some water in it in this area, enough for game and they are using it. I expect that the reason this band is seen so much from the highway in the winter is that these springs freeze up and then they must come down to the river for their water.

"Question no. 7. They are most decidedly harder to hunt than Elk, but, as in all hunting, lucky breaks will happen. My pardner, Mr. Robert Killion, and I hunted very hard for the first Ram, which fell to Mr. Killion. We were three days doing it the last two of which were devoted to a long circleing stalk to get above two old rams which we had found bedded in a high pocket. The biggest of these was taken at 4.00PM after a dawn start. We butchered, hung up our meat and made it out to the railroad with the head at just about dark, dry, hungry and exhausted. The next day we went in and packed out the meat. The next day we went out and saw 13 Rams and were unable to get within range of any of them, first because we were so tired and second because they were high up in the cliffs. Came to town and caught up on our work and rested for three days. Went out Friday, leaving town at 4.00 AM, left the car at Spikebuck at 5.00 AM walked up the easiest canon till we saw fresh sheep tracks crossing it, climbed up the gulch wall till we could see out, saw a band grazing on a crest across the gulch and I shot the nearest one, who happened to have a pretty fair head. Had him cleaned, skinned packed out and in the ice plant at 3.00PM. If we had not had such a tough and exhausting go on the first one we would have probably claimed that it wasn't too tough.

"Question 8. We did not use horses though we had one available. Every place we hunted and found sheep was too steep and rocky for horses. Two parties which came into the country from behind and above did use horses

and had considerable trouble with them. I believe that the section of country hunted, an area about two miles long and about the same deep from the river, beginning at Spikebuck siding on the RR and ending just below Echo siding, is as rugged country as exists in Colorado. A lot of high peak and timberline country is a lot easier to get around in. The gulches are steep and blocked with large waterworn stones and slides, the slopes are steep and have a great deal of very loose and treacherous slide rock. The writer wore out a pair of very good boots which would have lasted a couple more normal hunting seasons and slide the breech block out of a very tough pair of canvas hunting pants. This plus considerable hide damage. It is real sheep country and long may they flourish.

"Question 9. My expenses were not heavy. As stated in (a) I have all equipment necessary and, since much of it is many years old, it would not be fair to add this expense to the sheep. No new equipment was purchased. My rifle, an old DCM sporter fitted with a stock of my own making and a (Cal. .30-06) Lyman Alaskan scope, has been giving me perfect satisfaction on game of the deer, antelope and sheep class for twenty five years. My binoculars a pair of Army EE 6 x 30 are not too well suited to this game. The man who said that, 'The best of glasses are none too good', is right as far as sheep are concerned. The writer is very partial to the Army combat boot for very rough going of this type and used them with perfect foot results. Commercial deer bags and an Army issue pack board served to protect the meat and get it out in fine style.

"From the number of sheep seen, mostly rams too, and the number of rams which I know are still in the country at the end of the hunting, I saw 16 rams in my last two days there and took one out of that total and, since I was about the last man to fill in this area, most of them are there yet, I have no fear for the Arkansas canon herd. I would think that with a closely controlled season, such as this one, ten rams a year could be taken from it with ease and profit to the herd.

"If I would suggest any change in this years season it would be that it might be a little later. It was very hot and dry during most of the time we were out, though by use of bags and hanging at night we had no trouble saving and keeping our meat. However I realize that it is hard to get it in with so many seasons coming up at this time.

"Again thanking you for a most pleasant hunting trip I remain,"

(Signed) Gordon Bess

License #196 (Unsuccessful). "Yes I was very satisfied. Have equipment for camping out which I enjoy. I was a little disappointed because none of the animals ate out of my hand. I knew they would not. I believe that a season every two or three years would not deplete the Bighorn Sheep."



License #198 (Unsuccessful). "Yes. Happy to get the opportunity for a rare trophy as well as being of service to the Game & Fish Dep't in regards to the curbing of the lung disease. Only regret is not having more information of the Bighorn's habits."

(Signed) Chas. E. Shomaker

AREA #11 - Cottonwood

License #201 (Successful). "Yes. I believe there are more sheep in Colorado than has been estimated. They are especially hard to locate & so many are overlooked. I really believe a limited season on Rams would help most of the herds. There seemed to be too many hunters that were not equipped for hunting the high country. I certainly appreciate the fact that I was fortunate enough to get a permit & lucky enough to get a ram."

License #203 (Successful). "Comment in Dad's questionnaire."

(Signed) Eddie G. Rapp

License #204 (Successful). "Hunted Area #11. Believe there are 100+ sheep in this area, widely scattered over most of the many square miles of good sheep country on the Mt. Harvard, Mt. Yale and Princeton ranges. Scattered sign below timber line, however saw no sheep in timber. Considerable Elk and Deer in area. Saw 5 elk - and 6 unusually large rimrock buck deer, 10 points or better. Some Bear sign. Saw 1 timber wolf on Harvard Range above timberline. Winter Range in excellent condition. Good grass above timberline and around Beaver dams and meadows. Lots of Beaver on all streams in area. Both my sons Ram and mine were extremely fat and apparently in good health. All sheep seen appeared to be wary and active, no stragglers. One band 3 rams & 4 ewes, no lambs. One band 3 rams and 9 ewes with no lambs. Others seen were lone rams. Ram killed was old fellow 11-12 years, fat and alone on shelf in rock slide at approximately 13,000 feet north side of Mt. Princeton above Cottonwood lake on south fork. Live weight estimated at 320-340 pounds. Hog dressed with legs off, weighed 187 lbs at locker plant.

"One shot kill at 375-425 yards estimated.

"State Game Dept. officials at Camp #11 were extremely courteous and helpful, however Bill Kent and his helpers were unfamiliar with the area, therefore could offer little or no advice as to where sheep could be found. Kent covered many miles of high country on foot and it was through his effort that the herd on Howard was located, resulting in one kill. It is recommended that for any future sheep hunt, one State official, warden or trapper be assigned who is thoroughly familiar with his area. I further recommend that the old Rams be harvested in an annual or semi-annual hunt if conditions warrant."

(Signed) Edw. W. Rapp

License #202 (Unsuccessful). "The hunt was satisfactory, but I was unlucky in being at wrong place at proper time - the two fellows I hunted with got rams. It would have been a great deal of help if the define area's in which sheep are located were known as we spent the first 3 days hunting on area in which there was supposed to be sheep, but in which I am sure there were none to speak of as only rare sign was found."

License #206 (Unsuccessful). "Would suggest that due to terrain of area a later season would be to a better advantage.  
"Thanks for the privilege hope to do better next time."

(Signed) Mendia

License #207 (Unsuccessful). "At the end of the first 4 days, only one man had even seen a sheep of either sex in our area."

License #208 (Unsuccessful). "five days good horse back riding thoroughly enjoyed. Suggest that perhaps next time for instance that you have about two or three licensed hunters for area No. 11. (there seemed to be NO sheep).

"Whereas aera Number 18 across the Arkansas River perhaps could have stood a kill of perhaps more than ten."

(Signed) Duncan

License #209 (Unsuccessful). "Even though I made no kill I was very satisfied I did note however the sheep were not where the Warden expected them to be. The number of Rams is in to great a ratio to be effective. I am hoping that there will be a hunt in the future as I am still looking for my trophy."

License #210 (Unsuccessful). "No. I an the rest of us including the Ranger feel the Department was misinformed as to the amount of sheep in the areas and there location. No tracks or fresh dropping were found by any one in the porty - One person in our area got his Bighorn as he lives there he could have gotten it any place as they were plentiful across the river. We covered Mt. Harvard, Mt. Yale, Mt. Prinston."

AREA #12 - Crestone

License #211 (Successful). "Yes. Made kill first morning in camp. Spent rest of time packing assisting other hunters and looking over area."

License #212 (Successful). "I was very much satisfied. If they ever have another opean season I do hope I can partisipate. All sheep seen seemed in excelent condition, three I helped to dress were very fat and no sign of sickness. No liver spots; no visual damage to lungs, spleene or other vital organs.

"We were very satisfied with the help and cooperation we received from Mr. Wm. Reavely of Monte Vista and Mr. Philip Hawker of Saguache. Mr. Hawker gave me some pictures yesterday of our hunt & for these I am very greatfull. Thanks a lot."

(Signed) Clarence Stoddart

"P.S. I am going to have my trophey mounted."

License #213 (Successful). Killed sheep first morning. Helped others and watched horses & mules rest of the time. Weather was clear, \*\*\*\* Trails rather steep & rough. Moved horses & mules to hunting camp in head of Deadman Creek about 20 miles. Very well satisfied got some fine pictures from Game Warden Phil Hawker."

License #218 (Successful). "The hunt was very successful I got the first ram in the state about 7:30 A.M. the first morning Was the only one in that part of area that did. I dont think there are to many sheep in that aera. I am very well pleased that I got the licinse, and that I got my ram. Mr. Dan Riggs the Warden was with us all the time and sure done a swell job all the hunters liked him very much."

License #220 (Successful). "I have never been on a more difficult hunt. We camped above timberline and all the sheep were between 13 & 14 thousand feet. I hunted on the West side of the Sangre's and this is no area for sick or older hunters. I had a good time but found much hard work."

(Signed) R. T. Eckles

"P.S. Warden Hawker should be commended on his fine cooperation."

License #214 (Unsuccessful). "I was quite satisfied with the hunt, for the scenery and experience alone were well worth the effort. While I appreciated the consideration of the game department in assigning

wardens to each party of hunters, I feel that the game department could have controlled the hunting satisfactorily and given hunters all needed help without having them go to such extremes in personally advising hunters on hunting locations and guiding them to a limited extent. The expense and trouble of having pack horses furnished by wardens also might be eliminated in the interests of economy on the part of the game department, plus simplifying the work of wardens. Even though the liklihood of getting all sheep hunters together undoubtedly isn't too good, I feel that it would be to the advantage of the game department to have a series of special meetings in various areas of the state for the sheep hunters, for judging from comments heard by a number who went hunting, the game department might well benefit from more detailed eye-witness accounts of several score of hunters who observed mountain sheep in various areas. Most wardens are quick to admit that they have changed their minds considerably about the general habits of sheep after spending several days in the mountains with sheep hunters, so game technicians also might benefit from the overall experience of hunters."

License #215 (Unsuccessful) "Altho I did not shoot at a sheep the hunt was extremely satisfactory otherwise, for I learned considerable about the habits and habitat of bighorn mountain sheep. Assistance by Dan Riggs game warden from Westcliffe, also was all that could be expected, for he did all possible to direct us to general sheep country and through no fault of his we saw no rams, but only ewes. I do feel, however, that since the Game Department seemingly desired a limited kill, the state's sheep herds would not have suffered unduly if a higher percentage of hunters had bagged sheep. Thus it would seem to the advantage of hunters to have a slightly longer season. In my case, for example, I could get only four days off in succession from work, since I already had made arrangements for my regular vacation during the deer and elk season. Thus one day's hunting was on the final Sunday of the season. Others on the sheep hunt also had to return home after a few days since they did not have much advance notice of their applications being accepted. While deer and even elk can be bagged in only a few days, the terrain in which many of the sheep are found necessitates more time in getting an animal. Over the past weekend, for example, I hunted antelope and bagged an animal without undue difficulty, but sheep hunting on short notice and a moderately short season is a different matter."

License #216 (Unsuccessful). "Want to thank the Game & Fish Dept. for there splendid corporation on Mr. Dan Riggs. It was the hardest hunting I have ever done by far. Much harder than elk. We had to learn about hunting these sharp eyed rams. I found the lamb crop about one to 5 ewe. I would like to have the privilage of try it again sometime."

(Signed) Bert E. Still

License #217 (Unsuccessful). "Yes. I got a shot the last day- 1/2 mile away. Broke leg - Very large ram - This report late, because Mr. Dan Riggs (Game Warden) was going back up to try & find my ram - I would be glad to furnish information from my viewpoint about sheep being able to take care of themselves."

(Signed) W. L. Moore

License #219 (Unsuccessful). "I'm satisfied in the hunt. The game wardens were very cooperative and friendly. I pay special compliment to Mr. Phil Hawker of Saguache, Colo. - I wounded a big ram in the stomach and it got away. I followed it for about 4 miles and it went over the divide. I'm disappointed in my luck, but the hunt was well supervised."

(Signed) Lloyd C. Romero

#### AREA #13 - Taylor River

License #221 (Successful). "Yes. I have been a local guide in big game hunting for out of state hunters for 57 years and can say from all experience of big horn sheep they are too many rams for the amount of ewes and can say from what I have saw of sheep conditions the state should have season enough to thin down the rams to one to every 10 ewes."

(Signed) Lloyd Carpenter

License #222 (Successful). "Yes. Pleased for hunting higher country than on other hunts."

(Signed) Douglas Spann

License #224 (Successful). "Yes. I have hunted all my life and this was the toughest hunt I ever made. All of the hunting was from 11,000 to 13,000 elevation in the cliffs & slide rock. I estimate that we walked and rode nearly 500 miles to get our sheep. We found evidence that a good many sheep winter on bare ridges in the Brush Creek area. I was told by one reliable party that about deer and elk season around 125 to 175 sheep are seen each season in this area.

"I think that there are far too many rams for the ewes and several more ram seasons will be necessary to get the sex ratio in balance. Possibly after several ram seasons it might be desirable to transplant some sheep from one herd to another to prevent inbreeding.

"Before season 2 members of our party saw 6 lambs & seven ewes. They also saw 5 rams. In this area we only seen and killed one ram. I have been told that the lambs disapear from now until fall. Maybe the eagles or bobcats catch some."

(Signed) Ray Van Tuyl

License #225 (Successful). "Yes. We found sheep mostly 12000 alt. and up."

License #223 (Unsuccessful). "The Game Department boys were very liberal in letting us hunt where we thought we might find the sheep. I believe it would have been more satisfactory hunting had the camp been divided into smaller groups of hunters. I would not put in an application where all hunters are to hunt together again. There wer some fine fellows in the bunch, though. I definitely do not think the sheep population in the Taylor River area was hurt in any way. The sheep seem to be able to take care of themselves."

(Signed) Keith Stegall

License #227 (Unsuccessful). "Yes- I enjoyed the hunt very much, was unable to hunt more than 2 days due to unforeseen business transaction.

"I feel there should be more rams taken out of this area, as there is almost as many rams as ewes & lambs."

(Signed) John Ramsey

#### AREA #14 - Sopris

License #228 (Unsuccessful). "Yes it was wonderful camping weather and getting game is not all the pleasure I would have liked a shot but had a swell time anyhow."

(Signed) Jess Rhiness

License #229 (Unsuccessful). "Yes. I had good hunting companions. Three of the finest young men were assigned to our camp as game wardens Terrell, Denny, Bogart. They were accomodating kind. They did all within their power to give any assistance they could. I certainly appreciate. Domestic sheep had denuded the country until Mt. sheep could not stay in their natural habitat."

"Dear Mr. Hunter: It seems like writing to an old friend to write to you & I hope to be cooperative & agreeable in every way possible as we to-often have unapproachable men representing our departments.

"I thank you very much for granting me the privilege of hunting Big Horn sheep.

"My oldest Bro. George A. Hutchins was Forest Ranger in the Capital Creek Ranger Station for a number of years.

"I was 18 yrs old when he was transferred from Escalante Canon to Snowmass. Fred Light trespass case was just finished in the Supreme Court.

"Things were not too good for Rangers. My Bro. wanted me to to with him. I did & lived with him until I was 21. I passed the exam & got the Aspen district.

"While living with my Bro. I broke horses, packed salt, put out fish & trapped & hunted predatory animals. Naturally I was pretty much over the back part of the country.

"I fished & hunted a great deal. I have always been a great lover of nature.

"I homesteaded here along with Rich Thompson & others in 1913. Have lived here since.

"I enjoyed the sheep hunt. I saw one ewe on the ridge between Charity basin & Capital lake. She was at a salt lick the Tuttle sheep had just left.

"I wish the Avalanch, Snowmass & Carbonate Creeks & Crystal Creek water shed could be given over to wildlife.

"The Domestic sheep had been all over that country the succulent forage above timberline & in the spruce was simply gone. Rains had washed the rocks into terraces.

"Several places we saw pot holes that had slid out caused by rain soaking up the ground where sheep trails carried the water to a concentrated spot.

"Cattle on the Roaring fork side had the feed in the high country as well as the Dinkle Lake & Aspen country in a deplorable condition. The F.S. claims they are doing this for fire protection. The gophers & woodchucks finish the job.

"The stock men scream about too many big game on the range.

"The only deer we saw were either around swampy places or in a little area shut off by slide rock. The Avalanch country is a haven for the sheep herders & camp movers to do poaching.

"A band of tame goats with bells on were prowling around the peaks where a few Mt. sheep might have stayed if they could be alone.

"We saw something go between some rocks on a high ridge between Sopris & Cline Peaks at the head of Hawk Creek. Rhyness & I hurried to where it went out of sight.

"We saw a large dog coyote about 250 yds away Rhyness shot. Old dog dropped from sight. Then an old female showed up & I shot. We went to see what we had done. Both necks were broken by the 270's so you see we are not amateurs. I wish all grazing could be prohibited on public & Federal lands.

"The ground cover would be wonderfull.

"Let all stockmen compete with each other in pastures. Give all untitled land to game.

"We then would have no winter loss from starvation. The water would be plentiful in the streams. Let the beaver alone to conserve water. Let the game increase. They would not concentrate around orchards & hay stacks.

"If the sheep & cattle were cut off the low country the deer & elk would migrate in the fall to those grounds. The only reason the deer & elk trespass is because the sheep & cattle get everything. there is to eat & when all the forage is exhausted the stockmen start feeding but remain on the range to reap the last vestage of forage that a game animal might get.

"If any one does not believe this condition exists just watch the game move ahead of the sheep & cattle over the ridge. They will say the game feed with sheep & cattle. There is no place to go finally. They must mix with domestic stock winter & summer to exist.

"The beaver would not go to the valleys if they were not persecuted so hard in the high countries. People see a nickle in trapping the beaver so they complain about ditches being damaged etc. When beaver were not trapped at all here there was no beaver in the river around Paonia. Now they trap hard up here for the sheep & cattle men to get revenue to pay taxes. What few beaver are left must high-tail for the valley to escape persecution.

"I have never lost a critter to bear & I have lived at the end of the road all my life. I have seen bear blamed for depredations that they never committed.

"I would appreciate being called upon at any time for any help I may render."

(Signed) Gib H. Hutchins

License #230 (Unsuccessful). "Yes."

License #232 (Unsuccessful). "Yes. I had a swell time and would be glad to try it over again. I saw sheep every day that I hunted except two day. I am sure we were to high for the Rams, for we were on top all the time looking over and down. I new where there were some Rams on the head of Newman Creek but we just failed to find them. I new a great deal of the country I was hunting for I have been in and out of it since Aug. 1914. The Ewes and lambs and yearling we saw looked good. I was as close as forty and fifty yard to them. I covered the ridge from Mt. Sopris to Capitol Peak on the east side of Avalanche



and the ridge from about the mouth of Hell Roaring to Avalanche Lake on the west side of Avalanche. I believe the Rams were more or less down in the ledges and rocks where there were a few trees. I think we would have found them if they had been in the country we hunted.

"I want to thank you for the swell job Mr. Dennie, Mr. Terrell and Mr. Bogart did in giving us all the help they could. They are a swell bunch of boys and if I didnt think so I would tell you just as quick.

"I hope we may have another Bighorn hunt and I will be lucky enough to be in on it. I have always wanted to kill one but never have had that pleasure.

"P.S. Before we can have many Bighorns the Department will have to give them a helping hand. The domestic sheep have taken there home away. If you don't think so come over any time before the snow flies and we will(show you.)"

#### AREA #15 - Glenwood Springs

License #234 (Successful). "Yes, I enjoyed the hunt very much. Due to the fact that the sheep were down low, made the hunting much easier than it would have been if it had been necessary to pack into high country. Also I enjoyed the cooperation of the Game and Fish Comm. personnel during the hunt and especially their help in properly dressing out the carcass. I hope you will find it possable to give other Colorado hunters an opportunity to enjoy another Mountain Sheep hunt in the future."

License #233 (Unsuccessful). "Yes."

License #235 (Unsuccessful). "I was satisfied in spite of poor showing. Hunted in Glenwood area. Few sheep in a large area. Habits there are unusual because they summered so low. We all had to spend to much time locating sheep. Hope we get another chance to make good in future. Cooperation of 3 State G & F men was excellent although somewhat unfamiliar with sheep (as all of us were)."

(Signed) S. Mark Davidson

License #236 (Unsuccessful). "Not entirely-too much time was required to find where the sheep were. The Game & Fish personnel present had no knowledge as to the sheeps location. It will help in the future if the G & F personnel that are going to be in charge can spend more time in the area before the hunt starts so that the hunters can get down to 'brass tacks' immediately!"

License #238 (Unsuccessful). "I enjoyed hunt learned a lot about the habits of the sheep. Of all the sheep I saw I never got sight of a ram with a half or more curl I would enjoy going on another sheep hunt as you do not hunt them like you do elk & deer."

(Signed) M. J. Kraft

License #239 (Unsuccessful). "Yes I didn't get any shooting but saw some small rams no large ones. Big Horn hunting is fun but hard and hope to get to go again."

**AREA #16 - Pole Mountain**

License #241 (Successful). "Yes. In my opinion the season could not have been at a better time of year. I also appreciate the courtesey and consideration shown by the Wardens in the aera also there definat ex-  
plained regulations.

"Though the herd is decreasing fast I cannot see how a hunt of this kind would hurt the herd in general and it has a chance of helping them!"

License #247 (Successful). "Yes - I wish to commend the Department on the very satisfactory manner in which the hunt was managed and pledge my support to the Department regardless of what the politicians say. I would like to see a limited season of this sort (for residents only) each year as long as it does not deplete our herds."

License #248 (Successful). "Yes. These expenses are my half of a partnership hunt. The Wardens in this area counted 30 Rams and 50 Ewes and lambs.

"I feel this hunt should have been held 4 or 5 years ago. I found the horns of a young ram above timber line.

"I wish to thank you for your interest in the hunting public. I feel another hunt should be held next year."

(Signed) Van H. Sharp

License #242 (Unsuccessful). "Yes. Would like to have had two or three days longer, as getting acquainted with country consumed too much time. This in view of cost of liscence. Otherwise, had a very good time and found the Dept. personnel very friendly & cooperative. Thanks."

(Signed) O. I. Lawrence

License #243 (Unsuccessful). "Yes, excepting there appeared to be very few sheep in Pole Mountain Area. Very little sign, sheep herders in area claim these animals have migrated from this area, very few having been seen this year. Hope we can hunt again in near future years, as dont think even though animals are scarce, their population will be hurt much by hunters."

License #244 (Unsuccessful). "Yes, very much so, even tho I didn't get a bighorn I think personally this should be an annual affair - at least for a few more years until the ratio is more desireable. At the top I listed 3 rams & 6 others. there was a bunch of 6 rams which another party of hunters got 3 rams out of and I saw the other 3 but too far for any shooting."

License #245 (Unsuccessful). "Yes - I think such hunts should be an annual event, with the approval & supervision of the game Dept."

(Signed) Leo L. Simons

License #249 (Unsuccessful). "Yes, I would like to hunt again, I was at the wrong places at the right time I saw 3 three Rams killed the 1st day I was one hour to long in bed. I saw 3 ewes and two lambs. The lambs had a 'bad cough'. I saw 16 deer 2 Badgers 2 weasles 10 grouse 3 ptarmigan and some elk sign. I think thair should be a good number of rams espically 'old' ones killed off. as this would help eliminate malnutrition which is the primary reason for the cough of the lambs. I was raised in area 16 Lost Trail west lost Trail Pole Mt. and ect. I used to count sheep back in 1927 to 1933 as high as '60' in a bunch. that is wild ones. Now I count that many bands of tame ones feeding on the winter ranges of the wild ones which I think is a shame. The ridges and valleys of lost trail, west lost trail and East pole and pole mt. should be off limits to tame sheep. Then the wild sheep would multiple and support an limited amount of hunters each year. Thanking you."

(Signed) Joe F. Swank

#### AREA #17 - Cimarron Peak

License #250 (Unsuccessful). "No. We were guided into the wrong area by Game Wardens in a round about way, mainly, in my opinion, to scout the area for the Game & Fish Department. After moving to a new area the Game Wardens spotted a herd and we could have been very successful except there were no rams in this herd. If we had hunted in this area first I believe we would have located the rams. I am in favor of opening the Bighorn season again next year."

License #254 (Unsuccessful). "Do to events beyond my controll I was unable to go hunting. Hoping I will have another chance next year."

(Signed) John Fialkowski

License #255 (Unsuccessful). "I found that after days of hunting the best way to find sheep is go to a small town near your area and talk to old timers and ask them were they have seen sheep and if possible get one to give you a good description of how to get there had I done this the first thing on my arrival at the area I would have increased my chances 90% We spent days looking for sheep then after inquiring we were told where they were. We then found the sheep in two days however the season was fast closing and we were tired. When we got the sheep in position for the kill we found only ewes and no time left to find the rams."

(Signed) Wm. D. Jenkins

"Your men in the field were very cooperative."

"I hope we have a season next year I'd like very much to try again."

License #256 (Unsuccessful). "The first five days there were no sheep seen at all. The wardens put us in country where the domestic sheep range there were 10 of us hunting on horseback we did not see any mountain sheep or tracks I don't believe bighorn will stay around where domestic sheep are at. the last 4 days of hunting was good. (It was a great experience to hunt Big Horn."

License #258 (Unsuccessful). "Yes Game Wardens very courteous & all hunters were good sports. A very enjoyable trip & hope I may have the pleasure of making the trip again in the near future."

(Signed) C. R. Beaman

License #259 (Unsuccessful). "The hunt was satisfactory. Area 17 was divided into two parts. The area near Cimmarron peak showed no sign of sheep and in 5 days hunting, the party saw only one sheep. This left me short of time to hunt the Born lake area, which has many sheep, but in the short time I could spare, I did not locate any rams"

**AREA #18 - Buffalo Peaks**

License #262 (Successful). "Well satisfied, & wish to compliment the wardens for assistance, and advise in locating sheep."

License #261 (Successful). "I was more than satisfied with the hunt and all contacts made."

(Signed) L. B. Jergens

License #263 (Successful). "YES I am well satisfied with the way and manner the Wardens conducted the hunt. Permitting the hunter to choose his camp site. I think is a large part of the sport in hunting."

License #264 (Successful). "I had planned to write a letter from the office, however this provides a good way for me to thank you for a very pleasant trip. Mr. Fitzgerald, Mr. Steel and Mr. Williams ran an excellent camp in area 18. My wife and children were there for three days and they are still talking about how pleasant everything was. I think the three men deserve a pat on the back for a job better than well done."

(Signed) D. M. Parnell

License #265 (Successful). "Dear Gil: "I am enclosing my Big Horn Sheep questionnaire.

"Congratulations on the way the hunt was handled all the way through.

"My hunt was a success. I don't know when I've had any more fun hunting big game animals; and it really was a job. I didn't arrive until the later part of the season. The reason I state the big horn sheep hunting is easier than elk is because they were above timberline and could be seen for miles, thus easily stalked.

"Warden Steele and Wildlife technician Jess Williams were extremely co-operative. In fact, Steele lent me his alarm clock; and Jess helped me skin out my meat, in order to pack it out from the most inaccessible spot on Buffalo Peaks.

"The only sour point of the trip was in asking Turner Brothers to pack my ram out. They just plain were not interested, and two of the other hunters reported to me of their extreme independence; however, their refusal turned out to be a blessing in disguise, because I was able to rent a pack horse - and with the help of Jess Williams brought my ram out without a hitch."

(Signed) Harold W. Dahl, Jr.

"P.S. Send me an application blank for next year's hunt."

License #266 (Successful). "Completely. The best hunting trip in 34 years of big game hunting. G. & F. personnel extremely courteous and helpful."

"Dear Mr. Kimball: The Game and Fish Commission and the entire department is to be commended for arrangement of the current Big Horn Sheep season.

"In Area 18 where I hunted, I observed seven rams on September 3, and thirty sheep September 4 in two bands at a distance, which I presumed to be ewes and lambs. The range is in beautiful condition with an excellent cover of grass and other feed. The absence of domestic livestock certainly has benefited the area. In addition to sheep, eleven deer were seen, some large bucks among them.

"Your wardens and technicians were extremely courteous and helpful. This was the most satisfactory big game hunt in which I have ever had the opportunity to engage. From the standpoint of recreational value, I believe that sheep hunting can be developed into one of the state's greatest assets. You know, from a sportsman's standpoint, the big horn is the most coveted trophy."

(Signed) J. Roger Musick

License #267 (Successful). "Yes My expenses were low because I have had all my own eqpt. for quite some time, & camp out, & do not hire guides. Expense also low due to luck of kill first day. I think finding elk during season is much harder in black timber where you can't see them, is harder than stalking above timberline after you have spotted game. Binoculars essential."

(Signed) J. E. Fuller

License #268 (Successful). "I think this hunt was the best thing that has happened to Bighorn Sheep since season was closed. It moves them around, gets rid of old rams that are too old for breeding, and who are cranky & rough on Ewes. Lets young rams get to Ewes, instead of being run off by old useless Rams. Wish to commend State Game & Fish Dept. for taking this step in regard to Mountain Bighorn Sheep."

(Signed) Kenneth J. Cottrell

License #269 (Successful). "Yes. I arrived in plenty of time to scout area that I was going to hunt and had sheep spotted the day before opening. If I hadn't done so I'm sure that I would not have been so

successful. I hunted in Buffalo Peaks area and am told that area is exceptionally easy hunting compared to other areas. I'm sure that all hunters in Area #18, including myself, appreciated the fine cooperation we received from the wardens and technician on duty in our area, as well as the office personnel before the hunt began."

(Signed) James E. Duncan

License #260 (Unsuccessful). "I enjoyed the hunt very much and do hope we can get the sheep herd built up so we may have more Big Horn hunting. Mr. Fitzgerald, Steele and Williams of the game and fish dept. Certainly are fine boys and did a very good job of handling the hunt. My thanks to the boys. The above figures on the number of sheep, are actual count taken first day before disturbed, Lambs 8, Yearlings 12 to 15. Rams seen in these herds 3, two about 1/2 circle, one good full 1/2 circle.

"Many thanks to the Game & Fish Department for the privileges of hunting Big Horn Rams.

"I did not get the Prize Big Horn that I was after, that I located the Second day of the season, but I still enjoyed the privileges of hunting very much.

"Thank a lot, and hope to get an antelope during the season. Then a buck deer."

(Signed) A. J. Bonard