

## University of Tennessee, Knoxville

# TRACE: Tennessee Research and Creative Exchange

Masters Theses Graduate School

12-1981

# Attitudes and opinions of Grundy County citizens concerning the savage gulf state natural area

Jenny Moore Freeman

Follow this and additional works at: https://trace.tennessee.edu/utk\_gradthes

#### **Recommended Citation**

Freeman, Jenny Moore, "Attitudes and opinions of Grundy County citizens concerning the savage gulf state natural area." Master's Thesis, University of Tennessee, 1981. https://trace.tennessee.edu/utk\_gradthes/7711

This Thesis is brought to you for free and open access by the Graduate School at TRACE: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Masters Theses by an authorized administrator of TRACE: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

To the Graduate Council:

I am submitting herewith a thesis written by Jenny Moore Freeman entitled "Attitudes and opinions of Grundy County citizens concerning the savage gulf state natural area." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Forestry.

Kerry F. Schell, Major Professor

We have read this thesis and recommend its acceptance:

William Hammitt, Charles Cleland

Accepted for the Council: Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

### To the Graduate Council:

I am submitting herewith a thesis written by Jenny Moore Freeman entitled "Attitudes and Opinions of Grundy County Citizens Concerning the Savage Gulf State Natural Area." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Forestry.

Kerry F. Schell, Major Professor

We have read this thesis and recommend its acceptance:

W. E. Thummed

Accepted for the Council:

Vice Chancellor

Graduate Studies and Research

# ATTITUDES AND OPINIONS OF GRUNDY COUNTY CITIZENS CONCERNING THE SAVAGE GULF STATE NATURAL AREA

A Thesis

Presented for the

Master of Science

Degree

The University of Tennessee, Knoxville

Jenny Moore Freeman

December 1981

#### **ACKNOWLEDGMENTS**

The author wishes to acknowledge the cooperation and support of the people of Grundy County and officials of the Tennessee Department of Conservation during the course of this study.

She also wishes to thank all of the people who believed that she would finish her degree. In particular she would like to thank her major professor, Dr. Kerry Schell and her committee members Dr. William Hammitt and Dr. Charles Cleland. Also believing in her persistence and endurance were her parents, John and Rebecca Freeman, and friends too numerous to enumerate.

'Victories are not always won by bravery, but sometimes by persistence."

anonymous

#### **ABSTRACT**

The purpose of this study was to learn about the habits and patterns of use of the Savage Gulf State National Area (SGSNA) by Grundy County citizens and to determine the attitudes of Grundy Countians about the Savage Gulf project and related issues. The information gained through this study was to be used by the Tennessee Department of Conservation in the planning of the SGSNA. At the time the study was conducted, the Department of Conservation was seeking input from various groups of people in order to formulate the Master Plan for the SGSNA project. The local residents of Grundy County and members of certain organizations were surveyed to learn more about their perceptions of the SGSNA and the Department of Conservation, and to obtain their opinions and preferences concerning the SGSNA.

The primary means and procedures used in data assembly for this research involved the administration of a questionnaire to two populations of Grundy Coundy citizens. Informal personal interviews also provided a major portion of the data. The populations included (1) members of eight selected conservation or outdoor recreation organizations and (2) members of randomly selected households from throughout the county.

The research findings show that the members of organizations have more knowledge about the SGSNA and they use the land areas of the Savage Gulf project more than county residents who generally do not belong to these organizations. Because organization members presently use SGSNA lands for jeeping, hunting, and hiking, they are brought into closer contact with the Savage Gulf project than those people who do not regularly engage in these three popular activities. Organization respondents were more knowledgeable about the purpose of a natural area and their

knowledge of the rules that govern the SGSNA surpassed that of the household respondents. The research also found that the respondents tended to welcome the State of Tennessee as a protector of "their" resource with the hope that the establishment of the Savage Gulf project would be beneficial for the citizens of Grundy County.

The study attempted to learn the opinions and perceptions of Grundy countians about the SGSNA and related issues. This was knowledge gained through personal contact with many individuals on both a formal basis, the questionnaire, and on an informal basis, through personal interviews. The study makes the point that public participation methods should be applied on a case-by-base basis so that as many citizens as possible can have the opportunity to participate in the planning of a project that is important to the entire county.

# TABLE OF CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION	1
II.	DESCRIPTION	. 6
	Land Resource	. 6
	Map of the Savage Gulf State Natural Area	. 7
	Human Resource	. 9
III.	REVIEW OF LITERATURE	12
IV.	METHODS	22
	Study Populations	22
	Sample Selection	23
	Design of the Study Instrument	26
	Content of the Questionnaire and Data Analysis	28
	Content of the Questionnaire	28
	Data Analysis	29
v.	RESULTS	33
	Knowledge and Use of the Savage Gulf State Natural Area	33
	Attitudes and Opinions	47
VI.	DISCUSSION OF RESULTS	64
	Characterization of the Local Population	64
	Attitudes and Opinions about the Savage Gulf State	
	Natural Area and Related Issues	71
	Major Differences Between Household and Organizational	
	Users of the SGSNA and the Influences of Familiarity	
	With the Land on Attitudes of Users of the SGSNA	76

-IAPTER PAGE	3
VII. SUMMARY 8	0
III. RECOMMENDATIONS AND CONCLUSIONS 8	4
Recommendations8	4
Conclusion 8	6
LIST OF REFERENCES9	0
APPENDIXES9	4
Appendix A. Questionnaire9	5
Appendix B. Attitudinal Statements10	3
Appendix C. Responses to Attitudinal Statements,	
Divided into Low, Medium, and High Distribution of	
Respondents' Familiarity Index Scores, Given in Absolute	
Numbers10	9
VITA11	5

## TABLE OF CONTENTS

CHAPTER	PA	GE
I.	INTRODUCTION	1
II.	DESCRIPTION OF STUDY AREA	6
	Land Resource	6
	Human Resource	9
III.	REVIEW OF LITERATURE	2
IV.	METHODS	2
	Study Populations	2
	Sample Selection	3
	Design of the Study Instrument 2	6
	Content of the Questionnaire and Data Analysis 2	8
	Content of the Questionnaire 2	8
	Data Analysis2	9
V.	RESULTS	3
	Knowledge and Use of the Savage Gulf State Natural Area 3	3
	Attitudes and Opinions47	7
VI.	DISCUSSION OF RESULTS	
	Characterization of the Local Population 64	1
	Attitudes and Opinions about the Savage Gulf State	
	Natural Area and Related Issues	
	Major Differences Between Household and Organizational	
	Users of the SGSNA and the Influences of Familiarity	
	With the Land on Attitudes of Users of the SGSNA 76	,

CHAPTER PAGE
VII. SUMMARY 80
VIII. RECOMMENDATIONS AND CONCLUSIONS
Recommendations8
Conclusion80
LIST OF REFERENCES
APPENDIXES
Appendix A. Questionnaire9
Appendix B. Attitudinal Statements
Appendix C. Responses to Attitudinal Statements,
Divided into Low, Medium, and High Distribution of
Respondents' Familiarity Index Scores, Given in Absolute
Numbers109
VTTA

# LIST OF TABLES

PAG PAG
I. Number of Observations from Each Voter Precinct of Grundy County, Tennessee
II. Percentage of Respondents Familiar With Each of the Areas That Comprise the Savage Gulf State Natural Area35
III. Sources of Respondents' Knowledge About the Areas of the Savage Gulf State Natural Area and the Percentage of Respondents Who Obtained Their Knowledge Through the Various Sources
IV. Distribution of the Percentages of the Total Number of Respondents Who Indicated Their Participation in Selected Activities on the Areas of the Savage Gulf State Natural Area.
V. Distribution of Responses to the Question, 'What Do You Understand the SGSNA To Be?''
VI. Categories of Ideas About Management of the Savage Gulf State Natural Area, and the Percentage of Responses in Each Category
VII. Responses to Attitudinal Statements 7 and 14 by Familiarity Indices (F.I.) Shown in Percent49
VIII. Responses to Attitudinal Statements 2 and 10 by Familiarity Indices (F.I.) Shown in Percent52
IX. Responses to Attitudinal Statements 3 and 15 by Familiarity Indices (F.I.) Shown in Percent54
X. Responses to Attitudinal Statements 6 and 13 by Familiarity Indices (F.I.) Shown in Percent57
XI. Responses to Attitudinal Statements 9 and 11 by Familiarity Indices (F.I.) Shown in Percent59
XII. Responses to Attitudinal Statements 22 and 24 by Familiarity Indices (F.I.) Shown in Percent

### CHAPTER I

#### INTRODUCTION

There are increasing pressures for utilization of our natural resources. These pressures are being imposed upon society by our perceived needs for the development of additional energy sources, of more living space and recreation areas, and in general, an increased production of all goods and services. Because of these demands, governmental authority has significantly expanded its role in natural resource governance. Land use planning in particular is one activity over which governmental authority has extended its influence. The variety and number of demands placed upon the land resource have increased the complexity of the decision-making process for its allocation and use. The scope and immediacy of this impact during the last five years have caused land use planning and regulation to become one of the most prominent public issues faced by governmental decision makers at both the State and Federal levels. The extreme sensitivity of land use governance has given rise to an increasing number of confrontations between citizens and government.

Citizens have become, through involvement in past social movements, more politically adept and have begun to organize and mobilize their influence on land use issues. As Rosenbaum (1976, p. 2) states, "Citizen groups have demonstrated again and again that, if not satisfied with decisions, they can impede, obstruct, and delay the execution of policy for long periods of time." Decision-makers should not be

intimidated by the prospect of citizen opposition; but in an area as sensitive as land use planning where the potential for citizen organization exists, it is practical as well as theoretically desirable, to encourage and support public involvement in the hope of avoiding future conflict.

This study was conducted to obtain information which would aid a government agency in its efforts to involve the public in decisions about natural resources. The Savage Gulf State Natural Area (SGSNA) is a unique land resource in Grundy County, Tennessee. Its development and management, while being issues of concern to the State of Tennessee, assume particular significance in terms of the potential impact of management policies upon the local population of Grundy County. Decisions made about local issues concerning the SGSNA could conceivably affect land use policies at other levels of management. This study attempted to provide information concerning local preferences, opinions and viewpoints about the SGSNA for its management agency, the Tennessee Department of Conservation, in order to improve communication between the agency and Grundy County citizens. Improved communication between land use planners who must often make decisions without complete information, and the local population whose lives are directly impacted by those decisions, should result in less conflict while fostering mutual trust and respect.

Plans for the development and management of the SGSNA have created a natural resource issue. Policy decisions that govern the allocation and use of a land resource such as the SGSNA cannot be made in a vacuum.

Effective and long-term land use planning must involve an understanding of the nature of land use issues and it must provide channels for citizen participation in policy decisions. The role of the public land manager was easier a decade ago because judgements about land allocation and use had to satisfy only rather limited constituencies (Schweitzer, 1974). The days of limited constituencies and incidental land policies are in the past. Land is a finite resource; therefore, demands made for the production of one goal must be viewed in terms of its net contribution to the flow of diverse social benefits. The benefits from one use must ultimately be traded off against losses it inflicts upon other uses (Wagar and Folkman 1974). Land managers, now faced with the increasing pressure of allocating limited resources in space and over time, among present and future claimants, are having to make policy decisions in relation to the goals of many diverse constituencies. dilemma of land use planners who have to consider the needs and desires of varying publics when determining policy goals for a limited resource was very apparent in Grundy County in regard to management plans for the Savage Gulf State Natural Area.

The SGSNA, a 14,000 acre tract in Grundy County, Termessee, presented particular management problems for Department of Conservation planners. The natural area, while being one of Termessee's most attractive scenic and recreation resources, is a scientifically and culturally sensitive area as well. Within its boundaries a variety of plant and animal species flourish, and a 600 acre tract of virgin mixed-mesophytic forest continues to exist as it has for hundreds of

years (Tennessee Department of Conservation Brochure, 1978). Residents of Grundy County have used the lands of the SGSNA to hunt, fish, camp, collect wildflowers, and drive their jeeps. When the State of Tennessee, realizing the need to preserve the lands of the SGSNA for the future, began to purchase acreage and formulate management policies, the dilemmas associated with having to decide among a variety of land use goals began to surface. Scientists, environmentalists, recreationists, and community leaders were sought to express opinions on the allocation and use of the Savage Gulf land resource. The residents of Grundy County, whose lives stood to be the most impacted by decisions about the SGSNA, were not especially consulted to present their views and express their wishes and needs. Perhaps the conflicts between the Department of Conservation and local people of Grundy County about policies for SGSNA lands could have been resolved with appropriate communication.

This study obtained specific information from a public whose opinions and attitudes concerning the SGSNA might otherwise have been overlooked. Accomplishment of the study objectives could reduce future disagreements and conflicts arising out of a lack of understanding and communication between a government and its citizens. Specifically, the objectives of the study were:

- 1. To determine the patterns and habits of use of SGSNA lands by the local, rural population of Grundy County and its perceptions of the SGSNA project.
- 2. To determine attitudes and opinions of the local population about natural resources, their utilization, and about the agencies which

manage these resources.

- 3. To determine major differences between household and organizational users of the SGSNA on issues in objectives one and two.
- 4. To determine the influences of familiarity with the land on attitudes of users of the SGSNA.

#### CHAPTER II

#### DESCRIPTION OF STUDY AREA

#### I. LAND RESOURCE

Grundy County, Termessee, the boundaries of which encompass the SGSNA, is situated on the rim of the Cumberland Plateau. Having a land area of 229,120 acres, Grundy County lies approximately 60 miles northwest of Chattanooga, Termessee. The SGSNA is located in the northeast portion of the county, immediately southeast of the town of Beersheba Springs (Figure 1). That portion of the Cumberland Plateau on which Grundy County is situated, rises approximately 2,000 feet above sea level (U.S.G.S., 1956). The relatively flat nature of the land is interrupted by gorges that are the result of the rivers and creeks eroding deep into the 2,000 foot Plateau. These gorges, or gulfs<sup>1</sup>, give variety to a landscape that might otherwise be unrecognized for the aesthetic quality of its land. Three of the gulfs, formed by the Collins, Savage, and Big Creek prongs, are focal points of the SGSNA.

The SGSNA with its three convergent gorges and their associated watersheds, totaling approximately 14,000 acres, was authorized in 1973 by the General Assembly of the State of Tennessee. It is a part of

In the local vernacular, the word "gulf" was derived from the word "gulch" meaning a deep, narrow ravine. Savage Gulch, through the years, has become known as Savage Gulf. (Personal interview with Margaret Coppinger Brown, Beersheba Springs, Tennessee, January 19, 1979.)

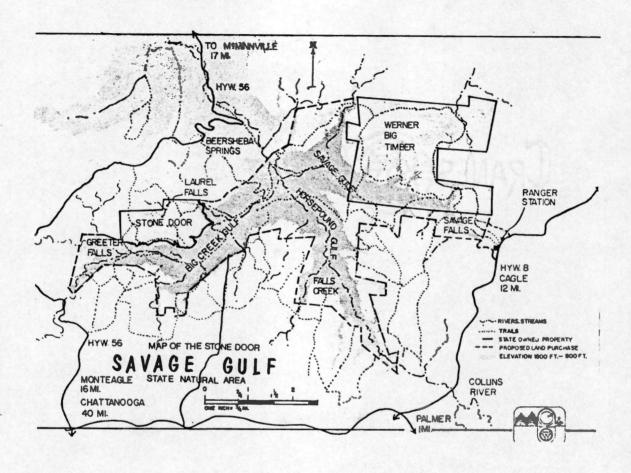


FIGURE 1. MAP OF THE SAVAGE GULF STATE NATURAL AREA

SOURCE: Termessee Department of Conservation

the Tennessee Outdoor Recreation Area System (TORAS), developed by the Department of Conservation. The plan for TORAS, completed in 1974, designates the SGSNA as a Class II Natural-Scientific Area. The Tennessee Natural Areas Preservation Act of 1971 defines a Class II Natural-Scientific Area as being:

. . . an area associated with and containing floral assemblages, forest types, fossil assemblages, geological phonomena, hydrological phonomena, swamp lands and other similar features or phonomena which are unique in natural or scientific value and are worthy of perpetual preservation.

Uses of a Class II area include the development of foot trails, foot bridges, and overlooks; however, at the Commissioner's discretion, if any portion of the area is deemed so fragile that overuse may damage it, limitations may be placed on activities within those affected areas (TORAS, p.246).

The natural features which lend themselves to the designation of the Savage Gulf as a Class II Natural-Scientific Area are numerous. Within the boundaries of the SGSNA are rock bluffs and overlooks, caves, mountain streams, and Indian rockhouses. The main feature of the Savage Gulf is the 600 acre virgin forest located on the North Plateau and in the Savage Gulf gorge. Keever in "Savage Gulf: last chance for wilderness" by Prichard (1977) once described the forest as "the best and largest virgin forest left in the Mixed Mesophytic Region of the Eastern Deciduous Forest," is reminiscent of the vegetation that once covered the slopes of the entire Savage Gulf and its sister gulfs, Pound Gulf (Horsepound Gulf) and Big Creek Gulf. This fragile acreage of timberland with oaks, ashes and buckeyes four feet and more in diameter,

may be legally entered only by permit (Prichard, 1977, p.9).

The Great Stone Door is a 200-foot overhang near Beersheba Springs. The Stone Door and its associated acreage form an Environmental Education area within TORAS and is not included in the boundaries of the SGSNA. Hikers, hunters, and other users of the area often enter the SGSNA from the accessible trails leading from the Stone Door. Because of the frequent use of the Great Stone Door in conjunction with the SGSNA, the Stone Door has been included as a study area.

#### II. HUMAN RESOURCE

Just as the land of Grundy County offers a unique resource to the State of Termessee, the citizens of the county and their history provide a cultural uniqueness that is difficult to compare to other regions of the state. The county is populated primarily by those descendents of homesteaders who migrated into the area beginning approximately 170 years ago (Grundy County Herald, 1976). The pristine nature of the land attracted people to Grundy County from many origins. In 1869, a colony of Swiss immigrants, believing the glowing posters they had seen in Switzerland depicting the bountiful harvest of fruits and vegetables that could be raised in the new country, moved to Grundy County, only to find uncleared wild forest land (Ibid, 1976). However, the hardy Swiss immigrants cleared the land, planted their crops and fruit trees, and established communities such as Gruetli, Palmer, and Laager. Families like the Nussbaums, Scholars, Schilds, and Schlageters bear the imprint of their Swiss ancestors (Ibid, 1976). Other Grundy County families

migrated into the area from Virginia, North Carolina, and other Eastern states and the population of the county has grown steadily. In 1978, the population of Grundy County was estimated at 12,562 (Tennessee State Planning Office, 1980).

An important influence on the demography of Grundy County is second home dwellers and retirees. Since 1840, when a hotel was built near the site of a mineral spring, Beersheba Springs has attracted wealthy visitors from Nashville, Murfreesboro, and Chattanooga (Grundy County Herald, 1976). Various families, drawn to Grundy County by its cool summers and the beauty of its land, located second homes in and around Beersheba Springs and Monteagle, and descendants of those families continue to spend their vacations in the area. Many people eventually retire to Grundy County. The consistent mingling of the more traditional mountain people with the wealthy outsiders from "off the mountain" may have produced a world view that is somewhat different from surrounding areas, but such a theory has never been substantiated.

There are other communities of people who have influenced Grundy
County in one way or another throughout the years. In the 1930's, the
Highlander Folk School was established in Grundy County near Monteagle.
Until 1959, when the State of Tennessee closed the school and
confiscated its holdings, many notable people such as Eleanor Roosevelt,
Martin Luther King, Rosa Parks, and Fred Shuttlesworth visited the
school to learn tactics for later organization in the civil rights
movement in this country (Highlander "Reports," 1980). The extent of
the influence of the Highlander School on attitudes of Grundy Countians

is not known. A second community, Cumberland Heights, located in the center of the county, was founded in the 1940's by a group of families, many of which were members of the Seventh Day Adventist Church. Today the Church continues to operate its own schools and hospital in the community, adding to the varied history of Grundy County, a history that must be considered when undertaking any sort of study in the area.

Grundy County with its population of 12,562 people is an area where, according to the 1970 census, men and women who are born in the county, tend to remain throughout life. According to census data, Grundy Countians go to school an average of 8.4 years, and there is one high school to serve the entire county. The per capita income in the county in 1977 was \$2,576. Grundy County was ranked 84th in dollar per capita income levels out of Tennessee's 95 counties. Major occupations of Grundy County residents are found in the manufacturing industries, and in other blue collar occupations. Twenty-two percent of Grundy County workers were employed in white collar and service jobs in 1970.

### CHAPTER III

#### REVIEW OF LITERATURE

The significance of public involvement in determining the goals of resource management over the last ten years is revealed in the literature. Because resource managers want to avoid costly errors in planning the allocation and use of resources, they are searching for the best ways to involve the public in decision-making. The decisions have become more complex, costly, time-consuming, and difficult, and resource managers have realized that in the long-rum, public participation will increase efficiency by improving the decision-making process and avoiding costly reversals and corrections (Wagar and Folkman, 1974). Urban renewal and the war-on-poverty programs of the 1960's coupled with the environmental movement of the early 1970's have helped to produce a growing participation in resource decisions by citizens who are no longer content to allow those decisions to be made without their direct input (Twight, 1977).

Citizen participation in decision-making processes is not a simple, defined process. In the past, the definition and analysis of citizen participation has proven to be a very difficult task (Langton, 1978). Because of the dilemmas and complexities associated with most social phenomena, attempts to analyze and structure citizen participation have defied generalization and have disintegrated under scrutiny (Spiegel and Mittenthal, 1968). In his book, Citizen Participation in America,

based on the combination of several concepts of citizen involvement in public decision-making. According to Langton (1978, p. 16), citizen participation refers to "purposeful activities in which citizens take part in relation to government." There is a distinction between citizen participation, in which people relate to the state through government-sponsored programs such as public hearings, and social participation, in which people relate to a social institution such as a church or school. Social participation is an integral component of effective citizen participation (Ibid, 1978). State governments have, over the last ten years, increased their support of strong citizen participation programs to help guide their policy decisions. Oregon's land-use law of 1973 calls for "widespread citizen involvement in all phases of the planning process," and Florida's Growth Management Act of 1975 establishes a policy of public participation at both city and county levels (Rosenbaum, 1976, p. 4).

The efforts of government to encourage through legislation a more active citizenry in determining natural resource policy stems from the fact that, as Wengert believes, the majority of the general public never positively participates in the decision-making process (Wengert, 1955). "Public interest," states O'Riordan, "exists only as the residue of the conflict produced in the process of the pluralistic group bargaining that resource management has become" (O'Riordan, 1971, p. 203). That natural resource decisions have, in the past, been largely the result of group or special interest bargaining is confirmed by Schweitzer when he cautions resource managers to be careful to minimize the polarization of

special interests by recognizing early potential conflicts between groups participating in resource decision-making (Schweitzer, 1974).

There are many factors found in the literature for the lack of individual involvement in decision-making processes. It is difficult at times to formulate and then communicate feelings and opinions about an environmental issue. The inarticulation that many people experience when trying to express their views is one reason for the failure of individuals to participate in natural resource decisions (Lowenthal, 1966). When individuals fail to express their views and opinions before a natural resource decision is made, policies often result that profoundly affect the world, for better or worse, in which people live, without the benefit of their judgements, their ideas, and their experiences.

A second factor in the absence of individual participation in public decisions is the extreme alienation that many people feel from the political process (Twight, 1977). As Thompson and Horton (1960) have suggested, people who feel alienated from the political process normally will not initiate an effort to influence public policy. Politically alienated people must be coaxed, through public participation programs, to become more involved in planning processes by expressing their opinions and needs, most of which are relevant and worthy of consideration.

A third reason for the low participation level of individuals in natural resource decision-making processes is simply that many people do not possess the information necessary to make decisions about environmental or natural resource issues (O'Riordan, 1971). Though the majority of citizens may be "silent" on questions of environmental quality, O'Riordan states they are not necessarily indifferent. Their silence, in many instances, may be as much a function of political inefficacy and limited information as it may be to the holding of mild preferences (Ibid, 1971).

When conducting a study such as this one concerning the citizens of Grundy County and their attitudes and opinions about the SGSNA, it would be helpful to know which people would be the most likely to be concerned about natural resource issues. Studies which describe those individuals who have developed an environmental concern provide information on those in Grundy County who might be more inclined to become actively involved in public policy decisions. Unfortunately, investigations into whether concern about environmental issues cuts across various subpopulations within American society are limited and the findings are equivocal (Tognacci et al. 1972). However, in 1967, DeGroot determined that variables such as sex, age, race, and socio-economic status were poor predictors of citizen concern about air pollution. The determinant of citizen concern was the quality of the atmosphere of the individual's proximal environment, suggesting that people would not become involved in issues or decisions unless their health and safety were threatened.

Later polls and studies have produced other data which describe those people who are more likely to become actively involved in decisions concerning the quality of their environment. Two national opinion polls indicate that the degree of concern about the quality of

the natural environment is directly related to the respondent's level of formal education and income, and inversely related to age (National Wildlife Federation, 1969, 1970). The results of a study performed by Tognacci et al. in 1972 were that the environmentally concerned individual tends to be more "liberal" in sociological orientation, younger, and better educated than those who remain less committed to environmental issues. The findings of Tognacci et al. coincide with findings of earlier studies that reflect the same configuration of social and psychological attributes which have traditionally characterized individuals active in civic, service, and political organizations (Hausknecht, 1962; Milbrath, 1965). The most active in political, civic, and service organizations are those who are younger, better educated, more liberal in socio-political beliefs, and who enjoy a higher economic status (Ibid, 1962, 1965).

Schmitt in 1969 and Haddon and Barton in 1973 in "Conceptions of rural life and environmental concern" by Buttell and Flinn in 1977 point out that social scientists have treated the increase of interest in recent years in rural lifestyles and rural values as being one of the facets in the rise of a concern about environmental issues. Buttell and Flinn's study delved into aspects of "ruralism," a romantic notion of a genteel life in the country that is most prevalent among upper middle-class people, and "agrarianism," the idealized farmer with Jeffersonian qualities who is free and independent, the democratic yeoman who retains the rural values even upon moving into suburbia. The hypothesis of the study was that ruralism is more strongly related to

environmental concern than is agrarianism due to the basically "appreciative" and "utilitarian" roots of, respectively, ruralism and agrarianism, i.e. upper middle-class and rural working class, respectively. Results of the study confirmed that people with agrarian (utilitarian) values were less concerned with the natural environment than the upper middle-class with ruralism (appreciative) values. Buttell and Flinn state that ruralism is the better predictor of awareness of environmental problems among the upper middle-class when compared with education, age, and other variables that thus far have had the most prominence in the environmental concern literature.

If people most concerned about environmental issues tend to be those well-educated, young people of the upper middle-class, then who are the concerned people in an area such as Grundy County where the per capita income is \$3,054 and the median age is 38? To gain more insight into this question, an attempt was made to determine from the literature if perhaps participation in active outdoor recreation activities, such as hunting and fishing, influences environmental concern.

Limited data exist which suggest that membership in outdoor recreation organizations leads to active involvement in the environmental movement (Faiche and Gale, 1971). Gale, more specifically, maintained that "strong personal attachment to an outdoor recreation activity can lead to an equally strong commitment to protect those features of the environment which contribute directly to enjoyment of the activity" (Gale, 1972, p. 284). In a more recent study it was

found that although increased participation in outdoor recreation activities is likely to significantly increase concern for specific environmental goals, such as protecting a popular recreation site from destruction, the degree to which environmental concern is generated from recreation activities to broader issues, such as supporting ballot measures to protect scenic areas or national coastal areas, appears less (Dunlap and Hefferman, 1975). Here again, is a clue to those people in Grundy County who are probably the most concerned with particular environmental concerns such as the SGSNA—the members of outdoor recreation organizations who participate in the consumptive activities such as hunting or fishing.

The final area of literature to be reviewed was concerned with the experiences of natural resource managers in attempting to bring groups and individuals together to participate in the decision-making process. Decisions are becoming more and more complex because of the broad array of groups and individual citizens who should be informed of and provided with the opportunity to participate in the decision-making process. The best possible means for gaining public involvement can only be determined on a case-by-case basis if the level and nature of public involvement are to be appropriate to the issue at hand (Rahm, 1970). Basic, however, to all techniques of working with the public are "candor and effective communication of ideas" (Ibid, 1970, p. 206). Before communication with the public is initiated, steps should be taken by land managers to build as broad a base as possible of "factual resource data" in order that sound information may be provided to involved

organizations and individuals (<u>Ibid</u>, 1970, p. 206). The next step in public involvement is to compile all viewpoints and opinions concerning the issue because the compilation of as many opinions as possible is necessary to build a constructive consensus among all interested parties (<u>Ibid</u>, 1970). Interested parties in resource decisions must include landowners and land managers, public officials, concerned citizens, interested organizations, and principal users of the resource in question. With participation from as many parties as possible, alternative courses of action and their consequences may then be identified with the understanding that the decisions should be regarded as "legitimate and acceptable" by all parties at all levels of public involvement (Ogden, 1970, p. 201).

There are few forms of public consultation that have been proven to work to the greatest advantage of all interested parties. Advisory committees, public hearings, and informal contacts provide the opportunity for many people to be heard and to generate written input (Wagar and Folkman, 1974). But often public hearings do not attract a large number of disaffected, politically alienated people to express their viewpoints. Therefore, other means of compiling opinions and attitudes must be undertaken. A telephone survey, a mailed questionnaire, or some other form of random consultation with a number of people who stand to be affected by resource decisions are examples of methods to involve the public in the decision-making process. However, only a case-by-case study will determine the best means of involving the public on any particular issue.

In summary, the literature reflects a growing awareness that public involvement is crucial in making natural resource decisions, but there are many people who, because of political alienation, inarticulation of environmental issues, and a lack of information, hesitate to state their views in public forums. There are studies, however, which identify those people who will be the most likely to become actively involved in the decision-making process, i.e upper middle-class, well-educated people who are of a high socio-economic status. However, in a largely low economic, rural area such as Grundy County, those most likely to become involved in natural resource decisions are the people whose specific outdoor recreation activities are threatened. To engage people who might not voluntarily express opinions and preferences, there are methods of citizen involvement that may be applied, such as public hearings and informal contacts. These citizen participation methods must be determined on a case-by-case basis and even then in many instances, a great number of people will be overlooked by decision makers. It is at the point where it is recognized that a large portion of the population will not take advantage of opportunities for public involvement that studies such as this one concerning the people of Grundy County should be undertaken. Efforts must be made by resource managers to involve as many people as possible in the decision-making process. Arbuthnot (1977, p. 217) recognized the value of input from a broad spectrum of interested organizations and individuals when he stated in 1977 that the success of

. . . public policy decisions, educational programs, and other efforts dependent upon specific individual action in the realm of environmental issues may well hinge upon our understanding of the relationships among personality characteristics, attitudes, and environmental values, knowledge and behaviors.

This understanding is no small task.

#### CHAPTER IV

#### **METHODS**

#### I. STUDY POPULATIONS

The first population (households) included one adult individual from 101 randomly selected households, drawn to insure an inclusion of some respondents who do not regularly use the SGSNA. The second population (organizations) consisted of a cluster sample of the adult members of eight selected conservation or outdoor recreation organizations in Grundy County drawn to represent users of the SGSNA. The organizations interviewed were the following:

- 1. Collins River Sportsmen's Club
- 2. Trailblazers Jeep Club
- 3. Mountain Beautiful Garden Club
- 4. Helping Hand CB Club
- 5. Grundy County Coon Club
- 6. Fiery Gizzard Sportsmen's Club
- 7. Grundy County Bass Club
- 8. Monteagle Garden Club

The total sample collected was 231 respondents, 2% of the population of Grundy County.

Because members of the CB Club were not active users of the SGSNA, results of data collected from that organization differed greatly from results of data collected from the seven other organizations.

Therefore, the CB Club was isolated from the organization population and treated as a third population. Because there were only 26 respondents in the CB Club, the results will not be presented.

#### II. SAMPLE SELECTION

A county-wide sample design was used to select respondents from households. All of the registered voters in the county were included in the sample population. An early attempt to sample randomly selected individuals drawn from the telephone book was abandoned upon learning that many Grundy County residents either do not have telephones or have unlisted numbers. Voter registration was determined to provide the best base from which to develop an unbiased sample.

There are 7,487 registered voters in Grundy County and the county is divided into seven voter precincts, all of which have almost an equal number of voters (TCA 2-618, August, 1978). The seven precincts are further divided into communities. Because an approximately equal number of registered voters are found in each voter precinct, it was relatively easy to determine how many people were to be interviewed from each precinct. It was calculated that from fourteen to nineteen respondents would need to be selected from each of the seven voter precincts. Within each precinct, the number of observations from each community would vary from five to nine. A combination of maps was used to locate dwellings in the county, and each of the seven voter precincts was divided into units of approximately 20 dwellings. After assigning each unit within a precinct a number, one unit was selected, using a

table of random numbers. Each dwelling within the selected unit was assigned a number, and using the table of random numbers, an appropriate number of dwellings was chosen. In this manner, 101 households from thirteen communities were selected to complete the survey (Table I).

It became apparent that the best time of the day for interviewing was in the late afternoon and early evenings. During the morning hours many people were away from the house, and during the late evening hours, they were reluctant to interrupt their evening activities to answer the door. Early evening proved to be the best time to find both spouses at home, one of whom could take the time to be interviewed. If there was no one at home on the first contact, a return visit was made a few hours later. If upon the second contact there was no answer, another dwelling was randomly chosen from those remaining in the population unit. Each interview was conducted at the time of the visit and depending upon the interest of the respondent, the interview was completed in approximately fifteen minutes. Twelve people actually declined to respond to the survey, citing illness or no knowledge about the SGSNA project as their reasons.

The interviews to obtain data from the organizations were conducted at the regular meetings of each organization. Questionnaires were completed by club members, as a group, after explanation of the survey forms. The majority of the organizations that were interviewed were very interested in the study and proved to be extremely cooperative in taking the time necessary to complete the forms. Upon completion of the questionnaire, the conversation would often dwell upon the SGSNA. The

TABLE I

NUMBER OF OBSERVATIONS FROM EACH VOTER PRECINCT
OF GRUNDY COUNTY, TENNESSEE

Voter Precinct	Community	Registered Voters	Community Totals	Precinct Totals
Ι	Tarlton Beersheba Springs Altamont Coalmont	87 343 668 318	1 5 9 4	19
II	Swiss	1031	14	14
III	Pelham Cross Roads Harrison Cove	418 420 150	6 6 2	14
IV	Monteagle Tracy City	667 356	9 5	14
V	Tracy City	1063	14	14
VI	Gruetti Palmer	464 418	6	12
VII	Plainview Coalmont	864 220	11 3	14
			Total	L = 101

interview generally gave rise to many questions about management policies concerning the SGSNA by the Department of Conservation. The high degree of interest about the SGSNA among all of the organizations was due to the fact that the majority of the clubs had regularly participated for many years in activities on lands that were now under state protection. Because rules and regulations had threatened some of the uses in which many organization members had participated throughout the years, interest about the SGSNA from many members was genuinely deep.

#### III. DESIGN OF THE STUDY INSTRUMENT

The instrument for this study was a questionnaire designed to obtain three sets of information. The information included:

- 1. Patterns and habits of use of SGSNA lands by the local people.
- 2. Knowledge and perceptions that Grundy Countians have of the SGSNA project.
- 3. Attitudes and opinions of Grundy County residents to various issues concerning the SGSNA project.

Construction of the questionnaire was based upon the studies of Selltiz, Wrightsman and Cook, 1976).

The questionnaire had two parts. Part I asked a series of questions to obtain the following information:

1. Respondents' familiarity with the different land areas of the SGSNA, and the source of that familiarity, whether by actual utilization of the land or through some other means.

- 2. The length of time that the respondent has utilized the areas of the SGSNA and the intensity of use within the past year.
- 3. The various activities in which the respondent has participated on the areas of the SGSNA.
- 4. The impact that the establishment of the SGSNA has had on the respondents' habits of use of the land.
- 5. The knowledge and understanding of the respondent about the SGSNA project and its purposes.
- 6. Ideas of the respondent concerning programs and facilities that might be incorporated into the management of the SGSNA.

The information obtained in Part I of the questionnaire was designed to be examined in relation to the attitudes reflected by answers in Part II of the questionnaire. Part II was composed of twenty-four attitudinal statements that were read aloud to respondents upon completion of Part I. The construction of the attitudinal statements was guided by the works of Selltiz, Wrightsman and Cook, 1976; Edwards, 1957; and Remmers, 1954. A Likert-type scale was used to obtain a measure of attitudes, with each of the twenty-four statements permitting the expression of five degrees of agreement - disagreement (Selltiz, Wrightsman and Cook, 1976). The statements were in reference to the following seven issues:

- 1. Public acquisition of the land for preservation purposes.
- 2. Possible economic and social benefits of the SGSNA project to Grundy County.
  - 3. The influx of people into the county to visit the SGSNA.

- 4. Participation by local residents in the planning process for the SGSNA.
- 5. Loss of a tax base to Grundy County because of government ownership of the land.
  - 6. The use and enjoyment of public lands.

indicative of their feelings for each statement.

- 7. Specific rules instituted for the SGSNA.

  During the interview, the respondent checked the response most
  - IV. CONTENT OF THE QUESTIONNAIRE AND DATA ANALYSIS

#### Content of the Questionnaire

In part I of the questionnaire, the first three questions, "Do you live in Grundy County?," and "If yes, in which community do you live?," and "How many years in total have you lived in Grundy County?," were carefully arranged to fulfill two purposes. They helped to make respondents feel comfortable with answering the questionnaire, while simultaneously eliciting background information.

Questions 4 and 5, 'Have you heard about any of these areas in Grundy County?", and "Tell how well you know each area," are "familiarity" questions which attempted to measure the degree of familiarity that respondents had with the land area that comprises the SGSNA. The individual land areas referred to are the Werner Big Timber, the Savage Gulf, the Stone Door Gulf, the Pound Gulf, and the Great Stone Door. The latter is not included in the SGSNA but is adjacent to it.

Questions 4 and 5 led into a more probing question, Question 6:

'How do you know about the areas?'' This question was asked to determine the means through which the respondents had learned of the SGSNA and its component areas, i.e., by actual use of the areas, through the media, hearsay, family and friends, public meetings, or other means.

Questions 7, 8, and 9 were designed to learn more about respondents' habits and patterns of use of the SGSNA. The three questions, 'How many times have you been to each area?," 'How long have you or your immediate family been going to the areas?," and 'About how often have you or your immediate family gone into the areas during the past year?," were designed as categorical variables.

### Data Analysis

For Questions 5, 7, 8, and 9, for every respondent, each category of answers under each land area was assigned a scaled value. Each question was worth 100 points with the categories in each question arbitrarily assigned values which equaled 100. The values of the categories were weighted, however, with the categories on the high end of the scale receiving more points than those at the low end of the scale. The scores from each of the four questions were added to give one overall score for each respondent. The overall score, the Familiarity Index, could be used in a variety of analyses. The Familiarity Indices for respondents of one population could be added to determine the extent to which the respondents of that population were involved with the

SGSNA. The Familiarity Index of one respondent or of one population could be broken down to determine the effect of one individual question on the entire score. For comparison of one population to another, or of one community to other communities or organizations, the Familiarity Index could also be applied.

As a means of further analysis, the Familiarity Indices of respondents within each population were divided into low, medium, and high categories with an approximately equal number of respondents in each category. The low, medium, and high categories were used to portray the degree of involvement that a respondent has had with the SGSNA. They were also related to selected attitude statements in Part II of the questionnaire, a measure of the effect that a respondent's degree of involvement with the SGSNA might have had on attitudes concerning issues that relate to the management of the SGSNA.

In Question 10, 'What do you do in the areas (of the SGSNA)?," an attempt was made to determine the most popular activities engaged in on SGSNA land by the respondents. These activities included hunting, fishing, camping, hiking, picnicing, and plant digging.

Question 11, "Do you do the same things on the areas now that you did 5 years ago?"; Question 12, "If you answered 'no' to Question 11 above, what is it that you did 5 years ago that you do differently now?"; and Question 13, 'What causes you to do things differently now that you you did 5 years ago?" Were asked to determine if there had been any changes by respondents in use of the SGSNA. If changes in use were evident, Question 13 attempted to establish the causes of those

changes in use. Question 14, "Do you know that 11 these areas are now called the Savage Gulf State Natural Area?" was an attempt to learn about local awareness of the existence of the SGSNA.

In order to determine the perceptions that Grundy Countians have about the SGSNA, what do you understand it to be?" This question attempted to discover if Grundy Countians understand the distinction between a state park and a natural area, or between a wildlife refuge and a natural area. While being largely subjective in its analysis, it was of interest to know if Grundy Countians had been sufficiently exposed to the concept of a natural area to know that a natural area is distincly different from other designated areas. Inherent in the ability of respondents to make the distinction between a natural area and other designated areas, is that in order to make that distinction, a respondent must know something about the function of a natural area and perhaps have some knowledge of the regulations governing a natural area. Question 16. "If you know about the SGSNA, what could be done to make the area better, as far as you are concerned?" gave the opportunity for respondents to make suggestions and give their opinions about the management, use and development of the SGSNA.

In Part II of the questionnaire, twenty-four attitude statements were rated by respondents, using a 5-point Likert-type scale. The possibilities on the scale ranged from "Strongly Agree" to "Strongly Disagree" with the neutral position of "Don't Know" being available as a choice. Comparisons were made which showed the strength of relationship between the low, medium, and high scores of each population, the ages of

respondents, their educational levels, and selected key attitudes. Relationships between responses and the factors of age, education and the Familiarity Index were examined primarily by frequency tables. Chi-Square analysis was used to test the apparent relationships between responses and the Familiarity Index. The Agree - Disagree - Don't Know responses were collapsed into two categories, thereby making a three-by-two matrix for each Chi-Square test. Although percentages are presented in the tables depicting the data, absolute numbers were used to calculate the Chi-Square values (See Appendix C).

#### CHAPTER V

#### RESULTS

# I. KNOWLEDGE AND USE OF THE SAVAGE GULF STATE NATURAL AREA

Except for Question 6, an analysis of the data is presented with the questions discussed in the order if their appearance in the questionnaire. Question 6 is discussed before Question 5 so that Question 5 may be analyzed in relation to Question 7, 8 and 9, questions of similar form and content.

### Residence, Age and Sex

Question 1: "Do you live in Grundy County?"

Question 2: "If yes, in which community do you live?"2

Question 3: 'How many years in total have you lived in Grundy

County?"

Residents from Grundy County accounted for 94% of the 231 total respondents; 6% lived in Warren County, the county directly north of Grundy County. Over 79% of the respondents had lived in Grundy County for twenty years or more. The U.S. Census of 1970 reported that 80% of the residents of Grundy County were born there. The median age of the respondents was thirty-seven years, with 59% of them being female and 41% male.

<sup>&</sup>lt;sup>2</sup>See Chapter IV, METHODS, for the community totals.

## Familiarity With Areas of the SGSNA

Question 4: 'Have you heard about any of these areas in Grundy
County?''

As an introduction to the questionnaire, respondents were asked if they were familiar with each of the five land areas that comprise the SGSNA: the Savage Gulf, the Stone Door, the Stone Door Gulf; the Werner Big Timber, the Pound Gulf. Table II shows that the Savage Gulf was the most familiar to respondents with over 94% of all respondents having at least heard of the area. The Stone Door ranked second, and the Pound Gulf was the least known to all respondents. Members of organizations appeared to be more knowledgeable about the areas than other respondents. On the average, considering all of the five areas, there was a 19% difference between familiarity expressed by organization members and that expressed by respondents from the other major population, the households.

## Sources of Knowledge of the Areas of the SGSNA

Question 6: "How do you know about the areas?"

The importance of the sources of knowledge about the various areas of the SGSNA is shown in Table III. Household members learned of the areas primarily through four sources, none of which is mutually exclusive of the others. Fifty-five percent of all household respondents gained their knowledge of the areas of the SGSNA through actual use, while 59% indicated that their knowledge came from friends.

TABLE II

PERCENTAGE OF RESPONDENTS FAMILIAR WITH EACH OF THE AREAS THAT COMPRISE
THE SAVAGE GULF STATE NATURAL AREA

	Savage Gulf (SG)	Stone Door (SD)	Stone Door Gulf (SDG)	Werner Big Timber (WBT)	Pound Gulf(PG)
Households					
n = 101	93.1	78.2	61.4	59.4	46.5
Organizations					
n = 104	97.1	96.2	91.3	80.8	70.2
TOTAL AVERAGE	94.8	86.0	74.4	68.7	56.8

TABLE III

SOURCES OF RESPONDENTS' KNOWLEDGE ABOUT THE AREAS OF THE SAVAGE GULF
STATE NATURAL AREA AND THE PERCENTAGE OF RESPONDENTS WHO OBTAINED
THEIR KNOWLEDGE THROUGH THE VARIOUS SOURCES

Source	Households	Organizations	All Respondents
By going there	54.5	80.8	65.9
Friends	59.4	35.6	49.0
Newspaper	50.5	26.0	39.8
Family	50.5	17.3	36.0
Public Meetings	4.0	15.4	8.9
Other (T. V.)	7.9	9.6	8.6

Fifty-one percent learned about the areas from family members who had visited the SGSNA. Local newspaper coverage provided a fourth major source of knowledge (50%). The higher percentage (81%) of organization members who reported that they learned of the areas primarily through actual use was expected because of the nature of activities pursued by them on SGSNA lands.

A major source of knowledge about the SGSNA evidently has been the Grundy County <u>Herald</u> and other local newspapers. Television programs had informed at least 8% of all the respondents about the SGSNA. Added to the 40% of the respondents who knew of the areas primarily through the newspapers, 48% of all respondents from households and organizations received a part of the knowledge from the news media.

## Familiarity Index

Question 5: 'How well do you know each area?"

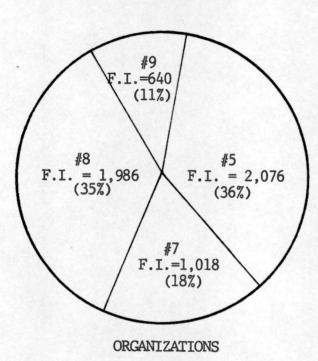
Question 7: "How many times have you been to each area?"

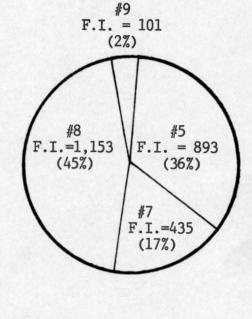
Question 8: 'How long have you or your immediate family been going into the areas?''

Question 9: "About how often have you or your immediate family gone into the areas during the past year?"

The Familiarity Index is a composite score of the responses to the four questions listed above. <sup>3</sup> Figure 2 presents the scores of the

<sup>&</sup>lt;sup>3</sup>See Chapter IV, METHODS, for an explanation of the Familiarity Index.





N = 104 Familiarity Index = 5,720

N = 101Familiarity Index = 2,582

HOUSEHOLDS

- #5. 'How well do you know each area?"
- #7. "How many times have you been to each area?"
- #8. 'How long have you or your immediate family been going into the area?"
- #9. "About how often have you or your immediate family gone into the areas during the past year?"

FIGURE 2. A GRAPHIC PRESENTATION OF THE FAMILIARITY INDEX, SHOWING INDIVIDUAL SCORES OF THE FOUR QUESTIONS THAT COMPRISE IT, AND THE CONTRIBUTION THAT EACH QUESTION MAKES TO THE TOTAL SCORE

individual questions for the two major populations, as well as the percentages that each question contributed to the total score.

The Familiarity Index composite scores are 2,582 and 5,720 for the households and organizations, respectively. The organizations have the highest Familiarity Index, a figure that is more than 100% higher than that of the households. The average score for household respondents is twenty-six. For organization members, the average score is fifty-five. A more intense use of the areas of the SGSNA through the participation in various activities by members of the organizations is reflected in the Familiarity Index.

For both the households and the organizations, the responses to Questions 5 and 7 comprise nearly equal percentages of their Familiarity Indices--36% for Question 5 for both households and organizations; and 17% and 18% for Question 7 for households and organizations, respectively. Possibly a more revealing difference may be found between scores for questions that are concerned with the length of time spent in the SCSNA throughout a person's lifetime (Question 8) and in the amount of use of the areas of the SCSNA during the past year (Question 9). For the households, 45% of the Familiarity Index came from the score of Question 8; for the organizations, 35% of the Familiarity Index was provided by the same question. The responses to Question 9 provided 2% of the household Familiarity Index and 11% of the organization Familiarity Index. The responses to these four questions, the scores of

which comprise the Familiarity Index, reveal certain patterns of use among organization members and household respondents. The Familiarity Index has been used as a tool to analyze and compare the uses that the two populations of Grundy Countians make of the SGSNA, uses that will be discussed in a following chapter.

#### Activities Conducted on the SGSNA

Question 10: 'What do you do on the areas?'' Check all the activities that you do or have done in the past year.''

Table IV presents the distribution of the percentages of the total number of respondents who participated in selected activities on the five areas of the SGSNA. The Savage Gulf was the area that respondents used the most in the year preceding this study, particularly when they engaged in activities such as hiking, hunting, and jeep driving. The Stone Door which provides accessibility to other areas of the SGSNA received the next most frequent amount of use, and Pound Gulf was used less frequently than the other four areas. Hiking, hunting, and jeep driving were the activities in which Grundy County respondents participated most frequently during the year preceding this study. Table IV shows that a few respondents continue the tradition of plant digging. Within the SGSNA boundaries, however, all plant and animal species are protected from exploitation in any form (TORAS).

TABLE IV

DISTRIBUTION OF THE PERCENTAGES OF THE TOTAL NUMBER OF RESPONDENTS WHO INDICATED THEIR PARTICIPATION IN SELECTED ACTIVITIES ON THE AREAS OF THE SAVAGE GULF STATE NATURAL AREA

Activity	Stone Door	Werner Big Timber	Savage Gulf	Stone Door Gulf	Pound Gulf
Hiking	37.2	23.4	34.2	23.4	19.9
Hunting	13.4	19.9	26.0	16.5	15.2
Jeeping	11.3	13.0	16.5	10.4	9.5
Camping	4.8	10.8	10.4	5.2	6.1
Digging Plants	2.2	1.3	2.6	2.2	2.6
Fishing	0.4	0.4	2.6	0.4	1.7
Other	3.5	0.4	0.9	0.9	1.7

## Changes in Use of the Areas of the SGSNA

Question 11: "Do you do the same things on the areas now that you did five years ago?"

Question 12: 'What causes you to do things differently now that you did five years ago?''

Questions 11 and 12 were included in the survey to determine the effect that Department of Conservation ownership and control of SGSNA lands were having on respondents' habits of use of those lands. Of all respondents, 25% indicated by answering Question 11 in the negative, that their uses of the areas had changed over the five years preceding this survey. Respondents answering Question 12 gave several reasons for the cause of that change in use, reasons that will be discussed further in the following chapter.

## Understanding of the Savage Gulf State Natural Area Project

Question 14: "Do you know that all these areas are now called the Savage Gulf State Natural Area?"

Question 15: "If you know about the SGSNA, what do you understand it to be?"

<sup>&</sup>lt;sup>4</sup>Certain wild species have long provided mountain families with a ready cash crop. These species include <u>Galax</u> aphylla and <u>Panax</u> quinque-folius. Also contributing to the response indicating that plant <u>digging within SGSNA</u> boundaries is continuing despite regulations, is the existence of several wildflower nurseries in the area that, in the past, have relied on wild plants collected from SGSNA lands for use as seed stock. (Personal interview with Lloyd Tate, Beersheba Springs, Tennessee, January 25, 1979).

Since its establishment in 1972, the SGSNA has received local, as well as state-wide, publicity and recognition. Through this media attention, through contacts with Department of Conservation employees, through various publications about the SGSNA, most of the respondents, including those who do not actively use the areas, have developed some perception of the project. Sixty-eight percent of all respondents answered "yes" to question 14, but very few respondents could actually be specific about the designation of the project (Table V). Question 15 listed several categories of land designations, some of which accurately describe the SCSNA. Respondents were asked to check all those categories that pertained to the SCSNA. Thirty-six percent of all respondents indicated that they knew the SGSNA is a "state-owned natural area with lots of unusual plants and animals" (Category 2); but more than twice as many (22.8% vs. 52.9%) of the organization members answered in the affirmative than did household respondents. Many respondents answered categories 1 and 3 in the affirmative (27% and 44%, respectively) indicating their association of the SGSNA as a state park. To categories 2, 5, and 6, the categories that could be applied to the SGSNA more respondents from the organizations than from the households answered in the affirmative. The majority of respondents seemed to know that the SGSNA is not a National Forest or a National Park; but there was not a clear indication of a general understanding among the respondents that the State of Tennessee is the owner of the land.

TABLE V
DISTRIBUTION OF RESPONSES TO THE QUESTION, "WHAT DO YOU UNDERSTAND THE SGSNA TO BE?"

	The SGSNA is:	Households	Organizations	Total
1.	Savage Gulf area of Grundy Co., now a state park.	34.7	55.8	44.1
2.	State-owned natural area with unusual plants and animals.	22.8	52.9	35.8
3.	State park in Grundy County.	26.7	28.8	27.3
4.	Wildlife refuge in Grundy County.	12.9	28.8	19.6
5.	Not a state park, but owned by the Dept. of Conservation.	8.9	28.8	17.3
6.	A lot of land in Grundy County owned by the Dept. of Conservation.	9.9	26.0	16.8
7.	National forest owned by the U. S. Govt		17.3	11.2
8.	National park owned by U. S. Govt.	2.0	6.7	3.9

### Management Ideas of Respondents Concerning the SGSNA

Question 16: "If you know about the Savage Gulf State Natural Area, what could be done to make the area better, as far as you are concerned?"

Many respondents readily expressed their ideas about the management of the Savage Gulf project. These ideas were categorized according to their similarity. Table VI presents nine categories and the number of people responding in each. Nearly half the respondents (45%) did not have any management suggestions. There exists, however, among those responding to this question, an interesting split in their concepts of how the SGSNA should be administered. There were the same number of respondents who wanted the SGSNA kept in as natural a state as possible as there were those who wanted a higher level of development in the area. Nine percent of all respondents expressed an interest in having some development in the area while maintaining the area as natural as possible. Limited development included more hiking trails, camping sites, horse trails, and strategic roads into certain areas such as the Stone Door so that older people could drive into the area. Other management suggestions included eliminating night hunting and spotlighting deer, as well as dogs running the deer. Although the question was not specifically asked, 7% of all respondents mentioned that hunting should be allowed to continue on some of the areas within the SGSNA. The majority of those opposed to further hunting restrictions were from the households and not specifically from sportsmen's organizations. There were 11 people from the households who

TABLE VI

CATEGORIES OF IDEAS ABOUT MANAGEMENT OF THE SAVAGE GULF STATE
NATURAL AREA, AND THE PERCENTAGE OF RESPONSES
IN EACH CATEGORY

Category	Households	Organization	Total %
No answer	42.6	48.7	45.3
Maintenance of the natural characteristics of the area.	12.8	15.8	16.2
Higher level of develop- ment.	11.9	21.8	16.2
More intensive manage- ment of the area.	13.9	12.8	13.4
More intensive management specifically for hunting	10.9	7.7	9.5
Some development, but keep area as natural as possible	4.9	14.1	8.9
Satisfaction with government involvement.	1.9	2.6	2.2
Dissatisfaction with government management	2.9	1.3	2.2
More participation in planning process.	0.9		0.5

suggested more intensive management specifically for hunting compared to six people from the organizations who responded with the same suggestion. Although many attitudes and opinions of the respondents were expressed in Part I of the questionnaire, Part II was designed to learn about specific attitudes concerning the SGSNA and related issues.

## II. ATTITUDES AND OPINIONS<sup>5</sup>

The attitudes of Grundy County citizens about the SGSNA and related issues were examined using the responses from 12 statements selected from the total 24 attitudinal statements of Part II of the questionnaire (See Appendix B). The selection of the 12 was based on the criteria of a high frequency of response to an individual statement and use as a surrogate to another statement. The responses were assigned to one of six issue categories relating to the development and management of the SGSNA by The Department of Conservation:

#### The issues are:

- 1. Public acquisition of land for preservation purposes.
- Possible benefits to Grundy County from the development of the SGSNA.

The data in the following section are analyzed and interpreted largely through the comparison of percentages. This form of analysis seems acceptable because the two populations being compared, households and organizations, have nearly equal respondents, 101 and 104, respectively. As was stated earlier in the text, the CB Club with its 26 respondents is not included in the analysis of data, due to the low number of respondents from that organization.

- 3. The influx of people into the county to visit the SGSNA.
- Participation by local residents in the planning process of the SGSNA.
- 5. The use and enjoyment of public lands.
- 6. Specific rules instituted in the SGSNA.

A seventh issue, the loss of a tax base due to government ownership of Grundy County land, was left unanalyzed because 42% of the respondents left the statements blank, producing insufficient data for analysis.

The variable of a low, medium or high Familiarity Index, the expression of the degree of involvement an individual has with the areas of the SGSNA, was compared to the responses to 12 selected statements to determine the relationship between the variable and the attitude being depicted. In testing for the relationship between responses to 12 selected attitude statements and Familiarity Indices, six situations were found to be significant at the 0.05 probability level.

## Public Acquisition of Land for Preservation Purposes

Statement 7<sup>6</sup>: There is enough land already set aside for wilderness in Tennessee, and we don't need anymore land bought by the government with rules about its use.

Statement 14: The remaining wilderness-type areas in Tennessee are too valuable to be left unprotected.

The responses to these statements indicate that the majority of respondents approve, at least in theory, the concept of public ownership

<sup>&</sup>lt;sup>6</sup>The number indicates the order of the statement in the questionnaire.

of land for the purposes of preservation. This approval is expressed in the general disagreement of respondents with #7 and their general agreement with statement 14 (See Table VII). Responses from both the households and the organizations indicate not only that Grundy Countians value wild lands and feel that those resources should be protected, but that protection will best be afforded through government ownership with subsequent rules and regulations governing future use.

Sixty-one percent of all respondents disagreed with the statement that there is enough land already set aside for wilderness in Termessee. Sixty-four percent of the household respondents disagreed with the statement, compared to 58% of the organization members who disagreed. Considering the degree of involvement that respondents have with the SGSNA, the data indicates that those household respondents with a high Familiarity Index are those people most in disagreement with the statement. More organization respondents than household members agree that there is already enough land set aside for wilderness. Once again, the difference might be found in the Familiarity Indices. Forty-five percent of those organization members who responded to this statement and agreed with the statement indicated a medium degree of involvement with SGSNA lands. Chi-Square analysis revealed no significant relationship between responses and the Familiarity Index at the .05 probability level.

The response to statement 14 is further evidence of the attitudes that respondents have concerning protected land in Tennessee. There was very little disagreement among respondents from the households to the

### TABLE VIIª

## RESPONSES TO ATTITUDINAL STATEMENTS 7 AND 14 BY FAMILIARITY INDICES (F.I.) SHOWN IN PERCENT

Statement 7: There is enough land already set aside for wilderness in Termessee, and we don't need anymore land bought by the government with rules about its use.

F. I.	Households	Organizations
	A D DK T	A D DK T
LOW	24 52 24 100	18 66 16 100
MEDIUM	18 67 15 100	45 45 10 100
HIGH	24 71 5 100	36 50 14 100
TOTAL	22 64 14 100	33 58 9 100
	$(x^2 = 2.99)$	$(x^2 = 2.91)$

Statement 14: The remaining wilderness-type areas in Tennessee are too valuable to be left unprotected.

F. I.	Households	Organizations
	A D DK T	A D DK T
LOW	91 9 100	84 10 6 100
MEDIUM	91 9 100	74 23 3 100
HIGH	91 9 100	76 14 10 100
TOTAL	91 6 3 100	79 15 6 100
	$(x^2 = 0.01)$	$(x^2 = 1.19)$

<sup>&</sup>lt;sup>a</sup>Chi-Square values shown in parentheses. Asterisks denote significance at 0.05 level. The 0.05 significance level was used throughout the analysis.

b In the tables, A=Agree, D=Disagree, DK=Don't Know, and T=Total percentage.

statement that the remaining wilderness areas in Tennessee are too valuable to be left unprotected. Ninety-one percent of household members agreed with statement 14, as did 79% of the organization members. Only 15% of respondents from the organizations disagreed with the statement, with many of those indicating only a medium degree of involvement with the SGSNA. There was no significant difference found in either population for statement 7 or 14 between the responses and the Familiarity Indices.

#### Possible Benefits to Grundy County from the Development of the SGSNA

- Statement 2: I am glad to see the SGSNA preserved in Grundy County because of the recognition it will bring us across the State.
- Statement 10: The economic benefits that visitors to the SGSNA will bring into Grundy County will more than offset problems that might be caused by those visitors.

In general, the respondents agree that the SCSNA will be a benefit to Grundy County (See Table VIII). The majority of all respondents indicated approval of the increased recognition for Grundy County that the establishment of the SCSNA might bring. There were, however, 24% more household members (90%) than organization members (75%) who agreed with the statement. In the households and organizations no significant relationship was found to exist between the responses and the Familiarity Index. Organization members with medium or high Familiarity Indices tended to disagree with the concept of increased recognition of Grundy County by the establishment of the natural area. Of the organization members who disagreed with the statement, 31% had a medium Familiarity Index, 30% had a high Familiarity Index; while among the

#### TABLE VIII

## RESPONSES TO ATTITUDINAL STATEMENTS 2 AND 10 BY FAMILIARITY INDICES (F.I.) SHOWN IN PERCENT

Statement 2: I am glad to see the SGSNA preserved in Grundy County because of the recognition it will bring us across the state.

F. I.	Но	use	holo	is
	A	D	DK	T
LOW	91		9	100
MEDIUM	91	6	3	100
HIGH	88	3	9	100
TOTAL	90	3	7	100
	$\alpha^2$	= 0	.21	

Org		zati	ons
A	D	DK	
86	_	8	100
69	31		100
60	30		100
75	20	. 5	100
	(x <sup>2</sup>	= 3.	77)

Statement 10: The economic benefits that visitors will bring to Grundy County will more than offset problems that might be caused by those visitors.

F. I.	Ho	usel	nolo	is _
	A		DK	
LOW	53			100
MEDIUM	47	14	39	100
HIGH	44	15	41	100
TOTAL	49	11	40	100
	$(x^2 =$	0.5	53)	

A	D	DK	
40	16		100
44	36		100
47	25	28	100
45	24	31	100

household respondents who disagreed with the statement, 6% and 3% had medium or high Familiarity Indices, respectively.

Response to statement 10, that economic benefits to the county that visitors to the SGSNA will bring will offset problems that might be caused by the visitors, was mixed. More household members than organization members agreed with the statement; but there were twice the proportion of organization members (24%) as there were household respondents (12%) who disagreed. Thirty-five percent of all respondents did not know how to respond to statement 10. The majority of respondents who disagreed with the statement were organization members who expressed a medium degree of involvement with SGSNA lands (Table IX). Thirty-six percent of those organization members with medium Familiarity Indices were in disagreement. No relationship was found to exist in either population between the responses and the Familiarity Index.

## The Influx of People into Grundy County to Visit the SGSNA

- Statement 3: I hope outsiders won't come into the SGSNA and will leave us alone here in Grundy County.
- Statement 15: The SGSNA should first be for the use and enjoyment of Grundy County citizens.

The attitude concerning an influx of people from outside Grundy

County coming into the area to visit the SGNSA is somewhat less apparent

among household members than among organization respondents (See Table

IX). A general agreement exists among all respondents that the SGSNA is

open to anyone who wants to visit; but there are some people who feel

that the SGSNA should be primarily for the use and enjoyment of Grundy

County citizens.

TABLE IX

## RESPONSES TO ATTITUDINAL STATEMENTS 3 AND 15 BY FAMILIARITY INDICES (F.I.) SHOWN IN PERCENT

Statement 3: I hope outsiders won't come to the SGSNA and will leave us alone here in Grundy County.

F.I.	Households	Organizations
	A D DK T	A D DK T
LOW	18 73 9 100	27 54 19 100
MEDIUM	16 66 18 100	23 54 23 100
HIGH	18 73 9 100	33 56 11 100
TOTAL	17 71 12 100	28 55 17 100
	$(x^2 = 0.51)$	$(x^2 = 0.25)$

Statement 15: The SGSNA should first be for the use and enjoyment of Grundy County citizens.

F. I.	Households	Organizations
	A D DK T	A D DK T
LOW	68 26 6 100	64 28 8 100
MEDIUM	52 39 9 100	60 30 10 100
HIGH	38 56 6 100	56 38 6 100
TOTAL	52 41 7 100	64 30 6 100
	$(x^2 = 6.12)*$	$(x^2 = 1.15)$

There are 33% more household members than organization members who disagreed with the statement that expresses the hope that outsiders will not come to the SGSNA. Fifty-nine percent more respondents from the organizations agreed with the same statement than did household members. Thirty-three percent of those organization members with a high degree of familiarity with SGSNA lands agreed with the statement, compared to 18% of household members with a high degree of familiarity who also agreed. Although the percentages indicate that more respondents from households than organizations disagreed with the statement, no relationship was found to exist between the responses and the Familiarity Index.

Apparently, more organization members than household respondents felt that the use and enjoyment of the SGSNA should first be for the Citizens of Grundy County. There were 17% more organization members (64%) who agreed with statement 15 than there were household members (53%). The majority of people from both the households and the organizations who were in agreement with the statement are those respondents who have a low degree of involvement with SGSNA lands (64% and 68% of organization and household respondents, respectively with low Familiarity Indices); whereas, among both populations, the most people who disagreed with the statement were those respondents who expressed a high degree of familiarity with the lands of the SGSNA (38% and 56% of organization and household respondents, respectively, with high Familiarity Indices).

A Chi-Square value of 6.12 was calculated when testing for a relationship between the responses of households and the Familiarity

Index. This was a significant value. However, no such relationship was found between responses from the organizations and the Familiarity Index.

## Participation by Local Residents in the Planning Process for the SCSNA

- Statement 6: The citizens of Grundy County have had ample opportunity to participate in decisions that are made that affect the SGSNA.
- Statement 13: On the whole, the Department of Conservation has been very thoughtful as to what the people of Grundy County want in the SGSNA.

Citizens of Grundy County were not as aware of efforts to involve them in the planning process for the SGSNA as state officials might have hoped. To statement 6, 56% of the respondents from the households answered in the "Don't Knows" column while 26% of organization respondents answered similarly. From the remaining respondents, 57% of organization members disagreed that Grundy Countians have had ample opportunity to participate in the decision-making process that affects the SGSNA (Table X). There was over a 60% difference between the number of organization members who disagreed with statement 6 and those household respondents who disagreed. However, for statement 6, no significant relationship was found to exist in either population between the responces and the Familiarity Index.

Response to statement 13 follows this trend. Respectively, 54% and 33% of household and organization respondents answered in the 'Don't Know' column (Table X). There was a high percentage of respondents from both populations who marked the 'Don't Know' column, with household members creating a 40% difference between their responses and the

TABLE X

## RESPONSES TO ATTITUDINAL STATEMENTS 6 AND 13 BY FAMILIARITY INDICES (F.I.) SHOWN IN PERCENT

Statement 6: The citizens of Grundy County have had ample opportunity to participate in decisions that are made that affect the SGSNA.

F. I.	Households	Organizations
	A D DK T	A D DK T
LOW	9 24 67 100	22 39 39 100
MEDIUM	24 9 67 100	19 62 19 100
HIGH	32 32 36 100	12 69 19 100
TOTAL	22 22 56 100	17 57 26 100
	$(x^2 = 5.69)$	$(x^2 = 0.91)$

Statement 13: On the whole, the Department of Conservation has been very thoughtful as to what the people of Grundy County want in the SGSNA.

F. I.	Households	Organizations
	A D DK T	A D DK T
LOW	32 6 62 100	21 25 54 100
MEDIUM	42 3 55 100	23 57 20 100
HIGH	30 24 46 100	22 54 24 100
TOTAL	36 10 54 100	20 47 33 100
	$(x^2 = 0.98)$	$(x^2 = 0.03)$

responses of organization members in the "Don't Know" column. An even greater difference found between the two populations is in the number of people who disagreed with statement 13. Forty-seven percent of organization members disagreed with the statement that the Department of Conservation has considered the needs and wants of Grundy County citizens in the SGSNA, while only 10% of the household population disagreed. The respondents from the organizations who make up the majority of those who disagreed with statements 6 and 13 are found to have expressed medium and high degrees of familiarity with the lands of the SGSNA. For respondents from the households, the majority of those who agreed with statements 6 and 13 are found in the medium and high categories of the Familiarity Index. As for the statement 13, there was no significant relationship between the responses of members of households or organizations and the Familiarity Index.

## The Use and Enjoyment of Public Lands

- Statement 9. There are too many rules in the SGSNA now, so that people can't really enjoy their visits there anymore.
- Statement 11. People can't really enjoy protected areas such as SGSNA because there are too many rules and regulations.

Responses to both of these statements follow similar trends. The data indicate that members of the organizations agreed that the rules and regulations governing the SGSNA inhibit enjoyment of SGSNA lands (Table XI). However, many of all respondents, 55% and 28% of the households and organizations, respectively, did not now how they felt about statement 9; and 26% of household respondents and 16% of

TABLE XI

## RESPONSES TO ATTITUDINAL STATEMENTS 9 AND 11 BY FAMILIARITY INDICES (F.I.) SHOWN IN PERCENT

Statement 9: There are to many rules in the SGSNA now, and people can't really enjoy their visits there anymore.

F. I.	Households	Organizations
	A D DK T	A D DK T
LOW	3 15 82 100	25 38 37 100
MEDIUM	12 30 58 100	58 33 9 100
HIGH	24 50 26 100	57 14 29 100
TOTAL	13 32 55 100	45 27 28 100
	$(x^2 = 9.82)*$	$(x^2 = 6.28)*$

Statement 11: People can't really enjoy protected areas such as the SGSNA because there are too many rules and regulations.

F. I.	Households	Organizations
	A D DK T	A D DK T
LOW	50 41 9 100	28 46 26 100
MEDIUM	20 54 26 100	50 42 8 100
HIGH	23 62 15 100	48 34 18 100
TOTAL	17 57 26 100	42 42 16 100
	$(x^2 = 2.77)$	$(x^2 = 1.37)$

organization respondents marked the 'Don't Know' column in response to statement 11 (See Table XI).

To statement 9, 32% of the household respondents disagreed that there are too many rules that inhibit the enjoyment of use of SGSNA lands, compared to 27% of the organization members who disagreed (Table XI). There is a 5% difference between the disagreement responses of the household and organization members to statement 9. To statement 11, there is a 15% difference between the numbers of respondents from the households (57%) and the organizations (42%) who disagreed with the concept that protected areas are not enjoyable to use because there are too many rules and regulations.

The greatest differences may be found among those who are in agreement with both of the statements. There were 45% of the organization respondents in agreement with statement 9, compared to 13% of the household members who responded similarly. To statement 11, 42% of the members of organizations were in agreement and 17% of the household members also agreed. The majority of respondents who agreed with both statements were those organization members with medium to high degrees of familiarity with SGSNA lands. There is an even split between those organization members who agreed with statement 11 (42%) and those who disagreed (42%). The same split is not evident in the response among organization members to statement 9.

A Chi-Square value of 9.82 was calculated when testing for a relationship between the responses of households and the Familiarity Index; this was a significant value. A significant value of 6.28 was

found when testing for the relationship between organization responses and the Familiarity Index.

### Specific Rules Instituted on the SGSNA

Statement 22: If I had my way, I would change alot of the rules that now exist on the SGSNA.

Statement 24: I don't really know what the rules are for the SGSNA.

These responses indicate that the rules and regulations for the SGSNA are not well-known to Grundy Countians (See Table XII). Statement 22 received a large "Don't Know" response, especially from respondents of the household population in which 53% answered in the "Don't Know" column. Organization respondents were those most in agreement that, given free rein, they would change many rules that are in existence on the SGSNA. Fifty-one percent of the organization members were in agreement with the statement. The majority of those were individuals with medium and high Familiarity Indices. Twenty-five percent of the household respondents agreed with the statement, but an almost equal number (22%) disagreed.

Statement 24, a more specific statement, elicited either an agreement or a disagreement from the respondents. The majority of household respondents (91%) agreed that they really did not know what the rules were for the SGSNA, and 75% of the organization respondents disagreed with statement 24; 25% and 9%, respectively, indicating through their disagreement that they did indeed know what the rules were for the SGSNA.

Based on the Familiarity Index, no significant relationship was

#### TABLE XII

# RESPONSES TO ATTITUDINAL STATEMENTS 22 AND 24 BY FAMILIARITY INDICES (F.I.) SHOWN IN PERCENT

Statement 22: If I had my way, I would change a lot of the rules that now exist in the SGSNA.

F. I.	Households	Organizations		
	A D DK T	A D DK T		
LOW	12 12 76 100	29 20 51 100		
MEDIUM	27 15 58 100	52 26 22 100		
HIGH	35 41 21 100	69 10 21 100		
TOTAL	25 22 53 100	51 17 32 100		
	$(x^2 = 5.22)$	$(x^2 = 12.38)*$		

Statement 24: I don't really know what the rules are for the SGSNA.

F. I.	Households	Organizations	
	A D DK T	A D DK T	
LOW	100 100	80 20 100	
MEDIUM	97 3 100	75 25 100	
HIGH	77 23 100	70 30 100	
TOTAL	91 9 100	75 25 100	
	$(x^2 = 13.67)*$	$(x^2 = 0.96)$	

found to exist between the household responses and the Familiarity Index. However, there was a significant relationship (12.38) between the responses of organization members and the Familiarity Index. Household responses were significantly related (13.67) to the Familiarity Index for statement 24.

#### CHAPTER VI

#### DISCUSSION OF RESULTS

#### I. CHARACTERIZATION OF THE LOCAL POPULATION

The respondents were from Grundy County and the majority had lived there for twenty years or more. Due in part to the length of residency in the county, most respondents were familiar with at least one of the five areas of the SGSNA. Savage Gulf and the Stone Door were the most familiar areas to the respondents primarily because of their outstanding physical features, their accessibility to users of the areas, and the publicity they have received in the media. Organization members were more familiar than household respondents with the areas, a fact that reflects a more intense use of the land because of the types of activities in which members of the organizations engage.

The knowledge of local people about the SGSNA and its land areas came from different primary sources, depending on whether a person was a member of one of the selected organizations. Members of organizations learned of the SGSNA lands primarily through the pursuit of various activities as well as through contact with friends or family members who had visited the areas. Household members, in general, did not belong to outdoor recreation organizations, did not regularly participate in activities on the areas, and learned about the areas primarily through family and friends who had visited them in the past. 7

<sup>&</sup>lt;sup>7</sup>Approximately 4% of household respondents belonged to organizations such as those sampled for this study.

The Familiarity Index of the organizations is double that of the households. Respondents from the organizations and the households, on a percentage basis, appeared to know the areas equally well although the knowledge of the households came from use in past years or through hearsay from family and friends. Organization members had visited the areas more times in the recent past, but household respondents had gone into the areas over a longer period of time than had the organization respondents. The main aspect of use in which respondents from households appeared to equal the use of the areas by organization respondents was in long-term familial use. The greatest contribution to the Familiarity Index of the households was provided by the response to the question concerning long-term familial use, Question 8 (refer to Figure 2 page 37). Long-term use of the areas by members of the household population added 10% more to its Familiarity Index than that of the organizations. Members of households, while not being frequent users of the SGSNA at the time this study was conducted, appear to have used the areas over a longer period of time than had organization members. These trends in use of the areas by respondents from households and organizations are a possible reflection of the average older age of household members and the type of use in which organization members participate on the areas. Household members averaged seven years older than organization members. Perhaps the older age of household respondents has given them more time to have used the areas in the past than organization members. The types of activities in which organization members participate in SGSNA lands are well-coordinated

group activities which are conducted on a seasonal schedule. Individual members of organizations who hunt, fish, or camp would have used the areas more in the year preceding this study than would people who do not have those interests. The data show that members of organizations are those people in Grundy County who use the areas with the most frequency when compared to household respondents.

If members of outdoor recreation organizations are those residents of Grundy County whose interests lead to the use of the SGSNA, then perhaps organization members have taken an interest in the past in the efforts of the Department of Conservation to explain management policies to residents of Grundy County. The data show that public participation in meetings held to discuss the SGSNA has been low with only 8% of all respondents indicating that they have attended public meetings concerning the SGSNA. Members or organizations, however, because of an active relationship with SGSNA lands, have been somewhat more responsive to the few public meetings held to explain management policies. It appeared to the researcher that a personal interest in assuring the continuation of their particular organization's activity, or perhaps an appreciation of the land's resources have generated among respondents from organizations a slightly more active interest than is evident among non-members in helping to plan the future of the SGSNA. However, active participation from Grundy Countians in the decision-making process has not been a priority of the Department of Conservation planners in charge of the SGSNA. 10

Residents of Grundy County who regularly participate in activities on SGSNA lands are mainly hikers, hunters and jeep drivers. Their activities are coordinated through monthly organization meetings and social functions. Hunting and jeeping are two of the most popular activities performed on SGSNA lands. There are probably no two recreation activities that are more of an antithesis to the purpose of a classified natural area than are hunting and jeeping. A dilemma is produced between two different philosophies of land use.

Grundy Countians have long used the land as hunting grounds and the old logging roads that cross the land as jeeping areas. Their activities probably cause little harm to the land resource and provide a form of sport enjoyed by residents from many sectors of Grundy County society. To visitors from outside the county, many of whom are interested in such passive activities as backpacking or camping, a jeep driven close to a primitive camping area, or a shot from a near-by gun detract from the very purpose of their visit to an area such as the SGSNA. In attempting to preserve an area as unique and sensitive as the SGSNA for future generations, certain rules and regulations must be established and observed. However, the adherence to those protective rules comes into direct conflict with long-term uses that area citizens

An example of public participation in Grundy County occurred in February, 1979. A public meeting was to be held to present the Master Plan for the SGSNA to the public. The notice announcing the meeting appeared in the paper the day after the meeting. The meeting was held in Monteagle which is located in the Southeastern corner of the county, a distance away from many communities that would be affected by the SGSNA. A second meeting was held later in the Spring in a more centrally located town.

have made of the land. The problem that Department of Conservation planners encountered in Grundy County was how to resolve these apparently conflicting concepts of land use without enraging the citizenry who, upon occasion, has vowed to "burn it all down" if its views were not respected. While not compromising the function or purpose of the natural area, Department of Conservation officials should have been able, through intense involvement of the public in their decisions concerning the SCSNA, to implement its management program without antagonizing the local residents.

The Department of Conservation has assumed, through state ownership of SGSNA land, the role of being a force of change in Grundy County.

Over 25% of all respondents indicated that their patterns of use of SGSNA lands had changed over the five year period preceding this study. The majority of those (15%) who indicated that their habits of use had changed cited "state control" as being the primary precipitator of the change. Other less frequently cited reasons for changes in patterns of use of SGSNA lands were old age or ill health. In most instances, whenever state control was given as an individual's reason for a change in the way he or she used the land, it was stated not as a disapproval of state control, but rather as a simple fact. A few respondents (7%) seemed confused by frequent rule changes, confusion that kept them off of state land because they were afraid of committing an illegality.

 $<sup>^9 \</sup>text{Similar remarks}$  were heard at various meetings attended by the researcher during the course of collecting data (January, February, 1979).

The confusion that was evident among many respondents was corroborated by the data. Respondents did not really understand the function of the SGSNA. Although most of the respondents (68%) had at least heard of the SGSNA project, that data indicate that most of the respondents associated the SGSNA with a state park, an association further substantiated by informal interviews with many respondents. Only 36% of all respondents knew that the SGSNA was a "state-owned natural area." The SGSNA was equated with Fall Creek Falls State Park which is located in Van Buren County. The problem with the association of the SGSNA with Fall Creek Falls State Park or any other state park lies in the fact that many forms of development and management of a state park are not appropriate for a classified natural area such as the SGSNA. When developments such as those at Fall Creek Falls are not forthcoming to the SGSNA, residents may become discontent with the management of the natural area. Residents may also become discontent if they have no knowledge about the function of a natural area and they see few visible signs of economic and recreational developments coming to their county. More positively, if area residents were made aware of the resources the state is attempting to preserve in the SGSNA, they might become more involved not only in participating in the management decisions concerning those resources, but also in taking more of a stewardship role in protecting the land.

Many Grundy Countians who responded to this survey had definite ideas concerning the management of the SGSNA. To an open-ended question asking for their ideas and opinions about ways the SGSNA could better be

managed for their benefit, approximately half of the respondents gave detailed answers. The data show that some respondents were in agreement with the maintenance of the natural characteristics of the SGSNA, but wanted to have a higher degree of development in the area. More development included new trails to certain presently inaccessible regions, more roads open to the public, and more campsites built within easy walking distances. Other respondents indicated their desire for more intensive management of the area, especially for the purposes of hunting. These respondents wanted to see an elimination of spotlighting deer and hunting deer with dogs. When people specifically referred to the management of hunting, they did so apparently with the foregone conclusion that they would be allowed to continue to hunt during given seasons in designated areas of the natural area. Twice as many respondents from households desired a more intensive management for hunting than did organization members.

To summarize, it appears that the respondents are aware of the existence of the SGSNA although they are not informed of its function and the purpose of its establishment. Among the residents of Grundy County, those who belong to outdoor organizations or garden clubs know the areas of the SGSNA as well as the household respondents, but organization members have visited the areas more in the past, and in the present and generally have a broader concept of the SGSNA than people who are not members of those organizations. Grundy Countians, on the whole, welcome government ownership and supervision of their resource; but since many activities in which many people engage on SGSNA lands are

prohibited on a natural area, compromises will have to be reached that will be accepted by the majority of users of the SGSNA.

# II. ATTITUDES AND OPINIONS ABOUT THE SAVAGE GULF STATE NATURAL AREA AND RELATED ISSUES

Attitudes were favorable among the respondents concerning the public acquisition of land for preservation purposes, land to be managed in as natural a state as possible. However, more respondents from the household population agreed with the concept than did organization members, especially those household respondents with high Familiarity Indices. It appears that household members, the majority of whom are not members of outdoor recreation or conservation organizations, are those people in Grundy County most concerned about the land being preserved for public use and enjoyment and for the benefit of future generations. It is understandable that because of the activities that are enjoyed on lands such as those of the SGSNA, members of organizations would be less likely to support the concept of wild, public lands that are owned and managed by the government. Government ownership has meant to these people, depending upon the particular designation of the land, the curtailment of many activities such as hunting, fishing, or jeeping. In theory, however, the majority of the respondents including organization members do support the concept of the public ownership of valuable Tennessee wilderness land.

The majority of the respondents to the survey appear to welcome the establishment of the SGSNA and believe that it will bring benefits to

Grundy County. The household respondents were more in favor of the natural area than the members of the organizations who were asked to complete the survey. Twice as many organization members as household members disagreed that the economic benefits that visitors to the SGSNA will bring into Grundy County will offset problems that might be caused by those visitors. Problems observed by the researcher that the county might encounter include increased litter and traffic; pressures on county services such as medical facilities, roads, or sewage systems, and severe user impact upon sensitive areas of the SGSNA. Of those respondents who disagreed with the concept of a greater recognition and increased economic benefits brought to Grundy County by outside visitors, the majority have medium to high Familiarity Indices. They are people who probably use SGSNA lands regularly for outdoor recreation activities and who do not want their activities interrupted by throngs of visitors to the area.

The favorable attitude that the respondents have toward the establishment of the SGSNA and the benefits it may bring to Grundy County is corroborated by the data about other attitudes that were investigated. Respondents indicated a willingness to accept people from out of the county who come to visit the SGSNA, but felt that the use and enjoyment of the natural area should be primarily for Grundy County citizens. While visitors will be accepted into the county to visit the SGSNA, the members of organizations were those respondents most in favor of the SGSNA being available primarily for their enjoyment. Among both of the two major populations, the respondents with low Familiarity

Indices were those most in agreeement that the SGSNA should first be for the use and enjoyment of Grundy County citizens. Disagreeing to the concept that the SGSNA should first be for the benefit of Grundy County citizens were the people who had high Familiarity Indices, possibly indicating a high degree of familiarity with SGSNA lands. The explanation of this phenomena might be that perhaps people who are not knowledgeable about the areas of the SGSNA, compared to people who use the areas regularly and are very knowledgeable about them, do not have an understanding of what it means to share the land resource with whomever will enjoy and protectit. Those people who actively use the land feel comfortable with sharing the resource with outsiders as long as their activities are not disrupted. The important fact is that the majority of Grundy Countians want people from out of the county to visit the SGSNA, but because the natural area is in Grundy County, its resources should first be for the use and enjoyment of area residents. Responses to this issue confirm the response to previous attitudes about public ownership of land for preservation purposes. Grundy Countians. on the whole, are favorable to their land resource being used for the common good.

Respondents' support for the establishment of the SGSNA in their county is further indicated by their responses to other attitudes that were investigated. The people who have used the areas in the past have done so in a largely unrestricted manner, adhering only to local social values. However, rules and regulations must be imposed on publicly owned land such as the SGSNA, and adherence to those rules is necessary

to achieve the goals and objectives that the preservation of the land demands. The majority of respondents disagreed that the rules and regulations imposed on SGSNA lands hindered their enjoyment of the land. Organization members as could be expected, formed the majority of people who agreed that the rules diminished their enjoyment of use of SGSNA. Statements 9 and 11 10 were worded differently enough to draw different responses from organization members. Statement 9 refers directly to the SGSNA while statement 11 refers to protected areas in general. There were almost twice as many organization respondents who agreed with statement 9 as those who disagreed. To statement 11 there was no difference between agreement and disagreement. Perhaps the inference can be made that, in theory, public protection for an area along with the rules that provide that protection, are acceptable to people such as the respondents from the organizations in Grundy County. But when considering a specific area such as the SGSNA, an area of which these people make regular use, organization members were not so willing to agree that in spite of the rules and regulations, they could still enjoy their visits to the area. The rules and regulations that have been imposed on the SGSNA concerning hunting and jeeping have affected the activities in which many organization members engage, most assuredly creating the agreement among those respondents that the SGSNA rules and regulations are a detriment to the full enjoyment of the visits that they make to

the SGSNA because there are too many rules and regulations.

<sup>10</sup> Statement 9 - There are too many rules in the SGSNA now, so that people can't really enjoy their visits there any more.

Statement 11 - People can't really enjoy protected areas such as

the area. The majority of respondents who agreed that rules and regulations inhibit pleasure of use of SGSNA land were those members of organizations who expressed medium and high degrees of familiarity.

This response could be expected.

Many of these respondents, in fact, if given their way, would change many of the rules that now exist on the SGSNA. Organization members, and in particular, those with medium and high Familiarity Indices, formed the majority of respondents who indicated their desire to make some changes in the existing rules. This response is probably a typical response to government imposition of rules on the use of the SGSNA lands. It appeared to the researcher that many people in Grundy County would object to the imposition of any rules on their patterns of participation in the SGSNA. The majority of household members, along with many respondents from the organizations, did not know enough about the rules to comment on changes they would make. In response to the very direct statement, "I don't know what the rules are for the SGSNA," 91% of the household respondents agreed. Organization members were 16% less in agreement, a response that could be expected given the fact that members or organizations use the areas of the SGSNA on a more regular basis than do household members. From personal interviews, it was learned that some jeep club members would like to open roads that had been closed to their jeeping activities; among sportsmen club members, there are some who would like to establish a managed hunting season within certain areas of the SGSNA. Citizens not affiliated with an

organization would like to have more trails built into particular areas. Some interested respondents wanted to know where they could obtain information about the rules and regulations of the SGSNA. There appeared to be a definite communication problem in the transmission of the rules to the general public, rules that could possibly help people to understand the nature of the SGSNA.

When asked to respond to statements that Grundy County residents have been given enough of an opportunity to become involved in the decisions that affect the SGSNA, the majority of respondents did not know how to answer. Almost twice as many members of organizations as household respondents responded negatively to the suggestion that Grundy Countians had been included in the decision-making process. In general, respondents seemed unaware of efforts to directly involve them in the decisions that affect the SGSNA and subsequently, Grundy County.

III. MAJOR DIFFERENCES BETWEEN HOUSEHOLD AND ORGANIZATIONAL USERS
OF THE SGSNA AND THE INFLUENCES OF FAMILIARITY WITH THE LAND ON
ATTITUDES OF USERS OF THE SGSNA

The relationship between responses and the Familiarity Index of household members are different from the relationship between responses and the Familiarity Index of the organization members.

Considering the issue of public acquisition of land for preservation purposes, the majority of all respondents agreed that wilderness land should be protected. A greater majority of household respondents than organization respondents agreed that wilderness land should be protected for preservation purposes. It is understandable that household members would be more in agreement with the issue of

public ownership of land than would organization members since the majority of household respondents are those who have the least amount of contact with the SGSNA and its government-imposed rules and regulations.

The majority of respondents from both populations agreed that possible benefits could come to Grundy County from the development of the SGSNA. A significant relationship was found to exist between the responses of household members and their Familiarity Indices who agreed that they were glad to see the SGSNA preserved in Grundy County. Such differences were not found in either population between those who agreed or disagreed with the statement that the economic benefits that visitors to the SGSNA will bring to the county will more than offset problems that might be caused by those visitors.

Issue 3, the influx of people into Grundy County to visit the SGSNA, brought similar responses by households and organizations to the statement, "I hope outsiders won't come to the SGSNA and will leave us alone here in Grundy County." Response to the statement that the SGSNA should first be for the use and enjoyment of Grundy County citizens was related to the Familiarity Index in the household population. No such relationship was found to exist among organization members who disagreed or agreed with the statements. This trend among the two populations was to be expected and it follows the trend of the previous data. Household members with their low Familiarity Indices, would not feel the same sense of competition with other people who use SGSNA lands as would organization members who regularly use the land; therefore, household members would be much more inclined not to be in favor of the SGSNA being primarily for the use and enjoyment of Grundy County citizens.

No relationship was found to exist in either population between the response to statements 6 or 13, the issue of participation by local residents in the planning process for the SGSNA, and the Familiarity Index. The major difference in the two populations could be found in answer to the statement that Grundy County citizens have had ample opportunity to participate in decisions that are made that affect the SGSNA. Organization members with high Familiarity Indices (69%) were those most in disagreement with the statement compared to the household members with high Familiarity Indices (32%) who also disagreed. Organization members who regularly use the land perhaps would not feel a part of the planning process for the SGSNA when the decisions that have been made concerning the natural area have been in direct contrast to their desires and wishes. The last issue that was analyzed concerned the rules imposed by the Department of Conservation on the SGSNA. Significant differences in responses were found to exist between both household and organization members with different Familiarity Indices to the statement that given their way, they would change a lot of the rules of the SGSNA.

The attitudes towards the imposition of rules on the SGSNA appear to support the concept that an area as valuable as the SGSNA must be protected by rules and regulations. However, consistently throughout the four statements that concern rules for the SGSNA, respondents marked the 'Don't Know' column indicating their lack of knowledge of the rules. The major differences between the two populations in response to all four statements can be found in the percentages of responses. A fairly high percentage of respondents from organizations who agreed with

statements 9 and 11 had medium or high Familiarity Indices; however, respondents from households who disagreed with statements 9 and 11 were in the majority and also had medium and high Familiarity Indices. A similar difference is found in response to statement 22 where the majority of organization members who agreed that they would change a lot of the rules for the SGSNA have high Familiarity Indices. The majority of respondents from households disagreed with the statement and had high Familiarity Indices.

All responses to the last four statements should be considered in relation to the response to the last statement. The great majority of respondents from both populations in response to statement 24 agreed that they really did not know what the rules are for the SGSNA.

Respondents were able to respond to the more general statements 9 and 11 concerning the use and enjoyment of public lands without necessarily having to know what specific rules existed on the SGSNA. However, to statement 22, a more specific statement concerning rules for the SGSNA, their response is more likely directed against a governmental authority in general. Statement 24 definitely reveals a lack of knowledge that the majority of respondents have about specific rules for the SGSNA.

#### CHAPTER VII

#### SUMMARY

The objectives of the study were: to characterize the local population of Grundy County and determine respondents' habits of use of the Savage Gulf State Natural Area lands; to determine the attitudes and opinions of the people about natural resources, the SGSNA; in particular, to determine major differences between household and organizational users of the SGSNA; and to determine the influences of familiarity with the land on attitudes of users of the SGSNA. Two major populations of Grundy County residents were interviewed during January and February, 1979, primarily through the use of a questionnaire. The two populations were respondents from 101 households and respondents from eight organizations, seven of which were outdoor recreation or conservation organizations. Households represented a current non-use orientation towards the SGSNA; the organizations represented a current use orientation. The total sample size was 231, including the 26 respondents of the CB Club, with 97% of the respondents living in Grundy County.

The results of the study show that respondents from the household population and from the organizations related to the SGSNA in different ways. Membership in one of the seven organizations included in the one population was an influence on an individuals's response to many of the questions in the survey. Members of organizations revealed different habits of SGSNA use than the household respondents. Organization members were much more familiar than household respondents with the areas and were more aware of the SGSNA project, its function, and the

rules that govern it. This awareness came from more use of the areas in the recent past by organization members due to the types of activities in which they participated on SGSNA lands. Organization respondents were also more opposed to many of the regulations which had been introduced on the natural area, and they would have changed many of the rules that were in effect.

When making reference to all of the respondents to the survey, most had a basic knowledge of the SGSNA's existence in Grundy County and the majority approved its protection by the State. There existed, however, a lack of knowledge among the respondents, especially among household members, about the function of a natural area, about the designation of the SGSNA, and about specific rules instituted on the area. Most of the respondents had little awareness of efforts on the part of the Department of Conservation to involve them in the planning process of the SGSNA. Very few respondents, only about 8%, had participated in any public event held by the Department of Conservation concerning the SGSNA.

Respondents who regularly used the areas of the SGSNA or who had used them in the past years, had experienced some change in their participatory patterns due to the ownership and control of the land by the Department of Conservation. Ideas about the management of the SGSNA submitted by many respondents included maintenance of the natural characteristics of the land, better management for hunting purposes, and higher levels of development.

A potential area of conflict for Department of Conservation

planners was revealed between the public use of the land and the designation of the SGSNA. Jeeping and hunting were two of the most popular activities conducted on the natural area, activities that are in direct opposition to uses of the land as defined under TORAS.

Sentiments about both activities ran high and should serve to alert the Department of Conservation to work for compromises concerning the continuation of those activities on the lands of the SGSNA and on other nearby lands.

Attitudes among Grundy County residents were favorable concerning government ownership and control of SCSNA lands. They recognized the value of the land and of wilderness land, in general, in Termessee. Of household and organization respondents, 91% and 79%, respectively, agreed that remaining wild areas in Termessee are too valuable to be left unprotected. Favorable attitudes were also displayed towards the establishment of the natural area in the county, with the respondents hopeful for the recognition and economic benefits that the project might bring the county. Ninety percent of household respondents and 75% of organization respondents agreed that the preservation of the SGSNA would prove to be beneficial to Grundy County because of the increased recognition it would bring to the area.

The rules of the SGSNA seemed not to be of common knowledge among the respondents, even among the organization members who actively used the land. Eighty-two percent of all respondents admitted that they did not know what the rules are for the SGSNA. Many of the organization members who did and did not know the rules would like to have seen them

changed since they affected many activities in which the organization members engage on SGSNA lands. Many of the organization members who did not know the rules indicated their desire to see the rules changed. The researcher observed that this attitude was typically expressed by many respondents, indicating a general dislike of perceived "government intrusion" in the lives of many people.

#### CHAPTER VIII

#### RECOMMENDATIONS AND CONCLUSIONS

#### I. RECOMMENDATIONS

Based on the data collected for this study, the following recommendations were made concerning future participation by Grundy County citizens in decisions affecting the SGSNA. The data have shown that the people who were most in contact withthe lands of the SGSNA were members of those organizations who engage in hunting, hiking, and jeep driving. Garden club members were also interested in the land resource, but more from a conservation viewpoint. Members of these organizations are the citizens of Grundy County who have a vested interest in the land and who, more than likely, will be those most interested in SGSNA management policies. Organization members were also those people who have been shown to be the most opposed to regulation of their land; and therefore, further communication between the Department of Conservation and these organizations would be a logical place to start when attempting to involve the people of Grundy County more in the SGSNA decision-making process.

Involvement of Grundy County citizens could be achieved through various methods. Effective communication about the SGSNA with Grundy Countians has, in the past been accomplished through the media, and in particular, through local newspapers. A continuation of the use of the news media is one suggestion for expanded communication with area residents about the SGSNA. Through periodic press releases written by local Department of Conservation employees a great deal of information could be relayed to Grundy County citizens. The press releases could

cover a variety of topics concerning the SGSNA, such as its natural history, cultural history, the philosophy behind its designation as a natural area, and introduction of Department of Conservation employees who manage the area at the local level.

A second suggestion for further involvement of Grundy County citizens in planning the SGSNA is to work directly with the organizations who have a vested interest in the natural area. Some of those organizations have been identified through this study, and there are others in Grundy county whose membership might also be interested in the management of the SGSNA. Department of Conservation staff could attend monthly meetings, give slide presentations and talks to those in attendance. The members of the various organizations who were sampled for this study were extremely pleased for someone to show interest in their activities. Many individuals from both populations expressed an avid interest in SGSNA lands, policies, and future management. Most respondents had very little knowledge about any of them. The organizations that were sampled enjoyed outside speakers. They will, however, not take the initiative to call upon potential speakers; nonetheless, they would welcome an initiative from someone willing to provide information to them.

A third suggestion that again utilizes local Department of Conservation staff, is to issue personal invitations to the leaders of these interested organizations whenever a major meeting is to be held concerning the SGSNA. Through a personal invitation, organization presidents or leaders might be more inclined to attend a meeting about the SGSNA. They might also, if requested by someone from the Department

of Conservation, elicit comments from the organization's membership that they represent. Participation in a public event held for the purposes of present changes in SGSNA policies should not be left to the chance that perhaps people will read the notice of the meeting in the paper. A more active, personal solicitation of the public's participation is necessary in Grundy County than the personnel in most agencies are accustomed to taking.

#### II. CONCLUSION

Public participation is a concept, an ideal, that is difficult to define and to implement. The difficulty lies in the variances among people, and therefore, public participation methods must remain flexible and be applicable to different populations of people in various time frames. People are influenced by their environmental or physical world. Generalizations about the best methods to involve people in decisions that affect their lives must be made cautiously because of the disparate, subtle differences among people living within the complex boundaries of our society.

Public participation, in many instances, depends on the saliency of the issue to the people involved. Often people not inclined to be involved in decision-making processes, but who stand to be directly impacted by a certain policy, will use whatever means available to them to express their needs and desires to policy makers. In Grundy County there was a segment of the population which could be more directly impacted by Department of Conservation decisions than the rest of the

population. Certain organization member, because of their immediate involvement with the areas of the SGSNA, were the people which the Department of Conservation would need to involve in the planning of the use of the SGSNA. Organization members were those people who used the SGSNA lands more in the present, and this immediate use of the land gave them a vested interest in decisions which affected the SGSNA.

However, the agency must be committed to obtaining people's views, their wants, and needs. A person or agency who is in the position of making decisions that have the potential to affect many people's lives must realize that the best decisions are made based upon what the people perceive themselves as wanting and needing. Therefore, in the long-run, as this indicates, it would have been more efficient and credible for Department of Conservation policy-makers to consider outdoor recreation and conservation organization members' viewpoints at the beginning of the decision-making process for the SGSNA. An early consideration of this public's opinions could help to avoid later conflict in the implementation of the decided policy.

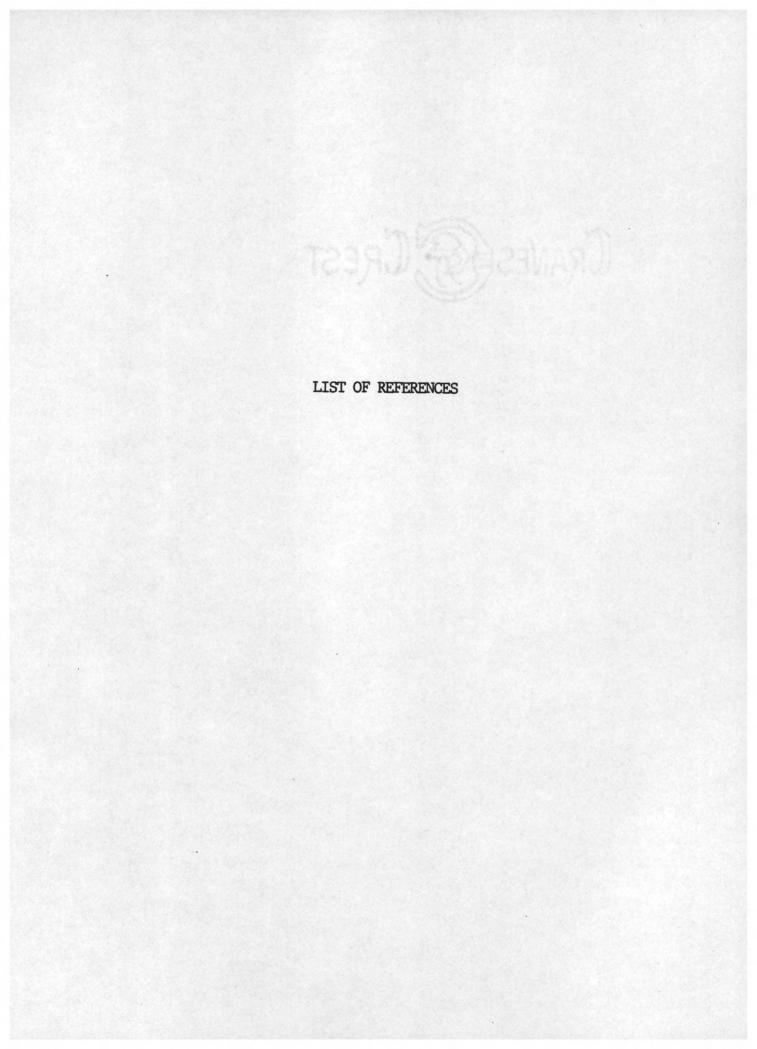
This study shows that citizens of Grundy County learned of the SGSNA through many different means, including actual use in the past and in the present, through the media, and through family and friends. Capitalizing on those established information sources, the Department of Conservation could develop ways to use them in the education of citizens about the SGSNA. Few people in Grundy County understand the concept of

the SGSNA, and they are not knowledgeable about the rules that govern the area. A utilization of the sources of information from which people learned of the SGSNA in the past would not be difficult to achieve.

This study also shows that Grundy Countians have not been active in the public participation programs offered by the Department of Conservation for the planning of the SGSNA. They have not attended the public hearings, nor have they attended public meetings of any kind to discuss the future of SGSNA lands. Given the cultural differences amoung Grundy Countians, as well as the differences in patterns of use of the SGSNA, both in the past and in the present, in which Grundy Countians engage, different methods of public involvement should be considered. A sound basis for public involvement in the planning of the SGSNA already exists in Grundy County. The majority of Grundy Countians are favorable towards government ownership of their land, and they recognize the value of wild, undeveloped lands. These attitudes, identified by this study, should be guidelines for the Department of Conservation in its efforts to involve people in decisions about SGSNA lands. So many citizens appear to be in favor of the project that their input into the planning process of the SGSNA would only serve to solidify better relations between the Department of Conservation and the citizenry of the county.

In Grundy County, a unique area of Tennessee because of the physical and cultural environment of the people who live there, standard methods of involving the public such as meetings, hearings, or responsiveness summaries would not be completely effective. It was

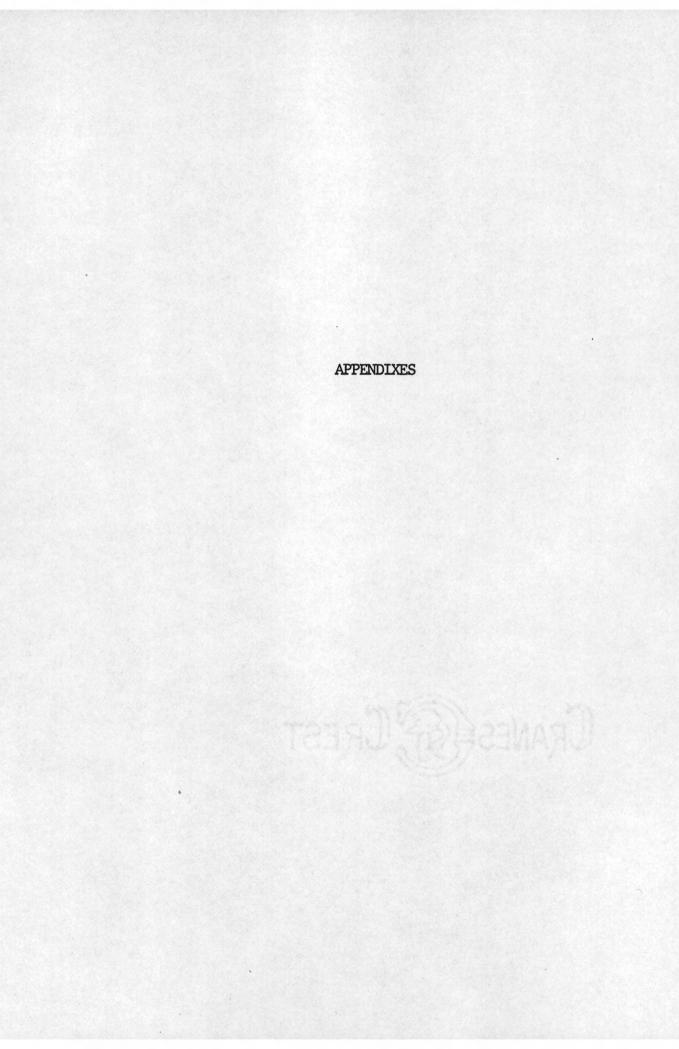
observed by the researcher that people of Grundy County, while at all times being friendly and hospitable, were rather reserved in nature and not given to openness about many subjects, especially one in which the State of Tennessee was involved. Grundy Countians, like many other people, need to be coaxed and encouraged to express their ideas and opinions. No effort to get public participation can be totally successful. Programs can be more effective, however, if people who have vested interests in the policy under consideration are especially enlisted to make their views known. This study, conducted on a person-to-person level, sought personal interaction with the people of Grundy County to elicit information from them. The people of Grundy County were found to be willing and eager to share their views and opinions when they were made to feel that those views and opinions were important and would be considered in the decisions made concerning the SGSNA. They were in need of more information about the subject upon which they were asked to comment. Importantly, they did not hesitate to give their ideas when asked.



- Milbrath, L. W. 1965. Political Participation: How and Why Do People Get Involved in Politics?. Chicago: Rand-M Nally.
- National Wildlife Federation. 1969. "The U.S. considers its environment." Report of the National survey conducted by Gallup International, Inc. Washington, D.C.
- ----1970. "A study of the attitudes of the American public toward improvement of the national environment." Report of the National survey conducted by Louis Harris and Associates. Washington, D.C.
- Ogden, Daniel M., Jr. 1970. 'Wildland policy decisions.' <u>Journal of Forestry</u> 68 (April): 201-204.
- O'Riordan, Timothy, 1971. 'Factors affecting the perceptions and attitudes of participants in decision making in resources management: a strategy for public involvement." In W.R.D. Sewel and I. Burton (Eds.) Attitudes and Perceptions in Resources Management. Ottowa: Queen's Primer.
- ----1971. 'Public opinion and environmental quality.' Environment and Behavior. 3 (June): 191-214.
- Prichard, Mack S. 1977. 'Savage Gulf: a last chance for wilderness.' Tennessee Conservationist, 28 (May-June): 8-11.
- Rahm, Neal M. 1970. 'Public participation in national forest management decisions.' Journal of Forestry. 68 (April): 205-207.
- Remmers, Hermann Henry. 1954. Introduction to Opinion and Attitude Measurement. New York: Harper.
- Rosenbaum, Nelson M., 1976. <u>Citizen Involvement in Land Use Governance:</u>
  <u>Issues and Methods</u>. First Edition. Washington, D.C.: The Urban <u>Institute</u>.
- "Savage Gulf State Natural Area." 1978. Tennessee Department of Conservation Brochure. Nashville.
- Selltiz, Claire, Lawrence S. Wrightsman, and Stuart W. Cook. 1976.

  Research Methods in Social Relations. Third Edition. New York:
  Holt, Rinehart, and Winston.
- Schmitt, Peter J. 1969. <u>Back to Nature: The Arcadian Myth in Urban</u>
  <u>America.</u> New York: Oxford University Press.
- Schweitzer, Dennis L. 1974. 'Ensuring viable public land-use decisions,' Journal of Forestry. 73 (November): 705-707, 739.

- Spiegel, Hans, and Stephen Mittenthal. 1968. "The many faces of citizen participation: a bibliographic oiverview." In Citizen Participation in Urban Development. 1, Washington, D. C.: Washington National Training Laboratories.
- TCA (Tennessee Code Annotated) 2-618, August, 1978.
- Tennessee Outdoor Recreation Area System. 1974. Nashville: Tennessee Department of Conservation, Office of Planning.
- Tennessee State Planning Office. 1979. Knoxville: University of Tennessee, Center for Business and Economic Research.
- Thompson, W. E., and J. E. Horton. 1960. 'Political alienation as a force in political action.' Social Forces. 38:190-195.
- Tognacci, Louis N., Russel H. Weigel, Marvin F. Wildeen, David T.A. Vernon. 1972. 'Environmental quality how universal is public concern?''. Environment and Behavior. 4 (March):73-86.
- Twight, Ben W. 1977. "Confidence or more controversy: wither public involvement?" Journal of Forestry, 75 (February):93-95.
- U.S. Geological Survey Map, 1956. Collins, Tennessee Quadrangle. U.S. Geological Survey: Washington, D.C.
- Wagar, J. Allen, and William S. Folkman. 1974. 'Public participation in forest management decision.' <u>Journal of Forestry</u>. 72 (July): 405-407.
- Wengert, Norman I. 1955. <u>Natural Resources and the Political Struggle</u>. First Edition. Garden City, New York: Doubleday.



APPENDIX A

#### APPENDIX A

## QUESTIONNAIRE

I am Jenny Freeman from Knoxville and a student at the University of Tennessee.

Part of my studies involve learning some things from you here in Grundy County. Would you please help me? I don't need to know your name, and anything you tell me will be put with a lot of other information which can't be traced to any one person.

Thank you very much,

1.	Do you live	in Grundy Co	ounty? 1Yes	2N	0	
2.	If yes, which community do you live in or near?					
		1	Altamont	6	_Monteagle	
		2	Beersheba Spring	s 7	Palmer	
		3	Coalmont	8	_Pelham	
		4	Gruetli	9	_Tracy City	
		5	Laager	10.0t	her	
3.	How many yea	rs in total	have you lived in	Grandy Com	ntw?	
			Less than one ye			
		2	1 - 2 years	5	10 - 20 years	
		3.	3 - 4 years	6.	over 20 years	
				_	over 20 years.	
4.	unty? Check each					
		1.	_Stone Door	4.	Stone Door Gulf	
			Werner Big Timbe			
		3	Savage Gulf			
5.	Check the sq Please put a	uare in <u>each</u> check in ea	column that tells	how well	you know each area.	
		Stone Door	Werner Big Timber	Savage G	ulf Stone DoorGulf	Pound Gulf
	ow nothing					
	ow a little,					

TIME

DATE

Know it fairly

Know it very well

well

6. How do you	know abou	t the areas?			
		1Newspaper	4.	By going the	ere
		2Friends		Public meeti	ngs
		3. Family	6.	Other_	
7. Check the to each ar	square in ea. Pleas	<u>each</u> column that s e put a check in e	shows how man	ry times you have	e been
	Stone Door	Werner Big Timber	Savage Gulf	Stone Door Gulf	Pound Gulf
Never been there					
Once or twice					
3 - 10 times					
10 - 50 times					
More than 50 times					
you do <u>not</u>	go into t	your immediate fa he areas, check he Werner Big Timber	re, and	go on to Questi	on #14.
Don't go into this area					
Past year only					
Past 5 years					
Past 10 years					
More than 10 years					

9. About how often have you or your immediate family gone into the areas during the past year?

	Stone Door	Werner Big Timber	Savage Gulf	Stone Door Gulf	Pound Gulf
Not one time					
Once or twice					
3 - 10 times					
Many times (10 - 20 times)					

10. What do you do in the areas? Check all the activities that you do or have done in the past year.

	Stone Door	Werner Big Timber	Savage Gulf	Stone Door Gulf	Pound Gulf
Hunt					
Fish					
Walk or hike					
Drive a jeep or motorcycle					
Dig plants					
Camp					

Other uses	
------------	--

11.	Do you	1 do	the	same	things	on	the	areas	now	that	you	did	5	years	ago	?
-----	--------	------	-----	------	--------	----	-----	-------	-----	------	-----	-----	---	-------	-----	---

1. Yes

2.\_\_\_No

12. If you answered 'No" to Question #11 above, what is it that you did 5 years ago that you do differently now? If you answered 'Yes" to Question #11, go on to Question #14.

Do you Natura	1 know that all these areas are now called the Savage Gulf State  1Yes 2No
If you stand	know about the Savage Gulf State Natural Area, what do you unde it to be? Check <u>each</u> statement that you agree with.
1	It's a State Park somewhere in Grundy County.
2	It's the Savage Gulf area of Grundy County that has been made into a State Park.
3	It's a National Forest, owned by the U. S. Government.
4	It's not a State Park, but it's an area that has been bought the Department of Conservation and that is now under governme protection.
5	It's a state-owned wildlife refuge in Grundy County.
6	It's a National Park owned by the U. S. Government.
7	It's a state-owned Natural Area that has lots of unusual plan and animals in it.
8	It's a lot of land in Grundy County that is owned by the Depa ment of Conservation.
If you to make	know about the Savage Gulf State Natural Area, what could be do e the Area better, as far as you are concerned?

\*\*\*\*This is the end of the first part of the questions. In just a minute, we will answer the last few questions.

Tell me how you feel about the statements that I read out loud. Please check the response that you agree with as I read <u>each</u> sentence. 17.

STRONGLY	1	1			1		1	1	1			1	1	1	1	1	1	1			1	1	1	1
DISAGREE			1	1		1	1		1		1	1			1					1	1			1
DON'T KNOW				1		1			1		1	1		1	1	1		1	1	1		-	1	1
ACREE				1		-	1				1	1				1		1	1	1		1	1	
STRONGLY AGREE	1			1					1		1	-					1		1	1			1	1
	1.	2.	e,	4.	ۍ.	.9	7.	œ.	6	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.

How old were you on your last birthday?
Male or Female
Circle the highest grade that you completed in school.  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 16+
What is the main kind of work that you do?
Are you presently a member of any of these organizations? Yes, No. Check all of the ones to which you belong and double-check those clubs in which you've held an office.
1Civic clubs
2Labor unions
3Fraternal orders (Masons, American Legion, VFW, etc.)
4Farm organizations
5Garden clubs
6Jeep clubs
7. <u>Conservation clubs</u> (hiking or camping clubs)
8Sportsmen's clubs (hunting, fishing, etc.)
9Professional organizations

APPENDIX B

## APPENDIX B

## ATTITUDINAL STATEMENTS

The following statements were read aloud to the respondents upon completion of Part I of the questionnaire.

- 1. Unusual areas such as the SGNA should be protected by the government for people to enjoy for a long time to come.
- 2. I am glad to see the SGSNA preserved in Grundy County because of the recognition it will bring us across the state.
- 3. I hope outsiders won't come to the SGSNA and will leave us alone here in Grundy County.
- 4. I wish I knew more about the SGSNA.
- 5. I would like to see the SGSNA open to more people.
- 6. The citizens of Grundy County have had ample opportunity to participate in decisions that are made that affect the SGSNA.

- 7. There is enough land already set aside for wilderness in Tennessee and we don't need any more land bought by the government with rules about its use.
- 8. I wish I had taken advantage of the public meetings that were held to get input from Grundy County citizens concerning the SGSNA.
- 9. There are too many rules in the SGSNA now, so that people can't really enjoy their visits there anymore.
- 10. The economic benefits that visitors to the SGSNA will bring into Grundy County will more than offset problems that might be caused by those visitors.
- 11. People can't really enjoy protected areas such as the SGSNA because there are too many rules and regulations.
- 12. The development of the SGSNA makes me proud to live in Grundy County.
- 13. On the whole, the Department of Conservation has been very thoughtful as to what the people of Grundy County want in the SGSNA.
- 14. The remaining wilderness type areas in Tennessee are too valuable to be left unprotected.

- 15. The SGSNA should first be for the use and enjoyment of Grundy County citizens.
- 16. The state government should have to reimburse Grundy County for the taxes lost on the 10,000 acres it owns in the SGSNA.
- 17. The protection of an area such as the SGSNA that has rare plants and animals in it is not fair because it means people cam't go into that area as they once did.
- 18. The Department of Conservation does not include the people of Grundy County when they decide the rules for the SGSNA.
- 19. Now that hunting and other activities are regulated in the SGSNA, I don't go into the areas as much as I used to.
- 20. Because the state doesn't have to pay tax on the land that it owns, it is not right for the government of Tennessee to own so much land in Grundy County.
- 21. My own enjoyment of the land has not lessened since the establishment of the SGSNA.

- 22. If I had my way, I would change a lot of the rules that now exist in the SGSNA.
- 23. I think more roads should be closed so that the SGSNA will be better preserved.
- 24. I don't really know what the rules are for the SGSNA.

APPENDIX C

CRANESE GRUCHEST

## APPENDIX C

RESPONSES TO ATTITUDINAL STATEMENTS, DIVIDED INTO LOW, MEDIUM, AND HIGH DISTRIBUTION OF RESPONDENTS' FAMILIARITY INDEX SCORES, GIVEN IN ABSOLUTE NUMBERS

Issue I: Public Acquisition of Land for Preservation Purposes.

Statement 7: There is enough land already set aside for widerness in Tennessee, and we don't need anymore land bought by the government with rules about its use.

F.I.	Ho	Households									
	A	D	DK	T							
LOW	8	18	8	34							
MEDIUM	6	22	5	33							
HIGH	8	24	1	33							
TOTAL	22	64	14	100							

Or	gan	izat	ions	
A	D	DK	T	
6	24	5	35	
15	15	1	31	
11	17	3	31	
32	56	9	97	

Statement 14: The remaining wilderness-type areas in Tennessee are too valuable to be left unprotected.

F.I.	Households										
	A	D	DK	T							
LOW	31	3	-	34							
MEDIUM	31	3	-	34							
HIGH	30	-	3	33							
TOTAL	92	6	3	101							

Organizations									
A	D	DK	T						
32	4	2	38						
23	7	1	31						
22	4	3	29						
77	15	6	98						

A= Agree, D= Disagree, DK= Don't Know, T= Total, F.I.= Familiarity Index.

Issue II: Possible Benefits to Grundy County from the Development of the Savage Gulf State Natural Area.

Statement 2: I am glad to see the SGSNA Preserved in Grundy County because of the recognition it will bring us across the state.

F. I.	Households					
	A	D	DK	T		
LOW	31		3	34		
MEDIUM	30	2	1	33		
HIGH	30	1	3	34		
TOTAL	91	3	7	101		

Org	gan	izat	ions
A	D	DK	T
31	2	3	36
22	9		31
20	8	2	30
73	19	5	97

Statement 10: The economic benefits that visitors to the SGSNA will brint to Grundy County will more than offset problems that might be caused by those visitors.

F. I.	Households					
	A	D	DK	T		
LOW	18	3	13	34		
MEDIUM	16	4	13	33		
HIGH	15	5	14	34		
TOTAL	49	12	40	101		

Org	Organizations					
A	D	DK	T			
15	5	16	36			
14	12	6	32			
15	7	8	30			
44	24	30	98			

Issue III: The Influx of People into the County to Visit the Savage Gulf State Natural Area.

Statement 3: I hope outsiders won't come to the SGSNA and will leave us alone here in Grundy County.

F. I. Households						
A D DK T						
LOW .	6	25	3	34		
MEDIUM	5	22	6	33		
HIGH	6	25	. 3	34.		
TOTAL	17	72	12	101		

Org	gan:	Lzat	ions	
A:	·D	DK	T	
9	19	7	35	
7	17	7	31	
10	18	2	30	_
27	54	16	96	

Statement 15: The SGSNA should first be for the use and enjoyment of Grundy County citizens.

F. I.	Households					
	A	D	DK	T		
LOW	23	9	2	34		
MEDIUM	17	13	3	33		
HIGH	13	19	2	34		
TOTAL	53	41	7	101		

Org	gani	zati	on
A	D	DK	T
23	10	3	36
21	9	2	32
18	12	1	31
62	31	6	99

Issue IV: Participation of Grundy County Citizens in the Planning Process of the Savage Gulf State National Area.

Statement 6: The citizens of Grundy County have had ample opportunity to participate in decisions that are made that affect the Savage Gulf State Natural Area.

F.I.	Households				
	A	D	DK	T	
LOW	3	8	23	34	
MEDIUM	8	3	22	33	
HIGH	11	11	12	34	
TOTAL	22	22	57	101	

Orga	mizat	ions	
AI	) DK	T	
7 13	3 13	33	
6 20	) 6	32	
4 22	2 6	32	
17 55	25	97	

Statement 13: On the whole, the Department of Conservation has been very thoughtful as to what the people of Grundy County want in the SGSNA.

F.I.	Households				
	A	D	DK	T	
LOW	11	2	21	34	
MEDIUM	14	1	18	33	
HIGH	11	7	16	34	
TOTAL	36	10	55	101	

rgan	izat	ions	
D	DK	T	
8	19	34	
19	6	32	
	7	30	
44	32	96	
	D	D DK 8 19 19 6 17 7	8 19 34 19 6 32 17 7 30

Issue V: The Use and Enjoyment of Public Lands

Statement 9: There are too many rules in the SGSNA now, so that people can't really enjoy their visits there, anymore.

F.I.	Households			
	A	D DK	T	
LOW	1	5 28	34	
MEDIUM	41	0 19	33	
HIGH	8 1	7 9	34	
TOTAL	13 3	2 56	101	

Or	Organizations					
A	D	DK	T			
8	13	14	35			
18	10	3	31			
17	3	9	29			
43	26	26	95			

Statement 11: People can't really enjoy protected areas such as the SGSNA because there are too many rules and regulations.

F.I.	Households			
	A D	DK	T	
LOW	3 17	14	34	
MEDIUM	6 20	7	33	
HIGH	8 21	5	34	
TOTAL	17 58	26	101	

Organizations				
D	DK	T		
17	9	36		
14	2	32		
10	5	30		
41	16	98		
	D 17 14	D DK 17 9 14 2 10 5	D DK T 17 9 36 14 2 32 10 5 30	

Issue VI: Specific Rules Instituted on the SGSNA.

Statement 22: If I had my way, I would change a lot of the rules that now exist on the SGSNA.

F. I.	Households				
	A	D	DK	T	
LOW	4	. 4	26	34	
MEDIUM	9	5	19	33	
HIGH	12	14	8	34	
TOTAL	25	23	53	101	

Organizations					
A	D	DK	T		
10	6	18	34		
17	8	7	32		
22	2	6	30		
49	16	31	96		

Statement 24: I don't really know what the rules are for the SGSNA.

F. I.	Households			
	A	D	DK	T
LOW	34			34
MEDIUM	32	1		33
HIGH	26	8		34
TOTAL	92	9		101

Org	ani	zati	ons	
A	D	DK	T	
29	6		35	
23	8		31	
23	8		31	
75	22		97	

Jermy Moore Freeman was born in Memphis, Tennessee on August 30, 1949. She attended public school in Germantown, Tennessee and graduated from Germantown High School in June, 1967. After attending Harding College in Searcy, Arkansas, for two years, she lived in New York for one year where she taught in a day care center. Returning to Memphis, she completed a Bachelor of Arts degree at Memphis State University in Cultural Anthropology. Upon graduation in 1973, she traveled for one year in Europe and Asia, returning to Memphis to work as a teacher's aide in the public school system.

During the course of her studies at The University of Tennessee, the author has worked for a variety of agencies, including: the National Park Service, the Tennessee Department of Conservation, the United States Forest Service, the Tennessee Valley Authority, and The University of Tennessee. She assisted with teaching an undergraduate Forestry course, and she has also taught through the Non-Credit Program at The University of Tennessee. Presently, she is working for the Tennessee Environmental Council in a public participation program and will continue in that employment after graduation.