Abstract

Byrd, Erick Tilghman. An Analysis of Variables That Influence Stakeholder Participation and Support for Sustainable Tourism Development in Rural North Carolina. (Under the direction of Dr. Larry Gustke).

The purpose of the study was to explore and identify what variables influence stakeholder's support for or against sustainable tourism development and a stakeholder's participation in tourism and political activities. Three research questions were addressed in this study. The first question asked if there were any differences between stakeholders so that homogeneous groups can be identified. The second was what variables influence stakeholders' support for or against the development of sustainable tourism in a rural community? The third question was what variables influence a stakeholder's active or passive participation in the sustainable tourism development process?

To answer these questions an instrument was developed and administered to two rural North Carolina counties, Johnston County and Martin County. The initial analysis of the data was conducted employing SPSS and produced descriptive statistics. To answer the research questions and to support or refute the hypothesizes decision trees were developed for support for sustainable tourism and participation in tourism and political activities using the Exhaustive CHAID method in SPSS Answer Tree.

Based on the results of the study evidence was found that differences exist between stakeholders so that homogeneous groups can be identified. The results of the decision trees also indicated that there are variables that influence a stakeholder's support for or against sustainable tourism policy development. The results also indicated that

there are variables that influence a stakeholder's level of participation in tourism policy development.

From this information a model was developed that indicated variables that influence a stakeholder's support for sustainable tourism and variables that influence a stakeholder's participation in tourism and political activities. The model demonstrates the relationship between the variables that influence support and participation and the social dimension of sustainable tourism. Form the results of this study a better understanding of the social dimension of sustainable tourism was developed.

An Analysis of Variables that Influence Stakeholder Participation and Support for Sustainable Tourism Development in Rural North Carolina

By

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Approved By:

Chair of Advisory Committee

Dedication

This dissertation is dedicated to the memory of my grandmothers.

Mable Byrd and Emma Lewis

Biography

The author was born in Wilson, North Carolina on April 7, 1973. His parents are Erick Byrd and Rebecca Byrd. For the first 18 years of his life, the author lived on the family farm in Sims, NC. He attended James B Hunt High School and graduated in 1991, where he was a member of the wrestling team, chorus, and vocal ensemble.

After his high school graduation the author studied at Nash Community College for a year and then transferred to Appalachian State University, in Boone, NC. While at Appalachian State University the author majored in Leisure Studies and minored in Business Administration. During his time at ASU the author was a member of the Leisure Studies Association, Appalachian Popular Programming Society, and Alpha Chi Honors Fraternity. The author graduated cum laude in 1995.

The author then moved to Raleigh, North Carolina and began his studies at North Carolina State University in the Department of Parks Recreation and Tourism Management. The author was awarded an assistantship in his second semester where he worked on projects for local and state agencies. His thesis was titled "Barriers to Rural Tourism: A Comparison of the Perceptions of the Host Community, Local Business Owners, and Tourists". His committee chair was Dr. Larry D. Gustke. The author graduated with a Masters of Science in 1997.

After graduation the author began work at the Johnston County Visitors Bureau (JCVB) in Johnston County, North Carolina. While at the JCVB the author worked with the day-to-day operations of the visitors' bureau, marketing, and event management. The author learned the different views that are involved with tourism development in rural areas.

In 2000 the author was accepted into the Doctoral Program in the Department of Parks, Recreation, and Tourism Management at North Carolina State University. Through his studies and assistantship the author worked with multiple groups including, the Eastern 4H Center, the Johnston County Visitors Bureau and the Pinehurst Visitors Bureau. While at NCSU the author minored in Public Administration.

The author accepted a tenure track position at the University of North Carolina at Greensboro in the Department of Recreation Parks and Tourism in the fall of 2003. The author plans to continue his research in stakeholder involvement in tourism and sustainable development.

Acknowledgements

Mark Twain in 1869 wrote the *Innocents Abroad, or The New Pilgrims' Progress*. In the final chapter Twain wrote the following:

> The Excursion is ended, and has passed to its place among the things that were. But its varied scenes and its manifold incidents will linger pleasantly in our memories for many a year to come. Always on the wing, as we were, and merely pausing a moment to catch fitful glimpses of the wonders of half a world, we could not hope to receive or retain vivid impressions of all it was our fortune to see. Yet our holiday flight has not been in vain – for above the confusion of vague recollections, certain of its best prized pictures lift themselves and will still continue perfect in tint and outline after their surroundings shall have faded away.

The past three years have been a journey with its highs and lows. This dissertation represents the conclusion of that journey. I will fondly remember many things from my journey most notably the people I have met along the way who have helped me to accomplish this task. I would first like to thank God for allowing me to take the journey and for helping me throughout.

In this journey and throughout my entire life I will always treasure and be grateful for the love and support that my parents, Erick and Rebecca Byrd, had given and continue to give me. If it was not for them I would not have been able to accomplish what I have accomplished. I will never forget the support I received from both my brothers Ken and Joseph Byrd and my sister-in-law Jennifer Byrd. And it will always bring a smile to my face to remember holding my nephew Aiden Byrd for the first time and being reminded of what was truly important. I also must thank the rest of my family for their support and for putting up with me throughout this and many of my other journeys.

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I will always remember fondly the support of the faculty and staff of the Parks, Recreation and Tourism management Department at North Carolina State University. I would especially like to thank Dr. Beth Wilson for the time, advise, and support that she gave me. I can only hope that I can give back to the program a portion of what it has given to me and that I bring honor to the program and the faculty.

The next group of people I would like to thank are those that had to deal with me everyday on the journey. The memory of the graduate orientation where I was first introduced to the other members of the first PhD cohort, Trisha Day, Carol Kline, Rick

Hardy and Tommy Holden, is humbling. To be associated with these four people who became my colleges and friends was an honor. From the beginning of the journey we supported and fought for each other. I am truly thankful for being allowed to be one of the five.

In every journey one meets many wonderful people and experience may things that together makes the journey what it is. Most of my days and many nights of this journay has been spent in the company of some of the greatest people that I have ever met. There were days when one ore more helped me in someway. One of my fondest experiences was working on the mailings for this dissertation while watching movies. With me on this particular excursion were David Cárdenas, Shannon Petterson, Holly Patten, Pete Bolden, Jerusha Bloyer, Megan, and Al. Together we folded, numbered and stuffed 2,564 questionnaires and watched five movies. Thank you. Other people who have supported me and have been a part of my journey include, Bill Avant, Sarah Banks, Stephanie Diaiz, Barb, Julie Fetters, Keith Johnson, Cathy Jacobson, Barbie Honeycutt, Erin Hunter**,** Alicia Lacombe**,** Vanessa Garza, thank you.

Before I decided to begin this journey I had to end another. In that journey at the Johnston County Visitors Bureau I learned many important lessons. The people who were a part of that journey Donna Bailey Taylor, Shelia, Rick Childery, Jean Massengill, Jenny Parnell and Holly Patten, thank you. I also must thank Charles Pettit and the members of New Sandy Hill Freewill Baptist Church for their love, support and prayers. Without them I could not have made it through this journey.

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Introduction

The decline of traditional rural industries such as agriculture, mining and forestry over the past three decades has required many rural communities to explore alternative industries to strengthen their economic base (Gustke, 1993; Long, Perdue, Allen 1990). Tourism has become one of the main industries identified as having the potential to assist local communities in developing stronger economic diversity (Gustke, 1993; Hanssan, 2000; Long, Perdue, Allen 1990). However, for tourism development to be successful it must be planned and managed responsibly (De Oliveira, 2003; Inskeep, 1991; Martin, 1995; Southgate & Sharpley, 2002; Yuksel, Bramwell & Yuksel, 1999). Inskeep (1991) furthered the concept of responsible management, stating, "ill-conceived and poorly planned tourism development can erode the very qualities of the natural and [social] environments that attract visitors in the first place" (p. 460). Similarly, communities that use or plan to use tourism as an economic development tool to diversify their economy must develop policies for the sustainable development of the community (De Oliveira, 2003; Pucako & Ratz, 2000; Southgate & Sharpley, 2002; Yuksel, Bramwell & Yuksel, 1999). Gunn (1994) also suggests that the success and implementation of a tourism development plan is often based on the support of citizens, entrepreneurs and community leaders (p. 4). Therefore, tourism as an economic development strategy designed to further economic diversity in a community requires deliberate planning.

1.1 Sustainability and Tourism

Central to tourism planning is the concept of sustainability. First introduced during the Roman Empire (Swarbrooke, 1998), sustainability has been re-introduced as the means to successful development. The perceived environmental crises and global response of the 1960's and 1970's led to the current concept of sustainable development (Southgate & Sharpley, 2002). The concept was formalized in 1987 with the publishing of *Our Common Future*, also known as the *Brunndtaland Report*, by the World Commission on the Environment and Development (WCED). Sustainable development was defined in this report as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (p. 43). Key to WCED's definition of sustainable development is that the present use of resources does not adversely impact the potential use of resources in the future. Therefore, resource use cannot be purposeless or unplanned, rather it should be organized and planned for sustainable development to be successful.

Gunn (1994) indicated that there is no other form of development "that has so many far-reaching tentacles as does tourism" (p 16). Tourism has the ability to impact, both positively and negatively, multiple aspects in a community. Therefore, to maximize the benefits while minimizing the costs, tourism must be developed in a sustainable manner. This implies sustainable development.

In an effort to incorporate sustainable concepts into tourism development, many authors have attempted to define or describe sustainable tourism (Alipour, 1996; Gunn, 1994 ; Hardy & Beeton, 2001; Ioannides, 1995; Robson & Robson, 1996; Swarbrooke, 1998; WTO, 1998), but there is no universally accepted definition. The definition applied most often by tourism planners and in the tourism research literature was developed by the World Tourism Organization (WTO).

> Sustainable tourism development meets the needs of the present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecology processes, biological diversity, and life support systems (p. 21, 1998).

Many tourism professionals have begun to incorporate sustainable development into their planning of tourism products, marketing programs, and delivering of guest services. For sustainable tourism development to be successful the following six major goals must be addressed.

- All resources should benefit the present community while being preserved for future generations (WTO, 1998).
- Development should be managed and molded to reduce the negative impacts and externalities to the environment and society (WTO, 1998).
- Sustainable development should at least maintain, if not improve, environmental quality (WTO, 1998).
- Visitor satisfaction should be maintained or enhanced (WTO, 1998).
- All benefits from tourism should be dispersed throughout the community (Alipour, 1996; WTO, 1998).

- Development initiatives in a community should take into account the interests of all stakeholder groups (Faulkner, 1998; Ioannides, 1995; Markwick, 2000; Southgate & Sharpley, 2002; Swarbrooke, 1998; Vincent & Thompson, 2002).

All the goals are of equal importance. If one is not met, the sustainability of a development is in jeopardy. Implied also in sustainability is the education of stakeholders about the relevant concepts of sustainable development (Gunn, 1994; Southgate & Sharpley, 2002).

1.2 Stakeholders

A stakeholder, as defined by Freeman (1984), is any individual or identifiable group affected by or that can affect the achievement of given objectives. Conflict can arise in the tourism development process from stakeholder groups with different interests and ideas about the cost and benefits of the development (Byrd, 1995; Ioannides, 1995; Markwick, 2000). One aspect of stakeholder management that needs to be understood is the type of involvement the stakeholders will have in the tourism development process.

The differing interests of each stakeholder group must be understood for stakeholder involvement to have the greatest chance of success. Based on this understanding, planners can then find indicators of where groups stand and how they feel about an issue. Multiple techniques have been suggested to assist in understanding stakeholder interests. Markwick (2000) suggested the ideas of *stakeholder mapping* and De Lopez (2001) utilized it for a conservation project.

1.3 Stakeholder Mapping

Stakeholder mapping is an analytical tool. It provides a means for understanding and developing strategies for managing the relationships between stakeholders (Markwick, 2000). The mapping process is used to assist in identifying different stakeholder groups. This produces a two-dimensional matrix which depicts a relationship or association between the two attributes/variables such as power, interest, support and participation (DeLopez, 2001; Johnson & Scholes, 1999). Results of the mapping process allow planners to categorize stakeholders.

Gunn (1994) stated,

> Tourism involves all the city's businesses, agencies, organizations, and segments of the public. It involves the local society and its ability to host mass of outsiders, often creating congestion, litter, and even competition for goods and services. It involves competition for land. It competes for amenities, such as parks, museums and cultural events. And, tourism often demands extra utility infrastructure, such as water supply, waste disposal, police and fire protection, streets, lighting, and maintenance (p. 16).

The very nature of tourism warrants involvement of multiple stakeholder groups. With multiple groups, the potential for conflict always exists. To assist in averting or resolving these conflicts, a plan or process must be developed to assist in evaluating each stakeholder group.

Traditional stakeholder mapping techniques, however, have inherent biases. The bias is based on the subjectivity of the categorization of stakeholders. The researcher makes subjective judgments about the two variables or dimensions included in the matrix. This procedure relies on the researcher's perceptions and knowledge and underlying factors may be overlooked (Markwick, 2000; Yuksel, Bramwell & Yuksel, 1999).

1.4 Understanding Stakeholders

Understanding and involving stakeholders and their interests assists planners with the resolution of resource use conflicts. For example, different recreational use of a river may result in resource use conflict. One stakeholder group's use, fly fishing, may involve limited access and require a pristine environment, while another group like boaters may involve multiple access points and a limited concern for the pristine natural environment. These two groups would be in conflict over river access and use. To effectively reduce the use conflict it is important that the interests of the stakeholders are identified and understood (De Lopez, 2001; Hunt & Haider 2001; Markwick, 2000; Yuksel, Bramwell & Yuksel, 1999).

Gunn (1994) indicated the importance of stakeholder involvement in the tourism planning process stating that community involvement should occur "early on and throughout the planning process, with a full range of stakeholders" (p. 21). Success of a stakeholder process is not dependent on the final outcome of the process, but that the interests, opinions and values of the stakeholders are represented in the decision. Therefore, a decision against development is not considered a failure if that decision accurately reflects the wishes of the stakeholders involved in the process (Gunn, 1994, p. 20). Identifying stakeholders and their interests is only the first step in the process that can lead to sustainable development. This identification alone does not resolve conflicts; it simply assists planners in identifying conflicts that need resolution.

1.5 Investigating Sustainability and Stakeholders

Sustainable development has three dimensions; the environmental (both natural and built), the economic (both community and business) and the social (both host and visitor). The environmental dimension consists of the natural environment, the farmed environment, the built environment, the wildlife and the natural resources in a community (Swarbrooke, 2000). The economic dimension includes the new money that is infused into a local community and the profits derived by local businesses from tourism activities. The social dimension includes the interaction between visitors and the community, and the interaction between different groups in a community.

It is important to recognize that all three aspects are equally important and must be studied and understood. Most research to date has focused on the environmental and economic aspects only. The bulk of the studies that have inquired about the social dimension of sustainability have focused on concepts, theories and case studies (Garrod & Fyall, 1998; Ioannides, 1995; Markwick, 2000; McCool, 1995). This is necessary in developing an understanding of sustainable tourism. The next step is to investigate what variables influence sustainable tourism in the social context.

1.6 Purpose of the Study

This study was an investigation of sustainable tourism. The purpose of the study was to explore and identify what variables influence a stakeholder’s support for or against sustainable tourism development and a stakeholder's level of participation in tourism and community political activities. The study had five objectives. The first, was to identify variables that can indicate commonalities between individual stakeholders. The second, was to identify groups based on these variables. The third, was to identify the type of support by group for sustainable tourism development. The fourth objective was to identify the level of participation for each group. The final objective was to apply the study results and develop a model to be used to develop predictions of how individual stakeholders would support and participate in sustainable tourism. Although the current theory and descriptive research speculates about variables that influence sustainable tourism, there are limited studies that have investigated the variables associated with the social dimensions of sustainable tourism.

This study addressed three research questions. The first research question asked if differences exist between stakeholders, allowing identification of homogenous groups using perceptions of tourism impacts, general demographics and participation in recreational activities. The second research question asked if perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' support for or against the development of sustainable tourism in a rural community. The third question asked if perception of tourism impact, demographic characteristics and recreational participation influence a stakeholder's active or passive participation in the sustainable tourism development process. These research questions can be expressed in three hypotheses.

Substantive Hypotheses:

H_1: Differences in stakeholders' perceptions of tourism impact, demographic characteristics, and recreational participation exist so that homogeneous stakeholder groups can be identified.

H_0: Differences in stakeholders' perceptions of tourism impact, demographic characteristics, and recreational participation do not exist so that homogeneous stakeholder groups can be identified.

H_2: Perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' support for or against tourism policy development.

H_0: Perception of tourism impact, demographic characteristics and recreational participation do not influence stakeholders' support for or against tourism policy development.

H_3: Perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' level of participation in tourism policy development.

H_0: Perception of tourism impact, demographic characteristics and recreational participation do not influence stakeholders' level of participation in tourism policy development.

1.7 Organization of Dissertation

Surveying stakeholder groups, conducting a decision tree analysis that identified the variables that influence a stakeholder's support for or against the development of sustainable tourism in a rural community, and determining if a stakeholder will be an active or passive participant in the development process accomplished the objectives of the study.

The first chapter of this dissertation provided a general introduction to sustainable tourism and stakeholder involvement, and stated the purpose and objectives of the study. Chapter two describes the theory and research that focuses on sustainability, stakeholders, and the government's role in tourism development. The methodology that was used is presented in chapter three. The discussion includes the tools and methods used to collect and analyze the data. The fourth chapter reviews the results of the study beginning with basic descriptive information, progressing to the identification of the variables that are related to support and participation and the development of the model. The fifth chapter discusses the results of the study and their theoretical and practical applications.

2 Literature Review

2.1 Introduction

The following review of literature examines the history and concepts of sustainable development, stakeholder theory, community participation, sustainable tourism development, the government's role in sustainable tourism development, and stakeholders and tourism development. The review concludes with a summary of the literature.

2.2 Sustainability

2.2.1 History of Sustainability

The first reference to sustainability can be attributed to the Roman Empire. The Romans focused on the development of cities and settlements in a planned and deliberate way, with a vision of how future expansion would be conducted (Swarbrooke, 2000). Early traditional agricultural practices such as crop rotation were also based on the principles of sustainability. The traditional farm was managed to preserve the land from one season to the next (Swarbrooke, 2000).

These ideas and concepts changed with the beginning of the industrial revolution. The industrial revolution led to the urbanization of larger areas and increased pressure on the natural environment (Murphy, 1985; Phillis & Andriantiatsaholiniaina, 2001). An understanding began to develop that if the industrialization of the globe were left uncontrolled, dire consequences would occur to the environment and society. The perceived environmental crises and global response in the 1960's and 1970's was the origin of the current concept of sustainable development (Murphy, 1985; Alipour, 1996;

Southgate & Sharpley, 2002). The publishing of *The Population Bomb* in 1968 by Ehrlich and *Limits to Growth* in 1972 by Meadows and Meadows emphasized the need for sustainable development. They argued that the resources of the world were limited and that the increase in population and development would experience serious constraints by the year 2000 unless changes were made (Ehrlich, 1968; Meadows & Meadows, 1972 as cited by Murphy 1998).

The concept of sustainability was formalized in 1987 with the publishing of *Our Common Future*, also known as the *Brunndtaland Report*, by the World Commission on the Environment and Development (WCED). Sustainable development was defined in this report as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (p. 43).

2.2.2 Goals of Sustainable Development

Murphy (1998) identified 14 major components of sustainable development based on his interpretation of *Our Common Future*. A summary of these components yields three general concepts that are the basis of sustainable development. These include environmental concepts, social concepts, and economic concepts. From these concepts one general goal for sustainable development can be developed.

The primary goal of sustainable development is to meet the basic needs of society and extend the opportunity for a higher quality of life (WCED, 1987). To achieve this goal the economic system must be able to produce a continuous source of surplus and a source of technical knowledge. There also must be a social structure that facilitates the resolution of conflicts. As important as the previous two are for achieving sustainability, the environment must be protected. Sustainable development is not a static process but must continuously include a search for new answers. Sustainable development must be flexible and adaptable.

Crucial to sustainable development is the inclusion of stakeholders throughout the process (Carter & Darlow, 1997). Sustainable development will not be successful unless stakeholders are allowed to participate in the decision making process (Hunt & Haider, 2001; WCED, 1987). Increased public involvement can facilitate equity in resource allocations (WCED, 1987).

2.2.3 Contemporary Thought on Sustainable Development

The idea of sustainable development has evolved from a strictly environmental concept to a concept that incorporates the issue of equity of access to the natural resources. The equity of access creates human well being and distributes costs and benefits (social, economic, and environmental). Hunter (1997) summed up the equity issue stating that "equity implies attempting to meet all basic needs and, perhaps, the satisfaction of human wants, both now and in the future" (p. 851). Hunter also states some interpretations of sustainable development include the equity across species barriers, "in particular the inherent rights of nonhumans to exist above and beyond any utilitarian value imposed by humans" (p. 852).

Subsequently, multiple authors and organizations have developed definitions and descriptions for sustainable development. These include general definitions of sustainable development as well as industry specific definitions. Industries that have developed definitions for sustainable tourism include forestry, agricultural and tourism. In forestry sustainable development is defined as “a process of innovation in forest use and management that arises in response to social, economic, ecological, and cultural conditions that exist for a given forest at any point in time” (Jenkins & Smith, 1999, p 6). Sustainable agriculture has been defined as an integrated system of agricultural production so that economic benefits are maintained while the environmental resources (land, water, and genetic) are protected and the social needs of the community are met (Liu & Fu, 2000).

The variety of definitions and the usage of sustainable concepts have caused sustainability to develop into a vague idea whose definition and methods of conducting measurements lack general consensus (Murphy, 1998; Phillis & Andriantiatsaholiniaina, 2001). Furthering this idea, Robson and Robson (1996) consider sustainability to be a utopian term. They argue that true sustainability cannot be obtained because any change in the environment or society will impact future generations’ use of the resource.

Even through sustainable development can be considered a vague concept, it has achieved wide use as a policy objective that integrates environmental and developmental concerns (Alipour, 1996). The current management structure for sustainability, however, is trial and error, instead of using specific knowledge and prediction to establish sustainable policy (Phillis & Andriantiatsaholiniaina, 2001).

2.3 Sustainable Tourism Development

2.3.1 History of Sustainable Tourism Development

The use of the term sustainable development in relation to tourism began in the late 1980’s. However, the concept and underlying theme of sustainable development has been discussed by many authors in the tourism literature from as early as the late 1970's. Swarbrooke (2000) indicated that there have been numerous books that have incorporated the ideals of sustainable development. These include Murphy's (1985) *Tourism: A Community Approach*, Mathieson and Wall's (1982) *Tourism: Economic and Social Impacts*, and Rosenow and Pulsipher's (1979) *Tourism: The Good, The Bad and The Ugly*.

In *Tourism: A Community Approach,* Murphy (1985) stated that communities must begin to appreciate the vulnerability of certain resources and protect these resources in order to develop a long-term industry. Murphy argues that,

> If tourism is to become [a] successful and self-perpetuating industry …, it needs to be planned and managed as a renewable resource industry, based on local capacities and community decision-making. To achieve these objectives will require a more balanced approach to planning and management than has existed in the past. More emphasis is needed on the interrelated nature of tourism development, in terms of its component parts (physical, economic, and social considerations), its spatial implications (accessibility, routing, and intervening opportunities), and evolutionary pattern (development stage and competitiveness). More balance in the decision making process is required between those with the funds (government, big business, banks) and those who have to live with the outcome and are expected to provide the hospitality. More local input and involvement in the planning stage will give destination communities a greater stake in the industry and create a more responsive partnership. Finally, the new approach to tourism development must combine planning (the initial goal and

> development strategy) with management (day-to-day, season-to-season operational decisions), because the ability to adjust to changing market or seasonal conditions is of paramount importance in such a competitive business. (Murphy, 1985, p 153)

D'Amore (1983, as cited in Murphy 1985) believed that if tourism was to be developed in a socially responsible manner then nine guidelines should be followed. The first is residents must be shown the importance of the tourism industry. The second is that tourism planning should be interwoven with the development goals and priorities identified by the stakeholders. Third, the marketing of attractions should be subject to stakeholder support. Fourth, there must be a coordinated effort between public and private sectors to maintain the integrity and quality for recreation and relaxation. Fifth, there should be involvement of residents in the development of tourism so that their traditions and lifestyle will be respected. The sixth goal was that local capital, entrepreneurial ability, and labor be invested in local tourism development initiatives. Seventh, suggested the need for opportunities to be provided to obtain community participation. The eighth guideline was that the destination should have themes and events that reflect their culture. The final guideline was that conflicts need to be resolved before proceeding with further increases in tourism activity.

2.3.2 Need for Sustainable Tourism

Sustainable development was identified as a global issue by the WCED (1987). The WCED (1987) indicated the need for all industries to develop practices and principles based on sustainable development ideals. Tourism, as the world's largest industry, must be involved if sustainable development is to be successful (Murphy, 1998). The World Tourism Organization (WTO), along with many authors (Gunn, 1994; Manning & Dougherty, 2000; McCool, 1995; Murphy, 1998; Hassan, 2000) recognized the importance of sustainable development to the tourism industry and that many of the tourism concepts that were being discussed in the 1970's and 1980's were related to the idea of sustainable development.

Gunn (1994) indicated the need for sustainable tourism when he stated that there is no other form of development "… that has so many far-reaching tentacles as does tourism" (p 16). Tourism has the ability to impact, both positively and negatively, multiple facets of a community. Therefore, to maximize the benefits while minimizing the costs, tourism must be developed in a sustainable manner. Manning and Dougherty (2000) agree with this need and acknowledge the importance of sustainable tourism for communities developing tourism products. Discussing the importance of sustainable development McCool (1995) stated "many [tourism] …decisions are irreversible because once communities lose the character that makes them distinctive and attractive to non-residents, they have lost their ability to vie for tourist based income in an increasingly global and competitive marketplace" (p. 3).

Murphy (1998) stated that sustainable development is important in tourism because tourism "is a resource industry, one which is dependent on nature's endowment and society's heritage. It sells these resources as part of its experiential product, but it also has to share the same resources with other users, including local residents" (p. 178). Briassoulis (2002) highlighted this need for sustainable tourism development in his discussion of the use of limited resources. Many of the resources used in tourism are used or can be used by both visitor and local community. Briassoulis identifies these as *common pool resources* (CPR). A CPR is an economic term and is defined as “those [resources] for which exploitation by one user reduces the amount available for others, but for which exclusion of additional users is difficult or impossible” (Briassoulis, 2002 p 1066).

2.3.3 Definition of Sustainable Tourism

Understanding the need to incorporate sustainable concepts into tourism development, many authors have attempted to define or describe sustainable tourism (Alipour, 1996; Garrod & Fyall, 1998; Gunn, 1994; Hunter, 1997; Ioannides, 1995; Robson & Robson, 1996; Swarbrooke, 1998; WTO, 1998), but there is not a universally accepted definition. The World Tourism Organization (WTO) (1998) developed the most accepted definition, which stated that sustainable tourism was development that met the current needs of the stakeholders, while also protecting the resources for use in the future. The resources include social, economical, and environmental.

Other definitions for sustainable tourism include, “sustainable tourism development is aimed at protecting and enhancing the environment, meeting basic human needs, promoting current and intergenerational equity and improving the quality of life of all people” (Inskeep, 1991, 495). Inskeep furthered this definition by stating that sustainable tourism is concerned with “meeting the needs of the present tourist and host regions while protecting and enhancing opportunities for the future” (Inskeep, 1991: 495). Similarly, McKercher (as cited in Robson & Robson 1996) defines sustainable tourism as: when tourism is sustainable and cultural resources and the environmental, social and economic well being of an area is maintained forever.

The concept of sustainability was first applied to the environment. It has more recently broadened to include the management of less tangible social resources. Meethan (2001) states that, "if people and their cultures are commodities for the purpose of tourism, then they too must logically be seen as a resource that needs to be sustained" (p. 58-59).

Sustainable development therefore can be divided into three dimensions; the environmental dimensions (both natural and built), the economic dimensions (both community and business) and the social dimensions (both host and visitor) (Swarbrooke, 2002) (see figure 2.1). The environmental dimension consists of the natural environment, the farmed environment, the built environment, the wildlife and the natural resources in a community (Swarbrooke, 2000). The economic dimension includes the new money that is infused into a local community and the profits that local businesses obtain from tourism activities. The social dimension includes the intra and inter-action between visitors and the community. The allocation of resources is better when the social variables are taken into consideration (Stein, Anderson & Kelly, 1999).

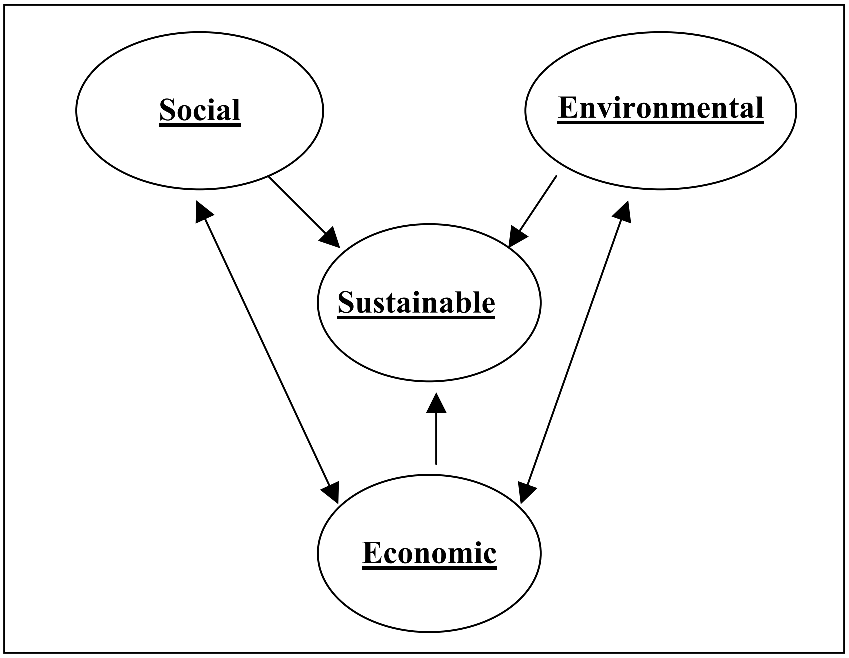


Figure 2.1 Dimensions of Sustainable Tourism and Their Relationship (adapted from Swarbrooke, 2000)

It is important to recognize that all three aspects are of equal value and need to be studied and understood. For sustainable tourism to be successful the interrelationship between all three aspects must be acknowledged (Swarbrooke, 2000). Interestingly, most of the research conducted has focused only on the environmental and economic aspects of sustainable tourism development (Garrod & Fyall, 1998; Ioannides, 1995; Markwick, 2000; McCool, 1995).

For Muller (1994), all three dimensions contribute equally to development. Hunter (1997) disagrees with the balance idea. Hunter indicates that a balanced approach is idealistic and unrealistic based on the idea that a spectrum of sustainable tourism approaches exists. Hunter (1997) argues that sustainable tourism "need not (indeed should not) imply that these often competing aspects are somehow to be balanced. In reality, trade-off decisions taken on a day to day basis will almost certainly produce priorities which emerge to skew the destination area based tourism environment system in favor or certain aspects" (p. 859).

The first approach based on Hunter's four varieties is "*tourism imperative*". The main emphasis of this approach is the development of tourism and satisfying the needs of the visitor and the tourism industry. The second approach is "*product-led tourism*". Within this approach, the tourism product is given priority over all other concerns. This approach's only concern with the environment and the community is how they influence the tourism product directly or indirectly. The next approach is "*environment-led tourism*". Under this approach, the environment is the priority and all other dimensions are secondary. The only tourism products that are developed under this approach would rely so heavily on the natural environment that any changes to the environment would risk the future of tourism in the area. The fourth approach is "*neotenous tourism*". Under this approach, tourism is "actively and continuously discouraged on ecological grounds" (p. 862).

2.3.4 The Evolution of Sustainable Tourism

The concept of sustainable tourism has gone through a multi-staged evolutionary process. There has been a distinct evolution in the way sustainable tourism has been described (Clarke, 1997; Swarbrooke, 2000). Sustainable tourism was first described as a polar opposite to mass tourism. Within this approach sustainable tourism was seen to be the exact opposite of mass tourism. Sustainable tourism is considered to operate on a small scale while mass tourism operates on a large, unsustainable scale (Clarke, 1997; Hardy & Beeton, 2001; Swarbooke, 2000).

The opposite view evolved into a continuum of tourism types where one form could evolve into another. No longer were sustainable tourism and mass tourism viewed as opposing concepts. On a continuous scale, the extremes are unsustainable and sustainable tourism, and different levels of sustainability exist between the extremes (Clarke, 1997; Hardy & Beeton, 2001; Swarbooke, 2000).

The current concept of sustainable tourism has evolved to include the idea that mass tourism could be made more sustainable through positive actions. Sustainability, therefore, is seen as a goal rather than as a definable end-point. As a result, operationalization of the current knowledge became the focus, and codes of practice and guidelines were introduced (Clark, 1997; Hardy & Beeton, 2001; Swarbooke, 2000). Sustainable tourism is viewed as a goal, which is applicable to all forms of tourism regardless of scale (Clarke, 1997; Hardy & Beeton, 2001; Swarbooke, 2000).

2.3.5 Sustainable Tourism Principles

As tourism professionals began to incorporate sustainable development into their planning of tourism products, marketing programs, and delivering guest services, multiple goals and principles were developed. Like the multiple definitions of sustainable tourism, the principles are based on the views and emphasis of individual authors. They focus on the management of a community's resources in order to meet the economic well-being, preservation of resources, equity in the distribution of costs and benefits, secure self-sufficiency, and satisfy the needs of the visitors (Briassoulis, 2002 p 1065). These principles are similar to the concepts and goals of socially responsible tourism discussed by Murphy (1983). All of principles are of importance to sustainable tourism development. If one is not acknowledged the sustainability of a development is in jeopardy.

Principles of Sustainable Tourism Development

1. All resources, the natural, historic and cultural, should benefit the present community while being preserved for future generations (Alipour, 1996; Garrod & Fyall, 1998; WTO, 1998).
2. Development should be conducted so that the negative impacts and externalities to the environment, community, and visitor are minimized (Alipour, 1996; WTO, 1998).
3. Sustainable development should either maintain or improve the regions environmental quality (Alipour, 1996; Faulkner, B. 1998; WTO, 1998).
4. Visitor satisfaction should be maintained or enhanced (Alipour, 1996; WTO, 1998).
5. There should be equity in the distribution of the benefits derived from development throughout the community (Alipour, 1996; Faulkner, B. 1998; WTO, 1998).
6. Development initiatives in a community should take into account the interests of all stakeholder groups (Faulkner, 1998; Garrod & Fyall, 1998; Ioannides, 1995; Markwick, 2000; Southgate & Sharpley, 2002; Swarbrooke, 1998; Vincent & Thompson, 2002). Stakeholders should be aware of the relevant concepts of sustainable development. (Southgate & Sharpley, 2002; Gunn, 1994).

7. There needs to be an adoption of a holistic planning approach and a strategic approach (Bramwell & Lane, 1993)
8. A respect for the culture, the economy, the way of life, the environment and political structures in the destination area must be developed and maintained (Southgate & Sharpley, 2002; Bramwell and Lane, 1993).
9. Ensuring that productivity is sustained over the long run for future generations (Bramwell & Lane, 1993).
10. Development should be planned and managed within environmental limits and with regard to long-term appropriate use of all resources. (Southgate & Sharpley, 2002).
11. Tourism planning, development, and operation should be intergraded into national and local sustainable development strategies (Garrod & Fyall, 1998; Southgate & Sharpley, 2002).
12. Tourism should support a wide range of local economic activities, taking environmental costs and benefits into account, but it should not become the activity that monopolizes the economic base of an area (Garrod & Fyall, 1998; Southgate & Sharpley, 2002).
13. Research should be undertaken through all stages of tourism development to monitor impacts, solve problems, allow stakeholders to respond to changes and to take advantages of opportunities (Garrod & Fyall, 1998; Southgate & Sharpley, 2002).

14. Develop a greater awareness and understanding of the significant contributions that tourism makes to the environment and community (Alipour, 1996, p376).
15. Improve the quality of life of the host (Alipour, 1996, p376).
16. Reducing over consumption and waste of the community's resources (Garrod & Fyall, 1998).
17. Maintain diversity in the natural system, social system and cultural system (Garrod & Fyall, 1998).
18. Market tourism so that there is an increase respect for the natural, social and cultural environments of destination areas and enhance customer satisfaction (Garrod & Fyall, 1998).

2.3.6 Criticisms of Sustainable Tourism

Interest and support for the sustainable tourism concept is not universally accepted. Hunter (1997) argued that sustainable tourism has pulled away from the underlying theme of sustainable development. The concept of sustainable tourism has taken on the idea of sustaining tourism and not sustaining the community or the environment in which tourism occurs unless it is needed for the tourism product (Hunter, 1997).

Another criticism of sustainable tourism is that it is a vague concept (Ioannides, 1995; Murphy, 1998). The argument is that sustainability may have no practical value in addressing the emerging issues that it has been touted to sustain (Swarbrooke, 2000; Murphy, 1998). This criticism views sustainable tourism as a utopian concept that is only useful for philosocial discussion (Robson & Robson, 1996). Both of these views and criticisms are in the minority in the sustainable tourism literature (Swarbrooke, 2000).

2.3.7 Planning for Sustainable Tourism

Alipour (1996) suggested, that if sustainable tourism development is to be realized, policies and plans need to move beyond describing and defining sustainable tourism and move towards practical application and action. Hall (1970, as cited in Murphy 1985, p156) states that a plan is "an ordered sequence of operations, designed to lead to the achievement of either a single goal or to be balance between several goals." Murphy (1985) expanded on this stating that "planning is concerned with anticipating and regulation change in a system, to promote orderly development so as to increase the social, economic, and environmental benefits of the development process" (p 156). Hardy and Beeton (2001) concur stating that planning must be conducted in a holistic manner so that the multiple interests; environmental, economic, community and visitors can be addressed. This planning needs to be active, continuous, and adaptable to changes in circumstances and in the needs of the community (Yuksel, Bramwell & Yuksel, 1999).

Sustainability also refers to the management strategy of meeting economic commitments without sacrificing an equal or higher quality of life for future generations. To achieve sustainability, tourism managers need to balance political support with a strategy that maintains the regions ecological integrity while demonstrating economic benefits and the development for the region (Vincent & Thompson, 2002). Yuksel, Bramwell and Yuksel (1999) indicated that a lack of planning allows places to "suffer from environmental and social problems, increased costs of conflict resolution, and from declining competitiveness as destinations" (p. 351).

Alipour (1996) in *Tourism Development Within Planning Paradigms: The Case of Turkey* demonstrated that the lack of planning could create major problems. He indicated that the absence of planning in the region resulted in random building and the polluting of resources. This has endangered the future of tourism for the entire region. Alipour states that, "this type of strip development lacks any integration, which also corresponds to deficient land use policies. For instance, all of the master plans are devoid of policies for focusing tourism development … . In addition, the government's passive role in tourism on one hand, and lack of a proactive planning process on the other allowed the industry to be developed by external actors" (p. 371). This demonstrates the need for policies to be developed for tourism development to be successful.

2.3.8 Sustainable Tourism Stakeholders

For any sustainable tourism development plan to have the greatest opportunity to be successful, stakeholders must be involved (Briassoulis, 2002; Manning & Dougherty, 2000; Robson & Robson, 1996; Stein, Anderson & Kelly, 1999). Involvement includes developing an understanding of the topics for the stakeholders and attempting to acquire their acceptance (Faulkner, 1998). This could assist planners in deciding what plans would work and the potential barriers to the planned development (Hunt & Haider, 1997; Manning & Dougherty, 2000).

2.4 Stakeholder Theory

Our Common Future (WCED, 1984) implied the need to understand stakeholders in the sustainable tourism process. The rationale is that sustainable tourism development is a difficult process and may negatively impact certain groups while others benefit (WCED, 1987). The WCED (1987) stated that stakeholder involvement in the process is one of the necessary requirements for sustainable development to occur.

2.4.1 Foundation of Stakeholder Theory

The concept of stakeholder theory has its roots in the business and management literature. The Stanford Research Institute (SRI) was the first to formally introduce the stakeholder concept in 1963. SRI stated that a stakeholder is any "group without whose support the organization would cease to exist" (SRI, 1963; quoted in Freeman, 1984, p. 31). Stakeholder theory is used to both explain and guide the structure and operation of an organization (Donaldson & Preston, 1995).

Stakeholder theory was not prominent in the management literature until 1984 when Freeman wrote *Strategic Management: A Stakeholder Approach*. Freeman (1984) states that an organization can be characterized by its relationships with the organization's stakeholders. This seminal work developed the current definition of a stakeholder. A stakeholder is "any group or individual who can affect or is affected by the achievement of the organizations objectives" (Freeman, 1984, p. 46). Donaldson and Preston (1995) refined Freeman's definition, stating that to be identified as a stakeholder the group or individual must have a legitimate interest in the organization.

Since Freeman's first work on stakeholder theory, it has been incorporated into business studies (Clarkson, 1995; Jones, 1995; Stoney & Winstanley, 2001). Donaldson and Preston (1995) reviewed many of the studies reported in the management literature about stakeholder theory. They developed three aspects to the stakeholder theory. These aspects are the descriptive/empirical, the instrumental, and the normative (Donaldson & Preston, 1995).

The descriptive/empirical aspect of stakeholder theory is used to describe some characteristic and/or behavior of an organization. This aspect is used to examine and explain the past, present and future state of affairs of an organization and its stakeholders (Donaldson & Preston, 1995).

The instrumental aspect "is used to identify the connections, or lack of connections, between stakeholder management and the achievement of traditional corporate objectives "(Donaldson & Preston, 1995, p.71). The instrumental aspect establishes connections between specific practices and specific end results. There is no assumption that the practices will be followed or that the results are desired (Jones, 1995).

The normative aspect is the fundamental core of the stakeholder theory. The normative aspect "is used to interpret the function of the corporation, including the identification of moral or philosophical guidelines for the operation and management of corporations" (Donaldson & Preston 1995, p. 71). From the perspective of the normative aspect, the reasoning behind an organization participating in an activity is because it is the right thing to do. Identification of a stakeholder, from this aspect, is based on the stakeholder's interest in the organization. The normative aspect assumes that all stakeholders have the right to be treated as an end, and not as a means to an end. Based on this, all stakeholders need to participate in determining the direction of the organization in which they have a stake (Donaldson & Preston, 1995).

Donaldson & Preston (1995) view these aspects of the stakeholder theory as being “nested within each other” (p. 74). The first layer of the theory is its descriptive aspect; “the theory presents and explains relationships that are observed in the external world” (Donaldson & Preston, 1995, p. 74). The second layer of the theory supports the first, by its instrumental and predictive value, “if certain practices are carried out, then certain results will be obtained” (Donaldson & Preston, 1995, p. 74). The underpinning element of the theory is its normative aspect. “The descriptive accuracy of the theory presumes that managers and other agents act as if all stakeholder interests have intrinsic value. In turn, recognition of these ultimate moral values and obligations give stakeholder management its fundamental normative base” (Donaldson & Preston, 1995, p. 74). De Lopez (2001) explains that, “stakeholder management essentially consists of understanding and predicting the behavior and actions of stakeholders and devising strategies to ethically and effectively deal with them” (p. 48).

Stakeholder theory is not just an academic exercise. It has strong uses in the management of an organization. This theory does more than simply describe existing situations and ideas about moral responsibility. It recommends attitudes, structures, and practices that together become stakeholder management (Donaldson & Preston, 1995). Freeman (1984) indicated that for an organization to manage its stakeholders it had to identify the stakeholders and their interests, understand the process needed to manage the relationship with the stakeholders, and manage the transactions between the organization and its stakeholders.

Stakeholder management requires attention to the interest of all stakeholders. All stakeholders do not need to be involved equally in the decision making process. It does require that all interests are identified and understood (Donaldson & Preston, 1995). Failure to identify the interest of even a single primary stakeholder group may result in the failure of the process (Clarkson, 1995). One common method for coping with multiple stakeholders and their interests is through stakeholder mapping.

Stakeholder mapping is an analytical tool. It provides a means for understanding and developing strategies for managing the relationships between stakeholders (Markwick, 2000). The mapping process is used to assist in identifying different stakeholder groups that results in a two-dimensional matrix that depicts a relationship or association between the two attributes/variables such as power, interest, support and participation (DeLopez, 2001; Johnson & Scholes, 1999).

Results of the mapping process allow planners to categorize stakeholders. For example a leader stakeholder or group could be identified as having high power and high interest in the economic development of a community through the establishment of new industries. A supportive stakeholder could be identified as having high support and high interest for a development concept such as downtown revitalization.

Traditional stakeholder mapping techniques, however, have inherent biases. The bias is based on the subjectivity of the categorization of stakeholders. The researcher makes subjective judgments about the two variables or dimensions included in the matrix. This procedure relies on the researcher's perceptions and knowledge and underlying factors may be overlooked (Markwick, 2000; Yuksel, Bramwell & Yuksel, 1999).

2.4.2 Stakeholders and Policy Development

Stakeholder involvement in policy development can be found in the early ideas of community participation and public involvement that are central in basic democratic beliefs (Fiorino, 1990). According to Crosby, Kelley and Schaefer (1986), it “is an effort to put a representative group of the public in dialogue with public officials so that the officials get the reactions of the public themselves on a particular subject” (p. 171). Based on these ideals stakeholder involvement should begin with identifying a diverse group of people in the community and informing them about the issues and topics (Carmin, Darnall & Mil-Homens, 2003; Crosby, Kelly & Schaefer, 1986). From the information that the stakeholders are given they should be allowed to make the recommendations that they believe to be the most appropriate for their community (Crosby, Kelley & Schaefer, 1986).

The idea of stakeholder inclusion was formalized by the 1968 Town and Country Panning Act. This Act mandated that planners give “adequate publicity to the report of surveys, policies and proposals; to inform those who may wish to make representations; and to provide opportunities for them to do so” (Carter & Darlow, 1997, p 46). It was not until the 1990s that community participation began to make major inroads (Carter & Darlow, 1997; Simrell King & Feltey, 1998; Steelman, 2001). Most of this growth was at the local levels of government (Crosby, Kelley & Schaefer, 1986). Curry (2001) suggested that the growth was due to the “inevitable consequences of a mature democracy placing more rights and responsibilities on its citizens and less on the state”

(Curry, 2001, 561). Another reason for the increase in interest in stakeholder involvement was the declining trust the community had in its policy makers (Simrell King & Feltey, 1998). Presently, therefore, many policies and development initiatives require some form of participation (Carmin, Darnall, Mil-Homens, 2003).

Stakeholder involvement can be facilitated or implemented in different forms. Included in those forms are public hearings, advisory committees, surveys, focus groups, public deliberation, citizen review panels, and written comments (Beierle, 1998; Carter & Darlow, 1997; Fiorino, 1990). All forms however do not incorporate the same level of participation.

To better understand citizen participation, Arnstein (1970) developed a typology of citizen participation called Arnstein's Ladder of Citizen Participation. Under this typology participation is divided onto three categories: "Non-participation", "Degrees of Tokenism" and "Degrees of Citizen Power". Non-participation describes initiatives that on the surface seem to be a form of public participation. The actual purpose of this type of participation is for planners to explain their independent decisions to the stakeholders who had no input. The next category is Degrees of Tokenism. Degrees of Tokenism are forms of participation in which stakeholders were allowed to voice their interests but have no power to influence the decisions that were being made. The final category is Degrees of Citizen Power. Involvement of this type gives the stakeholders the ability not only to voice their interests but also to influence directly the decisions being made (Arnstein, 1970).

Approaches that empower stakeholders to make decisions are regarded as stronger forms of stakeholder involvement (Carmin, Darnall, Mil-Homens, 2003). For participation to be empowering, stakeholders must be involved throughout the process and know that their participation has the potential to influence the decision (Ansari & Phillips, 2001; Carmin, Darnall, Mil-Homens, 2003; Simrell King & Feltey, 1998).

Stakeholder involvement has multiple outcomes depending on the process used and the stakeholders. The outcomes of involvement include:

- The public is informed and educated about the topics and issues (Beierle, 1998; Simrell King & Feltey, 1998).
- Public values and opinions are incorporated in the decision making process (Beierle, 1998; Carmin, Darnall, Mil-Homens, 2003).
- The quality and legitimacy of the decisions are improved (Beierle, 1998; Fiorino, 1990).
- New ideas are generated (Carmin, Darnall, Mil-Homens, 2003; Fiorino, 1990; Steelman, 2001).
- An increase in trust between all parties (Beierle, 1998; Carmin, Darnall, Mil-Homens, 2003; La Porte & Metlay, 1996; Simrell King & Feltey, 1998).
- A reduction in conflict and lawsuits (Beierle, 1998; Carmin, Darnall, Mil-Homens, 2003; Simrell King & Feltey, 1998; Steelman, 2001).
- A cost effective process (Beierle, 1998).
- The promotion of shared responsibility (Carmin, Darnall, Mil-Homens, 2003).

All outcomes can be achieved at differing levels depending on the process. Similarities between the processes include incorporation of stakeholders' interests in all decisions made, and that through this inclusion the policy or plan that is developed will better the community as a whole.

2.4.3 Stakeholders and Tourism

Rosenow and Pulsipher (1979) highlighted the need for “public participation” in the development and management of tourism destinations in their work, *Tourism: The Good, The Bad and The Ugly*. Since then the idea of public participation has evolved and combined with the idea of stakeholder theory as presented in the management literature.

Much of the early work in tourism investigated individual stakeholder groups; for example residents and visitors. Young (1973 as cited in Murphy 1985) believed “there is a saturation level for tourism in a given locality or region, and if that level is exceeded the costs of tourism begin to outweigh the benefits” (124). Doxey (1976 as cited in Murphy, 1985; Mathieson & Wall 1982) took Young’s idea of saturation levels and developed an “irridex” model. The irridex model identifies the cumulative effect of tourism development on the relationship between the host community and its visitors. The model indicates a direct link between community stress levels, and tourism development levels.

Butler (1975, as cited in Murphy 1985 and Mathieson & Wall 1982) developed a more robust model to identify the attitudes of the host and visitors. This model identifies two groups of factors that influence the host/visitor relationship. One factor was that characteristics of visitors have influence extending beyond the physical impact of their increasing numbers. The other factor was that the characteristics of the destination could influence its ability to absorb the growing number of visitors.

Butler (1975, as cited in Murphy 1985 and Mathieson & Wall 1982) contends that the behavior of residents can be expressed as either active or passive and that attitudes can be expressed as positive or negative. “The resulting combination of responses allows four reactions to occur. It is quite possible that all four options can take place in an area simultaneously” (Butler, 1975, 88: as cited in Murphy 1985). Residents can be grouped as aggressive promoters (positive/active), silent acceptors (positive/passive), aggressive opposers (negative/active), or resigned acceptors (negative/passive). In the model, combinations of attitudes and reactions to tourism become understandable (Murphy, 1985; Mathieson & Wall 1982).

Murphy (1983) conducted a more detailed analysis of the host community in England. Significant differences were indicated to exist between the residents, business sector and government officials. He identified these differences using a discriminate analysis of group attitudes about local tourism.

Numerous studies have explored attitudes and perceptions of the stakeholder groups in the hopes of better understanding them (Andereck & Vogt, 2000; Brunt & Courtney, 1999; Long, Perdue & Allen, 1990; Martin 1995; Pizam, Uriely & Reichel, 2000). Hardy & Beeton (2001) stress the need for studies that look at multiple stakeholder groups and compare them based on their interests. Investigation of multiple stakeholder groups revealed differences in the attitudes and perceptions of tourism between the groups (Byrd 1997; Kavallinis & Pizam, 1994), indicating the need for a mechanism to explain and manage these different views.

One solution is the inclusion of stakeholders in the planning process. Tourism planners should consider the interests of all stakeholders before proceeding with development efforts (Hardy & Beeton, 2001; Sautter and Leisen, 1999; Vincent & Thompson, 2002). Incorporating stakeholder views can add knowledge and insights of which can reduce conflicts in the long term (Yuksel, Bramwell & Yuksel, 1999, p.359). Sautter and Leisen (1999) found that as agreement across stakeholder interest increased, so did the likelihood of collaboration and compromise.

Including Sautter and Leisen (1999) there are now increasing numbers of researches and professionals that are advocating the inclusion of stakeholders in the planning process (Hardy & Beeton, 2001; Gunn, 1994; Ioannides 1995; Markwick, 2000). Two distinct areas of thinking have emerged in the tourism literature in regard to stakeholder theory. The first idea is closely related to the classical idea of stakeholder management. The central agency considers the interest of the stakeholders and develops policies and practices based on the stakeholders' power and influence. Those with more power would be given more consideration than those with less (De Lopez, 2001; Hunt & Haider, 2001; Markwick, 2000; Reed, 1997).

The second idea of stakeholder theory that has emerged over the past few years includes the concept of collaborative thinking (Bramewll & Sharman, 1999; Jamal & Getz, 1995; Yuksel, Bramwell & Yuksel, 1999). This idea is based on the normative approach to stakeholder theory. It implies that consideration should be given to each stakeholder group without one being given priority over others (Sautter & Leisen, 1999). In particular, stakeholder identification and involvement is the main step towards achieving community partnerships and collaboration within tourism (Hardy & Beeton, 2001). Yuksel, Bramwell & Yuksel (1999) state that while collaborative planning may be time consuming and difficult, it can be justified because potentially it can "avoid the costs of resolving conflicts in the long term, it is more politically legitimate, and it can build on the store of knowledge and capacities of the stakeholders" (p. 315). The idea of collaboration is not new to stakeholder theory. Freeman (1984) stated that there were three main concepts that needed to be understood to effectively manage stakeholders. The first two focus on the identification of stakeholder interests and the process necessary to understand the relationship between organization and stakeholder. The third focuses on the management of exchanges between all stakeholders (Freeman 1984).

For success to be realized in a community, all stakeholder interests must be understood and key stakeholders should be involved in the planning process (Bramewll & Sharman 1999, Jamal & Getz 1995 Hardy & Beeton, 2001, Sautter & Leisen, 1999, Gunn, 1994, Ioannides 1995, Markwick, 2000). Collaboration and partnerships are essential to the development of bonds and networks among diverse stakeholders for their benefit (Briassoulis, 2002).

Markwick (2000) demonstrated the need for stakeholder management in his discussion of a golf course development in Malta. Markwick stated that conflict arose from different stakeholder groups having different interests in relation to the costs and benefits of the development. At one extreme were the developers, who perceived the main benefits and economic gains in terms of financial growth and future profits. At the other extreme were environmental and conservation groups, who perceived that the main costs of the development were the loss of habitats and degradation of the environment. Other stakeholders held positions between the two, perceiving a greater or lesser balance between the costs and benefits of development (Markwick, 2000).

Ioannides in his study of Cyprus also demonstrates that problems arise when the government does not include the local community in the planning process. In the planning of tourism in Akamas, the villagers stated that they were never included in discussions about the plan and that the government did not take their opinions into account while developing the recommendation to develop a national park in the area. The villagers have threatened to take drastic actions to stop this process. The government stated that, "they avoided soliciting community opinions fearing it would stir up trouble among groups (590)." They believed if the plan was kept quiet it could be completed without much trouble (Ioannides, 1995). Evidence from this study shows sustainable tourism development cannot be achieved if imposed without regarding the host community's interests. "The key to effective dialogue between communities and policy makers rests on the marriage of top down education with bottom up community input (Ioannides, 1995, 591)."

Stakeholder involvement becomes more important in the discussion of sustainable tourism. Sustainable tourism lends itself to the idea of community involvement (Meethan, 2001). Southgate and Sharpley (2002) stress that stakeholders "must be the architects and engineers of sustainable development rather than mere recipients of a model of sustainable development created in the world."

2.5 Governments Role in Tourism Development

Many authors (Alipour, 1996; De Oliveira, 2003; Gunn, 1994; Inskeep, 1991; Meethan, 2001; Murphy, 1985; Southgate & Sharpley, 2002) have indicated the need for governmental involvement in the tourism development process, especially regarding sustainable tourism. Murphy (1985) indicated that tourism is a fundamental part of modern society and must be managed so that it is consistent with society's goals, allowing all benefits to be maximized.

Many governments have begun to invest in the development of infrastructure for tourism development (De Oliveira, 2003). Southgate and Sharpley (2002) state that government involvement "lies at the heart" of sustainable development. Governmental involvement can exist in many forms including environmental planning, regulation, provision and maintenance of infrastructure, financing, building institutional capacity, control of development and tourist flow and the creation of protected areas (De Oliveira, 2003; Ryan, 2002). Murphy (1985) suggests that "such government policies are needed if the recreation and tourist demands of a growing urban population … can be balanced with an increase demand for power, the needs of traditional users, and their responsibilities for future generations" (p. 34). Ryan (2002) indicates that this planning needs to be proactive, which implies acquiring knowledge of a stakeholder's interest and involvement.

Externalities and common pool resources are two primary reasons for government involvement in tourism development (Briassoulis, 2002; De Oliveira, 2003). Both reasons are based on the fact that resources that are commonly used for tourism (natural environment, infrastructure, and cultural resources) are also used by other stakeholder groups (Murphy, 1985; Briassoulis, 2002; De Oliveira, 2003). Tourism development left unmonitored and uncontrolled can undermine and destroy the resources that are its foundation (Briassoulis, 2002; De Oliveira, 2003).

Any governmental intervention cannot be conducted in a vacuum. As previously indicated stakeholders must be involved in the process for success to be realized (Ryan, 20002; Sautter & Leisen, 1990). Therefore, ideas and plans should not be imposed from above, but allowed to develop from taking the interests of all stakeholders into consideration (Meethan, 2001). Murphy (1985) indicated that community involvement is a way of "controlling the pace of development, integrating tourism with other activities and producing more individualistic tourist products" (p. 151). Sustainable development might be able to be defined by the people themselves to represent an ongoing process of self-realization and empowerment (Southgate & Sharpley, 2002).

2.6 Summary

The review of the literature has focused on the general concepts of sustainable development, with an emphasis on sustainable tourism, stakeholder theory and government's role in tourism development. The review has discussed the historical background and contemporary thought of sustainability and stakeholder theory. Vast as the literature is, there is little known about the social dimension of sustainability especially as applied to tourism development and planning.

A focus of the sustainable tourism literature has been the economic and environmental dimension. Only limited discussion has addressed the social dimension, the majority of which describes the impacts that tourism has on the area. There is a lack of research regarding the interaction of stakeholders in sustainable tourism development. Many authors have discussed individual stakeholder groups, such as residents. There has not been a solid foundation developed to compare differing stakeholder groups and identify similarities and differences between and within the groups. A method is needed to identify variables that contribute to stakeholders' development of interests and their interaction with the sustainable development of tourism in their community.

The literature clarifies the importance of including stakeholders in the decision making and development processes. All key interests should be identified and addressed. What is lacking in the incorporation of differing stakeholder interests is a method of identifying stakeholders that is non-subjective. What is needed is a method or technique that will allow planners to identify stakeholder groups in a community that is non-subjective so that stakeholders that represent the differing interests in a community can be included in the development process.

Investigating stakeholders' interaction with sustainable tourism raises many questions. The questions that need to be addressed to further the understanding of this relationship include; can multiple stakeholder groups be identified? What are the variables that distinguish these stakeholder groups? Are there variables that influence a stakeholder's support for sustainable tourism? If so what are the variables that influence a stakeholder's support? Are there variables that influence a stakeholder's participation in tourism and political activities? If so what are the variables that influence a stakeholder's support? From the information acquired from these questions what can be concluded about the relationship between stakeholders and sustainable tourism? And finally what should be done next.

3 Methodology

3.1 Introduction

During the winter and early spring of 2003 the study of tourism stakeholders described in this dissertation was conducted in two rural North Carolina counties. The counties selected for the study were Johnston County and Martin County. Stakeholders, which included the county residents and visitors, were mailed a questionnaire inquiring about their attitudes and perceptions of tourism development, their participation in local political and tourism activities, and their view of the environmental impacts of tourism. The responses were collected and analyzed to develop an understanding of what variables influence an individual's support for sustainable tourism development and their participation in tourism and political activities. This chapter describes the study hypotheses, the instrument and the analysis of the data.

3.2 Study Location

Two North Carolina locations, Johnston County and Martin County, were selected as sampling sites for this study (see Figure 1). Both counties are considered rural and are located in the eastern part of North Carolina. The NC Rural Economic Development Center (n.d.) defines a rural county as having a population density of less than 200 people per square mile. Johnston County and Martin County met this criterion. Johnston County in 2000 had a population of 121,965 people and a population density of 154 people per square mile. Martin County in 2000 had a population of 25,593 people with a population density of 55 people per square mile. For reference, an urban county such as Wake

County had a population of 627,846 people in 2002, with a population density of 752 people per square mile (NC Rural Economic Development Center, 2002).

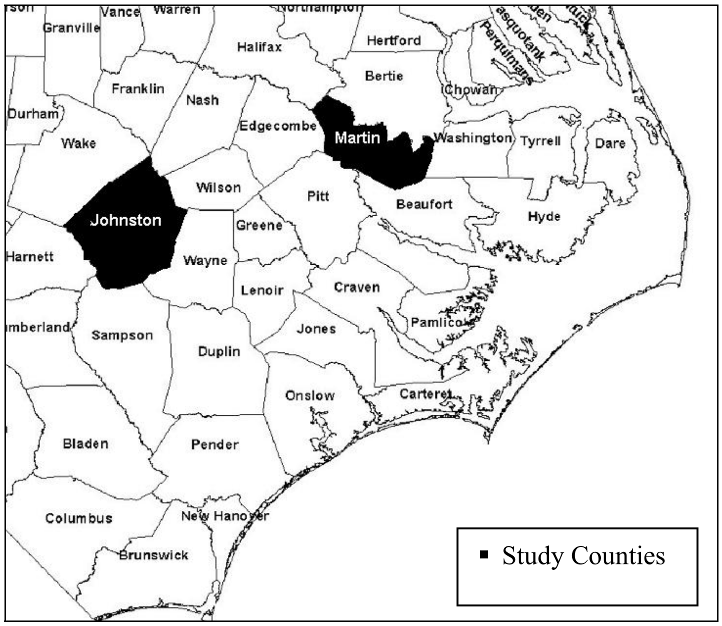


Figure 3.1 Map of Eastern North Carolina

There were three reasons for the selection of rural counties for this study. First, because of the nature of tourism as discussed in the literature review, dramatic impacts will be more apparent in a rural community than in an urban community (Perdue, Long, & Allen 1990). Second, both communities were in early stages of tourism development, based on Butler's (as cited in Weaver, 1990) model of tourism evolution (see Appendix A). As a result any changes in the tourism industry would have a more noticeable impact. The final reason for the selection was geographic location and familiarity with the counties.

Two separate counties were selected for three reasons as well. The first was to increase the size of the study population. The second was to increase the generalizability of the study results. Finally, by conducting the study in two different counties, comparisons could be made between counties that are in different stages of tourism development.

3.2.1 County Profiles

Johnston County is located along interstates I-40 and I-95. The tourism industry in Johnston County at the time of the study was more advanced than Martin County. The Johnston County Visitors Bureau had engaged in extensive promotion efforts and product development. The level of tourism development was also reflected in the quantity and size of the major attractions in the county including the American Music Jubilee, Ava Gardner Museum, Bentonville Battleground, Carolina Outlet Center, Clemmons Educational State Forest, and the Tobacco Farm Life Museum. In 2001-2002 Johnston County collected $436,894 in occupancy tax (NC Commerce, 2003).

Martin County is located along one of the main access routes to the North Carolina Outer Banks. Based on Butler's (as cited in Weaver, 1990) model of tourism evolution, Martin County's tourism industry was in the early stages of development when the study was conducted. The early stages of tourism development are characterized by limited visitation and the initial efforts of tourism product development and promotion (Weaver, 1990). This stage is demonstrated by Martin County's limited attraction base, represented by the size and number of attractions. The Bob Martin Center, a multi purpose center that hosts equestrian events and meetings, is the only major tourism attraction in Martin County. The Martin County Travel and Tourism Authority has begun developing and promoting the tourism product of the county. In 2001-2002 Martin County collected $88,222 in occupancy tax (NC Commerce, 2003).

3.3 Sampling

The tourism literature outlines four major stakeholder perspectives involved in tourism. These perspectives are the visitors, the residents, the local business owners, and the local governmental officials (Goeldner & Brent, 2002). These four perspectives were used to initially identify groups in the counties. In previous research (Allen, Hafer, Long & Perdue, 1993; Murphy, 1983; Pizam, 1978; Lankford, 1994) these perspectives were used to categorize different groups involved in the tourism development process.

3.3.1 Acquisition of Samples

Samples for the study were obtained from various sources (Table 3.1). 1. A list of visitors was obtained by acquiring a list of potential visitors that inquired about attractions and amenities from the Johnston County Visitors Bureau. 2. A list of residents was acquired from a commercial mailing list company. 3. A list of the local business owners was also obtained from the commercial source. 4. Local governmental officials were selected from a list of county and municipal officials. These officials included town/county managers, council members, and directors of county departments.

Table 3.1
Description of County Population and Sample Size

	Total Population	Sample Size	Sampling Method
Johnston County			
Residents (Households)	50,446	1,000	Random Sample Obtained From Commercial Source
Visitors	1,594	498	Random Sample of Visitor Inquiries
Business Owners	4,560	310	Random Sample Obtained From Commercial Source
Government Officials	89	89	Obtained From Johnston County Visitors Bureau
Martin County			
Residents (Households)	8,407	400	Random Sample Obtained From Commercial Source
Visitors	30	30	Sample selected form Bob Martin Center Event Attendees
Business Owners	905	173	Random Sample Obtained From Commercial Source
Government Officials	57	57	Obtained From County Listings

Sampling was conducted by drawing independent samples from each perspective group (see Table 3.1). Randomization of residents and business owners was achieved using the commercial source. A random number table was employed to conduct sampling of the visitors. The total population for the government officials was used. Each group was sampled independently to ensure that each perspective was represented in the study (Goeldner & Brent, 2002).

Sample sizes and response rates are shown in Table 3.2. The total response rate for the study was 23.50% (see Table 3.2). The responses for both counties were similar. For Johnston County the response rate was 23% and for Martin County it was 25%. Detailed information about the response rate is discussed in the results chapter.

Table 3.2
Response Rate for Study Sample By County

	Mailed	Useable	Non Deliverable	Response
Johnston County	1897	395	177	23.00%
Martin County	630	147	39	25.00%
Total	2527	542	216	23.50%

3.4 Research Questions and Hypotheses

This study addressed three research questions. The first research question asked if differences exist between stakeholders, allowing identification of homogenous groups using perceptions of tourism impacts, general demographics and participation in recreational activities. The second research question asked if perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' support for or against the development of sustainable tourism in a rural community. The third question asked if perception of tourism impact, demographic characteristics and recreational participation influence a stakeholder's active or passive participation in the sustainable tourism development process. These research questions can be expressed in three hypotheses.

Substantive Hypotheses:

H_1: Differences in stakeholders' perceptions of tourism impact, demographic characteristics, and recreational participation exist so that homogeneous stakeholder groups can be identified.

H_0: Differences in stakeholders' perceptions of tourism impact, demographic characteristics, and recreational participation do not exist so that homogeneous stakeholder groups can be identified.

H_2: Perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' support for or against tourism policy development.

H_0: Perception of tourism impact, demographic characteristics and recreational participation do not influence stakeholders' support for or against tourism policy development.

H_3: Perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' level of participation in tourism policy development.

H_0: Perception of tourism impact, demographic characteristics and recreational participation do not influence stakeholders' level of participation in tourism policy development.

3.5 Questionnaire Design and Distribution

A questionnaire (see Appendix B) was developed based on previous research and variables identified by the literature review (Mason & Cheyne, 2000, McFarlane & Boxall 2000, Perdue, Long & Allen 1990, Stein, Anderson & Kelly 1999, Vincent & Thompson 2002) Questions included perceptions about tourism development and the environment, perceptions of tourism impact in the community, types and amount of community participation, the individual's participation in recreational activities, and basic demographics. The questionnaire consisted of 56 items that included nominal, categorical, and interval measures.

Of the 56 items in the questionnaire 23 independent variables were used (see Table 3.3). The independent variables for the study were; perspective, perceived impact (an index that was developed from 13 Likert scale questions) participation in 13 recreational activities, length of residency, age, location of residence, education, gender, household status, and whether the respondent belonged to an environmental organization. These variables included interval, nominal and categorical data.

For the study, two dependent variables were used, support for sustainable tourism and participation in tourism and political activities (see Table 3.4). Index measures were developed for each of the dependent variables. The support for sustainable tourism index consisted of 17 items and the participation in tourism and political activities consisted of 7 items. The development of the indices is discussed later in this chapter. Specific items used in the index development are indicated in Table 3.3 and in the results chapter.

Table 3.3
Independent Variables Used in This Study

Variable	Measure	Level of Measurement
Perceived Impact	Index Developed from 12 Likert Scale Questions. Questions 14A-14K and 14M (see questionnaire in Appendix B and Table 4.3 in the results chapter)	Interval
Perspective	Based on initial perspectives	Categorical
Participation in Recreational Activities	Individual Activities; hunting, bird watching, fishing, motor sports, gardening, photography, golf, shopping, attended a festival, tennis, camping, hiking, attended sports event (see Question 7 in Appendix B).	Nominal
Length of Residency	How long have you lived in your home community? (See Question 1 in Appendix B).	Interval
Age	Age (see Question 16 in Appendix B).	Interval
Area Lived In	Do respondents live in a town? (see Question 2 in Appendix B).	Categorical
Education	11 categories (see Question 15, Appendix B)	Categorical
Gender	What is your gender? (See Question 17 in Appendix B).	Nominal
Household Status	Circle the response that represent your household (see Question 18, Appendix B)	Categorical
Belong to an Environmental Organization	Do you belong to an environmental organization? (see Question 20 in Appendix B).	Nominal

Table 3.4
Dependent Variables Used in This Study

Variable	Measure	Level of Measurement
Support For Sustainable Tourism	Index Developed from 17 Likert Scale Questions. Questions 6A-6G, 6J, 6L, 6M, 8A-8E, 8G, and 8H (see Questionnaire in Appendix B and Table 4.8 in the results chapter)	Interval
Participation in Tourism and Political Activities	Index Developed from 7 Questions. Questions 4, 5, 9-13 and 14M (see Questionnaire in appendix B)	Interval

The questionnaire includes both open ended and closed ended questions. The majority of the items were five point Likert scale questions. The numbers 1 through 5 represent a respondents' agreement or disagreement with the statement. A 1 represented strong disagreement and a 5 represented strong agreement. The format and scale were selected based on the format of previous studies (Maddox 1985, Lankford & Howard 1993, Mason & Cheyne, 2000, Andereck & Vogt, 2000, Williams & Lawson 2001, Vincent & Thompson 2002).

The questionnaire was developed to obtain information from the individual stakeholders about variables that influence their support and participation in tourism policy development. The questionnaire was mailed to the four groups representing the four perspectives of tourism described by Goeldner and Brent (2002). There were small differences in the questionnaires that reflected the characteristics of the counties.

A modified Dillman technique was used to distribute the questionnaire. The questionnaire was mailed first class and included a business reply envelope. Two weeks after the initial mailing a reminder postcard was sent to non-respondents (see Appendix

C). Two weeks following the postcard, a second questionnaire was sent to county resident non-respondents (Dillman, 2000). The third mailing was limited to only county residents because, at the time of the third mailing, they were the least represented perspective in the study.

3.6 Validity and Reliability Issues

The validity of a study is an indication of how well the study measures what it is supposed to measure (Kerlinger & Lee, 2000; Patten, 2000). Validity can be expressed by making judgments about the study. Content validity is the appropriateness of the content, while face validity is the judgment that a measure appears to be sound (Patten, 2000).

No study can have perfect validity (Patten, 2000). Content validity for this study was strengthened through various techniques. First, multiple questions about the concepts of sustainable tourism development were asked. Tourism research professionals reviewed the instrument for the appropriateness of the questions based on the area and the subject of the study. The final assessment of validity was a pre-test of the instrument. During and after the pre-test, respondents were asked a series of questions to verify their interpretation and understanding of the items and questions.

To address face validity issues, the questions used in the research instrument were based on questions from various studies investigating community involvement in tourism development, attitudes and perceptions of tourism, and perceived tourism impacts (Mason & Cheyne, 2000, McFarlane & Boxall 2000, Perdue, Long & Allen 1990, Stein, Anderson & Kelly 1999, Vincent & Thompson 2002). One-hundred-twenty-five questions were reviewed and 56 questions were selected for inclusion in this study.

The reliability of a study refers to whether a measure yields consistent results from multiple applications. Reliability cannot be truly measured but it can be estimated (Trochim, 2001). Internal consistency reliability is a method used to "assess the consistency of results across items within a test" (Trochim, 2001, p 96). To estimate the internal consistency reliability of the indices that were developed for the study, Cronbach's Alpha estimate was employed. The perceived impact index variables had an alpha of .74. The support for sustainable tourism had an alpha of .73. The participation in tourism and political activities had an alpha of .74. The accepted level for reliability is an alpha of .70 (Garson, 2002). Based on these estimates, the indices that were used in the study showed an acceptable level of reliability.

3.7 Review of Analysis

The initial analysis of the data produced descriptive statistics, which are presented in the Results Chapter and Appendix D. Further analysis of the responses was conducted using SPSS Answer Tree. This facilitated the identification of variables that influence support for sustainable tourism development and stakeholder participation in tourism and political activities.

The process began with the development of three additive indices; one for support for sustainable development (dependent variable), one for participation in tourism and political activities (dependent variable) and one for perception of tourism impact (independent variable). Additive indices were used due to a lack of information justifying another type of index. Also, employing additive indices keeps the study conservative (Babbie, 1995). All items in each index were weighted equally based on suggestions by Babbie (1995) and because the items selected had been chosen to represent different aspects of each topic.

Babbie (1995) also recommended that in developing an index the first requirement for a question's inclusion is the face validity of that question. For each index that was created (Support for Sustainability, Participation, Perceived Impacts), the face validity was obtained by developing questions about variables that previous research indicated were relevant. Each question was then evaluated for its relevance to the counties that were being studied.

After reviewing the face validity and the reliability for each measure, the variables that were found to be relevant were kept and those with low to no relevance to the index were removed. For the Support for Sustainability Index, 17 questions were found germane. For the Participation Index, seven questions were found germane. For the Perceived Impacts Index, 12 questions were found germane. Each index is further explained in the results.

To answer the research questions and to support or refute the hypotheses decision trees were developed for support for sustainable tourism and participation in tourism and political activities using the Exhaustive CHAID method in SPSS Answer Tree using the indexes and variables. Support for sustainable tourism and participation in tourism and political activities were the dependent variables and other variables in the study were independent variables.

SPSS Answer Tree 3.1 is a statistical application that uses algorithms to develop decision trees. A decision tree is a model that can be used to classify or predict variables (Kass, 1980; Koskela, 2003). It is an exploratory method used to study the relationship between a dependent variable and independent variables (Huba, 2003). Decision trees indicate how groups develop by dividing the dependent variable by the independent variables. The specific statistics that are used in a decision tree are based on the algorithm that is employed. This study used the Exhaustive Chi-square Automatic Interaction Detection (CHAID).

Other possible methods of data analysis that could have been employed for this study included factor analysis and cluster analysis. Decision trees were selected over these methods due to the parsimonious nature and the level of measurements used in the study. The parsimonious nature of decision trees facilitates understanding by both researchers and other tourism professionals. Through decision trees a visual representation of the variables and their interaction is developed. Also, due to the level of measurements for these data; interval, ordinal and nominal; factor analysis and cluster analysis would not be the best methods. The Exhaustive CHAID method has been developed to handle all levels of measurement.

The Exhaustive CHAID is a second-generation CHAID algorithm used in SPSS Answer Tree (Huba, 2003). The Exhaustive CHAID method was selected for the study because it is a more comprehensive method and yields more accurate results than CHAID and the other decision tree methods within SPSS Answer Tree (Huba, 2003; SPSS, 2003). CHAID was first designed for use with nominal variables (Kass, 1980). SPSS extended the capabilities of CHAID so that it can handle nominal, ordinal and interval variables (Huba, 2003). CHIAD splits the data into subsets that best describe the dependent variable (Kass, 1980). For nominal and ordinal variables, chi-square analyses and for interval variables an analysis of variance is used (Huba, 2003). The split is based on which variable had the lowest p value. If a tie occurs between two or more variables the variable that has the highest F value is selected as the predictor.

Through the use of the Exhaustive CHAID method two decision trees, one for each dependent variable (support and participation), were created based on the total sample. The Johnston County stakeholders were selected and two decision trees, one for support and one for participation, were developed from this sub sample. The trees were then compared to identify similarities and differences. The results of this comparison along with the trees that were developed are presented in the next chapter.

3.8 Limitations

Social science research usually presents multiple limitations when it is conducted, this study was no different. One limitation of this study is generalizability. This study can only be generalized to rural eastern North Carolina counties.

This study may also be limited due to a response bias. The response bias is due to self-selection and unidentified populations. Respondents were mailed the questionnaire and then were asked to mail it back. Respondents that chose not to mail the instrument back are not represented in this study, and may be different than those that are represented.

There were also segments of the population that could not be contacted through the methods used in the study. Residents and business owner lists were obtained by a commercial source. If a resident moved to the county or a business opened after the list was created, those individuals would not have a chance to be selected for the study. Also, the visitor population was based on an inquiry list. All visitors to Johnston County did not inquire about the area through the visitor's center. This means that the respondents do not represent all visitors.

It must be assumed that when investigating an individual's participation in policy development, those who participate are more likely to respond to the study. This may give overestimations of actual participation in the policy development process. There may also be segments of the population that do not participate, will not respond to the questionnaire, and will not be represented in the study.

4 Results

4.1 Introduction

As stated in Chapter 3, the study of stakeholder support and participation described in this dissertation was conducted in the winter and spring of 2003. Data were collected from stakeholders in Johnston County and Martin County, North Carolina. The data were then analyzed using SPSS and SPSS Answer Tree to develop conclusions about the three hypothesis and the research questions presented in Chapter 3 (see section 3.4). This chapter discusses the results of the data analysis.

The discussion focuses first on the response rate for the study, section 4.2. Following this, the discussion turns to the independent variables; perspective, perception of tourism impact, activity participation, and demographics; that were used in the study, section 4.3. Section 4.4 discusses the dependent variables; support for sustainable development and participation in tourism and political activities. The final sections 4.5 – 4.8 of this chapter discusses the decision trees that were developed using the independent and dependent variables in the study. This is followed by a summary of the decision trees and comparison to Johnston County respondents. For more detailed results see Appendix (E).

4.2 Response Rate

In the spring of 2003 a total of 2,527 surveys were mailed to tourism stakeholders in Johnston and Martin Counties. Out of the 2,527, a total of 542 were returned usable (see Table 3 and Table 4). Two hundred and sixteen were undeliverable because of incorrect address or requests not to be included in the study. This resulted in a response rate of 23.40%. Tables 4.1 and 4.2 detail the response rate by stakeholder perspective and county.

Table 4.1
Johnston County Sample Response Rate

	Mailed	Returned	Undeliverable	Response
Residents	1000	217	96	24.00%
Visitors	498	92	35	20.00%
Businesses	310	52	36	18.90%
Officials	89	30	10	38.00%
Total	1897	395*	177	23.00%

* 4 responses could not be classified

Table 4.2
Martin County Sample Response Rate

	Mailed	Returned	Undeliverable	Response
Residents	400	88	26	23.50%
Businesses	173	39	12	24.20%
Officials	57	18	1	32.10%
Tota1	630	147	39	25.00%

* 2 responses could not be classified

4.3 Independent Variables

There were three categories of independent variables used in the study. These were perceptions of tourism impact, activities the respondent did or did not participate in and general demographics. The following is a review of the results for the independent variables.

4.3.1 Perceptions of Tourism Impact

Previous studies (Perdue, Long & Allen 1990; Vincent & Thompson, 2002) reviewed in Chapter 2 indicated that an individual's perceptions of the impact tourism has on a community will influence their support toward tourism development and their participation. Based on this, respondents were asked a series of 12 Likert style questions designed to measure their perceptions of tourism impacts (see Table 4.3). Perdue, Long and Allen (1990) used these questions in their investigation of residents' perceptions of tourism impacts.

Table 4.3
Items Included in Perceptions of Tourism Impact Index

		Mean	Std. Deviation	Range	Min	Max
1	I have more money because of increased tourism.	2.36	.98	4	1	5
2	Tourism decreases unemployment.	3.38	1.10	4	1	5
3	Shopping facilities benefit from tourism.	4.23	.60	4	1	5
4	Tourism development increases the traffic problems.	3.65	.89	4	1	5
5	Tourism development increases property taxes.	3.09	.96	4	1	5
6	Tourism development increases crime.	2.79	.94	4	1	5
7	Tourism reduces the quality of outdoor recreational opportunities.	2.41	.90	4	1	5
8	Increased tourism improves the local economy.	4.07	.67	4	1	5
9	Tourism development increases the number of recreational opportunities for local residents.	3.82	.80	4	1	5
10	Tourism development improves a community's appearance.	3.85	.79	4	1	5
11	Tourism development increases a community's quality of life.	3.66	.85	4	1	5
12	Tourism produces long-term negative effects on the environment.	2.53	.90	4	1	5

Responses to these items were used to create an additive index of perceived impacts. The index ranged from 22 to 60 with a mean of 40.87 and standard deviation of 5.62 (see Figure 4.1). Index scores between 12 and 23.90 indicated that respondents strongly to moderately perceived that tourism had a negative impact on the county. Index scores between 24 and 35.90 indicated that respondents moderately to neutrally perceived that tourism had a negative impact on the community. An index score of 36 indicated that respondents were neutral in their perceptions of tourism's impact on the county. Index scores between 36.10 and 48 indicated that respondents neutrally to moderately perceived that tourism had a positive impact on the county. An index score between 48.10 and 60 indicated that respondents moderately to strongly perceive that tourism had a positive impact on the community.

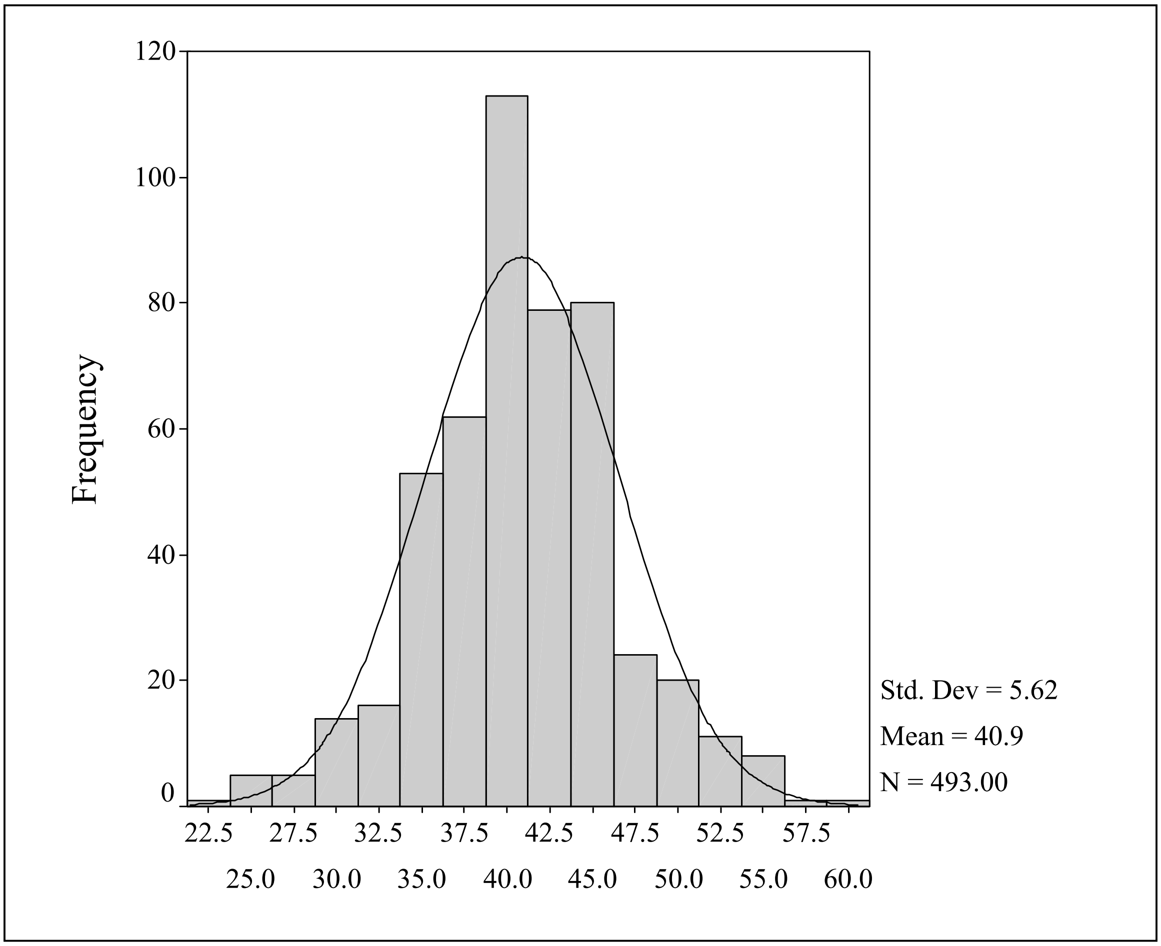


Figure 4.1 Histogram of Perceived Impact Index Scores

4.3.2 Activity Participation

Previous studies (McFarlane& Boxall, 2000) reviewed in Chapter 2 indicated that that there may be an association between an individual's participation in recreation activities and their support and participation for tourism. To measure activity participation, respondents were asked what type of activities they participated in during

2002 (see Table 4.4). Shopping was the activity that respondents participated in the most, (78.80%) followed by gardening (60.90%) and attending festivals (50.20%).

Table 4.4
Activities Respondents Participated in During 2002

Activity	Frequency	Percent
Shopping	419	78.80
Gardening	324	60.90
Attend a festival	267	50.20
Fishing	190	35.70
Photography	137	25.80
Bird Watching	131	24.60
Hiking	113	21.20
Golf	106	19.90
Camping	86	16.20
Attend a Sports Event	86	16.20
Motor Sports	82	15.40
Hunting	72	13.50
Tennis	28	5.30

4.3.3 Demographics of Respondents

According to the literature (McFarlane& Boxall, 2000; Stein, Anderson, & Kelly 1999), demographic characteristics can influence an individual's view of tourism. Based on this information, seven demographic items were included in the study. These items were perspective, length of residency, area of residence, education, age, gender, occupation and household status.

As previously stated in Chapter 3, there are four main perspectives in tourism development. These perspectives are the visitor, the resident, the business owner and the government official. All four perspectives are represented in this study. Over 50% (57.10%) of the respondents were residents (see Table 4.5).

Table 4.5
Respondents by their Perspective in Tourism

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Resident	308	56.50	57.10	57.10
	Official	48	8.80	8.90	66.00
	Business	92	16.90	17.10	83.10
	Visitor	91	16.70	16.90	100.00
	Total	539	98.90	100.00	
	Unidentified	6	1.10		
Total		545	100.00		

The results showed that respondents had lived in their home community for an average of 30.17 years. Length of residency ranged from less than 1 year to 91 years (see Figure 4.2). More than three quarters of the respondents (75.7%) indicated that they lived in either an urban area or town, while 24.3% lived in a rural location.

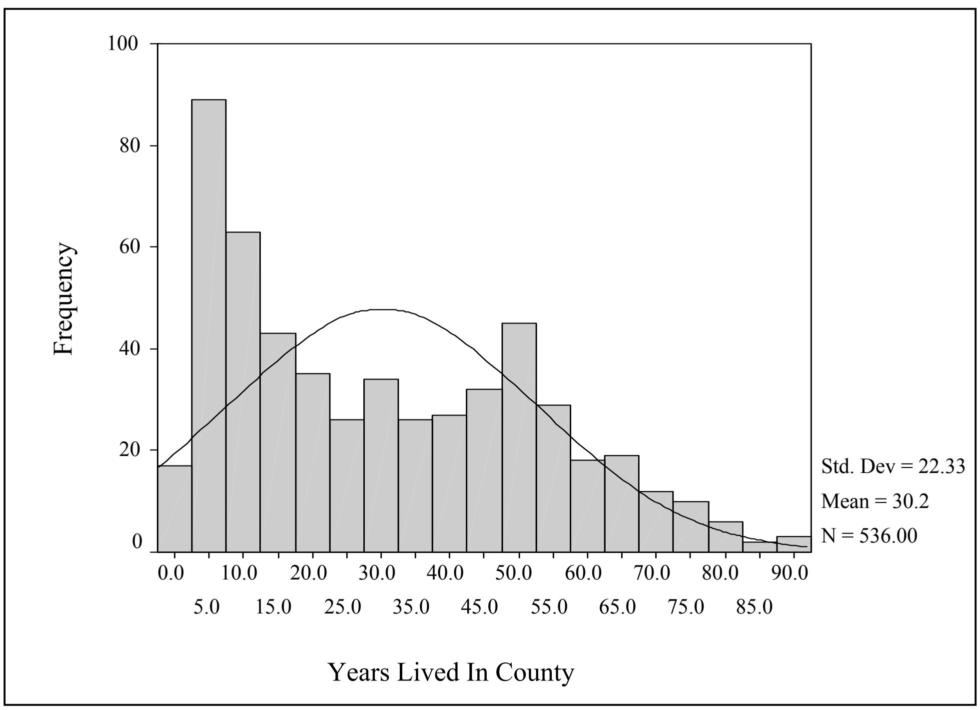


Figure 4.2 Number of Years Respondents Lived in Their Home County

The majority (76.30%) of the respondents pursued an education after high school (see Table 4.6). The age of the respondents ranged from 23 to 94 with a mean of 53.46. Slightly over half (55.4%) of the respondents were male. More than 68% (68.20%) of the respondents were employed, while 26.80% were retired, 3.70% were homemakers, and 1.4% were unemployed (see Table 4.7).

Table 4.6
Highest Education Level Completed of Study Respondents

Education	Frequency	Valid Percent
High School or Less	126	23.80
College	281	53.10
Graduate	88	16.60
Professional	34	6.40
Total	529	100.00

Table 4.7
Employment Statuses of Study Respondents

Employment Status	Frequency	Percent
Employed	349	68.20
Homemaker	19	3.70
Unemployed	7	1.40
Retired	137	26.80
Total	512	100.00

4.3.4 Summary of Independent Variables

The study used seven independent variables. Based on the results of the perceived impact index, it can be inferred that the respondent perceptions of impacts vary. This is based on the mean index score of 40.87 and standard deviation of 5.62, approximate 95% (2 standard deviations) of the respondents fall between the index scores of 29.63 and 52.11. This indicates that the majority of the respondents, moderately believe that tourism has a positive impact, a negative impact or no impact on the community. It can also be inferred that there are differences between the respondents in their perception of tourism's impact on the community.

The activities indicate that most respondents participate in at least one activity. The activity that had the highest rate of participation was shopping (78.8%). The majority of the respondents associated themselves with a town or urban area.

4.4 Dependent Variables

The study employed two dependent variables, support for sustainable development and participation in tourism and political activities, to answer the research questions and the hypotheses outlined in Chapter 3. Both variables were operationalized as indices that consisted of items from the questionnaires (see Table 3.4). The following is a review of the results of the dependent variables.

4.4.1 Support for Sustainable Tourism

Seventeen variables were used in this study to develop an additive index of support for sustainable tourism. These statements were asked as 5-point Likert questions (see Table 4.8). The statements ranged from 1 to 5, where a 1 indicated strong disagreement with the statement and a 5 represented strong agreement with the statement. The resulting index ranged from 37 to 85, with a mean of 64.94 and a standard deviation of 6.90 (see Figure 4.3). Index scores between 17 and 33.90 indicated that respondents were strongly to moderately against sustainable tourism development. Index scores between 34 and 50.90 indicated that respondents were moderately against to neutral in their support for sustainable tourism development. An index score of 51 indicated that respondents were neutral in their support for sustainable tourism development. Index scores between 51.10 and 67.90 indicated that respondents were neutral to moderately supportive of sustainable tourism development. Index scores between 68.10 and 85 indicated that respondents were moderately to strongly supportive of sustainable tourism development.

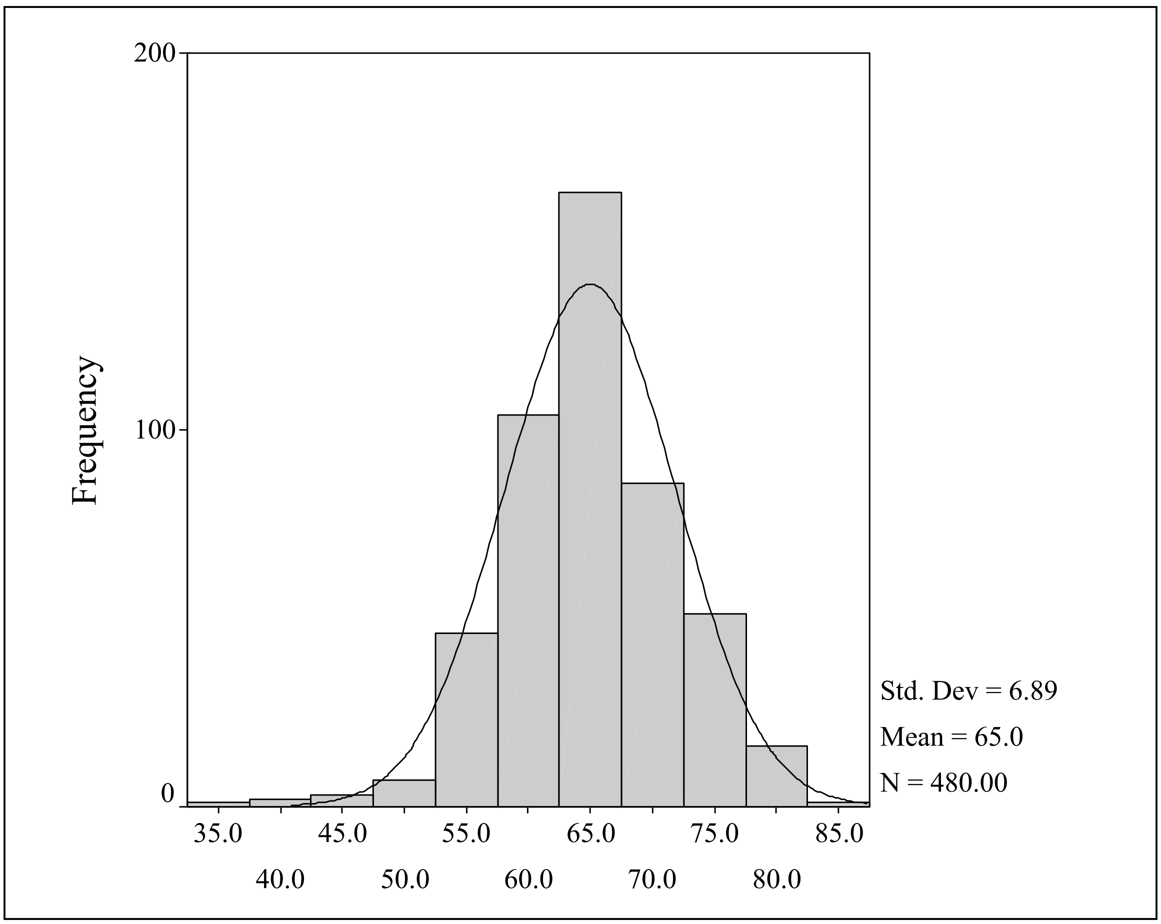


Figure 4.3 Histogram of Support for Sustainable Tourism Index

Table 4.8
Index Items for Support For Sustainable Tourism

	Item	Mean	Std. Deviation	Range	Min	Max
1	Tourism protects the environment.	3.01	.89	4	1	5
2	Tourism creates new jobs	4.16	.76	4	1	5
3	Tourism activities should be integrated with the county's conservation programs.	3.81	.86	4	1	5
4	Tourism development should be discouraged when it harms the natural environment.	3.97	.96	4	1	5
5	Economic gains are less important than the natural environment	3.30	1.10	4	1	5
6	Tourism must be managed so that the environment is sustainable over time.	4.09	.73	4	1	5
7	Tourism must not be allowed to damage natural resources.	4.13	.84	4	1	5
8	Environmental education programs lead to improvements in natural resources.	3.93	.73	4	1	5
9	Children need to learn about the environment.	4.33	.66	4	1	5
10	A community's economic stability is more important than its environmental concerns.	2.71	.98	4	1	5
11	The restoration of historical sites promotes tourism.	4.13	.73	4	1	5
12	Tourism should be managed to meet the needs of the present.	3.75	.79	4	1	5
13	Tourism should be managed to meet the needs of the future.	4.04	.62	4	1	5
14	Tourism development should respect the scale, nature, and character of my County.	4.15	.62	4	1	5
15	Involvement of residents in environmental activities enhances tourism.	3.75	.79	4	1	5
16	Economic development funds should be used to promote tourism.	3.30	.93	4	1	5
17	Local government should be involved in tourism development.	3.85	.75	4	1	5

4.4.2 Participation In Tourism and Political Activities

A series of seven questions were asked of respondents from both counties to develop an understanding of an individual's participation in community events and activities. The questions could be divided into two distinct categories, tourism specific participation and political participation. To gain insight into participation in tourism specific activities, respondents were asked if they had ever visited the local visitor's center. Of 536 respondents 36.4% stated that they had visited the visitor's center in the past.

To further understand an individual's participation in tourism, respondents were asked about their attendance at festivals and local attractions. Slightly more than two thirds (67.80%) responded that they had attended at least one festival or event in the community. Attendance ranged from 0 to 14 events and averaged 2.20 events during 2002 with a standard deviation of 2.34 (see Figure 4.4). Attendance at festivals and events were then used to create six categories to use in the participation index (see Table 4.9).

Table 4.9
Number of Festival and Events Attended in 2002 by Respondents

Number of Festival(s) Attended	Frequency	Percent	Cumulative Percent
0	173	32.20	32.20
1-3	223	41.50	73.70
4-6	115	21.40	95.20
7-9	22	4.10	99.30
10-12	2	.40	99.60
13	2	.40	100.00
Total	537	100.00	

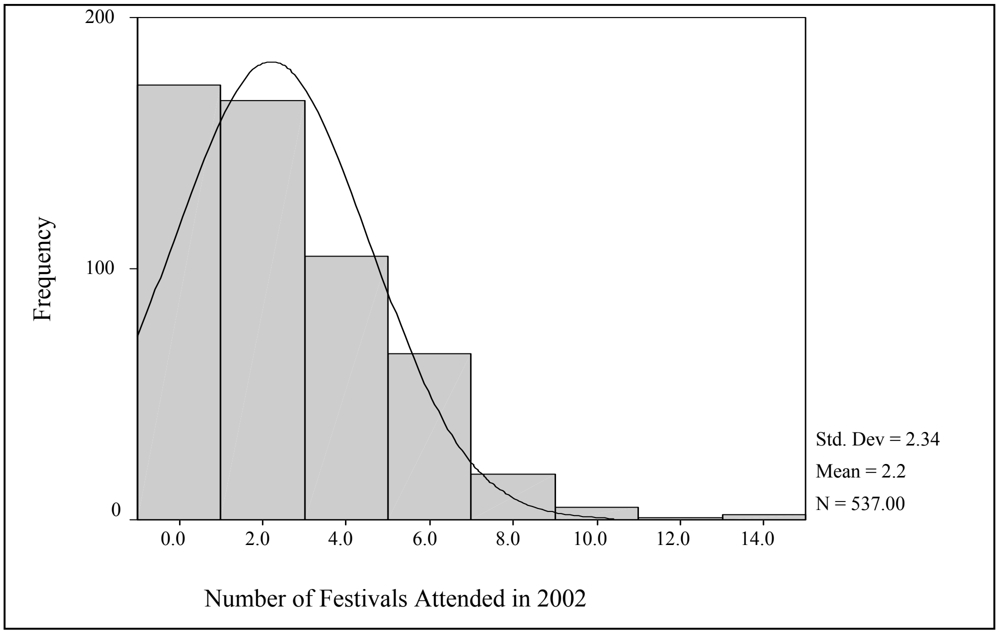


Figure 4.4 Number of Festivals Attended by Respondents in 2002

Respondents then were asked if they had visited any of the local tourist attractions in their county. Slightly more than 60% (61.00%) stated that they had visited at least one local attraction in 2002. The average number of attractions visited was 1.40, ranging from 0 to 9 with a standard deviation of 1.63 (see Figure 4.5). Visitation of local attractions was then used for create six categories to use in the participation index (see Table 4.10).

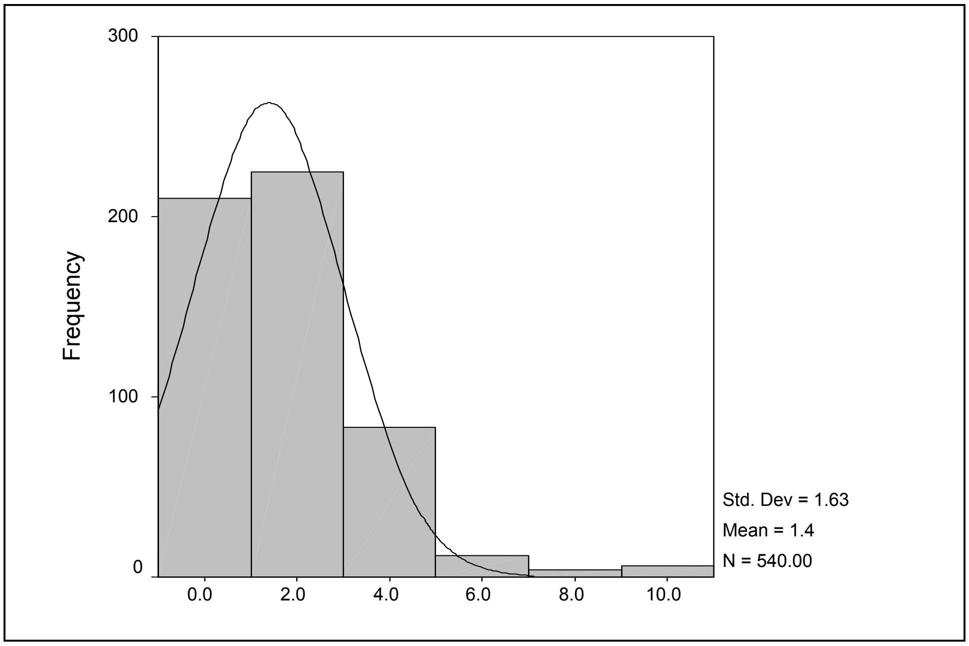


Figure 4.5 Number of Attractions Visited in 2002 By Respondents

Table 4.10
Number of Attractions Visited in 2002

Number of Attractions Visited	Frequency	Percent	Cumulative Percent
0	210	38.90	38.90
1-3	283	52.40	91.30
4-6	37	6.90	98.10
7-9	10	1.90	100.00
10-12	0	0	100.00
13+	0	0	100.00
Total	540	100.00	

Respondents were also asked questions about their involvement in community political activities. Slightly more than 85% (85.50%) stated that they had voted in the last general election. When respondents were asked if they attended city or county council meetings only 32.30% stated that they had attended at least one (see Table 4.11). When asked if they had ever run for an elected office only 10.60% stated that they had. Only 18.50% of the respondents indicted that they were members of the local chamber of commerce.

Table 4.11
Council Meetings Attended by Respondents

Council Meetings Attended	n	Valid Percent	Cumulative Percent
0	360	67.70	67.70
1-3	99	18.60	86.30
4-6	16	3.00	89.30
7-9	13	2.40	91.70
10-12	4	.80	92.50
13+	40	7.50	100.00
Total	532	100.00	

An additive index was created from these variables to reflect an individual's level of participation in tourism and community activities. The index ranged from 0 to 14. The mean was 4.11, with a standard deviation of 3.09 (see Figure 4). Index scores between 0 and 4.50 indicated that respondents had a low participation rate in tourism and political activities in 2002. Index scores between 4.60 and 9.50 indicated that respondents had a moderately low participation rate in tourism and political activities in 2002. Index scores between 9.60 and 14.50 indicated that respondents had a moderately high participation rate in tourism and political activities in 2002. Index scores between 14.60 and 19 indicated that respondents had a high participation rate in tourism and political activities in 2002.

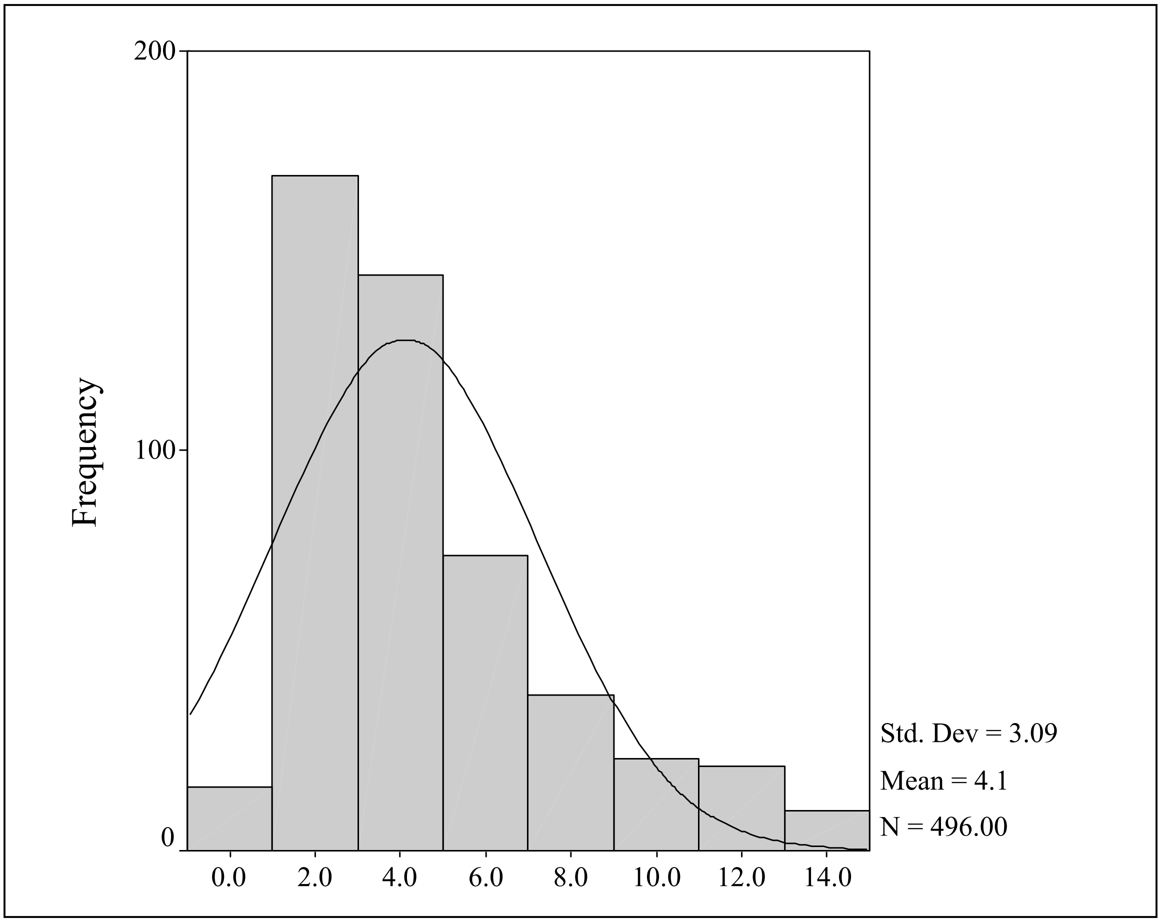


Figure 4.6 Histogram of Participation In Tourism and Political Activities Index

4.4.3 Summary of Dependent Variables

The support of sustainable tourism index, had a mean of 64.94 and a standard deviation of 6.89, and approximately 95% (2 standard deviations) of the respondents fell between 51.16 and 78.72. It can be summarized from this that the majority of respondents were not against the idea of sustainable tourism development in their community.

The participation in tourism and political activities index had a mean of 4.11 and a standard deviation of 3.09. Approximately 95% (2 standard deviations) of the respondents fell between 0 and 10.29. This indicated that the majority of respondents do not participate at an extremely high level in tourism and politics in the community.

4.5 Decision Tree Results

Using SPSS Answer Tree, a decision tree was created to answer the research questions and to support or refute the three hypotheses. To reiterate, the research questions for this study were: 1) if differences exist between stakeholders, allowing identification of homogenous groups using perceptions of tourism impacts, general demographics and participation in recreational activities; 2) if perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' support for or against the development of sustainable tourism in a rural community; and 3) if perception of tourism impact, demographic characteristics and recreational participation influence a stakeholder's active or passive participation in the sustainable tourism development process. These research questions can be expressed in three hypotheses.

Substantive Hypotheses:

H_1: Differences in stakeholders' perceptions of tourism impact, demographic characteristics, and recreational participation exist so that homogeneous stakeholder groups can be identified.

H_0: Differences in stakeholders' perceptions of tourism impact, demographic characteristics, and recreational participation do not exist so that homogeneous stakeholder groups can be identified.

H_2: Perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' support for or against tourism policy development.

H_0: Perception of tourism impact, demographic characteristics and recreational participation do not influence stakeholders' support for or against tourism policy development.

H_3: Perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' level of participation in tourism policy development.

H_0: Perception of tourism impact, demographic characteristics and recreational participation do not influence stakeholders' level of participation in tourism policy development.

The independent and dependent variables that were previously discussed were included in the development of decision trees. The decision trees were created using the Exhaustive CHAID method that was discussed in chapter 3, section 3.7. Two answer trees were developed for the total sample. The first tree included the dependent variable, support for sustainable tourism development. The second decision tree included the dependent variable, participation in tourism and political activities. In the next sections and Appendices F and G, each decision tree is discussed thoroughly identifying the levels and the nodes. This is followed by a general summary of the decision tree and a description of the groups that can be identified based on the decision tree results. The discussion is followed by two alternative decision trees that were developed using only respondents from Johnston County. The Johnston County decision trees are summarized and compared to the total sample's decision trees to identify similarities and differences.

4.6 Support For Sustainable Tourism Development Decision Tree

The Support For Sustainable Tourism Development Decision Tree (Figure 4.7) was developed using the Exhaustive CHAID method in SPSS Answer Tree. The resulting tree can be divided into three main branches and 8 levels. Branch 1 consists of nodes 1, 4, 5, 10, 11, 18, 19, 26, and 27. Branch 2 consists of nodes 2, 6, 7, 12, 13, 14, 15, 20, 21, 38, 39, 22, 23, 42, 43, 28, 29, 40, 41, 32, 33, 34, and 35. Branch 3 consists of nodes 3, 8, 9, 16, 17, 24, 25, 30, 31, 36, 37, 44, and 45. The following is a description of nodes by level. The variables used to differentiate the tree branches appear above the node boxes in Figure 4.7. For example, perceived impact differentiates the groups at level 2. The three groups represent nodes 1, 2, and 3.

4.6.1 Level One (Node 0)

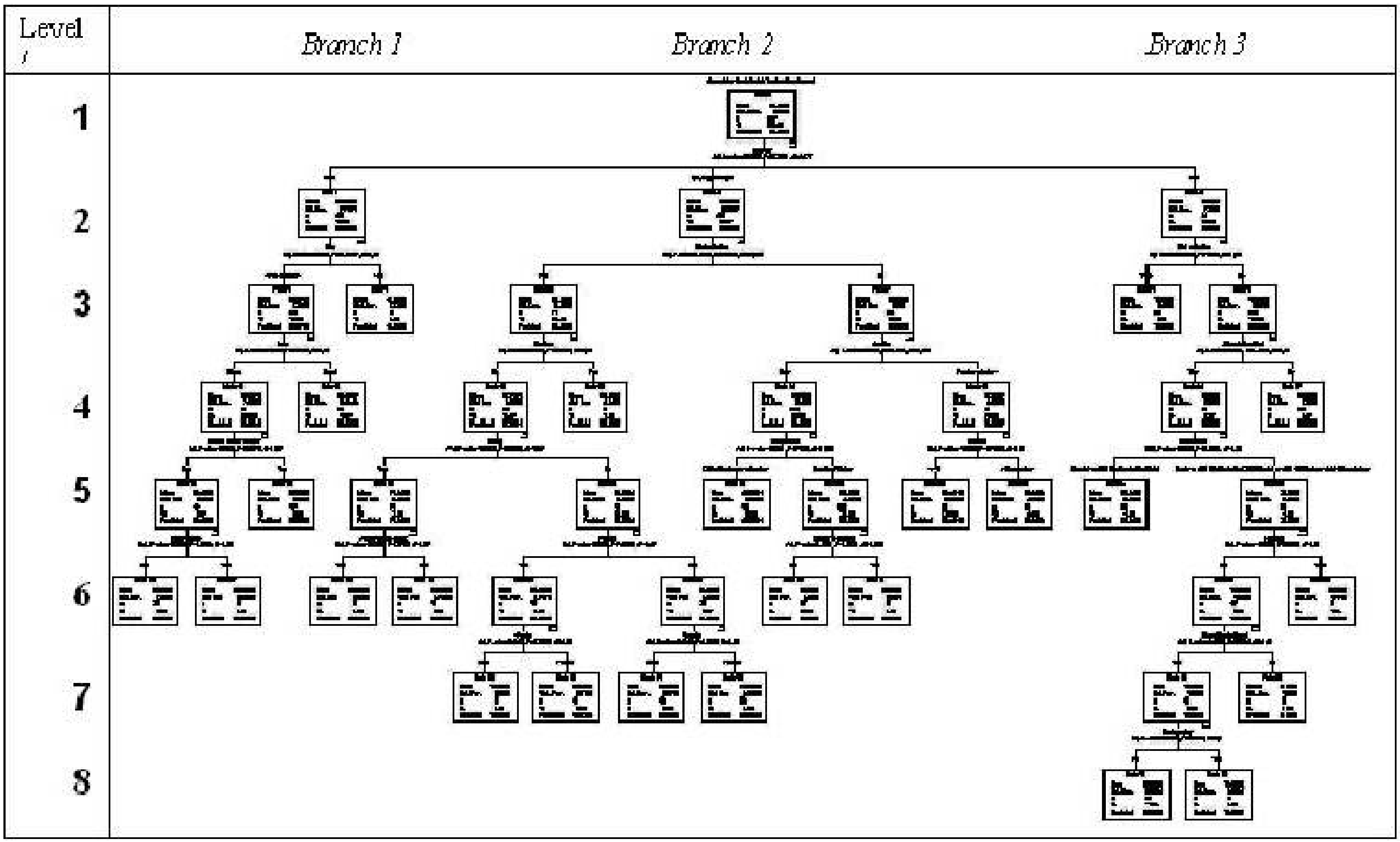
The root node for the Support For Sustainable Tourism Development Decision Tree (Figure 4.7) was the individuals score on the support for sustainable tourism index. The index ranged from 17 to 85, with 17 indicating strong disagreement with sustainable tourism, and 85 representing strong agreement with sustainable tourism (see section 4.4.1).

The respondents in this study had a mean score of 64.98 and a standard deviation of 6.89 on the support for sustainable tourism index (Figure 4.7). These respondents can be differentiated based on five variables (see Table 4.12). Perceived impact was selected as the variable for prediction in the decision tree because it had the smallest p value ($p<.05$). The respondents were divided into three groups represented by Branch 1, Branch 2, and Branch 3 based on the individual stakeholder's perceptions of the tourism impact. There were thirteen variables that were not statistically significantly different (p value = .05) to justify the split of node 0. The variables that were not statistically significantly different were, county respondents lived in, participation in gardening, participation in fishing, participation in hiking, participation in golf, participation in camping, participation in hunting, participation in tennis, perspective, education, employment status, and household characteristics.

Table 4.12
Predictors for Node O Root Split

Predictor	F	DF	P value
Perceived Impact	24.78	2, 477	p<.05
Bird Watch/ Did Not Bird Watch	19.81	1, 478	p<.05
Attend a Festival/ Did Not Attend a Festival	12.33	1, 478	p<.05
Photography/ Did Not Take Photographs	8.12	1, 478	p<.05
Gender (Male/ Female)	9.36	1, 478	p<.05

Figure 4.7 Support for Sustainable Tourism
Decision Tree



4.6.2 Level 2 (Nodes 1,2,3)

The split of node 0 results in three groups on level 2 of the Support For Sustainable Tourism Development Decision Tree. The split contains 100% of the respondents of this study. These three groups are represented by node 1; individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index); node 2 individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index); and node 3 individuals that moderately to strongly perceived that tourism had a positive impact (Score of >45 on the Impact Index). These three nodes are the parent nodes for branches 1, 2, and 3. Node 1 is located on branch 1, node 2 is located on branch 2, and node 3 is located on branch 3.

Respondents in the first group (node 1) indicate a lower level of support (62.31), based on the support index, than those in the second group (node 2) (64.60). Those in the second group (node 2) were less supportive (64.60) than those in the third group (node 3) (69.19). This supports the first and second hypotheses of the study. Understanding the perception of impact, however, does not tell the entire story. Other variables need to be investigated.

Branch 1

Node 1, individuals that moderately to neutrally perceived that tourism had a negative impact on the community, represented 18.33% of the respondents in this study (see Figure 4.1 and discussion of index scores in section 4.3.1). These respondents can be further differentiated by three other variables. The respondent’s age was found to be the most significant predictor of the level of support for sustainable tourism development based on a p value <.05 (see Table 4.13).

Table 4.13
Predictors for Node 1, Individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index).

Predictor	F	DF	P value
Age	16.20	1, 86	p<.05
Visited The Visitors Center/ Did Not Visit the Visitors Center	4.05	1, 86	p<.05
Area (Town/ Outside of Town)	4.00	1, 86	p<.05

Branch 2

Node 2, individuals that neutrally to moderately perceived that tourism had a positive impact represented 64.17% of the respondents (see Figure 4.1 and discussion of index scores in section 4.3.1). The respondents can be further split by four other variables (see Table 4.14). Participation or lack of participation in bird watching was selected as the most significant indicator of their support for sustainable tourism development, based on a p value <.05.

Table 4.14
Predictors for Node 2, Individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index).

Predictor	F	DF	P value
Bird Watching	13.92	1, 306	p<.05
Gender	16.44	1, 306	p<.05
Hiking	5.96	1, 306	p<.05
Gardening	3.77	1, 306	p =.05
Photography	3.61	1. 306	p = .06

Branch 3

Node 3, individuals that moderately to strongly perceived that tourism had a positive impact, represented 17.50% of the respondents (see Figure 4.1 and discussion of index scores in section 4.3.1). These respondents can be further divided by three other variables (see Table 4.15). Participation or lack of participation in bird watching was the most significant indicator of support for sustainable tourism development, based on a p value <.05, for this group and used for the split.

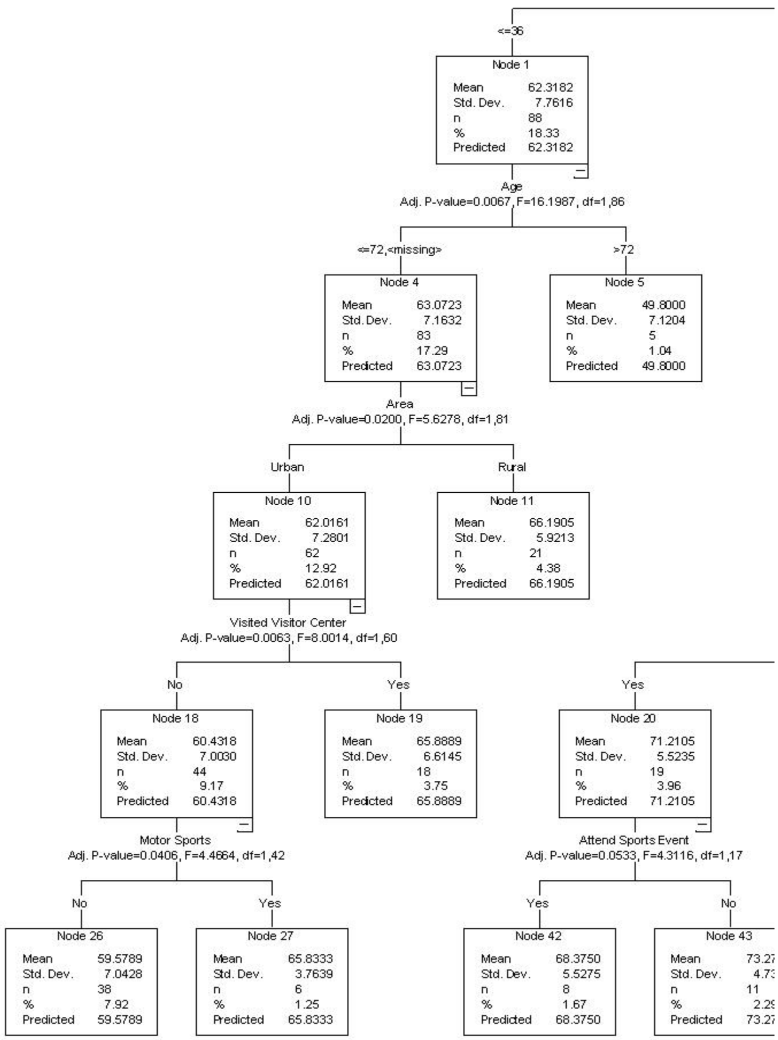
Table 4.15
Predictors for Node 3 Individuals that moderately to strongly perceived that tourism had a positive impact (Score of >45 on the Impact Index).

Predictor	F	DF	P value
Bird Watching	7.39	182	p<.05
Attend a Festival	5.85	182	p<.05
Hunting	3.82	182	p=.05

The second level of the Support for Sustainable Tourism Decision Tree differentiates that respondents into three groups based on their perceptions of tourism's impact to their county. These groups can be further divided based on other variables, age and bird watching. The remaining levels and nodes for the Support for Sustainable Tourism Decision Tree are discussed in Appendix F.

4.6.3 Support for Sustainable Tourism Decision Tree Groups By Branch Interpretation

Branch 1 (see Figure 4.8) can be classified as *low supporters* based on a mean score of 62.31 on the support for sustainable tourism index (see Figure 4.3 and discussion of index scores in section 4.4.1) at the main split (level 2). Mean support for sustainable tourism index scores for the low supporters ranged from 49.8 to 66.19. Low supporters account for 18.33% of the respondents. Variables that had an influence on this group were: age, area respondents live in, visited the visitors' center, and participation in motor sports.

<table>
<tr><td>Level/ Branch</td><td>Branch 1</td></tr>
<tr><td>1</td><td rowspan="6">
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<tr><td>4</td></tr>
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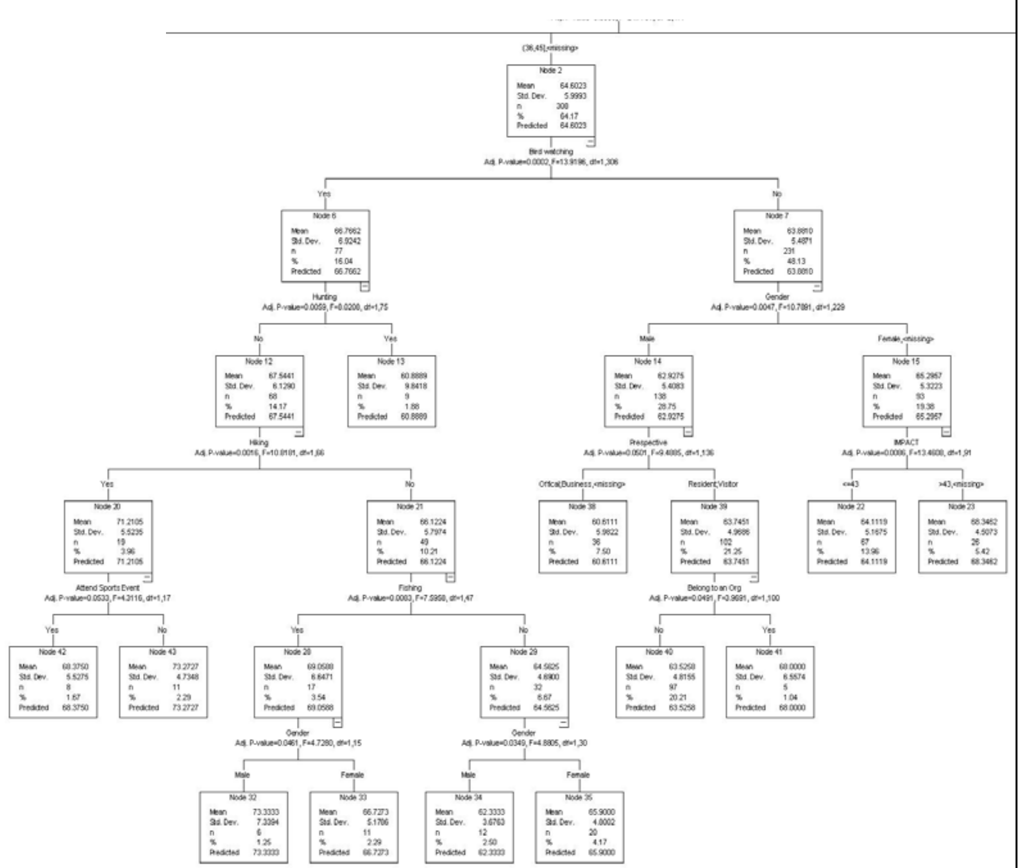
Figure 4.8 Support for Sustainable Tourism Decision Tree Branch 1

Low supporters are generalized as stakeholders who perceived tourism did not have a positive impact on the community, were from an urban area, have not visited the local visitors' center and had not participated in any motor sports in 2002. It can be inferred by this information that low supporters were not as familiar with tourism opportunities in their community as other groups. Low supporters may be a group that would support non-sustainable tourism activities as well as sustainable tourism activities. Also, there may be some sustainable tourism activities that this group would oppose.

Branch 2 (see Figure 4.9) can be classified as *moderate supporters* based on a mean score of 64.60 on the support for sustainable tourism index (see Figure 4.3 and discussion of index scores in section 4.4.1) at the main split (level 2). Mean support for sustainable tourism index scores for the moderate supporters ranged from a 60.11 to a 73.33. Moderate supporters account for 64.17% of the respondents. Variables that had an influence on this group were: participation or lack of participation in various activities, gender, and the individual's perspective of tourism.

Moderate supporters are classified as stakeholders who were residents or visitors, perceive that tourism has a positive impact on the community and did not participate in natural resource based activities in 2002. Moderate supporters represent the largest group based on the results and thus were important stakeholders in sustainable tourism development. This group will support most sustainable tourism activities that were undertaken by the community.

Level/ Branch	***Branch 2***
1	
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Branch 3 (see Figure 4.10) can be classified as *high supporters* based on a mean score of 69.16 on the support for sustainable tourism index (see Figure 4.3 and discussion of index scores in section 4.4.1) at the main split (level 2). Mean support for sustainable tourism index scores for the high supporters ranged from 65.05 to 79.60. High supporters account for 17.50% of the respondents. Variables that had an influence on this group were: participation or lack of participation in various activities, attending local festivals, and marital status.

High supporters are stakeholders who perceive that tourism has a major positive impact on the community, did not participate in natural resource based activities, but did attend festivals and events in 2002. It can be inferred by this information that high supporters were familiar with tourism opportunities and participate in some tourist activities such as attending a festival. Their familiarity with a tourism product, festivals, gives them a better appreciation of how tourism positively impacts the community and this influences them to be supportive of sustainable tourism development. This group would support most sustainable tourism activities.

Level/ Branch	***Branch 3***
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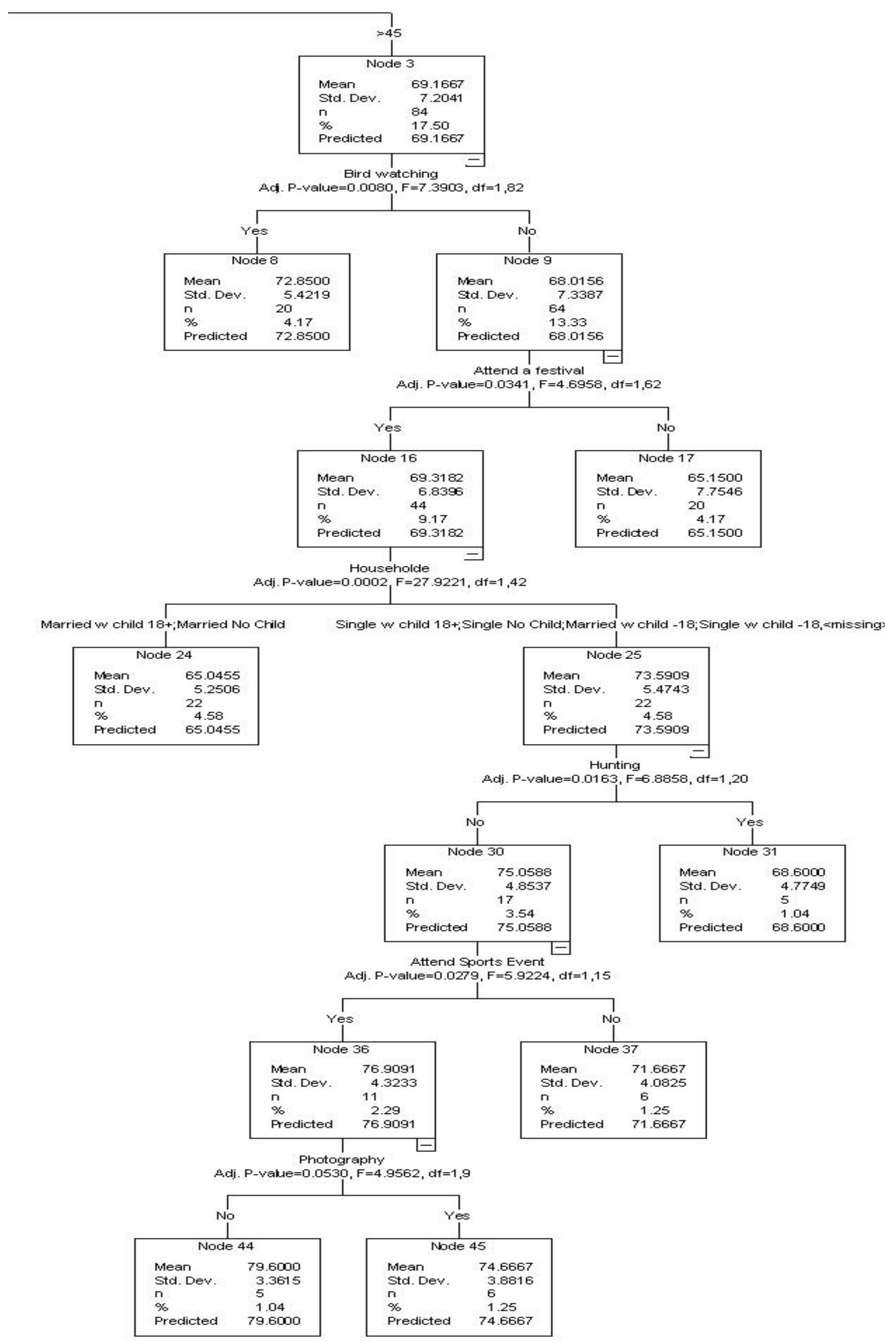


Figure 4.10 Support for Sustainable Tourism Decision Tree Branch 3

4.7 Participation in Tourism and Political Activities Decision Tree

The Support for Participation in Tourism and Political Activities Decision Tree (Figure 4.11) was developed using the Exhaustive CHAID method in SPSS Answer Tree. The resulting tree can be divided into four main branches and 9 levels. Branch 1 consists of nodes 1, 6, 7, 14, 15, 16, and 17. Branch 2 consists of nodes 2, 8, 9, 10, 18, 19, 20, 21, 24, 25, 26, 27, 28, 29, 30, 33, 34, 35, 36, 37, 38, 39, 40, 41, and 42. Branch 3 consists of node 3. Branch 4 consisted of nodes 4, 11, 12, 13, 22, 23, 31, and 32. Node 5 consists of respondents that could not be identified as a specific perspective due to missing data. The following is a description of nodes by level. As with the Support for Sustainable Tourism Development Decision Tree, the variables used to differentiate the tree branches appear above the node boxes in Figure 4.11. For example the stakeholder's perspective differentiates the groups at level 2. The four groups represent nodes 1, 2, 3 and 4.

4.7.1 Level One (Node 0)

The root node for Participation in Tourism and Political Activities Decision Tree (Figure 4.11) was the individual's score on the participation index. The index ranged from 0 to 19, with 0 indication no participation and 19 representing high participation (see section 4.4.2).

The respondents in this study had a mean score of 4.11 and a standard deviation of 3.09 on the participation index (Figure 4.7). This indicates participation by individuals varies. These respondents can be differentiated based on five variables (Table 4.16). The individual stakeholder's perspective was selected as the variable for prediction in the tree because it had the smallest p value ($p<.05$) and largest F value (125.71). The respondents were divided into four groups represented by Branch 1, Branch 2, Branch 3, and Branch 4 based on the individual stakeholder's perspective about tourism.

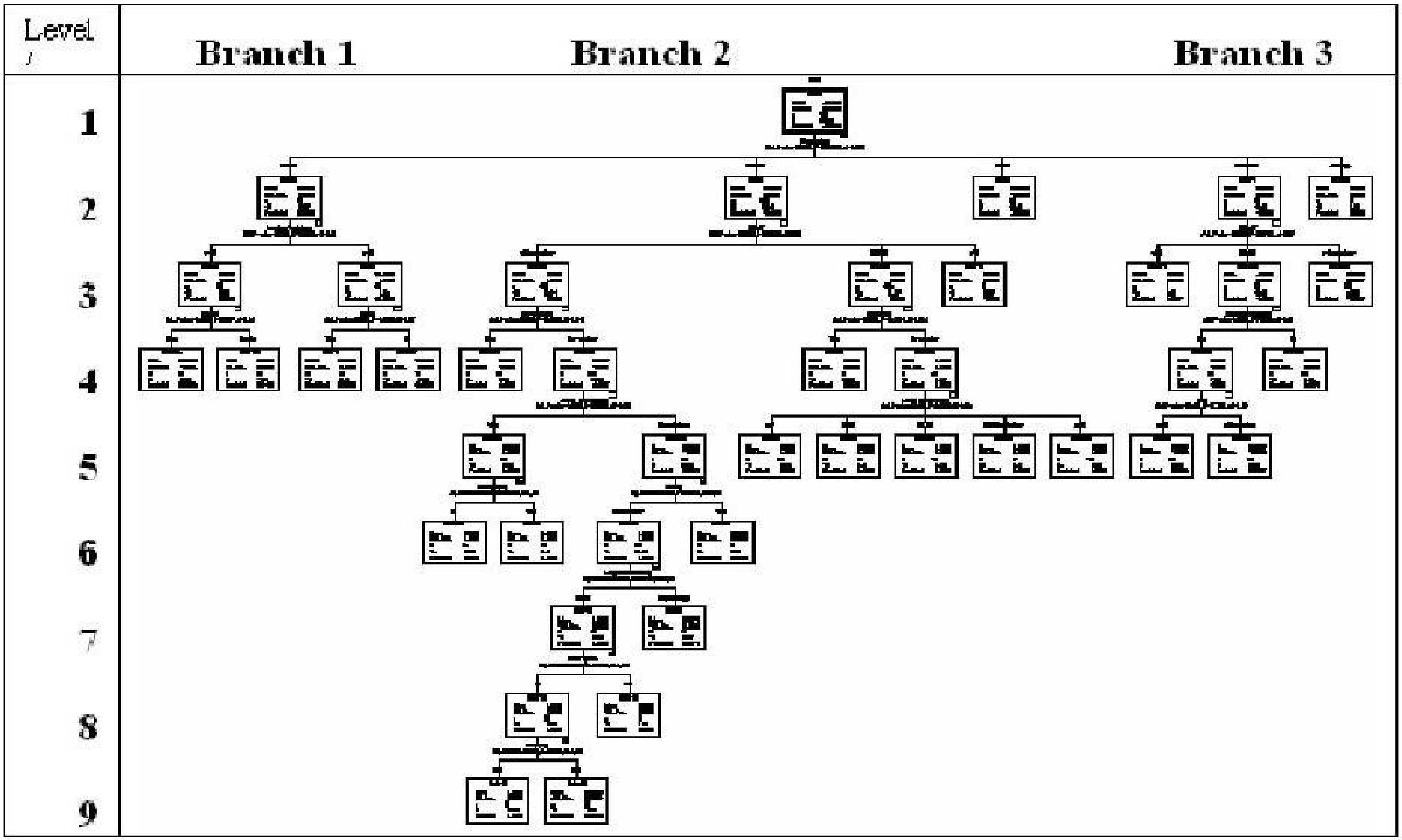
Table 4.16
Predictors For Node O Root Split

Predictor	F	DF	P value
Perspective	125.71	4, 491	p<.05
Impact	30.87	2, 493	p<.05
Education	27.47	2, 493	p<.05
Length of Residency	17.67	2, 493	p<.05
Attend a Sports Event	25.74	2, 493	p<.05

4.7.2 Level 2 (Nodes 1,2,3,4,5)

The split of node 0 results in four groups on level 2 of the Participation in Tourism and Political Activities Decision Tree. The split contains 100% of the respondents of this study. Node 1 represents governmental officials. Node 2 represents local residents. Node 3 represents visitors to the county. Node 4 represents local business owners. These nodes are the parent nodes for branches 1, 2,3 and 4. Node 1 is located on branch 1, node 2 is located on branch 2, node 3 is located on branch 3 and node 4 on branch 4.

Figure 4.11 Participation in Tourism and Political Activities Decision Tree



Respondents who were government officials (node 1) participated more (10.55) than any other group. The next highest participators were the business owners (node 4) (5.03) followed by the residents (node 2) (3.17) and the visitors (node 3) (2.35). This supports the first and third hypotheses of the study. Understanding the stakeholder's perspective is extremely important but does not tell the entire story. Other variables need to be investigated.

Branch 1

Node 1, government officials, represents 9.07% of the respondents in this study. These respondents can be further differentiated by two other variables (see Table 4.17). The most significant predictor of government officials participation in tourism and political activities was how long the respondent had lived in the county, based on a p value <.05.

Table 4.17
Node 1 Predictors For Individuals that were Government Officials

Predictor	F	DF	P value
Length of Residency	17.3784	1, 43	p<.05
Gender	8.5122	1, 43	p<.05

Branch 2

Node 2

Node 2, local residents, represents 60.08% of the respondents in this study. These respondents can be further differentiated by five other variables (see Table 4.18). The most significant predictor of residents participation in tourism and political activities was the individual's perception of the impact tourism has on the community, based on a p value <.05.

Table 4.18
Predictors For Node 2 Individuals that were residents.

Predictor	F	DF	P value
Perceived Impact	22.36	2, 295	p<.05
Attend a Sports Event	16.90	1, 296	p<.05
Education	10.09	2, 295	p<.05
Gardening or Not Gardening	12.71	1, 296	p<.05
County	8.90	1, 296	p<.05

Branch 3

Node 3

Node 3, visitors to the county, represents 11.49% of the respondents in this study. Node 3 is a terminal node. These respondents cannot be further divided by any other variables. There were no variables that were statistically significant enough (p value = .05) to justify the division.

Branch 4

Node 4

Node 4, local business owners, represents 18.15% of the respondents in this study. These respondents can be further divided by two other variables (see Table 4.19). The most significant predictor of business owners participation in tourism and political activities was the individual's perception of the impact tourism has on the community, based on a p value <.05.

Table 4.19
Predictors For Node 4 Individuals that business owner.

Predictor	F	DF	P value
Perceived Impact	12.05	2, 87	p<.05
County	4.81	1, 88	p<.05

Node 5 consists of respondents that could not be identified as a specific perspective due to missing data. The data was missing due to a conscious effort by the respondents to remove the identification marker form the questionnaire.

The second level of the Participation in Tourism and Political Activities Decision Tree differentiates that respondents into four groups based on their perspectives related to tourism. These groups can be further divided based on other variables, length of residency and perceived impact. The remaining levels and nodes for the Support for Sustainable Tourism Decision Tree are discussed in Appendix G.

4.7.3 Participation in Tourism and Political Activities Decision Tree Groups By Branch Interpretation

Branch 1 (see Figure 4.12) can be classified as *high participants* based on a mean score of 10.56 on the participation index (see Figure 4.6 and discussion of index scores in section 4.4.2) at the main split (level 2). Mean participation index scores for the high participants ranged from 8.24 to 12.56. High participants account for 9.07% of the respondents. Variables that had an influence on this group were: their perspective, how long they had lived in the community, gender and activities they participated in.

High participants are generalized as stakeholders who were government officials or were in governmental positions. It is intuitive in that the officials would be high participants in political activities. Of interest is that officials are activate in tourism related activities. It can be inferred by this information that government officials are familiar at some level with tourism opportunities and issues in their community. Government officials will be involved in some way in most major decision in the county that is related to sustainable tourism development. It also indicates the importance of governmental officials in the tourism development process.

Figure 4.12 Participation in Tourism and Political Activities Decision Tree Branch 1

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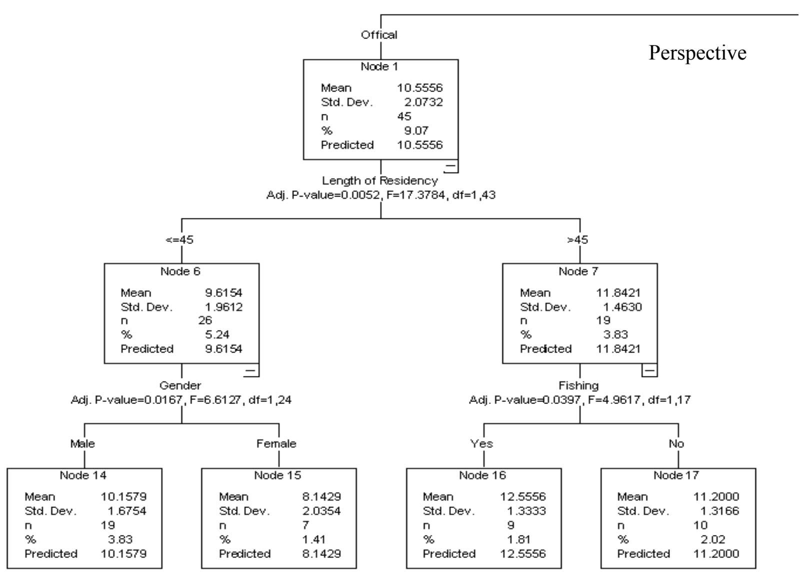
4</td><td>
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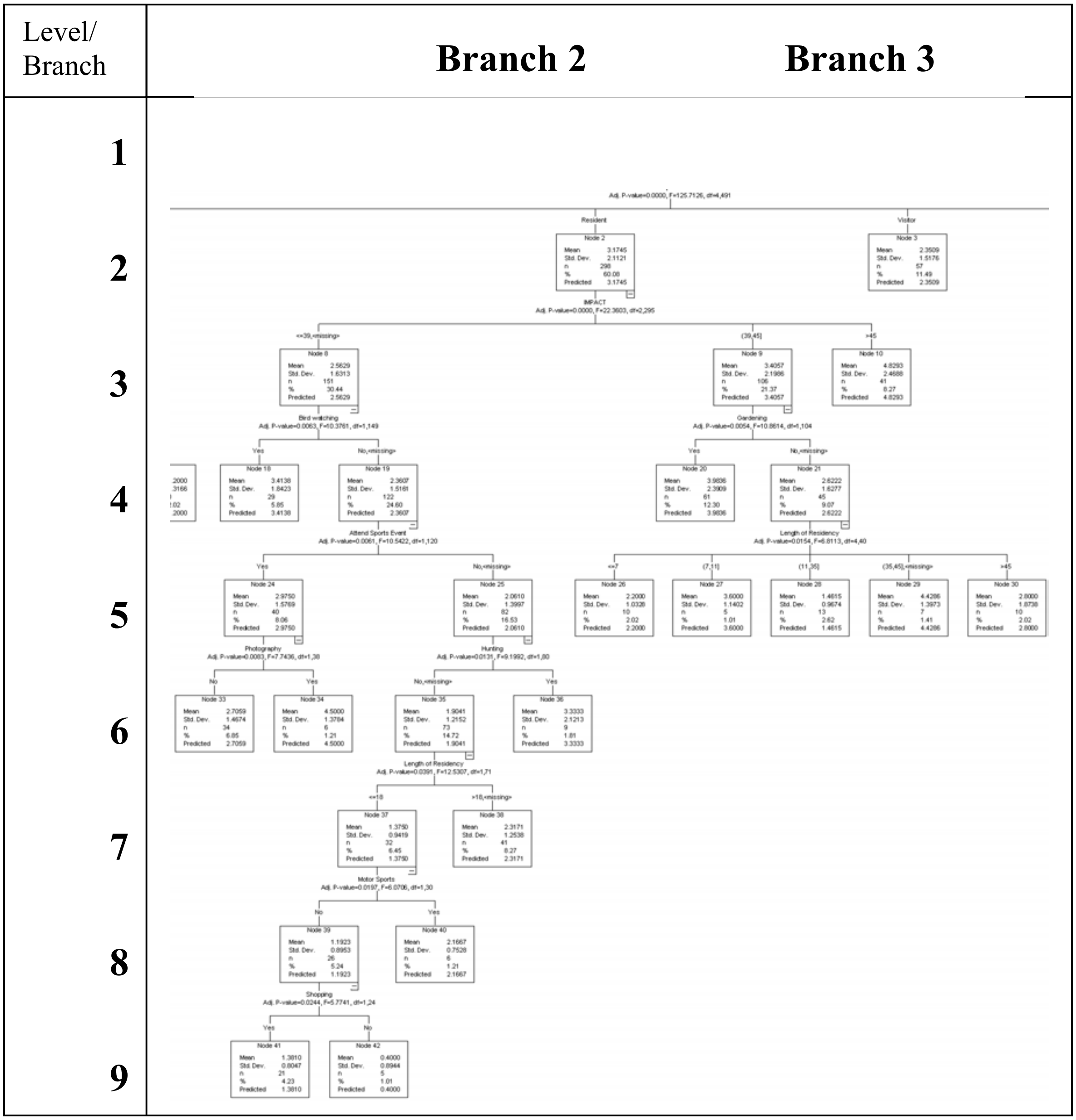
Branch 2 (see Figure 4.13) can be classified as *low moderate participants* based on a mean score of 3.18 (see Figure 4.6 and discussion of index scores in section 4.4.2) at the main split (level 2). Mean participation index scores for the low moderate participants ranged from a 0.40 to a 2.98. Low moderate participants account for 60.08% of the respondents. Variables that had an influence on this group were: their perspective, their perceived impact of tourism, how long they had lived in the community and activities they participated in

Low Moderate participants are generalized as stakeholders who were residents, that did not participate in many natural resource based activities in 2002, and perceive that tourism’s impact on the community is positive. Even though this group is low moderate participators they are extremely important to the sustainable tourism process. This is due to their size and their interaction with visitors. Therefore, this group should be encouraged to participate more in both tourism activities and political activities. This group will have little influence on what type of tourism development policies are developed, but will influence the success of these policies and will be affected by these policies.

Figure 4.13 Participation in Tourism and Political Activities Decision Tree Branch 2 and 3



Branch 3 (see Figure 4.14) can be classified as *low participants* based on a mean score of 2.30 (see Figure 4.6 and discussion of index scores in section 4.4.2) at the main split (level 2). Low participants account for 11.49% of the respondents. There are no identifiable variables that had an influence on this group.

Low participants can be generalized as stakeholders who are visitors to the local community. It is important to understand that even though the visitors are considered low participators and will have limited to no influence on policy development, they will as the residents be impacted by the policy and will be extremely influential in the success of any sustainable tourism process. Therefore it is important to obtain their concerns and wants and account for these in the tourism development process.

Branch 4 (see Figure 4.14) can be classified as *high moderate participants* based on a mean score of 5.03 ((see Figure 4.6 and discussion of index scores in section 4.4.2) at the main split (level 2). Mean participation index scores for the low moderate participants ranged from a 3.22 to a 6.84. High moderate participants account for 18.15% of the respondents. Variables that had an influence on this group were: their perspective, their perceived impact of tourism, age, and their

High Moderate participants can be generalized as stakeholders who were business owners and perceived tourism has a positive impact on the community. It can be inferred that this group sees many of the economic benefits of tourism and therefore has positive perceptions of tourism. As high moderates this group of stakeholders will be influential in many of the policies that are developed related to tourism.

Level/ Branch	**Branch 4**
1	
2	
3	
4	
5	

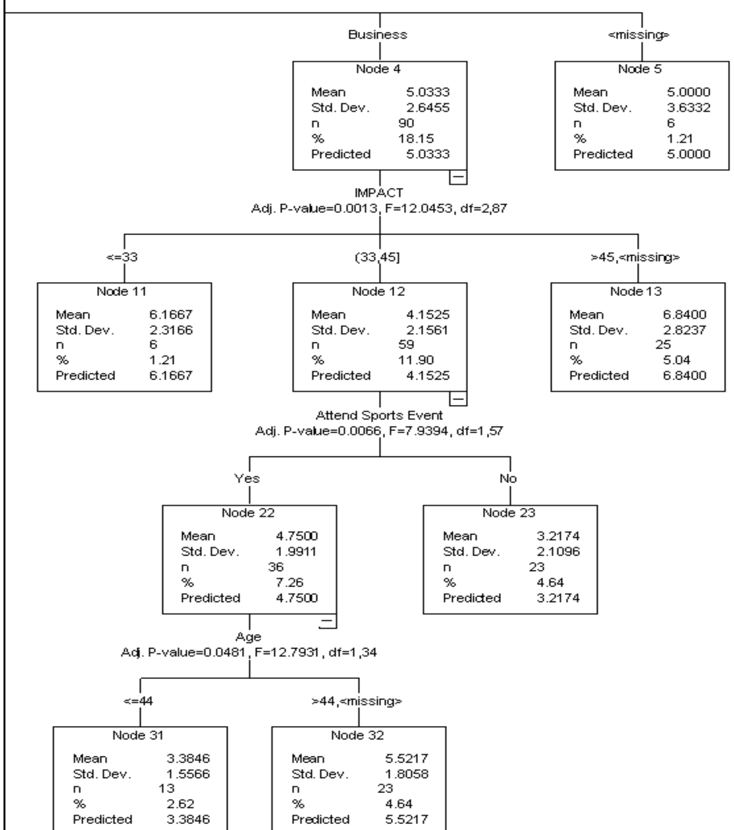


Figure 4.14 Participation in Tourism and Political Activities Decision Tree Branch 3

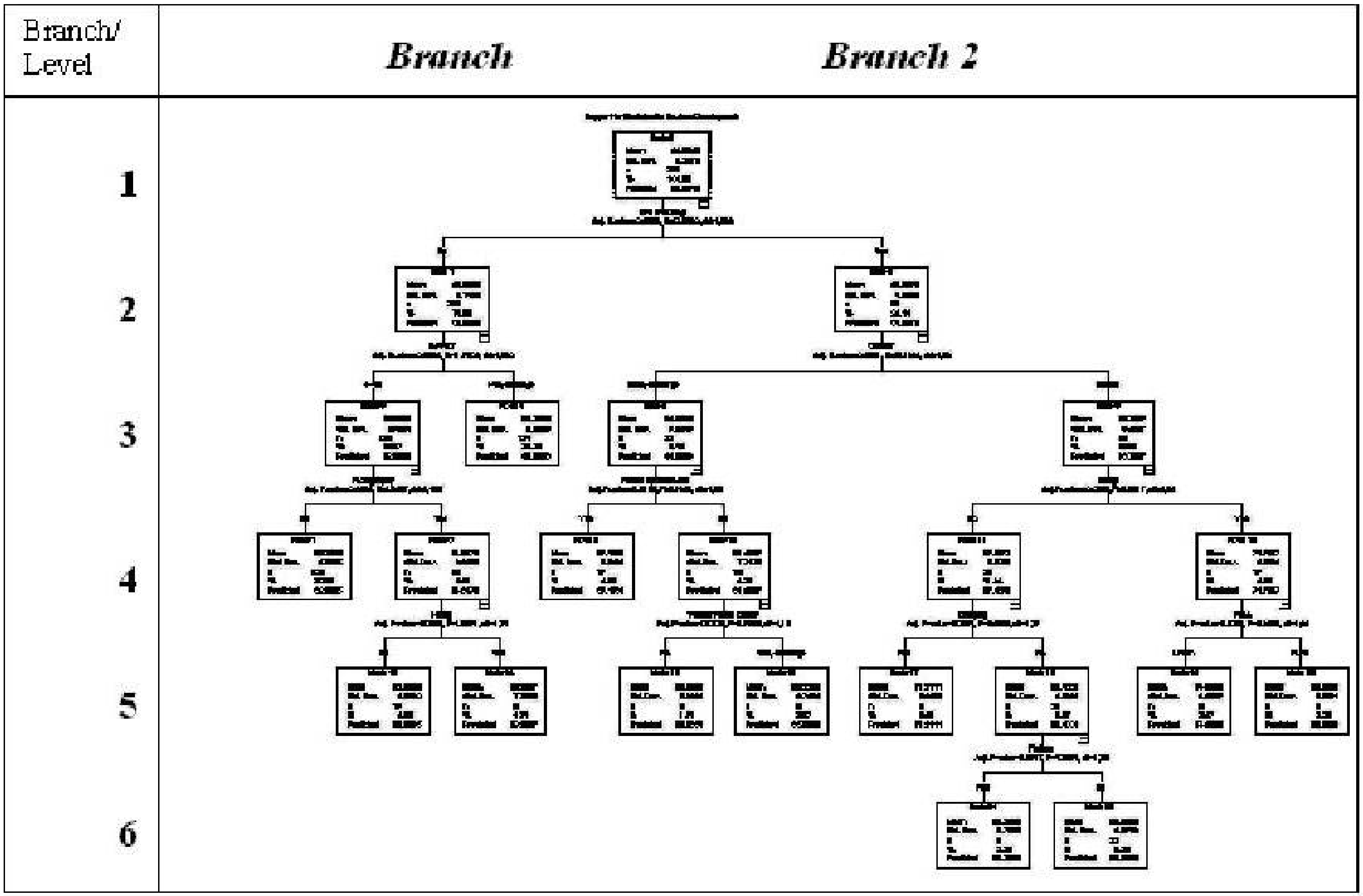
4.8 Johnston County Sub Sample Analysis Interpretation

The following is a discussion of the results of the study handling only those respondents from Johnston County. The Johnston County respondents totaled 396. Decision trees for support for sustainable tourism development (Figure 4.15 and 4.16) and participation in tourism and political activities were developed for the Johnston County respondents for comparison to the total respondents decision trees.

The Johnston County Support for Sustainable Tourism Decision Tree (Figure 4.15) has noticeable differences in the look and splits of the decision tree. The Johnston County Support for Sustainable Tourism Decision Tree has two branches that have the main split based on the individual's participation or lack of participation in bird watching. The resulting two groups can be classified as *low to moderate supporters* (branch 1) and *high supporters* (branch 2).

Low to moderate supporters can be described as individuals that do not participate in recreational activities. This finding is similar to that of the Support for Sustainable Tourism Decision Tree's description of the low supporters' typology. High supporters can be described as those who do participate in some natural resource based activities. Again this finding is similar to that of the Support for Sustainable Tourism Decision Tree.

Figure 4.15 Johnston County Support for Sustainable Tourism Development Decision Tree



The major difference between the two is the lack of influence revealed by the decision tree that a stakeholder's perception of tourism impact has on their support for sustainable tourism. Once all statistically significant predictors are identified however the importance of a stakeholder's perception of tourism impact is indicated (Table 4.20). By developing a decision tree based on perceptions of impacts the tree develops in a more congruent pattern as that of the Support for Sustainable Tourism Decision Tree.

Table 4.20
Johnston County Sample Node O Root Predictors

Predictor	F	DF	P value
Bird Watching	17.90	1, 348	p<.05
Gender	15.85	1, 348	p<.05
Perceived Impact	12.36	2, 347	p<.05
Photography	10.52	1, 348	p<.05
Attend a Festival	5.01	1, 348	p<.05

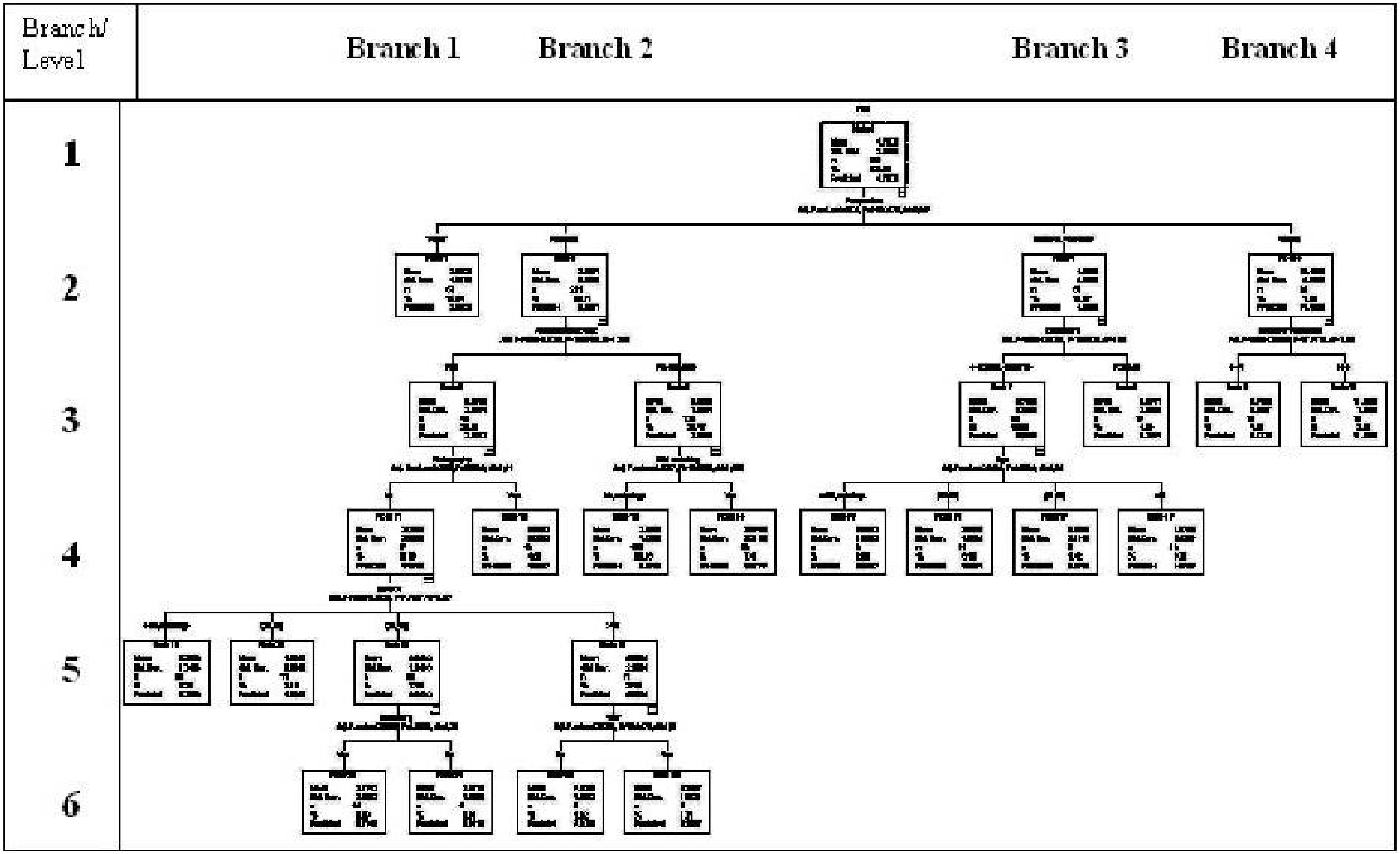
Table 4.21
Total Sample Node O Root Predictors

Predictor	F	DF	P value
Impact	24.78	2, 477	p<.05
Bird Watching	19.81	1, 478	p<.05
Attend a Festival	12.33	1, 478	p<.05
Photography	8.12	1, 478	p<.05
Gender	9.36	1, 478	p<.05

The significant predictors are the same five variables, perceived impact, bird watching, gender, photography, and attending a festival. There significance is at different levels, based on p values. The underlying them that these specific variables have an influence over a persons support for or against sustainable tourism development is consistent throughout.

Johnston County Support for Sustainable Tourism Decision Tree B once developed can be split into three groups. Branch 1 is *low supporters*, branch 2 *moderate supporters*, and branch 3 *high supporters*. Similar to the Support for Sustainable Tourism Decision Tree, low supporters can be classified as stakeholders who perceive tourism does not have a positive impact on the community, are from an urban area, and did not participated natural resource based activities in 2002. Moderate supporters can be classified as stakeholders who are residents or visitors, perceive that tourism has a positive impact on the community and did not participate in natural resource based activities in 2002. High supporters can be described as stakeholders who perceive that tourism has a major positive impact on the community, did not participate in natural resource based activities in 2002. The Johnston County Participation in Tourism and Political Activities Decision Tree is similar to the Participation in Tourism and Political Activities Decision Tree. The main split is based on the perspective of the stakeholder in relation to tourism. Branch 1 can be classified as *low participants*; branch 2 can be classified as *low moderate participants,* branch 3 *high moderate participants,* and branch 4 *high participants.* High participants can be generalized as stakeholders who are government officials or are in governmental positions. Low Moderate participants can be generalized as stakeholders who are residents, which do not participate in many natural resource based activities, and perceive that tourism's impact on the community is not all positive. Low participants can be generalized as stakeholders who are visitors to the local community. High Moderate participants can be generalized as stakeholders who are business owners.

Figure 4.16 Johnston County Participation in Tourism and Political Activities Decision Tree



There are small differences in the exact splits and some of the variables that are used to split the groups between the decision trees for the entire study and for Johnston County only. This must be attributed to the community itself. For any given community the decision tree that is developed will be slightly different depending on the characteristics of that community. What is important is that the variables that are found to be significant in the total were also found to be significant in the sub sample. These variables are important to understand.

4.9 Collapsed Index Analysis

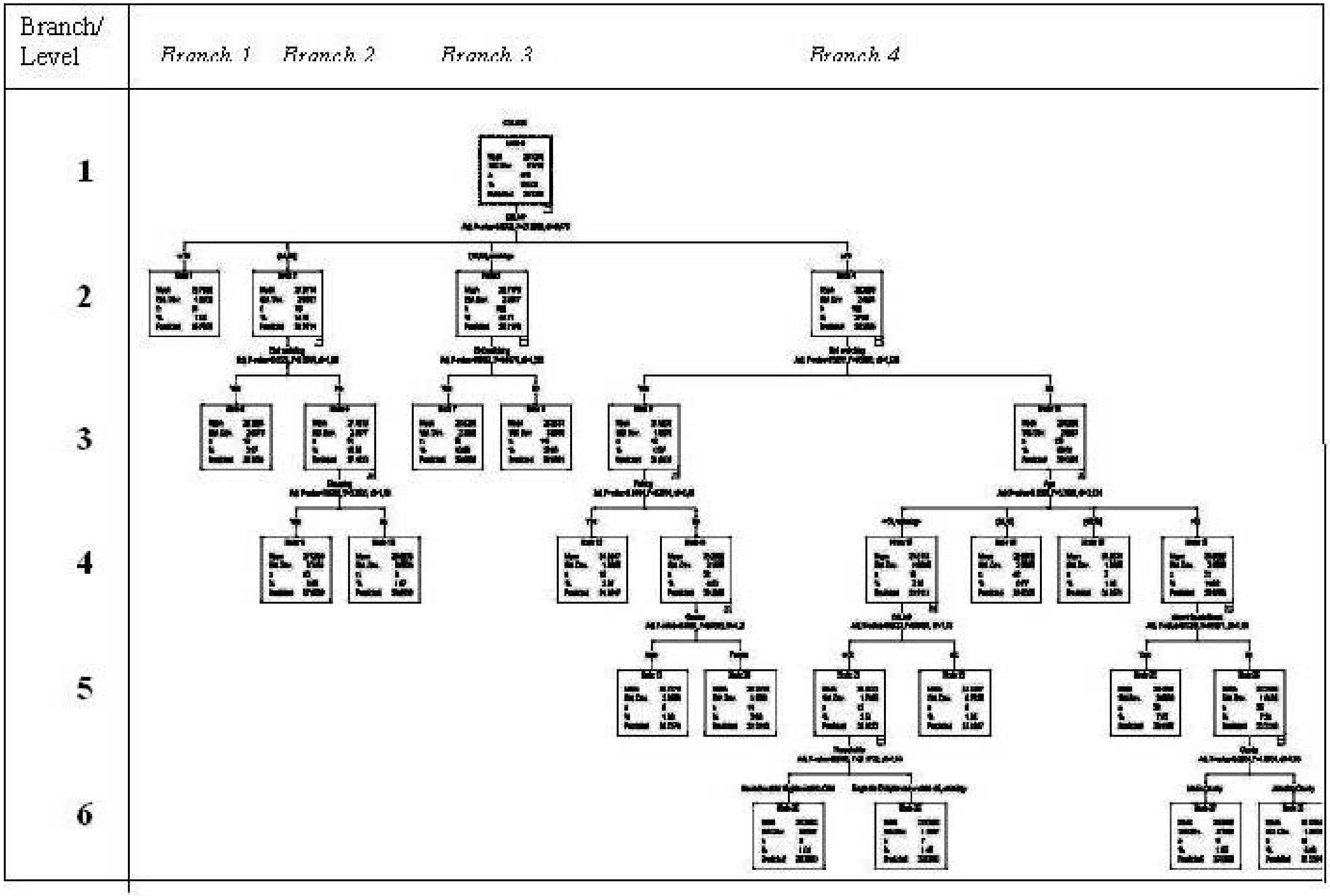
To verify the results of the decision trees based on the indexes that were created from Likert style questions, the Likert style questions were collapsed into dichotomies: stakeholders who support sustainable tourism development and stakeholders who oppose (or do not support) sustainable tourism development. Rationale for collapsing the data was that the measurement for the support for sustainable tourism index was based on artificial interval levels determined by the Likert style questions. By collapsing the data, it can be analyzed at a lower level of measurement that does not assume distances between intervals. The resulting index was then used to develop a decision tree (see Figure 4.17).

The results of this decision tree were similar to the decision trees that were based on the uncollapsed data, indicating that the results from those decision trees are supported. The primary split for both the uncollapsed and collapsed decision trees was based on the perceptions of tourism impact. Other statistically significant variables for the initial division were attendance to a local festival and participation in bird watching (see Table 4.22). Variables that were significant at level 2 on both decision trees were participation in bird watching and the age of the respondents. Additional variables that were identified in both trees were gender, household status and participation in recreational activities. The main difference between the two trees was that the initial split for the uncollapsed decision tree resulted in three branches, while the initial split for the collapsed decision tree resulted in four branches. There are also fewer nodes in the collapsed decision tree due to the loss of information that resulted from collapsing the data.

Table 4.22
Comparison of Predictors for Node 0 Uncollapsed and Collapsed Support for Sustainable Tourism Development Decision Tree

Node	Support for Sustainable Tourism Development Decision Tree (Uncollapsed)		Support for Sustainable Tourism Development Decision Tree (Collapsed)	
	Predictor	P value	Predictor	P value
0	Perceived Impact	>.01	Perceived Impact	>.01
	Bird Watch/ Did Not Bird Watch	>.01	Bird Watch/ Did Not Bird Watch	>.01
	Attend a Festival/ Did Not Attend a Festival	>.01	Attend a Festival/ Did Not Attend a Festival	>.01
	Photography/ Did Not Take Photographs	>.01		
	Gender	>.01		

Figure 4.17 Collapsed Support For Sustainable Tourism Development Decision Tree



5 Conclusions

5.1 Introduction

The purpose of this study was to explore and identify the variables that influence a stakeholder's support for or against sustainable tourism development and what variables influence a stakeholder's participation in tourism and political activities. Based on the review of the literature, variables were identified for use in the study. Variables identified were perception of tourism's impact (Perdue, Long & Allen, 1990, Vincent & Thompson, 2002), participation in recreational activities (McFarlane & Boxall, 2002) and general demographic characteristics (McFarlane & Boxall, 2002; Stein, Anderson & Kelly, 1999). Using the variables identified a questionnaire was developed and mailed to stakeholders in two rural North Carolina counties, Johnston and Martin. Responses were collected, coded, and analyzed. The analysis of the data was conducted employing SPSS and SPSS Answer Tree (see Chapter 3).

Chapter 4 reviewed the results of the data analysis. This chapter is a discussion of the results and there potential implications and applications. It is concluded with a discussion about future sustainable tourism research questions and challenges.

5.2 Discussion of the Results

This study addressed three research questions and three hypotheses. To answer those questions and to support or refute the hypotheses decision trees were developed using the CHAID algorithm in SPSS Answer Tree. Two decision trees were developed, and used to answer the questions (see figures 4.7 & 4.10).

5.2.1 Research Question 1 and Hypothesis 1

The first research question asked if differences exist between stakeholders, allowing identification of homogenous groups using perceptions of tourism impacts, general demographics and participation in recreational activities. This was expressed in H_1.

H_1: Differences in stakeholders' perceptions of tourism impact, demographic characteristics, and recreational participation exist so that homogeneous stakeholder groups can be identified.

H_0: Differences in stakeholders' perceptions of tourism impact, demographic characteristics, and recreational participation do not exist so that homogeneous stakeholder groups can be identified.

The results of this study, based on the decision trees (see figure 4.7 and 4.10), support H_1. Therefore, there is evidence that differences exist between stakeholders so that homogeneous groups can be identified. Three groups can be identified on the Support for Sustainable Tourism Development Decision Tree, and four groups can be identified on the Participation in Tourism and Political activities Decision Tree.

5.2.1.1 Groups on the Support for Sustainable Tourism Decision Tree

The three groups identified on the Support for Sustainable Tourism Development Decision Tree, were described as low supporters, moderate supporters, and high supporters (see section 4.6.9). Each group indicated some level of support for sustainable tourism development. These three groups can be separated into subgroups and those subgroups could be further separated resulting in a total of 22 groups. Each group is differentiated by multiple variables. For example a group that can be sub divided from the high supporters would be stakeholders who strongly perceive tourism has a positive impact on the community and did bird watch in 2002. This group is represented by node 8 on level 2 of the Support for Sustainable Tourism Development Decision Tree (figure 4.7). For further detailed information about each node refer to Appendix F.

5.2.1.2 Groups on the Participation in Tourism and Political Activities Decision Tree

Four groups were identified based on their reported participation in tourism and political activities (see figure 4.11). These four groups were the high participants, high-moderate participants, low-moderate participants, and low participants. Three of the four general groups can be divided into subgroups and those subgroups could be further divided resulting in a total of 25 groups. As with support for sustainable tourism, each group is differentiated by multiple variables. For example a group that can be sub divided from the high participants would be government officials who had lived in the county for over 45 years and did fish in 2002. This group is represented by node 16 on the Participation in Tourism and Political Activities Decision Tree (figure 4.11). For further detailed information about each node refer to appendix G.

Based on the results of this study different groups were identified by respondents' support for sustainable tourism, and their participation in tourism and political activities. Identifying the different groups in a community is just the first step in the sustainable tourism development process. With differing groups there are differing interests. Stakeholder involvement requires that attention be given to all the interests. Stakeholder involvement does not require that all stakeholders be involved equally in the decision making process, but it does require that all interests are identified and understood (Donaldson & Preston, 1995). Failure to identify and assimilate the interest of a primary stakeholder group could result in the failure of sustainable tourism development (Clarkson 1995). Failure would result in the tourism development being non sustainable, thereby increasing negative impacts on the community that will damage the resources and adversely affect the present and future stakeholders' quality of life.

5.2.2 Research Question 2 and Hypothesis 2

The second research question asked if perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' support for or against the development of sustainable tourism in a rural community. This was expressed in H_2:

H_2: Perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' support for or against tourism policy development

H_0: Perception of tourism impact, demographic characteristics and recreational participation do not influence stakeholders' support for or against tourism policy development.

The results, based on the Support for Sustainable Tourism Decision Tree (see figure 4.7), support H_2. Perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' support for or against sustainable tourism policy development. The variables that this study identified were; the respondents' perception of impacts, general demographics (age, gender, perspective) and their participation or lack of participation in recreational activities (bird watching, hiking, fishing, attending festivals) (see section 4.6).

The indication that stakeholders' perception of impact influences their support for sustainable tourism development verifies the results of Perdue, Long and Allen (1990) and Vincent and Thompson (2002). Based on these results, it is imperative to understand stakeholders' perception of tourism impact in order to understand their level of support for sustainable development. A more positive perception of impact indicates a more supportive stakeholder.

General demographic characteristics, more specifically age, gender, and perspective influence stakeholders' level of support for sustainable tourism development. This supports the findings of McFarlane and Boxall (2002) and Stein, Anderson and Kelly (1999). Stakeholders older than 72 years are less supportive than stakeholders younger than 72. Stakeholders who are female are more supportive than male stakeholders and stakeholders who are either residents or visitors are more supportive than the business owners and government officials.

This study also found that a stakeholder's participation in recreational activities influenced their support for sustainable tourism. This supports the findings by McFarlane and Boxall (2002). Stakeholders who participate in recreational activities are more supportive of sustainable tourism development than those who do not participate in recreational activities.

5.2.2.1 Support for Sustainable Tourism Stakeholders

As previously stated, based on the independent variables three groups with differing levels of support were identified in this study. These groups were low supporters, moderate supporters, and high supporters. Even with three groups identified the results indicated that in rural Eastern North Carolina stakeholders were generally not against sustainable tourism development. As Perdue, Long and Allen (1990) and Vincent and Thompson (2002) suggested, understanding a stakeholder's support is important so that predictions and plans can be developed to include the stakeholders in the tourism process.

To develop support for a sustainable tourism policy the planners should informed and educated the stakeholders about the development. The results imply that if the stakeholders perceive that a tourism development plan is sustainable they will generally support the plan and the development. If, however, they are left to try to interpret the tourism plan on their own, misunderstandings may occur resulting in the stakeholders perceiving that the tourism development is not sustainable. If stakeholders perceive that tourism development is not sustainable, they may take actions, legal and illegal, to stop or hinder the policy, plan or development as indicated by Markwick (2000) and Ioannides (1995).

The stakeholders that were identified as low supporters were low in their support for sustainable tourism development and perceived tourism had a negative impact on the community. For sustainability to be successful this group needs to be contacted and the reasons behind their perceptions of negative impacts understood, addressed and if possible resolved. One of the possible reasons for their negative perception could be lack of knowledge about the tourism industry in the county. There are indications from the results that low supporters may not be familiar with the tourism industry in their county, for example at least 50% of the respondents had never visited the local visitor's center. Because of their unfamiliarity with tourism low supporters may not be made aware of the positive impacts tourism can have in the community. Awareness should increase their level of support and understanding, which will allow for tourism development to be more sustainable. Low supporters should also have their interests included in any discussion on further development in the county, to address any future negative impacts to this group that may result from the tourism development.

Moderate supporters were moderate in their support for sustainable tourism development. They had a neutral, to moderately positive in their perceptions of tourism impact on the community. Moderate supporters are the largest group that was identified by the study, representing 64% of the respondents. Results indicated that this group had higher levels of participation in recreational activities in 2002 than the low supporters, but lower than the high supporters. Moderate supporters' participation in recreational activities suggests that they may have a better understanding of tourism in their community than the low supporters. The interests of this group may vary so it is important to identify them.

Moderate supporters are a very important stakeholder group in the community due to their numbers. Moderate supporters should be kept aware of all the tourism issues in the community and informed about the direct and indirect benefits received from the tourism industry in the county. Awareness of tourism in the will assist in maintaining the moderate supporters level of support and will allow for the moderate supporters to have an avenue to communicate their concerns with tourism planners.

High supporters indicated high levels of support for sustainable tourism development and perceived that tourism had a positive impact on the community. This group had strong positive ideas about tourism and would generally support sustainable tourism development. High supporters' positive ideas and beliefs towards tourism may be reflected in their participation in at least one recreational activity during 2002. Slightly over 76 % (76.19%) of the respondents in this group participated in at least one recreational activity in 2002. The respondents' participation in recreational activities implies that high supporters are active and many participate in either natural resource based activities such as bird watching or tourism activities such as attending a festival. The respondents' participation in recreation activities indicates that these stakeholders enjoyed some of the activities and resources that can be described as tourism related. Based on this participation, high supporters may be more aware than the other two groups of the positive impacts that tourism had on the county.

5.2.2.2 Summary of Support for Sustainable Tourism

Understanding stakeholder support can assist tourism planners and policy developers in identifying stakeholder groups and their interests. An individual's perception of tourism's impacts was indicated to be the strongest predicator of an individuals support for sustainable tourism development. The more positive the impacts that the respondent perceived tourism had on the community the more supportive they were to sustainable tourism. Therefore, there is a need to make sure that stakeholders have a positive perception of the impacts tourism has on the community. If they have valid reasons for their negative perceptions, the reasons should be addressed.

Differing perceptions of tourism's impact requires communication between rural community stakeholders for stakeholders. Communication must be two way. Stakeholders need to be informed about the positive and negative impacts tourism has on the community and ways of controlling or reducing the negative impacts. This will give the stakeholders a better understanding of tourism's relationship with the community, which should increase their positive perceptions of impacts in the community. By doing this tourism development can be conducted in a more sustainable manner. If the stakeholders do not support the tourism development there is a higher chance for failure because stakeholders will be involved directly or indirectly with the development in the future.

5.2.3 Research Question 3 Hypothesis 3

The third question asked if perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' active or passive participation in the sustainable tourism development process. This was expressed in H_3:

H_3: Perception of tourism impact, demographic characteristics and recreational participation that influence stakeholders' level of participation in tourism policy development.

H_0: Perception of tourism impact, demographic characteristics and recreational participation do not influence stakeholders' level of participation in tourism policy development.

The results of this study, based on the Participation in Tourism and Political Activities Decision Tree (see figure 4.11), support H_3. Therefore, perception of tourism impact, demographic characteristics and recreational participation influence stakeholders' level of participation in tourism policy development. Variables identified that influence an individual's participation in tourism and political activities were; the respondents perspective, perception of impact and their participation or lack of participation in recreational activities (bird watching, hunting, fishing, attending sports events) (see section 4.6).

The indication that stakeholders' perspective influences their level of participation supports the ideas expressed by Goeldner and Ritchie (2002). Stakeholders who are government officials participate more than business owners, business owners more that residents and residents more than the visitors. Therefore it is important to know the stakeholders' perspective in order to develop an idea of their level of participation.

The indication that a stakeholders' perception of impact influences their level of participation in tourism and political activities verifies the results of Perdue, Long and Allen (1990) and Vincent and Thompson (2002). Based on these results to understand a stakeholder's level of participation it is imperative to understand their perception of tourism impact. The more positive the perception of impact the more they will participate in tourism and political activities.

This study also found that stakeholders' participation in recreational activities influenced their participation in tourism and political activities. This supports the findings by McFarlane and Boxall (2002). Stakeholders who participate in recreational activities are more participative in tourism and political activities than those who do not participate in recreational activities.

5.2.3.1 Participation in Tourism and Political Activities Stakeholders

Four main groups that had differing levels of participation in tourism and political activities were identified in this study. The groups were identified by the Participation in Tourism and Political Activities Decision Tree and were; high participants, high-moderate participants, low-moderate participants, and low participants. The main predicator of participation in tourism and political activities was the respondent's perspective (residents, business owners, government officials and visitors) in tourism as indicated by Goeldner and Ritchie 2003. The high participants were comprised of the government officials. The high-moderate participants were comprised of the business owners. The low-moderate participants were comprised of the residents. The low participants were comprised of the visitors. It is not surprising that the government officials and business owners demonstrated the highest level of participation. It can be speculated that government officials and business owners are involved because of their jobs and they perceive a direct benefit from the participation.

The results suggest that individuals who participate in recreational activities may participate more in tourism and political activities as indicated by McFarlane and Boxall (2002). In three groups, there are indications that participation in recreational activities has a positive relationship with participation in tourism and political activities. It can therefore be speculated that if an individual is active in recreational activities they will be more active in political activities.

Results from this study show that a stakeholder's perception of the impact tourism has on the local community is an important indicator for residents' and business owners' participation in tourism and political activities as indicated by Perdue, Long and Allen (1990) and Vincent and Thompson (2002). Residents who perceived a more positive impact of tourism had higher levels of participation in tourism and political activities than other residents. Therefore, residents who perceive more negative impacts from tourism may not have their interests represented as well as those who perceive more positive impacts from the tourism development, due to their lack of participation.

Perceived impact split the business owners into three sub groups. The business owners on the two polar ends of the perceived tourism impact index were more participative than those clustered towards the center. The results from the business owners support Hunt and Haider (2001) findings that for business owners, in their case tourism operators, their participation is not positively related to their perceptions of impacts. This finding is important because those who perceive are strong in their perception either positive or negative of impacts will participate more then those who are moderate. This may omit a very important group from the sustainable tourism process.

Government officials and business owners will have a stronger influence over the development of tourism in their county, due to their position and indicated participation. Based on this, their interests are predominately represented in the general discussion of tourism development. This has been reported in the literature (Alipour, 1996; Ioannides, 1995). It is important for these stakeholders to be involved in the process. Based on the definition of stakeholders these two groups will influence tourism development. The business owners and to some extent the government officials will also be affected by the development.

Just as important in sustainable tourism development is making sure the residents and visitors are represented in the planning process. Both groups may have a limited ability to directly affect policy development but they will be the most affected. The visitors can be affected both positively and negatively by different tourism development plans. For example if a county increased the occupancy tax the visitor would be directly affected. The increase in occupancy tax could influence visitors to choose an alternative destination for their vacations. If this occurs the tourism industry in the county is adversely affected and the sustainability of the industry is lessened.

The visitor may not notice as much change as other groups but they need to be given the opportunity to express their interests. This could be done though visitor surveys, focus groups, and simple comment cards. Through these methods general interests can be identified. Identifying these interests will allow for the development to move in a direction that will not adversely impact the visitors. Also through this the visitors can be educated about reasoning behind policies so that they do not have negative perceptions of the policy. This could be done with occupancy taxes. If the visitor was informed that t he tax went to the development of tourism and tourism related businesses to better serve them they may not have as negative an attitude towards the tax.

The residents could potentially be the most affected group from tourism. The results of this study show that the residents have a low level of participation. Their interests must be identified and included in the discussion of tourism, if tourism is to be sustainable. Tourism planners need to develop techniques that will allow for this to be accomplished. Many use tourism advisory boards, town council meetings, public meetings, and other forms of citizen input. These techniques are employed when specific issues must be addressed like downtown redevelopment. This unfortunately does not include all the interests involved. This could be adequate at times but if there was a process in place where planners had a simple measure of the interests in the community then these interests could be constantly taken into account throughout the planning process and the development would be more sustainable. Also, the planners would have an idea of the information that the residents and other stakeholders may need or ask for so that they become better informed. This will allow the planners the ability to anticipate what they will need and will create a more proactive process and not reacting to questions.

5.3 Stakeholder Groups

Twelve stakeholder groups can be inferred based on the results described in Chapter 4. These twelve groups are the result of combining the groups identified in the Support for Sustainable Tourism Decision Tree with the groups identified in the Participation in Tourism and Political Activities Decision Tree. The twelve groups are described below under a sub heading that depicts the group.

5.3.1 High participant/ high supporters

High participant/ high supporters can be generalized as stakeholders who are government officials or are in governmental positions, they perceive that tourism has a major positive impact on the community, and they did not participate in natural resource based activities in 2002, but they did attend festivals and events in 2002. This group can be assumed to be familiar with tourism opportunities by their participation in tourism activities such as attending festivals. It can be speculated that the high participant/ high supporters' familiarity with a tourism product, such as festivals, gives them a better appreciation of how tourism positively impacts the community and this in turn influences them to be more supportive of sustainable tourism development. High participant/ high supporters will be involved in most major decisions in the county in which they live or work, including those related to sustainable tourism development.

High participant/ high supporters are important group in the sustainable tourism development process. This group would support most sustainable tourism activities and be active in getting them initiated and developed. Just as important, this group will be in a position to block any tourism plan and product development that they might perceive as being non-sustainable.

5.3.2 High participant/ moderate supporters

High participant/ moderate supporters can be generalized as stakeholders who are government officials or are in governmental positions, perceive that tourism has a positive impact on the community and did not participate in natural resource based activities in 2002. The main difference between the high participants/ moderate supporters and the high participants/ high supporters was their perception of the impact tourism has on the community. High participant/ moderate supporters perceived that the impact tourism has on the community is less positive than the high participant/ high supporters.

The high participant/ moderate supporters may be skeptical of radical changes in the tourism industry. They may require convincing if there are not obvious benefits from the development and if they do not perceive the tourism plan to be sustainable. However, this group would probably not initiate a sustainable development plan if they did not perceive obvious benefits of a tourism product or development. In addition the concepts underlying any plan or development should be sustainable

5.3.3 High participant/ low supporters

High participant/ low supporters can be generalized as stakeholders who are government officials or are in governmental positions, who perceive tourism does not have a positive impact on the community, lived in a town or urban area, and they had not visited the local visitor's center and had not participated in any motor sports in 2002. It can be inferred from the results that high participant/ low supporters were not familiar with tourism opportunities in their community. High participant/ low supporters may be a group that would support non-sustainable tourism activities as well as sustainable tourism activities. Also, there may be some sustainable tourism activities that this group would not support, such as the preservation of a natural area that the high participant/ low supporters may perceive as being a good location for industrial development.

High participant/ low supporters may indicate the strongest opposition for any sustainable tourism development. They need to be assured of the benefits of any type of tourism development on the community and the costs that are associated with development that could be considered unsustainable. It is important that there concerns be addressed and that the high participant/ low supporters be informed of the contributions to the community that sustainable tourism makes and will continue to make in the future.

3.3.4 High-moderate participant/ high supporters

High-moderate participant/ high supporters can be generalized as stakeholders who are business owners, who perceive tourism has a major positive impact on the community, did not participate in natural resource based activities in 2002, and did attend festivals and events in 2002. It can be inferred from the results that this group was familiar with tourism opportunities and participate in some tourist activities such as attending a festival. Similar to the high participant/ moderate supporters, their familiarity with a festival which is a tourism product gives them a better appreciation of how tourism positively impacts the community and this in turn influences them to be supportive of sustainable tourism development. This group would support most sustainable tourism activities.

High-moderate participant/ high supporters need to be informed about any tourism policies or plans that will be developed. This group will be involved in sustainable tourism development as long as they are aware of the tourism plan and are given an opportunity to participate. Therefore communication is vital for this group. Communication with high-moderate participant/ high supporters as well as the other groups discussed can be conducted in multiple ways. These include email, newsletters, newspaper announcements, and public meetings. As previously stated, whatever type of communication strategy planners decide to employee there must be a way for the stakeholders to respond back to the planners.

3.3.5 High-moderate participant/ moderate supporters

High-moderate participant/ moderate supporters can be generalized as stakeholders who are business owners that perceive tourism had a positive impact on the community and did not participate in natural resource based activities in 2002. They will be involved in the process as long as they perceive positive benefits to themselves, but will not take a leadership position in the development of sustainable tourism. This group needs to be kept aware of the benefits tourism has for them and their business, so that they will continue to support sustainable tourism development. High-moderate participant/ moderate supporters need to be made aware of the long-term benefits of sustainable tourism development.

3.3.6 High-moderate participant/ low supporters

High-moderate participant/ low supporters can be generalized as stakeholders who are business owners, they perceive tourism does not have a positive impact on the community, lived in a town or urban area, and did not visit the local visitor's center. Inferences can be made from the results that this group may not be as familiar with tourism opportunities in their community as other groups. High-moderate participants/ low supporters may be a group that would support non-sustainable tourism activities as well as sustainable tourism activities. Also, there may be some sustainable tourism activities that this group would oppose.

This group should be identified and contacted to discover the reasons for their negative perceptions of tourism's impacts. Once their interests are understood they should be addressed. Addressing the interests may came in the form of attempting to lessen negative impacts that affect this group and also informing the stakeholders to resolve any misconceptions about tourism. This group may need to be made aware of the positive impacts tourism has on the community and specifically the impacts to their business. For this group to support sustainable tourism they would have to be shown that the development benefited them directly. For example, the amount of taxes the stakeholder does not have to pay because of taxes collected from tourism related activities and developments.

3.3.7 Low-moderate participant/ high supporters

Low-moderate participant/ high supporters participants can be generalized as stakeholders who are residents, they perceive that tourism has a major positive impact on the community, they did not participate in natural resource based activities in 2002, but did attend festivals and events in 2002. Even though this group represents low to moderate participants they are important to the sustainable tourism process based on their high level of support. Low-moderate participant/ high supporters should be encouraged to participate more in both tourism and political activities. Unless they become more active this group will have little influence on what type of tourism development policies are implemented. Low-moderate participant/ high supporters will, however, always influence the success of these policies and will be affected by them. Impacts form non-sustainable developments that can affect the residents include, traffic congestion, increases in property values, and pollution.

3.3.8 Low-moderate participant/ moderate supporters

Low-moderate participant/ moderate supporters can be described as stakeholders who are residents, they perceive that tourism has a positive impact on the community and they did not participate in natural resource based activities in 2002. This group should be encouraged to participate more in both tourism activities and political activities. Similar to low-moderate participant/ high supporters this group will have little influence on the type of tourism policies are implemented unless they become more involved, but they will influence the success of these policies and will be affected by them. Low-moderate/ moderate supporters, as well as other host community stakeholders, will interact with visitors to the community. If this interaction is positive than tourism in the community is strengthened.

3.3.9 Low-moderate participant/ low supporters

Low-moderate participant/ low supporters can be identified as stakeholders who are residents, they perceive tourism does not have a positive impact on the community, lived in a town or urban area, they have not visited the local visitor's center and they had not participated in any motor sports in 2002. Due to them not visiting the visitor's bureau, it can be inferred from the results that low-moderate participant/ low supporters were not familiar with tourism opportunities in their community.

Low-moderate participant/ low supporters will have limited participation in sustainable tourism development and only on issues that they perceive directly affecting them. They will view any tourism development initiatives with skepticism. This group will need to be made aware of tourism's benefits before they will support the tourism plan or development. In addition they may have little influence on tourism policy development, but as with every other group will influence the success of these policies and will be affected by them.

3.3.10 Low participant/ high supporters

Low participant/ high supporters can be described as stakeholders who are visitors to the county, who perceive that tourism has a major positive impact on the community, who did not participate in natural resource based activities in 2002, and who did attend festivals and events in 2002. Low participant/ high supporters will have limited participation in sustainable tourism policy development, because they do not live in the area. It is important to understand that even though the visitors are considered low participants and will have limited influence on policy development, they will, like the residents, be impacted by the policy and will be extremely influential in the success of any sustainable tourism process. Therefore it is important to be aware of their concerns and wants, and account for them in the tourism development process. If they perceive that a tourism development in the area is not sustainable or that new development is non-sustainable they may decide not to visit the area in the future. For example if development of a new lodging facility degrades the natural environment the low participant/ high supporters may decide to travel to another location.

3.3.11 Low participant/ moderate supporters

Low participant/ moderate supporters can be outlined as stakeholders who are visitors to the local community, they perceive that tourism has a positive impact on the community and they did not participate in natural resource based activities in 2002. It is important to understand that even though the visitors are considered low participant/ moderate supporters and they will have limited to no influence on policy development, they will be impacted by the policy and will be extremely influential in the success of any sustainable tourism process. Therefore, it is important to understand their concerns and wants and account for them in the tourism development process.

3.3.12 Low participant/ low supporters

Low participant/ low supporters can be delineated as stakeholders who are visitors to the local community, they perceive tourism does not have a positive impact on the community, they reside in a town or urban area, they have not visited the local visitor's center and have not participated in any motor sports in 2002. It can be inferred from the results that low supporters were not as familiar with tourism opportunities in the county. It is important to understand that even though the visitors are considered low participants and they will have limited to no influence on policy development, they will like the residents be impacted by policy and will be extremely influential in the success of any sustainable tourism process. As with the low participant/ moderate supporters, it is important to be aware of low participant/ low supporters concerns and wants and account for them in the tourism development process.

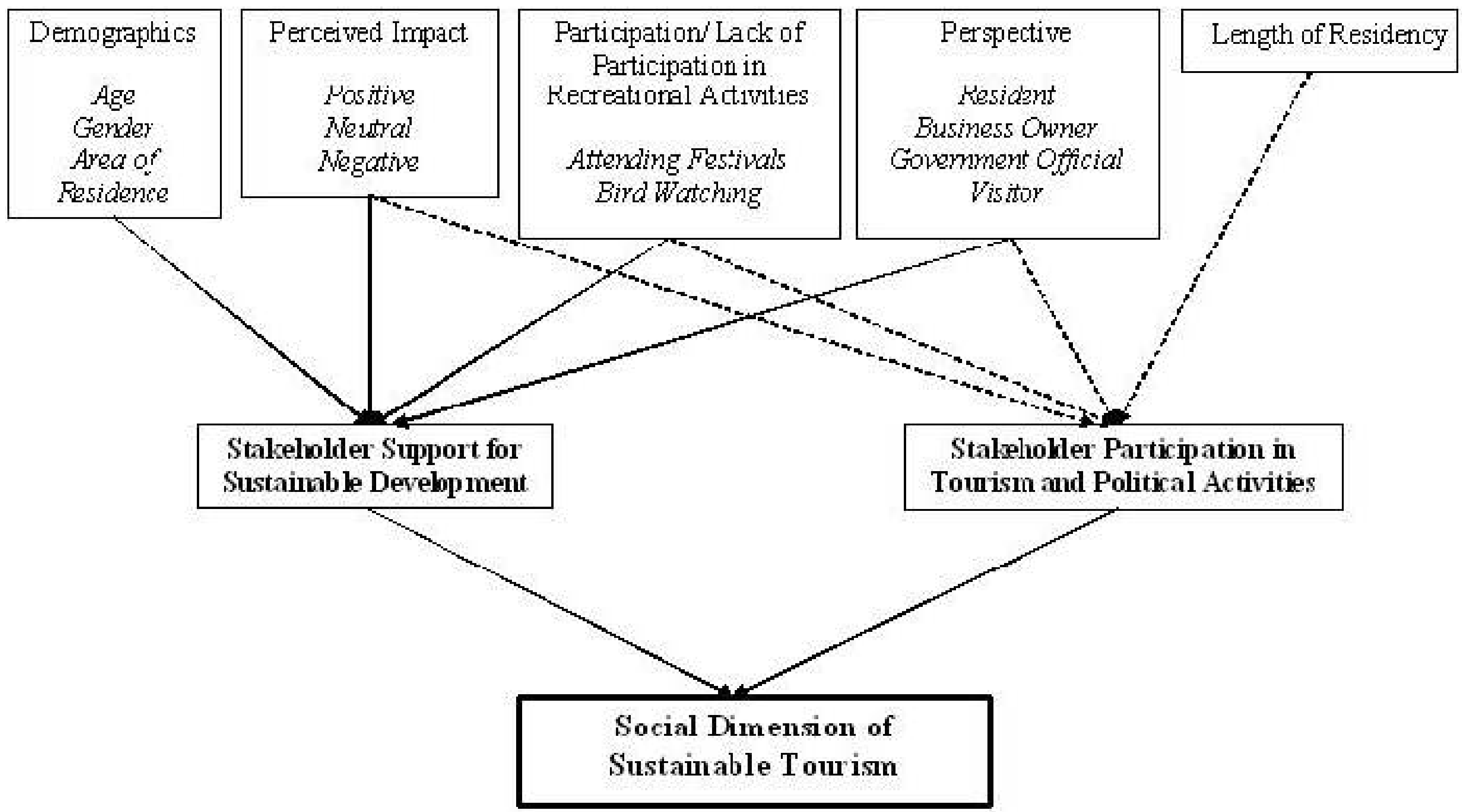
3.3.13 Summary of Stakeholder Groups

Sections 3.3.1 through 3.3.12 have described multiple stakeholder groups that may be present in the community. With multiple stakeholder groups there are multiple interests that can range from groups that are pleased with tourism in their community and are active in the planning of future tourism policies and developments to groups that are skeptical of any new tourism development because they perceive that they and their community are negatively impacted by tourism but do not express their interests. This study investigated two components, support and participation, of the social dimension of sustainable tourism and some of the variables that influence them to develop a better understanding of stakeholder groups and their interests (figure 5.1).

There are other variables that may influence a stakeholder's support and participation and therefore the stakeholder's interests. There are also other components that may influence the social dimension of sustainable tourism. These variables and other components are discussed in Section 5.5 Recommendations for Further Research.

Sustainability implies that stakeholders should be involved in the tourism development process. Stakeholders have been defined as those who can affect and/or are affected by tourism. Logic dictates then that for tourism development to be sustainable any individual who can affect or are affected by the development should have the opportunity to be involved and / or have their interests identified and taken into consideration

Figure 5.1
Components of the Social Dimension Model



5.4 Applications

5.4.1 Theoretical Application

Grounded in the literature is the idea that sustainable tourism can be described as having three dimensions; the environmental (both natural and built), the economic (both community and business) and the social (both host and visitor) (see figure 5.2). As previously indicated in the literature review, Chapter 2, the majority of the current tourism literature has investigated the environmental and economic dimensions of sustainable tourism. The literature that has focused on the social dimension has been predominately descriptive in nature.

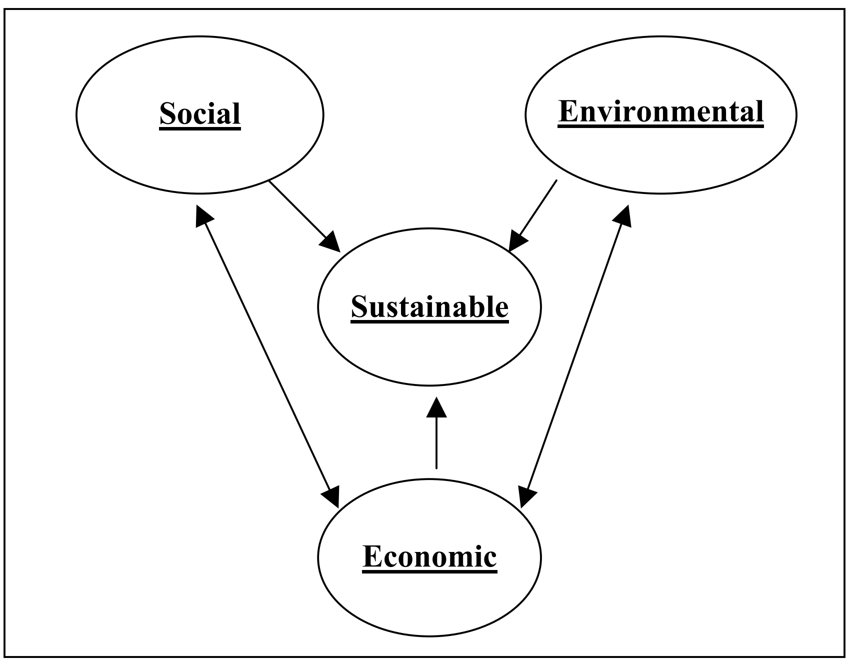


Figure 5.2 Dimensions of Sustainable Tourism and Their Relationship
(Adapted from Swarbrooke, 2000)

The study described in this dissertation investigated the variables that influence stakeholder support and participation. Support and participation are components of the social dimension of sustainable tourism. The results of this study indicated variables that influence a stakeholder's support for sustainable tourism and variables that influence a stakeholder's participation in tourism and political activities (see figure 5.1). Groups were formed using decision trees based on the variables. These groups can then be used to predict stakeholder behavior, and to develop strategies for including stakeholder interests in the tourism development process.

Figure 5.1 displays the relationship between the variables that influence support and participation. Support and participation interact and influence the social dimension of sustainable tourism in relations to the stakeholders in the community. The social dimension is interrelated to the economic and environmental dimensions and each of the three influence the others (figure 5.2). All three dimensions combine to form the concept of sustainable tourism.

5.4.2 Practical Application

This research has shown that community planners and destination management organizations need to be concerned with all stakeholders in the community. Traditionally, the concern is with the visitor, informing them of the attractions and facilities in the community in hopes they will travel to the region. Based on this study, the ideas of sustainability, and stakeholder theory there is a need for these organizations to communicate within the local community as well as the visitor. Educating and informing the local community will strengthen the tourism industry. It will also allow for a stronger understanding of the tourism impacts that the community perceives and the actual impacts that result from tourism.

Many professionals have discussed stakeholder inclusion in the tourism development process but it has not been fully realized. There is a perception in the tourism field that stakeholder involvement is difficult or impossible to accomplish. Some professionals would argue that due to limited resources, time and money, it cannot be done by destination management organizations (DMO) and other planning groups. The job of these groups is tourism marketing and product development. From their perspective tourism marketing and product development does not include stakeholder involvement. This perspective then would not lead to sustainable development. Without stakeholder involvement the term sustainable development would just be a marketing slogan or at best a topic for theoretical debate. The limited resource argument would support the idea that sustainable development is a utopian concept that will never be realized.

The DMO or other tourism planners in developing the product have been focusing on the tangible parts of the product or destination such as the number of rooms, the buildings, and the natural resources. This neglects the other aspect of the product, the intangible part. The author proposes that the intangible part of the tourism product is the over all experience for all stakeholders, not just the visitors. This is where the social component of tourism and more notably sustainable tourism is most prevalent. For

DMO's to develop the product they must incorporate both the tangible and intangible aspects of tourism for all stakeholders.

To develop sustainable tourism, DMO's must begin to develop the whole product and include the interests of all stakeholders. Including the interests of stakeholders will help to reduce conflict before it gets out of control. Including the interests of the stakeholders cannot keep conflict between stakeholders from occurring, but it can provide the parties a mechanism to discuss their disagreements in a constructive manner. Stakeholders need to be made aware of the other interests in the community so that they can understand the reasoning behind tourism policies and developments. Ioannides (1995) demonstrated the outcome of tourism development that dose not take the interests of the stakeholders into account and keeps the stakeholders informed in his study of Akamas, Cyprus discussed in the literature review.

There are occasions and circumstances when stakeholders cannot be contacted due to time constraints. This is when knowing beforehand the interests in the community and being able to predict the way stakeholders would view a new tourism policy will be valuable. Being able to predict an individual's or group's level of support will allow for better planning and crises management.

Including stakeholders in the process calls for a new approach in tourism professional development. Traditionally tourism professional training has centered on resource management, marketing, and planning. Based on this study as well as many others reviewed in the literature the training needs to be expanded. Tourism professionals must begin to learn how to incorporate the interests of multiple stakeholder groups in their plans. Tourism professionals must begin to learn to inventory not only the physical resources but also the stakeholders and their interests. The study described in this dissertation is a step towards that process.

5.4.3 Discussion of Decision Tree Application

The use of decision trees in tourism is a new way to approach many concepts that are integral to tourism such as marketing, planning and quality of life. Decision trees have been used in the past with patient research such as, *Quality of Life in HIV/ AIDS Patients* and *Patient Satisfaction with Management Care* (The Measurement Group, 2003), and marketing research such as consumer profiling (Eherler & Lehmann, n.d.).

By using decisions trees many of the stakeholder groups in a community can be identified. Stakeholder identification is important for stakeholder management. Unlike the traditional method of stakeholder mapping that relies simply on the research knowledge and perceptions, the decision tree process is grounded in statistics using ANOVA and Chi Square making it a stronger tool for stakeholder management.

Decision trees are a parsimonious technique that can facilitate interpretation and understanding for tourism professionals about many of the topics and interests related to tourism. The parsimonious nature of decision trees is based on the descriptive and visual nature of the methods output. Variable interaction can be visually shown to tourism professionals such as DMO executives, state travel directors and community planners facilitating ease in explanation and application of the results from the decision tree.

5.5 Recommendations for Further Research

The research discussed in this dissertation should be used as a foundation to expand and continue the research on the social dimension of sustainable development. The author recommends that each variable used in this study, both independent and depend be investigated further. The author further recommends that this study be refined, strengthened and then duplicated to gain a better understanding of the variable that influence stakeholders and sustainable tourism.

There is a need to develop and strengthen the three indices that were used in this study. The refining of each index should evolve into the development of scales that measure support and participation in relation to sustainable tourism development. Babbie states that scales "offer more assurance of ordinality by tapping structures among the indicators" (p 176). The development of the scales would further and strengthen the understanding of stakeholder participation and support and ultimately the social dimension of tourism.

The independent variables that were indicated as having influence on a stakeholder's support and or participation should be investigated further to gain a better understanding of how they influence stakeholders and sustainable tourism. There is a strong indication from this study that a person's participation or lack of participation in recreational activities had an influence in their support and participation in sustainable tourism development. Because different areas and counties have different recreational opportunities and activities, it may be better to develop a list that consists of activities that can be classified as either consumptive or non consumptive, natural resource based vs. non-natural resource based, social or non social recreational activities. Such lists will not only allow for comparisons between different regions, and increase the generaliziabilty of the measure, but also will help in the understanding of types of activities that influence a stakeholder's support and participation.

The importance of demographics needs to be investigated further. There were indications in this study that basic demographics, age and gender, have an influence of a stakeholder’s level of support. It is important to continue this path of investigation to develop an understanding of these variables. It appears that women were more supportive than men and that the younger a stakeholder was the more supportive they were. If these results can be confirmed in other studies then a better understanding of their contribution to the social dimension of sustainable tourism can be developed.

The other demographic variables that should be included in future studies included; ethnicity, race, disability, and proximity to proposed development. Does a person with a disability view sustainability differently? What are the interests of this population and are they different that other groups? As for proximity to development does the closer one lives to a potential development impact their support and participation. These are research questions that deserve further investigation.

Most of the tourism literature, as discussed in Chapter 2, has investigated individual stakeholder groups in a community. Research focused on tourism stakeholders in a community needs to expanded and investigate multiple stakeholder groups in the community. This dissertation focused on stakeholders and investigated them with the purpose of identifying if stakeholder groups can be differentiated, described and explained. The results provide some evidence that different groups can be identified and that there are variables that influence their support for sustainable tourism development. The next step is to continue this line of research. Further research should focus on incorporating multiple stakeholder groups. Differences and similarities of multiple stakeholder groups in a community are important and need to be studied further, to assist in developing an understanding of stakeholders and their influence on sustainable tourism development.

This study focused on two components of the social dimension of sustainable tourism. Other components such as culture, history, power, interest, equity and stakeholder interaction need to be investigated and understood. There is also a need for qualitative research in these areas to gain a more in depth understanding of each component, support and participation, and the variables that influence them and ultimately influence the social dimension of sustainability.

Research needs to be conducted on the interrelationship between the three dimensions of sustainable tourism (figure 5.2). Only when all three dimensions are investigated together will a better understanding of sustainable tourism be developed. One way to research the three dimensions and their interrelationship would be an intensive case study. One region or county would be selected and each dimension of sustainability would be studied during the same period. Then the relationships between the dimensions can be fully studied.

This study asked general questions about sustainable tourism development. Future research should develop more specific questions about sustainable tourism development.

Questions could focus on a specific development, policy, plan or program in the community. This will give respondents a more concentrate idea of what is being asked and they will be able to respond to a specific situation instead of an abstract or theoretical concept. Those results can be compared to this study for validity purposes and reliability. This would indicate actual behavior towards sustainable tourism development and not just perception of the situation. A study that is focused on a specific development, plan, policy or program in the community could also increase the response rate, which will decrease the non-response bias of a study.

The findings from this study can only be generalized to stakeholders in rural Eastern North Carolina. More studies need to be conducted in different regions of the state, such as the mountains and the coast and in different rural and urban settings. There may be similarities in the results, but there is a need to identify these similarities and also the differences to develop a fuller understanding of the variable that influence a stakeholder's support for sustainable tourism and participation in tourism and political activities.

The results of this study can assist tourism planners with developing tourism in a manner such that stakeholder interests can be incorporated into the tourism plan. Identifying stakeholder groups is only one step in the sustainable development of tourism in an area. There are many other requirements discussed in the literature review that must be addressed. Each dimension needs to be fully understood if true sustainable development is to be accomplished.

Until now the social dimension of sustainable tourism has only been identified and described as a part of sustainable tourism. The social dimension has remained a shadowy and fuzzy concept lacking clarity and systematic study. This study investigated two components, support and participation, of the social dimension of sustainable tourism and the variables that influence them. By exploring these components and variables, this dissertation has begun the process of elucidating the social dimension of sustainable tourism development.

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7 Appendices

7.1 Appendix A

Weaver, E.B. (1990). Grand Cayman Island and the resort cycle concept. *Journal of Travel Research, 29 (2)*, 9-15.

This article represents an attempt to assess the validity of Butler's resort cycle within the context of non-plantation small island locations. It begins with a general overview of Butler's resort life cycle and Weaver's expansion and modification of it dealing with plantation style resorts. Weaver used secondary data sources to compile the information need to compare each stage of the resort life cycle with the history of development in the Grand Cayman Island.

Using the development of tourism on the Grand Cayman Island as a case study, Weaver compared historical data with the different stages of the resort life cycle. The first stage is the exploration stage. This stage is characterized by a small number of visitors having little to no effect on the destination. Weaver found that this stage was reflected in the first settlement of the Island to the 20th century.

The second stage of the resort cycle is the involvement stage. The second stage is characterized by an increased number of visitors and locals beginning to provide specialized services for the visitors. Weave again found that the above characteristics were found in the Grand Cayman Island history. One major exception was that outside investors developed most of the tourism services and not the local residents.

The third stage is the development stage. This stage is characterized by the decline in local community involvement and the increase in specialized facilities and services. During this stage the government takes a more active role in the development of tourism. The government did become more involved and established controls in development of the area. Weaver found a deviation form the resort model in that during this stage the local community began to take more control over the development of the tourism product.

7.2 Appendix B

Johnston County Tourism Study

North Carolina State University is conducting research on tourism development and its impacts in Johnston County. This study is investigating the attitudes and perceptions a community has about tourism and tourism development. The results of this study will assist Johnston County and other areas in understanding how the community views tourism development and the needs and wants of the community.

You were selected from a random sample of residents in Johnston County. Only a small sample of people are being surveyed, therefore your answers are very important. Your answers will be kept confidential. After completing the questionnaire please return it in the business reply envelope provided and drop it in the mail by ***May 1, 2003***.

If you have any questions please feel free to contact Erick Byrd at 919/515-9571.

Thank you,

Erick T Byrd
Research Assistant
North Carolina State University

For the following questions, please write your answers in the space provided or circle the appropriate answer.

1. How long have you lived in Johnston County? _____ year(s) or _____ month(s)

2. Please circle the town you live in?

1-Benson	2-Clayton	3-Cleveland Area
4-Four Oaks	5-Kenly	6-Micro
7-Pine Level	8-Princeton	9-Selma
10-Smithfield	11-Wilson's Mills	12-I Do Not Live in Town

3. What is your zip code? __________

4. Have you ever visited the Johnston County Visitor's Center at the Historic Lee House (located near Carolina Outlet Center)? (circle one)

1- Yes 2- No

5. Please circle the local festivals you attended <u>in the last year</u>?

1-Ham and Yam Festival	2-"Taste of Johnston County"	3-Show at The Clayton Center
4-American Music Jubilee	5-Four Oaks Acorn Festival	6-Selma Railroad Days
7-Community Christmas Parade	8-Howell Woods Feral Pig Hunt	9-State Annual Singing Convention in Benson
10-Tobacco Farm Life Museum Event	11-Johnston County Community College Concert Series	12-Smithfield-Selma Small Business & Technology Expo
13-Strawberry Festival	14-Clayton Harvest Festival	15-Benson Little Theatre
16-Brookhill Steeplechase	17-Other (please specify) ____________________	

6. The following are statements about tourism and its relationship with the natural environment. Please circle the number that most represents your view of each statement.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	Tourism protects the environment.	1	2	3	4	5
B	Tourism creates new jobs.	1	2	3	4	5
C	Tourism activities should be integrated with the county's conservation programs.	1	2	3	4	5
D	Tourism development should be discouraged when it harms the natural environment.	1	2	3	4	5
E	Economic gains are less important than the natural environment.	1	2	3	4	5
F	Tourism must be managed so that the environment is sustainable over time.	1	2	3	4	5
G	Tourism must not be allowed to damage natural resources.	1	2	3	4	5
H	In general, all tourism development is friendly to the environment.	1	2	3	4	5
I	There is a lack of educational opportunities to learn more about the environment.	1	2	3	4	5
J	Environmental education programs lead to improvements in natural resources.	1	2	3	4	5
K	The environment needs more protection.	1	2	3	4	5
L	Children need to learn about the environment.	1	2	3	4	5
M	A community's economic stability is more important than its environmental concerns.	1	2	3	4	5

7. Which of the following recreational activities have you participated in over the last year <u>since January 2002</u>.

1-Hunting	2-Bird Watching	3-Fishing	4-Motor Sports
5-Gardening	6-Photography	7-Golf	8-Shopping
9-Attend a Festival	10-Tennis	11-Camping	12-Hiking
13-Attend Sports Events	14-Other (please specify)____________________		

8. The following statements discuss tourism developed in your community. Please circle the number that most represents your view of each statement.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	The restoration of historical sites promotes tourism.	1	2	3	4	5
B	Tourism should be managed to meet the needs of the present.	1	2	3	4	5
C	Tourism should be managed to meet the needs of the future.	1	2	3	4	5
D	Tourism development should respect the scale, nature, and character of Johnston County.	1	2	3	4	5
E	Involvement of residents in environmental activities enhances tourism.	1	2	3	4	5
F	The tourism industry is a disruptive force that undermines integrity of Johnston County.	1	2	3	4	5
G	Economic development funds should be used to promote tourism.	1	2	3	4	5
H	Local government should be involved in tourism development.	1	2	3	4	5
I	Tourists should pay more than local residents to visit parks and outdoor recreation facilities.	1	2	3	4	5
J	Tourists should pay a special tax on hotel and motel room fees.	1	2	3	4	5
K	I am happy with the way tourism is being developed in my community.	1	2	3	4	5
L	I consider my county a tourist destination.	1	2	3	4	5

9. Which of the following attractions in Johnston County have you visited since January 2002.

1-Ava Gardner Museum	2-Bentonville Battlegrounds	3-American Music Jubilee
4-Howell Woods	5-Benson Museum of Local History	6-Johnston County Heritage Center
7-Atkinson's Mill	8-Clemmons Educational State Forest	9-Tobacco Farm Life Museum

The following questions are about your participation in community activities in the last year (2002).

10. Did you vote in the November 2002 general election?

1- Yes   2- No

11. Please circle the number of city and county council meetings you attended since January 2002.

0   1-3   4-6   7-9   10-12   13+

12. Have you run for a governmental office?

1- Yes   2- No

13. Were you a member of the Chamber of Commerce at any time?

1- Yes   2- No

14. The following statements are about how tourism may influence Johnston County. When answering these questions, think about tourism your community. Please circle the number that most represents your view of each statement.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	I have more money because of increased tourism.	1	2	3	4	5
B	Tourism decreases unemployment.	1	2	3	4	5
C	Shopping facilities benefit from tourism.	1	2	3	4	5
D	Tourism development increases the traffic problems.	1	2	3	4	5
E	Tourism development increases property taxes.	1	2	3	4	5
F	Tourism development increases crime.	1	2	3	4	5
G	Tourism reduces the quality of outdoor recreational opportunities.	1	2	3	4	5
H	Increased tourism improves the local economy.	1	2	3	4	5
I	Tourism development increases the number of recreational opportunities for local residents.	1	2	3	4	5
J	Tourism development improves a community's appearance.	1	2	3	4	5
K	Tourism development increases a community's quality of life.	1	2	3	4	5
L	Stricter laws are needed to protect the environment.	1	2	3	4	5
M	Tourism produces long-term negative effects on the environment.	1	2	3	4	5

The last few questions are about you. Your answers will help us to better understand the residents of Johnston County. Your answers will be kept confidential.

15. Please circle the highest level of education you complete.

1- grade school	2- some high school	3- high school graduate	4- some college
5- technical school	6- college degree	7- some graduate school	8- graduate degree
9- advanced graduate degree	10- professional degree	11- other (please specify)	

16. What year were you born?____________

17. What is your gender? 1 - Male 2 – Female

18. Please circle the response that represents you household.

1- Single no children	4- Single with children under 18
2- Married no children	5- Single with children over 18
3- Married with children under 18	6- Married with children over 18

19. What is your occupation?____

20. Do you belong to an environmental organization?

1- No
2- Yes. Please list the organizations to which you belong:_____________________________
____

If there are any additional comments that you would like to add please do so below.

Thank you for taking the time to participate in this study. Your answers are very important and will be kept confidential. Please post your questionnaire in the Business Reply envelope provided *__by May 1, 2003__*. If you have any questions please contact Erick Byrd at 919-515-9571.

Appendix C

Johnston County Tourism Study

Recently you received a questionnaire asking your attitudes and perceptions about tourism and tourism development in Johnston County. If you have completed and returned the questionnaire, Thank you! If you have not filled out the questionnaire, please take a few minutes to do so and return it in the business reply envelope that was included in with the questionnaire. Remember only a small sample of people are being surveyed, therefore your answers are very important. Your answers will be kept confidential. If your survey has been misplaced and you would like a new one, please call or email.

If you have any questions please feel free to contact Erick Byrd at 919/515-9571.

Thank you,

Erick T Byrd
Research Assistant
North Carolina State University
etbyrd@unity.ncsu.edu
919/515-9571

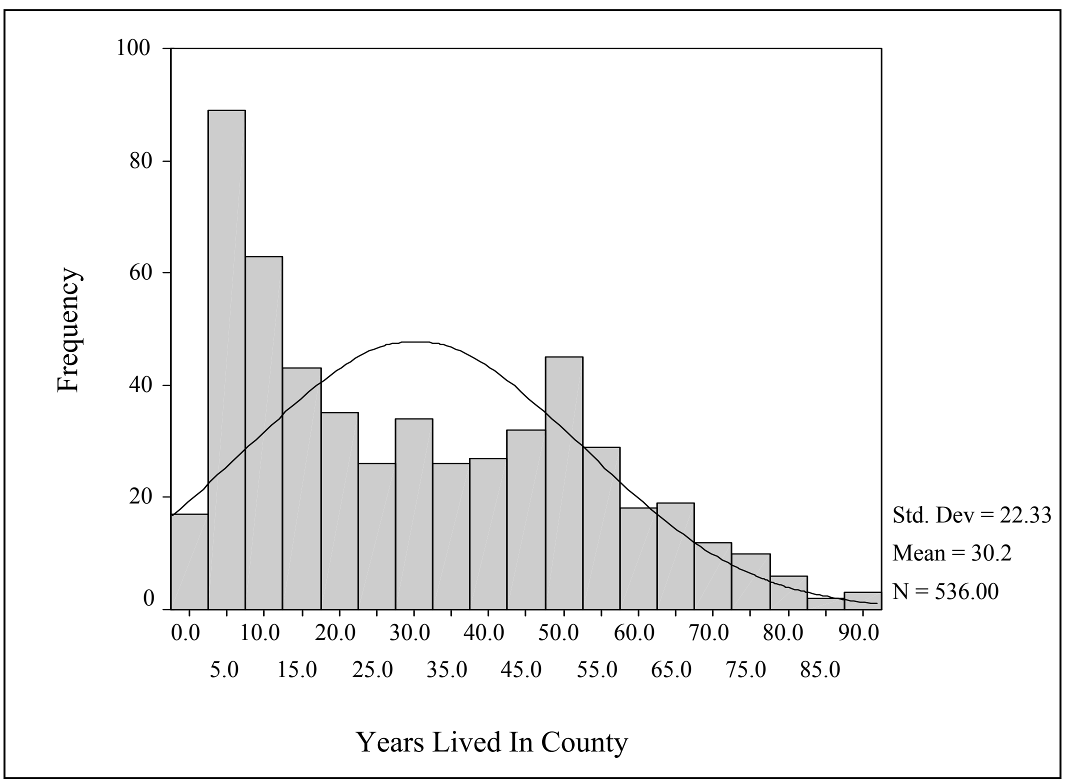
7.4 Appendix D

Detailed Results

This appendix discusses every item that was used on the questionnaire (Appendix B) whether it was used in the study or not. For a complete discussion of the items that were used in the study refer to chapter 3 the results. Each question will be discussed as it appeared on the questionnaire.

The first question (Question 1) of the study asked respondents how long they had lived in the community. The mean number of years a respondent had lived in their county was 30.17 years. The responds ranged from 0 to 91 years and had a standard deviation of 22.33 (see figure D.1). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents had lived in their home community between 0 and 74.83 years.

Figure D.1 Number of Years Respondents Lived in Their Home County



Question 2 asked respondents if they lived in a town or urban area. Over 74% of the respondents indicated that they lived in either an urban area or town, while 24% lived in a rural location (see table).

Table D.1
Area Respondents Lived In

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Urban	407	74.70	75.70	75.70
	Rural	131	24.00	24.30	100.00
	Total	538	98.70	100.00	
Missing	9	7	1.30		
Total		545	100.00		

The next question (Question 4) asked respondents if they had ever visited their local visitor's center. Slightly over one third of the respondents 36.4 indicated that they had visited the local visitors center (see table D.2).

Table D.2
Visited Visitor Center

Response	Frequency	Percent	Cumulative Percent
Yes	195	36.40	36.40
No	341	63.60	100.00
Total	536	100.00	

Question 5 asked respondents what festivals and events they had attended in 2002. The respondents were added together to get an idea of the number of local festivals a stakeholder attended in a year. The mean number of festivals attended was 2.20. The responds ranged from 0 to 14 years and had a standard deviation of 2.34 (see figure D.2). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents attended between 0 and 6.88 festivals in 2002 year.

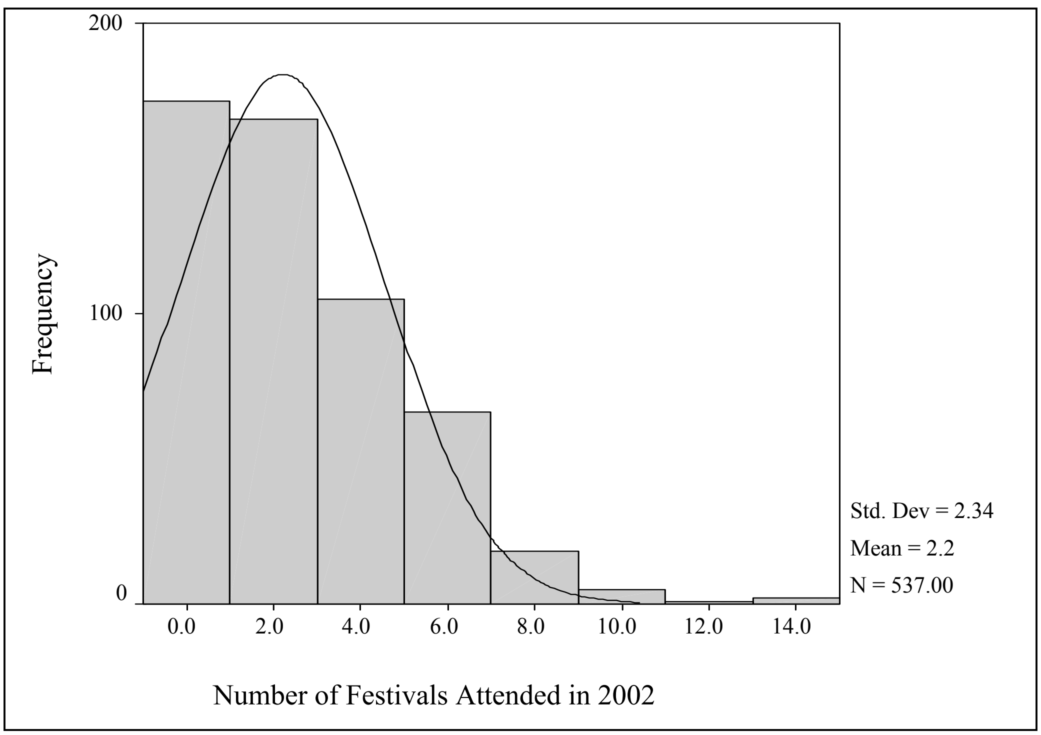


Figure D.2 Number of Festivals Attended by Respondents in 2002

Question 6 asks the respondents to answer 13 Likert style items. Each item is a statement that respondents are asked to indicate their disagreement or agreement with. A 1 represented strong disagreement and a 5 represented strong agreement with the statement.

Item 6A stated that tourism protects the environment. Responses ranged form 1 to 5 (see table D.3). The mean score was 3.01 and a standard deviation of .89. Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1.31 to 4.88.

Table D.3
Tourism protects the environment.

Score		Frequency	Percent	Valid Percent	Cumulative Percent
	1	23	4.20	4.50	4.50
	2	109	20.00	21.50	26.00
	3	239	43.90	47.00	73.00
	4	115	21.10	22.60	95.70
	5	22	4.00	4.30	100.00
	Total	508	93.20	100.00	
Missing	9	37	6.80		
Total		545	100.00		

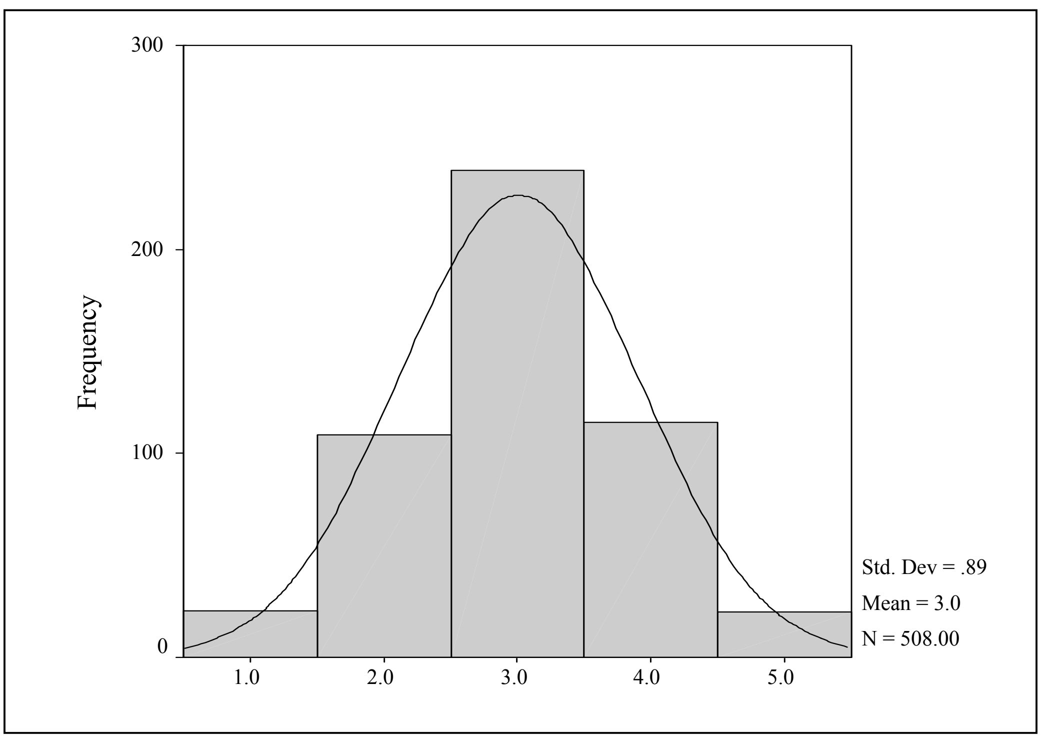


Figure D.3 Histogram of Responses to “Tourism protects the environment”.

Item 6B stated that tourism creates new jobs. Responses ranged form 1 to 5 (see table). The mean score was 4.16 and a standard deviation of .76 (see figure). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.64 to 5.

Table D.4
Responses to Statement "Tourism creates new jobs"

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	5	.90	1.00	1.00
	2	16	2.90	3.10	4.10
	3	36	6.60	6.90	11.00
	4	295	54.10	56.90	68.00
	5	166	30.50	32.00	100.00
	Total	518	95.00	100.00	
Missing	9	27	5.00		
Total		545	100.00		

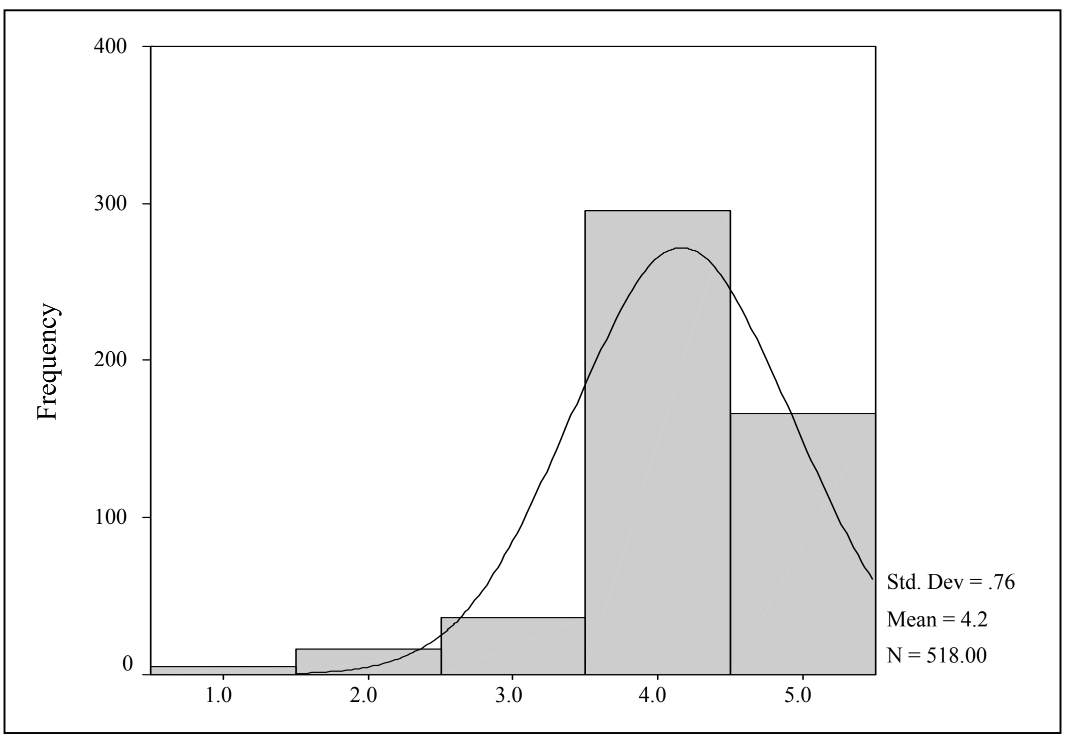


Figure D.4 Histogram of Responses to "Tourism Creates New Jobs".

Item 6C stated that tourism activities should be integrated with the county's conservation programs. Responses ranged form 1 to 5 (see table D.5). The mean score was 3.81 and a standard deviation of .85 (see figure D.5). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.10 to 5.

Table D.5
Responses to Statement "Tourism activities should be integrated with the county's conservation programs".

Score		Frequency	Percent	Valid Percent	Cumulative Percent
	1	9	1.70	1.80	1.80
	2	20	3.70	3.90	5.70
	3	133	24.40	25.90	31.60
	4	249	45.70	48.50	80.10
	5	102	18.70	19.90	100.00
	Total	513	94.10	100.00	
Missing	9	32	5.90		
Total		545	100.00		

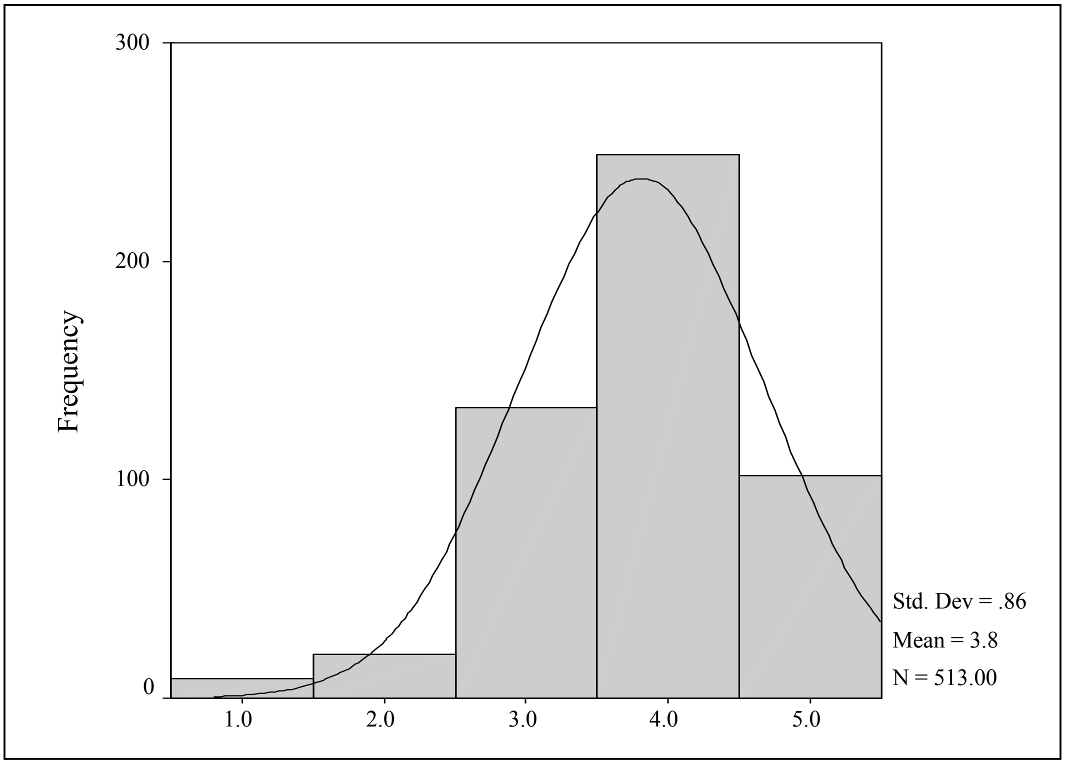


Figure D.5 Histogram of Responses to "Tourism activities should be integrated with the county's conservation programs".

Item 6D stated that tourism development should be discouraged when it harms the natural environment. Responses ranged form 1 to 5 (see table D.6). The mean score was 3.97 and a standard deviation of .957 (see figure D.6). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.06 to 5.

Table D.6
Responses to Statement "Tourism development should be discouraged when it harms the natural environment".

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	2.60	2.70	2.70
	2	26	4.80	5.00	7.70
	3	84	15.40	16.10	23.80
	4	234	42.90	44.80	68.60
	5	164	30.10	31.40	100.00
	Total	522	95.80	100.00	
Missing	9	23	4.20		
Total		545	100.00		

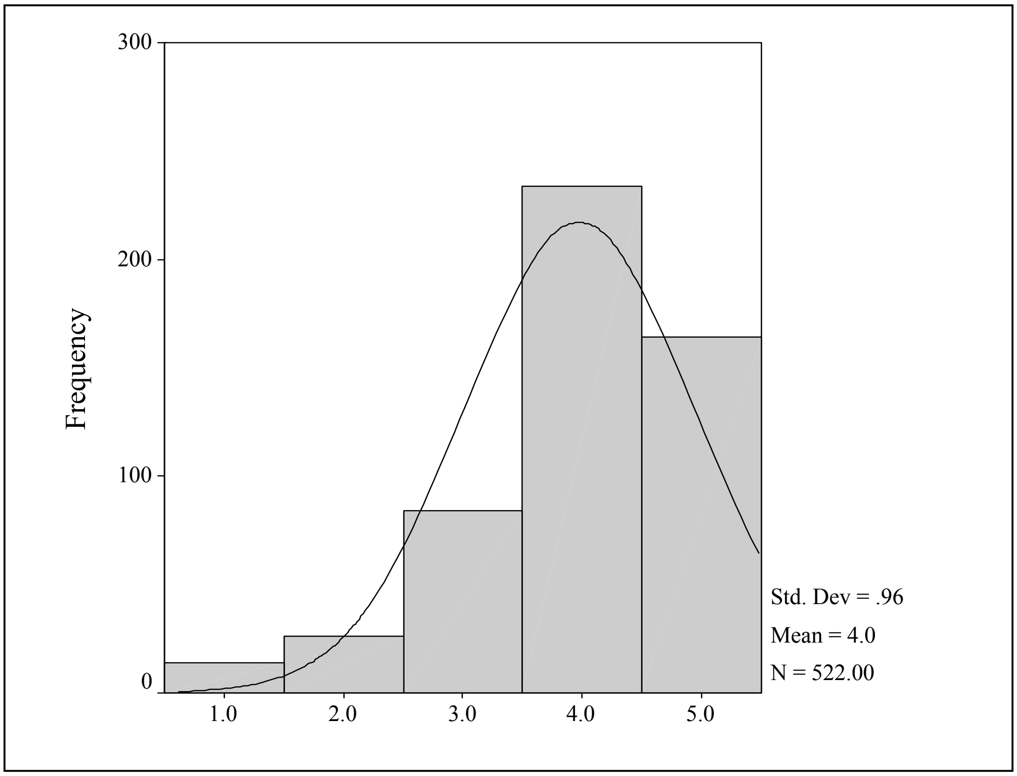


Figure D.6 Histogram of Responses to “Tourism development should be discouraged when it harms the natural environment”.

Item 6E stated that economic gains are less important than the natural environment.. Responses ranged form 1 to 5 (see table D.7). The mean score was 3.30 and a standard deviation of 1.10 (see figure D.7). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1.10 to 5.

Table D.7
Responses to Statement “Economic gains are less important than the natural environment”.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	27	5.00	5.20	5.20
	2	106	19.40	20.40	25.60
	3	1	.20	.20	25.80
	3	144	26.40	27.70	53.50
	4	170	31.20	32.70	86.20
	5	72	13.20	13.80	100.00
	Total	520	95.40	100.00	
Missing	9	25	4.60		
Total		545	100.00		

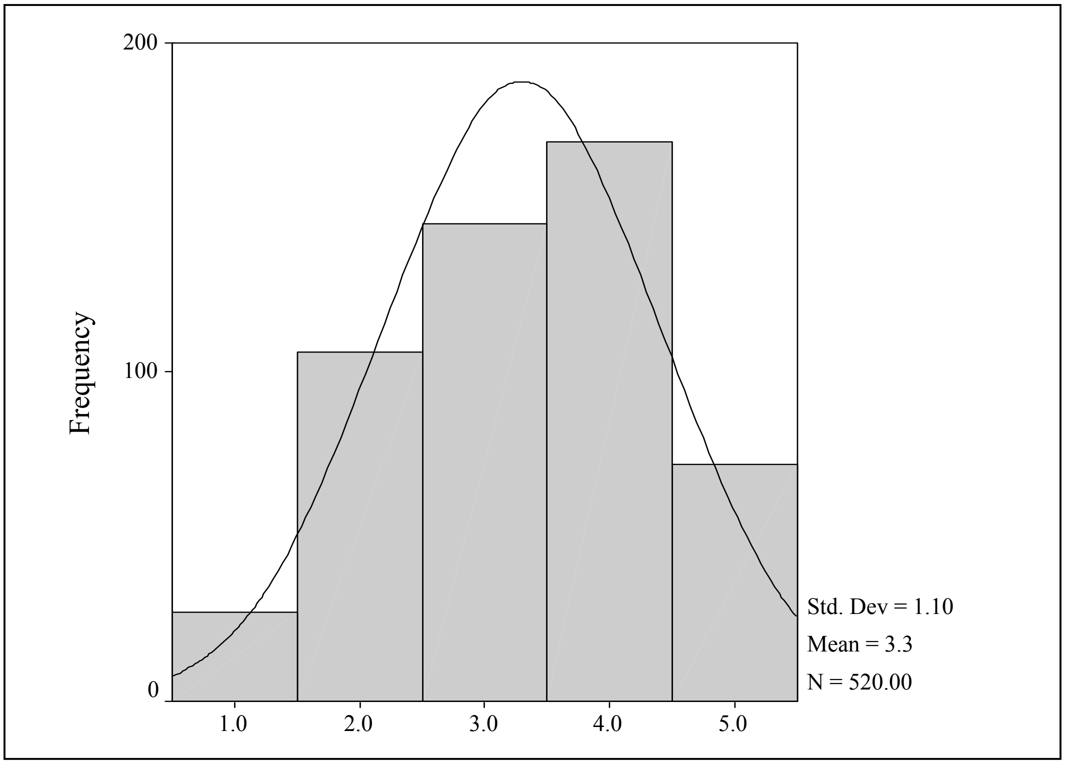


Figure D.7 Histogram of Responses to “Economic gains are less important than the natural environment”.

Item 6F stated that tourism must be managed so that the environment is sustainable over time. Responses ranged form 1 to 5 (see table D.8). The mean score was 4.09 and a standard deviation of .72 (see figure D.8). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.65 to 5.

Table D.8
Responses to Statement, “Tourism must be managed so that the environment is sustainable over time”.

Score		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	1.10	1.20	1.20
	2	6	1.10	1.20	2.30
	3	58	10.60	11.20	13.60
	4	309	56.70	59.90	73.40
	5	137	25.10	26.60	100.00
	Total	516	94.70	100.00	
Missing	9	29	5.30		
Total		545	100.00		

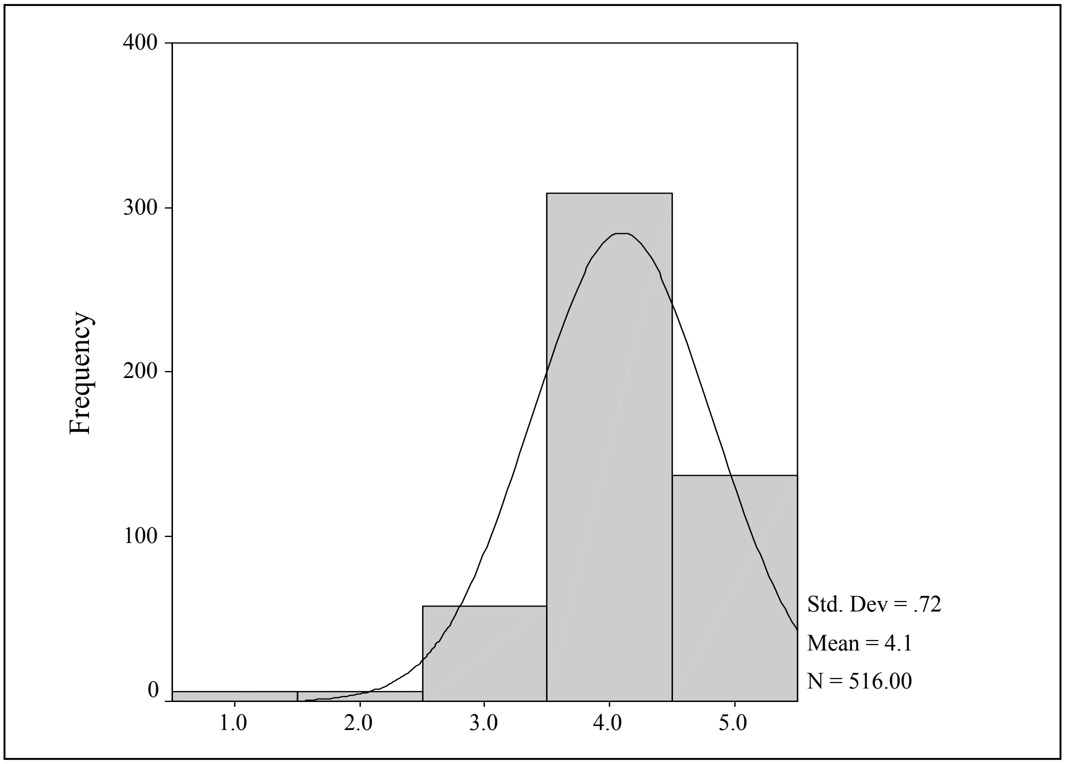


Figure D.8 Histogram of Responses to “Tourism must be managed so that the environment is sustainable over time”.

Item 6G stated that tourism must not be allowed to damage natural resources. Responses ranged form 1 to 5 (see table D.9). The mean score was 4.13 and a standard deviation of .84 (see figure D.9). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.45 to 5.

Table D.9
Responses to Statement “Tourism must not be allowed to damage natural resources”.

Score		Frequency	Percent	Valid Percent	Cumulative Percent
	1	8	1.50	1.50	1.50
	2	20	3.70	3.80	5.40
	3	47	8.60	9.00	14.40
	4	268	49.20	51.30	65.70
	5	179	32.80	34.30	100.00
	Total	522	95.80	100.00	
Missing	9	23	4.20		
Total		545	100.00		

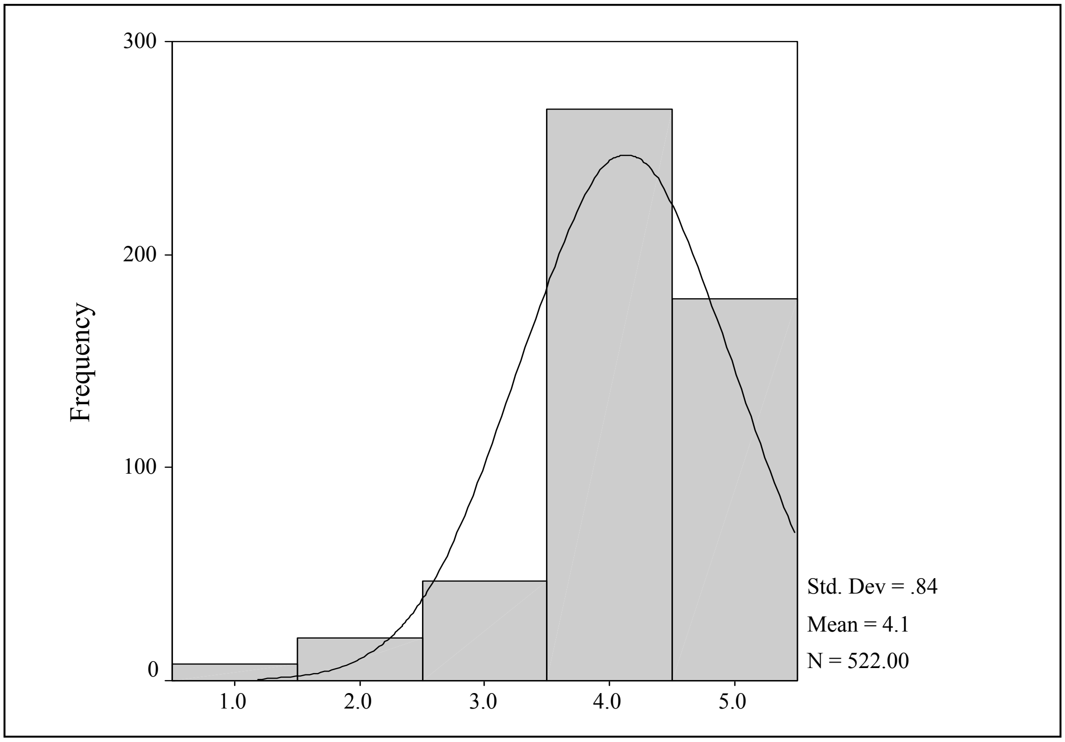


Figure D.9 Histogram of Responses to “Tourism must not be allowed to damage natural resources”.

Item 6H stated that in general, all tourism development is friendly to the environment. Responses ranged form 1 to 5 (see table D.10). The mean score was 2.80 and a standard deviation of 1.04 (see figure D.10). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1 to 4.88.

Table D.10
Responses to the Statement, “In general, all tourism development is friendly to the environment.”

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	37	6.8	7.1	7.1
	2	192	35.2	37.1	44.2
	3	1	.2	.2	44.4
	3	148	27.2	28.6	73.0
	4	115	21.1	22.2	95.2
	5	25	4.6	4.8	100.0
	Total	518	95.0	100.0	
Missing	9	27	5.0		
Total		545	100.0		

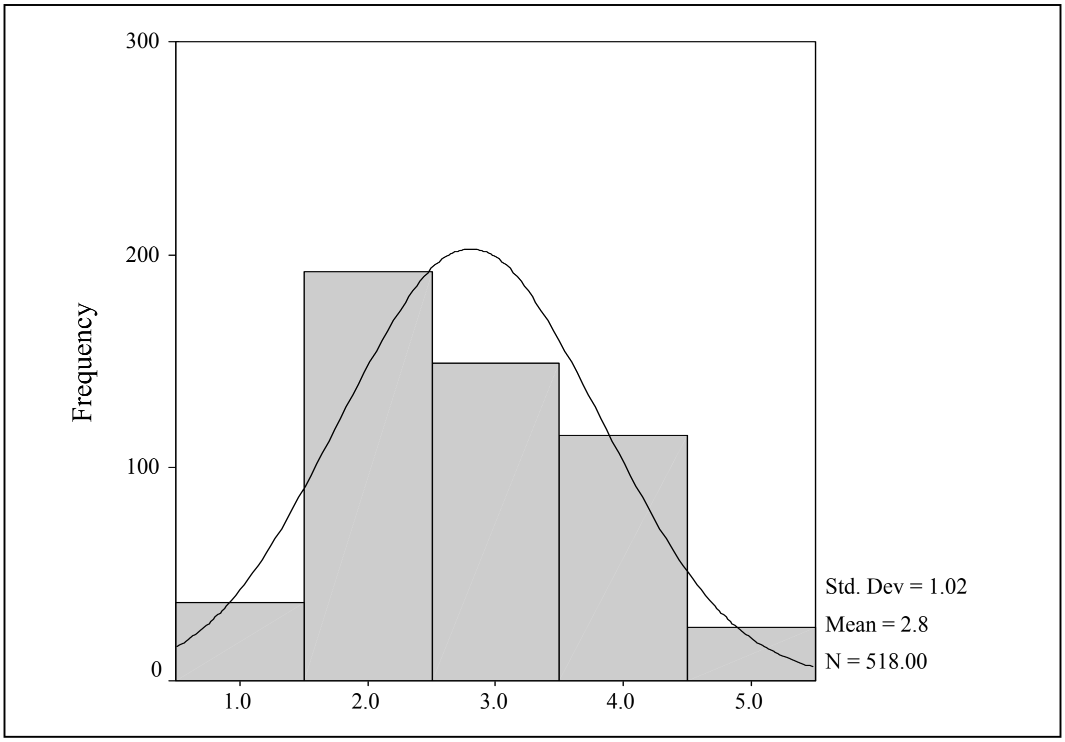


Figure D.10 Histogram of Responses to, "In general, all tourism development is friendly to the environment."

Item 6I stated that there is a lack of educational opportunities to learn more about the environment. Responses ranged form 1 to 5 (see table D.11). The mean score was 3.48 and a standard deviation of .72 (see figure D.11). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.05 to 4.91.

Table D.11
Responses to the Statement, "There is a lack of educational opportunities to learn more about the environment".

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	12	2.20	2.30	2.30
	2	49	9.00	9.50	11.80
	3	172	31.60	33.30	45.10
	4	249	45.70	48.20	93.20
	5	35	6.40	6.80	100.00
	Total	517	94.90	100.00	
Missing	9	28	5.10		
Total		545	100.00		

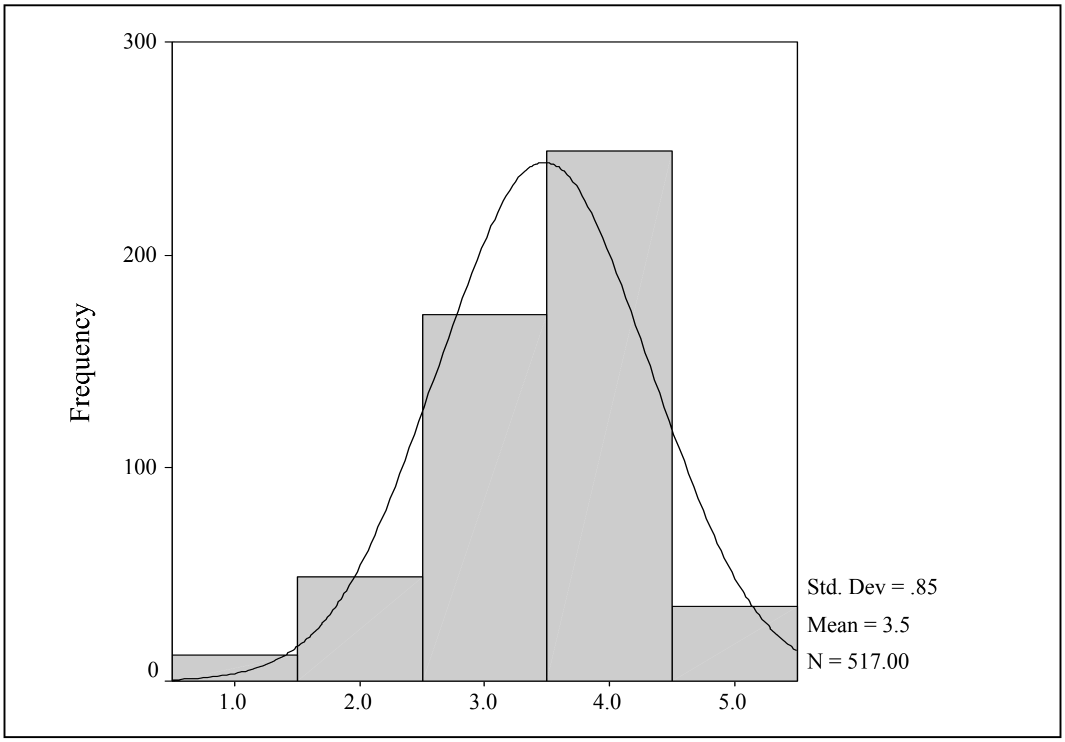


Figure D.11 Histogram of Responses to, "There is a lack of educational opportunities to learn more about the environment".

Item 6J stated that environmental education programs lead to improvements in natural resources. Responses ranged form 1 to 5 (see table D.12). The mean score was 3.93 and a standard deviation of .73 (see figure D.12). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.47 to 5.

Table D.12
Responses to the Statement, "Environmental education programs lead to improvements in natural resources".

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	1.1	1.2	1.2
	2	7	1.3	1.4	2.5
	3	101	18.5	19.5	22.0
	4	308	56.5	59.5	81.5
	5	96	17.6	18.5	100.0
	Total	518	95.0	100.0	
Missing	9	27	5.0		
Total		545	100.0		

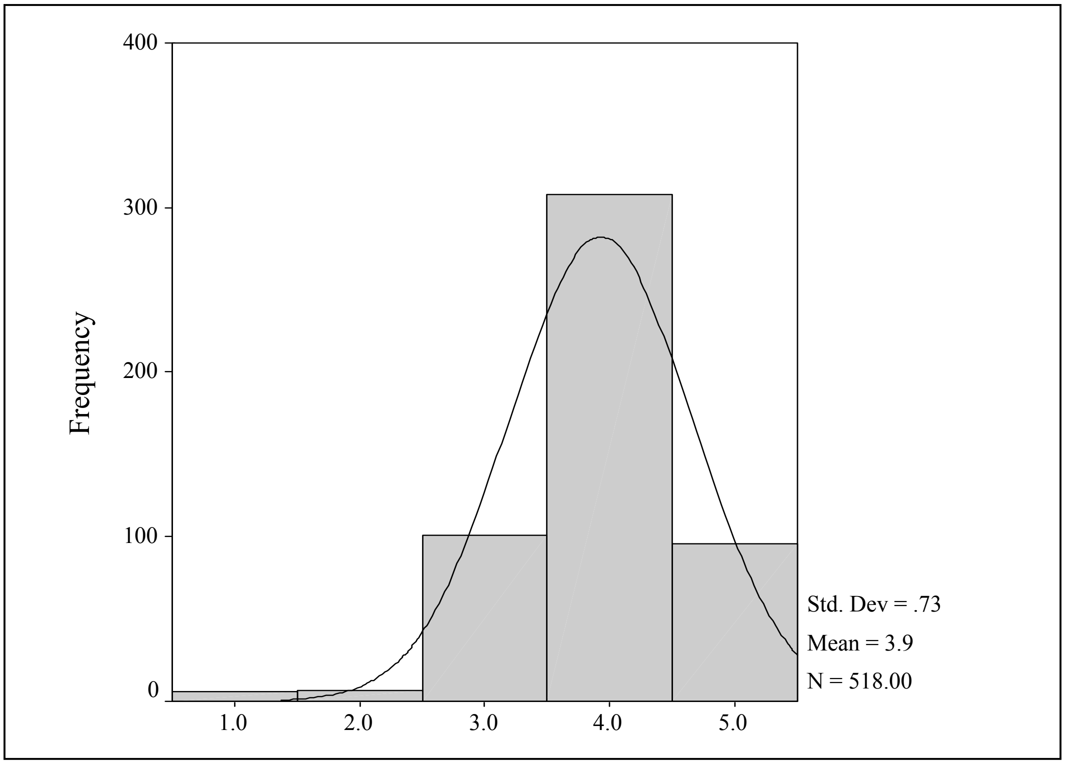


Figure D.12 Histogram of Responses to "Environmental education programs lead to improvements in natural resources".

Item 6K stated that the environment needs more protection. Responses ranged form 1 to 5 (see table D.13). The mean score was 3.89 and a standard deviation of .92 (see figure D.13). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.04 to 5.

Table D.13
Responses to the Statement that "The environment needs more protection".

Score		Frequency	Percent	Valid Percent	Cumulative Percent
	1	6	1.1	1.1	1.1
	2	36	6.6	6.9	8.0
	3	112	20.6	21.4	29.4
	4	227	41.7	43.4	72.8
	5	142	26.1	27.2	100.0
	Total	523	96.0	100.0	
Missing	9	22	4.0		
Total		545	100.0		

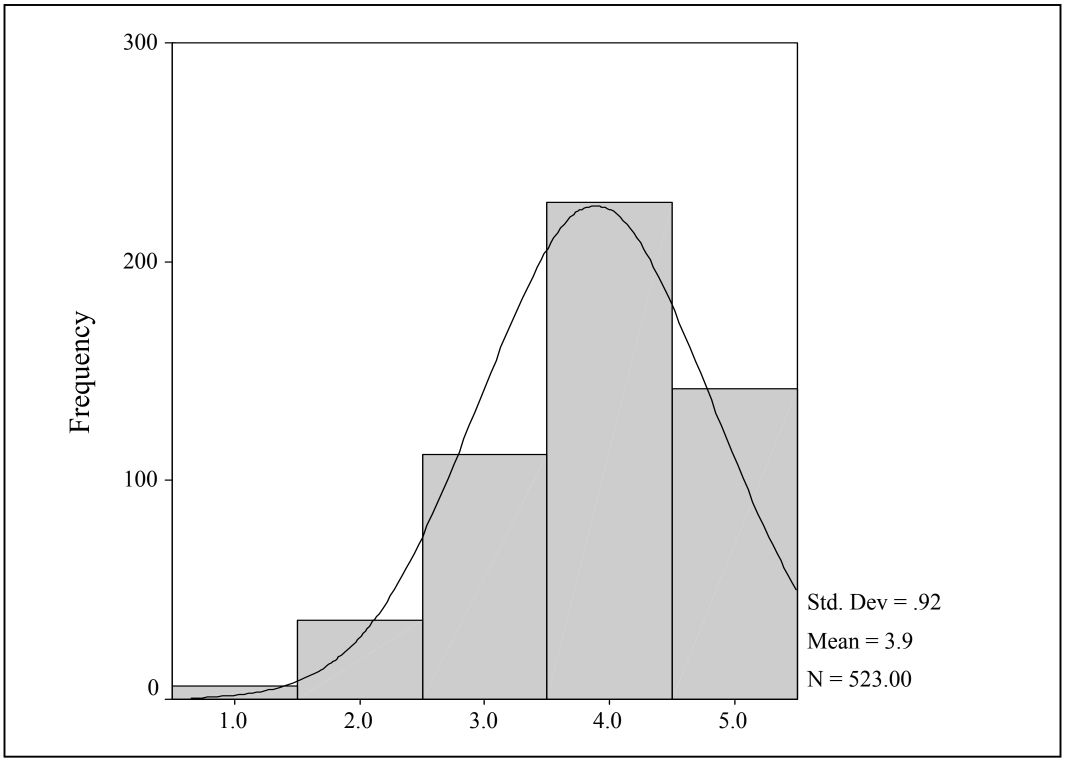


Figure D.13 Histogram of Responses to "The environment needs more protection".

Item 6L stated that children need to learn about the environment. Responses ranged form 1 to 5 (see table D.14). The mean score was 4.33 and a standard deviation of .66 (see figure D.14). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 3.01 to 5.

Table D.14
Responses to the Statement that Children need to learn about the environment.

Score		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	.6	.6	.6
	2	1	.2	.2	.8
	3	35	6.4	6.7	7.5
	4	262	48.1	50.3	57.8
	5	220	40.4	42.2	100.0
	Total	521	95.6	100.0	
Missing	9	24	4.4		
Total		545	100.0		

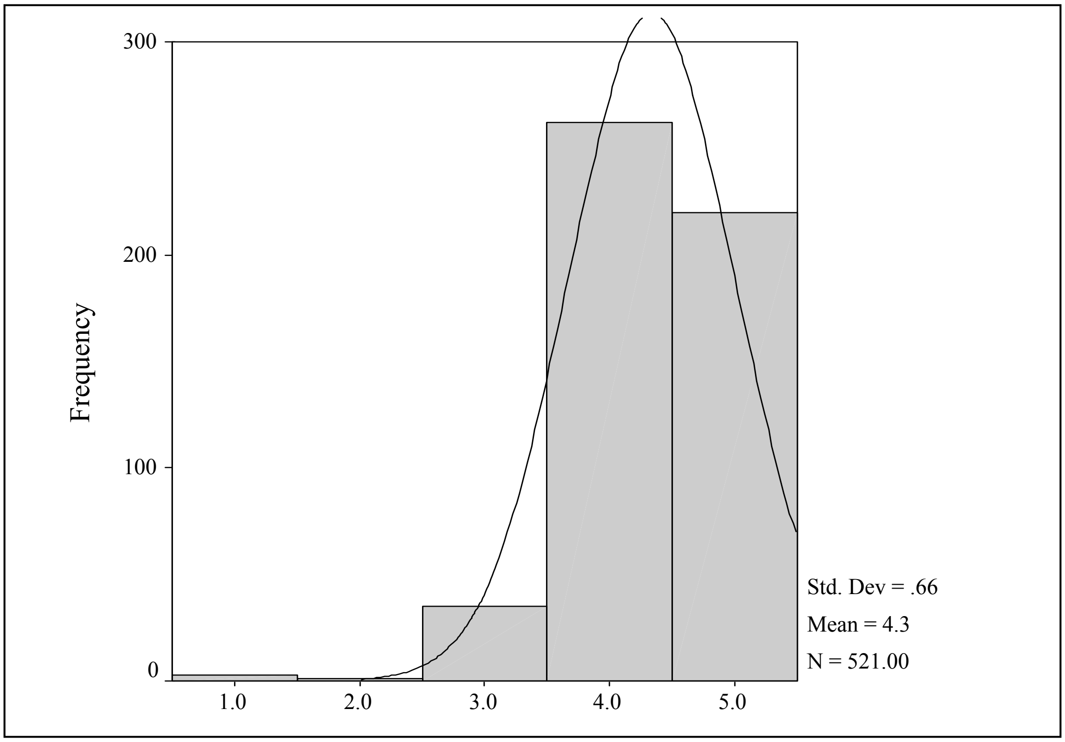


Figure D.14 Histogram of Responses to "Children need to learn about the environment".

Item 6M stated that a community's economic stability is more important than its environmental concerns.. Responses ranged form 1 to 5 (see table D.15). The mean score was 2.71 and a standard deviation of .98 (see figure D.15). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1 to 4.66.

Table D.15
Responses to the Statement A community's economic stability is more important than its environmental concerns.

Score		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	45	8.3	8.7	8.7
	2	185	33.9	35.9	44.6
	3	182	33.4	35.3	79.8
	4	82	15.0	15.9	95.7
	5	22	4.0	4.3	100.0
	Total	516	94.7	100.0	
Missing	9	29	5.3		
Total		545	100.0		

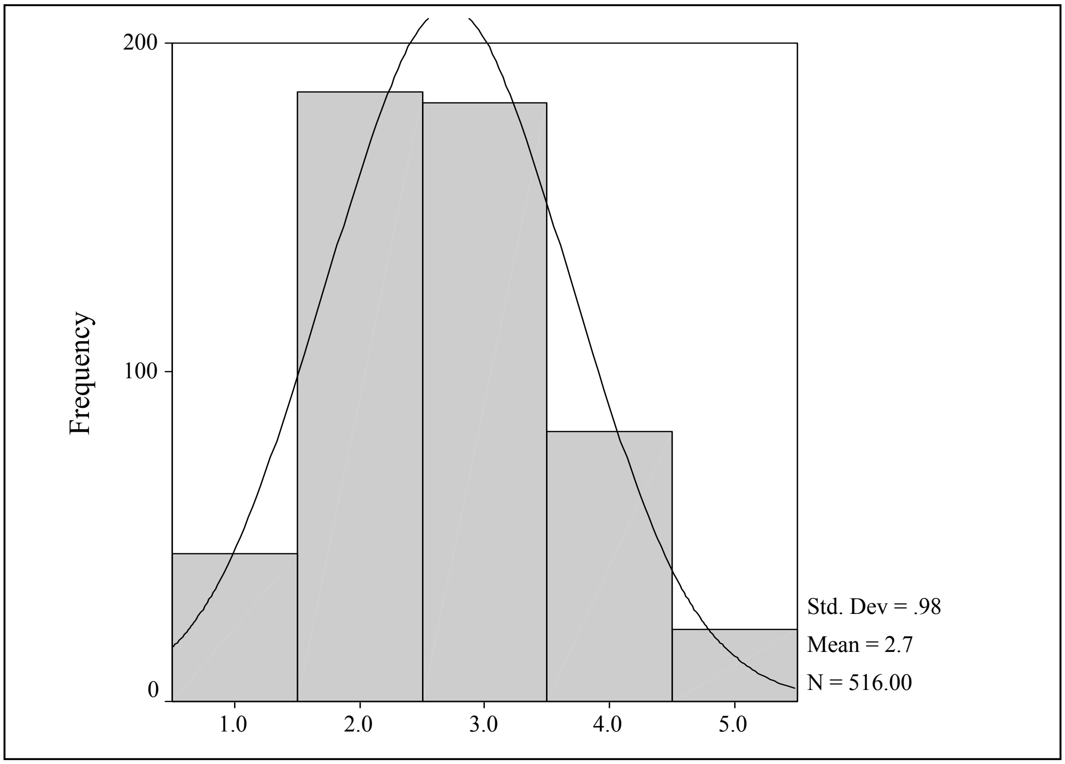


Figure D.15 Histogram of Responses to A community's economic stability is more important than its environmental concerns

Question 7 asks the respondents what recreational activities they had participated in 2002. Thirteen recreational activities were listed for respondents to indicate if they had or had not participated in specific activities. Another category was available for respondents to write in activities that they had participated in. Each recreational activity represented a separate variable measured by if they did or did not participate in that specific activity. Tables D.16 –D.28_ detail the results for each recreational activity.

D.16
Table Hunting Participation by Respondents in 2002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	460	84.40	86.50	86.50
	Yes	72	13.20	13.50	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

Table D.17
Bird watching Participation by Respondents in 2002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	401	73.60	75.40	75.40
	Yes	131	24.00	24.60	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

Table D.18
Fishing Participation by Respondents in 2002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	342	62.80	64.30	64.30
	Yes	190	34.90	35.70	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

Table D.19
Motor Sports Participation by Respondents in 2002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	450	82.60	84.60	84.60
	Yes	82	15.00	15.40	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

Table D.20
Gardening Participation by Respondents in 2002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	208	38.20	39.10	39.10
	Yes	324	59.40	60.90	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

Table D.21
Photography Participation by Respondents in 2002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	395	72.50	74.20	74.20
	Yes	137	25.10	25.80	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

Table D.22
Golf Participation by Respondents in 2002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	426	78.20	80.10	80.10
	Yes	106	19.40	19.90	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

Table D.23
Shopping Participation by Respondents in 2002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	113	20.70	21.20	21.20
	Yes	419	76.90	78.80	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

Table D.24
Attend a festival Participation by Respondents in 2002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	265	48.60	49.80	49.80
	Yes	267	49.00	50.20	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

Table D.25
Tennis Participation by Respondents in 2002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	504	92.50	94.70	94.70
	Yes	28	5.10	5.30	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

Table D.26
Camping Participation by Respondents in 2002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	446	81.80	83.80	83.80
	Yes	86	15.80	16.20	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

Table D.27
Hiking Participation by Respondents in 2002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	419	76.90	78.80	78.80
	Yes	113	20.70	21.20	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

Table D.28
Attend Sports Event Participation by Respondents in 2002

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	290	53.20	54.50	54.50
	Yes	242	44.40	45.50	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

Question 8 asks the respondents to answer 12 Likert style items. Each item is a statement that respondents are asked to indicate their disagreement or agreement with. A 1 represented strong disagreement and a 5 represented strong agreement with the statement.

Item 8A stated that the restoration of historical sites promotes tourism. Responses ranged form 1 to 5 (see table D.29). The mean score was 4.13 and a standard deviation of .73. Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.67 to 5 (figure D.16).

Table D.29
Responses to the Statement The restoration of historical sites promotes tourism.

Score		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	.7	.8	.8
	2	15	2.8	2.9	3.7
	3	40	7.3	7.7	11.4
	4	311	57.1	59.9	71.3
	5	149	27.3	28.7	100.0
	Total	519	95.2	100.0	
Missing	9	26	4.8		
Total		545	100.0		

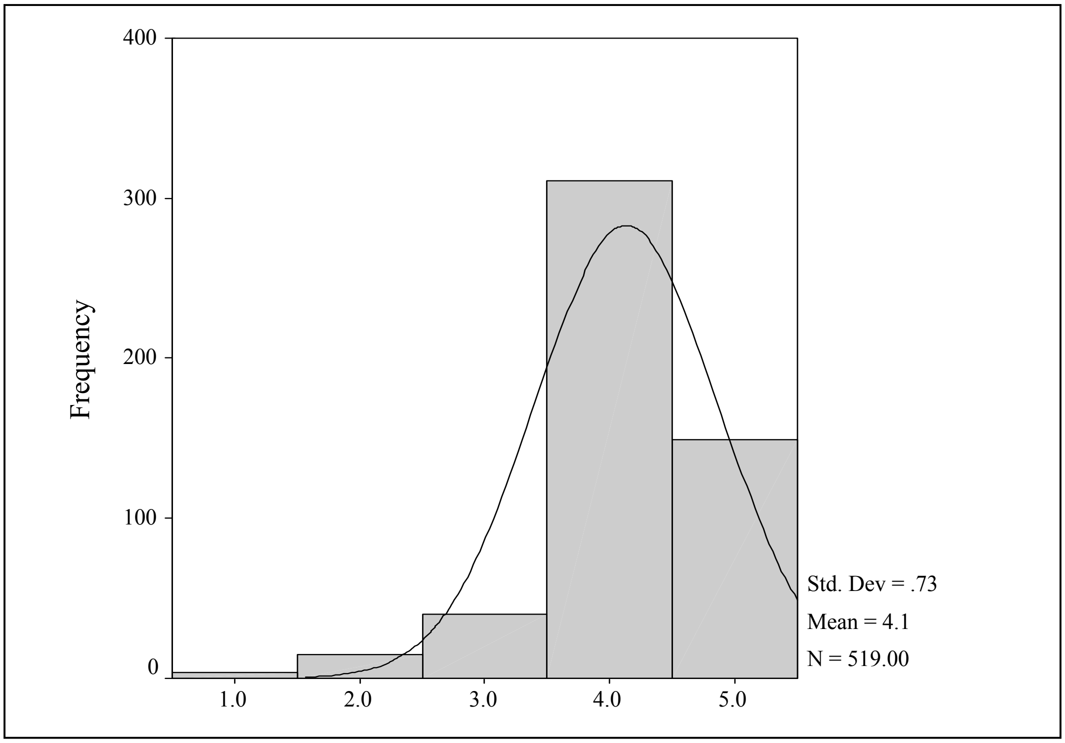


Figure D.16 Histogram of Responses to The restoration of historical sites promotes tourism

Item 8B stated that tourism should be managed to meet the needs of the present. Responses ranged form 1 to 5 (see table D.30). The mean score was 3.75 and a standard deviation of .79. Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.17 to 5 (figure D.17).

Table D.30
Responses to the Statement, Tourism should be managed to meet the needs of the present.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	.70	.80	.80
	2	37	6.80	7.20	7.90
	3	105	19.30	20.30	28.30
	4	306	56.10	59.30	87.60
	5	64	11.70	12.40	100.00
	Total	516	94.70	100.00	
Missing	9	29	5.30		
Total		545	100.00		

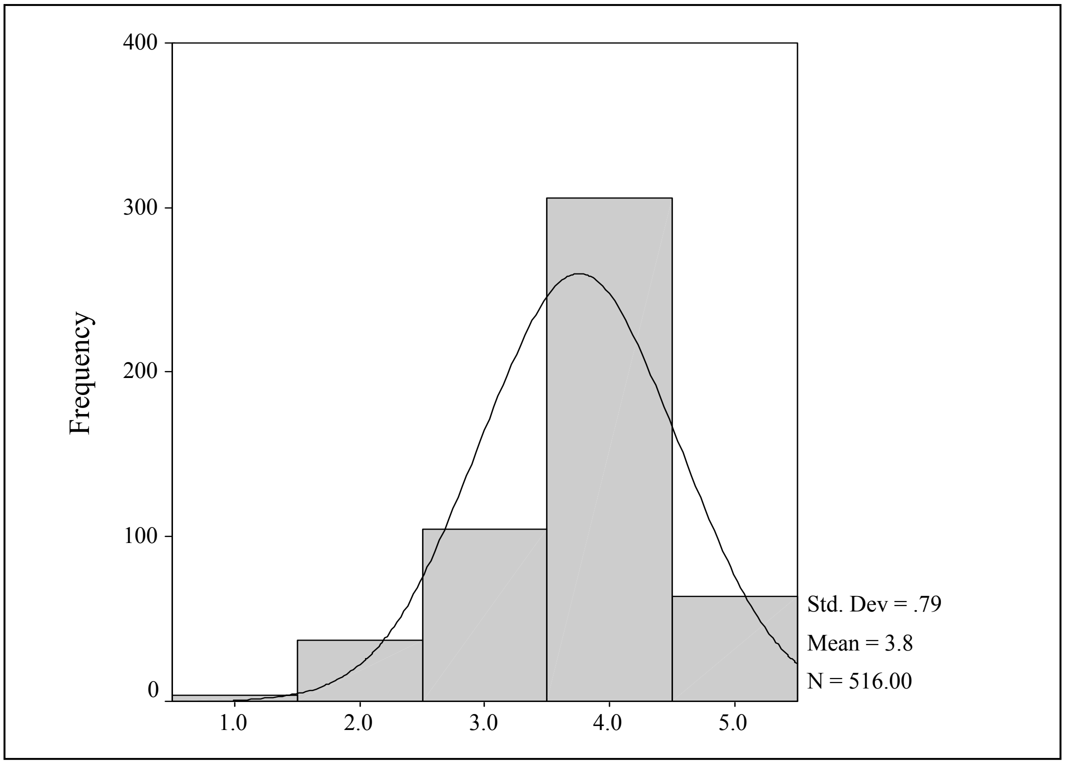


Figure D.17 Histogram of Responses to the Statement Tourism should be managed to meet the needs of the present

Item 8C stated that tourism should be managed to meet the needs of the future. Responses ranged form 1 to 5 (see table D.31). The mean score was 3.75 and a standard deviation of .79. Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.80 to 5 (figure D.18).

Table D.31
Responses to the Statement Tourism should be managed to meet the needs of the future.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.20	.20	.20
	2	2	.40	.40	.60
	3	78	14.30	15.00	15.60
	4	335	61.50	64.40	80.00
	5	104	19.10	20.00	100.00
	Total	520	95.40	100.00	
Missing	9	25	4.60		
Total		545	100.00		

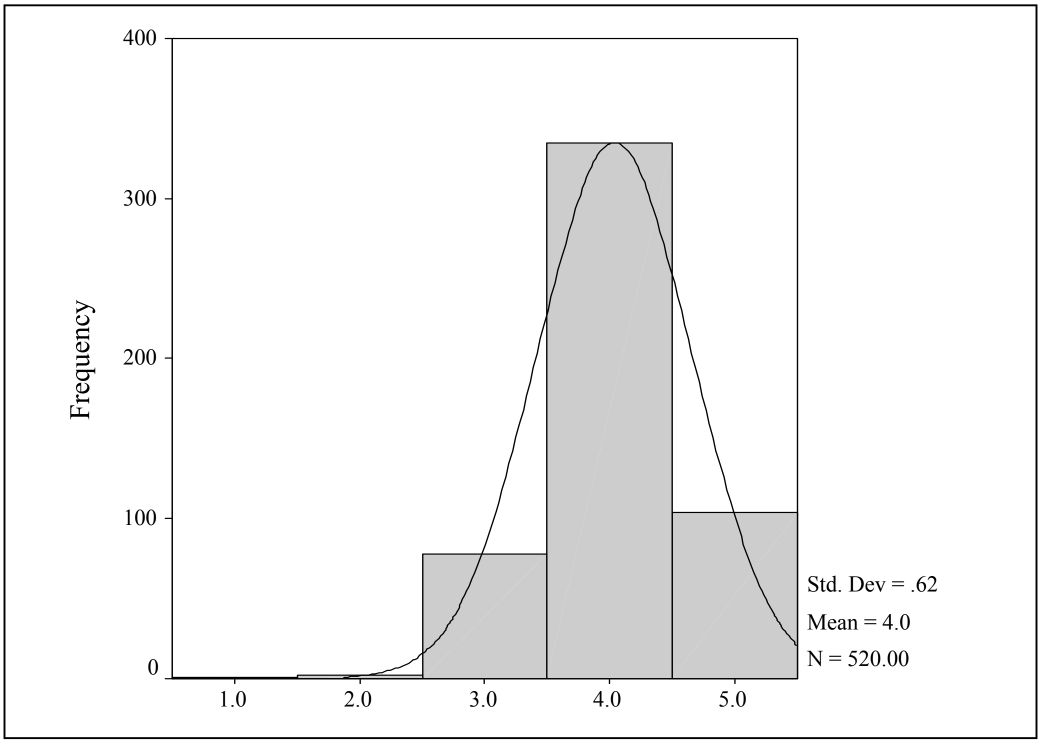


Figure D.18 Histogram of Responses to the Statement Tourism should be managed to meet the needs of the future.

Item 8D stated that Tourism development should respect the scale, nature, and character of Johnston County. Responses ranged form 1 to 5 (see table D.32). The mean score was 4.15 and a standard deviation of .62. Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.91 to 5 (figure D.19).

Table D.32
Responses to the Statement Tourism development should respect the scale, nature, and character of Johnston County.

Score		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.20	.20	.20
	2	7	1.30	1.30	1.50
	3	40	7.30	7.70	9.20
	4	336	61.70	64.70	74.00
	5	135	24.80	26.00	100.00
	Total	519	95.20	100.00	
Missing	9	26	4.80		
Total		545	100.00		

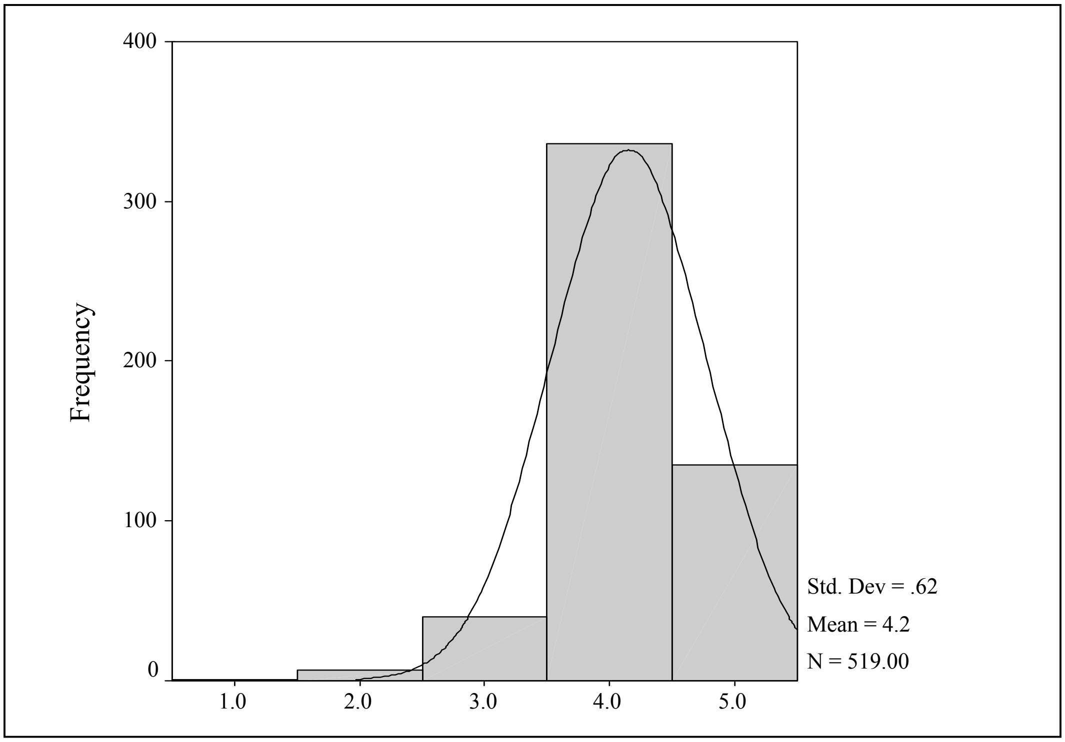


Figure D.19 Histogram of Responses to the Statement Tourism development should respect the scale, nature, and character of the county

Item 8E stated that involvement of residents in environmental activities enhances tourism. Responses ranged form 1 to 5 (see table D.33). The mean score was 4.13 and a standard deviation of .73. Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.67 to 5 (figure D.20).

Table D.33
Responses to the Statement Involvement of residents in environmental activities enhances tourism.

Score		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	1.10	1.20	1.20
	2	15	2.80	2.90	4.10
	3	161	29.50	31.10	35.20
	4	255	46.80	49.30	84.50
	5	80	14.70	15.50	100.00
	Total	517	94.90	100.00	
Missing	9	28	5.10		
Total		545	100.00		

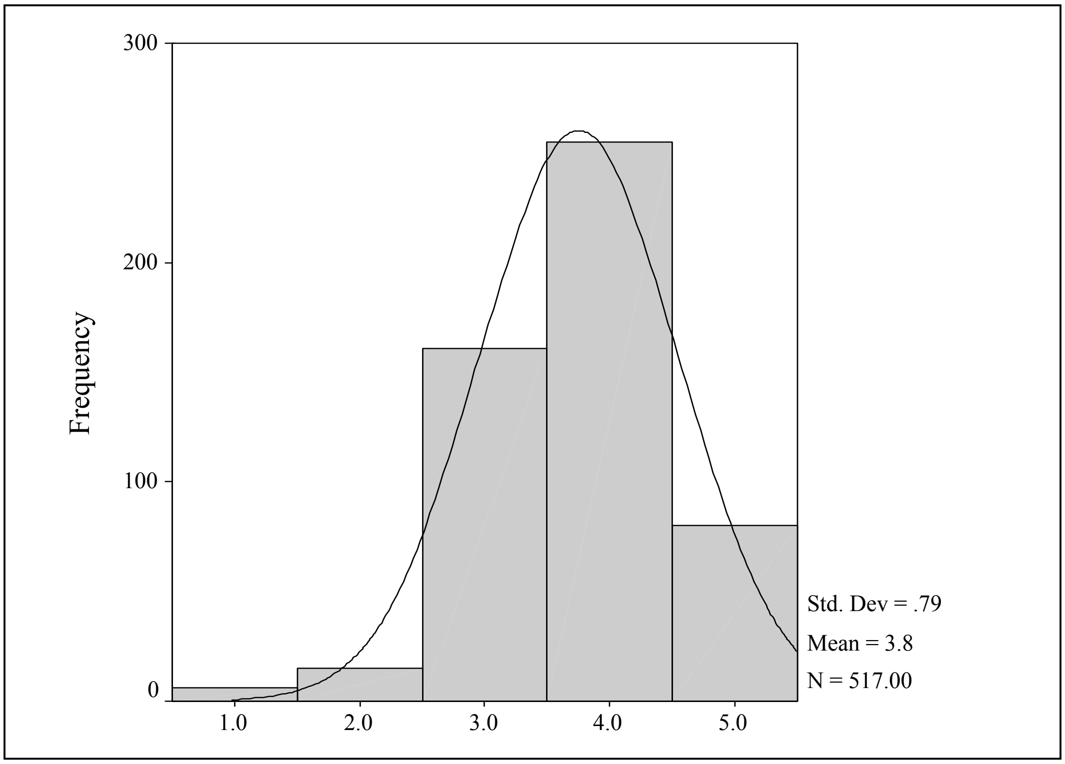


Figure D.20 Histogram of Responses to the Statement Involvement of residents in environmental activities enhances tourism

Item 8F stated that the tourism industry is a disruptive force that undermines integrity of the county. Responses ranged form 1 to 5 (see table D.34). The mean score was 4.13 and a standard deviation of .73. Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.67 to 5 (figure D.21).

Table D.34
Responses to the Statement The tourism industry is a disruptive force that undermines integrity of Johnston County.

Score		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	120	22.00	23.40	23.40
	2	248	45.50	48.30	71.70
	3	114	20.90	22.20	94.00
	4	18	3.30	3.50	97.50
	5	13	2.40	2.50	100.00
	Total	513	94.10	100.00	
Missing	9	32	5.90		
Total		545	100.00		

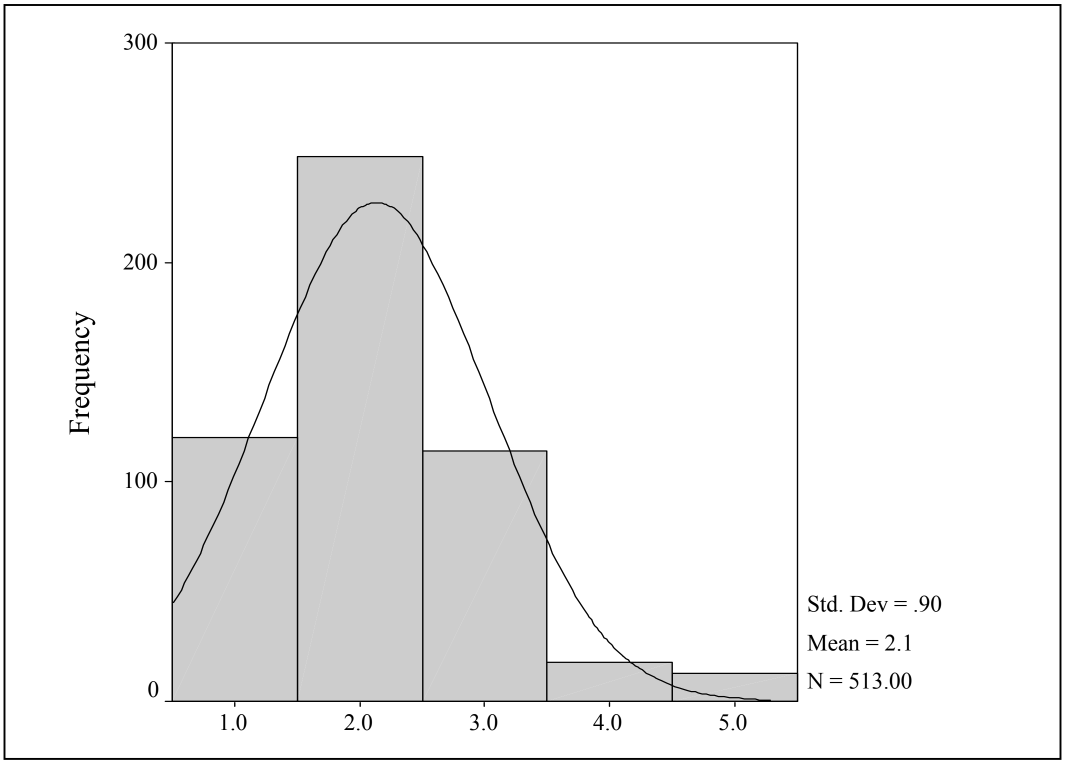


Figure D.21 Histogram of Responses to the Statement The tourism industry is a disruptive force that undermines integrity of Johnston County

Item 8G stated that the economic development funds should be used to promote tourism. Responses ranged form 1 to 5 (see table D.35). The mean score was 3.30 and a standard deviation of .93. Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1.43 to 5 (figure D.22).

Table D.35
Responses to the Statement Economic development funds should be used to promote tourism.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	21	3.90	4.10	4.10
	2	69	12.70	13.40	17.50
	3	196	36.00	38.10	55.50
	4	191	35.00	37.10	92.60
	5	38	7.00	7.40	100.00
	Total	515	94.50	100.00	
Missing	9	30	5.50		
Total		545	100.00		

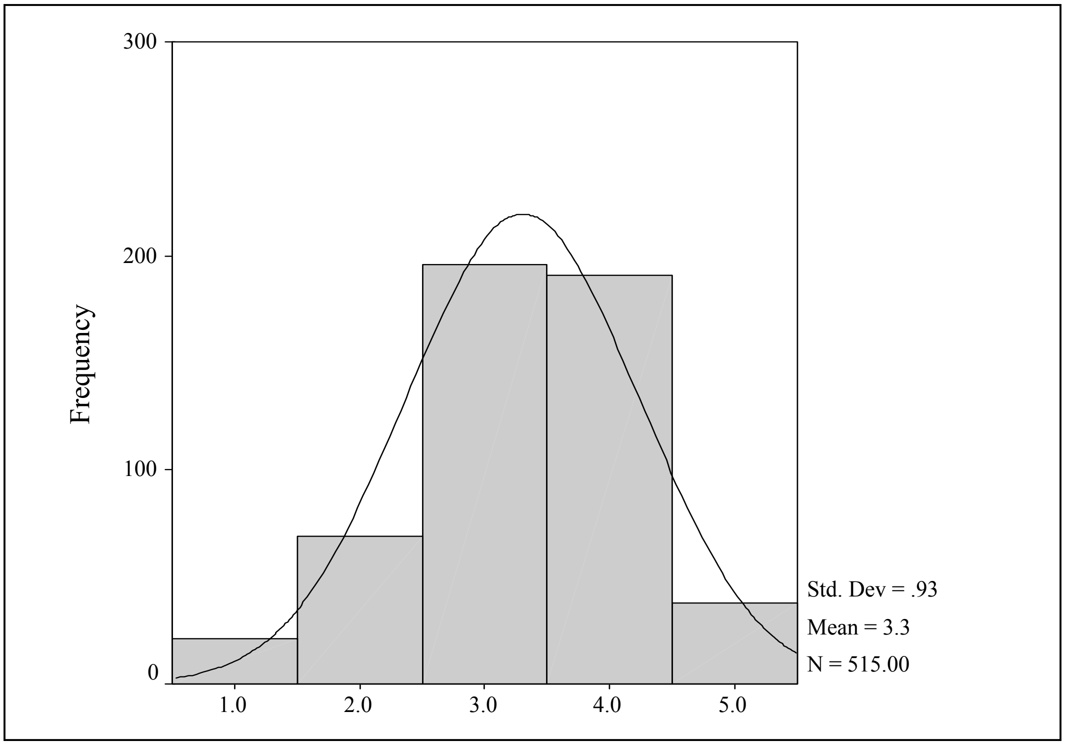


Figure D.22 Histogram of Responses to the Statement Economic development funds should be used to promote tourism

Item 8H stated that the local government should be involved in tourism development. Responses ranged form 1 to 5 (see table D.36). The mean score was 3.85 and a standard deviation of .75. Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.34 to 5 (figure D.23).

Table D.36
Responses to the Statement Local government should be involved in tourism development.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	.90	1.00	1.00
	2	21	3.90	4.10	5.00
	3	97	17.80	18.70	23.70
	4	317	58.20	61.20	84.90
	5	78	14.30	15.10	100.00
	Total	518	95.00	100.00	
Missing	9	27	5.00		
Total		545	100.0		

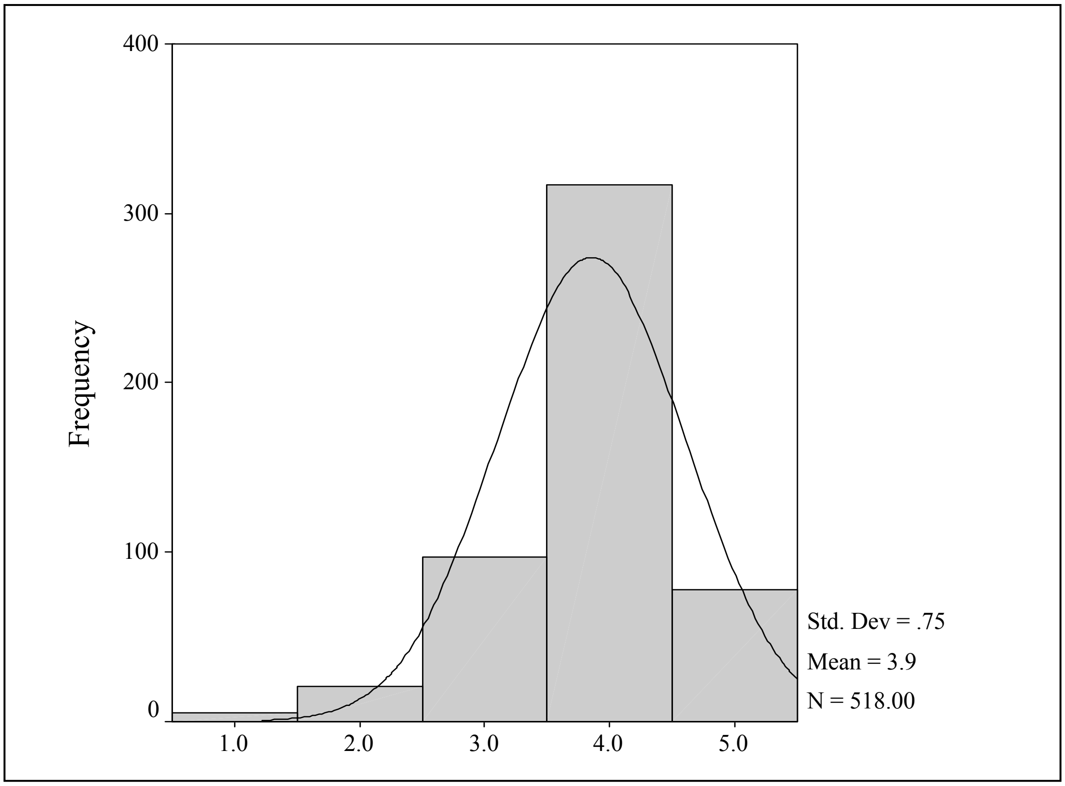


Figure D.23 Histogram of Responses to the Statement Local government should be involved in tourism development

Item 8I stated that tourists should pay more than local residents to visit parks and outdoor recreation facilities. Responses ranged form 1 to 5 (see table D.37). The mean score was 2.81 and a standard deviation of 1.14. Based on the mean and standard deviation all respondents are within 2 standard deviations of the mean (figure D.24).

Table D.37
Responses to the Statement Tourists should pay more than local residents to visit parks and outdoor recreation facilities.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	59	10.80	11.40	11.40
	2	183	33.60	35.30	46.70
	3	112	20.60	21.60	68.30
	4	127	23.30	24.50	92.90
	5	37	6.80	7.10	100.00
	Total	518	95.00	100.00	
Missing	9	27	5.00		
Total		545	100.00		

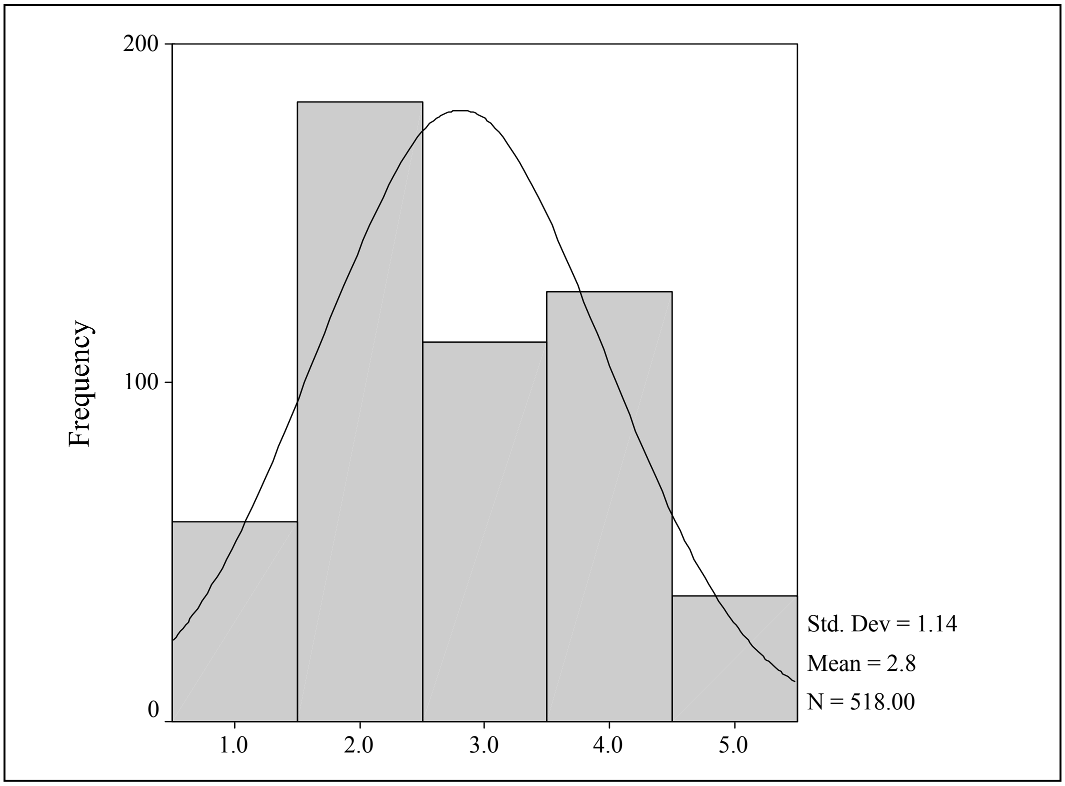


Figure D.24 Histogram of Responses to the Statement Tourists should pay more than local residents to visit parks and outdoor recreation facilities.

Item 8J stated that the restoration of historical sites promotes tourism. Responses ranged form 1 to 5 (see table D.38). The mean score was 2.96 and a standard deviation of 1.154. Based on the mean and standard deviation all respondents are within 2 standard deviations of the mean (figure D.25).

Table D.38
Responses to the Statement Tourists should pay a special tax on hotel and motel room fees.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	50	9.20	9.60	9.60
	2	160	29.40	30.80	40.40
	3	119	21.80	22.90	63.30
	4	144	26.40	27.70	91.00
	5	47	8.60	9.00	100.00
	Total	520	95.40	100.00	
Missing	9	25	4.60		
Total		545	100.00		

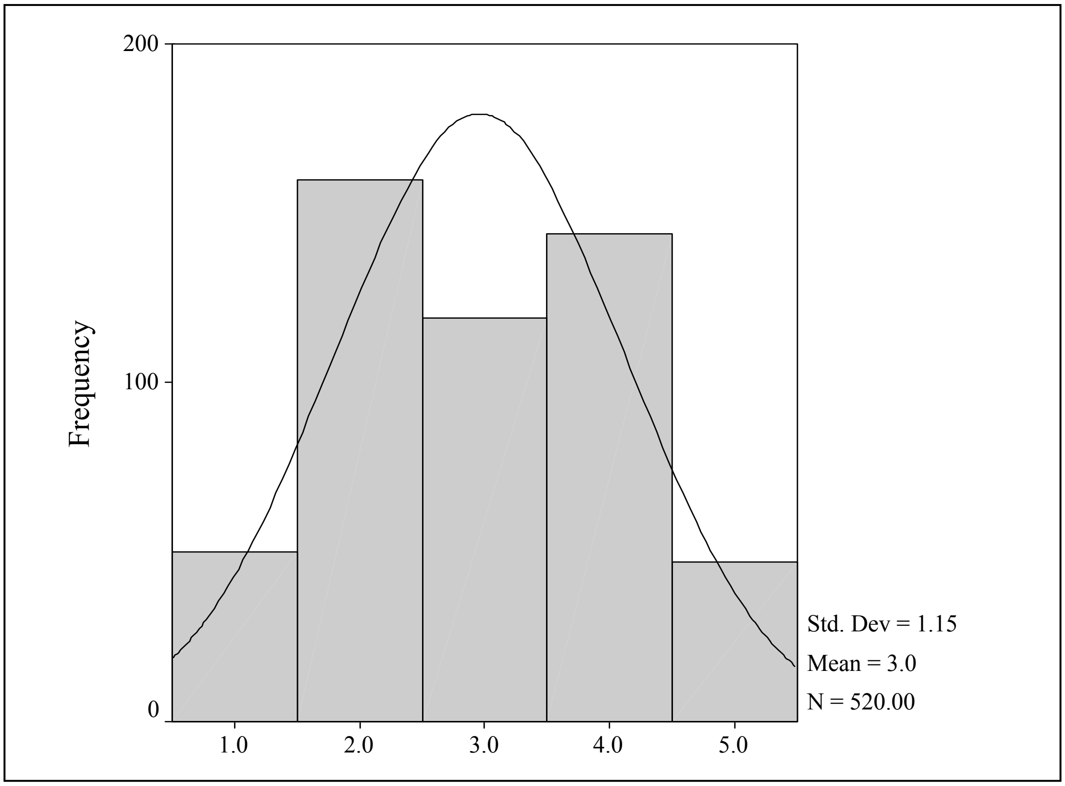


Figure D.25 Histogram of Responses to the Statement Tourists should pay a special tax on hotel and motel room fees.

Item 8K stated that the restoration of historical sites promotes tourism. Responses ranged form 1 to 5 (see table D.39). The mean score was 3.17 and a standard deviation of .83. Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1.5 to 4.83 (figure D.26).

Table D.39
Responses to the Statement I am happy with the way tourism is being developed in my community.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	27	5.00	5.20	5.20
	2	50	9.20	9.60	14.80
	3	262	48.10	50.50	65.30
	4	168	30.80	32.40	97.70
	5	12	2.20	2.30	100.00
	Total	519	95.20	100.00	
Missing	9	26	4.80		
Total		545	100.00		

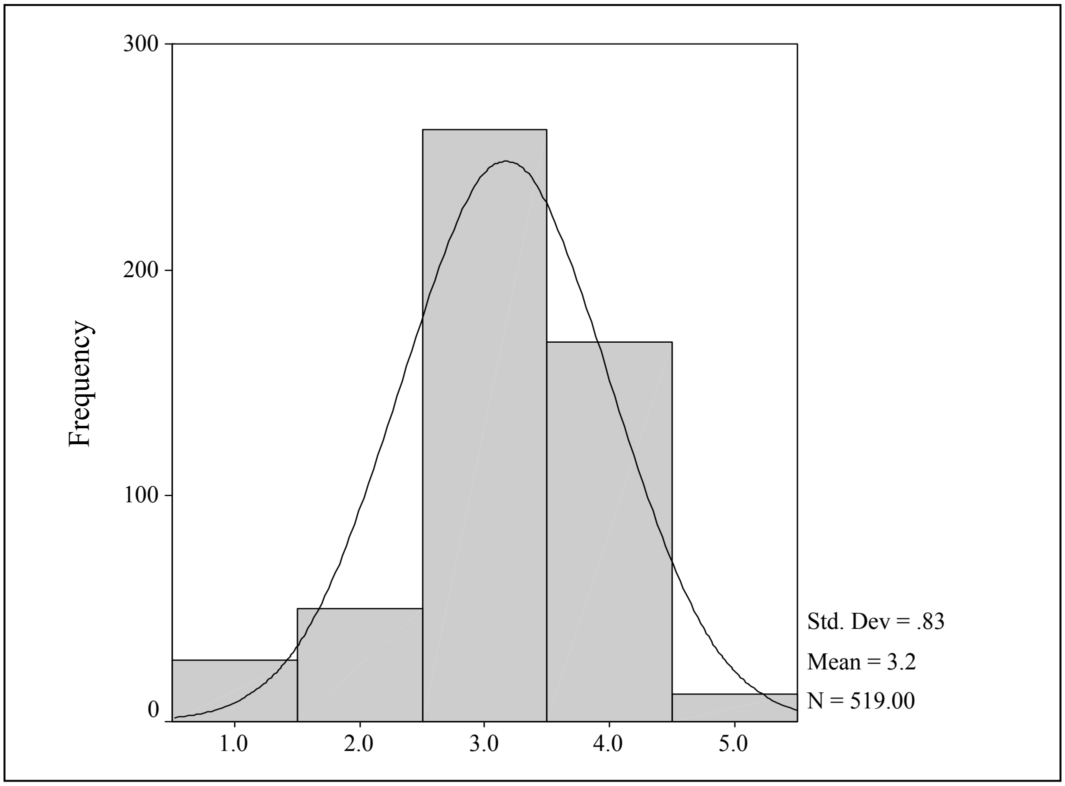


Figure D.26 Histogram of Responses to the Statement I am happy with the way tourism is being developed in my community.

Item 8L stated that I consider my county a tourist destination. Responses ranged form 1 to 5 (see table D.40). The mean score was 3.17 and a standard deviation of 1.03. Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1.11 to 5 (figure D.27).

Table D.40
Responses to the Statement I consider my county a tourist destination.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	21	3.9	4.0	4.0
	2	128	23.5	24.7	28.7
	3	151	27.7	29.1	57.8
	4	179	32.8	34.5	92.3
	5	40	7.3	7.7	100.0
	Total	519	95.2	100.0	
Missing	9	26	4.8		
Total		545	100.0		

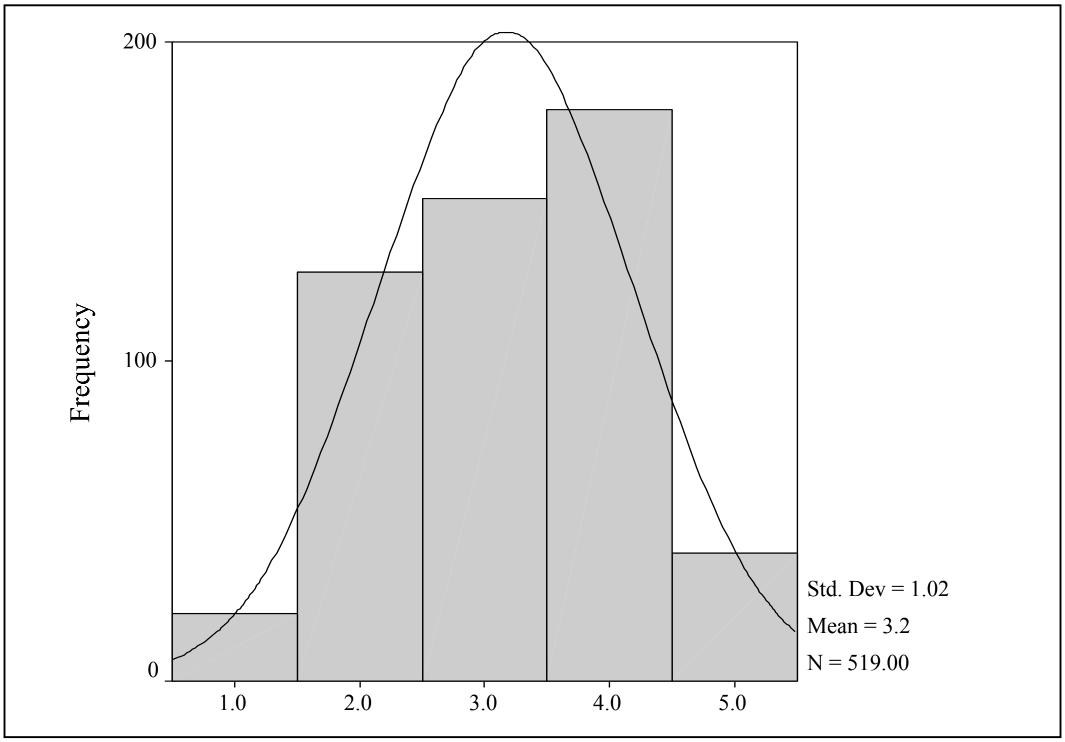


Figure D.27 Histogram of Responses to the Statement I consider my county a tourist destination.

Question 9 asked the individual what local attractions they had visited in 2002. Those attractions that the respondent indicated that they had visited were added to develop a measure of the number of attractions the visitor had visited in 2002. The results range from 0 to 9 attractions, with a mean of 1.39 and a standard deviation of 1.63 (see table D.41 and figure D.28). Based on the mean and standard deviation 95% of the respondents fell in the range of 0 to 7.73 attractions visited in 2002.

Table D.41
Number of Attractions Visited in 2002 By Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	210	38.50	38.90	38.90
	1	120	22.00	22.20	61.10
	2	105	19.30	19.40	80.60
	3	58	10.60	10.70	91.30
	4	25	4.60	4.60	95.90
	5	9	1.70	1.70	97.60
	6	3	.60	.60	98.10
	7	4	.70	.70	98.90
	9	6	1.10	1.10	100.00
	Total	540	99.10	100.00	
Missing	99	5	.90		
Total		545	100.00		

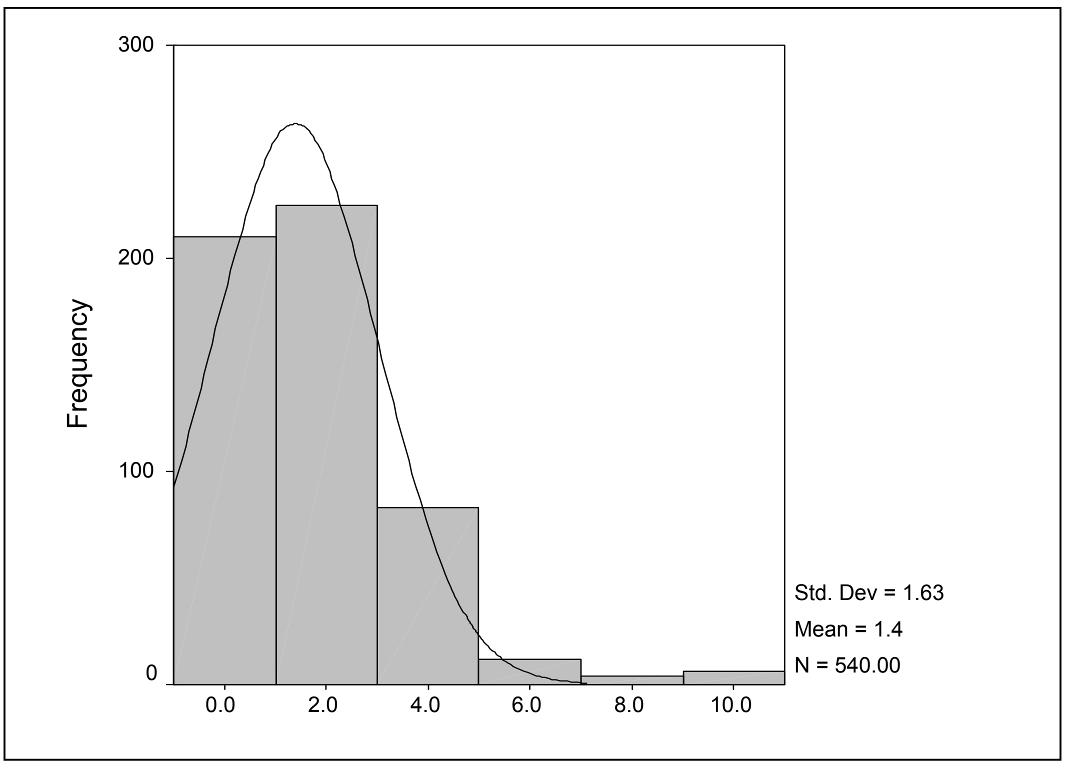


Figure D.28 Number of Attractions Visited in 2002 By Respondents

Questions 10 –13 asked respondents about their participation in political activities.

Question 10 asked respondents if they had voted in the November 2002 general election. Slightly over 83% (83.5%) of the respondents indicated that they did vote in the elections (see table D.42). Question 11 asked the respondents to indicate how many city and county council meetings they attended in 2002 (see table D.43). Question 12 asked respondents if they had ever run for a government office (see table D.44). Slightly over one tenth (10.60%) of the respondents indicated that they had at some point run for an office. Question 13 asked respondents if they were a member of the local chamber of commerce. Almost one fifth (18.50%) of the respondents indicated that they were members of the local chamber of commerce (see table D.45).

Table D.42
Respondents Voting Participation in November 2002 Election

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	455	83.50	85.50	85.50
	No	77	14.20	14.50	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
	545	100.0			

Table D.43
Number of City and County Council Meetings Attended in 2002 by Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	360	66.10	67.70	67.70
	1-3	99	18.20	18.60	86.30
	4-6	16	2.90	3.00	89.30
	7-9	13	2.40	2.40	91.70
	10-12	4	.70	.80	92.50
	13+	40	7.30	7.50	100.00
	Total	532	97.60	100.00	
Missing	9	13	2.40		
Total		545	100.00		

D.44
Table Percentage of Respondents Who Run for Office

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	58	10.60	10.90	10.90
	No	473	86.80	89.10	100.00
	Total	531	97.40	100.00	
Missing	9	14	2.60		
Total		545	100.00		

Table D.45
Percentage of Respondents Who Are Member of the Local Chamber of Commerce

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	101	18.50	19.00	19.00
	No	430	78.90	81.00	100.00
	Total	531	97.40	100.00	
Missing	9	14	2.60		
Total		545	100.00		

Question 14 asks the respondents to answer 13 Likert style items. Each item is a statement that respondents are asked to indicate their disagreement or agreement with. A 1 represented strong disagreement and a 5 represented strong agreement with the statement.

Item 14A stated that I have more money because of increased tourism. Responses ranged form 1 to 5 (see table D.46). The mean score was 2.36 and a standard deviation of .98 (see figure D.29). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1 to 4.31.

Table D.46
Responses to the Statement I have more money because of increased tourism.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	93	17.10	17.90	17.90
	2	225	41.30	43.40	61.30
	3	140	25.70	27.00	88.20
	4	44	8.10	8.50	96.70
	5	17	3.10	3.30	100.00
	Total	519	95.20	100.00	
Missing	9	26	4.80		
Total		545	100.00		

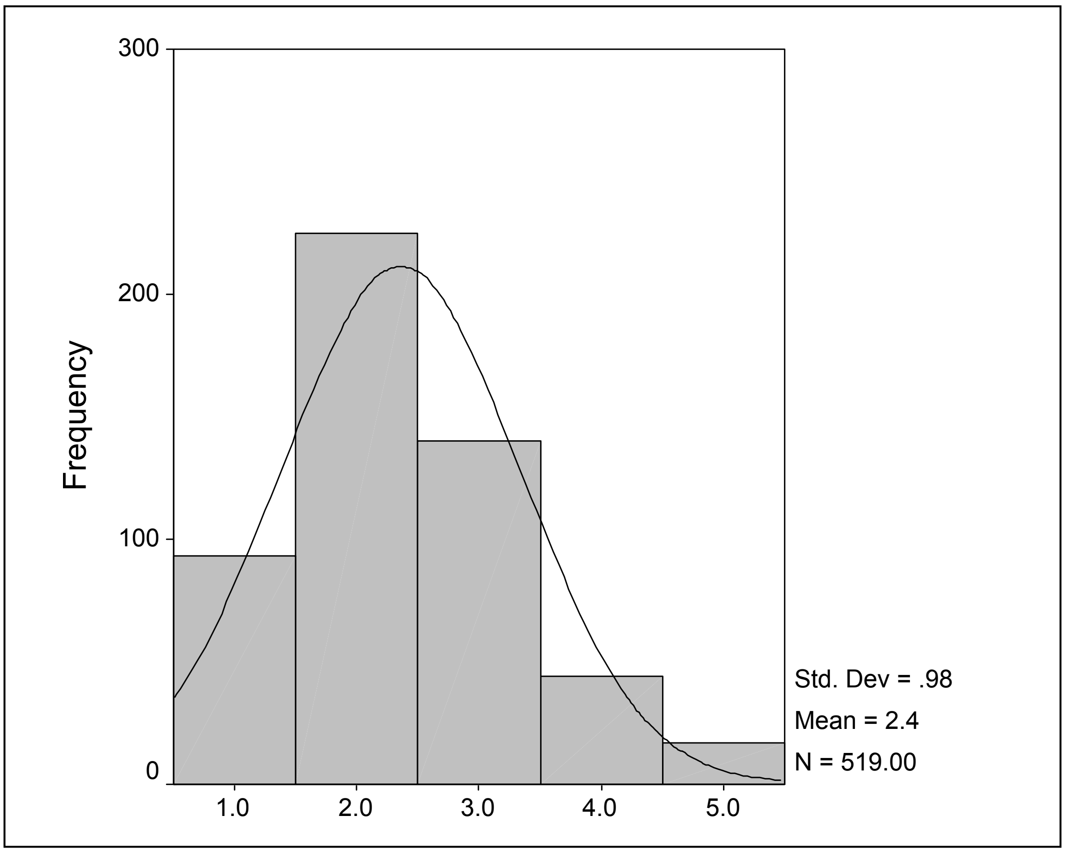


Figure D.29 Histogram of Responses to the Statement I have more money because of increased tourism.

Item 14B stated that tourism decreases unemployment. Responses ranged form 1 to 5 (see table D.47). The mean score was 3.38 and a standard deviation of 1.07 (see figure D.30).

Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1.24 to 5.

Table D.47
Responses to the Statement, Tourism decreases unemployment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	30	5.50	5.80	5.80
	2	102	18.70	19.60	25.40
	3	75	13.80	14.40	39.80
	4	1	.20	.20	40.00
	4	267	49.00	51.30	91.30
	5	45	8.30	8.70	100.00
	Total	520	95.40	100.00	
Missing	9	25	4.60		
Total		545	100.00		

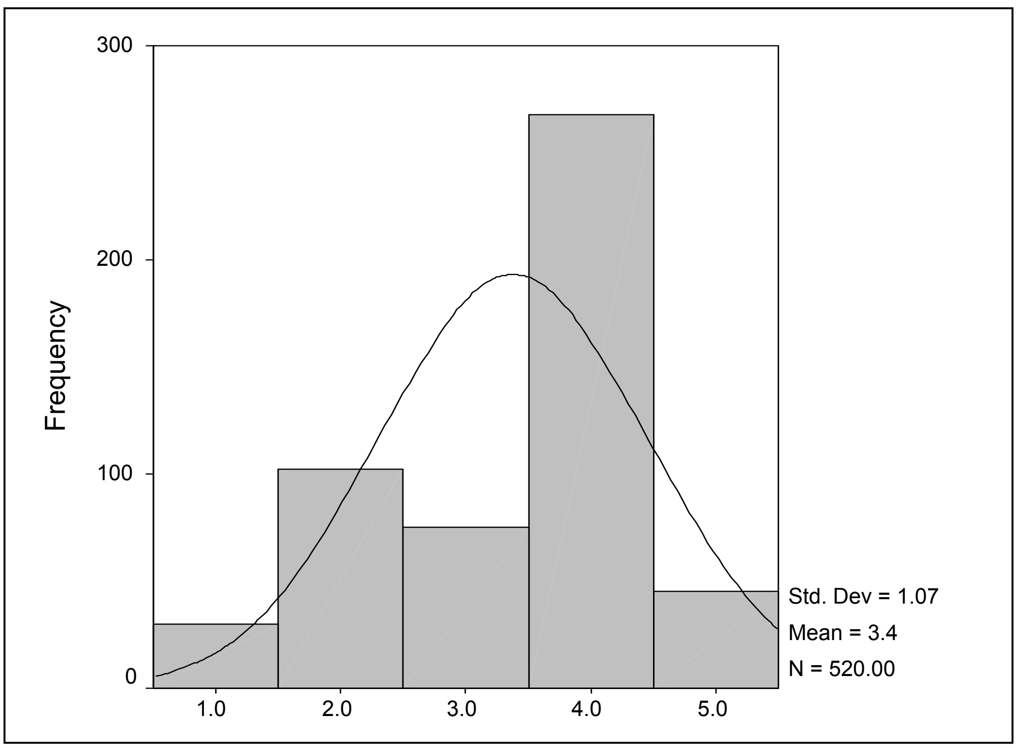


Figure D.30 Histogram of Responses to the Statement Tourism decreases unemployment

Item 14C stated that shopping facilities benefit from tourism. Responses ranged form 1 to 5 (see table D.47). The mean score was 4.23 and a standard deviation of .60 (see figure D.31). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 3.03 to 5.

Table D.47
Responses to the Statement Shopping facilities benefit from tourism.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	.40	.40	.40
	2	6	1.10	1.10	1.50
	3	18	3.30	3.40	5.00
	4	341	62.60	65.30	70.30
	5	155	28.40	29.70	100.00
	Total	522	95.80	100.00	
Missing	9	23	4.20		
Total		545	100.00		

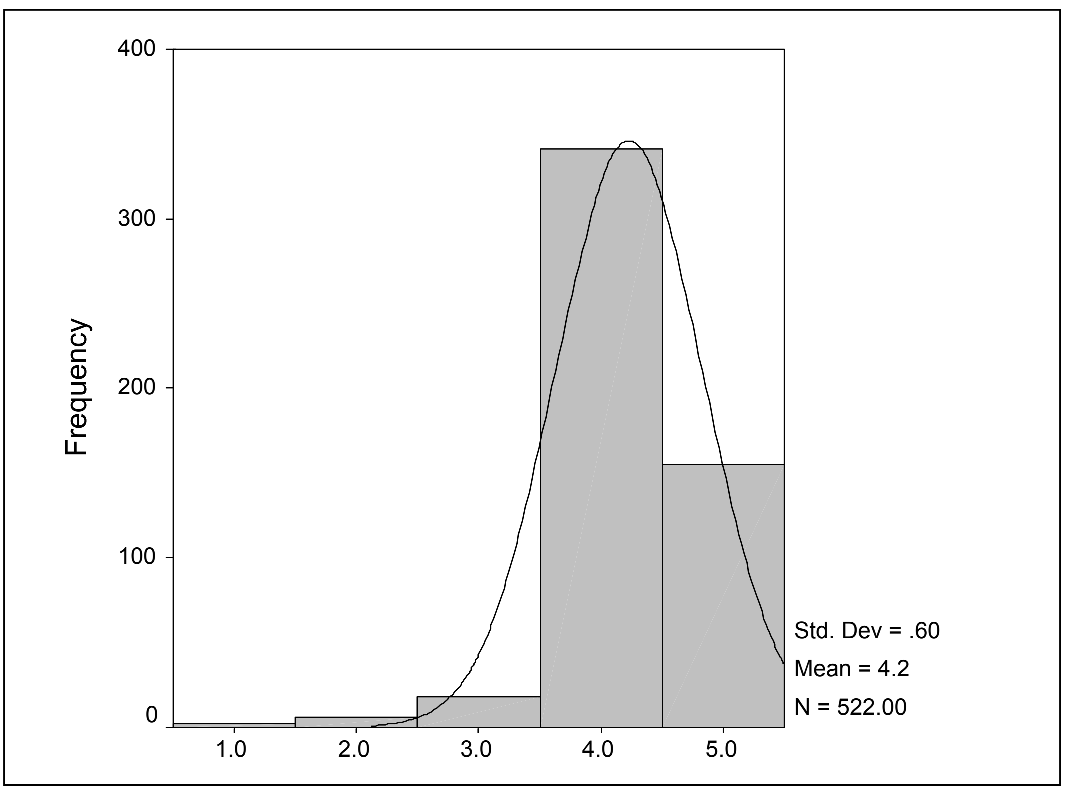


Figure D.31 Histogram of Responses to the Statement Shopping facilities benefit from tourism.

Item 14D stated that tourism development increases the traffic problems. Responses ranged form 1 to 5 (see table D.48). The mean score was 3.65 and a standard deviation of .89 (see figure D.32). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1.88 to 5.

Table D.48
Responses to the Statement Tourism development increases the traffic problems.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	.60	.60	.60
	2	65	11.90	12.50	13.10
	3	111	20.40	21.40	34.60
	4	269	49.40	51.90	86.50
	5	70	12.80	13.50	100.00
	Total	518	95.00	100.00	
Missing	9	27	5.00		
Total		545	100.00		

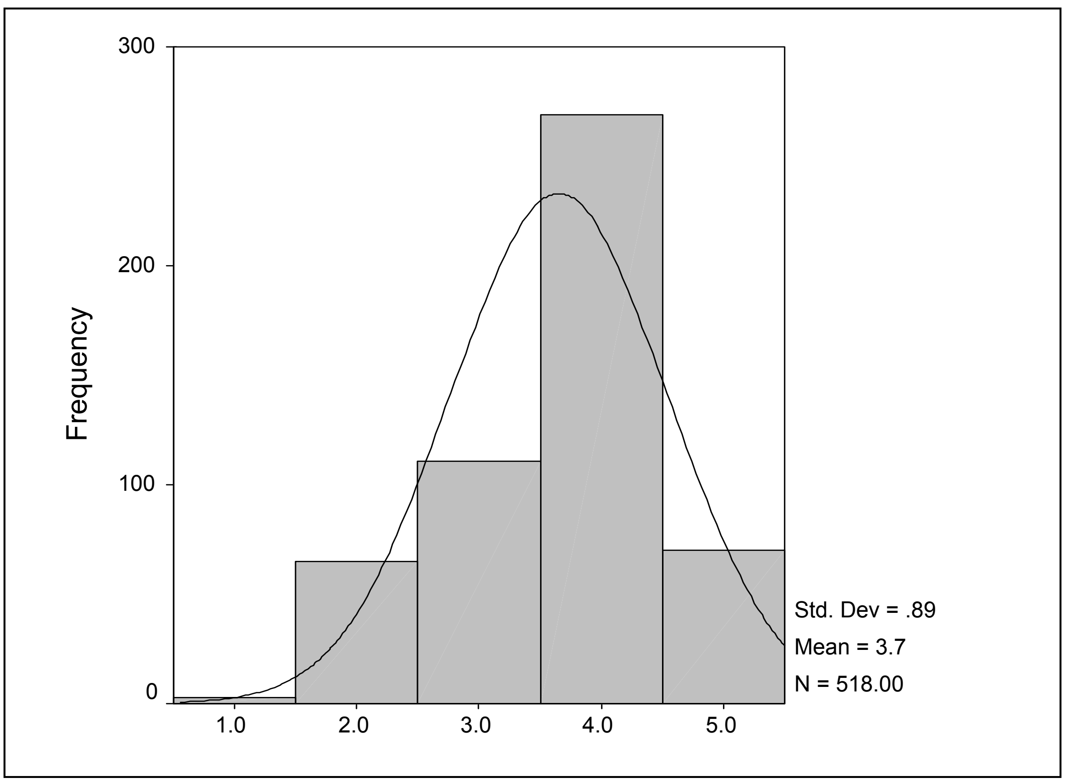


Figure D.32 Histogram of Responses to the Statement Tourism development increases the traffic problems.

Item 14E stated that tourism development increases property taxes. Responses ranged form 1 to 5 (see table D.49). The mean score was 3.09 and a standard deviation of .96 (see figure D.33). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1.18 to 5.

Table D.49
Responses to the Statement Tourism development increases property taxes.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20	3.70	3.90	3.90
	2	117	21.50	22.60	26.40
	3	214	39.30	41.30	67.80
	4	129	23.70	24.90	92.70
	5	38	7.00	7.30	100.00
	Total	518	95.00	100.00	
Missing	9	27	5.00		
Total		545	100.00		

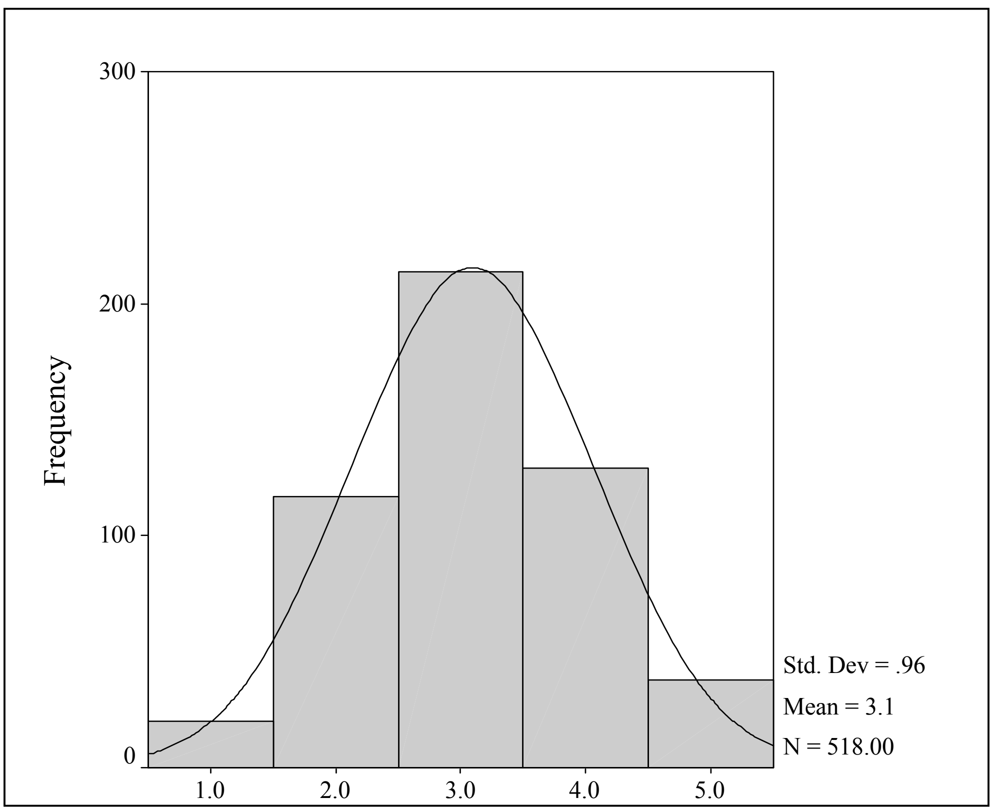


Figure D.33 Histogram of Responses to the Statement Tourism development increases property taxes

Item 14F stated that tourism development increases crime. Responses ranged form 1 to 5 (see table D.50). The mean score was 2.79 and a standard deviation of .94 (see figure D.34). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1 to 4.67.

Table D.50
Responses to the Statement Tourism development increases crime.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	34	6.20	6.60	6.60
	2	178	32.70	34.40	40.90
	3	185	33.90	35.70	76.60
	4	1	.20	.20	76.80
	4	104	19.10	20.10	96.90
	5	16	2.90	3.10	100.00
	Total	518	95.00	100.00	
Missing	9	27	5.00		
Total		545	100.00		

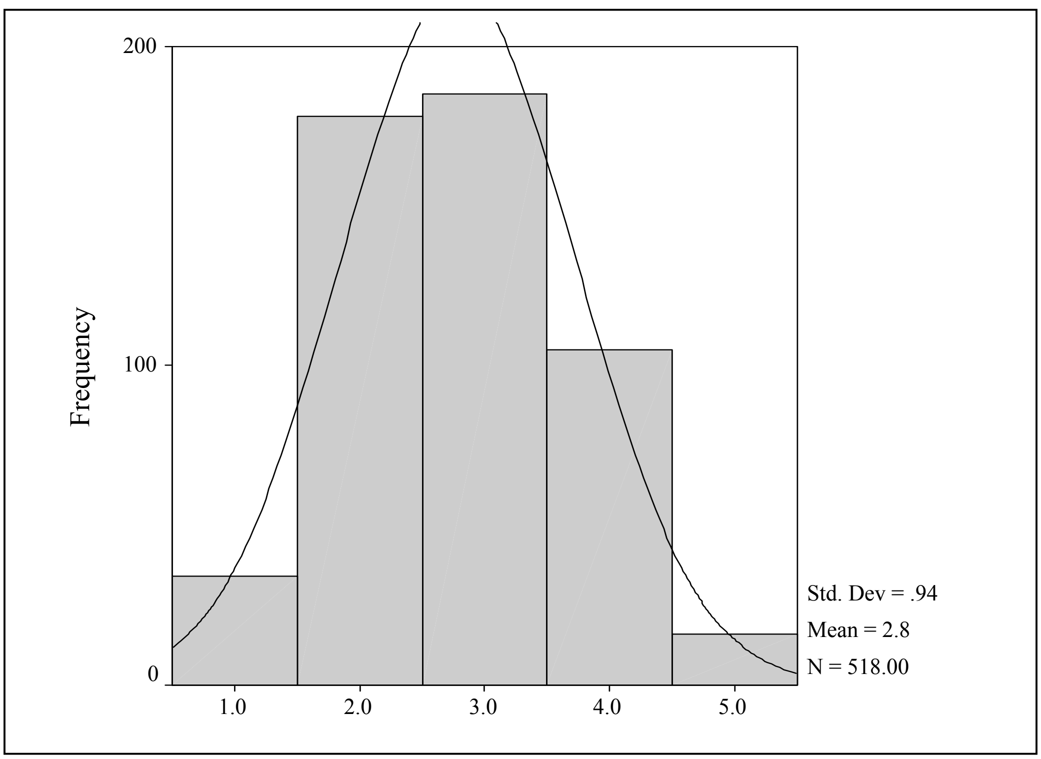


Figure D.34 Histogram of Responses to the Statement Tourism development increases crime

Item 14G stated that tourism reduces the quality of outdoor recreational opportunities. Responses ranged form 1 to 5 (see table D.51). The mean score was 2.41 and a standard deviation of .90 (see figure D.35). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1 to 3.93.

Table D.51
Responses to the Statement Tourism reduces the quality of outdoor recreational opportunities.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	50	9.20	9.60	9.60
	2	287	52.70	55.20	64.80
	3	120	22.00	23.10	87.90
	4	47	8.60	9.00	96.90
	5	16	2.90	3.10	100.00
	Total	520	95.40	100.00	
Missing	9	25	4.60		
Total		545	100.00		

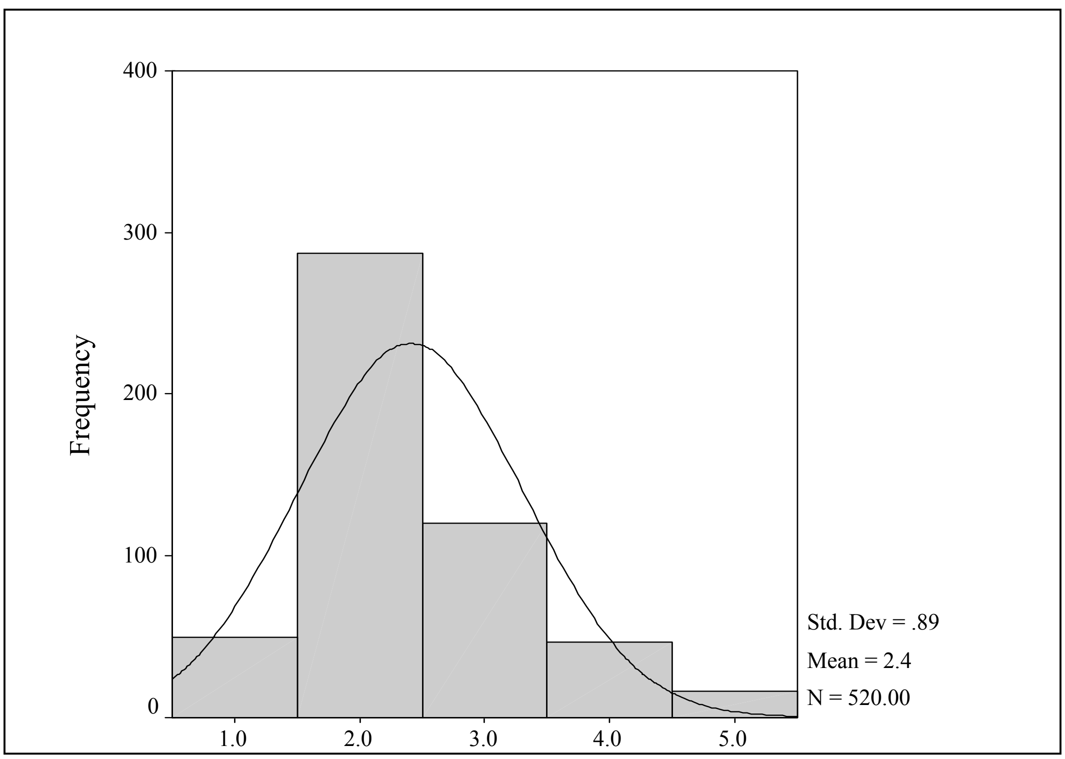


Figure D.35 Histogram of Responses to the Statement Tourism reduces the quality of outdoor recreational opportunities

Item 14H stated that increased tourism improves the local economy. Responses ranged form 1 to 5 (see table D.52). The mean score was 4.07 and a standard deviation of .67 (see figure D.36). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.73 to 5.

Table D.52
Responses to the Statement Increased tourism improves the local economy.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	.90	1.00	1.00
	2	12	2.20	2.30	3.30
	3	33	6.10	6.30	9.60
	4	362	66.40	69.20	78.80
	5	111	20.40	21.20	100.00
	Total	523	96.00	100.00	
Missing	9	22	4.00		
Total		545	100.00		

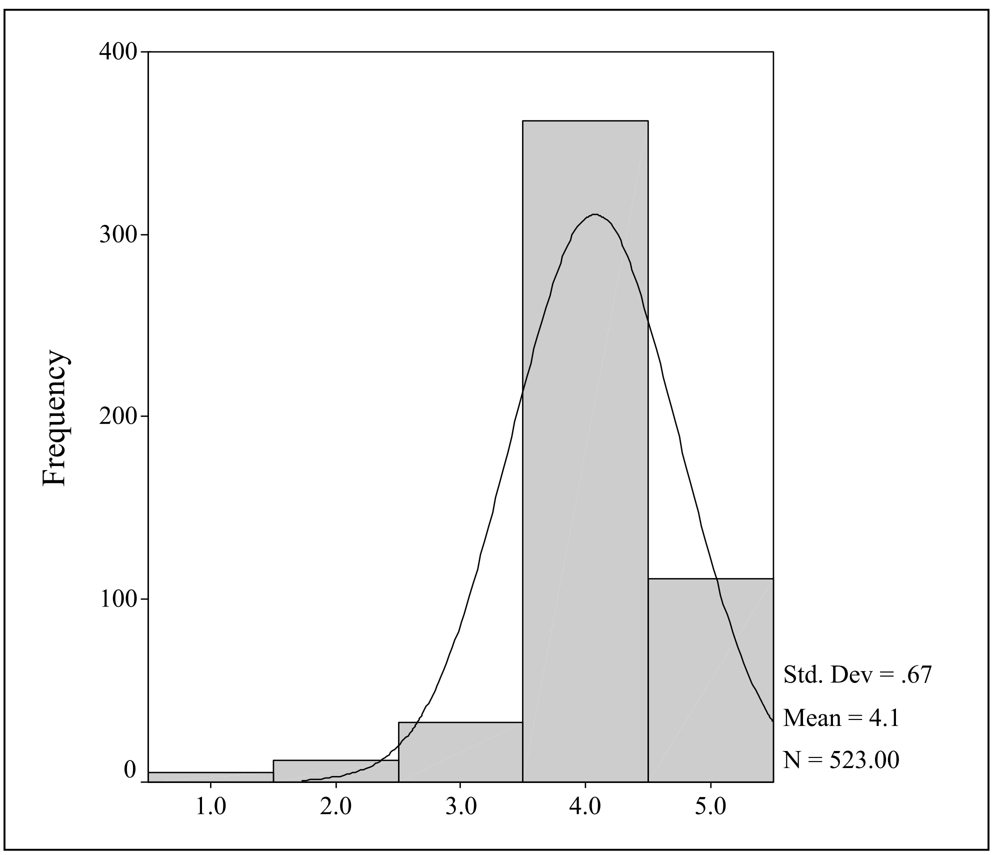


Figure D.36 Histogram of Responses to the Statement Increased tourism improves the local economy.

Item 14I stated that tourism development increases the number of recreational opportunities for local residents. Responses ranged form 1 to 5 (see table D.53). The mean score was 3.82 and a standard deviation of .80 (see figure D.37). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.22 to 5.

Table D.53
Responses to the Statement Tourism development increases the number of recreational opportunities for local residents.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	.70	.80	.80
	2	37	6.80	7.20	7.90
	3	85	15.60	16.50	24.40
	4	311	57.10	60.30	84.70
	5	79	14.50	15.30	100.00
	Total	516	94.70	100.00	
Missing	9	29	5.30		
Total		545	100.00		

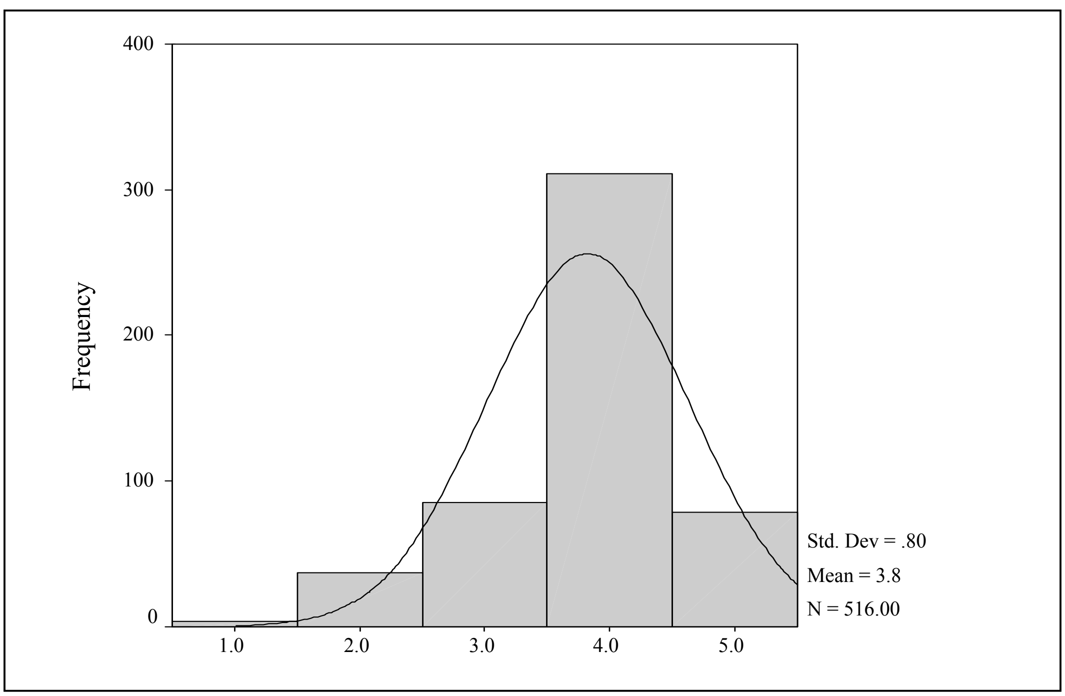


Figure D.37 Histogram of Responses Tourism development increases the number of recreational opportunities for local residents.

Item 14J stated that tourism development improves a community's appearance. Responses ranged form 1 to 5 (see table D.54). The mean score was 3.85 and a standard deviation of .79 (see figure D.38). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.26 to 5.

Table D.54
Responses to the Statement Tourism development improves a community's appearance.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	1.70	1.70	1.70
	2	19	3.50	3.70	5.40
	3	98	18.00	18.90	24.30
	4	309	56.70	59.50	83.80
	5	84	15.40	16.20	100.00
	Total	519	95.20	100.00	
Missing	9	26	4.80		
Total		545	100.00		

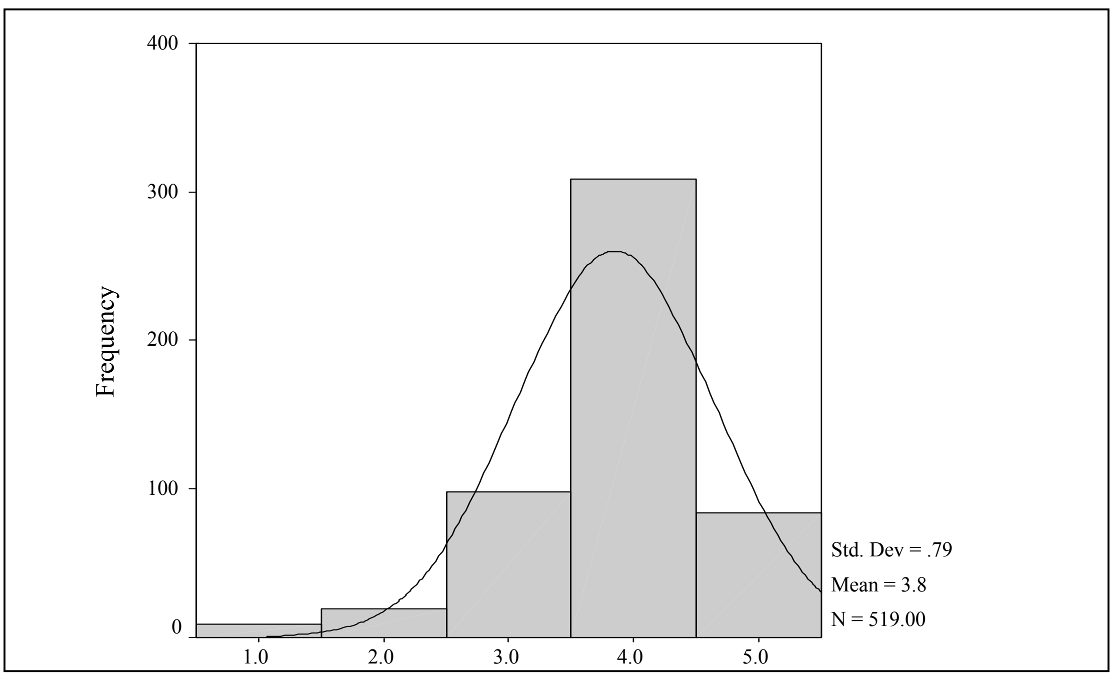


Figure D.38 Histogram of Responses Tourism development improves a community's appearance.

Item 14K stated that tourism development increases a community's quality of life. Responses ranged form 1 to 5 (see table D.55). The mean score was 3.66 and a standard deviation of .73 (see figure D.39). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 2.21 to 5.

Table D.55
Responses to the Statement Tourism development increases a community's quality of life.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	1.50	1.50	1.50
	2	32	5.90	6.20	7.70
	3	160	29.40	30.80	38.50
	4	1	.20	.20	38.70
	4	244	44.80	47.00	85.70
	5	74	13.60	14.30	100.00
	Total	519	95.20	100.00	
Missing	9	26	4.80		
Total		545	100.00		

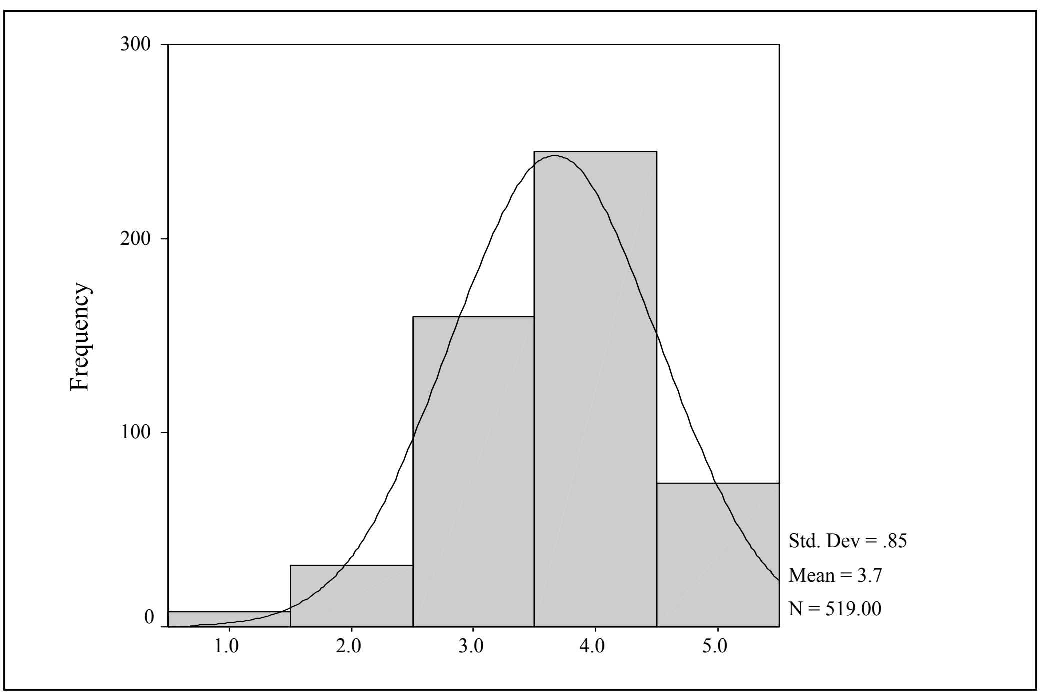


Figure D.39 Histogram of Responses Tourism development increases a community's quality of life.

Item 14L stated that Stricter laws are needed to protect the environment. Responses ranged form 1 to 5 (see table D.56). The mean score was 3.64 and a standard deviation of 1.05 (see figure D.40). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1.54 to 5.

Table D.56
Responses to the Statement Stricter laws are needed to protect the environment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	13	2.40	2.50	2.50
	2	58	10.60	11.10	13.60
	3	148	27.20	28.40	42.00
	4	187	34.30	35.80	77.80
	5	116	21.30	22.20	100.00
	Total	522	95.80	100.00	
Missing	9	23	4.20		
Total		545	100.00		

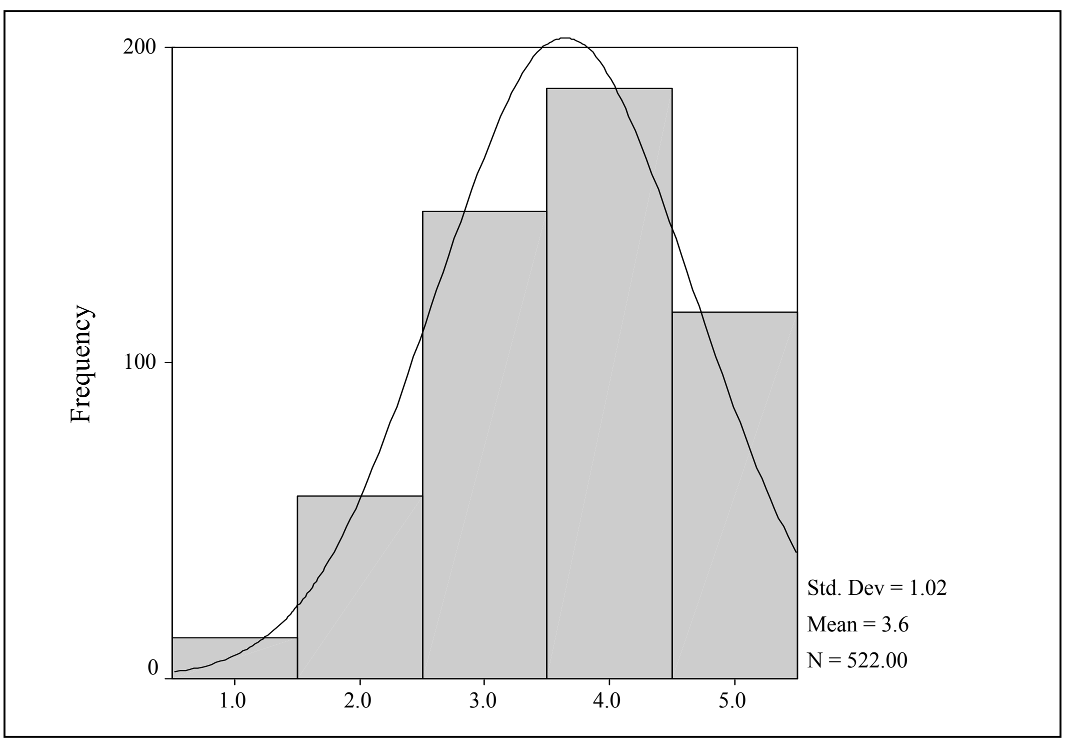


Figure D.40 Histogram of Responses Stricter laws are needed to protect the environment.

Item 14M stated that tourism produces long-term negative effects on the environment. Responses ranged form 1 to 5 (see table D.57). The mean score was 2.53 and a standard deviation of .80 (see figure D.41). Based on the mean and standard deviation 95% (2 standard deviations) of the respondents fell in the range of 1 to 4.14.

Table D.57 Responses to the Statement Tourism produces long-term negative effects on the environment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	49	9.00	9.50	9.50
	2	224	41.10	43.20	52.70
	3	179	32.80	34.60	87.30
	4	52	9.50	10.00	97.30
	5	14	2.60	2.70	100.00
	Total	518	95.00	100.00	
Missing	9	27	5.00		
Total		545	100.00		

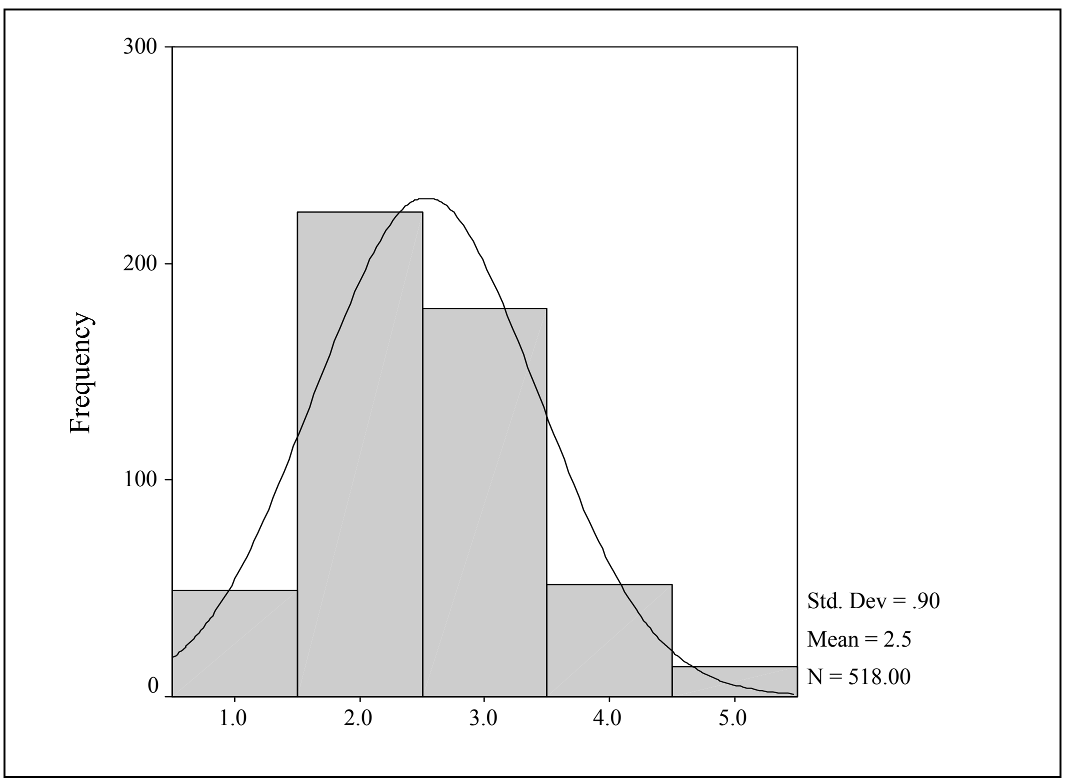


Figure D.41 Histogram of Responses Tourism produces long-term negative effects on the environment.

The final section of the questionnaire asked respondents to answer six demographic questions. Question 15 asked respondents what was the highest level of education they completed. The majority (76.3%) of the respondents were had pursued an education after high school (see table D.58).

Table D.58 Highest Education Level Completed of Study Respondents

		Frequency	Valid Percent	Cumulative Percent
Valid	High School or Less	126	23.80	23.80
	College	281	53.10	76.90
	Graduate	88	16.60	93.60
	Professional	34	6.40	100.00
	Total	529	100.00	

Question 16 asked respondents what year they were born in. This was information was used to obtain the age of the respondents. The age of the respondents ranged from 23 to 94 with a mean of 53.46 and a standard deviation of 14.20 (see figure D.42).

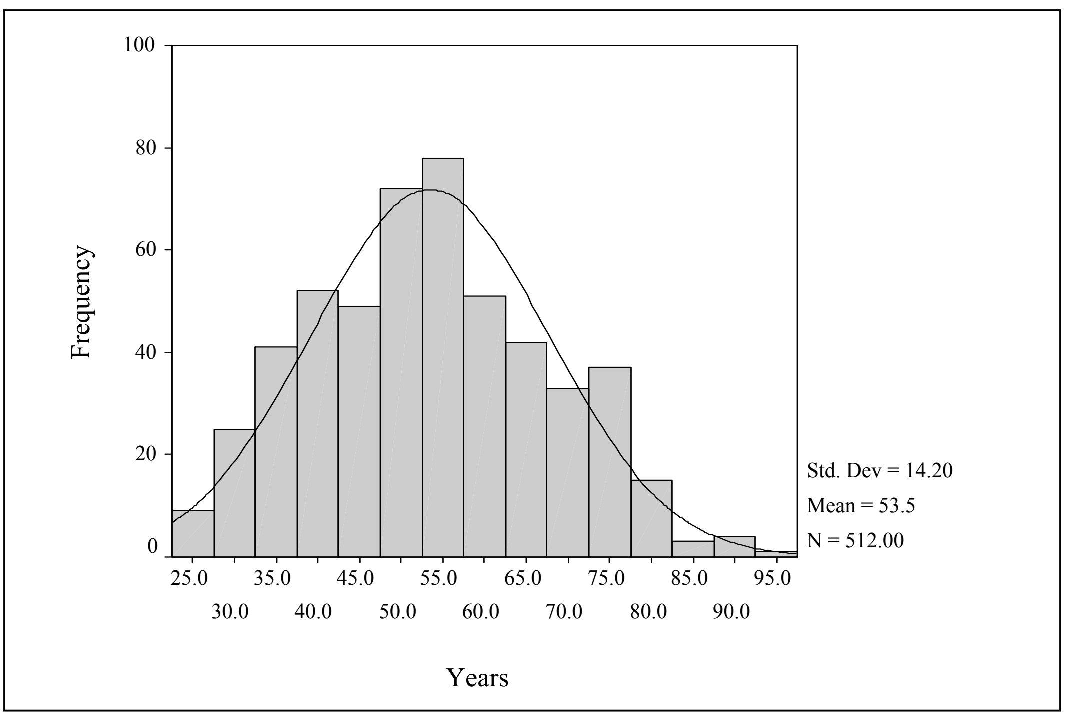


Figure D.42 Age of Respondents

Question 17 asked the respondents their gender. Slightly over half (55.4%) of the respondents were male (see table D.59). Question 18 asked the respondents about their family status. The majority of the respondents were married and had children. Slightly over two fifths (40.7) of the respondents were married with children over 18, and slightly over one fifth (23.7) of the respondents were married with children under 18 (see table D.60).

Table D.59
Gender of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	294	53.90	55.40	55.40
	Female	237	43.50	44.60	100.00
	Total	531	97.40	100.00	
Missing	9	14	2.60		
Total		545	100.00		

Table D.60
Family Status of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single No Child	60	11.00	11.40	11.40
	Married No Child	53	9.70	10.10	21.50
	Married w child -18	129	23.70	24.50	46.00
	Single w child -18	14	2.60	2.70	48.70
	Single w child 18+	46	8.40	8.70	57.40
	Married w child 18+	222	40.70	42.20	99.60
	99	2	.40	.40	100.00
	Total	526	96.50	100.00	
Missing	9	19	3.50		
Total		545	100.00		

Question 19 asked respondents what was their occupation. This was summarized into four categories; employed, homemaker, unemployed and retired. Over 68% of the respondents were employed, while 26.8% were retired, 3.7% were homemakers, and 1.4% were unemployed (see table D.61).

Table D.61
Employment Status of Study Respondents

		Frequency	Valid Percent	Cumulative Percent
Valid	Employed	349	68.20	68.20
	Homemaker	19	3.70	71.90
	Unemployed	7	1.40	73.20
	Retired	137	26.80	100.00
	Total	512	100.00	

Question 20 asked respondents if they belong to an environmental organization. An overwhelming majority (90.8%) of the respondents stated that they did not belong to an environmental organization (see table D.62).

Table D.62
Were Respondents Members of Environmental Organizations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	495	90.80	92.70	92.70
	Yes	39	7.20	7.30	100.00
	Total	534	98.00	100.00	
Missing	9	11	2.00		
Total		545	100.00		

7.5 Appendix E

Support For Sustainable Tourism Development Decision Tree Levels 3-8

The following is a discussion of the levels for the Support for Sustainable Tourism Decision Tree (figure 4.10.7). Nodes on levels 1 and 2 were previously discussed in section 4.6. The following is a description of the remaining nodes on levels 3 through 8.

E.1 Level 3 (Nodes 4,5,6,7,8,9)

Level 3 of the Support for Sustainable Tourism Decision Tree contains 100% of the respondents split into six nodes. Nodes 4 and 5 are part of branch 1, nodes 6 and 7 are part of branch 2, and nodes 8 and 9 are part of branch 3. Each branch at this level will be discussed separately.

Brach 1 (Nodes 4,5)

Nodes 4 and 5

Nodes 4 and 5 are located on branch 1 (see figure 4.10.9) and were the result of dividing node 1 by the respondent's age. Node 4 represented individuals that moderately to neutrally perceived that tourism had a negative impact on the community and were 72 years old or younger. Node 5 represent individuals that moderately to neutrally perceived that tourism had a negative impact on the community and older than 72 years.

Stakeholders in node 4, individuals that moderately to neutrally perceived that tourism had a negative impact on the community and who 72 years old or younger, were generally more supportive (63.07 mean on Support for Sustainable Tourism Index, see description section 4.3.1) than individuals in node 5, individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1) and who were older than 72 years (49.80 mean on Support for Sustainable Tourism Index, see description section 4.3.1). The mean for node 5 was the lowest of all nodes on the decision tree and below the middle point on the Support for Sustainable Tourism Index. This indicated that individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1) and who were older than 72 years may not be supportive of sustainable tourism.

Node 4, individuals that moderately to neutrally perceive that tourism had a negative impact on the community and who were 72 years old or younger, represented 17.29% of the total respondents. This group can be further differentiated by two other variables (see table E.1). The most significant indicator of support for sustainable tourism development was the area (town, non-town) the individual lived in, based on a p value = .02.

Table E.1
Predictors for Node 4 Individuals that moderately to neutrally perceived that tourism had a negative impact on the community and who were 72 years old or younger.

Predictor	F	DF	P value
Area	5.62	1, 81	.02
Visited Visitors Center	4.05	1, 81	.04
Bird Watching	2.92	1, 81	.09

Node 5, individuals that moderately to neutrally perceive that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1) and who were older than 72 years, represented 1.04% of the respondents. Due to the size of this group (n = 5) no further divisions can be done. Therefore, node 5 was a terminal node in this decision tree.

Branch 2 (Nodes 6 and 7)

Nodes 6 and 7

Nodes 6 and 7 are located on branch 2 (see figure 4.10.9) and were the result of dividing node 2 by if the respondents' bird watched or did not bird watch in 2002. Node 6 represented individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1) and have bird watched in 2002. Node 7 represented individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1) and did not bird watch in 2002.

Stakeholders in node 6 were more supportive (66.77) than those in node 7 (63.88). Both groups were in the index range of support for sustainable development. When compared to other groups' means both nodes 6 and 7 fell in the middle of the distribution. This indicated that both groups should be supportive of sustainable tourism development.

Node 6, individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1) and did bird watch in 2002, represent 16.04% of the respondents. These responses can be further differentiated by two other variables (see table 16). Whether the individual had hunted or had not hunted in 2002 was found to be the most significant indicator of support for sustainable tourism development, based on a p value > .01 (see table E.2).

Table E.2
Predictors for Node 6 Individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index) and bird watched in 2002.

Predictor	F	DF	P value
Hunting	8.02	1, 75	>.01
Hiking	6.46	1, 75	.01

Node 7, individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1) and did not bird watch in 2002, represented 48.13% of the respondents. These responses can be further differentiated based the individual's gender, based on a p value > .01 (see table E.3).

Table E.3
Predictors for Node 7 Individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index) and did not bird watch in 2002.

Predictor	F	DF	P value
Gender	10.78	1, 229	>.01
Perspective	5.45	2, 228	.09

Branch 3 (Nodes 8 and 9)

Nodes 8 and 9

Nodes 8 and 9 are located on branch 3 (see figure 4.10) and were the result of dividing node 3 by if the respondents' bird watched or did not bird watch in 2002. Node 8 represent individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) and did bird watched in 2002. Node 9 represented individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) and did not bird watch in 2002.

Stakeholders in node 8, individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) and did bird watch in 2002, were more supportive (72.85) than node 9, individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) and did not bird watch in 2002 (68.02). Node 8 represented one of the five highest mean scores in the decision tree, indicating that they would be very supportive of sustainable tourism in the community. Node 9 also represented a group that was highly supportive but not as high as node 8.

Node 8, individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) and did bird watch in 2002 represent 4.17% of the respondents. There were no variables statistically significant enough (p value = .05) to justify dividing this group further. Therefore, node 8 was a terminal node in this decision tree.

Node 9, individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) and did not bird watch in 2002, represent 13.33% of the respondents. These responses can be differentiated by two other variables. An individual's attendance to an event in 2002 was found to be the most significant indicator of support for sustainable tourism development, based on a p value = .03 (table E.4).

Table E.4
Predictors for Node 9 Individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index) and did not bird watch in 2002.

Predictor	F	DF	P value
Attend a Festival	4.70	1, 62	.03
Area	4.50	1, 62	.04
Hunting	3.64	1, 62	.06

E.2 Level 4 (Nodes 10, 11, 12, 13, 14, 15, 16, 17)

Level 4 of the Support for Sustainable Tourism Decision Tree contains 94.79% of the respondents split into eight nodes. Nodes 10 and 11 are part of branch 1, nodes 12, 13, 14 and 15 are part of branch 2, and nodes 16 and 17 are part of branch 3. Each branch at this level will be discussed separately.

Branch 1 (Nodes 10, 11)

Nodes 10 and 11

Nodes 10 and 11 are located on branch 1 (see figure 4.10.9) and were the result of dividing node 4 by the area (town, non-town) the respondents lived in. Node 10 represented individuals that moderately to neutrally perceive that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section

4.3.1), were 72 years old or younger, and live in town. Node 11 represented individuals that moderately to neutrally perceived that tourism had a negative impact on the community, who were 72 years old or younger, and did not live in town.

Stakeholders in node 11, individuals that moderately to neutrally perceived that tourism had a negative impact on the community, who were 72 years old or younger, and did not live in town, were more likely to support sustainable tourism (66.19) than node 10, individuals that moderately to neutrally perceive that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1), were 72 years old or younger, and live in town (62.02). Compared to other groups in the decision tree, node 10 was in the bottom 10 for support for sustainable tourism development. Therefore respondents in this group, while somewhat supportive of sustainable development, could be persuaded to be against some of the concepts of sustainable development.

Node 10; individuals that moderately to neutrally perceived that tourism had a negative impact on the community, who were 72 years old or younger, and live in town; represent 12.92% of the respondents. These responses can be further differentiated by if individual has visited or had not visited the local visitors center. Visiting the local visitors center was found to be the most significant indicator of support for sustainable tourism development, based on a p value > .01 (see Table E.5).

Table E.5
Predictor for Node 10 Individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1), who were 72 years old or younger, and live in town.

Predictor	F	DF	P value
Visited Visitors Center	8.00	1, 60	>.01

Node 11; individuals that moderately to neutrally perceived that tourism had a negative impact on the community, who were 72 years old or younger, and do not live in town; represented 4.38% of the respondents. There were no variables statistically significant enough (p value = .05) to justify dividing this group further. Therefore, node 20 was a terminal node in this decision tree.

Branch 2 (12, 13 and 14, 15)

Nodes 12 and 13

Nodes 12 and 13 are located on branch 2 (see figure 4.10.9) and were the result of dividing node 6 by if the respondents did or did not hunt in 2002. Node 12 represents individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch, but did not hunt in 2002. Node 13 represents individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch and hunt in 2002.

Stakeholders in node 12; individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch, but did not hunt in 2002; were more supportive of sustainable tourism development (67.54) than those in node 13; individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1)), did bird watch and hunt in 2002; (60.89). The mean score for node 5 was the fifth lowest of all nodes on the tree. This indicated that although this group supports some sustainable tourism development they were not as supportive as others.

Node 12, individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch, but did not hunt in 2002 represented 14.17% of the respondents. These responses can be further differentiated by two other variables (see table E.6). Whether the individual had hiked or had not hiked in 2002 was found to be the most significant indicator of support for sustainable tourism development, based on a p value > .01.

Table E.6
Predictors for Node 12 Individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index), did bird watch, but did not hunt in 2002.

Predictor	F	DF	P value
Hiking	10.81	1, 66	>.01
Impact	10.11	1, 66	.04
Education	7.56	1, 66	.07
Belong to an organization	2.97	1, 66	.08

Node 13; individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch and hunt in 2002; represent 1.88% of the respondents. Due to the size of this group (n = 9) no further divisions can be done. Therefore, node 5 was a terminal node in this decision tree.

Nodes 14 and 15

Nodes 14 and 15 are located on branch 2 (see figure 2) and were the result of dividing node 7 by the individual's gender. Node 14 represents individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch in 2002 and were male. Node 15 represents individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch in 2002 and were female.

Stakeholders in node 14; individuals that neutrally to moderately perceived that tourism had a positive impact, did not bird watch in 2002 and were male were less inclined to support sustainable tourism development (62.93) than node 15, individuals that neutrally to moderately perceived that tourism had a positive impact, did not bird watch in 2002 and were female (65.30). Node 14 was in the bottom 10 groups in relation to their support of sustainable tourism. It can be assumed that this group would support sustainable tourism but could also support ideas that would not be considered as sustainable.

Node 14; individuals that neutrally to moderately perceived that tourism had a positive impact, did not bird watch in 2002 and were male; represent 28.75% of the respondents. These responses can be further differentiated based on their perspective in relation to tourism. The stakeholders perspective was found to be the most significant indicator of support for sustainable tourism development, based on a p value = .05 (table E.7).

Table E.7
Predictors for Node 14 Individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index), did not bird watch in 2002 and were male.

Predictor	F	DF	P value
Perspective	9.48	1, 136	.05

Node 15; individuals that neutrally to moderately perceived that tourism had a positive impact, did not bird watch in 2002 and were female; represent 19.38% of the respondents. These respondents can be further split by two other variables (see table E.8). A more specific indication of the respondents perception of tourism impacts was found to be the most significant indicator of support for sustainable tourism development, based on a p value > .01

Table E.8
Predictors for Node 15 Individuals that neutrally to moderately perceived that tourism had a positive impact did not bird watch in 2002 and were female.

Predictor	F	DF	P value
Impact	13.46	1, 91	>.01
Camping	3.8780	1, 91	.05

Branch 3 (Nodes 16 and 17)

Nodes 16 and 17

Nodes 16 and 17 are located on branch 3 (see figure 4.10) and were the result of dividing node 9 by if they had or had not attended a festival in 2002. Node 16 represented individuals that moderately to strongly perceive that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch, but attended a festival in 2002. Node 17 represented individuals that moderately to strongly perceive that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch nor attended a festival in 2002.

Stakeholders in node 16; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch, but attended a festival in 2002; were more supportive (69.32) than individuals in node 17; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch, nor attended a festival in 2002; (65.15). Both scores were in the middle of the distribution in comparison to the other groups.

Node 16; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch, but attended a festival in 2002; represent 9.17% of the respondents. These responses can be further differentiated based on the characteristics of their household. Household characteristics was found to be the most significant indicator of support for sustainable tourism development, based on a p value > .01 (table E.9).

Table E.9
Predictors for Node 16 Individuals that moderately to strongly perceive that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch, but attended a festival in 2002.

Predictor	F	DF	P value
Household	27.92	1, 42	>.01

Node 17, individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch, nor attended a festival in 2002 represented 4.17% of the respondents. There are no variables statistically significant enough (p value = .05) to justify dividing this group further. Therefore, node 16 was a terminal node in this decision tree.

E.3 Level 5 (Nodes 18, 19, 20, 21, 38, 39, 22, 23, 24, and 25)

Level 5 of the Support for Sustainable Tourism Decision Tree contains 84.63% of the respondents split into ten nodes. Nodes 18 and 19 are part of branch 1, nodes 20, 21, 22, and 23 are part of branch 2, and nodes 24 and 25 are part of branch 3. Each branch at this level will be discussed separately.

Branch 1 (Nodes 18 and 19)

Nodes 18 and 19

Nodes 18 and 19 are located on branch 1 (see figure 4.10.9) and were the result of dividing node 10 by if the respondent's had or had not visited the visitors' center. Node 18 represented stakeholders that perceive tourism had no impact or a negative impact (Score of <=36 on the Impact Index, see description section 4.3.1), which were 72 years old or younger, live in town and have never visited the visitors' center. Node 19 represented stakeholders that perceive tourism had no impact or a negative impact (Score of <=36 on the Impact Index, see description section 4.3.1), which were 72 years old or younger, live in town and have visited the visitors' center.

Stakeholders in node 18, individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1), who were 72 years old or younger, live in town and have never visited the visitors' center were less supportive of sustainable tourism (60.43) than node 19 individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1), who were 72 years old or younger, and live in town and have not visited the visitors' center individual's who have visited the visitors' center (65.89). Node 18 was one of the three lowest scores when compared to the other groups. This indicated that they might not be as supportive as others in the community.

Node 18, individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1), who were 72 years old or younger, and live in town and have not visited the visitors' center, represented 9.17% of the respondents. These responses can be further differentiated based on if the individuals participated in or did not participate in a motor sports activity in 2002. An individuals participation or lack of participation in motor sports was found to be the most significant indicator of support for sustainable tourism development, based on a p value = .04 (see Table E.10).

Table E.10
Predictors for Node 18 Individuals that moderately to neutrally perceived that tourism had a negative impact on the community, who were 72 years old or younger, and live in town and have not visited the visitors' center.

Predictor	F	DF	P value
Motor Sports	4.47	1, 42	.04

Node 19, individuals that moderately to neutrally perceived that tourism had a negative impact on the community, who were 72 years old or younger, and live in town and have visited the visitors' center represent 3.75% of the respondents. There were no variables statistically significant enough (p value = .05) to justify dividing this group further. Therefore, node 19 was a terminal node in this decision tree.

Branch 2 (Nodes 20, 21, 38, 39, 22, 23)

Nodes 20 and 21

Nodes 20 and 21 are located on branch 2 (see figure 4.10) and were the result of dividing node 12 by the respondent's participation or lack of participation in hiking. Node 20 represented; individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1) bird watched and hiked but did not hunt in 2002. Node 21 represented; individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1) bird watched but did not hiked or hunts in 2002.

Stakeholder in node 20, individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1) bird watched and hiked but did not hunt in 2002, were more supportive of sustainable tourism (71.21) than node 21, individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1) bird watched but did not hiked or hunt in 2002 (66.12). Node 20 was the tenth highest in comparison to the other nodes on the tree, indicating that this group was more supportive than many other groups in the community.

Node 20; individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), who did bird watch and hiked but did not hunt; represent 3.96% of the total respondents. These responses can be further differentiated by if the individuals attended or did not attend a festival in 2002. An individuals attendance or lack of attendance at festivals was found to be the most significant indicator of support for sustainable tourism development, based on a p value = .05 (see Table E.11).

Table E.11
Predictors for Node 20 Individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), were bird watchers, do not hunt and were hikers.

Predictor	F	DF	P value
Attend a Sports Event	4.31	1, 17	.05

Node 21; individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1) bird watched but did not hiked or hunt in 2002; represented 10.21% of the respondents. These responses can be further differentiated by if the individuals had or had not fished in 2002. Fishing or not fishing was found to be the most significant indicator of support for sustainable tourism development, based on a p value > .01 (see Table E.12).

Table E.12
Predictors for Node 21 Individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index) bird watched but did not hiked or hunt in 2002.

Predictor	F	DF	P value
Fishing	7.60	1, 47	>.01

Nodes 38 and 39

Nodes 38 and 39 are located on branch 2 (see figure 4.9) and were the result of dividing node 14 by the respondent's perspective. Node 38 represented male governmental officials or business owners that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), and did not bird watch in 2002. Node 39 represented male residents or visitors that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), and did not bird watch in 2002.

Stakeholder in node 38, male governmental officials or business owners that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), and did not bird watch in 2002; were less supportive of sustainable development (60.61) than node 39; male residents or visitors that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), and did not bird watch in 2002; (63.75) than officials and business owners (node 38). Node 38 was one of the five lowest, least support for sustainable development, of all nodes.

Node 38; male governmental officials or business owners that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), and did not bird watch in 2002; represented 7.50% of the respondents. There were no variables statistically significant enough to justify dividing this group further. Therefore, node 38 was a terminal node in this decision tree.

Node 39, male residents or visitors that perceive tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), and did not bird watch in 2002; represent 21.25% of the respondents. These responses can be further differentiated based on if the individuals were or were not members of an environmental organization. Membership in an environmental organization was found to be the most significant indicator of support for sustainable tourism development, based on a p value = .05 (see Table E.13).

Table E.13
Predictors for Node 39 Male residents or visitors that perceive tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index), and did not bird watch in 2002.

Predictor	F	DF	P value
Belong to an Organization	3.97	1, 100	.05

Nodes 22 and 23

Nodes 22 and 23 are located on branch 2 and the result of dividing node 15 by the respondent's perception of tourism's impact on the community. Node 22 represented individuals that perceive tourism has a slight positive impact (Score of 36-43 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch in 2002 and were female. Node 23 represented individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 43-45 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch in 2002 and were female.

Stakeholder in node 22; individuals that perceive tourism has a slight positive impact (Score of 36-43 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch in 2002 and were female were less supportive of sustainable tourism development (64.11) than individuals in node 23; represented individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 43-45 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch in 2002 and were female; (68.35). When compared to the other nodes both node 22 and 23 fall in the middle of the distribution.

Node 22; individuals that perceive tourism had a slight positive impact (Score of 36-43 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch in 2002 and were female represent 13.96% of the respondents. There were no variables statistically significant enough (p value = .05) to justify dividing this group further. Therefore, node 22 was a terminal node in this decision tree.

Node 23 individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 43-45 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch in 2002 and were female represent 5.42% of the respondents. There were no variables statistically significant enough to justify dividing this group further. Therefore, node 23 was a terminal node in this decision tree.

Branch 3 (Nodes 24 and 25)

Nodes 24 and 25

Nodes 24 and 25 are located on branch 3 and were the results of dividing node 16 by household characteristics. Node 24 represented individuals that moderately to strongly perceive that tourism had a positive impact, (score of >45 on the Impact Index, see description section 4.3.1), did not bird watch but did attend a festival in 2002 and who were either married with a child over 18 or have no children. Node 25 represented individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch but did and attended a festival in 2002 and who were single or married with a child under 18.

Stakeholders in node 24, individuals that moderately to strongly perceived that tourism had a positive impact, (score of >45 on the Impact Index, see description section 4.3.1), did not bird watch but did attend a festival in 2002 and who were either married with a child over 18 or have no children, were less supportive (65.05) than node 25; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch but did and attended a festival in 2002 and who were single or married with a child under 18; (73.59). Node 25 was one of the most supportive groups of all nodes.

Node 24, individuals that moderately to strongly perceived that tourism had a positive impact, (score of >45 on the Impact Index, see description section 4.3.1), did not bird watch but did attend a festival in 2002 and who were either married with a child over 18 or have no children; represents 4.58% of all respondents. There were no variables statistically significant (p value = .05) enough to justify dividing this group further. Therefore, node 23 was a terminal node in this decision tree.

Node 25, individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch but did and attended a festival in 2002 and who were single or married with a child under 18; represented 4.58% of all respondents. These respondents can be further differentiated by three other variables. (see table E.14). The most significant indicator of support for sustainable tourism development was if the individual hunted or did not hunt in 2002, based on a p value = .02.

Table E.14
Node 25 Individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index) did not bird watch but did and attended a festival in 2002 and who were single or married with a child under 18.

Predictor	F	DF	P value
Hunting	6.89	1, 20	.02
County	4.63	1, 20	.04
Impact	4.29	1, 20	.05
Camping	3.23	1, 20	.08

E.4 Level 6 (Nodes 26, 27, 42, 43, 28, 29, 40, 41, 30, 31)

Level 6 of the Support for Sustainable Tourism Decision Tree contains 54.57% of the respondents split into ten nodes. Nodes 26 and 27 are part of branch 1, nodes 42, 43, 28, 29, 40 and 41 are part of branch 2, and nodes 30 and 31 are part of branch 3. Each branch at this level will be discussed separately.

Branch 1 (Nodes 26 and 27)

Nodes 26 and 27

Nodes 26 and 27 are located on branch 1 (figure 4.8) and are the result of dividing node 18 by the respondents' participation or lack of participation in motor sports activities. Node 26 represented; individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1), who were 72 years old or younger, live in town and have never visited the visitors' center and who had not participated in motor sports in 2002. Node 27 represented individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1), who were 72 years old or younger, live in town and have never visited the visitors' center and who had participated in motor sports in 2002.

Stakeholder's in node 26; individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1), who were 72 years old or younger, live in town and have never visited the visitors' center and who had not participated in motor sports in 2002; were less supportive (59.58) than stakeholders in node 27; individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1), who were 72 years old or younger, live in town and have never visited the visitors' center and who had participated in motor sports in 2002; (65.83). Node 26 was the second lowest score when compared to all other nodes.

Node 26; individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1), who were 72 years old or younger, live in town and have never visited the visitors' center and who had not participated in motor sports in 2002; represent 7.92% of the respondents. There were no variables statistically significant enough (p value = .05) to justify dividing this group further. Therefore, node 23 was a terminal node in this decision tree.

Node 27 individuals that moderately to neutrally perceived that tourism had a negative impact on the community (Score of <=36 on the Impact Index, see description section 4.3.1), who were 72 years old or younger, live in town and have never visited the visitors' center and who had participated in motor sports in 2002 represent 1.25% of the respondents. Due to the size of this group (n = 6) no further divisions can be done. Therefore, node 5 was a terminal node in this decision tree.

Branch 2 (42, 43, 26, 29, 40, 41, 30, 31)

Nodes 42 and 43

Nodes 42 and 43 are located on branch 2 (see figure 4.9) and were the results of dividing node 20 by if the respondent had or had not attended a sporting event. Node 43 represented, This split results in node 42, individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch, did not hunt, did hike and did attended a sports event in 2002. Node 43, individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch, did not hunt, did hike and did not attended a sports event in 2002.

Stakeholders in node 42; individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch, did not hunt, did hike and did attended a sports event in 2002; were less supportive (68.38) than individuals in node 43; individuals that neutrally to moderately perceived that tourism had a positive impact

(Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch, did not hunt, did hike and did not attended a sports event in 2002; (73.27). Both groups, when compared to other nodes, were in the top ten in their support for sustainable tourism development.

Node 42; individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch, did not hunt, did hike and did attended a sports event in 2002; represented 1.67% of the respondents. Due to the size of this group (n = 8) no further divisions can be done. Therefore, node 42 was a terminal node in this decision tree.

Node 43; individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch, did not hunt, did hike and did not attended a sports event in 2002; represented 2.29% of the respondents. There were no variables statistically significant (p value = .05) enough to justify dividing this group further. Therefore, node 43 was a terminal node in this decision tree.

Nodes 28 and 29

Nodes 28 and 29 are on branch 2 (see figure 4.10) and were the result of dividing node 21 by if the respondents had or had not fished 2002. Node 28 represented individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch and fish but did not hunt or hike in 2002. Node 29 represented individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch but did not fish, hunt or hike in 2002.

Stakeholders in node 28, individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch and fish but did not hunt or hike in 2002, were more supportive of sustainable tourism development (69.06) than stakeholders in node 29; individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch but did not fish, hunt or hike in 2002; (64.56). Both groups, when compared to the other nodes, fall in the middle of the distribution.

Node 28; individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch and fish but did not hunt or hike in 2002; represented 3.54% of the respondents. These responses can be further differentiated based on the individual's gender. Gender was found to be the most significant indicator of support for sustainable tourism development, based on a p value = .05 (see table E.15).

Table E.15
Predictors for Node 28 Individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index), did bird watch and fish but did not hunt or hike in 2002.

Predictor	F	DF	P value
Gender	4.73	1, 15	.05

Node 28; individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch but did not fish, hunt or hike in 2002; represented 6.67% of the respondents. These responses can be further differentiated based on the individual's gender. Gender was found to be the most significant indicator of support for sustainable tourism development, based on a p value = .04 (see table E.16).

Table E.16
Predictors for Node 29 Individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index), did bird watch but did not fish, hunt or hike in 2002

Predictor	F	DF	P value
Gender	4.88	1, 30	.04

Nodes 40 and 41

Nodes 40 and 41 were on branch 2 (see figure 4.9) and were the result of dividing node 39 by if the respondents belong or did not belong to an environmental organization in 2002. Node 40 represented male residents or visitors that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch, or belong to an environmental organization in 2002. Node 41 represented male residents or visitors that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch, but did belong to an environmental organization in 2002.

Stakeholders in node 40; male residents or visitors that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch, or belong to an environmental organization in 2002; were less supportive of sustainable tourism (63.53) than node 41; male residents or visitors that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch, but did belong to an environmental organization in 2002; (68.00). Both groups, when compared to the other nodes, fall in the lower middle of the distribution.

Node 40; male residents or visitors that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch, or belong to an environmental organization in 2002; represented 20.21% of the respondents. There were no variables statistically significant enough (p value = .05) to justify dividing this group further. Therefore, node 40 was a terminal node in this decision tree.

Node 41; male residents or visitors that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did not bird watch, but did belong to an environmental organization in 2002; represented 1.04% of the respondents. Due to the size of this group (n = 5) no further divisions can be done. Therefore, node 42 was a terminal node in this decision tree.

Branch 3 (Nodes 30 and 31)

Nodes 30 and 31

Nodes 30 and 31 are located on branch 3 (see figure 5) and were the result of dividing node 25 by if the respondents had or had not hunted in 2002. Node 30 represented individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch or hunt but did attended a festival in 2002 and who were single or married with a child under 18. Node 31 represented individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch but did hunt and attended a festival in 2002 and who were single or married with a child under 18.

Stakeholders in node 30; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch or hunt but did attended a festival in 2002 and who were single or married with a child under 18; were more supportive of sustainable tourism development (75.06) than those in node 31; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch but did hunt and attended a festival in 2002 and who were single or married with a child under 18; (68.60). Both groups were very supportive of sustainable tourism, but individuals in node 30 were the third highest supporters of sustainable tourism.

Node 30; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch or hunt but did attended a festival in 2002 and who were single or married with a child under 18; represent 3.54% of the respondents. These responses can be further differentiated based on if the individual attended or did not attend a festival in 2002. Festival attendance was found to be the most significant indicator of support for sustainable tourism development, based on a p value = .03 (see table E.17).

Table E.17
Predictors for Node 30 Individuals that moderately to strongly perceive that tourism had a positive impact (score of >45 on the Impact Index) did not bird watch or hunt but did attended a festival in 2002 and who were single or married with a child under 18.

Predictor	F	DF	P value
Attending a Sporting Event	5.92	1, 15	.03
Gardening	3.73	1, 15	.073

Node 31; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch but did hunt and attended a festival in 2002 and who were single or married with a child under 18; represent 1.04% of the respondents. Due to the size of this group (n = 5) no further divisions can be done. Therefore, node 42 was a terminal node in this decision tree.

E.5 Level 7 (Nodes 32, 33, 34, 35, 36, 37)

Level 7 of the Support for Sustainable Tourism Decision Tree contains 13.75% of the respondents split into six nodes. There are no nodes under branch 1. Nodes 32, 33, 34 and 35 are part of branch 2, and nodes 36 and 37 are part of branch 3. Each branch at this level will be discussed separately.

Branch 2 (32, 33, 34, 35)

Nodes 32 and 33

Nodes 32 and 33 are located on branch 2 and were the result of dividing node 28 by the person's gender. Node 32 represented male individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch and fish but did not hunt or hike in 2002. Node 33 represented female individuals that neutrally to moderately perceive that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch and fish but did not hunt or hike in 2002.

Stakeholders in node 32; male individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch and fish but did not hunt or hike in 2002; were more supportive of sustainable tourism development (73.33) than those in node 33; female individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch and fish but did not hunt or hike in 2002; (66.73). Respondents in node 32, when compared to other nodes, was the sixth highest in their index score for support for sustainable tourism.

Node 32; male individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch and fish but did not hunt or hike in 2002; represent 1.25% of the respondents. Due to the size of this group (n = 6) no further divisions can be done. Therefore, node 32 was a terminal node in this decision tree.

Node 33 female individuals that neutrally to moderately perceived that tourism had a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch and fish but did not hunt or hike in 2002; represented 2.29% of the respondents. There were no variables statistically significant enough (p value = .05) to justify dividing this group further. Therefore, node 33 was a terminal node in this decision tree.

Nodes 34 and 35

Nodes 34 and 35 are located on branch 2 (see figure 4.10) and were the result of dividing node 29 by their gender. Node 34 represented males that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch but did not fish, hunt or hike in 2002. Node 35 represented females that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch but did not fish, hunt or hike in 2002.

Stakeholders in node 34; males that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch but did not fish, hunt or hike in 2002; were less supportive of sustainable tourism (62.33) than those in node 35; females that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch but did not fish, hunt or hike in 2002; (65.90). Node 34 was the eight lowest score on the Support for Sustainable Tourism Index, indicating that this group may not support all types of sustainable development.

Node 34; males that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch but did not fish, hunt or hike in 2002; represented 2.50% or the respondents. There were no variables statistically significant enough (p value = .05) to justify dividing this group further. Therefore, node 33 was a terminal node in this decision tree.

Node 35; females that perceive tourism has a positive impact (Score of 36-45 and missing responses on the Impact Index, see description section 4.3.1), did bird watch but did not fish, hunt or hike in 2002; represented 4.17% of the respondents. There were no variables statistically significant enough (p value = .05) to justify dividing this group further. Therefore, node 33 was a terminal node in this decision tree.

Branch 3 (Nodes 36 and 37)

Nodes 36 and 37

Nodes 36 and 37 are located on branch 3 and were the result of dividing node 30 by whether they had or had attended a sports event. Node 36 represented individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch or hunt but did attended a festival and a sports event in 2002 and who were single or married with a child under 18.

Node 37 represented individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch hunt, or attend a sports event but did attended a festival in 2002 and who were single or married with a child under 18.

Stakeholders in node 36; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch or hunt but did attended a festival and a sports event in 2002 and who were single or married with a child under 18; were more supportive of sustainable tourism development (76.91) than those in node 37; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch hunt, or attend a sports event but did attended a festival in 2002 and who were single or married with a child under 18; (71.67). Both groups were in the upper range of the Support Index, with node 36 the second most supportive group on the tree.

Node 36; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch or hunt but did attended a festival and a sports event in 2002 and who were single or married with a child under 18; represented 2.29% of the respondents. These responses can be further differentiated based on if they had or had not taken a photograph in 2002. Taking photographs was found to be the most significant indicator of support for sustainable tourism development, based on a p value = .05 (see table E.18).

Table E.18
Predictors for Node 36 Individuals that moderately to strongly perceive that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch or hunt but did attended a festival and a sports event in 2002 and who were single or married with a child under 18.

Predictor	F	DF	P value
Photography	4.97	1, 9	.05

Node 37; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch hunt, or attend a sports event but did attended a festival in 2002 and who were single or married with a child under 18; represent 1.25% of the respondents. Due to the size of this group (n = 6) no further divisions can be done. Therefore, node 37 was a terminal node in this decision tree.

E.6 Level 8 (Nodes 44 and 45)

Level 8 of the Support for Sustainable Tourism Decision Tree contains 2.29% of the respondents split into two nodes. There are no nodes under branch 1 or branch 2. Nodes 44 and 45 are part of branch 3. Each branch at this level will be discussed separately.

Branch 3 (Nodes 44 and 45)

Nodes 44 and 45

Nodes 44 and 45 were the result of dividing node 36 by whether they had or had not taken photographs in 2002. Node 44, represented individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch, hunt or take photographs but did attended a festival and a sports event in 2002 and who were single or married with a child under 18. Node 45 represented individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch, or but did take photographs, attended a festival and a sports event in 2002 and who were single or married with a child under 18.

Node 44; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch, hunt or take photographs but did attended a festival and a sports event in 2002 and who were single or married with a child under 18; were more supportive of supportive of sustainable tourism development (79.60) than those in node 45; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch, or but did take photographs, attended a festival and a sports event in 2002 and who were single or married with a child under 18 (74.67). Both groups were in the high support range. Node 44 was the most supportive group identified by this decision tree.

Node 44; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch, hunt or take photographs but did attended a festival and a sports event in 2002 and who were single or married with a child under 18; were more supportive of supportive of sustainable tourism development; represent 1.04% of the respondents. Due to the size of this group (n = 5) no further divisions can be done. Therefore, node 37 was a terminal node in this decision tree.

Node 45; individuals that moderately to strongly perceived that tourism had a positive impact (score of >45 on the Impact Index, see description section 4.3.1) did not bird watch, or but did take photographs, attended a festival and a sports event in 2002 and who were single or married with a child under 18; represented 1.25% of the respondents. Due to the size of this group (n = 6) no further divisions can be done. Therefore, node 37 was a terminal node in this decision tree.

7.6 Appendix F

Participation in Tourism and Political Activities Decision Tree Levels 3-9

The following is a discussion of the levels for the Participation in Tourism and Political Activities Decision Tree (figure 4.11). Nodes on levels 1 and 2 were previously discussed in section 4.7. The following is a description of the remaining nodes on levels 3 through 8.

F.1 Level 3 (Nodes 4,5,6,7,8,9)

Level 3 of the Participation in Political and Tourism Activities Decision Tree contained 87.30% of the respondents split into eight nodes. Nodes 6 and 7 were part of branch 1, nodes 8, 9 and 10 were part of branch 2, and nodes 11,12 and 13 were part of branch 4. There were no nodes under branch 3. Each branch at this level will be discussed separately.

Brach 1 (Nodes 6, 7)

Nodes 6 and 7

Nodes 6 and 7 were located on branch 1 (see figure 4.12) and were the result of splitting node 1 by how long the respondents had lived in the county. Node 6 represents government officials who have lived in the county for 45 years or less. Node 7 represents government officials who have lived in the county for more than 45 years.

Stakeholders in node 6, government officials who have lived in the county for 45 years or less, were less participative (9.62) than stakeholders in node 7, government officials who have lived in the county for more than 45 years, (11.84). Both groups can be considered highly participative in comparison to other nodes. Individuals in node 7 represent the second most participative group on the tree. This indicates that both groups will be involved in most activities that deal with politics and tourism.

Node 6 government officials, who have lived in the county for 45 years or less, represent 5.24% of the respondents in this study. These respondents can be further split based on another variable. Gender was found to be the most significant predictor of their participation in tourism and political activities was the individual's perception of the impact tourism has on the community, based on a p value = .02.

Table F.1
Predictors For Node 6 Government Officials who have lived in the county for 45 years or less.

Predictor	F	DF	P value
Gender	6.61	1, 24	.02

Node 7 government officials, who have lived in the county for more than 45 years, represent 3.83% of the respondents in this study. These respondents can be further split based on another variable. Whether the individual had fished or had not fished in 2002 was found to be the most significant predictor of their participation in tourism and political activities was the individual's perception of the impact tourism has on the community, based on a p value = .04 (see table F.2).

Table F.2
Predictors For Node 7 Government Officials who have lived in the county for more than 45 years.

Predictor	F	DF	P value
Fished or Had not Fished	4.96	1, 17	.04

Branch 2 (Nodes 8, 9 and 10)

Nodes 8, 9 and 10

Nodes 8, 9, and 10 were located on branch 2 and were the result of splitting node 2 by respondents' perceptions of the impact that tourism has on their county. Node 8 represents residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1). Node 9 represents, residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1). Node 10 represents, residents that strongly perceive that tourism has positive impacts (Score of 45+ on the Impact , see description section 4.3.1).

Stakeholders in node 8, residents that perceive tourism has very little positive impact to a negative impact, were less participative (2.56) than stakeholders in node 9 residents that perceive that tourism has some positive impacts (3.40). Stakeholders in node 9 residents that perceive that tourism has some positive impacts were less supportive (3.40) than stakeholders in node 10 residents that strongly perceive that tourism has positive impacts (Score of 45+ on the Impact , see description section 4.3.1) (4.83). Residents were the lowest participating group over all, but the residents found in node 10 were the most participative in tourism and political activities.

Node 8, residents that perceive tourism has very little positive impact to a negative impact, represented 30.44% of the respondents. These respondents can be further split based on other variables. Four variables were found to be statistically significant (p value = .05) to justify the division (see table 46). Whether the individual had bird watched or had not bird watched in 2002 was found to be the most significant predictor of their participation in tourism and political activities was the individual's perception of the impact tourism has on the community, based on a p value = .006270548 (see table F.3).

Table F.3
Predictors For Node 8 Residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact).

Predictor	F	DF	P value
Bird Watching/ not Bird Watching	10.38	1, 149	>.01
Hunting/ Not Hunting	10.11	1, 149	>.01
Attend a Sports Event/ Not Attended a Sports Event	8.71	1, 149	.01
Photography/ No Photography	7.15	1, 149	.03

Node 9, residents that perceive tourism has very little positive impact to a negative impact, represented 31.37% of the respondents. These respondents can be further split based on another variable. Whether the individual had gardened or had not gardened in 2002 was found to be the most significant predictor of their participation in tourism and political activities was the individual's perception of the impact tourism has on the community, based on a p value = .005374018 (see table F.4).

Table F.4
Predictors For Node 9 Residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact).

Predictor	F	DF	P value
Gardening/ Not Gardening	10.86	1, 104	>.01

Node 10, residents that strongly perceive that tourism has positive impacts (Score of 45+ on the Impact , see description section 4.3.1) represent 8.27% of the respondents. This node is a terminal node with no predictor statistically significant enough (p value= .05) to split this group.

Branch 4 (Nodes 11, 12 and 13)

Nodes 11, 12 and 13

Nodes 11, 12, and 13 were located on branch 4 and were the result of splitting node 4 by the respondents' perceptions of the impact that tourism has on their county. Node 11 represents business owners that perceive tourism had a negative impact (Score of <33 on the Impact , see description section 4.3.1). Node 12 represents business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact , see description section 4.3.1). Node 13 represents business owners that strongly perceive that tourism has positive impacts (Score of 45+ on the Impact , see description section 4.3.1).

Stakeholders in node 12, business owners that moderately perceived that tourism had negative and positive impacts to the community, were less participative (4.15) than stakeholders in node 11, business owners that perceive tourism had a negative impact, (6.17). Stakeholders in node 11, business owners that perceive tourism had a negative impact, (6.17) were less participative than stakeholders in node 13, business owners that strongly perceive that tourism has positive impacts, (6.84). Of interest is that the two groups that on opposite ends of their perceptions of tourism impact were the highest participants of the business owners. This indicated that stakeholders who own a business and believe strongly in the perceptions of tourism impact would participate more than other business owners. It is also important to not that after government officials both nodes 11 and 13 had the highest level of participation of all reaming groups.

Node 11, business owners that perceive tourism had a negative impact (Score of <33 on the Impact , see description section 4.3.1), represents 1.21%. Due to the size of this group (n = 9) no further divisions can be done. Therefore, node 5 is a terminal node in this decision tree.

Node 12, Business owners that moderately perceived that tourism had negative and positive impacts to the community, represented 11.90% of the respondents. These respondents can be further split based on other variables. Three variables were found to be statistically significant (p value = .05) to justify the division (see table 47). Whether the individual had attended or had not attended a sports event in 2002 was found to be the most significant predictor of their participation in tourism and political activities was the individual's perception of the impact tourism has on the community, based on a p value = .006636731 (see table 47).

Table F.5
Predictors For Node 12 Business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact).

Predictor	F	DF	P value
Had Attended a Sports Event/ Had not Attended a Sports Event	7.94	1, 57	>.01
Had Golf/ Had Not Golfed	7.94	1, 57	.01
Gardening/ Not Gardening	14.19	1, 57	.02

Node 13 business owners that strongly perceive that tourism has positive impacts (Score of 45+ on the Impact, see description section 4.3.1), represents 5.04% of the respondents. This node is a terminal node. There were no predictors statistically significant enough (p value= .05) to split this group.

F.2 Level 4 (Nodes 14, 15, 16, 17, 18, 19, 20, 21, 22, 23)

Level 4 of the Participation in Political and Tourism Activities Decision Tree contained 72.76% of the respondents split into ten nodes. Nodes 14, 15, 16 and 17 were part of branch 1, nodes 18, 19, 20 and 21 were part of branch 2, and nodes 22 and 23 were part of branch 4. Each branch at this level will be discussed separately.

Branch 1 (Nodes 14, 15, 16, 17)

Nodes 14 and 15

Nodes 14 and 15 were located on branch 4 and were the result of splitting node 6 by the respondents' gender. Node 14 represents government officials who have lived in the county for 45 years and were male. Node 15 represents government officials who have lived in the county for 45 years and were female.

Stakeholders in node 14, government officials who have lived in the county for 45 years and were male, were more participative (10.15) than stakeholders in node 15, government officials who have lived in the county for 45 years and were female, (8.14). Of all governmental officials node 15 were the lowest participators in tourism and political activities. Even though they were the least participative of government officials they were more participative than any other group that were not government officials.

Node 14, government officials who have lived in the county for 45 years and were male cannot be split due to there is no predictor statistically significant to split this group, represents 3.83% of the respondents. This node is a terminal node. There were no predictors statistically significant enough (p value= .05) to split this group.

Node 15, government officials who have lived in the county for 45 years and were female, represent 1.41% of the respondents. Due to the size of this group (n = 7) no further divisions can be done. Therefore, node 5 is a terminal node in this decision tree.

Nodes 16 and 17 were the result of splitting node 6 by their participation or lack of participation in fishing. Node 16 represents government officials who have lived in the county for more than 45 years and fished in 2002. Node 17 represents government officials who have lived in the county for more than 45 years and did not fished in 2002

Stakeholders in node 16, government officials who have lived in the county for more than 45 years and fished in 2002, participated more (12.56) than stakeholders in node 17, government officials who have lived in the county for more than 45 years and did not fished in 2002, (11.20). This may indicate that government officials that participate in recreational activities also participate slightly more in political and tourism activities than their counterparts who did not participate in recreational activities.

Node 16, government officials who have lived in the county for more than 45 years and fish, represent 1.81% of the respondents. Due to the size of this group (n = 9) no further divisions can be done. Therefore, node 16 is a terminal node in this decision tree.

Node 17, government officials who have lived in the county for more than 45 years and did not fish, represent 2.02% of the respondents. Due to the size of this group (n = 10) no further divisions can be done. Therefore, node 17 is a terminal node in this decision tree.

Branch 2 (18, 19 and 20, 21)

Nodes 18 and 19

Nodes 18 and 19 were located on branch 2 and were the result of splitting node 8 by whether the respondents did bird watch or did not bird watch in 2002. Node 18 represents residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) and did bird watch in 2002. Node 19 represents residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) and did not bird watch in 2002.

Stakeholders in node 18, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) and did bird watch in 2002, were more participative (3.41) than stakeholders in node 19, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) and did not bird watch in 2002 (2.36). There is an indication that residents who participate in natural resource based recreational activities were more participative then residents who did not.

Node 18, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) and bird watch, represent 5.85% of the respondents. This node is a terminal node. There were no predictors statistically significant enough (p value= .05) to split this group.

Node 19, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) and did not bird watch in 2002, represent 24.60 respondents. These respondents can be further split based on other variables. Three variables were found to be statistically significant (p value = .05) to justify the division (see table 47). Whether the individual had attended or had not attended a sports event in 2002 was found to be the most significant predictor of their participation in tourism and political activities was the individual's perception of the impact tourism has on the community, based on a p value > .01 (see table F.6).

Table F.6
Predictors For Node 19 Residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact) and did not bird watch in 2002.

Predictor	F	DF	P value
Attend a Sports Event/ Not Attended a Sports Event	10.54	1, 120	>.01
Length of Residency	8.94	2, 119	.01
Hunting/ Not Hunting	8.19	1, 120	.02

Nodes 20 and 21

Nodes 20 and 21 were located on branch 2 and were the result of splitting node 9 by whether they did garden or did not garden in 2002. Node 20 represents residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) and did garden in 2002. Node 21 represents residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) and did not garden in 2002.

Stakeholders in node 20, residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) and did garden in 2002, participated more (3.98) than did residents in node 21, residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) and did not garden in 2002, (2.62). There is another indication that residents who participate in natural resource based recreational activities were more participative then residents who did not.

Node 20, residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) and did garden in 2002, represent 12.30% of the responses. This node is a terminal node. There were no predictors statistically significant enough (p value= .05) to split this group.

Node 21, residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) and did not garden in 2002, represent 9.07% of the respondents. The most significant predictor of their participation in tourism and political activities was the individual's perception of the impact tourism has on the community, based on a p value = .02.

Table F.6
Predictors For Node 21 Residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact) and did not garden in 2002.

Predictor	F	DF	P value
Length of Residency	6.81	4, 40	.02

Branch 4 (Nodes 22, 23)

Nodes 22, 23

Nodes 22 and 23 were located on branch 4 and were the result of splitting node 12 business owners that perceive that tourism has some positive impacts on the community by whether they attended or did not attend a sporting event in 2002. Node 22 represents business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact , see description section 4.3.1) and attended a sports event in 2002. Node 23 represents business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact , see description section 4.3.1) and did not attend a sports event in 2002.

Stakeholders in node 22, business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact , see description section 4.3.1) and attended a sports event in 2002, participate more (4.75) than stakeholders in node 23, business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact , see description section 4.3.1) and did not attend a sports event in 2002, (3.22). Node 23 is the least participative group of business owners identified by the tree. There is also an indication that business owners who participate in other recreational activities may also participate more in political and tourism activities.

Node 22, business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact , see description section 4.3.1) and attended a sports event in 2002, represent 7.26% of the respondents. These respondents can be further split based on another variable. Age was found to be the most significant predictor of their participation in tourism and political activities was the individual's perception of the impact tourism has on the community, based on a p value = .05.

Table F.7
Predictors For Node 22 Business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact) and attended a sports event in 2002.

Predictor	F	DF	P value
Age	12.79	1, 34	.05

Node 23, business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact , see description section 4.3.1) and did not attend a sports event in 2002, represent 4.64% of the respondents. This node is a terminal node. There were no predictors statistically significant enough (p value= .05) to split this group.

F.3 Level 5 (Nodes 24, 25, 26, 27, 28, 29, 30, 31, and 32)

Level 5 of the Participation in Political and Tourism Activities Decision Tree contained 42.29% of the respondents split into nine nodes. Branch 1 has no nodes associated with it. Nodes 24, 25, 26, 27, 28, 29 and 30 were part of branch 2, and nodes 31 and 32 were part of branch 4. Each branch at this level will be discussed separately.

Branch 1 (Nodes 24 and 25)

Nodes 24 and 25

Nodes 24 and 25 were located on branch 2 and were the result of splitting node 19 by if they attended or did not attend a sports event in 2002. Node 24 represents residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, but attend a sports event in 2002. Node 25 represents residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch or attend a sports event in 2002.

Stakeholders in node 24, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, but attend a sports event in 2002, participated more (2.98) than stakeholders in node 25, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch or attend a sports event in 2002, (2.06). There is indication that residents who participate in recreational activities were more participative then residents who did not.

Node 24, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, but attend a sports event in 2002, represents 8.06% of the respondents. These respondents can be further split based on another variable. Whether they had or had not taken photographs in 2002 was found to be the most significant predictor of their participation in tourism and political activities was the individual's perception of the impact tourism has on the community, based on a p value >.01.

Table F.8
Predictors For Node 24 Residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact) did not bird watch, but attend a sports event in 2002.

Predictor	F	DF	P value
Photography/ No Photography	7.74	1, 38	>.01

Node 25, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch or attend a sports event in 2002, represent 16.53% of the respondents. These respondents can be further split based on other variables. Two variables were found to be statistically significant (p value = .05) to justify the division (see table 47). Whether the individual had hunted or had not hunted a sports event in 2002 was found to be the most significant predictor of their participation in tourism and political activities was the individual's perception of the impact tourism has on the community, based on a p value = .01 (see table F.9).

Table F.9
Predictors For Node 25 Residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact) did not bird watch or attend a sports event in 2002.

Predictor	F	DF	P value
Hunting/ No Hunting	9.20	1, 80	.01
County	4.4957	1, 80	.04

Nodes 26, 27, 28, 29, and 30

Nodes 26, 27, 28, 29, and 30 were located on branch 2 and were the result of splitting node 21, by how long they had lived in the community. Node 26 represents residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county for 7 years or less. Node 27 represents residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county for 7-11 years. Node 28 represents residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002, and have lived in the county for 11-35 years. Node 29 residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county for 35-45 years. Node 30 represents residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county more than 45 years.

Stakeholders in node 28; residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002, and have lived in the county for 11-35 years; participate less (1.46) than respondents in node 26; residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county for 7 years or less; (2.20). Stakeholders in node 26; residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county for 7 years or less; participate less (2.20) than stakeholders in node 30; residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county more than 45 years; (2.80). Stakeholders in node 30; residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county more than 45 years; participate less (2.80) than stakeholders in node 27; residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county for 7-11 years; (3.60). Stakeholders in node 27; residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county for 7-11 years; participate less (3.06) than stakeholders in node 29; residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county for 35-45 years; 4.42.

Node 26, residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county for 7 years or less represents 2.02% of the respondents. Due to the size of this group (n = 10) no further divisions can be done. Therefore, node 26 is a terminal node in this decision tree.

Node 27, residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county for 7-11 years, represents 1.01% of the respondents. Due to the size of this group (n = 5) no further divisions can be done. Therefore, node 27 is a terminal node in this decision tree.

Node 28 represents residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002, and have lived in the county for 11-35 years; represent 2.62% of the respondents. Due to the size of this group (n = 13) no further divisions can be done. Therefore, node 28 is a terminal node in this decision tree.

Node 29 residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county for 35-45 years; represent 1.41% of the respondents. Due to the size of this group (n = 7) no further divisions can be done. Therefore, node 28 is a terminal node in this decision tree.

Node 30 residents that perceive that tourism has some positive impacts (Score of 39-45 on the Impact , see description section 4.3.1) did not garden in 2002 and have lived in the county more than 45 years; respondents 2.02% of the respondents. Due to the size of this group (n = 10) no further divisions can be done. Therefore, node 28 is a terminal node in this decision tree.

Branch 4

Nodes 31, 32

Nodes 31 and 32 were located on branch 4 and were the result of splitting node 22 by the individual's age. Node 31 represents, business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact , see description section 4.3.1) attended a sports event in 2002 and were 44 years or younger. Node 32 represents business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact , see description section 4.3.1) attended a sports event in 2002 and were older than 44 years of age.

Stakeholders in node 31, business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact , see description section 4.3.1) attended a sports event in 2002 and were 44 years or younger, were less participative (3.38) than stakeholders in node 32, business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact , see description section 4.3.1) attended a sports event in 2002 and were older than 44 years of age (5.52). This could indicate that younger business owners were not as participative in tourism and political activities as were older business owners.

Node 31, business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact , see description section 4.3.1) attended a sports event in 2002 and were 44 years or younger, represent

2.62% of the respondents. This node is a terminal node. There were no predictors statistically significant enough (p value= .05) to split this group.

Node 32, business owners that moderately perceived that tourism had negative and positive impacts to the community (Score of 33-45 on the Impact , see description section 4.3.1) attended a sports event in 2002 and were older than 44 years of age, represents 4.64% of respondents. This node is a terminal node. There were no predictors statistically significant enough (p value= .05) to split this group.

F. 4 Level 6 (Nodes 33, 34, 35, and 36)

Level 6 of the Participation in Political and Tourism Activities Decision Tree contained 24.59% of the respondents split into four nodes. Branches 1 and 4 have no nodes associated with them. Nodes 33, 34, 35, and 36 were part of branch 2. Each branch at this level will be discussed separately.

Branch 2 (Nodes 33, 34, 35, and 36)

Nodes 33, and 34

Nodes 33 and 34 were located on branch 2 and were the result of splitting node 24 by there if they took photographs in 2002. Node 33 represents residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch or take photographs, but attend a sports event in 2002. Node 34 represents residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, but attend a sports event and took photographs in 2002.

Stakeholders in node 33, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch or take photographs, but attend a sports event in 2002, were less participative (2.71) than stakeholders in node 34; residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, but attend a sports event and took photographs in 2002: (4.50). This further indicates that residents that residents that participate in recreational activities also participate more in tourism and political activities.

Node 33, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch or take photographs, but attend a sports event in 2002, represents 6.85% of the respondents. This node is a terminal node. There were no predictors statistically significant enough (p value= .05) to split this group.

Node 34, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, but attend a sports event and took photographs in 2002, represents 1.21% of the respondents. Due to the size of this group (n = 6) no further divisions can be done. Therefore, node 34 is a terminal node in this decision tree.

Nodes 35 and 36

Nodes 35 and 36 were the result of splitting node 25 by if the individual hunted or did not hunt in 2002. Node 35 represents residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt or attend a sports event in 2002. Node 36 represent residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch or attend a sports event, but did hunt in 2002.

Stakeholders in node 35, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt or attend a sports event in 2002; were less participative (1.90) than node 36; residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch or attend a sports event, but did hunt in 2002; (3.33). This demonstrates that residents who participate in recreational activities have higher levels of participation in tourism and political activities.

Node 35, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt or attend a sports event in 2002; represents 14.72% of the respondents. The most significant predictor of their participation in tourism and political activities was the individual’s perception of the impact tourism has on the community, based on a p value = .04 (table F.10).

Table F.10
Predictor For Node 35 Residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the) did not bird watch, hunt or attend a sports event in 2002

Predictor	F	DF	P value
Length of Residency	12.53	1, 71	.04

Node 36; residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch or attend a sports event, but did hunt in 2002, represent 1.81% of the respondents. Due to the size of this group (n = 9) no further divisions can be done. Therefore, node 36 is a terminal node in this decision tree.

F.5 Level 7 (Nodes 37 and 38)

Level 7 of the Participation in Political and Tourism Activities Decision Tree contained 14.72% of the respondents split into two nodes. Branches 1 and 4 have no nodes associated with them. Nodes 37 and 38 were part of branch 2. Each branch at this level will be discussed separately.

Branch 2 (Nodes 37 and 38)

Nodes 37 and 38

Nodes 37 and 38 were located on branch 2 and were the result of splitting node 35 by how long they had lived in the community. Node 37 represents residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt or attend a sports event in 2002 and have lived in the community for 18 or fewer years. Node 38 represent residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt or attend a sports event in 2002 and have lived in the community for more than 18 years.

Stakeholders in node 37, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt or attend a sports event in 2002 and have lived in the community for 18 or fewer years; were less participative (1.38) than those in node 38;residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt or attend a sports event in 2002 and have lived in the community for more than 18 years; (2.32). There is some indication that the longer a stakeholder lives in the community the more participative they were in tourism and political activities.

Node 37, residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt or attend a sports event in 2002 and have lived in the community for 18 or fewer years; represent 6.45% of the respondents. These respondents can be further split based on other variables. Two variables were found to be statistically significant (p value = .05) to justify the division (see table 47). Whether the individual had participated or had not participated in a motor sports in 2002 was found to be the most significant predictor of their participation in tourism and political activities was the individual's perception of the impact tourism has on the community, based on a p value = .02 (see table F.11).

Table F.11
Predictors For Node 37 Residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact) did not bird watch, hunt or attend a sports event in 2002 and have lived in the community for 18 or fewer years

Predictor	F	DF	P value
Attendance at motor sports events	6.07	1, 30	.02
Shopping	4.67	1, 30	.04
Camping	4.10	1, 30	.05

Node 38; residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt or attend a sports event in 2002 and have lived in the community for more than 18 years; represent 8.27% of the respondents. This node is a terminal node. There were no predictors statistically significant enough (p value= .05) to split this group.

F.6 Level 8 (Nodes 39 and 40)

Level 8 of the Participation in Political and Tourism Activities Decision Tree contained 6.45% of the respondents split into two nodes. Branches 1 and 4 have no nodes associated with them. Nodes 39 and 40 were part of branch 2. Each branch at this level will be discussed separately.

Branch 2 (Nodes 39 and 40)

Nodes 39 and 40

Nodes 39 and 40 were located on branch 2 and were the result of splitting node 37 by their participation or lack of participation in motor sports in 2002. Node 39 represents residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt, attend a sports event, or participate in motor sports in 2002 and have lived in the community for 18 or fewer years. Node 40 represents residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt, or attend a sports event, but participated in motor sports in 2002 and have lived in the community for 18 or fewer years.

Stakeholders in node 39; residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt, attend a sports event, or participate in motor sports in 2002 and have lived in the community for 18 or fewer years; were less participative (1.19) then those in node 40; residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt, or attend a sports event, but participated in motor sports in 2002 and have lived in the community for 18 or fewer years; (2.17). There is some indication that the longer a stakeholder lives in the community the more participative they were in tourism and political activities.

Node 39 residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt, attend a sports event, or participate in motor sports in 2002 and have lived in the community for 18 or fewer years; represents 5.24% of the respondents. The most significant predictor of their participation in tourism and political activities was if individual shopped or did not shop in 2002, based on a p value = .02.

Table F.12
Predictor For Node 39 Residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact) did not bird watch, hunt, attend a sports event, or participate in motor sports in 2002 and have lived in the community for 18 or fewer years.

Predictor	F	DF	P value
Shopping	5.77	1, 24	.02

Node 40; residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt, or attend a sports event, but participated in motor sports in 2002 and have lived in the community for 18 or fewer years; represents 1.21% of the respondents. Due to the size of this group (n = 9) no further divisions can be done. Therefore, node 36 is a terminal node in this decision tree.

F.7 Level 9 (Nodes 41 and 42)

Level 9 of the Participation in Political and Tourism Activities Decision Tree contained 5.24% of the respondents split into two nodes. Branches 1 and 4 have no nodes associated with them. Nodes 41 and 42 were part of branch 2. Each branch at this level will be discussed separately.

Branch 2 (Nodes 41 and 42)

Nodes 41 and 42

Nodes 41 and 42 were located on branch 2 and were the result of splitting node 39 by if they had or had not shopped in 2002. Node 41 represents residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt, attend a sports event, or participate in motor sports, by did shop in 2002 and have lived in the community for 18 or fewer years. Node 42 represents residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt, attend a sports event, shop or participate in motor sports in 2002 and have lived in the community for 18 or fewer years.

Stakeholders in node 41; residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt, attend a sports event, or participate in motor sports, by did shop in 2002 and have lived in the community for 18 or fewer years; were more participative (1.38) than those in node 42; residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt, attend a sports event, shop or participate in motor sports in 2002 and have lived in the community for 18 or fewer years; (0.40). There is some indication that the longer a stakeholder lives in the community the more participative they were in tourism and political activities.

Node 41; residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt, attend a sports event, or participate in motor sports, by did shop in 2002 and have lived in the community for 18 or fewer years; represents 4.23% of the respondents. This node is a terminal node. There were no predictors statistically significant enough (p value= .05) to split this group.

Node 42; residents that perceive tourism has very little positive impact to a negative impact (Score of <39 and missing responses on the Impact , see description section 4.3.1) did not bird watch, hunt, attend a sports event, shop or participate in motor sports in 2002 and have lived in the community for 18 or fewer years; represents 1.01% of the respondents. Due to the size of this group (n = 9) no further divisions can be done. Therefore, node 36 is a terminal node in this decision tree.