PUBLIC ATTITUDES ABOUT AGRICULTURE IN COLORADO

A STUDY DONE FOR THE COLORADO DEPARTMENT OF AGRICULTURE AND AG INSIGHTS

By The

College of Natural Resources Colorado State University

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INTRODUCTION

Background

This research replicates a study that was conducted in 1996 for the Colorado Department of Agriculture and Ag Insights. In 1996, the Colorado Department of Agriculture and Ag Insights worked with Colorado State University's Human Dimensions in Natural Resources Unit to develop a survey of Colorado residents with the following study objectives:

- 1) Determine the public's attitudes towards such issues as food prices, food safety, pesticide use, environmental practices, wildlife and agriculture, animal welfare, land use, population growth and agricultural land preservation, among others.
- 2) Look for differences in attitudes among Coloradans that may be based on geographic location, length of residence or other characteristics.

The current phase of this study has the following objectives:

- 1) Ensure questions asked are relevant in 2001, adding additional questions as necessary and deleting questions that are no longer relevant.
- 2) Measure attitudes towards the above mentioned issues, noting similarities and changes from 1996 to 2001.

Methods used

Colorado State University's Human Dimensions in Natural Resources Unit contracted with PhoneBase Research Inc., a firm specializing in telephone interviewing, to gather the data for the 2001 phase of this study. A proportional random sample of 450 Colorado residents were interviewed. The number of people interviewed from the Eastern Plains, Front Range and Western Slope (all counties located to the west of Front Range counties) was in proportion with the actual population in that region. The sample was purchased from Survey Sampling Inc. The telephone interviews were conducted by trained staff at PhoneBase Research Inc. and required about 12 minutes each to complete.

The survey (Appendix A) contained a mixture of multiple choice and open-ended questions that were developed in 1996 in conjunction with Colorado Department of Agriculture officials and then critiqued by Ag Insights members during the Governor's Agricultural Forum in Denver. There are 3 questions that were added to the 2001 survey. A question regarding subsidies for agriculture and another asking respondents' level of education were asked in 1996, but not in 2001. A pretest was conducted with a small sub-sample of the full sample, no changes resulted from the pretest. The survey contains questions about agricultural issues and practices and also several items that probe the public's perceptions about and experience with agriculture. Data were analyzed using the Statistical Package for Social Science (SPSS) software, and content analysis techniques. With the sampling techniques used and the number of respondents

successfully surveyed, survey results have a margin of error of plus or minus 5% at the 95% confidence level.

How to read this report

Results from the survey are briefly narrated and often displayed in graphic form. Captions in the body of the report will reference key topics probed by the study. Bar graphs replace most of the pie charts used in the 1996 report, allowing the reader to better compare the two studies. Percentages in some figures may not total exactly 100% because of rounding. The number of people answering a given item can vary because some people chose not to respond to particular questions. The text will refer to a good deal of specific information that can be found in the appendices.

RESULTS

Response Rate

When the survey was conducted in 1996, calls were made by Colorado State University students in the Natural Resource Recreation and Tourism Department's telephone lab and a response rate of (44%) was obtained. In 2001, we used the services of a professional survey company because the CSU lab was closed for financial and administrative reasons. During the 2001 survey, of the 1514 people contacted, 450 completed the survey for a response rate of 30%. Although this is lower than the 44% response rate in 1996, we feel we have confirmed the validity of the study by conducting a non-response test. Of those who refused, 56 were asked to answer two of the questions that were included on the survey (#12 and #23). The responses of those who declined to complete the whole survey were very similar to those who agreed to complete the survey (Table 1).

Table 1. Differences Between Respondents and Non-respondents on Non-response Questions

How responsible is Colorado in protecting the environment?

	Almost always responsible	Usually responsible	Sometimes responsible	Almost never responsible	Don't know	No response
Respondents	21.6%	37.8%	20.0%	4.4%	15.8%	.4%
Non-respondents	17.9%	33.9%	17.9%	3.6%	26.8%	

How important is the presence of ranches, farms and agriculture to the quality of life in Colorado?

	Very <u>important</u>	Moderately important	Slightly <u>important</u>	Not <u>important</u>	Don't <u>know</u>	No <u>response</u>
Respondents	80.0%	15.1%	2.0%	.7%	1.8%	.4%
Non-respondents	76.8%	5.4%	1.8%	3.6%	8.9%	3.6%

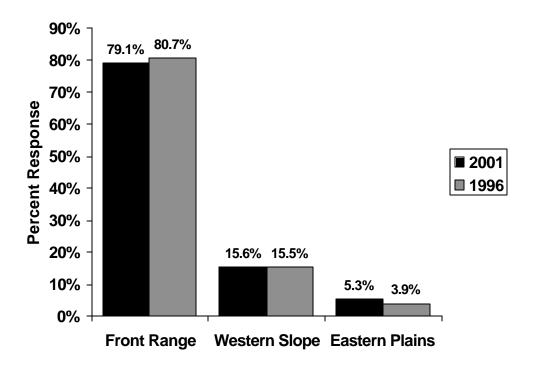
respondents n = 450; nonrespondents n = 56

The responses to 'How responsible is Colorado in protecting the environment?' were not significantly different ($x^2 = 4.5$, p = .477) between respondents and non-respondents. While the respondents and non-respondents differed significantly on 'How important is the presence of ranches, farms and agriculture to the quality of life in Colorado?', ($x^2 = 23.78$, p = <.001) the responses did not appear to be meaningfully different. Therefore, we feel the responses are representative of the population at +/-5% at the confidence level of 95%.

Population Surveyed

A proportional random sample of 450 Coloradans was used (n = 450). This can be thought of as follows: Eight of every 10 respondents live in the Colorado Front Range (79.1%). One in 6 lives on the Western Slope (15.6%) and the remaining respondents live on the Eastern Plains (5.3%). This sample is similar to the 1996 survey (Figure 1).

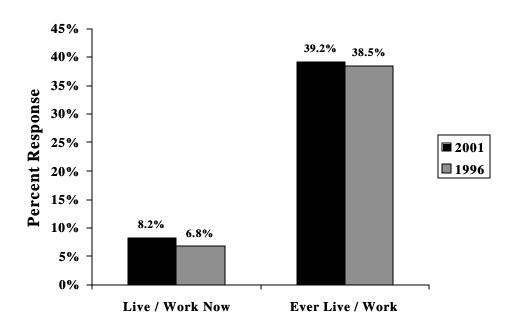
Figure 1
Where respondents were from in Colorado.



Affiliation with Agriculture

The first question on the survey consisted of two parts: 1) *Do you <u>currently</u> live or work on a farm or ranch?* and 2) *Have you ever lived or worked on a farm or ranch?*

 $Figure\ 2$ Do you / Have you lived or worked on a farm or ranch?



About 4 of 10 respondents (39.2%) have lived or worked on a farm at some point in their lives, similar to the 1996 survey (38.5%). Interestingly, 8% of those responding considered themselves to currently be living on a farm of ranch. No criteria were given to respondents as to what constituted living or working on a farm or ranch.



First Impressions About Agriculture

Respondents were asked to mention the first thing that came to their minds when they heard the word *agriculture*.

Some responses consisted of several aspects of agriculture, and were treated as separate answers. When all answers were content analyzed, it was possible to sort them into the following categories: Farms/Farmers/Farming; Livestock; Agricultural Values/Work Ethic; Sense of Place/Specific Locations/Amenities; Ranches; Personal Experience/Family in Agriculture; and Negative Comments. Table 2 summarizes the number and types of first responses. A complete listing of the responses to this question is provided in Appendix D.

Table 2. First Thing That Comes to Mind When You Hear the Word "Agriculture"

CONTENT	NUMBER	FREQUENT ANSWERS
CATEGORIES	2001 (1996)	
Farms / Farmers / Farming	552 (785)	Corn, Wheat, Grain 84 , 15 % (128, 16%) Crops, Hay 81 , 15 % (102, 13%) Planting, Growing, Harvesting 33 , 6 % (62, 8%) Vegetables 14 , 3 % (41, 5%) Fields 12 , 2 % (20, 3%) Fruit in CO 13 , 2 % (23, 3%) Irrigation / Water 6 , 1 % (9, 1%) Gardens 6 , 1 % (1, 0%)
Livestock	152 (176)	Cattle, Beef 38 , 25% (107, 61%) Livestock 32 , 21% (13, 7%) Animals 23 , 15% (24, 14%) Poultry / Chickens 8 , 5% 2 (1%)
Agricultural Values / Work Ethic	68 (46)	Work 15, 22% (23, 50%) Hard work 17, 25% (1, 2%) Way of Life / Lifestyle / Good life 13, 19% (3, 7%) Vanishing farms / Difficulty of ag. 8, 12% (5, 11%) Importance of Ag. 9, 13% (7, 15%)
Sense of Place / Specific Locations / Amenities	50 (97)	Rural Landscape images 21, 42% (5, 5%) Land (78, 80%) Open space 11, 22% (1, 1%) Amenities 2, 4% () Loss / Preservation of Ag. Land 5, 10% (2, 2%)
Ranches	38 (44)	Ranching 17, 45% (28, 64%) Ranches 16, 42% (12, 27%)
Personal Experience / Family in Ag	12 (16)	Relatives 4, 33% (9, 56%) Past work experience 7, 58% ()
Negative Comments	9 (18)	Chemicals / Pesticides 4, 44% (3, 17%) Environmental issues 4, 44% (1, 6%) Subsidies (6, 33%)

Knowledge of Colorado Ag Products: 2001 survey responses are bolded and 1996 responses are in parentheses

People were asked: what products can you name that are grown or raised in Colorado?

The following products were referred to more than 75 times: Corn 277, 12% (558, 16%), Wheat 244, 11% (552, 16%), Cattle or Beef 157, 7% (288, 8%), Alfalfa / Hay 122, 6% (185, 5%), Beets 113, 5% (269, 8%), Potatoes 90, 4% (165, 5%), Peaches 104, 5% (153, 4%), Beans 94, 4% (145, 4%), Melons 89, 4% (140, 4%), Grains 79, 4%, (115, 3%), Apples 77, 4% (128, 4%). It is important to note the sample size was smaller in 2001 and, therefore, it is more useful to compare the percentages rather than the number of times a product was mentioned. Many other crops were mentioned and the number of times they were mentioned can be found in Appendix E.

Also of interest, 10% of respondents only listed 1 product, 52% of respondents only listed 4 or fewer products, and 8 % could list 10 or more products.



Crops Having the Most Economic Importance for Colorado: 2001 responses are bolded and 1996 responses are in parentheses

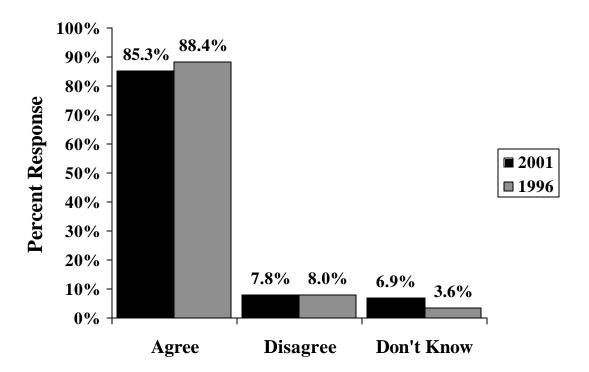
People were asked: what agricultural product would you say has the most economic importance for Colorado?

Many people listed Wheat **88**, **18%** (295, 29%); Beef **55**, **12%** (--); Cattle **48**, **10%** (219, 22%); and Corn **44**, **9%** (102, 10%), but a noticeable number did not know **93**, **19%** (107, 11%). Other crops listed include: sugar beets, potatoes, fruit, hay / alfalfa, peaches and vegetables. The complete listing of crops named and the frequency of being named can be found in Appendix F.

Perceptions About the Cost of Food

People were asked: *Do you agree or disagree that agriculture provides food at a reasonable price in Colorado?*

Figure 3
Agriculture provides food at a reasonable price in Colorado.



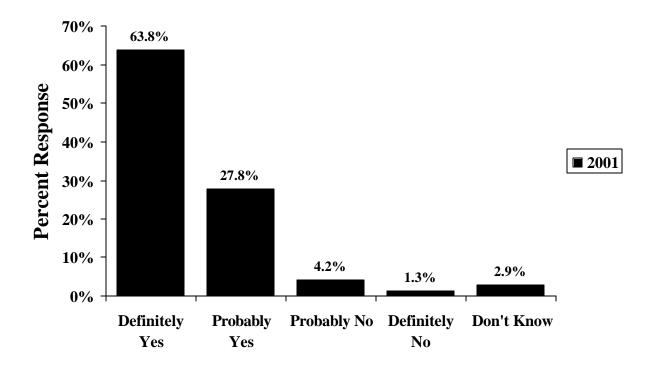
Most of the individuals sampled agreed (85.3%) that agriculture provides food at a reasonable price in Colorado (Figure 3). Less than 1 of 10 (7.8%) did not agree with this statement while fewer did not know (6.2%). These proportions were similar to 1996 responses. For those people who did not feel that agriculture provides food at a reasonable price, Appendix G gives a description of their comments as to why food is not reasonably priced, and nearly everyone attributed higher prices to factors other than producers themselves.

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Respondents were asked: Would you buy more Colorado grown and produced products if they were available and identified as being from Colorado?

This is a new question for 2001.

Figure 4 Would you buy more Colorado grown and produced products?



Almost all of the respondents (91.6%) indicated they would definitely or probably purchase more Colorado grown products if they were available and identified as being from Colorado.

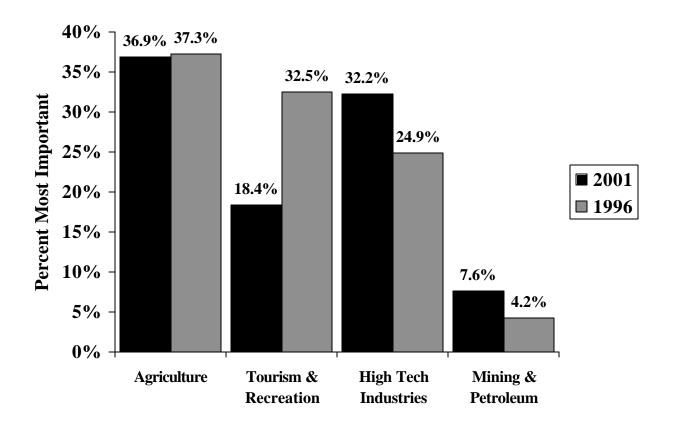


The Relative Economic Importance of Agriculture

Those surveyed were asked to listen to a list of four of Colorado's several economic sectors (Mining and Petroleum, High Technology Industries, Tourism and Recreation, and Agriculture) and then to: *rank them from most important to least important for the long-term future in Colorado*.

The order of questions was shuffled to prevent order bias. Figure 5 shows that agriculture was seen as most important among the four listed (36.9%), similar to 1996. While 1 of 3 (32.5%) 1996 respondents felt that tourism and recreation was the most important economic sector, this decreased to 1 of 5 (18.4%) in 2001. On the other hand, those that perceived high tech industries as most important went from 24.9% in 1996 to 32.2% in 2001. Mining and petroleum increased in perceived importance but was still seen as the least important of the 4 industries in both 1996 (4.2%) and 2001 (7.6%). Appendix H shows the breakdown of the second, third, and fourth most important economic sectors.

Figure 5 Most important economic sectors.

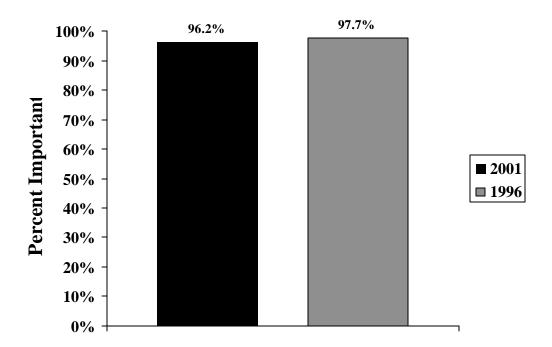


Protecting Ag Land and Water

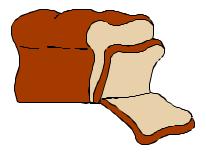
Those interviewed were asked: *How important do you think it is to maintain land and water in agricultural production?*

Nearly all respondents felt that maintaining agricultural land and water in agricultural production was *very or moderately important* (96.2%) a similar percentage was reported in 1996 (97.7 %).

Figure 6 Importance of maintaining land and water in agricultural production.



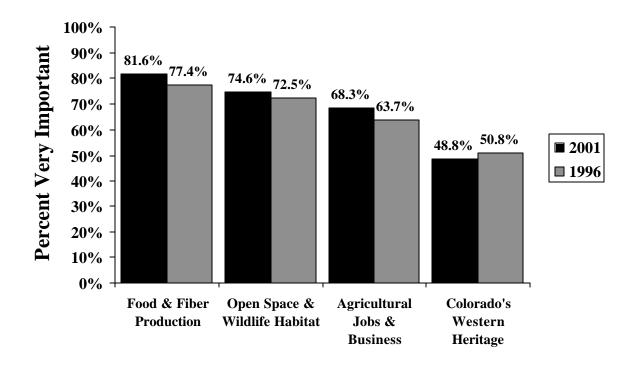
Response categories were: *very important*, *moderately important*, *slightly important*, and *not important*. The figure shows the percentage choosing *very* or *moderately important*.



Reasons For Protecting Ag Land and Water

Respondents were read a list of four possible reasons for protecting agricultural land and water and asked: *how important is each one for you?*

Figure 7
Importance of reasons for protecting agricultural land & water.



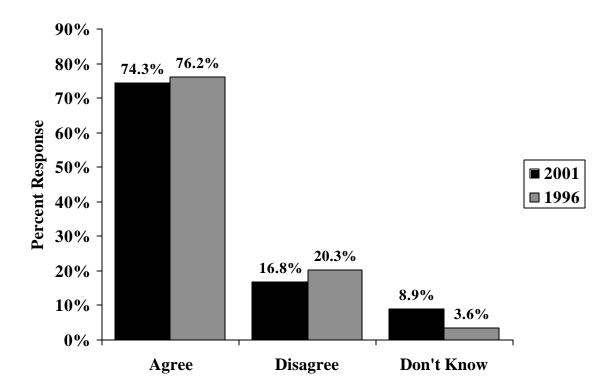
Response categories were: *very important*, *moderately important*, *slightly important*, or *not important*. The figure shows the percentage choosing *very important*.

A majority of Coloradans felt that three of the four reasons given for protecting Colorado's agricultural land and water were *very important*. Most important was: food and fiber production (81.6%), followed by maintaining open space and wildlife habitat (74.6%) and maintaining jobs and business related to agriculture (68.3%). About ½ of the respondents felt that maintaining Colorado's western heritage was a very important reason to protect agricultural land and water (48.8%). These were similar proportions for the same question when asked in 1996.

Purchasing Development Rights to Protect Ag Land

After a brief explanation of how the purchase of development rights can be used to protect agricultural land, those being interviewed were asked: *to what extent they agreed with this approach to maintaining agricultural land?*

Figure 8 Acceptability of purchasing development rights to prevent loss of agricultural lands.



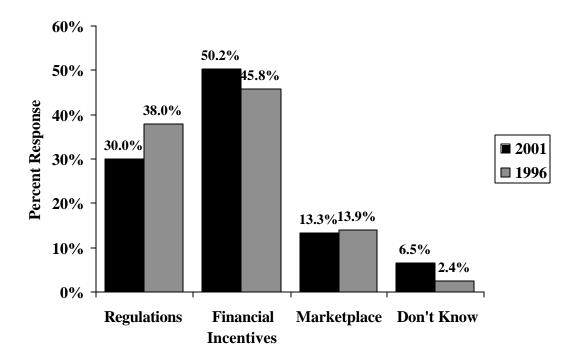
Response categories were: *strongly*, *moderately*, or *slightly* agree and *slightly*, *moderately*, or *strongly* disagree.

About three-fourths of the respondents (74.3%) agreed that public funds should be used to purchase the development rights from farmers and ranchers who were willing to sell them, similar to 1996 results (76.2%). Slightly fewer disagreed with this statement than in 1996 (16.8% versus 20.3%), but there was a 5.3% increase in those who did not know.

Preferred Approach to Protecting Ag land and Water in Colorado

Those interviewed were asked: what basic approach should be used to protect agricultural land and water? 1) Regulations and zoning that discourages the sale of farmland for development; 2) financial incentives that encourage land owners to keep farm land in agriculture; 3) or let the market place decide whether farm land remains in agriculture.

Figure 9
Preferred approach for protecting agricultural land & water.



Financial incentives that encourage landowners to keep farmland was the preferred approach by about 1 of 2 respondents (50.2%) in 2001, slightly up from 1996 (45.8%). Less than 1 of 3 (30.0%) preferred regulations and zoning in 2001, down from 38.0% in 1996. Allowing the market place to determine whether land remains in agriculture continued to be the least preferred alternative in 2001 (preferred by 13.3% of respondents).

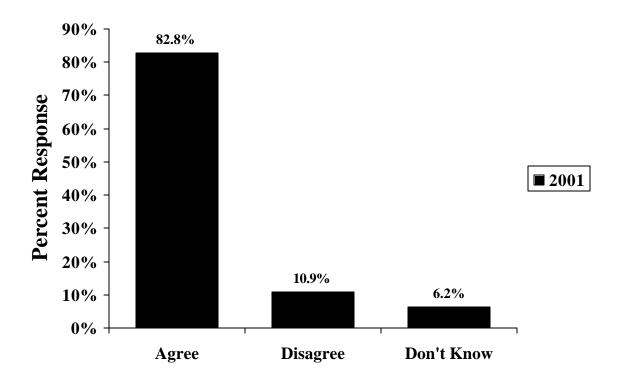


Respondents were asked: An increasing number of Colorado cities and counties have open space programs. Such programs typically acquire natural areas and trail corridors and allow public access. Some programs use part of their money to help farms or ranches as well. Do you agree or disagree that more local open space programs should use part of their money to help minimize the lose of farms and ranches?

This is a new question for 2001.

Figure 10

More open space programs should use part of their money to help minimize the loss of farms and ranches?



Response categories were: *strongly*, *moderately*, or *slightly* agree and *slightly*, *moderately*, or *strongly* disagree.

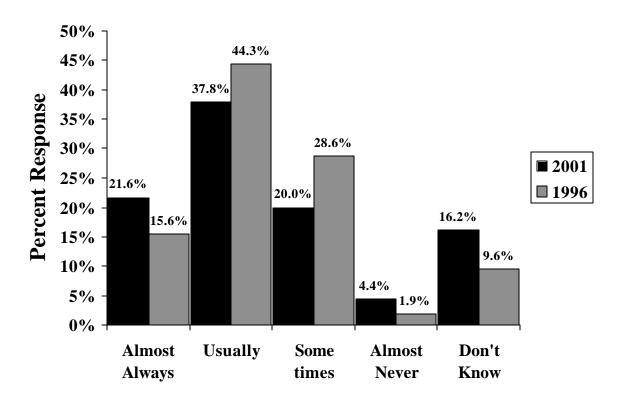
A majority (82.8%) of respondents agreed that more local open space programs should use part of their money to help minimize the loss of farms and ranches.

Evaluating Agricultural Practices

Environmental Responsibility

Respondents were asked: how responsible do you believe agriculture in Colorado has been in protecting the environment?

Figure 11 How responsible is agriculture in protecting the environment?



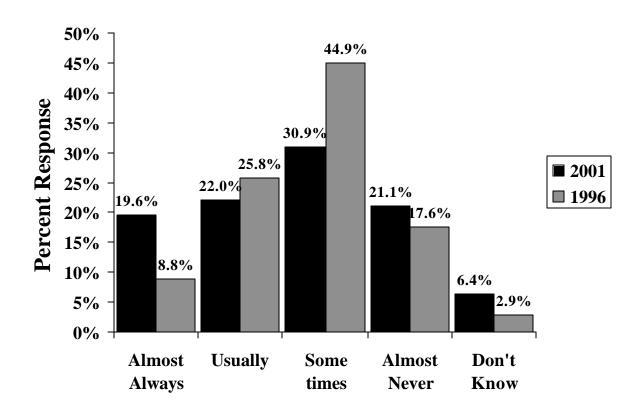
Nearly 6 of 10 respondents (59%) felt agriculture was almost always (21.6%) or usually (37.8%) environmentally responsible. When combined, these answers are similar to 1996 responses (60%). One of 5 respondents (20.0%) felt that agriculture was sometimes environmentally responsible down from 28.6% in 1996. There was a noticeable increase in those unable to judge.



Agricultural Chemicals

The next item asked: how necessary do you think it is to use agricultural chemicals in order to produce enough food for people?

Figure 12 How necessary is it to use chemicals to produce enough food?

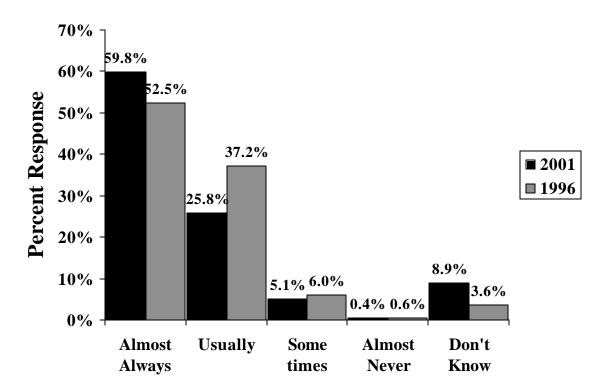


More than 4 of 10 respondents felt that agricultural chemicals are either almost always (19.6%) or usually (22.0%) necessary to produce enough food for people. This is higher than similar responses in 1996 (8.8% and 25.8%, respectively). This also reveals a 3.8% decrease in those who feel that agricultural chemicals are usually necessary and a notable 10.8% increase in those who feel that they are almost always necessary. Nonetheless, about 1 of 5 felt that chemicals were almost never necessary in 2001 (21.1%) and 1996 (17.6%).

Food Safety

Respondents were asked: how safe is the food that Colorado farmers and ranchers produce?

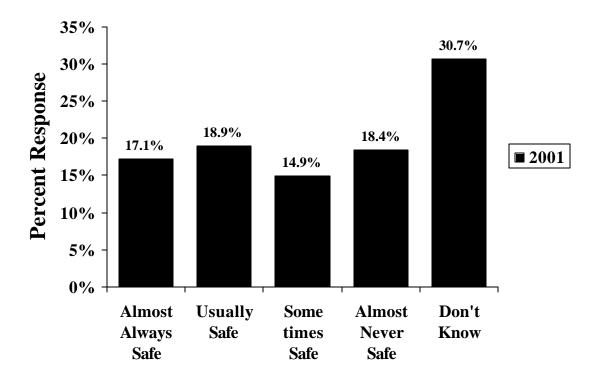
Figure 13 How safe is the food produced in Colorado?



About 6 of 10 respondents (59.8%) felt that food produced in Colorado is always safe, up slightly from 52.5% in 1996. The proportion that feels food produced in Colorado is usually safe was 25.8%, down from 37.2% in 1996 and the proportion that did not know increased from 3.6% in 1996 to 8.9% in 2001.

Respondents were asked: *In your opinion, how safe is genetically engineered food to eat?*This was a new question for 2001.

Figure 14 How safe is genetically engineered food to eat?



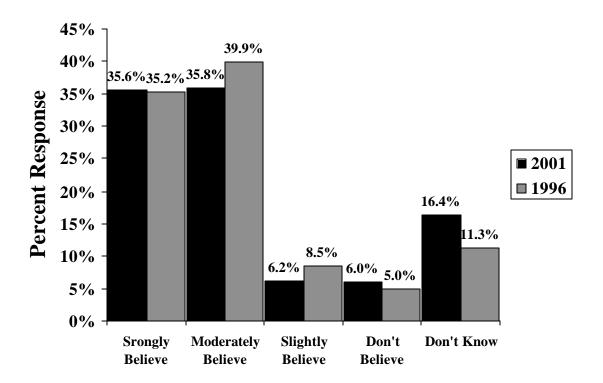
Respondents were split as to whether or not genetically engineered food is safe to eat. While about 17% felt genetically engineered food is almost always safe to eat, more than 18% believed it is almost never safe to eat. A large percent of respondents (31%) were not able to judge how safe genetically engineered food is to eat.



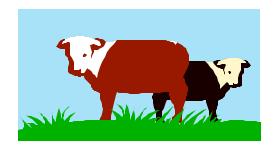
Treatment of Animals

Next people were asked: *do you believe that farm and ranch animals in Colorado are treated humanely?*

Figure 15
Are farm and ranch animals treated humanely?



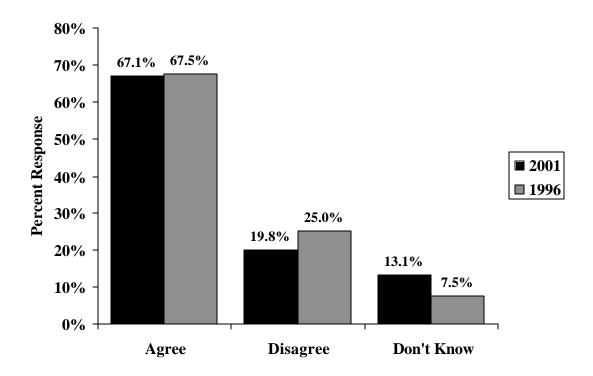
Responses regarding the treatment of farm and ranch animals were similar to those in 1996. Respondents were evenly split between strongly (35.6%) and moderately (35.8%) believing that farm and ranch animals are treated humanely in Colorado. These proportions are similar to those found in 1996. Just over 1 of 10 respondents slightly believed (6.2%) or did not believe (6.0%) animals were treated humanely. Notably, about 1 of 6 (16.4%) did not have enough information to formulate a reply.



Practices involving Wildlife, Grazing, and Soil and Water Conservation

Continuing with attitudes about current practices in agriculture, in separate items, respondents were asked to what extent they agreed or disagreed with the following statements: 1) *current* agricultural practices do a good job of providing cover or habitat for wildlife; 2) ranchers with permits to graze on public land treat that land appropriately; 3) current agricultural practices to conserve soil and water in Colorado are effective; and 4) public funds should be used to help farmers and ranchers improve wildlife habitat and conserve soil and water resources.

Figure 16 "Agricultural practices do a good job of providing cover or habitat for wildlife."

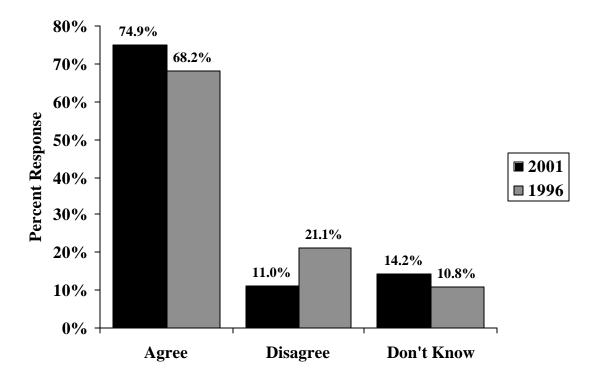


Response categories were: *strongly*, *moderately*, or *slightly* agree and *slightly*, *moderately*, or *strongly* disagree.

A similar number of respondents in 2001 (67.1%) as 1996 (67.5%) felt that agricultural practices do a good job of providing cover or habitat for wildlife. Disagreement with this statement decreased from 25.0% in 1996 to 19.8% in 2001. As with much of the study, the percentage of those who did not know has increased.

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Figure 17 "Ranchers with permits to graze on public land treat the land appropriately."

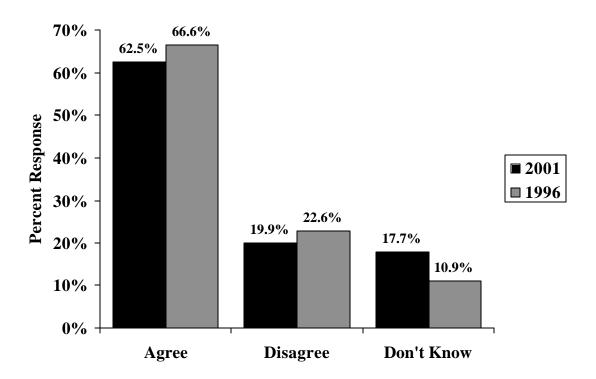


Response categories were: *strongly*, *moderately*, or *slightly* agree and *slightly*, *moderately*, or *strongly* disagree.

About three-fourths (74.9%) of the respondents agreed that ranchers with permits to graze on public land treat the land appropriately. This is up somewhat from 1996, where about 7 of 10 agreed with this statement (68.2%). Disagreement with this statement decreased from 21.1% in 1996 to 11.0% in 2001.



Figure 18 "Agricultural practices to conserve water and soil are effective."

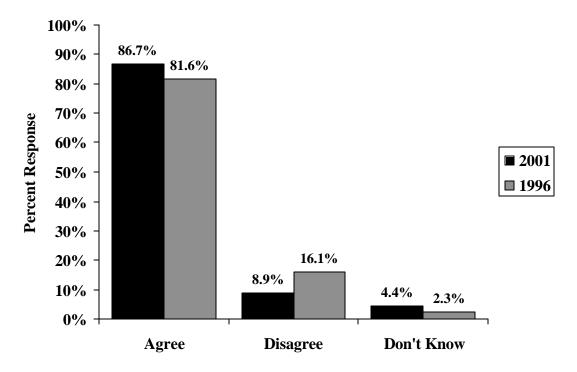


Response categories were: *strongly*, *moderately*, or *slightly* agree and *slightly*, *moderately*, or *strongly* disagree.

About 6 of 10 respondents (62.5%) agreed that agricultural practices to conserve water and soil are effective, slightly down from 1996 (66.6%). About one-fifth of the respondents disagreed with this statement (19.9%). Once again, the proportion of respondents who did not know was up (from 10.9% in 1996 to 17.7% in 2001).



Figure 19
"Public funds should be used to help farmers and ranchers improve wildlife habitat and conserve soil and water resources."



Response categories were: *strongly*, *moderately*, or *slightly* agree and *slightly*, *moderately*, or *strongly* disagree.

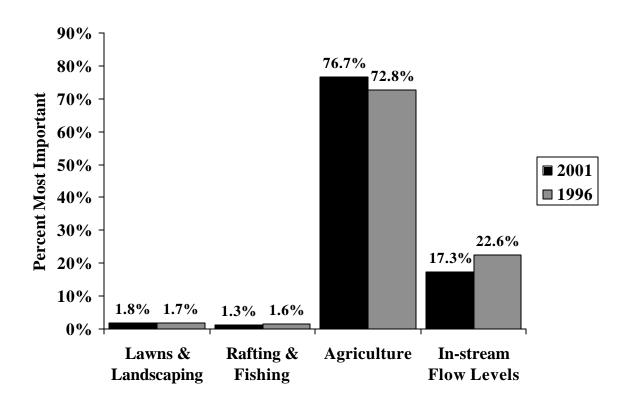
More than 8 of 10 respondents (86.7%) agreed that public funds should be used to help farmers and ranchers improve wildlife habitat and conserve soil and water resources. This is slightly higher than the level of agreement in 1996 (81.6%). Less than 1 of 10 (8.9%) disagreed with this statement, down from 1996 (16.1%).



Water Allocation

It was explained to respondents that water for growth is often transferred from agriculture and that providing water to agriculture can mean constraints on other uses of water. Respondents were read a list of 4 uses of water: 1) Lawns and Landscaping; 2) Rafting and Fishing; 3) Agriculture; 4) Maintaining In-stream Flows, and then asked: *in a dry year, which use of water would be your top priority, second priority and third priority.* (questions were asked one by one)

Figure 20
Top water priority in dry

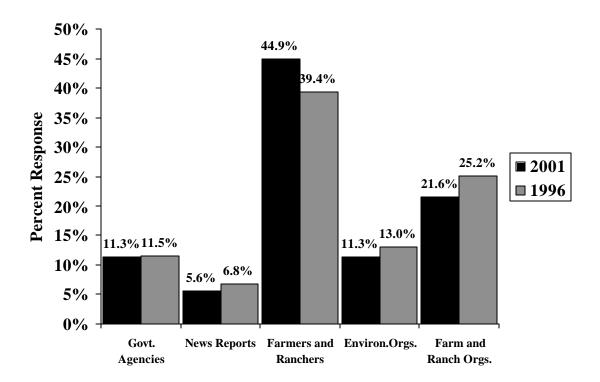


Three of 4 respondents (76.7%) indicated that agriculture should be the top priority for water allocation in dry years, similar to 1996 (72.8%). About 1 of 5 respondents said in-stream flow levels should be top priority (17.3%; 22.6% in 1996). Both lawn & landscaping and rafting and fishing were seen as low priorities in a dry year.

Sources of Information About Agriculture

Respondents were read a list of possible sources of information about agriculture:
1) Government agencies; 2) News reports in the media; 3) Farmers and ranchers themselves; 4) Environmental organizations; and 5) Farm and ranch organizations. They were then asked: *what source do you think is the most trustworthy?*

Figure 21 Most trustworthy sources of information about agriculture.



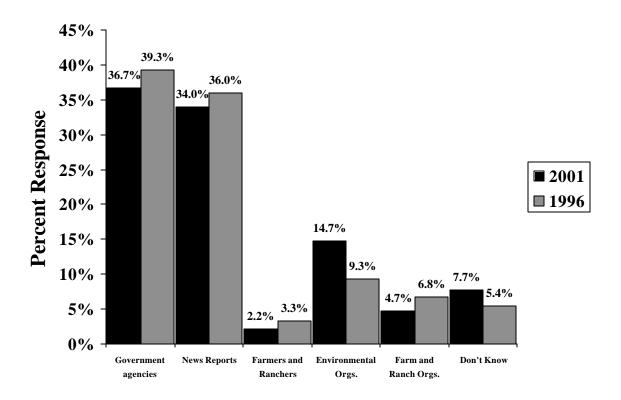
Farmers and ranchers (44.9%) and farm and ranch organizations (21.6%) were seen as the most trustworthy sources of information about agriculture, followed by environmental organizations (11.3%), government agencies (11.3%) and the media (5.6%). While confidence in information from farmers and ranchers increased and stayed about the same for government agencies, confidence in reports from the media or stakeholder organizations fell slightly.

Sources of Information About Agriculture

Respondents were also asked: what source do you think is the <u>least</u> trustworthy?

Those surveyed pointed to government agencies as the least trustworthy (36.7%) followed by the media (34%). Fifteen percent indicated distrust in environmental organizations, 4.7% in farm and ranch organizations, and 2.2% in farmers and ranchers themselves. In a reverse of the primary question, the media (34.0%) and government agencies (36.7%) were perceived as being the least trustworthy source of information about agriculture.

Figure 22
Least trustworthy sources of information about agriculture.



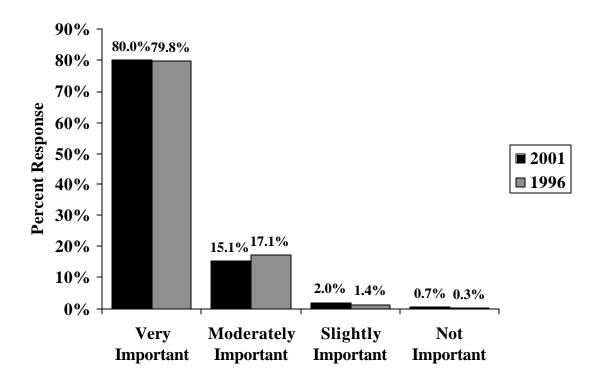


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Agriculture's Contribution to the Quality of Life in Colorado

The last item on the survey asked those interviewed: how important is the presence of ranches, farms and agriculture to the quality of life in Colorado?

Figure 23 Importance of agriculture for quality of life in Colorado.



As in 1996, 8 of 10 respondents (80.0%) indicated that agriculture was *very important* to the quality of life in Colorado while another 1 of 6 (15.1%) indicated it was moderately important.

Characteristics of Respondents

The average length of residence of those surveyed was 31.2, higher than the average in 1996 of 26.2 years. The average age of respondents was 48.9 years of age and a slightly larger percentage of those participating were women.

COMPARISONS BETWEEN RESPONDENTS

Comparisons were made of way different types of respondents answered the questions. Variables like geographic location, length of residence, and affiliation with agriculture were used to analyze possible differences for the following survey questions.

- ?? Most important economic sector: Eastern Slope and Western Slope respondents assigned more economic importance to agriculture than Front Range residents. Those living in Colorado for more than 10 years also assigned more economic importance to agriculture than those who have lived in the state 10 years or less. Those who are currently or have been affiliated with agriculture assigned more economic importance to agriculture.
- ?? Importance of protecting agricultural land/water: differences were not significant.
- ?? **Purchase of development rights:** differences were not significant.
- ?? Basic approach to protecting agricultural land / water: differences were not significant.
- ?? **How environmentally responsible is agriculture:** Those living in Colorado longer than 10 years and those who are or have been affiliated with agriculture were more likely to feel Colorado agriculture is responsible in protecting the environment.
- ?? **Necessity of using agricultural chemicals:** differences were not significant.
- ?? **Top water priority in a dry year:** Those having lived in Colorado 10 years or less were less likely to assign top priority to agriculture. Shorter term residents were more likely to select in-stream flows as a top priority.
- ?? Agriculture and the quality of life: Those living on the Eastern Plains or Western Slope and those living in Colorado longer than 10 years were more likely to assign importance to agriculture as contributing to the quality of life in Colorado. Those affiliated with agriculture were more likely to respond that agriculture is very important to the quality of life in Colorado.

The complete listing of percentages for these questions are listed in Appendix I.

APPENDIX A

Questionnaire with Results From all Respondents

	001 lo Department of Agriculture blic Opinion Survey		Drs. George Wallace, Alan Bright Peter Fix
Colorace survey rancher to agrice question	lo Department of Agriculture, and I' about attitudes toward agriculture s and agriculture specialists better unsulture and the environment. Your	m not soliciting. They ar in Colorado. Your resp derstand public perception participation is voluntary	of Colorado State University and the re conducting an important state-wide conses will help Colorado farmers, a about some important issues related and you can decline to answer any strictly confidential. Would you be
YES	Thank you. (continue survey)	Final n = 450 (Final n = 450)	951)
NO	Could we call at a more convenient	time?	
Just for	the record, I need to confirm that I ar	n speaking with someone	18 or older.
YES	Thanks. For your information, whe and other types of agricultural production.		we mean <u>farms, ranches, orchards,</u>
NO	Is there someone 18 or older who m Is there a better time to call back an	C	o is over 18?
First, w	ve will start with a few general ques		hown in bold, (1996 results shown Results are in percentages
1.	<u>91.8 (93.2)</u> 2 NO	ves, skip to question 2.)	
	b. Have you <u>ever</u> lived or worked or <u>39.2 (38.5)</u> 1 YES	n a farm or ranch?	
	60.8 (61.5) 2 NO		
2.	What is the <u>first thing</u> that comes to agriculture?(See separate file)	your mind when you hea	r the word
	(Record as much as you can verbati (If respondent hesitates, prompt wit You can just give me your first reac	h:)	Anything else?
3.	a. What products can you name that (See separate file)	at are grown or raised in C	Colorado?
	(Have patience here; give responde	nts plenty of time.)	Anything else?
	b. What agricultural product would (See separate file)	•	onomic importance for Colorado?

4. Do you agree or disagree that agriculture provides food at a reasonable price in Colorado?

85.3 (88.4)	1	AGREE	(if disagree,) Why do you feel that way? (See separate file)
7.8 (8.0)	2	DISAGREE	
6.2 (3.2) .7 (.4)	3	Don't know No response	

5. Would you buy more Colorado grown and produced products if they were available and identified as being from Colorado? (**Please note, question not asked in 1996**)

63.8	1	DEFINITELY YES
27.8	2	PROBABLY YES
4.2	3	PROBABLY NO
1.3	4	DEFINITELY NO
2.9	8	Don't know
	9	No response

- 6. Now I am going to read a list of four of Colorado's several economic sectors. Thinking about how important each might be for the long term <u>future</u> of Colorado, please rank them from <u>most important</u> to <u>least important</u>.
 - a) In your opinion, of these four economic sectors, which is the MOST important for the long term future of Colorado?

7.6 (4.2)	1	MINING AND PETROLEUM
32.2 (24.9)	2	HIGH TECH INDUSTRIES
18.4 (32.5)	3	TOURISM AND RECREATION
36.9 (37.3)	4	AGRICULTURE
4.7 (.7)	5	Don't know
.2 (.3)	6	No response

b) In your opinion, which is the SECOND most important for the long term future of Colorado?

18.7 (11.5)	1	MINING AND PETROLEUM
22.2 (26.3)	2	HIGH TECH INDUSTRIES
29.4 (30.3)	3	TOURISM AND RECREATION
28.5 (30.7)	4	AGRICULTURE
1.2 (.8)	5	Don't know
 (.4)	6	No response

c) Which is THIRD most important?

22.5 (20.7)	1	MINING AND PETROLEUM
25.5 (29.3)	2	HIGH TECH INDUSTRIES
26.5 (22.7)	3	TOURISM AND RECREATION
24.1 (25.3)	4	AGRICULTURE
1.4 (1.3)	5	Don't know
(.6)	6	No response

Here are a few questions about agriculture and growth.

7. In Colorado, considerable agricultural land and water is being converted to houses, roads and other uses. How important do you think it is to maintain land and water in agricultural production?

```
85.3 (84.5)
                     VERY IMPORTANT
             1
10.9 (13.2)
             2
                    MODERATELY IMPORTANT
2.2 (1.2)
             3
                    SLIGHTLY IMPORTANT
1.1 (.4)
             4
                    NOT IMPORTANT
                                         (if NOT IMPORTANT, skip to question 9)
             5
                    Don't know
.2 (.2)
 .2 (.4)
             6
                    No response
```

8. I will read you four reasons people give for protecting Colorado's agricultural land and water. Please tell me how important is each one for you. Maintaining agricultural land and water. . . (shuffled to prevent order bias)

```
a. For food and fiber production?
```

81.6 (77.4)	1	VERY IMPORTANT
15.7 (18.1)	2	MODERATELY IMPORTANT
1.6 (3.0)	3	SLIGHTLY IMPORTANT
.4 (.3)	4	NOT IMPORTANT
.7 (.6)	5	Don't know
 (.6)	6	No response

b. For maintaining open space and wildlife habitat?

74.6 (72.5)	1	VERY IMPORTANT
19.1 (21.1)	2	MODERATELY IMPORTANT
4.9 (4.4)	3	SLIGHTLY IMPORTANT
.9 (1.1)	4	NOT IMPORTANT
.2 (.3)	5	Don't know
.2 (.5)	6	No response

c. For maintaining jobs and business related to agriculture?

68.3 (63.7)	1	VERY IMPORTANT
25.4 (30.9)	2	MODERATELY IMPORTANT
5.6 (3.6)	3	SLIGHTLY IMPORTANT
.7 (.5)	4	NOT IMPORTANT
 (.6)	5	Don't know
 (.6)	6	No response

d. For maintaining Colorado's western heritage?

48.8 (50.8)	1	VERY IMPORTANT
30.3 (30.4)	2	MODERATELY IMPORTANT
12.1 (13.3)	3	SLIGHTLY IMPORTANT
6.7 (4.5)	4	NOT IMPORTANT
1.6 (.2)	5	Don't know
.4 (.7)	6	No response

9. Agricultural lands are being converted to non-agricultural uses. I'd like to know your thoughts about one way of preventing this. It is possible to use public funds to buy the development rights from farmers and ranchers willing to sell them. The farmer or rancher would still own the land and be able to use it for agriculture, but the land couldn't be developed for housing or industrial purposes.

In general, do you agree or disagree with this approach for maintaining agricultural land?

AGREE	Would that be s	strongly	, moderately, or slightly?
	41.8 (45.1)	1	STRONGLY AGREE
	29.8 (28.1)	2	MODERATELY AGREE
	2.7 (3.0)	3	SLIGHTLY AGREE
DISAGREE	Would that be s	trongly	, moderately, or slightly?
	8.0 (9.3)	6	STRONGLY DISAGREE
	6.4 (9.4)	5	MODERATELY DISAGREE
	2.4 (1.6)	4	SLIGHTLY DISAGREE
	7.1 (2.5)	7	Don't know
	1.8 (1.1)	8	No response

10. What basic approach should be used to protect agricultural land and water in Colorado?

```
30.0 (38.0)1Regulations such as zoning that discourage the sale of farm land for development.50.2 (45.8)3Financial incentives that encourage land owners to keep farm land in agriculture.13.3 (13.9)5Let the market place decide whether farm land remains in agriculture.5.6 (1.1)7Don't know9 (1.3)8No response
```

11. An increasing number of Colorado cities and counties have open space programs. Such programs typically acquire natural areas and trail corridors and allow public access. Some programs use part of their money to help protect local farms or ranches as well. Do you Agree or Disagree that more local open space programs should use part of their money to help minimize the loss of farms and ranches? (Please note, question not asked in 1996)

AGREE	Would that be s	strongly, 1	noderately, or slightly?
	45.3	1	STRONGLY AGREE
	33.3	2	MODERATELY AGREE
	4.2	3	SLIGHTLY AGREE
DISAGREE	Would that be s	strongly, 1	noderately, or slightly?
	3.6	6	STRONGLY DISAGREE
	4.4	5	MODERATELY DISAGREE
	2.9	4	SLIGHTLY DISAGREE
	6.2	8	Don't know
		9	No response

Now we will look at a few issues related to farming practices, things like the use of agricultural chemicals, treatment of animals, and care for the land.

12. How responsible do you believe agriculture in Colorado has been in protecting the environment?

21.6 (15.6)	1	ALMOST ALWAYS RESPONSIBLE
37.8 (44.3)	2	USUALLY RESPONSIBLE
20.0 (28.6)	3	SOMETIMES RESPONSIBLE
4.4 (1.9)	4	ALMOST NEVER RESPONSIBLE
15.8 (8.8)	5	Don't know
.4 (.8)	6	No response

13. In your opinion, how safe is the food that Colorado farmers and ranchers produce?

```
59.8 (52.5)
             1
                   ALMOST ALWAYS SAFE
             2
25.8 (37.2)
                   USUALLY SAFE
             3
5.1 (6.0)
                   SOMETIMES SAFE
 .4 (.6)
             4
                   ALMOST NEVER SAFE
8.7 (3.0)
             5
                   Don't know
.2 (.6)
             6
                   No response
```

14. In your opinion, how safe is genetically engineered food to eat? (**Please note, question not asked in 1996**)

```
ALMOST ALWAYS SAFE
17.1 --
            1
18.9 --
            2
                  USUALLY SAFE
14.9 --
            3
                  SOMETIMES SAFE
18.4 --
            4
                  ALMOST NEVER SAFE
            8
29.1 --
                  Don't know
1.6 --
            9
                  No response
```

15. How necessary do you think it is to use agricultural chemicals in order to produce enough food for people?

19.6 (8.8)	1	ALMOST ALWAYS NECESSARY
22.0 (25.8)	2	USUALLY NECESSARY
30.9 (44.9)	3	SOMETIMES NECESSARY
21.1 (17.6)	4	ALMOST NEVER NECESSARY
6.2 (2.3)	5	Don't know
.2 (.6)	6	No response

16. Do you believe that farm and ranch animals in Colorado are treated humanely?

35.6 (35.2)	1	STRONGLY BELIEVE
35.8 (39.9)	2	MODERATELY BELIEVE
6.2 (8.5)	3	SLIGHTLY BELIEVE
6.0 (5.0)	4	DON'T BELIEVE
16.0 (10.4)	5	Don't know
.4 (.9)	6	No response

As we continue to think about current practices in agriculture, please tell me how you feel about the following statements.

17. Current agricultural practices do a good job providing cover or habitat for wildlife. In general, do you agree or disagree?

AGREE	Would that be	strongl	y, moderately, or slightly?
	23.1 (20.8)	1	STRONGLY AGREE
	40.2 (41.5)	2	MODERATELY AGREE
	3.8 (5.2)	3	SLIGHTLY AGREE
DISAGREE	Would that be	strongly	y, moderately, or slightly?
	5.8 (6.8)	6	STRONGLY DISAGREE
	9.1 (14.9)	5	MODERATELY DISAGREE
	4.9 (3.3)	4	SLIGHTLY DISAGREE
	12.4 (6.3)	7	Don't know
	.7 (1.2)	8	No response

18. Ranchers with permits to graze on public land treat that land appropriately. In general, do you agree or disagree?

AGREE Would that be strongly, moderately, or slightly? **29.3** (24.3) 1 STRONGLY AGREE 2 **40.7** (36.7) MODERATELY AGREE **4.9** (7.2) 3 SLIGHTLY AGREE Would that be strongly, moderately, or slightly? **DISAGREE 3.6** (8.0) STRONGLY DISAGREE **4.7** (10.6) 5 MODERATELY DISAGREE 4 SLIGHTLY DISAGREE **2.7** (2.5) 7 **14.0** (9.6) Don't know **.2** (1.2) 8 No response

19. Current agricultural practices in Colorado to conserve water and soil are effective. In general, do you agree or disagree?

Would that be strongly, moderately, or slightly? AGREE **16.7** (17.9) 1 STRONGLY AGREE **37.8** (37.7) 2 MODERATELY AGREE **8.0** (11.0) SLIGHTLY AGREE DISAGREE Would that be strongly, moderately, or slightly? **6.7** (5.9) STRONGLY DISAGREE **9.6** (11.5) 5 MODERATELY DISAGREE **3.6** (5.2) 4 SLIGHTLY DISAGREE 7 **17.3** (9.7) Don't know 8 **.4** (1.2) No response

20. Public funds should be used to help farmers and ranchers improve wildlife habitat and protect soil and water resources. In general, do you agree or disagree?

AGREE Would that be strongly, moderately, or slightly? **48.0** (47.2) STRONGLY AGREE 1 **32.9** (28.7) 2 MODERATELY AGREE **5.8** (5.7) 3 SLIGHTLY A GREE DISAGREE Would that be strongly, moderately, or slightly? **2.9** (5.7) STRONGLY DISAGREE **4.4** (8.2) 5 MODERATELY DISAGREE 4 SLIGHTLY DISAGREE **1.6** (2.2) **4.0** (1.5) 7 Don't know 8 No response **.4** (.8)

21. Water for growth is often transferred from agriculture. Providing water to agriculture can mean constraints on other uses of water. Please listen to the following uses of water, and tell me how you would rank them.

a. In a dry year, which water use would be your top priority?

1.8 (1.7)	1	LAWNS AND LANDSCAPING
1.3 (1.6)	2	RAFTING AND FISHING
76.7 (72.8)	3	AGRICULTURE
17.3 (22.6)	4	IN-STREAM FLOW LEVELS
2.7 (.2)	5	Don't know
.2 (1.2)	6	No response

```
b. Your second priority?
9.6 (6.5)
                    LAWNS AND LANDSCAPING
             1
14.6 (8.2)
             2
                    RAFTING AND FISHING
             3
16.7 (22.5)
                    AGRICULTURE
54.9 (60.4)
             4
                    IN-STREAM FLOW LEVELS
3.9 (1.2)
             5
                    Don't know
.2 (1.3)
             6
                    No response
c. Your third priority?
                    LAWNS AND LANDSCAPING
36.8 (31.1)
44.2 (52.1)
             2
                    RAFTING AND FISHING
 3.1 (2.2)
             3
                    AGRICULTURE
12.9 (10.5)
             4
                    IN-STREAM FLOW LEVELS
             5
1.9 (2.2)
                    Don't know
1.2 (1.9)
                    No response
```

22. a. Next I will go through a list of sources where you might receive information about agriculture. What source do you think is the *most* trustworthy?

11.3 (11.5)	1	GOVERNMENT AGENCIES
5.6 (6.8)	2	NEWS REPORTS IN THE MEDIA
44.9 (39.4)	3	FARMERS AND RANCHERS THEMSELVES
11.3 (13.0)	4	ENVIRONMENTAL ORGANIZATIONS
21.6 (25.2)	5	FARM AND RANCH ORGANIZATIONS
3.6 (2.0)	6	Don't know
1.8 (2.0)	7	No response

b. The *least* trustworthy?

00 0 (70 0)

6

36.7 (39.3)	1	GOVERNMENT AGENCIES
34.0 (36.0)	2	NEWS REPORTS IN THE MEDIA
2.2 (3.3)	3	FARMERS AND RANCHERS THEMSELVES
14.7 (9.3)	4	ENVIRONMENTAL ORGANIZATIONS
4.7 (6.8)	5	FARM AND RANCH ORGANIZATIONS
6.4 (3.3)	6	Don't know
1.3 (2.1)	7	No response

23. How important is the presence of ranches, farms, and agriculture to the quality of life in Colorado?

<u>80.0 (79.8)</u>	1	VERY IMPORTANT
15.1 (17.1)	2	MODERATELY IMPORTANT
2.0 (1.4)	3	SLIGHTLY IMPORTANT
.7 (.3)	4	NOT IMPORTANT
1.8 (.3)	5	Don't know
.4 (1.1)	6	No response
2.0 (1.4) .7 (.3) 1.8 (.3)	4 5	SLIGHTLY IMPORTANT NOT IMPORTANT Don't know

To close, we would like to ask you a couple of questions about yourself.

- 24. How many years have you lived in Colorado? **31.13** (26.2) YEARS 25. What is your age? **48.91** (40)
- 26. What is your zip code? _____ (89999 *No response*)

27. I don't have any more questions for you. Do you have any other comments?

(See separate file)

That is the end of the survey. Thank you so much for participating. The results of this study will be described in the media in April and May or you may contact the Colorado Department of Agriculture. Good night.

(The phone number for the Dept. of Ag. is (303)239-4100. Provide the number only if requested.)

28. Sex <u>42.9 (47.7)</u> 1 MALE 57.1 (52.3) 2 FEMALE

APPENDIX B

RESULTS FROM COLORADANS WHO HAVE LIVED IN COLORADO FOR 10 YEARS OR LESS.

RESULTS FROM COLORADANS WHO HAVE LIVED IN COLORADO FOR 10 YEARS OR LESS.

Please note the analysis for the 1996 report excluded the 'don't know' and 'no response' categories from the frequencies. The 1996 data was re-analyzed including the 'don't know' and 'no response' categories and, therefore, the frequencies differ slightly from the 1996 report.

Below are results on survey items that do not include the open-ended questions. Responses for 2001 **are shown in bold**, 1996 responses are in parentheses. Responses are in percentages.

2001 $\mathbf{n} = \mathbf{86}$ (1996 $\mathbf{n} = 238$)

1. a. Do you <u>currently</u> live or work on a farm or ranch?

1.2 (3.8)	1	YES (if yes, skip to question 2.)
98.8 (96.2)	2	NO

b. Have you ever lived or worked on a farm or ranch?

```
38.8 (35.4) 1 YES
61.2 (64.6) 2 NO
```

4. Do you agree or disagree that agriculture provides food at a reasonable price in Colorado?

```
      82.6 (87.4)
      1
      AGREE

      9.3 (9.2)
      2
      DISAGREE (if disagree,) why do you feel that way?

      7.0 (2.9)
      3
      Don't know

      1.2 (.4)
      4
      No response
```

5. Would you buy more Colorado grown and produced products if they were available and identified as being from Colorado? (**Please note, question not asked in 1996**)

62.8	1	DEFINITELY YES
<u>27.9</u>	2	PROBABLY YES
7.0	3	PROBABLY NO
1.2	4	DEFINITELY NO
1.2	8	Don't know
	9	No response

- 6. Now I am going to read a list of four of Colorado's several economic sectors. Thinking about how important each might be for the long term <u>future</u> of Colorado, please rank them from *most important* to *least important*.
 - a) In your opinion, of these four economic sectors, which is the MOST important for the long term future of Colorado?

7.0 (4.6)	1	MINING AND PETROLEUM
43.0 (31.1)	2	HIGH TECH INDUSTRIES
24.4 (34.5)	3	TOURISM AND RECREATION
19.8 (29.8)	4	AGRICULTURE
4.7	5	Don't know
1.2	6	No response

b) In your opinion, which is the SECOND most important for the long term future of Colorado?

12.3 (13.0)	1	MINING AND PETROLEUM
24.7 (28.6)	2	HIGH TECH INDUSTRIES
33.3 (28.6)	3	TOURISM AND RECREATION
28.4 (29.8)	4	AGRICULTURE
1.2	5	Don't know
	6	No response

c) Which is THIRD most important?

21.3 (19.7)	1	MINING AND PETROLEUM
18.8 (26.5)	2	HIGH TECH INDUSTRIES
23.8 (23.5)	3	TOURISM AND RECREATION
36.3 (30.3)	4	AGRICULTURE
	5	Don't know
	6	No response

Here are a few questions about agriculture and growth.

7. In Colorado, considerable agricultural land and water is being converted to houses, roads and other uses. How important do you think it is to maintain land and water in agricultural production?

81.4 (79.0)	1	VERY IMPORTANT	
14.0 (18.5)	2	MODERATELY IMPO	PRTANT
2.3 (1.7)	3	SLIGHTLY IMPORTA	NT
2.3 (.8)	4	NOT IMPORTANT	(if NOT IMPORTANT, skip to question 9)
	5	Don't know	
	6	No response	

8. I will read you four reasons people give for protecting Colorado's agricultural land and water. Please tell me how important is each one for you. Maintaining agricultural land and water. . . (shuffled to prevent order bias)

a. For food and fiber production?

69.0 (77.1)	1	VERY IMPORTANT
25.0 (19.1)	2	MODERATELY IMPORTANT
4.8 (3.0)	3	SLIGHTLY IMPORTANT
1.2 (.4)	4	NOT IMPORTANT
 (.4)	5	Don't know
	6	No response

b. For maintaining open space and wildlife habitat?

77.4 (75.8)	1	VERY IMPORTANT
19.0 (17.4)	2	MODERATELY IMPORTANT
2.4 (5.5)	3	SLIGHTLY IMPORTANT
1.2 (.8)	4	NOT IMPORTANT
 (.4)	5	Don't know
	6	No response

c. For maintaining jobs and business related to agriculture?

56.0 (58.9)	1	VERY IMPORTANT
35.7 (34.7)	2	MODERATELY IMPORTANT
8.3 (4.7)	3	SLIGHTLY IMPORTANT
 (.8)	4	NOT IMPORTANT
 (.8)	5	Don't know
	6	No response

d. For maintaining Colorado's western heritage?

35.7 (47.9)	1	VERY IMPORTANT
28.6 (29.7)	2	MODERATELY IMPORTANT
23.8 (18.6)	3	SLIGHTLY IMPORTANT
10.7 (3.8)	4	NOT IMPORTANT
1.2	5	Don't know
	6	No response

9. Agricultural lands are being converted to non-agricultural uses. I'd like to know your thoughts about one way of preventing this. It is possible to use public funds to buy the development rights from farmers and ranchers willing to sell them. The farmer or rancher would still own the land and be able to use it for agriculture, but the land couldn't be developed for housing or industrial purposes.

In general, do you agree or disagree with this approach for maintaining agricultural land?

AGREE Would that be strongly, moderately, or slightly?

39.5 (47.1) 1 STRONGLY AGREE

36.0 (23.1) 2 MODERATELY AGREE

3.5 (3.4) 3 SLIGHTLY AGREE

DISAGREE Would that be strongly, moderately, or slightly?

9.3 (11.3) 6 STRONGLY DISAGREE

	341 311 817	, moderately, or singlify.
9.3 (11.3)	6	STRONGLY DISAGREE
4.7 (10.1)	5	MODERATELY DISAGREE
2.3 (2.5)	4	SLIGHTLY DISAGREE
2.3 (2.5)	7	Don't know
2.3	8	No response

10. What bas ic approach should be used to protect agricultural land and water in Colorado?

38.4 (35.7)
 46.5 (47.5)
 Regulations such as zoning that discourage the sale of farm land for development.
 Financial incentives that encourage land owners to keep farm land in agriculture.

11.6 (15.1) 5 Let the market place decide whether farm land remains in agriculture.

2.3 (1.3) 7 Don't know

1.2 (.4) 8 No response

11. An increasing number of Colorado cities and counties have open space programs. Such programs typically acquire natural areas and trail corridors and allow public access. Some programs use part of their money to help protect local farms or ranches as well. Do you Agree or Disagree that more local open space programs should use part of their money to help minimize the loss of farms and ranches? (Please note, question not asked in 1996)

AGREE	Would	that be str	ongly, m	oderately, or slightly?
	41.9		1	STRONGLY AGREE
	34.9		2	MODERATELY AGREE
	7.0		3	SLIGHTLY AGREE
DISAGREE	Would	that be str	ongly, m	oderately, or slightly?
	4.7		6	STRONGLY DISAGREE
	4.7		5	MODERATELY DISAGREE
	4.7		4	SLIGHTLY DISAGREE
	2.3		8	Don't know
			9	No response

Now we will look at a few issues related to farming practices, things like the use of agricultural chemicals, treatment of animals, and care for the land.

12. How responsible do you believe agriculture in Colorado has been in protecting the environment?

12.8 (13.0)	1	ALMOST ALWAYS RESPONSIBLE
34.9 (40.3)	2	USUALLY RESPONSIBLE
22.1 (29.8)	3	SOMETIMES RESPONSIBLE
3.5 (.8)	4	ALMOST NEVER RESPONSIBLE
26.7 (15.1)	5	Don't know
(.8)	6	No response

13. In your opinion, how safe is the food that Colorado farmers and ranchers produce?

51.2 (50.4)	1	ALMOST ALWAYS SAFE
29.1 (37.0)	2	USUALLY SAFE
5.8 (7.1)	3	SOMETIMES SAFE
 (1.3)	4	ALMOST NEVER SAFE
14.0 (4.2)	5	Don't know
	6	No response

14. In your opinion, how safe is genetically engineered food to eat? (Please note, question not asked in 1996)

16.3	1	ALMOST ALWAYS SAFE
22.1	2	USUALLY SAFE
18.6	3	SOMETIMES SAFE
19.8	4	ALMOST NEVER SAFE
23.3	8	Don't know
	9	No response

15. How necessary do you think it is to use agricultural chemicals in order to produce enough food for people?

12.8 (11.3)	1	ALMOST ALWAYS NECESSARY
22.1 (21.8)	2	USUALLY NECESSARY
36.0 (43.7)	3	SOMETIMES NECESSARY
25.6 (21.8)	4	ALMOST NEVER NECESSARY
3.5 (1.3)	5	Don't know
	6	No response

16. Do you believe that farm and ranch animals in Colorado are treated humanely?

31.4 (28.6)	1	STRONGLY BELIEVE
31.4 (39.5)	2	MODERATELY BELIEVE
8.1 (9.7)	3	SLIGHTLY BELIEVE
4.7 (5.5)	4	DON'T BELIEVE
24.4 (16.4)	5	Don't know
 (.4)	6	No response

As we continue to think about current practices in agriculture, please tell me how you feel about the following statements.

17. Current agricultural practices do a good job providing cover or habitat for wildlife. In general, do you agree or disagree?

AGREE	Would that be strongly, moderately, or slightly?		
	18.6 (22.7)	1	STRONGLY AGREE
	41.9 (37.0)	2	MODERATELY AGREE
	3.5 (5.9)	3	SLIGHTLY AGREE
DISAGREE	Would that be s	trongl	y, moderately, or slightly?
	7.0 (7.6)	6	STRONGLY DISAGREE
	9.3 (16.4)	5	MODERATELY DISAGREE
	2.3 (3.8)	4	SLIGHTLY DISAGREE
	16.3 (6.7)	7	Don't know
	1.2	8	No response

18. Ranchers with permits to graze on public land treat that land appropriately. In general, do you agree or disagree?

AGREE

Would that he strongly, moderately, or slightly?

AGREE	Would that be s	trongly, 1	noderately, or slightly?
	22.1 (19.7)	1	STRONGLY AGREE
	40.7 (35.7)	2	MODERATELY AGREE
	2.3 (8.8)	3	SLIGHTLY AGREE
DISAGREE	Would that be s	trongly, 1	moderately, or slightly?
	8.1 (9.7)	6	STRONGLY DISAGREE
	5.8 (10.9)	5	MODERATELY DISAGREE
	2.3 (1.7)	4	SLIGHTLY DISAGREE
	18.6 (13.4)	7	Don't know
		8	No response

19. Current agricultural practices in Colorado to conserve water and soil are effective. In general, do you agree or disagree?

AGREE	Would that be s	strongly	y, moderately, or slightly?
	11.6 (15.1)	1	STRONGLY AGREE
	36.0 (38.2)	2	MODERATELY AGREE
	8.1 (11.8)	3	SLIGHTLY AGREE
DISAGREE	Would that be s	strongly	y, moderately, or slightly?
	7.0 (3.8)	6	STRONGLY DISAGREE
	10.5 (11.8)	5	MODERATELY DISAGREE
	3.5 (5.5)	4	SLIGHTLY DISAGREE
	22.1 (13.0)	7	Don't know
	1.2 (.8)	8	No response

20. Public funds should be used to help farmers and ranchers improve wildlife habitat and protect soil and water resources. In general, do you agree or disagree?

AGREE	Would that be	strongly, 1	noderately, or slightly?
	51.2 (51.3)	1	STRONGLY AGREE
	33.7 (26.5)	2	MODERATELY AGREE
	3.5 (5.5)	3	SLIGHTLY AGREE
DISAGREE	Would that be	strongly, r	noderately, or slightly?
	1.2 (4.2)	6	STRONGLY DISAGREE
	7.0 (8.0)	5	MODERATELY DISAGREE
	 (3.8)	4	SLIGHTLY DISAGREE
	3.5 (.8)	7	Don't know
	<u></u>	8	No response

- 21. Water for growth is often transferred from agriculture. Providing water to agriculture can mean constraints on other uses of water. Please listen to the following uses of water, and tell me how you would rank them.
 - a. In a dry year, which water use would be your top priority?

3.5 (2.5)	1	LAWNS AND LANDSCAPING
2.3 (.8)	2	RAFTING AND FISHING
58.1 (65.5)	3	AGRICULTURE
30.2 (30.3)	4	IN-STREAM FLOW LEVELS
5.8	5	Don't know
(.8)	6	No response

b. Your second priority?

7.4 (5.9)	1	LAWNS AND LANDSCAPING
14.8 (7.6)	2	RAFTING AND FISHING
29.6 (28.2)	3	AGRICULTURE
48.1 (57.6)	4	IN-STREAM FLOW LEVELS
<u></u>	5	Don't know
(.8)	6	No response

c. Your third priority?

28.4 (26.9)	1	LAWNS AND LANDSCAPING
53.1 (59.2)	2	RAFTING AND FISHING
6.2 (4.6)	3	AGRICULTURE
11.1 (8.0)	4	IN-STREAM FLOW LEVELS
1.2 (.4)	5	Don't know
 (.8)	6	No response

a. Next I will go through a list of sources where you might receive information about agriculture. What source do you think is the *most* trustworthy?

16.3 (13.0)	1	GOVERNMENT AGENCIES
8.1 (7.6)	2	NEWS REPORTS IN THE MEDIA
36.0 (36.6)	3	FARMERS AND RANCHERS THEMSELVES
18.6 (16.0)	4	ENVIRONMENTAL ORGANIZATIONS
18.6 (22.3)	5	FARM AND RANCH ORGANIZATIONS
1.2 (1.7)	6	Don't know
1.2 (2.9)	7	No response

b. The *least* trustworthy?

33.7 (47.1)	1	GOVERNMENT AGENCIES
33.7 (28.6)	2	NEWS REPORTS IN THE MEDIA
2.3 (2.9)	3	FARMERS AND RANCHERS THEMSELVES
15.1 (6.3)	4	ENVIRONMENTAL ORGANIZATIONS
4.7 (10.1)	5	FARM AND RANCH ORGANIZATIONS
7.0 (3.4)	6	Don't know
3.5 (1.7)	7	No response

23. How important is the presence of ranches, farms, and agriculture to the quality of life in Colorado?

```
1
                    VERY IMPORTANT
74.4 (78.6)
15.1 (18.5)
             2
                    MODERATELY IMPORTANT
             3
 3.5 (1.7)
                    SLIGHTLY IMPORTANT
 2.3 (.4)
             4
                    NOT IMPORTANT
             5
 4.7 (.4)
                    Don't know
 -- (.4)
                   No response
             6
```

To close, we would like to ask you a couple of questions about yourself.

- 24. How many years have you lived in Colorado? 4.92 (4.48) YEARS
- 25. What is your age? **39.08.** (40)

That is the end of the survey. Thank you so much for participating. The results of this study will be described in the media in April and May or you may contact the Colorado Department of Agriculture. Good night.

(The phone number for the Dept. of Ag. is (303)239-4100. Provide the number only if requested.)

28. Sex <u>50.0 (45.4)</u> 1 MALE 50.0 (54.6) 2 FEMALE

APPENDIX C

RESULTS FROM COLORADANS WHO ARE NOT FROM THE FRONT RANGE

These results are from respondents living on the Eastern Plains or on the Western Slope and do not include open-ended questions.

Please note the analysis for the 1996 report excluded the 'don't know' and 'no response' categories from the frequencies. The 1996 data was re-analyzed including the 'don't know' and 'no response' categories and, therefore, the frequencies differ slightly from the 1996 report.

Below are results on survey items that do not include the open-ended questions. Responses for 2001 **are shown in bold**, 1996 responses are in parentheses. Responses are in percentages.

2001 $\mathbf{n} = \mathbf{91}$ (1996 $\mathbf{n} = 184$)

1. a. Do you <u>currently</u> live or work on a farm or ranch?

22.0 (16.8)	1	YES (if yes, skip to question 2.)
78.0 (83.2)	2	NO

b. Have you ever lived or worked on a farm or ranch?

```
56.3 (43.8) 1 YES
43.7 (56.2) 2 NO
```

4. Do you agree or disagree that agriculture provides food at a reasonable price in Colorado?

```
      84.6 (83.2)
      1
      AGREE

      9.9 (13.0)
      2
      DISAGREE (if disagree,) Why do you feel that way?

      3.3 (3.3)
      3
      Don't know

      2.2 (.5)
      4
      No response
```

5. Would you buy more Colorado grown and produced products if they were available and identified as being from Colorado? (Please note, question not asked in 1996)

```
      61.5
      --
      1
      DEFINITELY YES

      34.1
      --
      2
      PROBABLY YES

      --
      --
      3
      PROBABLY NO

      1.1
      --
      4
      DEFINITELY NO

      3.3
      --
      8
      Don't know

      --
      --
      9
      No response
```

- 6. Now I am going to read a list of four of Colorado's several economic sectors. Thinking about how important each might be for the long term <u>future</u> of Colorado, please rank them from *most important* to *least important*.
 - a) In your opinion, of these four economic sectors, which is the MOST important for the long term future of Colorado?

11.0 (6.0)	1	MINING AND PETROLEUM
9.9 (15.2)	2	HIGH TECH INDUSTRIES
19.8 (37.0)	3	TOURISM AND RECREATION
52.7 (41.8)	4	AGRICULTURE
5.5	5	Don't know
1.1	6	No response

b) In your opinion, which is the SECOND most important for the long term future of Colorado?

23.5 (10.9)	1	MINING AND PETROLEUM
23.5 (23.4)	2	HIGH TECH INDUSTRIES
28.2 (31.0)	3	TOURISM AND RECREATION
22.4 (33.7)	4	AGRICULTURE
2.4 (.5)	5	Don't know
 (.5)	6	No response

c) Which is THIRD most important?

24.1 (23.4)	1	MINING AND PETROLEUM
32.5 (33.7)	2	HIGH TECH INDUSTRIES
28.9 (19.6)	3	TOURISM AND RECREATION
13.3 (20.7)	4	AGRICULTURE
1.2 (2.2)	5	Don't know
 (.5)	6	No response

Here are a few questions about agriculture and growth.

7. In Colorado, considerable agricultural land and water is being converted to houses, roads and other uses. How important do you think it is to maintain land and water in agricultural production?

91.2 (88.0)	1	VERY IMPORTANT	
8.8 (9.8)	2	MODERATELY IMPOR	RTANT
 (2.2)	3	SLIGHTLY IMPORTAN	NT
	4	NOT IMPORTANT	(if NOT IMPORTANT, skip to question 8)
	5	Don't know	
<u> </u>	6	No response	

- 8. I will read you four reasons people give for protecting Colorado's agricultural land and water. Please tell me how important is each one for you. Maintaining agricultural land and water. . . (shuffled to prevent order bias)
 - a. For food and fiber production?

81.3 (83.7)	1	VERY IMPORTANT
17.6 (14.1)	2	MODERATELY IMPORTANT
(1.1)	3	SLIGHTLY IMPORTANT
(1.1)	4	NOT IMPORTANT
<u></u>	5	Don't know
1.1	6	No response

b. For maintaining open space and wildlife habitat?

69.2 (67.4)	1	VERY IMPORTANT
27.5 (24.5)	2	MODERATELY IMPORTANT
2.2 (6.5)	3	SLIGHTLY IMPORTANT
 (1.6)	4	NOT IMPORTANT
	5	Don't know
1.1	6	No response

c. For maintaining jobs and business related to agriculture?

74.7 (67.4)	1	VERY IMPORTANT
19.8 (27.7)	2	MODERATELY IMPORTANT
5.5 (3.3)	3	SLIGHTLY IMPORTANT
 (1.1)	4	NOT IMPORTANT
 (.5)	5	Don't know
	6	No response

d. For maintaining Colorado's western heritage?

52.7 (60.3)	1	VERY IMPORTANT
33.0 (26.1)	2	MODERATELY IMPORTANT
7.7 (7.1)	3	SLIGHTLY IMPORTANT
3.3 (6.0)	4	NOT IMPORTANT
2.2	5	Don't know
1.1 (.5)	6	No response

9. Agricultural lands are being converted to non-agricultural uses. I'd like to know your thoughts about one way of preventing this. It is possible to use public funds to buy the development rights from farmers and ranchers willing to sell them. The farmer or rancher would still own the land and be able to use it for agriculture, but the land couldn't be developed for housing or industrial purposes.

In general, do you agree or disagree with this approach for maintaining agricultural land?

Would that be str	ongly, m	oderately, or slightly?
46.2 (37.0)	1	STRONGLY AGREE
24.2 (27.7)	2	MODERATELY AGREE
2.2 (4.3)	3	SLIGHTLY AGREE
Would that be str	ongly, m	oderately, or slightly?
7.7 (12.5)	6	STRONGLY DISAGREE
7.7 (12.5)	5	MODERATELY DISAGREE
2.2 (2.7)	4	SLIGHTLY DISAGREE
8.8 (3.3)	7	Don't know
1.1	8	No response
	46.2 (37.0) 24.2 (27.7) 2.2 (4.3) Would that be str 7.7 (12.5) 7.7 (12.5) 2.2 (2.7)	24.2 (27.7) 2 2.2 (4.3) 3 Would that be strongly, m 7.7 (12.5) 6 7.7 (12.5) 5 2.2 (2.7) 4 8.8 (3.3) 7

10. What basic approach should be used to protect agricultural land and water in Colorado?

26.4 (34.2)1Regulations such as zoning that discourage the sale of farm land for development.53.8 (50.5)3Financial incentives that encourage land owners to keep farm land in agriculture.13.2 (13.6)5Let the market place decide whether farm land remains in agriculture.5.5 (1.6)7Don't know1.1 --8No response

11. An increasing number of Colorado cities and counties have open space programs. Such programs typically acquire natural areas and trail corridors and allow public access. Some programs use part of their money to help protect local farms or ranches as well. Do you Agree or Disagree that more local open space programs should use part of their money to help minimize the loss of farms and ranches? (Please note, question not asked in 1996)

AGREE	Would that be	e strongly, i	noderately, or slightly?
	49.5	1	STRONGLY AGREE
	34.1	2	MODERATELY AGREE
	3.3	3	SLIGHTLY AGREE
DISAGREE	Would that be	e strongly, 1	noderately, or slightly?
	3.3	6	STRONGLY DISAGREE
		5	MODERATELY DISAGREE
	<u> </u>	4	SLIGHTLY DISAGREE
	8.8	8	Don't know
		9	No response

Now we will look at a few issues related to farming practices, things like the use of agricultural chemicals, treatment of animals, and care for the land.

12. How responsible do you believe agriculture in Colorado has been in protecting the environment?

30.8 (21.2)	1	ALMOST ALWAYS RESPONSIBLE
35.2 (40.8)	2	USUALLY RESPONSIBLE
20.9 (32.1)	3	SOMETIMES RESPONSIBLE
2.2 (2.2)	4	ALMOST NEVER RESPONSIBLE
11.0 (3.8)	5	Don't know
	6	No response

13. In your opinion, how safe is the food that Colorado farmers and ranchers produce?

70.3 (54.3)	1	ALMOST ALWAYS SAFE
25.3 (34.2)	2	USUALLY SAFE
1.1 (8.7)	3	SOMETIMES SAFE
 (.5)	4	ALMOST NEVER SAFE
3.3 (2.2)	5	Don't know
	6	No response

14. In your opinion, how safe is genetically engineered food to eat? (**Please note, question not asked in 1996**)

<u> 19.8</u>	1	ALMOST ALWAYS SAFE
<u> 19.8</u>	2	USUALLY SAFE
13.2	3	SOMETIMES SAFE
19.8	4	ALMOST NEVER SAFE
26.4	8	Don't know
1.1	9	No response

15. How necessary do you think it is to use agricultural chemicals in order to produce enough food for people?

22.0 (10.9)	1	ALMOST ALWAYS NECESSARY
26.4 (29.3)	2	USUALLY NECESSARY
31.9 (43.5)	3	SOMETIMES NECESSARY
15.4 (13.0)	4	ALMOST NEVER NECESSARY
4.4 (3.3)	5	Don't know
	6	No response

16. Do you believe that farm and ranch animals in Colorado are treated humanely?

47.3 (39.7)	1	STRONGLY BELIEVE
38.5 (41.3)	2	MODERATELY BELIEVE
3.3 (9.2)	3	SLIGHTLY BELIEVE
2.2 (2.7)	4	DON'T BELIEVE
8.8 (7.1)	5	Don't know
	6	No response

As we continue to think about current practices in agriculture, please tell me how you feel about the following statements.

17. Current agricultural practices do a good job providing cover or habitat for wildlife. In general, do you agree or disagree?

Would that be st	trongly, m	noderately, or slightly?
35.2 (23.4)	1	STRONGLY AGREE
37.4 (44.6)	2	MODERATELY AGREE
2.2 (6.5)	3	SLIGHTLY AGREE
Would that be st	trongly, n	noderately, or slightly?
4.4 (8.2)	6	STRONGLY DISAGREE
5.5 (13.0)	5	MODERATELY DISAGREE
5.5 (1.6)	4	SLIGHTLY DISAGREE
8.8 (2.7)	7	Don't know
1.1	8	No response
	35.2 (23.4) 37.4 (44.6) 2.2 (6.5) Would that be st 4.4 (8.2) 5.5 (13.0) 5.5 (1.6) 8.8 (2.7)	37.4 (44.6) 2 2.2 (6.5) 3 Would that be strongly, m 4.4 (8.2) 6 5.5 (13.0) 5 5.5 (1.6) 4 8.8 (2.7) 7

18. Ranchers with permits to graze on public land treat that land appropriately. In general, do you agree or disagree?

AGREE	Would that be s	trongly	, moderately, or slightly?
	42.9 (33.2)	1	STRONGLY AGREE
	41.8 (30.4)	2	MODERATELY AGREE
	2.2 (7.1)	3	SLIGHTLY AGREE
DISAGREE	Would that be s	trongly	, moderately, or slightly?
	3.3 (9.2)	6	STRONGLY DISAGREE
	2.2 (9.8)	5	MODERATELY DISAGREE
	3.3 (2.7)	4	SLIGHTLY DISAGREE
	4.4 (7.1)	7	Don't know
	 (.5)	8	No response

19. Current agricultural practices in Colorado to conserve water and soil are effective. In general, do you agree or disagree?
AGREE Would that be strongly, moderately, or slightly?

AGREE	would that be s	trongry	, moderately, or slightly?
	25.3 (19.6)	1	STRONGLY AGREE
	38.5 (37.5)	2	MODERATELY AGREE
	6.6 (12.0)	3	SLIGHTLY AGREE
DISAGREE	Would that be s	trongly	, moderately, or slightly?
	3.3 (7.1)	6	STRONGLY DISAGREE
	7.7 (13.0)	5	MODERATELY DISAGREE
	4.4 (4.3)	4	SLIGHTLY DISAGREE
	14.3 (6.5)	7	Don't know
		8	No response

20. Public funds should be used to help farmers and ranchers improve wildlife habitat and protect soil and water resources. In general, do you agree or disagree?

AGREE Would that be strongly, moderately, or slightly?

	53.8 (52.2)	1	STRONGLY AGREE
	31.9 (24.5)	2	MODERATELY AGREE
	3.3 (6.0)	3	SLIGHTLY AGREE
DISAGREE	Would that be s	trongl	y, moderately, or slightly?
	4.4 (7.1)	6	STRONGLY DISAGREE
	2.2 (6.5)	5	MODERATELY DISAGREE
	 (2.2)	4	SLIGHTLY DISAGREE
	3.3 (1.6)	7	Don't know

- 21. Water for growth is often transferred from agriculture. Providing water to agriculture can mean constraints on other uses of water. Please listen to the following uses of water, and tell me how you would rank them.
 - a. In a dry year, which water use would be your top priority?

 (3.3)	1	LAWNS AND LANDSCAPING
 (1.6)	2	RAFTING AND FISHING
79.1 (75.0)	3	AGRICULTURE
18.7 (19.0)	4	IN-STREAM FLOW LEVELS
2.2 (.5)	5	Don't know
 (.5)	6	No response

b. Your second priority?

4.5 (7.1)	1	LAWNS AND LANDSCAPING
16.9 (11.4)	2	RAFTING AND FISHING
15.7 (19.6)	3	AGRICULTURE
58.4 (59.2)	4	IN-STREAM FLOW LEVELS
4.5 (2.2)	5	Don't know
 (.5)	6	No response

c. Your third priority?

	-	
42.4 (31.5)	1	LAWNS AND LANDSCAPING
42.4 (48.4)	2	RAFTING AND FISHING
3.5 (3.8)	3	AGRICULTURE
8.2 (10.3)	4	IN-STREAM FLOW LEVELS
1.2 (4.3)	5	Don't know
2.4 (1.6)	6	No response

a. Next I will go through a list of sources where you might receive information about agriculture. What source do you think is the *most* trustworthy?

9.9 (12.0)	1	GOVERNMENT AGENCIES
3.3 (4.3)	2	NEWS REPORTS IN THE MEDIA
52.7 (40.2)	3	FARMERS AND RANCHERS THEMSELVES
6.6 (8.7)	4	ENVIRONMENTAL ORGANIZATIONS
24.4 (32.6)	5	FARM AND RANCH ORGANIZATIONS
3.3 (1.6)	6	Don't know
 (.5)	7	No response

b. The *least* trustworthy?

37.4 (39.1)	1	GOVERNMENT AGENCIES
31.9 (32.6)	2	NEWSREPORTS IN THE MEDIA
2.2 (3.3)	3	FARMERS AND RANCHERS THEMSELVES
20.9 (13.6)	4	ENVIRONMENTAL ORGANIZATIONS
2.2 (7.1)	5	FARM AND RANCH ORGANIZATIONS
4.4 (1.6)	6	Don't know
1.1 (2.7)	7	No response

23. How important is the presence of ranches, farms, and agriculture to the quality of life in Colorado?

95.6 (84.2)	1	VERY IMPORTANT
3.3 (13.6)	2	MODERATELY IMPORTANT
 (1.6)	3	SLIGHTLY IMPORTANT
	4	NOT IMPORTANT
1.1	5	Don't know
 (.5)	6	No response

To close, we would like to ask you a couple of questions about yourself.

24) How many years have you lived in Colorado? 38.26 (30.4) YEARS

25) What is your age? **51.93** (40)

That is the end of the survey. Thank you so much for participating. The results of this study will be described in the media in April and May or you may contact the Colorado Department of Agriculture. Good night.

(The phone number for the Dept. of Ag. is (303)239-4100. Provide the number only if requested.)

28) Sex <u>40.7 (50.5 -change)</u> 1 MALE <u>59.3 (49.5 - change)</u> 2 FEMALE

APPENDIX D

Summary of Results from Question #2:

"What is the <u>first thing</u> that comes to your mind when you hear the word *agriculture*?"

In order to provide some insight into responses garnered from the open-ended question, "What is the <u>first thing</u> that comes to your mind when you here the word *agriculture*?", the following summary was developed.

In 1996, open-ended data were analyzed by repeatedly reading through responses and generating categories which were distinct and specific. Answers were then tallied for all categories using the *search* and *replace* commands in Microsoft Word, with a total of 1390 responses analyzed. In 2001, a slightly different method was used. All responses were analyzed as 'frequencies' in SPSS. Frequencies group the common responses, i.e., corn or cattle. In 2001, 882 responses were analyzed. The responses are listed in descending order of the number of occurrences in 2001. At the end of each list are products listed in 1996, but not in 2001.

Livestock

CATEGORY	NUMBI	NUMBER OF OCCURRENCES				
	20	2001		996		
CATTLE	35	23.0%	98	55.7%		
COWS	33	21.7%				
LIVESTOCK	32	21.1%	13	7.4%		
ANIMALS	23	15.1%	24	13.6%		
POULTRY / CHICKENS	8	5.3%	2	1.1%		
HORSES	7	4.6%	8	4.5%		
PIGS	7	4.6%	4	2.3%		
BEEF	3	2.0%	9	5.1%		
WILDLIFE	3	2.0%				
SHEEP	1	0.7%	2	1.1%		
DAIRY CATTLE			13	7.4%		
VEAL			1	0.6%		
RAISING ANIMALS			1	0.6%		
PORK			1	0.6%		
TOTAL	152	100%	176	100%		

Ranches

	2001		19	96
RANCHING	17	44.7%	28	63.6%
RANCHES	16	42.1%	12	27.3%
FEED	4	10.5%	1	2.3%
MEAT	1	2.6%	2	4.5%
BREEDING			1	2.3%
TOTAL	38	100%	44	100%

Farms / Farmers / Farming

	20	01	19	996
FARM	170	30.8%	349	44.5%
FOOD	72	13.0%		
CROPS	68	12.3%	85	10.8%
CORN	38	6.9%	64	8.2%
WHEAT	31	5.6%	60	7.6%
PRODUCING / GROWING THINGS	30	5.4%	39	5.0%
GRAINS	15	2.7%	4	0.5%
VEGETABLES	14	2.5%	41	5.2%
HAY	13	2.4%	17	2.2%
FRUITS (in Colorado)	13	2.4%	23	2.9%
FIELDS	12	2.2%	20	2.5%
PLANTS	12	2.2%		
OTHER	11	2.0%		
DAIRY / DAIRY FARMS	9	1.6%		
IRRIGATION / WATER	6	1.1%	9	1.1%
SOYBEANS	6	1.1%	4	0.5%
GARDEN	6	1.1%	1	0.1%
ALFALFA	4	0.7%	7	0.9%
ECONOMY	4	0.7%		
PLANTING	3	0.5%	23	2.9%
POTATOES	3	0.5%	7	0.9%
FORESTRY / SILVICULTURE	3	0.5%	4	0.5%
TRACTORS	2	0.4%	6	0.8%
FORAGE	2	0.4%		
BARLEY	2	0.4%	2	0.3%
DIRT / SOIL	1	0.2%	6	0.8%
COTTON	1	0.2%	2	0.3%
CSU	1	0.2%	1	0.1%
FRUITS (not in Colorado)			4	0.5%
DEPARTMENT OF AGRICULTURE			1	0.1%
DRY AND IRRIGATION			1	0.1%
DRY LAND FARMING			1	0.1%
HEMP / POT			2	0.3%
NUTRIENTS			1	0.1%
ORGANIC			1	0.1%
TOTAL	552	100%	785	100%

Relatives in Agriculture / Personal Agriculture Experience

	20	001	19	996
PAST WORK EXPERIENCE	7	58.3%		
GRANDFATHER	1	8.3%	3	18.8%
GRANDMOTHER	1	8.3%		
HUSBAND	1	8.3%	1	6.3%
RELATIVES ON FARMS	1	8.3%	2	12.5%
BROTHER'S FARM	1	8.3%		
MY GRANDPARENTS			2	12.5%
CHILDHOOD EXPERIENCE			3	18.8%
MY DAUGHTER			1	6.3%
MY FATHER IS AN AGRICULTURE			1	
TEACHER				6.3%
DAD'S FARM			1	6.3%
WORKING FOR DEPT OF AG PREVIOUSLY			1	6.3%
WEATHER			1	6.3%
TOTAL	12	100%	16	100%

Cultural / Misc.

	2001		19	96
MIGRANT WORKERS	1	100%	1	20.0%
FAMILY CULTURE			1	20.0%
NATIONALITIES			1	20.0%
TACOS			1	20.0%
VEGETARIAN			1	20.0%
TOTAL	1	100%	5	100%

Sense of Place / Locations

	20	001	19	96
RURAL LANDSCAPE IMAGES	21	42.0%	5	5.2%
OPEN SPACE	11	22.0%	1	1.0%
LOSS / PRESERVATION OF AG / FARM	5	10%	2	2.1%
LAND				
HOME	2	4.0%	2	2.1%
IOWA	2	4.0%		
NEBRASKA	2	4.0%		
AMENITY VALUES	2	4.0%		
OTHER	2	4.0%		
COUNTRY	1	2.0%	2	2.1%
KANSAS	1	2.0%		
EASTERN COLORADO	1	2.0%		
*LAND RELATED COMMENTS			78	80.4%
GROCERY STORE			2	2.1%
GROUND			1	1.0%
HEART OF AMERICA			1	1.0%
JULESBURG			1	1.0%
SAN LUIS VALLEY		_	1	1.0%
WESTERN SLOPE			1	1.0%
TOTAL	50	100%	97	100%

^{*} For the 2001 data analysis, we decided to break down the general "land related comments" category used in 1996 into more specific responses to improve information for 2001 and future replications.

Work Ethics / Values

	20	001	19	96
HARD WORK	17	25.0%	1	2.2%
WORK	15	22.1%	23	50.0%
A WAY OF LIFE / LIFESTYLE /	13		3	
LIVELIHOOD / GOOD LIFE		19.1%		6.5%
IMPORTANCE OF AGRICULTURE	9	13.2%	7	15.2%
VANISHING / DIFFICULTY OF FARMING	8	11.8%	5	10.9%
POOR / LOW PAY	4	5.9%	1	2.2%
PEOPLE / FARM WORKERS	1	1.5%	4	8.7%
OTHER	1	1.5%		
QUIET			1	2.2%
RESEARCH			1	2.2%
TOTAL	68	100%	46	100%

Negatives

	2	2001	1	996
CHEMICALS / PESTICIDES	4	44.4%	3	16.7%
ENVIRONMENTAL ISSUES / IMPACTS	4	44.4%		
HORMONES IN COWS	1	11.1%		
SUBSIDIES			6	33.3%
GOVERNMENT			3	16.7%
AGRIBUSINESS			1	5.6%
BORING			1	5.6%
MONOCULTURAL CROPS			1	5.6%
REDNECK			1	5.6%
STREAM EUTROPHICATION FROM			1	
NITROGEN FERTILIZER				5.6%
TESTING			1	5.6%
TOTAL	9	100%	18	100%

APPENDIX E

Summary of Results from Question #3. A.

"What products can you name that are grown or raised in Colorado?"

In order to provide some insight into responses garnered from the open-ended question, "What products can you name that are grown or raised in Colorado?", the following summary was developed.

In 1996, open-ended data were analyzed by repeatedly reading through responses and generating categories which were distinct and specific. Answers were then tallied for all categories using the *search* and *replace* commands in Microsoft Word, with a total of 3704 responses analyzed. In 2001 a slightly different method was used. All responses were analyzed as 'frequencies' in SPSS. Frequencies group the common responses, i.e., corn or cattle. In 2001, 2224 responses were analyzed. The responses are listed in descending order of the number of occurrences in 2001. At the end of the list are products listed in 1996, but not in 2001.

PRODUCTS	NUMBER OF OCCURRENCES			
	20	01	19	996
CORN: CORN (277 555), FEED CORN (-	280	12.6%	564	16.0%
- 2), ANASAZI CORN (1) MAIZE 3 (6)				
WHEAT: WHEAT (244 541), WINTER	244	11.0%	552	15.6%
WHEAT (9), DURHAM WHEAT (2)				
CATTLE: CATTLE (86 170), BEEF(63	157	7.1%	288	8.2%
98), LIVESTOCK(8 15), COW'S				
FEED(3), BEEF CATTLE(2)				
HAY (51 84), ALFALFA (71 101)	122	5.5%	185	5.2%
BEETS: SUGAR BEETS (76 145),	113	5.1%	269	7.6%
BEETS (37 124)				
PEACHES	104	4.7%	153	4.3%
BEANS: BEANS (44 82), SOYBEANS	94	4.2%	145	4.1%
(31 49), PINTO BEANS (13 11), GREEN				
BEANS (6 3), LEGUMES (1)				
POTATOES	90	4.0%	165	4.7%
MELONS: CANTALOUPE (54 77),	89	4.0%	140	4.0%
MELONS (13 32), WATERMELONS (19				
29), HONEY DEW MELONS (3 2)				
GRAINS: BARLEY (50 81), GRAIN (24	79	3.6%	115	3.3%
22), RYE (5 12)				
APPLES	77	3.5%	128	3.6%
FRUIT	52	2.3%	62	1.8%
PIGS (32 28), HOGS (7 16), PORK (11 7)	50	2.2%	51	1.4%
ONIONS	48	2.2%	75	2.1%
SHEEP (36 66), LAMB (10 12), WOOL (1	47	2.1%	79	2.2%
1)				
TOMATOES	35	1.6%	58	1.6%
VEGETABLES (33 60) VEGGIES (7)	33	1.5%	67	1.9%
COWS	29	1.3%	34	1.0%
LETTUCE	26	1.2%	38	1.1%
GRAPES	26	1.2%	23	0.7%
CARROTS	26	1.2%	16	0.5%

PRODUCTS	NUMBER OF OCCURRENCES				
	20	001	1996		
POULTRY: CHICKEN (14 20), TURKEYS (7 4), POULTRY (3 6)	24	1.1%	30	0.8%	
I'M NOT SURE (1), I DON'T KNOW (18 21), NOT SURE (2 2) NONE (4 -)	24	1.1%	24	0.7%	
CHERRIES	23	1.0%	20	0.6%	
CABBAGE	16	0.7%	25	0.7%	
SUNFLOWERS (13 13) SEEDS (2 2)	15	0.7%	15	0.4%	
OATS	14	0.6%	40	1.1%	
MILO	13	0.6%	11	0.3%	
LLAMAS	11	0.5%	5	0.1%	
FLOWERS	11	0.5%	1	0.0%	
GRASS	10	0.4%	3	0.1%	
PEPPERS (8 14) BELL (1) GREEN (1 -)	9	0.4%	15	0.4%	
HORSES	9	0.4%	9	0.3%	
BUFFALO	9	0.4%	7	0.2%	
PEAS	8	0.4%	10	0.3%	
PRODUCE	8	0.4%	4	0.1%	
EVERYTHING (5) LOTS (1) ALL THINGS (2)	8	0.4%			
TREES: TREE FARMS (2 1) TREES (5 7) PINE TREES (1)	7	0.3%	9	0.3%	
PUMPKINS	7	0.3%	18	0.5%	
PEARS	7	0.3%	12	0.3%	
PEPPERS: CHILI	7	0.3%	10	0.3%	
CUCUMBERS	7	0.3%	8	0.2%	
STRAWBERRIES	7	0.3%	7	0.2%	
SPINACH	7	0.3%	5	0.1%	
GOATS	7	0.3%			
SOY	7	0.3%			
APRICOTS	6	0.3%	11	0.3%	
BROCCOLI	6	0.3%	9	0.3%	
RADISH	6	0.3%	5	0.1%	
GRAPES: VINEYARDS (1 3) WINE (5 1)	6	0.3%	4	0.1%	
DAIRY: MILK (3 13), DAIRY (11), DAIRY COWS (1 2), DAIRY	5	0.2%	28	0.8%	
PRODUCTS (1 2)					
SQUASH	5	0.2%	7	0.2%	
ORCHARDS	5	0.2%	5	0.1%	
TURNIPS	4	0.2%			
HOPS	4	0.2%	9	0.3%	
CAULIFLOWER	4	0.2%	4	0.1%	
PLUMS	4	0.2%	4	0.1%	
ASPARAGUS	4	0.2%	2	0.1%	
POTATOES: SWEET	4	0.2%	2	0.1%	
ELK	4	0.2%	1	0.0%	

PRODUCTS	NUMBER OF OCCURRENCES			
	2001		1996	
SUGAR (1) SUGAR CANE (3)	3	0.1%	10	0.3%
CELERY	3	0.1%	5	0.1%
GARDENS	3	0.1%	4	0.1%
MILLET	3	0.1%	4	0.1%
MUSHROOMS	3	0.1%	3	0.1%
ANIMALS	3	0.1%	1	0.0%
CANOLA	3	0.1%	1	0.0%
OSTRICH	3	0.1%	1	0.0%
COTTON	2	0.1%	3	0.1%
CROPS: CROPS (2 2) FARM	2	0.1%	3	0.1%
PRODUCTS (1)				
GREENS	2	0.1%	1	0.0%
RICE	2	0.1%		
NUTS	2	0.1%		
SORGHUM	1	0.0%	10	0.3%
MARIJUANA (1) HEMP (7) WEED (1)	1	0.0%	8	0.2%
HONEY	1	0.0%	7	0.2%
BLUEBERRIES	1	0.0%		0.270
ORANGES	1	0.0%	5	0.1%
TRUCK FARMERS/ING	1	0.0%	3	0.1%
OLIVES	1	0.0%		0.170
EGGPLANT	1	0.0%		
ARTICHOKES	1	0.0%		
PARSLEY	1	0.0%		
FUEL FROM CORN	1	0.0%		
SAGE	1	0.0%		
GARLIC	1	0.0%		
HORSE RADISH	1	0.0%		
	1	+	2	0.10/
LUMBER (1) TIMBER (1 1) CARNATION	1	0.0%	<u>2</u> 1	0.1%
FLAX	1	0.0%	1	0.0%
RASPBERRIES POCKY MOURITAIN OVETERS	1	0.0%	1	0.0%
ROCKY MOUNTAIN OYSTERS	1	0.0%	1	0.0%
SEEDS	1	0.0%	1	0.0%
SOD	1	0.0%	1	0.0%
STRAW	11	0.0%	1	0.0%
JALAPENOS	1	0.0%		1
LEMONS	1	0.0%		1
LIMES	1	0.0%		1
ORGANIC FARMING	1	0.0%		
COFFEE	1	0.0%		
EGGS			4	0.1%
TRUCK-BED GARDENS/ERS			4	0.1%
ZUCCHINI			3	0.1%
EMU			2	0.1%

PRODUCTS	NUME	NUMBER OF OCCURRENCES			
	20	2001		96	
FISH			2	0.1%	
HERBS			2	0.1%	
NECTARINES			2	0.1%	
PLANTS			2	0.1%	
ALLIGATORS			1	0.0%	
BEER			1	0.0%	
BIRDSEED			1	0.0%	
BISON			1	0.0%	
CLOVER			1	0.0%	
COWS: REPLACEMENT			1	0.0%	
DRY FARMING			1	0.0%	
DUCKS			1	0.0%	
GEESE			1	0.0%	
GRAPEFRUIT			1	0.0%	
JOLLYRANCHERS			1	0.0%	
RABBITS			1	0.0%	
RANCHING			1	0.0%	
SILAGE		_	11	0.0%	
TUMBLEWEED			1	0.0%	
WILDLIFE			1	0.0%	
TOTAL REPONSES	2224	100%	3531	100%	

APPENDIX F

Summary of results from Question #3. B.:

"What agricultural product would you say has the most economic importance for Colorado?"

In order to provide some insight into responses garnered from the open-ended question, "What agricultural product would you say has the most economic importance for Colorado?", the following summary was developed.

In 1996, open-ended data were analyzed by repeatedly reading through responses and generating categories which were distinct and specific. Answers were then tallied for all categories using the *search* and *replace* commands in Microsoft Word, with a total of 1013 responses were. In 2001 a slightly different method was used. All responses were analyzed as 'frequencies' in SPSS. Frequencies group the common responses, i.e., corn or cattle. In 2001, 479 responses were analyzed. The responses are listed in descending order of the number of occurrences in 2001. At the end of the list are products listed in 1996, but not in 2001.

PRODUCT	NUMBER OF OCCURRENCES			
	2001		1996	
DON'T KNOW	93	19.4%	107	10.6%
WHEAT	88	18.4%	295	29.1%
BEEF	55	11.5%		
CATTLE	48	10.0%	219	21.6%
CORN	44	9.2%	102	10.1%
SUGAR BEETS	24	5.0%	40	3.9%
POTATOES	15	3.1%	28	2.8%
LIVESTOCK	14	2.9%	10	1.0%
FRUITS	10	2.1%	22	2.2%
ALL AGRICULTURAL PRODUCTS	10	2.1%	5	0.5%
ALFALFA	8	1.7%	10	1.0%
HAY	7	1.5%	15	1.5%
GRAIN	7	1.5%	12	1.2%
PEACHES	7	1.5%	10	1.0%
CANTALOUPE	6	1.3%	3	0.3%
SOYBEANS	6	1.3%	1	0.1%
VEGETABLES	4	0.8%	10	1.0%
BARLEY	4	0.8%	2	0.2%
FEED / FORAGE	3	0.6%	4	0.4%
APPLES	2	0.4%	8	0.8%
BEANS	2	0.4%	7	0.7%
MELONS	2	0.4%	4	0.4%
SHEEP	2	0.4%	2	0.2%
PRODUCE	2	0.4%	2	0.2%
CHILE	2	0.4%	2	0.2%
HOGS	2	0.4%		
BEETS	1	0.2%	27	2.7%
DAIRY	1	0.2%	7	0.7%
TREES	1	0.2%	5	0.5%

PRODUCT	NUMBER OF OCCURRENCES			
	2001		1996	
ONIONS	1	0.2%	2	0.2%
RANCHING	1	0.2%	2	0.2%
NO ONE PRODUCT	1	0.2%	1	0.1%
MILO	1	0.2%		
ROCKY FORD CANTALOUPE	1	0.2%		
ROCKY FORD PEACHES	1	0.2%		
COAL	1	0.2%		
FLOWERS	1	0.2%		
FISH	1	0.2%		
SUGAR			8	0.8%
MEAT			4	0.4%
WINTER WHEAT			3	0.3%
WATER			3	0.3%
HEMP / POT			5	0.5%
TOMATOES			3	0.3%
MILK			3	0.3%
ORCHARDS			2	0.2%
FARMING			2	0.2%
CELERY			2	0.2%
CROPS			2	0.2%
PRODUCTS			2	0.2%
GOOD WEATHER			1	0.1%
WINE GRAPES			1	0.1%
COTTON			1	0.1%
COFFEE			1	0.1%
ORGANIC PRODUCER			1	0.1%
GAME			1	0.1%
FLOUR			1	0.1%
DURHAM			1	0.1%
CROPS FOR ANIMALS			1	0.1%
SUNFLOWERS			1	0.1%
TOTAL	479	100%	1013	100%

APPENDIX G

Summary of results from Question #4:

"Do you agree or disagree that agriculture provides food at a reasonable price in Colorado?"

In order to provide some insight into responses garnered from the open-ended follow up for the 35 respondents who disagreed with, "Do you agree or disagree that agriculture provides food at a reasonable price in Colorado?", all comments were content analyzed and put into the following categories. The 2001 responses are in bold and the 1996 responses are in parentheses.

Farmer's prices manipulated / underpaid (not their fault) 6, 17% (n = 31, 43%)	More expensive here / Came from cheaper food area 19, 54% (n = 24, 33%)			
0,1770 (n = 31, 4370)	17, 54 70 (n = 24, 33 70)			
Processing-retailing / Middlemen	Specific items too expensive			
5, 14% (n = 15, 21%)	4, 11% ()			
<u>Hoarding (Dairy)</u>	Other			

DISAGREE

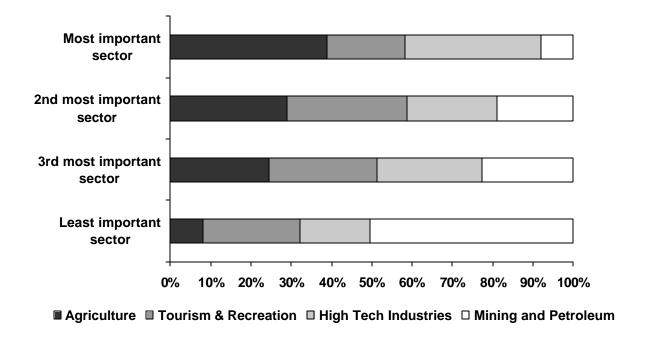
(Why do you feel that ag does not produce food at a reasonable price in Colorado?)

- I don't think agriculture can dictate the price of food sold in stores. It may start out at a reasonable price, but by the time it reaches the stores it has increased in price due to the company buying from the farmers then being sold to the stores. It would be a lot cheaper straight from the farmers.
- 2 Prices are too high.
- 3 I disagree, nothing is at a reasonable price anymore.
- 4 Because growing up in California, I know how much fruits and produce cost as compared to prices here and they were considerably less expensive there where they were grown. Foods grown here don't seem to cost much less than anywhere else.
- 5 Because the farmer isn't getting paid fairly, grocery stores way over price products.
- 6 It seems that farmers are not given enough money for their hard work so something isn't done right with the price.
- 7 I just feel that the prices are too high in general.
- 8 It is just too expensive. You can find good buys though.
- 9 More expensive than anywhere else I have lived.
- Because prices in the supermarket are just high, very high, too high for meats and bread. It's like 2 dollars for bread here, where I came from it was like 2 for fifty cents or 2 for a dollar. I just don't understand why the prices here are so high.
- 11 Cause it's a lot cheaper in Texas. We go down there for the winter months and the fruits and vegetables are really cheap and then you come up here and it's like culture shock.
- 12 I don't see any agriculture where I live in Colorado so I think they ship it in from somewhere else and charge us more for it.
- 13 I disagree because it's way too cheap.
- 14 Prices too high.
- 15 Everything is expensive here.
- 16 It's not a reasonable cost.
- 17 Because other regions we've lived in had more available fresh produce. I mean that other areas has things like farm-direct programs for local supermarkets where we could get produce and meat almost directly from the farmers.
- 18 Mainly because of the lamb prices.
- 19 I don't think it has anything to do with the price.
- 20 It depends on which food chain store you're going to.
- I see if from the point of view of the farmer and what the farmer gets is much smaller an amount for what the products are selling at.
- Because for an older person such as me living on social security, as the price goes up it is harder and harder to live on a budget.

- 23 I think it is prices too cheap, the farmers are getting the bad end of the deal.
- 24 Because I lived in the East and food prices are 10-20 percent lower than Colorado.
- 25 Because she has lived in other states that the food is cheaper.
- All produce is priced too high and the farmers aren't getting enough money so something doesn't add up.
- 27 I can't afford the cost of fruits.
- 28 It's very high, because I was in other states and their prices were a lot cheaper than ours.
- 29 Meat is too darn expensive.
- 30 The price is too high at the store.
- 31 It's too expensive.
- 32 Farmers can grow it cheap enough, but they don't get enough for what they grow.
- 33 Not in Fort Collins, everything is cheaper in Denver.
- 34 Because things are not really affordable.
- 35 Well it depends where you live on the costs of things.

APPENDIX H

THE RELATIVE ECONOMIC IMPORTANCE OF AGRICULTURE



The figure above describes the results from Question 6 of the survey in which respondents were asked to rank the importance of four economic sectors. The figure shows the results for each ranking opportunity where only the first ranking opportunity was reported on page 12 of the report.

APPENDIX I

RESPONSES BY GEOGRAPHIC REGION, LENGTH OF RESIDENCY, AND AFFILIATION WITH AGRICULTURE

Responses by region of residence

The responses are given in percentages.

What is the most important economic sector

	n	Mining and High tech Tourism and petroleum industries recreation Agriculture		Agriculture	Don't know / no response	
Front range						
1996	767	4	27	31	36	1
2001	344	7	38	18	33	4
Eastern plains						
1996	37		22	22	57	
2001	23	4	17	4	70	4
Western slope						
1996	147	8	14	41	38	
2001	68	13	7	25	47	7

 $^{?^2}$ 1996 = 26.18, p = .004; $?^2$ 2001 = 41, p = <.001

How important is it to maintain land and water in agriculture production

	n	Very important	Moderately important	Slightly important	Not important	Don't know / no response
Front range		1	1	1		
1996	767	84	14	1	1	1
2001	344	84	11	2.6	2	1
Eastern plains						
1996	37	92	5	3		
2001	23	96	4			
Western slope	;					
1996	147	87	11	2		
2001	68	90	10			

 $^{.^2}$ 1996 = 7.7, p = .66; $.^2$ 2001 = 5.6, p = .85

Use of public funds to purchase development rights

	n	Strongly agree	Mod. agree	Slightly agree	Slightly disagree	Mod. disagree	Strongly disagree	Don't know / no response
Front range	e							
1996	767	47	28	3	1	9	9	4
2001	344	40	31	3	3	6	8	9
Eastern pla	ins							
1996	37	30	24	3	5	16	22	
2001	23	30	30		4	9	4	22
Western sl	ope							
1996	147	39	29	5	2	12	10	4
2001	68	52	30	3	3	7	8	9

 $^{?^2}$ 1996 = 24.5, p = .04; $?^2$ 2001 = 11.6, p = .64

What basic approach should be used to protect agriculture land and water

	n	Regulations	Financial incentives	Let market decide	Don't know / no response
Front range					
1996	767	39	45	14	3
2001	344	32	50	12	6
Eastern plains					
1996	37	30	57	8	5
2001	23	26	44	22	9
Western slope					
1996	147	35	49	15	1
2001	68	27	51	12	6

 $^{?^2}$ 1996 = 13.5, p =.097; $?^2$ 2001 = 7.09, p = .53

How responsible is Colorado agriculture in protecting the environment

	n	Almost always	Usually	Sometimes	Almost never	Don't know / no response
Front range						
1996	767	14	45	28	2	11
2001	344	20	38	20	5	17
Eastern plains						
1996	37	16	46	32	3	3
2001	23	44	39	9		9
Western slope						
1996	147	22	40	32	2	4
2001	68	27	34	25	3	12

 $^{?^2}$ 1996 = 15.9, p = .1; $?^2$ 2001 = 13, p = .224

How necessary is it to use chemicals to produce enough food

	n	Almost always	Usually	Sometimes	Almost never	Don't know / no response
Front range						
1996	767	8	25	45	19	3
2001	344	19	22	30	22	7
Eastern plains						
1996	37	19	27	41	14	
2001	23	39	22	26	9	4
Western slope	;					
1996	147	9	30	44	13	4
2001	68	16	28	34	18	4

 $^{?^2}$ 1996 = 13, p = .22; $?^2$ 2001 = 9.6, p = .48

In a dry year what is your top priority for water use

	n	Lawns and landscaping	Rafting and fishing	Agriculture	In-stream flow levels	Don't know / no response
Front range						
1996	767	1	2	72	24	1
2001	344	2	2	77	17	3
Eastern plains						
1996	37	3		89	8	
2001	23			83	17	
Western slope						
1996	147	3	2	71	22	1
2001	68			78	19	3

 $^{?^2}$ 1996 = 12, p = .28; $?^2$ 2001 = 4.1, p = .944

How important is the presence of ranches, farms, and agriculture to quality of life in Colorado

	n	Very important	Moderately important	Slightly important	Not important	Don't know / no response
Front range						
1996	767	79	18	1	.4	2
2001	344	78	17	3	.6	2
Eastern plains						
1996	37	92	8			
2001	23	96	4			
Western slope						
1996	147	82	15	2		1
2001	68	96	3			2

 $^{?^2}$ 1996 = 6.5, p = .77; $?^2$ 2001 = 15.6, p = .048

Responses by those living in Colorado 10 or less years or longer than 10 years

The responses are given in percentages.

What is the most important economic sector

	n	Mining and petroleum	High tech industries	Tourism and recreation	Agriculture	Don't know / no response
< = 10 years						_
1996	238	5	31	35	30	
2001	86	7	43	24	20	6
> 10 years						
1996	705	4	23	32	40	1
2001	358	8	29	17	41	5

 $?^2$ 1996 = 12, p = .03; $?^2$ 2001 = 18.6, p = .002

How important is it to maintain land and water in agriculture production

	n	Very important	Moderately important	Slightly important	Not important	Don't know / no response
< = 10 years						
1996	238	79	19	2	1	
2001	86	81	14	2	2	
> 10 years						
1996	705	87	12	1	.3	.4
2001	358	86	10	2	1	.6

 $?^2$ 1996 = 11.3, p = .045; $?^2$ 2001 = 2.8, p = .72

Use of public funds to purchase development rights

J 1	n	Strongly agree	Mod.	Slightly agree	Slightly disagree	Mod. disagree	Strongly disagree	Don't know / no response
< = 10 yea	ırs							1
1996	238	47	23	3	3	10	11	3
2001	86	40	36	4	2	5	9	5
> 10 years								
1996	705	45	30	3	1	9	9	3
2001	358	43	28	3	2	7	8	10

 $?^2$ 1996 = 8.7, p = .27; $?^2$ 2001 = 6.5, p = .48

What basic approach should be used to protect agriculture land and water

	n	Regulations	Financial incentives	Let market decide	Don't know / no response
< = 10 years					
1996	238	36	48	15	2
2001	86	38	47	12	4
> 10 years					
1996	705	39	46	14	2
2001	358	29	51	13	7

 $?^2$ 1996 = 1.6, p = .8; $?^2$ 2001 = 4.5, p = .35

How responsible is Colorado agriculture in protecting the environment

	n	Almost always	Usually	Sometimes	Almost never	Don't know / no response
< = 10 years						
1996	238	13	40	30	1	16
2001	86	13	35	22	4	27
> 10 years						
1996	705	16	45	29	2	7
2001	358	24	39	20	5	14

 $?^2$ 1996 = 20.5, p = .001; $?^2$ 2001 = 13, p = .023

How necessary is it to use chemicals to produce enough food

	n	Almost always	Usually	Sometimes	Almost never	Don't know / no response
< = 10 years						
1996	238	11	22	44	22	1
2001	86	13	22	36	26	4
> 10 years						
1996	705	8	27	45	16	3
2001	358	21	22	29	20	7

 $?^2$ 1996 = 9.4, p = .094; $?^2$ 2001 = 6.2, p = .29

In a dry year what is your top priority for water use

	n	Lawns and landscaping	Rafting and fishing	Agriculture	In-stream flow levels	Don't know / no response
< = 10 years						
1996	238	3	1	66	30	1
2001	86	4	2	58	30	6
> 10 years						
1996	705	1	2	76	20	.5
2001	358	1	1	81	15	2

 $^{?^2}$ 1996 = 13.9, p = .016; $?^2$ 2001 = 21.8, p = .001

How important is the presence of ranches, farms, and agriculture to quality of life in Colorado

	n	Very important	Moderately important	Slightly important	Not important	Don't know / no response
< = 10 years						
1996	238	79	19	2	.4	1
2001	86	74	15	4	2	5
> 10 years						
1996	705	81	17	1	.3	.5
2001	358	82	15	2	.3	1

 $^{?^2}$ 1996 = 1.4, p = .93; $?^2$ 2001 = 10.7, p = .03

Responses by affiliation with Agriculture

The responses are given in percentages.

What is the most important economic sector

	n	Mining and petroleum	High tech industries	Tourism and recreation	Agriculture	Don't know / no response
Affiliated						
1996	406	4	21	30	45	1
2001	199	7	22	16	51	5
Never affiliate	ed					
1996	545	5	28	35	32	1
2001	251	8	41	20	26	5

 $^{?^2}$ 1996 = 17.8, p = .003; $?^2$ 2001 = 33.9, p = <.001

How important is it to maintain land an water in agriculture production

	n	Very important	Moderately important	Slightly important	Not important	Don't know / no response
Affiliated						
1996	406	88	10	1	.2	.4
2001	199	88	8	2	2	.5
Never affiliate	ed					
1996	545	82	16	1	1	1
2001	251	83	13	2	1	.4

 $^{?^2}$ 1996 = 7.7, p = .18; $?^2$ 2001 = 5.6, p = .35

Use of public funds to purchase development rights

	n	Strongly agree	Mod. agree	Slightly agree	Slightly disagree	Mod. disagree	Strongly disagree	Don't know / no response
Affiliated								
1996	406	44	26	3	2	11	11	
2001	199	44	25	3	2	7	9	11
Never affil	iated							
1996	545	46	29	3	1	8	8	4
2001	251	40	34	3	3	6	7	8

 $^{?^2}$ 1996 = 9.9, p = .2; $?^2$ 2001 = .71, p = .42

What basic approach should be used to protect agriculture land and water

	n	Regulations	Financial incentives	Let market decide	Don't know / no response
Affiliated					
1996	406	37	47	13	3
2001	199	27	48	17	8
Never affiliated					
1996	545	39	45	14	2
2001	251	32	52	11	5

 $?^2$ 1996 = 2.2, p = .7; $?^2$ 2001 = 7.2, p = .13

How responsible is Colorado agriculture in protecting the environment

	n	Almost always	Usually	Sometimes	Almost never	Don't know / no response
Affiliated						
1996	406	17	47	26	3	7
2001	199	27	37	20	4	12
Never affiliated						
1996	545	15	42	30	1	12
2001	251	18	38	20	5	19

 $?^2$ 1996 = 13.1, p = .023; $?^2$ 2001 = 9.2, p = .103

How necessary is it to use chemicals to produce enough food

		Almost			Almost	Don't know /
	n	always	Usually	Sometimes	never	no response
Affiliated						_
1996	406	9	29	43	16	3
2001	199	24	24	28	19	6
Never affiliated						
1996	545	9	23	46	19	3
2001		16	21	33	23	7

 $?^2$ 1996 = 4.9, p = .424; $?^2$ 2001 = 6.06, p = .3

In a dry year what is your top priority for water use

	n	Lawns and landscaping	Rafting and fishing	Agriculture	In-stream flow levels	Don't know / no response
Affiliated						
1996	406	2	1	77	19	1
2001	199	2	.5	80	17	2
Never affiliate	ed					
1996	545	2	2	70	25	2
2001	251	2	2	74	18	4

 $^{?^2}$ 1996 = 12.4, p = .03; $?^2$ 2001 = 5.2, p = .39

How important is the presence of ranches, farms, and agriculture to quality of life in Colorado

	n	Very important	Moderately important	Slightly important	Not important	Don't know / no response
Affiliated						
1996	406	86	12	1		1
2001	199	85	10	.5	.5	4
Never affiliated						
1996	545	76	21	2	.6	2
2001	251	76	20	3	1	1

 $^{?^2}$ 1996 = 17.6, p = .003; $?^2$ 2001 = 18.9, p = .002

APPENDIX J

#27. FINAL COMMENTS FROM RESPONDENTS

Respondents were asked: *do you have any other comments*. All such comments were recorded verbatim and are included here. Also comments have been content analyzed and summarized below by the frequency of occurrence within each category. The number of responses in 2001 is listed in bold, with the 1996 responses in parentheses.

Some of the broad categories used in 1996 were broken down into more specific categories for the 2001 data analysis. In addition new categories emerged in 2001. The new categories are listed below the table.

LAST COMMENTS

Good Survey / Interesting	Survey Needs Improvement
6, 4.2% (83, 39.5%)	1,.7% (8, 3.8%)
Positive View of Agriculture	Favor More Governmental Control
Importance 21, 14.6% (40, 19%)	
Difficulty / Struggle 11, 7.6%	1,.7% (4, 1.9%)
Disappearing / Need to preserve it 9, 6.3%	
Culture / Heritage / Values 9, 6.3%	
General positive comment 28, 19.4%	
Don't Feel Well Informed	Pro-Environment/Anti-Development
	Pro-environment 5, 3.5% (25, 11.9%)
10, 6.9% (8, 3.8%)	Anti-development 20, 13.9%
Anti-Environmentalist/Anti-Government/	Things Not Farmers' Fault
Anti-Government Subsidies	
3, 2.1% (11, 5.2%)	0 (31, 14.8%)

The new categories that emerged in 2001 are:

Need for Education 6, 4.2%

Negative

Grazing on public land 3, 2.1% Chemicals 2, 1.4% Genetic engineering 3, 2.1% Other 4, 2.8%

More organic farming 2, 1.4%

LASTCHNC

(Any comments for me to record?)

- I don't know because I've never live on a ranch here.
- 2 No, I can't think of anything.
- On the most part I think they're doing a good job. I wish they wouldn't use as many chemicals, but everybody has to have food, right?
- 4 No, I can't think of anything.
- It seems like you guys are doing a pretty good job as far as awareness and it's an interesting survey and I hope something good comes of it.
- That they really oughta look at color county. There is a lot of BLM land and ranch land that is being neglected and could be better used for these agricultural concerns.
- 7 Just that I see it as part of the fundamental heritage and beauty of the state.
- 8 I was raised on a farm and I enjoyed it and would like to go back.
- 9 It's more important than most people think.
- 10 Agriculture should be preserved for all the nation. We're running out of food.
- 11 Not at this time.
- 12 On the whole, the farmers do a darn good job.
- I believe people need to be a lot more educated about agriculture. It should be brought into the schools and started at an early age. Kids today have no respect for agriculture because they don't know anything about it.
- 14 No, but thanks for asking.
- 15 I have no comments, other than this is a very interesting survey.
- Most important issue was not on the survey. Estate tax/ farms and businesses should not be taxed to be passed to family members. This has caused an increase in the mean age of farmers, which is now 55.
- 17 Everything is better.
- 18 It's very necessary. Too many houses going up.
- 19 The state needs to get off its butt and protect it from the residential growth that is slowly wiping it out.
- Farmers are going broke. Farmers leaving the fields. Low market prices. NAFTA influencing prices.
- 21 Are there any web sites out there? I feel I need more information now.
- 22 It is really important.
- Without agriculture we wouldn't be alive.
- I would hate for it to go away. It adds so much flavor and culture to the state.

- 25 They are selling too much farmland for housing developments.
- Just wish them all the best. I just hope the republicans keep their nose out of their business.
- I wish that they didn't have all these cattle farms. We are surrounded by them and we can't even drive into town without getting that stench and it just makes me gag. I wish that they had someway to control the stink.
- 28 I'm just all for it.
- I live in highlands ranch and I have seen them first hand buy up and subdivide beautiful ranches in order to put up subdivisions. It is a shame.
- Nothing except that after listening to your questions, I think I need to learn more about it.
- Just like to make sure that we always have a good system in place to make sure that we always have it in Colorado.
- No, but I wanted to add the cows to the first questions about products in Colorado.
- No, that was great.
- Just that it's sad to see everything going to development. Pulling up the orchards. It's just sad.
- I just hope that someday something good comes of this. We need to do more to protect the farms and ranches. There is too much land that used to be farmland, mainly near Greeley and places like that, and now it is used for houses. Out of state people come and buy up the land and they develop it and I hope we can do something about it.
- I would see the production of genetically engineered crops stop. I would also like to have full closure on the effects of genetically engineered crops. Also I think we should always be informed as which crops are genetically engineered and which ones are organically grown.
- No I just feel that it's very important and we should make it priority. We have to give and take a lot and this should be one thing we give something up for.
- 38 They're doin' about the best they can but farmers need better prices for their products to make this work. The price of land has gotten so out of control that it's not economically feasible to make a profit off of farming.
- 39 Start teaching kids when they are young about the importance of agriculture.
- 40 No, but I do think it is important.
- 41 Not really, but the open space questions touched a nerve. Their funds should definitely help the farmers and ranchers as well as the wildlife, if not more than the rest of the undeveloped land that will not be used for anything.
- Wouldn't it be less strainful on the environment and safer for the people if we planted grain crops instead of allowing the cows to eat the plant life?

- I think it's going down, down because most everybody wants to live adjacent to the mountains. They haven't had as much water in previous years because less people are farming and they're selling their water rights to metro areas like Denver.
- I just think we need to preserve our agriculture and do all we can to help it. There's been people that it really wasn't a high priority and they were more interested in money than in conserving the agriculture.
- I've taken a class on the water cycle in Colorado, but I don't know much about agriculture other than what I learned in this class; I haven't traveled around and visited any farms or ranches. I guess my one comment would be that since the importance of agriculture is there and you are doing this study you should get the word out to the people so the people are aware.
- No, I don't know enough about it.
- No, I just wonder how strong the agriculture program at Colorado state university is.
- 48 I don't have any questions.
- No, I guess we all need to get more involved and be more concerned and we need to be more interested in habitat of animals but any good farmer or rancher does that I think.
- More organic products would be nice to see.
- I just think we need to protect it more than we are. We only have it once.
- I am very concerned about the growth and water. Many farmers and ranchers are selling to developers. Water is going to be a very serious problem in the future.
- Farmers need to be respected and honored for what they do. People need to respect them more.
- Once life is gone here we will need to depend on over seas and we are already having problems with that in regards to oil.
- No, I hope it keeps thriving.
- We need more agriculture and less urban growth. I'm considering leaving Colorado because I need more elbow room.
- Not really, just unaware.
- I don't know whether my opinions have been helpful as I just moved to this country from India. So when you weigh people's opinions, maybe mine should not be weighed as much since I don't know very much about agriculture in Colorado or in this country.
- I feel for the farmers because they can't make it these days. They are important food suppliers. They need more breaks.
- 60 I honestly need to learn more.
- I would like to see Colorado work harder on producing safe foods without chemicals so I don't have to buy foods from other states.
- There's been a lot of development over a lot of fields. There are prairie dogs that are dead all over the roads, so I think that agriculture isn't very important to the public.

- I don't pay too much attention to it, but I do know that it is important.
- 64 CSU's extension used to be very helpful, there used to be a telephone listing and it was important to get information from.
- 65 If we lose it at the rate we are losing it now we are going to be in some serious trouble.
- No, but I sure hope I'm helping you.
- 67 Growth in Colorado should be limited. We don't have enough resources.
- Are they reaching out to the Indian reservations and so forth.
- I think that they need to keep the agriculture programs in the schools, but instead they are taking them out.
- No, just keep doing what you are doing at CSU.
- No, I just wish the poor farmers got more money for their produce.
- No, more people need to be interested and aware of it.
- I would like to see it flourish and be more stronger. Don't divert and sell water to different states. Allow more farming. Less use of pesticides. No hormones or genetics. Be more organic.
- I really think there is a lot of misconception about how damaging prairie dogs are to farm and ranch land. I think the farmers and ranches could be better informed about the prairie dog and what they actually do to the land.
- 75 No, but thanks for asking.
- 76 No, but thanks for asking.
- I think that agriculture has been neglected for the last 10 years or so. I believe it needs to be brought back and people need to pay attention. I believe it should be taught a lot more in schools today. It should be started at an early age and continued through the years.
- No, I apologize for now knowing more about it/ they probably have substantial crops. I think beef is important here, other than that I don't really know. Again, I would just like to apologize for being so naive about the whole agricultural life.
- I am concerned about genetically engineered crops and the chemicals that are placed on the crops. How does it effect my health.
- 80 I wish so many people wouldn't move to Colorado. I feel like we are getting over run.
- Developing open lands for energy is going to be the end of us in Colorado. There won't be any more open area's.
- 82 Even though I ranked in-stream flow levels high on one of the questions, I believe we require more reservoirs for getting water around the state for human and agricultural needs.
- Agriculture and water are some of the most important things that we have to deal with in Colorado society.

- I think food and livestock is very important for people. You can't have a civilization without it.
- 85 I think we should concentrate a little more on the produce side of agriculture, as opposed to the livestock side.
- Hmm I think uh it just uh land use and environmental protection issues are vital not only to Colorado but to the country as a whole.
- 87 The only thing I would have stressed on this issue is you cannot treat the land in Colorado all the same.
- 88 I feel it's an important survey.
- 89 No I think the farmers do pretty good with furnishing vegetables and potatoes and stuff like that we need. We barely have enough. I buy vegetables like onions and squash and stuff like that. We have enough variety to go on from season to season.
- 90 Well no, but they've done a very good job.
- I've raised 5 kids of my and one foster in the state and watched my kids and grandkids grown up. Wished I had the money to farm in Kansas but I moved here and got a job.
- No, I really don't honey. I know I miss the vegetables when they're not coming in. I like that we're able to get them locally.
- 93 No. It's important but not the most important.
- I see it slipping away and it really bothers me. All the beautiful farms you used to see are all covered with houses.
- 95 People don't realize how cheap the food is.
- 96 Not right off the top of my head.
- I hope they love to not be run over by the environmentalists who seem to get everything they want. They do a good job but they go overboard and I think they need to moderate.
- 98 Keep it up, CSU is doing a good job.
- I really am broken hearted to see other generations whose family carved out an industry in agriculture break it up and sell it off. It's a tragedy to see it. And it's sad to see all the jackasses we have in the legislature and they don't seem to have any cause to be answerable to why they do what the do. They are just carving a place for themselves in the future. You don't see the independent legislator. What I see are a bunch of amateurs all thwarted up in the economy right now not really knowing what they are doing.
- 100 The farmer is not getting his fair share so the small farmers are forced to quit.
- 101 This is very interesting.
- 102 I think it has just dwindled down to nothing.
- Just that it's in a gutter, we're getting hosed on our prices. I could go into it further but I don't have time.
- 104 I just think it's very important.

- 105 I don't know anything about it yet.
- 106 Well, I just hope that we can preserve the land before it's too late.
- 107 Limit the amount of square miles of land, have so many that can be developed a year for farms.
- 108 I pray that they get it worked out because it is so important for us in Colorado with the prices of gas and things going up.
- 109 No, but I think they need some help, but I don't know who is willing to help them.
- I think it's a shame that people today take the land and animals for granted. Agriculture is an important part of life and what are people going to do when all of the land is cleared for buildings and housing, etc.? We're all going to find out that we can't eat money and that agriculture is the most important thing we have. Agriculture includes all animals, trees, land, everything in nature and we are not saving it today, I think that it's sad.
- 111 I would like to know if it is being maintained and kept going because I don't really know.
- 112 I think we should keep the farms rather than covering them with houses.
- Grew up on a farm and it was the happiest time I have ever had. Why would they take that away from us?
- Got to keep it important. It costs more to bring in products from other states then Colorado will dig themselves into a hole.
- 115 It seems to me that if farmers and ranchers worked together with the environmental organizations instead of opposing each other everyone would be better served.
- 116 I think we need to do more to preserve what we have.
- 117 No grazing on public lands.
- 118 Very worried about society in general. I am afraid that if we lose our agricultural production the U.S. will be in a lot of trouble. Farming is what Colorado is all about, it is what the US is all about.
- 119 I just wish they'd learn how to manage their water better.
- 120 I think it's important to our state of Colorado.
- 121 I think it's an important aspect of Colorado, even though I couldn't say much at the beginning about the products.
- 122 I think it's a very important thing cause we have to eat.
- 123 I hope we can keep more open space. We don't need all these homes.
- 124 Front Range area is growing rapidly. Too many farmland communities are being converted in Colorado.
- 125 Agriculture has been here before Colorado was here and we shouldn't hurt it or throw it away.
- 126 It is unfair that people who have water rights that date back, sometimes a hundred years, can hoard all the water in the streams and no one else can touch it.

- 127 I just wish we could stop the growth some way so that we can save some of the farm and ranch land.
- 128 No, the answers in the survey however were very misleading and biased.
- 129 Let's keep farmer going.
- 130 It's important, and I haven't had as much experience in Colorado as I have in Wyoming, but I think the oil and natural gas industries can coexist with agriculture, but sometimes people get unreasonable and it's important to understand that multiple uses of land are possible.
- 131 I came from an agricultural country, I hope that Colorado can be part of the food I get at the store.
- The biggest problem with it is that it can really be geared to what you've seen and not what is overall important to Colorado.
- 133 You've covered it all.
- 134 This is very interesting.
- We have to retain the value of agriculture not only for the monetary value but for the outgrowth of our families. We need to keep that intact because that is the only way we can survive.
- 136 They're doing everything they can.
- 137 We hope to have a ranch some day ourselves so we are interested in animals.
- 138 More agriculture because people are selling their farms.
- 139 It's a necessity. The sooner people realize the better off it's going to be for everyone.
- I just think that in a place where everyone wants to live more houses will be built and the land prices will go up and farmers will leave west for cheaper land.
- 141 I just don't like big organizations buying out the little farmers.
- 142 It is a real important part of the environment and it makes Colorado a great place to live.
- I support ag in Colorado, I think it is more important than real estate development and the zoning and planning sucks in Colorado.
- I guess not. People still need to have land as well as the ag when people have to struggle to keep land, that is not right.
- 145 The only beef I have is that ranchers and farmers use public land for private usage.
- I think farming is given too much leeway as to how their actions affect the environment, cattle should not be allowed to graze on national park land.
- 147 Family farms not able to keep up any more, losing out to big corporations.
- 148 The people don't understand the responsibility that farmers have or their way of life.
- 149 People moving in don't understand the farm situation, they think we are a bunch of hicks.

- 150 It would be interesting to see the turn out, would like a mailed summary of the survey when it is done.
- 151 I really support organic farming. Curious who developed these questions Colorado state university or Colorado department of agriculture.
- 152 I'm seeing too many farmers sale land to build houses.
- Exceedingly distressed in development of housing in the Broomfield area. I think they are destroying the basic nature of Colorado.
- 154 I would hate to see agriculture go down.
- Nope, I don't know very much about agriculture.
- 156 It has been a hard struggle for the farmers and the ranchers.
- 157 I think that the banning of pesticides was a mistake, I also think that protecting the prairie dogs and the coyotes was also a mistake.
- 158 Better keep it going, it's not long enough.
- 159 Farmers on small farms such as 40 acres need to control their weeds.
- 160 I support it a 100%, it is what keeps our community going.
- 161 We better all pay attention or we won't have food.
- 162 I think the building needs to stop.
- 163 I couldn't live without corn so they're doing a good job.
- I really think in general everyone that is involved in agriculture does the best they can to take care of the land and hand it down to younger generations. Sometimes farming is expensive and the generation taking the farm can't do it because it is too expensive to get into. I hate to see subdivision of agricultural land and lots of that is happening in Montezuma. I understand we need the people moving to Colorado and we need to put them somewhere but I think it's very important that we keep the land to farm.
- 165 I think we need to get rid of some the environmentalists that have disturbed our country. Routing water systems and the way things in state work. Prairie dogs are a menace here and the environmentalists are making them endangered species. They are wiping out acres of land over here.
- 166 We should keep the land alive and well.