

Report 22

New Mexico Hunter-Rancher Relationships Survey



Range Improvement Task Force
Cooperative Extension Service
Agricultural Experiment Station



College of Agriculture and Home Economics

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October 1986

Las Cruces, New Mexico

NEW MEXICO HUNTER-RANCHER
RELATIONSHIPS SURVEY

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INTRODUCTION

Conflicts between hunters and ranchers have increased in recent years as evidenced by complaints from landowners and pressure by sportsmen and livestock producer groups for new legislation to offer relief. In recent years, rancher organizations have complained about the New Mexico Game and Fish Department's failure to control hunters trespassing on private land. Ranchers have also complained about hunters disturbing cattle and damaging terrain.

Sportsmen groups have complained of illegal posting of public lands, and negative effects of livestock grazing on public lands. Hunter groups also complained about high hunter densities and deteriorating game populations in some areas.

The purpose of this study is to define the problems as perceived by hunters and ranchers, and to identify solutions as suggested by the two groups.

METHODS

Separate questionnaires were prepared for ranchers and hunters concerning the 1982 deer hunting season (Appendix A). Many of the same questions were asked of both groups, but several questions pertained to only one group.

Rancher Questionnaire

A list of almost 6,000 ranchers was compiled from various sources within the Cooperative Extension Service and the Department of Agricultural Economics at New Mexico State University. The master list was stratified

by counties and 1,500 ranchers were randomly drawn to obtain statewide representation.

The questionnaire was pretested by sending it to 20 ranchers. They completed the questionnaire and made suggestions. After some minor changes, the final questionnaire was mailed to 1,500 ranchers, with a letter describing the study.

The questionnaire contained questions relating to size and type of the ranch, hunting conditions on the ranch, types of problems encountered with hunters and possible solutions to these problems.

Hunter Questionnaire

A list of 3,000 hunters was drawn from the New Mexico Department of Game and Fish records of 1982 licensed deer hunters. Hunters were selected from the list of primitive weapons (muzzleloader and bow and arrow) and regular rifle deer hunters.

The questionnaire was pretested by selected sportsmen and five New Mexico Game and Fish Department biologists. They completed the questionnaire and made suggestions for changes. The final questionnaire was sent to the 3,000 randomly selected hunters.

The questionnaire contained questions relating to area hunted, hunter pressure and experiences with ranchers. Questions also pertained to observed problems and suggested solutions. (Appendix A)

RESULTS

Rancher Survey

Of the 1,500 ranchers who were sent questionnaires, 234 responded for a response rate of 15.6%. Responses are summarized in Appendix B.

Responses were statewide, with the exception of Los Alamos and Valencia counties. Bernalillo and Dona Ana counties had only one response each. This could be expected because there is little deer habitat in these counties. Lincoln and Chaves counties had 23 respondents per county. This high rate of return also could be expected because of the large areas of deer habitat, high numbers of hunters, and the resultant high concern over the issue.

Ranch size varied considerably, as expected. At least 62% of the respondents had ranches with more than 5,000 acres. When stratified by size, some difference was noted in responses. But when stratified other ways, responses were more consistent. Some of these differences will be discussed later.

The ownership pattern varied according to the overall ownership of New Mexico lands. When related to private land, 16% of those responding had less than 25% private land, 22% of the respondents owned between 25 and 50% of their ranch, and 62% owned more than 50% of the ranch. There were not many differences in the responses when the surveys were stratified by ownership status.

The types of ranching operations were divided into three categories. There were 186 cow/calf operations, 50 yearling operations and 30 sheep ranches. The numbers do not total correctly because some ranches are combinations of different types.

Most ranches allowed hunting, but there were some obvious differences. Smaller ranches tended to have less hunting (51% of the ranches) than ranches with more than 5,000 acres (76% of the ranches). Ranches with a greater percentage of private land were less likely to have hunting (Table

1). It was evident from written comments that large ranches with small amounts of private land could not control hunters, even on the private lands.

Table 1. Ranchers having hunting on their ranch (private & public land) by type of operation and percentage of private land.

<u>Ranch Type</u>	<u>Have Hunting</u> (%)
Cow-Calf	67
Yearling	73
Sheep	62
<u>Percentage of Private Land</u>	
Less than 25	82
25-50	77
Greater than 50	60

There was less variation when the type of operation was compared (Table 1). Some ranches had no hunting because there was no game population there to hunt, not because the rancher did not permit hunting. Some of the ranches had hunting, although they did not give permission.

About 60% of the respondents said they allowed hunting on the private portions of the ranch. Larger ranches were more likely to allow hunting than the smaller ones (68% vs 56%). Those ranches with less than 25% private land were less likely to allow hunting on the private portion than those ranches with more private land (Table 2). Cow-calf operations were less likely to allow hunting than the other two types (Table 2). The questionnaire did not determine how many of those that allowed hunting on

the private lands were charging for the privilege. Of those who said they do not allow hunting on their private lands, 77% said they would not allow it, even if paid for the privilege.

Estimating the number of hunters on a ranch during hunting season is difficult. Answers varied from none to 2,000. The 2,000 response came from a large Lincoln County ranch that is mostly U.S. Forest Service land. As expected, the more public land a rancher has, the more likely he is to perceive a large number of hunters. Of the ranches reporting more than 60 deer hunters, 80% of these ranches have less than 50% private land.

A majority (60%) of the ranches apparently had less than 10 deer hunters. The arithmetic mean indicated about 80 deer hunters per ranch statewide. This indicates that a few of the ranches have large numbers of deer hunters. Hunter numbers were placed in categories of 10-20, 21-40, 41-60 and greater than 60. There were more ranchers reporting in the greater-than-60 deer hunters category than in the 10-20 hunter category. The two categories between these (21-40 and 41-60) each had considerably fewer ranches that indicated these numbers of deer hunters.

The ranches that indicated large number of hunters (>60) averaged 771 deer hunters for those with less than 25% private land. The 25-50% private ownership ranches averaged 265 hunters and the over 50% private ownership ranches had 189 hunters.

The county with the highest number of reported deer hunters was Lincoln, followed by Otero, Eddy and Chaves.

When asked if the rancher, or a member of the family hunts, 61% of the respondents said they did. On ranches that allow hunting on the ranch, 73% said family members hunt. On ranches where hunting is not allowed, 65% said family members do not hunt.

When asked if they would like to see more or less deer, 47% of the respondents said more, 28% said less and 25% did not answer the question. Of those who said they would like to see more deer on the ranch, 69% were hunting families. Of those who would like to see less, only 50% were hunting families. Whether the rancher wanted more or less deer had little to do with allowing hunting on the private land.

Table 2. Ranchers allowing hunting on the private portions of the ranch, by type of operation and percentage of private land.

<u>Ranch Type</u>	<u>Allowed Hunting (%)</u>
Cow-Calf	48
Yearling	68
Sheep	73
<u>Percentage of Private Land</u>	
Less than 25	53
25-50	67
Greater than 50	60

In an effort to determine what are the most serious problems, a list of problems was presented and respondents were asked to indicate whether the item was a serious problem, a problem or no problem. Of the 17 items listed, ranchers identified two as serious problems: litter and trespass. No matter how the questionnaires were stratified, these two problems were always in the top four, and usually ranked one or two. Position often switched depending on the stratification. For example, of the ranches that allow hunting, litter was cited most frequently as a serious problem and

trespass second. On the ranches that do not allow hunting, trespass was most often cited as a serious problem.

Several other problems are cited with regularity through the various comparisons. Damage to gates, cutting fences, theft and off-road vehicle damage are most often listed in the top four. Trespass dropped in frequency as a serious problem on those ranches where much of the ranch is public land because the rancher could not legally keep hunters off and, therefore, did not consider it a major problem.

When considering the distribution by county, litter and trespass were the most cited problems. However, trespass was most serious in the counties that have considerable state and private land, as in northeastern New Mexico. Litter problems were varied around the state, but ranked either first or second in 22 of 23 counties. Vehicle damage was most often cited either as ranch road damage or off-road vehicle damage in Colfax, Luna, Grant and Otero counties.

The ranchers were asked, if they had serious problems, who they perceived as creating the problems. The overwhelming majority responded that it was the rifle hunters. The respondents indicated 93% of the problems were caused by rifle hunters. About 2% of the problems were attributed to archery hunters and 4% to muzzleloader hunters.

Respondents were asked which type of hunter (deer, bird, antelope or other) was thought to cause the problems. The previous question indicated that rifle hunters caused the bulk of the problem, which would indicate that deer hunters should be the main choice. The responses indicated this was true; however, the percentage was not as high as in the previous question. Respondents that reported more than 50 hunters said 90% of the

problems were from deer hunters, 9% were from bird hunters and 1% was from antelope hunters. Those ranches with less than 10 hunters indicated only 78% of the problems were created by deer hunters, 16% were caused by bird hunters and 6% were caused by antelope hunters. The ranches with 10-50 hunters gave responses midway. These responses are logical because ranches with few hunters may not have any deer, but have other species to hunt.

The size of the ranch had little to do with the response to this question, but the type of ranch did make some difference. This is probably related to the location of certain types of ranches. Sheep ranches had more problems with deer hunters than cow/calf or yearling operations. Yearling operators had the least problems, but most of them are located in northeastern New Mexico where there is little deer habitat. Sheep ranches are primarily in Chaves and Eddy counties, and had large numbers of hunters.

Ranchers who said they would like to see more deer had a higher proportion of problems from deer hunters than those who said they would like to see less deer (94% vs 86%). Whether or not they allow hunting on the private land made no difference in which type of hunter the ranchers believe caused the problem.

Questionnaires were sorted to separate respondents indicating serious ORV problems from those reporting no ORV problems. Those with serious ORV problems said 84% of the problem was caused by deer hunters, 13% by bird hunters and 3% by antelope hunters. Those who reported no ORV problems said 67% of the overall problems were caused by deer hunters, 26% were caused by bird hunters and antelope hunters caused 7% of the problems.

When all vandalism choices were combined, those respondents with a serious vandalism problem said deer hunters caused 83% and bird and antelope hunters the other 17%. Where vandalism was not a problem, respondents said deer hunters were responsible for 66% of all other hunter problems.

The costs reported by ranchers to repair damage caused by hunters also were evaluated. These costs varied considerably both in time and dollars. For example, the largest cost to an individual was listed as \$14,860. One such report can vary the mean considerably. The overall mean response was \$659. The use of a median is probably a better way to determine a more central figure.

The responses for time spent repairing damage were divided into four categories of: less than 10 hours, 10-40, 41-100 and greater than 100 hours. The largest group was within the 10-40 hour group. The overall median for time spent repairing damage was in the 20-30 hour range. The ranches with more than 5,000 acres had a higher percentage of respondents in the 41-100 hour range than the smaller ranch size groups. Larger proportions of public land on the ranch also caused time spent repairing damage to increase. The more hunters present on the ranch caused more time to be expended for repairs, as would be expected. Serious problems caused by littering, vandalism and trespass also caused the time expenditure for repairs to go up. Hours spent in repair did not differ greatly whether ranches allowed hunting or not.

Dollar cost for repairs was divided into four groups of less than \$10, \$10-40, \$41-100 and greater than \$100. The median cost for repairs was \$500 for ranches with more than 5,000 acres compared to \$300 for ranches of

less than 5000 acres. Of the ranches with more than \$100 costs, the median costs for ranches with less than 25% private property was \$600, \$500 for 25-50% private land and \$300 for ranches with greater than 50% private holdings. Cow/calf ranches tended to have the highest median costs, followed by yearling and sheep ranches. Ranches that allowed hunting also had higher dollar costs than those that did not allow it.

The number of hunters also influenced the cost of repairs. Most (74%) ranches reporting more than 50 hunters spent \$1,000 (median) for repairs, whereas only 18% of the ranches with less than 10 hunters spent more than \$100 and their median expenditure was \$300. Again, respondents reporting problems caused by trespass, littering and vandalism also reported higher repair expenditures. Problems caused by ORV damage did not effect the dollar expenditure, probably because no attempts were made to repair the damage.

One question asked, "Which hunter caused more problems: instate hunters or out-of-state hunters?" Little variation in response was seen among the ranchers, no matter how they were stratified. The median would indicate that 100% of the problem is caused by instate hunters, whereas the mean indicates about 90% was caused by instate hunters. The more public land present on a ranch tended to increase the percentage of out-of-state hunters that were believed to cause problems.

Respondents were asked, "What percentage of the total hunters caused problems?" It was quite consistent at a median of 10% that caused problems; however, the mean was close to 25%. Some ranchers said all hunters cause problems. This response indicates an attitude problem toward the hunting public by a minority of ranchers.

Responses to the question on "how to correct the hunter-rancher problems" tended to have the same possible solutions repeated, regardless of how the questionnaires were sorted or stratified. There were small variations depending on how other questions had been answered. For example, if ORV's had been a serious problem, then not allowing hunters off the road was the most popular solution. Also a rancher with mostly public land did not recommend controlling trespass because he did not have this problem.

The following lists, in order, the most popular possible solutions to hunter-rancher problems:

Enforce trespass laws.

Allow no one to drive off established roads during the hunting season.

Stiffer fines for trespass.

Have only one season.

More courtesy by hunters.

Have more game wardens in the field.

Shorten season.

Written comments about the possible solutions repeatedly brought up two ideas. The first was to make deer hunting similar to antelope hunting where the rancher can control some or all of the permits. Another was to require all hunters to have written permission from a rancher before going hunting on private land. Many other comments related to law enforcement or past problems.

Respondents were asked if buck numbers on their ranch were different from 10 years ago. A majority (74%) of those responding said buck numbers were different on their ranch from 10 years ago. Of these, 83% said the

numbers were down, and they were down by an average of 58%. When such numbers were down, ranchers said too many hunters (81%), predators (48%) and poaching (47%) were the cause.

Some other comments included excessive numbers of does, drought, disease and elk invasion.

When asked to describe the most positive experience they had with hunters during the 1982 deer season, the following lists, in order, the most popular:

Did not have any.

Experience was related to assistance the hunter needed.

Experience was beneficial to the hunter.

Experience was related to public land access.

Experience was beneficial to the rancher.

Other

Experience was related to assistance the rancher needed.

Other comments varied widely, although most indicated there is little problem with those hunters who ask for permission, and that most hunters were no problem.

Respondents were also asked to select their most negative experience. Responses were ranked in the following order:

Related to trespass.

Related to ranch damage.

Other.

Did not have any negative experiences.

Related to a complaint by the rancher.

Related to damage to livestock.

Related to public land access.

Related to complaint by the hunter.

More than half the ranchers made additional comments on this question. Most can be categorized in some of the earlier questions. They mainly centered around describing what type of problems they had. Some individuals commented on the amount of trouble they had because of the excessive use of alcohol by hunters. Some comments were directed at bear and turkey hunters. One rancher said, "If something isn't done soon, someone is going to get killed." However, most comments related to trespassing, not getting permission and poaching.

The final question was "Who do you feel most represents you with hunting related problems?" The following list ranks those responses, along with the percentages:

New Mexico Cattle Growers Association - 31%

No one - 19%

Department of Game and Fish - 15%

Local Officials - 10%

New Mexico Farm Bureau - 8%

Other - 8%

New Mexico Woolgrowers Association - 6%

New Mexico Department of Agriculture - 3%

Hunter Survey

Of the 3,000 hunters who were sent questionnaires, 682 responded for a response rate of 22.7%. Responses are summarized in Appendix B.

Most of the deer hunters that responded were primitive weapon deer hunters (556). Responses of primitive weapon hunters and rifle deer

hunters were separated before analysis to determine if responses differed between the two groups. An analysis of variance between the two groups indicated there was no significant differences in the answers to most questions. Therefore, the following discussion combines the responses of all deer hunters, unless noted otherwise.

Because such a high percentage of primitive weapon hunters responded there was some concern about how well respondents represented all hunters. To alleviate this concern, 120 hunters were interviewed in the field during the 1983 rifle season. Two areas were identified as high hunter concentration and complaint areas. Special areas surveyed were along the West Side Road and in the Weed area of the Sacramento Mountains in south-central New Mexico.

Thirty hunters were interviewed on the first Saturday of each of the two seasons in each of the two areas. Survey began at noon and the first 30 hunters contacted were asked to fill out the questionnaire.

Analysis of variance between the randomly selected hunters and the hunters interviewed in the field indicated there was no difference between responses of the two groups; therefore, responses to the postal questionnaire were assumed to be representative of all deer hunters.

The questionnaire began with information about what, how and where the respondents hunted. Of the 682 respondents, 642 hunted deer in 1982, 125 respondents hunted elk and 54 were also antelope hunters.

More than 18% of the hunters hunted deer in Otero or Lincoln counties and 87% of the respondents said they hunted on public land. Only 7% of the rifle hunters did not know if the land was public or private and 4.8% of the primitive weapon hunters did not know.

About 24% of the primitive weapon respondents and 19% of the rifle hunters successfully harvested deer in 1982.

Half of the rifle hunters and 41% of the primitive weapon hunters reported they hunted more than 1 mile from the nearest road. While it is understood it was not possible for respondents to accurately determine the distance hunted from the nearest road, the responses do reflect the relative distance the hunters perceive themselves to be from the nearest roads.

Approximately 65% of all deer hunters stayed in tents or trailer/camper camps while hunting deer, and 17% hunted out of their home.

About 75% of the hunters said they saw 10 or fewer other hunters each day in the field. As expected, more primitive weapon hunters (77%) reported low hunter densities than did rifle hunters (59%).

More than half (54%) of the respondents said buck numbers were lower than 10 years ago. Only 4% said they were higher, 6% reported no change and 36% did not know.

Of the hunters who said the buck population was lower, 33% said it was because of poaching and 22% said there were too many hunters.

This first group of questions dealt with the hunter's opinions concerning the deer herd, and defining the quality of hunt he experienced. The following questions dealt specifically with experiences that effected hunter-rancher relationships.

Hunters were asked to identify positive experiences they had with a rancher. About 45% said they had no positive experience with ranchers. It should be noted that this choice can also indicate the hunter had no contact with a rancher. Of the 476 positive experiences identified by

respondents, 30% involved courtesy displayed by the rancher. Another 18% of the positive experiences were related to public land access.

Hunters were also asked to identify negative experiences they had with ranchers. About 67% said they had no negative experiences with ranchers. Again, this choice can indicate the hunters had no contact with a rancher. Of the 198 negative experiences reported, 31% were related to public land access, 26% involved a lack of courtesy shown by the rancher and 13% were related to trespass.

Hunters were asked if they saw any hunter-caused damage and 40% said they did not see any hunter-caused damage. Of the hunter-caused damage reported, 28% of it was littering, 16% was damage to habitat (trees and grasslands) and 11% was damage caused by vehicles.

To determine the awareness level of hunter respondents, some questions concerned the hunter's background that could influence their perception of hunter ethics and hunter-rancher relationships.

About 40% of the hunters had hunter safety training and 41% belonged to a New Mexico sportsman organization. They were also asked who represented them in hunting related matters. Of those answering this question, almost half (46%) said they were represented by the New Mexico Department of Game and Fish. Another 31% said no one represented them. Another 12% said they were represented by local sportsman organizations and 6% by the New Mexico Wildlife Federation.

Several miscellaneous questions were asked to determine how hunters felt about controversial issues that could influence hunter-rancher relationships. At least 85% of the hunters said hunting from a vehicle on the road, is not a legitimate way to hunt. And 91% said hunting from a vehicle off roads is not a legitimate way to hunt.

About 62% of the hunters said, depending on the fee, they would be willing to pay to hunt on private land for a high-quality hunting experience. Another 25% said they would not be willing to pay to hunt.

Hunters were asked if resident or non-resident hunters were responsible for most hunter-caused damage, and 35% had no opinion. The no-opinion category included those who did not know and those who believe it was not the fault of either group. Of the 383 respondents with an opinion, 47% said out-of-state hunters were responsible for most hunter-caused damage.

The final two questions dealt with identifying perceived problems and solutions to hunter-rancher conflicts. Hunters were asked to identify the top five causes of most hunter-rancher conflicts. About 40% of the hunters ranked trespass or failure to ask permission as the number one cause of hunter-rancher conflicts. Another 14% said denial of access to public lands as the number one cause of hunter-rancher conflicts. About 13% of the hunters picked disrespect for others' rights as the primary cause of the conflicts.

When considering the number of times a conflict appeared in the top five choices, trespass or failure to ask permission again appear as the biggest problems identified by hunters. These two items accounted for 26% of all choices.

The final question involved ranking the top five solutions to hunter-rancher conflicts. As expected, the most highly-ranked solution was related to the most highly-ranked conflict. Accurate maps that identify public and private lands were chosen as the primary solution to hunter-rancher conflicts by 27% of the hunters. Another 11% of the hunters said

more cooperation between hunters and ranchers is the primary solution, and 10% said more courtesy by hunters is the primary solution. Stiffer penalties for denying access to public lands was identified by 10% of the hunters as the primary solution to hunter-rancher conflicts.

Hunters were asked to supply any other information that would help identify problems and provide solutions to the hunter-rancher relationship problem.

The most frequent additional comment by hunters was about a greater effort to maintain good relationships between hunters and ranchers. This included comments on asking permission to hunt, respecting the landowner's property, and helping the rancher in any way possible.

Many hunters said many times they were not aware they were on private land. They said more accurate maps and signs designating public and private areas were needed. Other comments indicated many ranchers were posting public lands they had leased, and were locking gates on public roads.

Additional comments indicated some hunters would like to see stiffer penalties for hunters who damage a landowner's property.

DISCUSSION

Many problems identified in this survey are what might be expected when dealing with large crowds. Litter and trespassing are essentially crowd problems and the more people utilizing hunting lands, the more of a problem there will be. Trespass was identified by both groups as being the most serious problem affecting hunter-rancher relationships. The solution to this problem, however, is identified differently by the two groups. Most ranchers said enforcement of trespass laws would solve the problem,

but most hunters said the problem could be alleviated by more accurate land status maps that clearly identify private and public lands. Some of the hunters said this would also be a way to prevent illegal posting of public lands.

Both groups indicated a lack of respect for the rights of others as a major cause of hunter-rancher problems. Ranchers identified littering and property damage as serious problems. Many hunters reported a general disrespect for others' rights as the cause of conflicts.

Some steps already have been taken to solve some of these problems. The New Mexico Department of Game and Fish has instituted regulations that prohibit off-road driving by licensed hunters on public land. Legislative action has also given Game and Fish officers authority to enforce trespass laws. Other legislative action allows more officers in the field, and the Game and Fish Department is trying to assign more manpower to specific problem areas.

The U.S. Forest Service, the Bureau of Land Management and the Game and Fish Department all try to have more uniformed personnel in the field during hunting seasons. This should help alleviate public land access problems, and increased visibility of officers will encourage more order overall.

There have been meetings between representatives of livestock and hunter, groups and these meetings should continue. One objective of this survey was to identify problems and possible solutions. Only through a cooperative effort and more meetings between representatives can these solutions be implemented.

One obstacle between better hunter-rancher relationships is attitude. Many responses indicate ranchers and hunters feel they are expected to feel some animosity toward each other. Occasionally, respondents would answer questions in such an extreme direction that it was obvious their answer reflected a desire to influence biased results. It is probable that these types of attitudes are responsible for much of the strained hunter-rancher relationships existing today.

The most positive factor this study has revealed is a strong desire by most hunters and ranchers to mend the differences that effect their relationships. Ranchers are sincerely concerned about activities that effect their livelihood, and use of the land they are entrusted to care for. Hunters are concerned about their ability to use lands and resources they have a legal and moral right to use. Both groups want to to maintain the quality of these lands and to ensure the long-range uses of the resources provided. Only through cooperation and a sincere concern for the rights of others will the activities of hunters and ranchers be compatible.

APPENDIX A

Rancher Questionnaire

Hunter Questionnaire

April, 1983

RANGE IMPROVEMENT TASK FORCE
NEW MEXICO STATE UNIVERSITY

1983 Rancher-Hunter Relationship Survey

Dear Rancher:

The 1982 deer hunting season in some areas of the state caused more than usual problems for ranchers. Evidence of this was seen during the recent legislative session with at least four bills passed relating to this problem. This survey is being conducted in order to attempt to get documentation on the hunter/rancher relationships throughout New Mexico and get information that might lead to better relations in future hunts.

We are asking that you complete the enclosed questionnaire in as much detail as possible. Results of this survey will be published as a Range Improvement Task Force (RITF) publication and sent to livestock organizations and Game and Fish Officials. Your answers will only be reported as a group average, your individual responses will remain anonymous. Thank you for your help.

Sincerely,

Larry Foster
Extension Beef Cattle Specialist

James E. Knight
Extension Wildlife Specialist

LF/JEK:bb
Enclosure

Appendix A Rancher Survey

RANCH SURVEY

In Reference to Hunting Season--1982

1. What county is your ranch in? _____
2. What is the approximate number of acres in total ranch? _____
3. What percent of the ranch is in private ownership _____%,
state land _____%, Forest Service _____%, BLM _____%?
4. Type of ranching operation: Cow/Calf _____, Yearling _____, Sheep _____.
5. Do you currently have any hunting on the ranch? ___yes ___no
6. How many hunters of each type do you estimate hunted on your ranch last season?
Deer _____ Birds _____ Antelope _____
7. Do you or members of your family hunt? ___yes ___no
8. Would you like to see more _____ or less _____ deer on your ranch?
9. Do you allow hunting on your private land? ___yes ___no
10. If no, would you allow it if they paid you for the privilege? ___yes
___no
11. Which of the following were problems on your ranch during the 1982 season? Please mark the level of the problem:

	Serious Problem	Problem	No Problem
Vandalism to tanks	___	___	___
Vandalism to windmills	___	___	___
Vandalism to gates	___	___	___
Vandalism to locks	___	___	___
Vandalism to corrals	___	___	___
Vandalism to buildings	___	___	___
Vandalism to feed troughs	___	___	___
Killing livestock	___	___	___
Chasing livestock	___	___	___
Stealing	___	___	___
Litter	___	___	___
Trampling (camp areas)	___	___	___
Camping too close to water	___	___	___
Cutting fences	___	___	___
Trespass	___	___	___
Ranch road damage	___	___	___
Off road damage	___	___	___
Other _____	___	___	___

12. If you had damage, which type hunter caused the damage (give percentage)?
 Rifle Hunters _____% Archery Hunters _____% Muzzle Loader Hunters _____%
13. Which type hunters created the problem? Deer _____% Bird _____%
 Antelope _____% Other _____%
14. How much did it cost you in 1982 to repair the hunter-caused damage?
 Time in man hours _____ and dollars \$ _____
15. How much time was spent patrolling during hunting season to check gates, etc.? _____ hours
16. Who created the most problems: in-state _____% or out-of-state _____% hunters?
17. What percent of all deer hunters do you feel caused damage in 1982?
 _____%
18. How would you correct the problems? Rank in order the top five possibilities.
- ___ Meetings between rancher groups and hunter groups
 - ___ Limit out-of-state hunters
 - ___ Shorten season
 - ___ Have only one season
 - ___ Further stratified seasons
 - ___ Have more game wardens out in the field
 - ___ Increase the number of reserve conservation officers in the field during the season
 - ___ Enforce trespass laws
 - ___ Allow no one to drive off established roads during season
 - ___ Confine camping to designated areas
 - ___ Stiffer fines for trespass
 - ___ Stiffer penalties for access denial to public lands
 - ___ Accurate maps that would identify public and private lands
 - ___ More public education on hunting ethics
 - ___ Assign hunting permits by unit to better distribute hunters
 - ___ More courtesy by ranchers
 - ___ More courtesy by hunters
 - ___ Other (Specify) _____
-
19. Do you feel that the buck numbers are different on your ranch from 10 years ago? ___ yes ___ no If up, how much? ___% If down, how much? ___%
20. If numbers are down, is it due to:
- ___ Too many hunters
 - ___ Predators
 - ___ Doe seasons in the past
 - ___ Poaching
 - ___ Habitat degradation
 - ___ Other _____

21. How would you best describe the most positive experience you had with a hunter during the 1982 deer season? (Check all that apply).

- Did not have any positive experiences with hunters
 - Experience was beneficial to the hunter
 - Experience was beneficial to me
 - Experience was related to public land access
 - Experience was related to assistance the hunter needed
 - Experience was related to assistance I needed
 - Other _____
-
-

Additional comments:

22. How would you best describe the most negative experience you had with a hunter during the 1982 deer season? (Check all that apply)

- Did not have any negative experiences with hunters
 - Experience was related to a complaint by me
 - Experience was related to a complaint by the hunter
 - Experience was related to trespass
 - Experience was related to public land access
 - Experience was related to ranch damage
 - Experience was related to damage to livestock
 - Other _____
-
-

23. Who do you feel most represents you with hunting-related problems?

- New Mexico Cattlegrowers Association
 - New Mexico Woolgrowers Association
 - New Mexico Farm Bureau
 - Department of Game and Fish
 - New Mexico Department of Agriculture
 - Local Officials
 - No one
 - Other _____
-
-
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THANK YOU FOR YOUR HELP!

Please fold so that return card is on the outside. Tape or staple, and mail before May 30. No postage is required.

NEW MEXICO STATE UNIVERSITY
Range Improvement Task Force

Dear Sportsman:

You have been selected as part of a random sample of New Mexico deer hunters. This questionnaire is being sent to individuals who held 1982 deer licenses to determine (1) the extent or existence of hunter-rancher problems and (2) some possible solutions to these problems.

This is a cooperative project between wildlife and agriculture specialists at New Mexico State University. It is our feeling that positive hunter-rancher relationships are necessary to properly manage the natural resources of New Mexico. Stemming the increase of posted land is but one benefit to hunters if we can mend some of the differences that appear to plague the two groups. Better wildlife management through cooperative ranchers will benefit wildlife populations directly and the healthier herds will benefit hunters indirectly.

The first step in addressing this perceived problem is to get information from you, the sportsman, so that all aspects of this situation can be considered. Your cooperation in this project will be appreciated not only by us at New Mexico State but by all who are concerned about the proper use of our natural resources.

Thank you.

Sincerely,

James E. Knight, Ph.D.
Wildlife Specialist

Larry Foster Ph.D.
Beef Cattle Specialist

Appendix A. Hunter Survey

Hunter-Rancher Relationships in New Mexico, 1982
New Mexico State University

ALL QUESTIONS REFER TO HUNTING SEASON, 1982

1. What, how and where did you hunt in New Mexico in 1982? (Check appropriate items and indicate counties).

<u>Game Hunted</u>	<u>Weapon Used</u>	<u>Counties Hunted</u>	<u>Hunting Area Ownership</u>		
___ Deer	___ Rifle	_____	___ Public	___ Private	___ Unknown
	___ Muzzleloader	_____	___ Public	___ Private	___ Unknown
	___ Bow & Arrow	_____	___ Public	___ Private	___ Unknown
___ Elk	___ Rifle	_____	___ Public	___ Private	___ Unknown
	___ Muzzleloader	_____	___ Public	___ Private	___ Unknown
	___ Bow & Arrow	_____	___ Public	___ Private	___ Unknown
___ Antelope	___ Rifle	_____	___ Public	___ Private	___ Unknown
	___ Muzzleloader	_____	___ Public	___ Private	___ Unknown
	___ Bow & Arrow	_____	___ Public	___ Private	___ Unknown
___ Bear	___ Rifle	_____	___ Public	___ Private	___ Unknown
	___ Muzzleloader	_____	___ Public	___ Private	___ Unknown
	___ Bow & Arrow	_____	___ Public	___ Private	___ Unknown
___ Turkey	___ Rifle	_____	___ Public	___ Private	___ Unknown
	___ Muzzleloader	_____	___ Public	___ Private	___ Unknown
	___ Bow & Arrow	_____	___ Public	___ Private	___ Unknown
___ Quail		_____	___ Public	___ Private	___ Unknown
___ Dove		_____	___ Public	___ Private	___ Unknown
___ Pheasant		_____	___ Public	___ Private	___ Unknown
___ Waterfowl		_____	___ Public	___ Private	___ Unknown

QUESTIONS 2 - 12 REFER TO DEER SEASON, 1982

2. Did you go deer hunting in New Mexico in 1982? (Check one) ___ Yes ___ No
(If No, please skip to Question 13)
3. Did you harvest a deer in New Mexico in 1982? (Check one) ___ Yes ___ No
4. What distance from the nearest road did you do most of your deer hunting? (Check one)
- | | |
|--------------------------|------------------------|
| ___ Roadside to 100 yds | ___ 3/4 mile to 1 mile |
| ___ 100 yds to 1/4 mile | ___ Over 1 mile |
| ___ 1/4 mile to 3/4 mile | |

5. Where did you usually stay while on the deer hunting trip? (Check one)

Home Cabin Ranch
 Tent Camp Lodge Motel
 Trailer/Camper Motor Home Other (Specify)

6. How many other hunters did you observe per day in the field while hunting deer in 1982? (Check one)

0 - 5 11 - 50 101 - 500
 6 - 10 51 - 100 Over 500

7. Do you feel that buck numbers are different in your hunting area from 10 years ago? (Check one) Yes No Don't know

8. If "Yes", how much? % higher % lower

9. If numbers are down, what is the cause? (Check those that apply)

Too many hunters
 Predators
 Doe seasons in the past
 Poaching
 Habitat degradation
 Other (specify) _____

10. How would you describe the most positive experience you had with a rancher during the 1982 deer season? (Check all that apply)

Did not have any positive experiences with rancher
 Experience was beneficial to rancher
 Experience was beneficial to me
 Experience was related to public land access
 Experience was related to assistance I needed
 Experience was related to assistance rancher needed
 Experience involved courtesy displayed by the rancher
 Other (Specify): _____

11. How would you describe the most negative experience you had with a rancher during the 1982 deer season? (Check all that apply)

Did not have any negative experience with ranchers
 Experience was related to a complaint by me
 Experience was related to a complaint by the rancher
 Experience was related to public land access
 Experience was related to trespass
 Experience was related to ranch damage
 Experience was related to damage to livestock
 Experience involved a lack of courtesy shown by the rancher
 Other (specify): _____

12. If you observed hunter-caused damage in 1982, how would you best describe what you observed? (Check those that apply)

- I did not observe any hunter-caused damage
- Damage was accidental
- Damage was intentional
- Damage was to structures (fences, tanks, windmills, etc.)
- Damage was to roads
- Damage was to habitat (trees, grasslands, etc.)
- Damage was caused by shooting
- Damage was caused by vehicles
- Damage was caused by camps
- Damage was caused by littering

13. Have you had Hunter Safety Training? (Check one) Yes No

14. Do you belong to a sportsman's organization in New Mexico?
(Check one) Yes No

15. Who do you feel most represents you in hunting related matters?
(Check one)

- No one but yourself
- New Mexico Department of Game and Fish
- Local sportsman organizations
- New Mexico Wildlife Federation
- Other (Specify): _____

16. Do you feel hunting deer from a vehicle, on-roads, is a legitimate way to hunt? (Check one) Yes No

17. Do you feel hunting deer from vehicles, off-roads, is a legitimate way to hunt? (Check one) Yes No

18. Would you be willing to pay to hunt on private land for a high quality hunting experience? (Check one) Yes No Depends on fee

19. Who do you feel is responsible for most hunter-caused damage?

- In-state hunters
- Out-of-state hunters
- Have no opinion

20. Which do you feel are the top 5 causes of most hunter-rancher conflicts? (Indicate "1" for top choice) (Rank 5)

- Misunderstandings
- Trespass by hunters
- Access denial to public lands by ranchers
- Too many cattle
- Failure to ask permission
- Failure to be courteous
- Disrespect for others' rights
- Property damage
- Too many hunters
- Not enough huntable land
- Hunters not distributed properly
- Off-road driving
- Littering by hunters
- Road hunting
- Other (specify): _____

21. What do you feel are the top 5 solutions to most hunter-rancher conflicts? (Indicate "1" for top choice) (Rank 5)

- More meetings between representatives of the two groups
- More game wardens in the field
- Increase the number of reserve conservation officers in the field
- Stiffer penalties for trespass
- Stiffer penalties for access denial to public lands
- Accurate maps that would identify public and private lands
- Limit out-of-state hunter numbers
- Greater restrictions on livestock use of public lands
- More public education on hunter ethics
- Shorten hunting seasons
- Assign hunting permits by unit to better distribute hunters
- Further stratify seasons
- More cooperation between ranchers and hunters
- More courtesy by ranchers
- More courtesy by hunters
- Prohibit driving off-roads during hunting seasons
- Confine camping to designated areas
- Other (specify): _____

22. Please provide any additional information you may have that might help us identify problems and solutions to the hunter-rancher relationship problem.

APPENDIX B

Rancher Questionnaire Summary

Hunter Questionnaire Summary

Ranher Questionnaire Summary

		Totals*
1. Total Responses		260
County	Chaves	23
	Lincoln	23
	Quay	20
	Torrance	17
	Socorro	15
	Lea	13
	San Miguel	13
	Guadalupe	11
	Otero	11
	Union	10
	Catron	9
	Sandoval	9
	Rio Arriba	8
	De Baca	7
	Hidalgo	7
	San Juan	7
	Sierra	7
	Eddy	6
	Grant	6
	Santa Fe	6
	Mora	5
	Cibola	4
	Harding	4
	Luna	4
	Colfax	3
	Roosevelt	3
	Taos	3
	Curry	2
	McKinley	2
	Bernalillo	1
	Dona Ana	1
	Los Alamos	0
	Valencia	0

**2. Number of acres in ranch

**3. Percent in private ownership

4. Type of ranching operation

Cow Calf	203
Yearling	54
Sheep	30

* Totals are not all the same because some respondents did not answer all questions and some respondents were in multiple categories.

** Variable answers discussed in test.

Rancher Questionnaire Summary (Continued)

5. Current hunting on ranch

Yes	147
No	70

**6. Type of hunters

7. Does rancher or members of family hunt

Yes	137
No	84

8. Would rancher like to see more or less deer on ranch

More	103
Less	64

9. Allow hunting on private land

Yes	140
No	82

10. If no, would rancher allow it if hunters paid

Yes	22
No	58

11. Problems on ranch during 1982 season

	Serious Problem	Problem	No Problem
Vandalism to tanks	23	24	175
Vandalism to windmills	21	33	168
Vandalism to gates	60	57	101
Vandalism to locks	20	27	151
Vandalism to corrals	15	22	185
Vandalism to buildings	10	18	194
Vandalism to feed troughs	10	19	192
Killing livestock	29	33	160
Chasing livestock	34	42	146
Stealing	41	48	133
Litter	88	58	76
Trampling (camp areas)	38	29	155
Camping too close to water	36	35	151
Cutting fences	57	42	123
Trespass	86	47	89
Ranch road damage	35	34	153
Off road damage	64	30	108
Other	16	15	185

Rancher Questionnaire Summary (Continued)

12. Type hunter causing damage

Rifle Hunters	93%
Muzzle Loader Hunters	4%
Archery Hunters	2%

- **13. Type hunters creating problems
- **14. Cost to repair hunter-caused damage
- **15. Time spent patrolling during hunting season
- **16. Who created most problems
- **17. Percentage of deer hunters causing damage

18. How to correct problems

Meetings between rancher/hunter groups	30
Limit out-of-state hunters	18
Shorten season	73
Have only one season	97
Further stratified seasons	6
More game wardens in the field	73
Increase number of conservation officers in the field	32
Enforce trespass laws	115
No driving off roads during season	109
Confine camping	47
Stiffer fines for trespass	104
Stiffer penalties for access denial on public lands	18
Accurate maps for public/private lands	60
More public education on ethics	66
Assign hunting permits by unit	55
More courtesy by ranchers	23
More courtesy by hunters	97
Other	48

19. Are buck numbers different from 10 years ago

Yes	130
No	33
If up, how much?	55% (Av. Increase)
If down, how much?	58% (Av. Decrease)

Rancher Questionnaire Summary (Continued)

20. If numbers are down, is it due to

Too many hunters	81
Predators	48
Doe season in the past	23
Poaching	47
Habitat degradation	6
Other	15

21. Positive experience with hunters

Did not have any	81
Beneficial to hunter	35
Beneficial to rancher	21
Related to public land access	20
Related to assistance to hunter	38
Related to assistance to rancher	10
Other	16

22. Negative experience with hunters

Did not have any	36
Related to a complaint by rancher	31
Related to a complaint by hunter	10
Related to trespass	98
Related to public land access	21
Related to ranch damage	68
Related to damage to livestock	33
Other	44

23. Who represents rancher with hunting-related problems

New Mexico Cattle Growers Assn.	91
New Mexico Woolgrowers Assn.	17
New Mexico Farm Bureau	24
Department of Game and Fish	44
New Mexico Department of Agriculture	9
Local Officials	30
No one	57
Other	23

Hunter Questionnaire Summary by Licensee Type

		Total*	Rifle	Primitive
#1	Total Responses	682	126	556
	County Hunted:			
	Lincoln	64	15	49
	Otero	59	3	56
	Rio Arriba	53	15	38
	Eddy	41	2	39
	Sandoval	34	7	27
	Catron	33	4	29
	Grant	29	0	29
	San Juan	29	8	21
	Socorro	18	4	14
	Bernalillo	16	2	14
	Torrance	16	3	13
	Chaves	13	0	13
	Colfax	13	2	11
	Los Alamos	13	3	10
	San Miguel	13	3	10
	Santa Fe	11	3	8
	Sierra	11	4	7
	McKinley	9	2	7
	Mora	9	1	8
	Union	9	3	6
	Dona Ana	8	3	5
	Valencia	8	3	5
	Cibola	7	1	6
	Hidalgo	6	1	5
	Taos	6	2	4
	Luna	4	0	4
	Lea	2	0	2
	Curry	1	0	1
	DeBaca	1	0	1
	Guadalupe	0	0	0
	Harding	0	0	0
	Quay	0	0	0
	Roosevelt	0	0	0
#2	Went hunting?			
	Yes	642	125	517
	No	40	3	37
#3	Harvest a deer?			
	Yes	155	24	131
	No	513	100	413

*Totals are not the same for all questions because some respondents did not answer all questions and some respondents were in multiple categories.

Hunter Questionnaire Summary by Licensee Type (Continued)

	Total	Rifle	Primitive
#4 Distance hunted from road			
Roadside to 100 yds	13	1	12
100 yds to 1/4 mi	71	11	60
1/4 mi to 3/4 mi	119	18	101
3/4 mi to 1 mi	145	28	117
Over 1 mi	294	63	231
#5 Where stayed during hunt			
Home	118	25	93
Tent Camp	235	46	189
Trailer/Camper	209	38	171
Cabin	29	7	22
Lodge	0	0	0
Motor Home	18	4	14
Ranch	7	1	6
Motel	8	3	5
Other	12	1	11
#6 Other hunters seen per day			
0-5	297	38	259
6-10	203	36	167
11-50	137	39	98
51-100	22	9	13
101-500	4	1	3
Over 500	0	0	0
#7 Buck numbers different			
Yes	403	80	323
No	39	5	34
Don't know	227	39	188
#8 How different?			
Higher: Less than 10%	2	1	1
11-25%	13	0	13
26-50%	4	0	4
Over 50%	3	1	2
Lower: Less than 10%	25	4	21
11-25%	73	14	59
26-50%	150	31	119
Over 50%	87	22	65

Hunter Questionnaire Summary by Licensee Type (Continued)

	Total	Rifle	Primitive
#9 If lower - why?			
Too many hunters	169	38	131
Predators	106	18	88
Past doe seasons	77	19	58
Poaching	248	52	196
Habitat degradation	79	16	63
Other	77	12	65
#10 Positive experience with rancher			
Had none	305	60	245
Beneficial to rancher	61	8	53
Beneficial to me	84	14	70
Related to public land access	87	15	72
Related to assistance - me	48	9	39
Related to assistance - rancher	37	4	33
Involved courtesy by rancher	143	26	117
Other	16	5	11
#11 Negative experience with rancher			
Had none	452	83	369
Complaint by me	6	2	4
Complaint by rancher	14	4	10
Related to public land access	62	10	52
Related to trespass	25	5	20
Related to ranch damage	7	1	6
Related to livestock damage	6	1	5
Involved lack of courtesy by rancher	52	11	41
Other	26	7	19
#12 Hunter caused damage			
Did not observe any	272	53	219
Damage was accidental	15	2	13
Damage was intentional	106	24	82
Structures	105	25	80
Roads	51	7	44
Habitat	177	9	168
Shooting	85	17	68
Vehicles	119	21	98
Camps	79	15	64
Littering	292	55	237
#13 Hunter safety training?			
Yes	281	51	230
No	414	72	342

Hunter Questionnaire Summary by Licensee Type (Continued)

	Total	Rifle	Primitive
#14 Belong to a sportsman organization?			
Yes	277	50	227
No	402	70	332
#15 Represents you?			
No one	179	34	145
New Mexico Game and Fish	269	55	214
Local Officials	68	7	61
New Mexico Wildlife Federation	37	5	32
Other	31	4	27
#16 On-road hunting legitimate?			
Yes	107	14	93
No	585	109	246
#17 Off-road hunting legitimate?			
Yes	60	9	51
No	637	114	523
#18 Pay to hunt?			
Yes	95	15	80
No	175	30	145
Depends	436	80	356
#19 Responsible for damage?			
In-state	202	34	168
Out-of-state	181	28	153
No opinion	208	40	168
#20 Causes of conflicts (Total occurrences in top 5)			
Misunderstandings	232	40	192
Trespass	429	76	353
Access denial	338	59	279
Cattle	61	9	52
No permission	454	84	370
Courtesy	220	34	186
Disrespect	352	49	303
Property damage	379	66	313
Too many hunters	85	16	69
Not enough land	71	11	60
Poor distribution	33	8	25
Off-road driving	230	39	191
Littering	345	61	284
Road hunting	95	16	79
Other	43	7	36

Hunter Questionnaire Summary by Licensee Type (Continued)

	Total	Rifle	Primitive
#21 Solutions to conflicts (Total occurrences in top 5)			
Meetings between representatives	182	32	150
More wardens	141	28	113
More RCO's	57	10	47
Stiffer trespass penalties	152	28	124
Stiffer penalties - access denial	193	28	165
Accurate maps	452	81	371
Limit out-of-state	196	36	160
Livestock restrictions	117	16	101
Public education	230	38	192
Shorter seasons	9	2	7
Permits by unit	98	25	73
More stratification	27	6	21
More cooperatiion	322	59	263
Courtesy by ranchers	207	38	169
Courtesy by hunters	350	63	287
Prohibit off-road driving	194	30	164
Confine camping	73	14	59
Other	44	7	37