# Alabama 2002 Agricultural, Environmental and Rural Life Issues

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# **Executive Summary**

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# 2002 Alabama Agriculture, Environment, and Rural Life Survey Executive Summary

In February 2002, Dr. Claude E. Boyd of the College of Agriculture at Auburn University contracted through the Butler/Cunningham Endowment in Agriculture and the Environment with the Center for Governmental Services to conduct an opinion survey of Alabama citizens on a series of agricultural, environmental, and rural life issues. The primary purpose of the survey was to appraise the awareness, opinions and attitudes held by Alabama residents regarding agriculture, the environment, and the quality of rural life in Alabama. A survey instrument was developed in close cooperation with Dr. Boyd and telephone interview sessions were conducted during February 28 to March 7, 2002. There were 988 completed telephone interview sessions distributed over two protocols (489 in protocol A and 499 in protocol B). The margin of error for those questions specific to a single protocol was +/- 5%, while the margin of error for those questions common to both protocols was less than 4%.

Overall, the survey indicates that Alabamians have considerable empathy for agricultural and rural life issues, but also have a relatively weak understanding of these problems. A majority believe that Alabama is one of the leading agricultural states in the nation, and large proportions of Alabamians believe that the State's natural suitability for agriculture is excellent, evidencing some lack of awareness of serious problems related to Alabama's soil, water, and climate. Alabamians are aware of the statewide reduction in the number of farms and the amount of farmland over the past 50 years, but are not as aware of how great that reduction has been, overestimating the number of Alabamians involved in agriculture by a very large margin.

A clear majority of Alabamians reports that government subsidies are necessary for profitable farming, while an even higher proportion understand that farmers must have second incomes to survive. Nearly two-thirds of Alabamians agree that food in Alabama and in the nation is inexpensive compared with other parts of the world, and they also express a willingness to support policy changes to protect U.S. agriculture.

Alabamians are concerned about protecting the environment, and many appear to favor tax increases for that purpose. Many respondents believe farming causes some pollution, but not to the same extent as industrial uses and urban areas. Alabama's environment is perceived to be roughly comparable to other states, though many consider roadside litter to be a bigger problem in Alabama than elsewhere. State and local governments receive mildly positive marks for their environmental protection efforts, and two-thirds of respondents would support both increased taxes and higher food prices to ensure the safety of the environment.

Alabamians are aware of the economic difficulties of farming on a small scale, but they believe Alabama taxes on farmland are very low, and that rural land is rapidly increasing in value. These finding may help explain Alabamians' lack of support for increasing taxes to improve rural life.

### I. Project Overview

In February 2002, Professor Claude E. Boyd of the College of Agriculture at Auburn University contracted through the Butler/Cunningham Endowment in Agriculture and the Environment with the Center for Governmental Services (CGS) at Auburn University to conduct an opinion survey of Alabama citizens on a series of agricultural, environmental, and rural life issues. The primary purpose of the survey was to appraise the awareness, opinions, and attitudes held by Alabama residents regarding agriculture, the environment, and the quality of rural life in Alabama. Specifically, the survey assessed the opinions of adult Alabamians regarding:

- The current status of agriculture in Alabama;
- Changes in Alabama farming since 1950;
- Family farm profitability in Alabama;
- Support for various measures to protect Alabama agriculture;
- Appraisal of pollution threats to Alabama's environment;
- Issues related to land use in rural areas; and
- Issues related to the quality of life for Alabama's rural residents.

#### II. Methodology

#### A. Questionnaire Development

In January 2002, CGS staff met with Professors Claude E. Boyd and Wayne Shell of Auburn University's Fisheries and Allied Aquacultures Department. At that meeting, Professor Boyd provided CGS with copies of a draft instrument to serve as the focal point of a discussion concerning the aims and purposes of the survey. Following that meeting, CGS staff reviewed and revised the draft instrument. Because of the instrument's length, two separate 38-item protocols, designated *Protocol A* and *Protocol B*, were created with eleven demographic items and eleven questions common to both versions.

The revised instruments were programmed for use with the Computer Assisted Telephone Interviewing (CATI) system. Prior to actual interviewing, CGS staff reviewed and tested the survey instrument, made necessary corrections to clarify vague or misleading sections, and retested the survey. Appendix A contains the final versions of the survey instruments.

# **B. Sample Selection and Survey Procedures**

Using a random number generator, CGS selected a sample of approximately 5,200 residential telephone numbers in Alabama. CGS placed calls to numbers in the sample February 28 to March 7, 2002. There were 988 completed telephone interview sessions (489 in protocol A and 499 in protocol B). The margin of error for those questions specific to a single protocol was +/- 5%, while the margin of error for those questions common to both protocols was less than

4%. These confidence levels are standard for survey research, and provide a reasonable balance between accuracy and efficiency.

The profile of respondents from the samples parallel the demographic profile for all Alabama citizens or households with respect to education level, income, and age. The reported proportion of African Americans responding to the sample, however, was slightly less than anticipated based upon this group's proportion of Alabama households. Table 1 provides data comparing census and sample demographics.

Table 1: Comparisons Between Survey Sample an Census Demographic Characteristics

Descriptor	Sample	Census
Male	43.7%	47.3%
Caucasian	78.3%	73.9%
Over 65 <sup>1</sup>	24.4%	22.1%
Unemployed	5.4%	6.4%
Income \$75,000 - \$99,999	10.1%	7.6%

# C. Interviewing and Data Analysis Procedures

Prior to interviewing, all CGS interviewers were trained on proper interviewing and data entry techniques. These skills included: building rapport with potential respondents, administering questions properly, probing for

<sup>&</sup>lt;sup>1</sup> Census data uses a category of 65 and over. This survey used a category of 61 and over. Effectively, the population and sample age proportions do not differ in a statistically significant way.

complete answers, and avoiding biases. No interviewers were allowed to participate in actual data collection without first successfully completing the training session. Throughout the process, interviewers were monitored, supervised, and evaluated to maintain interviewing standards.

#### III. Findings

## A. Alabama's Agricultural Status

One of the goals of the survey was to determine the extent of knowledge and awareness that Alabamians have about the scope and quality of agricultural production in Alabama, as well as about any historical changes or trends affecting agriculture in the State. Are Alabamians aware of the kind of agricultural activities that are currently conducted in the State? Are they familiar with the quality of Alabama's natural environment for agriculture? Do they know Alabama's relative agricultural position, as compared to other states in the nation?

The survey results indicate that many Alabamians believe that Alabama is a major agricultural producer and is blessed with excellent soil, water and climate for agricultural production. For example, nearly 56% of respondents agree with the statement: *Alabama is one of the leading agricultural states in the nation*, and somewhat less than one-third (32%) disagree (Table 2). In addition, over three quarters of respondents (77%) report that Alabama's soil and water are excellent for agricultural production (Table 3), while 90% agree that Alabama's climate is excellent for a wide variety of agricultural crops (Table 4).

Table 2: Alabama is a Leading Agricultural State in the Nation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	61	6.2	12.2	12.2
	Strongly Disagree	9	.9	1.8	14.0
	Disagree	151	15.3	30.3	44.3
	Agree	246	24.9	49.3	93.6
	Strongly Agree	32	3.2	6.4	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

Table 3: Alabama's Soil and Water Resources are Among the Nation's Best

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	30	3.0	6.0	6.0
	Strongly Disagree	8	.8	1.6	7.6
	Disagree	77	7.8	15.4	23.0
	Agree	333	33.7	66.7	89.8
	Strongly Agree	51	5.2	10.2	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

Table 4: Alabama's Climate is Excellent for Farming

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	10	1.0	2.0	2.0
	Strongly Disagree	2	.2	.4	2.4
	Disagree	37	3.7	7.4	9.8
	Agree	361	36.5	72.3	82.2
	Strongly Agree	89	9.0	17.8	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

Overall, Alabamians are proud and supportive of the important role played in Alabama's economy by the State's agricultural producers. Though agriculture is a major part of the Alabama economy, many respondents have a somewhat exaggerated sense of the current scale and importance of agricultural activities in Alabama when compared to those activities in other states. The gap between opinion and reality is more pronounced in regard to Alabama's natural suitability for agriculture, with a high proportion of respondents opining that Alabama's less-than-ideal soil, water and climate conditions are excellent for farming.

#### B. Structural Changes in the Role of Alabama Agriculture

A second intent of the survey was to gauge the level of awareness among Alabama's citizens of the changes in farming and other agriculture-related activities that have occurred in our state over the last 50 years. Do Alabamians realize the impact upon Alabama farmers and farm communities as local food production has been supplanted over the years by sources in other parts of the country, or even outside U.S. borders? Are the State's residents aware that over the past half century, fewer farmers on fewer farms are producing fewer products, and that the average age of Alabama farmers continues to rise as fewer young Alabamians choose farming as a career?

Answers to a series of questions about changes in Alabama agriculture since 1950 show some public awareness of the diminishing role of farming in the State. Based on the survey responses, a majority of Alabamians agree that crop production, the number of farms, and the amount of land used for farming have

all decreased in Alabama since 1950. Slightly more than half (51%) of respondents believe that crop production has decreased in Alabama since 1950 (Table 5), while over 70% concur that the number of farms and the amount of land used for agriculture have decreased over that same period (Table 6 and 7).

**Table 5: Total Annual Crop Production since 1950** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	111	11.2	11.3	11.3
	Decreased	496	50.2	50.6	61.9
	Stayed the Same	156	15.8	15.9	77.8
	Increased	218	22.1	22.2	100.0
	Total	981	99.3	100.0	
Missing	System	7	.7		
Total		988	100.0		

Table 6: Number of Alabama Farms Since 1950

		_			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	67	6.8	6.8	6.8
	Decreased	777	78.6	79.0	85.8
	Stayed the Same	61	6.2	6.2	92.0
	Increased	79	8.0	8.0	100.0
	Total	984	99.6	100.0	
Missing	System	4	.4		
Total		988	100.0		

Table 7: Amount of Alabama Agricultural Land Since 1950

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	67	6.8	6.8	6.8
	Decreased	717	72.6	73.0	79.8
	Stayed the Same	95	9.6	9.7	89.5
	Increased	103	10.4	10.5	100.0
	Total	982	99.4	100.0	
Missing	System	6	.6		
Total		988	100.0		

Alabamians express differing opinions when responding to questions about the number of Alabamians involved in farming and the average age of Alabama farmers. Nearly half of the respondents (49%) perceive that more than 5% of the state's population are directly engaged in agriculture, and 17% answer that more than 10% of the active population are engaged in farming (Table 8).

**Table 8: Percentage of Alabamians Farming** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	88	8.9	9.0	9.0
	Less than 2%	133	13.5	13.6	22.6
	2 to 5%	276	27.9	28.2	50.8
	5 to 10%	314	31.8	32.1	82.8
	More than 10%	168	17.0	17.2	100.0
	Total	979	99.1	100.0	
Missing	System	9	.9		
Total		988	100.0		

Table 9 summarizes responses regarding the average age of the Alabama farmer. Nearly four-fifths (78%) of respondents answer that the average age of an Alabama farmer is between 40-60 years old. Thirty-nine percent place the mean age in the forties, and an identical percentage place the mean age of the Alabama farmer in the fifties. Fully one half of the respondents state that the average age of an Alabama farmer is under 50 years of age.

Table 9: Average Age of the Alabama Farmer

		_	Б. (	V 11 D (	Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	15	1.5	3.0	3.0
	Between 30 to 40	54	5.5	10.9	13.9
	Between 40 to 50	193	19.5	38.9	52.8
	Between 50 to 60	193	19.5	38.9	91.7
	60 and Over	41	4.1	8.3	100.0
	Total	496	50.2	100.0	
Missing	System	492	49.8		
Total		988	100.0		

Alabama farmers are generally perceived as relatively conservative with respect to the adoption of innovative ideas and diffusion of new farming methods. When queried about Alabama farmers' acceptance of new ideas and methods in agriculture, 19% state that Alabama farmers are innovative, over half (52%) of the respondents report that Alabama farmers react conservatively to change, and another 18% perceive that Alabama farmers are slow to accept change and lag behind farmers in other states (Table 10).

Table 10: Alabama Farmers' Adoption of New Ideas

		Fraguanay	Doroont	Valid Dargant	Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	51	5.2	10.3	10.3
	Behind Others	91	9.2	18.4	28.7
	Conservative	258	26.1	52.1	80.8
	Innovative	95	9.6	19.2	100.0
	Total	495	50.1	100.0	
Missing	System	493	49.9		
Total		988	100.0		

# C. Alabama Family Farm Profitability

The survey also questioned Alabamians regarding their awareness of the difficulty in profitably operating small, often family-owned, farms in today's agricultural environment. Our findings indicate that Alabamians have some understanding of the difficulty of farming profitably, particularly on small, family farms, and the resultant need for second-incomes or subsidies. As indicated in Table 11, sixty-two percent of Alabamians believe that farmers cannot be profitable without some form of subsidy, and an overwhelming majority (83%) of those interviewed agree that most farm families must have a second source of income to survive (Table 12).

Table 11: Farms are Profitable Ventures Without Subsidies

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	33	3.3	6.7	6.7
	Strongly Disagree	45	4.6	9.2	16.0
	Disagree	258	26.1	52.8	68.7
	Agree	140	14.2	28.6	97.3
	Strongly Agree	13	1.3	2.7	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

Table 12: Most Farmers Must Have a Second Sort of Income to Survive

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	25	2.5	5.0	5.0
	Strongly Disagree	3	.3	.6	5.6
	Disagree	58	5.9	11.6	17.2
	Agree	304	30.8	60.9	78.2
	Strongly Agree	109	11.0	21.8	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

#### D. Measures to Protect Alabama Agriculture

In addition to measuring what Alabamians know about agriculture, the survey also examined the level of support among Alabamians for certain possible actions or changes intended to protect the health and viability of farming in Alabama and the nation. Nearly two thirds of Alabamians agree that food products in Alabama and the nation are relatively inexpensive, and only 6% strongly disagree with this proposition (Table 13). Nearly three out of five Alabamians (59%) also report that they would pay more for food in order to protect U.S. agriculture. Thirty-seven percent report that they are willing to pay 1-10% more; 19% are willing to pay 10-25% more, and 3% willing to pay an additional 25% or more for food in order to protect U.S. agriculture (Table 14). Finally, there is also very strong support (75%) for protecting U.S. agriculture by limiting the importation of food products from other countries (Table 15).

Table 13: Food in the United States is Inexpensive

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	35	3.5	7.2	7.2
	Strongly Disagree	31	3.1	6.4	13.5
	Disagree	106	10.7	21.7	35.2
	Agree	275	27.8	56.4	91.6
	Strongly Agree	41	4.1	8.4	100.0
	Total	488	49.4	100.0	
Missing	System	500	50.6		
Total		988	100.0		

Table 14: I am Willing to Pay More for Food in Order to Protect U. S. Farming

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	19	1.9	3.9	3.9
	No more	182	18.4	37.4	41.3
	1 to 10%	180	18.2	37.0	78.2
	10 to 25%	92	9.3	18.9	97.1
	More than 25%	14	1.4	2.9	100.0
	Total	487	49.3	100.0	
Missing	System	501	50.7		
Total		988	100.0		

Table 15: We Should Protect U. S. Farming by Limiting Food Imports

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	20	2.0	4.1	4.1
	Strongly Disagree	13	1.3	2.7	6.8
	Disagree	87	8.8	17.8	24.6
	Agree	289	29.3	59.2	83.8
	Strongly Agree	79	8.0	16.2	100.0
	Total	488	49.4	100.0	
Missing	System	500	50.6		
Total		988	100.0		

# E. Agriculture and the Environment

One issue related to the state of farming and agriculture in Alabama is the perceived impact such activities have on the environment in our State. Do Alabamians believe that farming degrades the environment; is farming a major source of pollution; and, if so, in what ways? How do Alabamians evaluate the seriousness of agricultural pollution compared to other pollution sources?

Alabamians are divided regarding the seriousness of the environmental impact of farm fertilizers. Forty-six percent agree that farm fertilizers are a significant or very significant cause of environmental damage, while 47%

perceive farm fertilizers as minor environmental pollutants (Table 16). Perceptions regarding the environmental damage attributed to the use of other agricultural chemicals is less divided, but not unanimous. Half of Alabamians estimate that the environmental damage attributed to agricultural chemical pollution is significant, while 37% disagree (Table 17).

**Table 16:** Significance of Pollution From Farm Fertilizers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	34	3.4	7.0	7.0
	Insignificant	127	12.9	26.0	32.9
	Slightly Significant	103	10.4	21.1	54.0
	Significant	185	18.7	37.8	91.8
	Very Significant	40	4.0	8.2	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

 Table 17:
 Significance of Pollution from Other Agricultural Chemicals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	64	6.5	13.1	13.1
	Insignificant	77	7.8	15.7	28.8
	Slightly Significant	106	10.7	21.7	50.5
	Significant	184	18.6	37.6	88.1
	Very Significant	58	5.9	11.9	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

Responses to questions about the pollution caused by animal wastes suggest that Alabamians are divided in their perceptions regarding the impact of environmental pollution attributed to these industries. Nearly half of respondents (47%) agree that manure from poultry production is a significant source of environmental damage in the State, while 37% say this damage is insignificant

(Table 18). Forty-three percent believe that environmental pollution from cattle and swine feed lots is a significant problem, but 40% of Alabamians disagree (Table 19).

Table 18: Significance of Pollution From Poultry Production Facilities in Alabama

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	77	7.8	15.4	15.4
	Insignificant	103	10.4	20.6	36.1
	Slightly Significant	83	8.4	16.6	52.7
	Significant	169	17.1	33.9	86.6
	Very Significant	67	6.8	13.4	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

Table 19: Significance of Pollution From Cattle and Swine Feedlots in Alabama

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	85	8.6	17.0	17.0
	Insignificant	112	11.3	22.4	39.5
	Slightly Significant	90	9.1	18.0	57.5
	Significant	164	16.6	32.9	90.4
	Very Significant	48	4.9	9.6	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

There appears to be less public awareness of Alabama's farmland erosion problems compared to livestock and fertilizer sources of pollution. Thirty-nine percent of Alabamians believe that soil erosion caused by crop production is a significant or very significant source of pollution, but 50% do not see this as a significant environmental issue (Table 20).

Table 20: Significance of Erosion From Crop Production in Alabama

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	54	5.5	10.8	10.8
	Insignificant	139	14.1	27.9	38.7
	Slightly Significant	110	11.1	22.0	60.7
	Significant	155	15.7	31.1	91.8
	Very Significant	41	4.1	8.2	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

Alabamians do not believe that small, family farms are as damaging to the environment as large, factory farms. By a pronounced margin (61% agree, 28% disagree), small family farms are considered less damaging to the environment than large farms (Table 21).

**Table 21: Small Family Farms Cause Less Pollution Than Large Farms** 

		_		V " I D (	Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	55	5.6	11.0	11.0
	Strongly Disagree	6	.6	1.2	12.2
	Disagree	135	13.7	27.1	39.3
	Agree	271	27.4	54.3	93.6
	Strongly Agree	32	3.2	6.4	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

Many Alabamians understand that environmental protection costs money, and are willing to bear some financial burden for it. Two-thirds of the respondents (66%) would pay more for food in order to protect the environment, and only 29% are not willing to pay more for this purpose (Table 22).

 Table 22:
 Willingness to Pay More for Food to Protect the Environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	22	2.2	4.5	4.5
	No more	143	14.5	29.4	34.0
	1 to 10%	188	19.0	38.7	72.6
	10 to 25%	109	11.0	22.4	95.1
	More than 25%	24	2.4	4.9	100.0
	Total	486	49.2	100.0	
Missing	System	502	50.8		
Total		988	100.0		

#### F. Other Environmental Issues

Concern about diminishing air and water quality and other environmental issues have generally been on the rise in recent years. This concern often focuses on a limited number of pollution sources, such as industrial uses, sewage treatment facilities, automobile emissions, and a variety of negative impacts from urbanized areas. A goal of the survey was to determine awareness of other major, but sometimes overlooked, sources of pollution.

Responses to a question about the impact of farming operations on the quality of life in nearby residential areas reinforces the impression that many Alabamians do not see agriculture as a major threat to their environment, but that they understand that home use of chemicals may pose a serious environmental threat. Forty-two percent of the respondents agree that nearby farming operations improve the quality of life in residential areas, while 17% believe that nearby farming diminishes residential quality of life (Table 23).

Table 23: The Effect of Nearby Farming on the Residential Quality of Life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	43	4.4	8.8	8.8
	Dim. Significantly	12	1.2	2.5	11.2
	Diminishes	69	7.0	14.1	25.4
	No effect	159	16.1	32.5	57.9
	Improves	179	18.1	36.6	94.5
	Impr.Significantly	27	2.7	5.5	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

Among all the environmental issues addressed in the survey, homeowner use of pesticides carries the highest level of awareness of environmental damage by Alabamians. Fifty-six percent of respondents report that homeowner use of pesticides is a significant cause of environmental damage in the State (Table 24). Interestingly, a much smaller percentage (32%) attribute use of fertilizer on home lawns as a significant cause of environmental damage, and 61% report that use of fertilizer on home lawns is an insignificant polluter (Table 25).

**Table 24:** Significance of Pollution from Homeowner Pesticides

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	21	2.1	4.2	4.2
	Insignificant	107	10.8	21.4	25.7
	Slightly Significant	94	9.5	18.8	44.5
	Significant	214	21.7	42.9	87.4
	Very Significant	63	6.4	12.6	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

Table 25: Significance of Pollution From Home Lawn Fertilizer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	35	3.5	7.2	7.2
	Insignificant	183	18.5	37.4	44.6
	Slightly Significant	114	11.5	23.3	67.9
	Significant	121	12.2	24.7	92.6
	Very Significant	36	3.6	7.4	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

Alabamians tend to believe that industries, energy generating plants, and urbanized areas are responsible for most pollution in the State. Relatively few Alabamians perceive agriculture to be a primary polluter, and fewer still consider outdoor recreation as a primary source of pollution. Half (50%) the respondents view industry as the main cause of pollution, 20% towns and cities, 17% power plants, 4% agriculture, and 2% outdoor recreation (Table 26).

Table 26: Primary Cause of Pollution in Alabama

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	67	6.8	6.8	6.8
	Power Plants	170	17.2	17.2	24.0
	Outdoor Recreation	23	2.3	2.3	26.3
	Towns and Cities	195	19.7	19.7	46.1
	Industry	493	49.9	49.9	96.0
	Agriculture	40	4.0	4.0	100.0
	Total	988	100.0	100.0	

Respondents generally believe that the quality of Alabama's environment is similar to that in other states, but that Alabama's roadside litter problems are worse. Over half (51%) of the respondents answer that Alabama's environmental quality is about the same as other states, 18% believe that Alabama's

environmental quality is better, and 21% that it is worse (Table 27). With respect to the issue of roadside litter, 36% state that Alabama's roadside litter problem is worse than in other states and 23% that it is better (Table 28).

Table 27: Alabama's Environmental Quality in Comparison to Other States

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	110	11.1	11.1	11.1
	Much Worse	23	2.3	2.3	13.5
	Worse	180	18.2	18.2	31.7
	About the same	499	50.5	50.5	82.2
	Better	145	14.7	14.7	96.9
	Much Better	31	3.1	3.1	100.0
	Total	988	100.0	100.0	

Table 28: Alabama's Roadside Litter in Comparison to Other States

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	24	2.4	4.8	4.8
	Much Worse	50	5.1	10.0	14.8
	Worse	127	12.9	25.5	40.3
	About the Same	185	18.7	37.1	77.4
	Better	91	9.2	18.2	95.6
	Much Better	22	2.2	4.4	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

The majority of Alabamians somewhat approve of the performance of State and local governments in environmental protection, and say they favor tax increases to protect the environment. Thirty percent answer that State and local governments are doing well or very well in protect the environment; 43% give a fair appraisal; and 20% evaluate the State and local governments' performance in the field of environmental protection to be poor or very poor Table 29).

Table 29: How Well is Alabama Protecting the Environment in the State

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	72	7.3	7.3	7.3
	Very Poorly	47	4.8	4.8	12.0
	Poorly	147	14.9	14.9	26.9
	Fairly	428	43.3	43.3	70.2
	Well	228	23.1	23.1	93.3
	Very Well	66	6.7	6.7	100.0
	Total	988	100.0	100.0	

Alabamians may be willing to support increased taxes to protect the environment. Sixty-nine percent support or strongly support such an increase, and 28% are opposed or strongly opposed to such action (Table 30).

Table 30: Support a Tax Increase to Protect the Environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	33	3.3	3.3	3.3
	Strongly Oppose	58	5.9	5.9	9.2
	Oppose	218	22.1	22.1	31.3
	Support	525	53.1	53.1	84.4
	Strongly Support	154	15.6	15.6	100.0
	Total	988	100.0	100.0	

#### G. Rural Life Issues

Survey respondents are somewhat aware of the economic problems facing rural Alabamians, but show little support for tax increases or government funded research aimed at improving rural conditions. Less than one in ten respondent (8%) suggest that Alabama's rural economy is doing well. Thirty-six percent believe that the rural economy is holding its own, and 48% believe that it is declining (Table 31).

Table 31: Appraisal of the State of Alabama's Farm Economy

		Fraguanay	Doroont	Valid Dargant	Cumulative Percent
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	79	8.0	8.0	8.0
	Declining	474	48.0	48.1	56.1
	Holding its Own	350	35.4	35.5	91.7
	Doing Well	82	8.3	8.3	100.0
	Total	985	99.7	100.0	
Missing	System	3	.3		
Total		988	100.0		

Despite awareness of problems in Alabama's rural economy, respondents are divided regarding support for tax increases to enhance the rural situation in the State. Slightly over half of Alabamians (51%) support or strongly support some form of tax increase to alleviate the rural situation, but 45% oppose or strongly oppose such increases (Table 32)

Table 32: Support for a Tax Increase to Enhance Rural Life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	38	3.8	3.8	3.8
	Strongly Oppose	102	10.3	10.3	14.2
	Oppose	346	35.0	35.0	49.2
	Support	432	43.7	43.7	92.9
	Strongly Support	70	7.1	7.1	100.0
	Total	988	100.0	100.0	

Answers to a series of questions about rural land and land uses reveal an awareness on the part of Alabama's citizens of the issue of vacant rural land, but also tend to show limited support for government involvement in solving rural problems. For example, Government zoning of rural land was supported by 37% of respondents; however, it was opposed by 50% (Table 33). These answers, coupled with those given to previous questions about resistance to tax increases,

indicate that Alabamians may be reluctant to involve state and local governments in addressing these issues, either through land regulation or the increased use of government funds.

Table 33: Support for Zoning of Rural Land

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	65	6.6	13.3	13.3
	Strongly Oppose	48	4.9	9.8	23.1
	Oppose	194	19.6	39.7	62.8
	Support	161	16.3	32.9	95.7
	Strongly Support	21	2.1	4.3	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

### **IV.Summary**

Though farming and other forms of agriculture remain an important part of Alabama's economy, many Alabamians have an exaggerated idea of their importance. A majority believe that Alabama is one of the leading agricultural states in the nation, and large proportions of Alabamians believe that the State's natural suitability for agriculture is excellent, evidencing some lack of awareness of serious problems related to Alabama's soil, water and climate. Alabamians are aware of the statewide reduction in the number of farms and the amount of farmland over the past 50 years, but are not as aware of how great that reduction has been, overestimating the number of Alabamians involved in agriculture by a very large margin.

Responses to questions about the economics of farming in Alabama were also mixed. A clear majority of Alabamians report that government subsidies are necessary to farm profitably, while an even higher proportion say farmers must have second incomes to survive. Nearly two-thirds of Alabamians agree that food in Alabama and the nation is not expensive compared with other parts of the world, and they also express a willingness to support policy changes to protect U.S. agriculture. For example, over half of Alabamians would pay more for food to protect U.S. agriculture, and three-fourths would support limiting food imports from other countries in support of this policy goal.

Alabamians are concerned about protecting the environment, and many appear to favor tax increases for that purpose. Many respondents believe farming causes some pollution, but not to the same extent as industrial uses and

urban areas. Respondents believe home pesticide use poses a serious environmental threat, but do not have analogous concerns regarding the polluting effects of lawn fertilization or many types of outdoor recreation. Alabama's environment is perceived to be roughly comparable to other states, though many consider roadside litter to be a bigger problem in Alabama than elsewhere. State and local governments receive mildly positive marks for their environmental protection efforts, and two-thirds of respondents would support both increased taxes and higher food prices to ensure the safety of the environment.

Alabamians are aware of the economic difficulties of farming on a small scale, but they believe Alabama taxes on farmland are very low, and that rural land is rapidly increasing in value. These finding may help explain Alabamians' lack of support for increasing taxes to improve rural life, and their stated view that government funded research should be aimed at solving environmental problems, rather than improving rural life.

# Protocol A – 2002 Survey Alabamian Opinion on Agriculture, the Environment and Rural Life

Hello, my name is \_\_\_\_\_, and I am calling from Auburn University's survey research lab. We are not selling anything! However, we are conducting a survey on important agricultural and environmental issues facing Alabamians today. Your opinion is very important to us.

May I have a few minutes of your time to answer some questions?

- 1. How well are Alabama's state and local governments protecting the environment?
  - Very Well
  - Well
  - Fairly
  - Poorly
  - Very Poorly
  - Don't know
- 2. How does Alabama's environmental status compare to other states?
  - Much better
  - Better
  - About the same
  - Worse
  - Much worse
  - Don't know
- 3. What is the best use of government funded research on Alabama agriculture?
  - Finding better uses of rural land
  - Solving environmental problems
  - Don't know
- 4. What is the least appropriate use of former agricultural land?
  - Forestry
  - Mining
  - Landfill
  - Recreational areas
  - Don't know

- 5. How do farming operations close to residential areas affect the quality of life?
  - Improves Significantly
  - Improves
  - No effect
  - Diminishes
  - Diminishes Significantly
  - Don't know
- 6. How do you feel about zoning of rural lands in non-incorporated areas?
  - Strongly Support
  - Support
  - Oppose
  - Strongly Oppose
  - Don't know

For the following issues, would you Strongly Support, Support, Oppose, or Strongly Oppose a tax increase.

- 7. Improving rural life in Alabama.
  - Strongly Support
  - Support
  - Oppose
  - Strongly Oppose
  - Don't know
- 8. Protecting the environment.
  - Strongly Support
  - Support
  - Oppose
  - Strongly Oppose
  - Don't know
- 9. Which causes the most pollution in Alabama?
  - Agriculture
  - Industry
  - Towns and cities
  - Outdoor recreation
  - Power generating plants
  - Don't know

Please indicate if the pollution or other environmental damage caused by the following activities in Alabama is Very Significant, Significant, Slightly Significant, or Insignificant.

- 10. Use of fertilizer on crops.
  - Very Significant
  - Significant
  - Slightly Significant
  - Insignificant
  - Don't know
- 11. Use of fertilizer on home lawns
  - Very Significant
  - Significant
  - Slightly Significant
  - Insignificant
  - Don't know
- 12. Use of other agricultural chemicals.
  - Very Significant
  - Significant
  - Slightly Significant
  - Insignificant
  - Don't know

For the following series of statements please respond whether you Strongly Agree, Agree, Disagree, or Strongly Disagree.

- 13. Lawyers, doctors, and other professionals own and operate a high proportion of Alabama farms as a side investment.
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
  - Don't know
- 14. Farmers in Alabama can make a good profit without government subsidies.
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
  - Don't know

- 15. Most farm families in Alabama derive more than 50% of their income from farm related activities.
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
  - Don't know
- 16. The value of rural land in Alabama is rapidly increasing.
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
  - Don't know
- 17. The tax rate on farmland in Alabama is among the lowest in the nation.
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
  - Don't know
- 18. Compared to other parts of the world, food in the United States, and particularly in Alabama, is relatively inexpensive.
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
  - Don't know
- 19. In order to protect U.S. agriculture, the importation of food products from foreign countries should be limited.
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
  - Don't know

- 20. In order to protect U.S. agriculture, how much more would you be willing to pay for food products?
  - More than 25%
  - 10 to 25%
  - 1 to 10%
  - No more
  - Don't know
- 21. In order to protect the environment, how much more would you be willing to pay for food products?
  - More than 25%
  - 10 to 25%
  - 1 to 10%
  - No more
  - Don't know
- 22. Is the rural economy of Alabama...?
  - Doing well
  - Holding its own
  - Declining
  - Don't know
- 23. Since 1950, the number of farms in Alabama has...?
  - Increased
  - Stayed the same
  - Decreased
  - Don't know
- 24. Since 1950, the amount of land in Alabama used for agriculture has...?
  - Increased
  - Stayed the same
  - Decreased
  - Don't know
- 25. Since 1950, total yearly crop production in Alabama has...?
  - Increased
  - Stayed the same
  - Decreased
- Don't know

#### 26. What percentage of Alabamians are involved in farming?

- More than 10%
- 5 to 10%
- 2 to 5%
- Less than 2%
- Don't know

#### 27. In what county do you live

• County list should follow

#### 28. How would you classify the area in which you live? Would you say that it is...?

- City (above 50,000)
- Small city (25,000-50,000)
- Large town (5,000-25,000)
- Small town (less than 5,000)
- Small unincorporated community
- Rural area
- No answer

#### 29. Are you currently employed...?

- Full-time
- Part-time
- Homemaker
- Retired
- Unemployed
- Other (e.g. student, disabled, etc)
- No answer

#### 30. What is your current or pre-retirement occupation?

- Laborer
- Clerical
- Technical
- Professional
- Sales
- Service
- Homemaker
- Other
- No answer

- 31. Do you make your living or supplement your income by farming or another agriculture-related activity?
  - Yes
  - No
  - No answer
- 32. Including yourself and children, how many people live in your household?
- 33. How many children under 18 years of age currently live in your household?
- 34. In which age group would you include yourself?
  - 71 +
  - 61 70
  - 51 60
  - 41 50
  - 31 40
  - 18 30
  - No answer
- 35. What is your highest level of education completed?
  - Graduate\Professional
  - Bachelor's
  - Associates\Technical
  - Some college
  - High school diploma/GED
  - Less than high school
  - No answer
- 36. Which category best describes your annual household income?
  - \$100,000 and over
  - \$75 99,000
  - \$40 74,000
  - \$20 39,000
  - Less than \$20,000
  - No answer

## 37. What race do you identify with?

- African-American
- Asian-American
- Hispanic
- Native-American
- White
- Other
- No answer

# 38. What is your gender?

- Male
- Female
- No answer

# Protocol B – 2002 Survey Alabamian Opinion on Agriculture, the Environment and Rural Life

Hello, my name is	and I am calling from Auburn University's survey
research lab. We are not s	elling anything! However, we are conducting a survey on
important agricultural and e	nvironmental issues facing Alabamians today.
Your opinion is very importa	ant to us.
May I have a few minutes of	of your time to answer some questions?

39. How well are Alabama's state and local governments protecting the environment?

- Very Well
- Well
- Fairly
- Poorly
- Very Poorly
- Don't know

40. How does Alabama's environmental status compare to other states?

- Much Better
- Better
- About the same
- Worse
- Much Worse
- Don't know

41. In regard to trash and litter, how do Alabama roadsides compare to other states' roadsides?

- Much Better
- Better
- About the same
- Worse
- Much Worse
- Don't know

42. What is the least appropriate use of former agricultural land in Alabama?

- Forestry
- Mining
- Landfill
- Recreational areas
- Don't know

For the following statements please respond whether you Strongly Agree, Agree, Disagree, or Strongly Disagree.

- 43. Alabama has among the best soil and water resources in the United States for agriculture.
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
  - Don't know
- 44. Alabama's climate is excellent for a wide variety of agricultural crops.
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
  - Don't know
- 45. Alabama is one of the leading agricultural states in the nation.
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
  - Don't know
- 46. Most farm families in Alabama must have a second source of income to survive.
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
  - Don't know
- 47. Small family farms cause less environmental damage than large farms.
  - Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
  - Don't know

48. There is a large amount of unused rural land in Alabama.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Don't know

For the following issues, would you Strongly Support, Support, Oppose, or Strongly Oppose a tax increase.

49. Improving rural life in Alabama.

- Strongly Support
- Support
- Oppose
- Strongly Oppose
- Don't know

50. Protecting the environment.

- Strongly Support
- Support
- Oppose
- Strongly Oppose
- Don't know

51. Which causes the most pollution in Alabama?

- Agriculture
- Industry
- Towns and cities
- Outdoor recreation
- Power generating plants
- Don't know

Please indicate if the pollution or other environmental damage caused by the following activities in Alabama is Very Significant, Significant, Slightly Significant, or Insignificant.

52. Use and disposal of pesticides by homeowners.

- Very Significant
- Significant
- Slightly Significant
- Insignificant
- Don't know

#### 53. Erosion caused by crop production.

- Very Significant
- Significant
- Slightly Significant
- Insignificant
- Don't know

## 54. Manures from chicken production in Alabama.

- Very Significant
- Significant
- Slightly Significant
- Insignificant
- Don't know

#### 55. Cattle and swine feedlots in Alabama.

- Very Significant
- Significant
- Slightly Significant
- Insignificant
- Don't know

## 56. Is the rural economy of Alabama...?

- Doing well
- Holding its own
- Declining
- Don't know

#### 57. Since 1950, the number of farms in Alabama has...?

- Increased
- Stayed the same
- Decreased
- Don't know

# 58. Since 1950, the area of land in Alabama used for agriculture has...?

- Increased
- Stayed the same
- Decreased
- Don't know

## 59. Since 1950, total yearly crop production in Alabama has...?

- Increased
- Stayed the same
- Decreased
- Don't know

#### 60. What percentage of Alabamians are involved in farming?

- More than 10%
- 5 to 10%
- 2 to 5%
- Less than 2%
- Don't know

#### 61. What is the annual return on investment for an Alabama farmer?

- More than 10%
- 5 to 10%
- 2 to 5%
- Less than 2%
- Don't know

## 62. What is the age of the average Alabama farmer today?

- 60 years old or above
- Between 50 to 60 years old
- Between 40 to 50 years old
- Between 30 to 40 years old
- Don't know

#### 63. Would you say the variety of crops grown in Alabama is...?

- Highly diversified (many different crops)
- Moderately diversified (moderate number of crops)
- Undiversified (only a few traditional crops)
- Don't know

## 64. Which statement about the typical Alabama farmer is most correct?

- He quickly adopts to new ideas and new crops
- He is slow to change to new methods or crops until well established
- He lags far behind farmers in other states in adopting new technology
- Don't know

#### 65. In what county do you live?

County list should follow

- 66. How would you classify the area in which you live? Would you say that it is...?
  - City (above 50,000)
- Small city (25,000-50,000)
- Large town (5,000-25,000)
- Small town (less than 5,000)
- Small unincorporated community
- Rural area
- No answer
- 67. Are you currently employed...?
  - Full-time
  - Part-time
  - Homemaker
  - Retired
  - Unemployed
  - Other (e.g. student, disabled, etc)
  - No answer
- 68. How would you classify your current or pre-retirement occupation?
  - Laborer
  - Clerical
  - Technical
  - Professional
  - Sales
  - Service
  - Homemaker
  - Other
  - No answer
- 69. Do you make your living or supplement your income by farming or another agriculture-related activity?
  - Yes
  - No.
  - No opinion
- 70. Including yourself and children, how many people live in your household?
- 71. How many children under 18 years of age currently live in your household?

# 72. In which age group would you include yourself?

- 71 +
- 61 70
- 51 60
- 41 50
- 31 40
- 18 30
- No answer

## 73. What is your highest level of education completed?

- Graduate\Professional
- Bachelor's
- Associate\Technical
- Some college
- High school diploma/GED
- Less than high school
- No answer

# 74. Which category best describes your annual household income?

- \$100,000 and over
- \$75 99,000
- \$40 74,000
- \$20 39,000
- Less than \$20,000
- No answer

## 75. What race do you identify with?

- African-American
- Asian-American
- Hispanic
- Native-American
- White
- Other
- No answer

## 76. What is your gender?

- Male
- Female
- No answer

# Appendix B: Frequency Distributions of 2002 Alabama Survey on Agricultural, Environmental and Rural Life Issues

#### How well is AL protecting the environment

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	72	7.3	7.3	7.3
	Very Poorly	47	4.8	4.8	12.0
	Poorly	147	14.9	14.9	26.9
	Fairly	428	43.3	43.3	70.2
	Well	228	23.1	23.1	93.3
	Very Well	66	6.7	6.7	100.0
	Total	988	100.0	100.0	

#### AL's environment compared to other states

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	110	11.1	11.1	11.1
	Much Worse	23	2.3	2.3	13.5
	Worse	180	18.2	18.2	31.7
	About the Same	499	50.5	50.5	82.2
	Better	145	14.7	14.7	96.9
	Much Better	31	3.1	3.1	100.0
	Total	988	100.0	100.0	

#### AL's roadside litter compared to other states

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	24	2.4	4.8	4.8
	Much Worse	50	5.1	10.0	14.8
	Worse	127	12.9	25.5	40.3
	About the Same	185	18.7	37.1	77.4
	Better	91	9.2	18.2	95.6
	Much Better	22	2.2	4.4	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

## Best use of government funded research is...

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	81	8.2	16.6	16.6
	Solving Envir. Problems	253	25.6	51.7	68.3
	Find Better Land Uses	155	15.7	31.7	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

#### Worst use of former agricultural land is..

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	119	12.0	12.0	12.0
	Recreational Areas	139	14.1	14.1	26.1
	Landfill	324	32.8	32.8	58.9
	Mining	245	24.8	24.8	83.7
	Forestry	161	16.3	16.3	100.0
	Total	988	100.0	100.0	

#### Farming's effect on residential quality of life

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	43	4.4	8.8	8.8
	Dim. Significantly	12	1.2	2.5	11.2
	Diminishes	69	7.0	14.1	25.4
	No effect	159	16.1	32.5	57.9
	Improves	179	18.1	36.6	94.5
	Impr.Significantly	27	2.7	5.5	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

## Support zoning rural lands

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	65	6.6	13.3	13.3
	Strongly Oppose	48	4.9	9.8	23.1
	Oppose	194	19.6	39.7	62.8
	Support	161	16.3	32.9	95.7
	Strongly Support	21	2.1	4.3	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

## Support tax increase to improve rural life

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	38	3.8	3.8	3.8
	Strongly Oppose	102	10.3	10.3	14.2
	Oppose	346	35.0	35.0	49.2
	Support	432	43.7	43.7	92.9
	Strongly Support	70	7.1	7.1	100.0
	Total	988	100.0	100.0	

## Support tax increase to protect environment

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	33	3.3	3.3	3.3
	Strongly Oppose	58	5.9	5.9	9.2
	Oppose	218	22.1	22.1	31.3
	Support	525	53.1	53.1	84.4
	Strongly Support	154	15.6	15.6	100.0
	Total	988	100.0	100.0	

## Main cause of Alabama pollution

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	67	6.8	6.8	6.8
	Power Plants	170	17.2	17.2	24.0
	Outdoor Recreation	23	2.3	2.3	26.3
	<b>Towns and Cities</b>	195	19.7	19.7	46.1
	Industry	493	49.9	49.9	96.0
	Agriculture	40	4.0	4.0	100.0
	Total	988	100.0	100.0	

#### Pollution from farm fertilizer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	34	3.4	7.0	7.0
	Insignificant	127	12.9	26.0	32.9
	Slightly Significant	103	10.4	21.1	54.0
	Significant	185	18.7	37.8	91.8
	Very Significant	40	4.0	8.2	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

#### Pollution from home lawn fertilizer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	35	3.5	7.2	7.2
	Insignificant	183	18.5	37.4	44.6
	Slightly Significant	114	11.5	23.3	67.9
	Significant	121	12.2	24.7	92.6
	Very Significant	36	3.6	7.4	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

## Pollution from other agricultural chemicals

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	64	6.5	13.1	13.1
	Insignificant	77	7.8	15.7	28.8
	Slightly Significant	106	10.7	21.7	50.5
	Significant	184	18.6	37.6	88.1
	Very Significant	58	5.9	11.9	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

## Pollution from homeowner pesticides

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	21	2.1	4.2	4.2
	Insignificant	107	10.8	21.4	25.7
	Slightly Significant	94	9.5	18.8	44.5
	Significant	214	21.7	42.9	87.4
	Very Significant	63	6.4	12.6	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

#### **Erosion from crop production**

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	54	5.5	10.8	10.8
	Insignificant	139	14.1	27.9	38.7
	Slightly Significant	110	11.1	22.0	60.7
	Significant	155	15.7	31.1	91.8
	Very Significant	41	4.1	8.2	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

#### Pollution from chicken production

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	77	7.8	15.4	15.4
	Insignificant	103	10.4	20.6	36.1
	Slightly Significant	83	8.4	16.6	52.7
	Significant	169	17.1	33.9	86.6
	Very Significant	67	6.8	13.4	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

#### Pollution from cattle and swine feedlots

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	85	8.6	17.0	17.0
	Insignificant	112	11.3	22.4	39.5
	Slightly Significant	90	9.1	18.0	57.5
	Significant	164	16.6	32.9	90.4
	Very Significant	48	4.9	9.6	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

#### Professionals own most Alabama farms

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	88	8.9	18.0	18.0
	Strongly Disagree	21	2.1	4.3	22.3
	Disagree	158	16.0	32.3	54.6
	Agree	180	18.2	36.8	91.4
	Strongly Agree	42	4.3	8.6	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

#### Farms are profitable without subsidies

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	33	3.3	6.7	6.7
	Strongly Disagree	45	4.6	9.2	16.0
	Disagree	258	26.1	52.8	68.7
	Agree	140	14.2	28.6	97.3
	Strongly Agree	13	1.3	2.7	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

## Farming provides over 50% of farmer income

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	67	6.8	13.7	13.7
	Strongly Disagree	13	1.3	2.7	16.4
	Disagree	122	12.3	24.9	41.3
	Agree	250	25.3	51.1	92.4
	Strongly Agree	37	3.7	7.6	100.0
	Total	489	49.5	100.0	
Missing	System	499	50.5		
Total		988	100.0		

## Value of AL rural land is rapidly increasing

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	28	2.8	5.7	5.7
	Strongly Disagree	13	1.3	2.7	8.4
	Disagree	119	12.0	24.4	32.8
	Agree	265	26.8	54.3	87.1
	Strongly Agree	63	6.4	12.9	100.0
	Total	488	49.4	100.0	
Missing	System	500	50.6		
Total		988	100.0		

#### Tax rate on AL farmland among nation's lowest

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	154	15.6	31.6	31.6
	Strongly Disagree	13	1.3	2.7	34.2
	Disagree	81	8.2	16.6	50.8
	Agree	216	21.9	44.3	95.1
	Strongly Agree	24	2.4	4.9	100.0
	Total	488	49.4	100.0	
Missing	System	500	50.6		
Total		988	100.0		

#### Food in U.S. is inexpensive

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	35	3.5	7.2	7.2
	Strongly Disagree	31	3.1	6.4	13.5
	Disagree	106	10.7	21.7	35.2
	Agree	275	27.8	56.4	91.6
	Strongly Agree	41	4.1	8.4	100.0
	Total	488	49.4	100.0	
Missing	System	500	50.6		
Total		988	100.0		

## Protect U.S. farming by limiting food imports

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	20	2.0	4.1	4.1
	Strongly Disagree	13	1.3	2.7	6.8
	Disagree	87	8.8	17.8	24.6
	Agree	289	29.3	59.2	83.8
	Strongly Agree	79	8.0	16.2	100.0
	Total	488	49.4	100.0	
Missing	System	500	50.6		
Total		988	100.0		

## AL's soil and water among nation's best

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	30	3.0	6.0	6.0
	Strongly Disagree	8	.8	1.6	7.6
	Disagree	77	7.8	15.4	23.0
	Agree	333	33.7	66.7	89.8
	Strongly Agree	51	5.2	10.2	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

## Alabama's climate is excellent for farming

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	10	1.0	2.0	2.0
	Strongly Disagree	2	.2	.4	2.4
	Disagree	37	3.7	7.4	9.8
	Agree	361	36.5	72.3	82.2
	Strongly Agree	89	9.0	17.8	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

## Alabama is a leading agricultural state

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	61	6.2	12.2	12.2
	Strongly Disagree	9	.9	1.8	14.0
	Disagree	151	15.3	30.3	44.3
	Agree	246	24.9	49.3	93.6
	Strongly Agree	32	3.2	6.4	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

#### Most farmers have a second income source

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	25	2.5	5.0	5.0
	Strongly Disagree	3	.3	.6	5.6
	Disagree	58	5.9	11.6	17.2
	Agree	304	30.8	60.9	78.2
	Strongly Agree	109	11.0	21.8	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

## Small family farms cause less pollution

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	55	5.6	11.0	11.0
	Strongly Disagree	6	.6	1.2	12.2
	Disagree	135	13.7	27.1	39.3
	Agree	271	27.4	54.3	93.6
	Strongly Agree	32	3.2	6.4	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

#### Alabama has much unused rural land

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	31	3.1	6.2	6.2
	Strongly Disagree	9	.9	1.8	8.0
	Disagree	70	7.1	14.0	22.0
	Agree	321	32.5	64.3	86.4
	Strongly Agree	68	6.9	13.6	100.0
	Total	499	50.5	100.0	
Missing	System	489	49.5		
Total		988	100.0		

## Pay more for food to protect U.S. farming

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	19	1.9	3.9	3.9
	No more	182	18.4	37.4	41.3
	1 to 10%	180	18.2	37.0	78.2
	10 to 25%	92	9.3	18.9	97.1
	More than 25%	14	1.4	2.9	100.0
	Total	487	49.3	100.0	
Missing	System	501	50.7		
Total		988	100.0		

## Pay more for food to protect environment

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	22	2.2	4.5	4.5
	No more	143	14.5	29.4	34.0
	1 to 10%	188	19.0	38.7	72.6
	10 to 25%	109	11.0	22.4	95.1
	More than 25%	24	2.4	4.9	100.0
	Total	486	49.2	100.0	
Missing	System	502	50.8		
Total		988	100.0		

#### How is Alabama's rural economy

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	79	8.0	8.0	8.0
	Declining	474	48.0	48.1	56.1
	Holding its Own	350	35.4	35.5	91.7
	Doing Well	82	8.3	8.3	100.0
	Total	985	99.7	100.0	
Missing	System	3	.3		
Total		988	100.0		

#### Number of AL farms since 1950

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	67	6.8	6.8	6.8
	Decreased	777	78.6	79.0	85.8
	Stayed the Same	61	6.2	6.2	92.0
	Increased	79	8.0	8.0	100.0
	Total	984	99.6	100.0	
Missing	System	4	.4		
Total		988	100.0		

#### Amount of AL agricultural land since 1950

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	67	6.8	6.8	6.8
	Decreased	717	72.6	73.0	79.8
	Stayed the Same	95	9.6	9.7	89.5
	Increased	103	10.4	10.5	100.0
	Total	982	99.4	100.0	
Missing	System	6	.6		
Total		988	100.0		

## Total yearly AL crop production since 1950

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	111	11.2	11.3	11.3
	Decreased	496	50.2	50.6	61.9
	Stayed the Same	156	15.8	15.9	77.8
	Increased	218	22.1	22.2	100.0
	Total	981	99.3	100.0	
Missing	System	7	.7		
Total		988	100.0		

## **Percentage of Alabamians farming**

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	88	8.9	9.0	9.0
	Less than 2%	133	13.5	13.6	22.6
	2 to 5%	276	27.9	28.2	50.8
	5 to 10%	314	31.8	32.1	82.8
	More than 10%	168	17.0	17.2	100.0
	Total	979	99.1	100.0	
Missing	System	9	.9		
Total		988	100.0		

#### Annual return on investment for AL farmer

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	84	8.5	16.9	16.9
	Less than 2%	68	6.9	13.7	30.6
	2 to 5%	175	17.7	35.3	65.9
	5 to 10%	114	11.5	23.0	88.9
	More than 10%	55	5.6	11.1	100.0
	Total	496	50.2	100.0	
Missing	System	492	49.8		
Total		988	100.0		

## Average age of Alabama farmer

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	15	1.5	3.0	3.0
	Between 30 to 40	54	5.5	10.9	13.9
	Between 40 to 50	193	19.5	38.9	52.8
	Between 50 to 60	193	19.5	38.9	91.7
	60 and Over	41	4.1	8.3	100.0
	Total	496	50.2	100.0	
Missing	System	492	49.8		
Total		988	100.0		

# Crop diversity in Alabama

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Don't Know	37	3.7	7.5	7.5
	Undiversified	96	9.7	19.4	26.8
	Mod. Diversified	311	31.5	62.7	89.5
	Highly Diversified	52	5.3	10.5	100.0
	Total	496	50.2	100.0	
Missing	System	492	49.8		
Total		988	100.0		

# AL farmers' adoption of new ideas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't Know	51	5.2	10.3	10.3
	Behind Others	91	9.2	18.4	28.7
	Conservative	258	26.1	52.1	80.8
	Innovative	95	9.6	19.2	100.0
	Total	495	50.1	100.0	
Missing	System	493	49.9		
Total		988	100.0		

# County

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Autauga County	19	1.9	1.9	1.9
	Baldwin County	26	2.6	2.7	4.6
	Barbour County	5	.5	.5	5.1
	Bibb County	2	.2	.2	5.3
	Blount County	23	2.3	2.4	7.7
	Bullock County	6	.6	.6	8.3
	<b>Butler County</b>	4	.4	.4	8.7
	Calhoun County	32	3.2	3.3	12.0
	<b>Chambers County</b>	3	.3	.3	12.3
	Cherokee County	9	.9	.9	13.2
	Chilton County	7	.7	.7	13.9
	Clarke County	6	.6	.6	14.5
	Coffee County	12	1.2	1.2	15.8
	Colbert County	13	1.3	1.3	17.1

# County

		_	_		Cumulative
\	0 10 1	Frequency	Percent	Valid Percent	Percent
Valid	Conecuh County	5	.5	.5	17.6
	Coosa County	2	.2	.2	17.8
	Covington County	11	1.1	1.1	18.9
	Crenshaw County	6	.6	.6	19.5
	Cullman County	20	2.0	2.0	21.6
	Dale County	12	1.2	1.2	22.8
	Dallas County	8	.8	.8	23.6
	DeKalb County	14	1.4	1.4	25.1
	Elmore County	17	1.7	1.7	26.8
	Escambia County	3	.3	.3	27.1
	Etowah County	25	2.5	2.6	29.7
	Fayette County	3	.3	.3	30.0
	Franklin County	6	.6	.6	30.6
	Geneva County	4	.4	.4	31.0
	Greene County	5	.5	.5	31.5
	Hale County	2	.2	.2	31.7
	Henry County	3	.3	.3	32.0
	Houston County	18	1.8	1.8	33.9
	Jackson County	12	1.2	1.2	35.1
	Jefferson County	145	14.7	14.8	49.9
	Lamar County	1	.1	.1	50.1
	Lauderdale County	15	1.5	1.5	51.6
	Lawrence County	15	1.5	1.5	53.1
	Lee County	23	2.3	2.4	55.5
	Limestone County	20	2.0	2.0	57.5
	Lowndes County	7	.7	.7	58.2
	Macon County	2	.2	.2	58.4
	Madison County	55	5.6	5.6	64.1
	Marengo County	10	1.0	1.0	65.1
	Marion County	2	.2	.2	65.3
	Marshall County	9	.9	.9	66.2
	Mobile County	80	8.1	8.2	74.4
	Monroe County	12	1.2	1.2	75.6
	Montgomery County	36	3.6	3.7	79.3
	Morgan County	21	2.1	2.1	81.5
	Perry County	2	.2	.2	81.7
	Pickens County	1	.1	.1	81.8
	Pike County	14	1.4	1.4	83.2
	Russell County	13	1.3	1.3	84.5

# County

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Shelby County	25	2.5	2.6	87.1
	St. Clair County	24	2.4	2.5	89.6
	Sumter County	2	.2	.2	89.8
	Talladega County	26	2.6	2.7	92.4
	Tallapoosa County	10	1.0	1.0	93.4
	Tuscaloosa County	34	3.4	3.5	96.9
	Walker County	14	1.4	1.4	98.4
	Washington County	7	.7	.7	99.1
	Wilcox County	4	.4	.4	99.5
	Winston County	5	.5	.5	100.0
	Total	977	98.9	100.0	
Missing	System	11	1.1		
Total		988	100.0		

# Area description

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	No Answer	5	.5	.5	.5
	Rural Area	210	21.3	21.5	22.1
	Small Unincorporated Community	87	8.8	8.9	31.0
	Small Town	221	22.4	22.7	53.6
	Large Town	86	8.7	8.8	62.5
	Small City	162	16.4	16.6	79.1
	City	204	20.6	20.9	100.0
	Total	975	98.7	100.0	
Missing	System	13	1.3		
Total		988	100.0		

## **Employment status**

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	No Answer	9	.9	.9	.9
	Unemployed	53	5.4	5.4	6.4
	Retired	209	21.2	21.5	27.8
	Homemaker	98	9.9	10.1	37.9
	Part-time	73	7.4	7.5	45.4
	Full-time	468	47.4	48.0	93.4
	Other	64	6.5	6.6	100.0
	Total	974	98.6	100.0	
Missing	System	14	1.4		
Total		988	100.0		

#### Occupation classification

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	No Answer	31	3.1	3.2	3.2
	Homemaker	112	11.3	11.5	14.7
	Service	64	6.5	6.6	21.3
	Sales	61	6.2	6.3	27.5
	Professional	275	27.8	28.2	55.7
	Technical	77	7.8	7.9	63.7
	Clerical	83	8.4	8.5	72.2
	Laborer	135	13.7	13.9	86.0
	Other	136	13.8	14.0	100.0
	Total	974	98.6	100.0	
Missing	System	14	1.4		
Total		988	100.0		

## Farm or supplement income by farming

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	No Answer	18	1.8	1.8	1.8
	No	855	86.5	87.9	89.7
	Yes	100	10.1	10.3	100.0
	Total	973	98.5	100.0	
Missing	System	15	1.5		
Total		988	100.0		

## Number of people in household

		_	_		Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid		17	1.7	1.7	1.7
	0	10	1.0	1.0	2.7
	1 to 2	508	51.4	51.4	54.1
	3 to 4	368	37.2	37.2	91.4
	5 to 6	74	7.5	7.5	98.9
	7 to 8	9	.9	.9	99.8
	9 to 10	2	.2	.2	100.0
	Total	988	100.0	100.0	

## People under eighteen in household

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid		28	2.8	2.8	2.8
	0	579	58.6	58.6	61.4
	1 to 2	308	31.2	31.2	92.6
	3 to 4	65	6.6	6.6	99.2
	5 to 6	7	.7	.7	99.9
	7 to 8	1	.1	.1	100.0
	Total	988	100.0	100.0	

## Age group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Answer	7	.7	.7	.7
	18 - 30	160	16.2	16.4	17.2
	31 - 40	177	17.9	18.2	35.4
	41 - 50	212	21.5	21.8	57.1
	51 - 60	180	18.2	18.5	75.6
	61 - 70	107	10.8	11.0	86.6
	71 +	130	13.2	13.4	100.0
	Total	973	98.5	100.0	
Missing	System	15	1.5		
Total		988	100.0		

#### **Education level**

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	No Answer	12	1.2	1.2	1.2
	Less than HS	88	8.9	9.0	10.3
	HS Diploma\GED	317	32.1	32.6	42.9
	Some College	210	21.3	21.6	64.4
	Associate\Technical	71	7.2	7.3	71.7
	Bachelor's	182	18.4	18.7	90.4
	Grad.\Professional	93	9.4	9.6	100.0
	Total	973	98.5	100.0	
Missing	System	15	1.5		
Total		988	100.0		

#### Income level

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	No Answer	156	15.8	16.0	16.0
	Less than \$20,000	154	15.6	15.8	31.9
	\$20 - 39,000	230	23.3	23.6	55.5
	\$40 - 74,000	254	25.7	26.1	81.6
	\$75 - 99,000	98	9.9	10.1	91.7
	\$100,000 and over	81	8.2	8.3	100.0
	Total	973	98.5	100.0	
Missing	System	15	1.5		
Total		988	100.0		

#### Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Answer	16	1.6	1.6	1.6
	White	762	77.1	78.3	80.0
	Native-American	11	1.1	1.1	81.1
	Hispanic	9	.9	.9	82.0
	Asian-American	7	.7	.7	82.7
	African-American	159	16.1	16.3	99.1
	Other	9	.9	.9	100.0
	Total	973	98.5	100.0	
Missing	System	15	1.5		
Total		988	100.0		

#### Gender

		Fraguenay	Doroont	Valid Percent	Cumulative
		Frequency	Percent	valid Percent	Percent
Valid	No Answer	3	.3	.3	.3
	Female	545	55.2	56.0	56.3
	Male	425	43.0	43.7	100.0
	Total	973	98.5	100.0	
Missing	System	15	1.5		
Total		988	100.0		