Community Attachment, Sense of Place, and Attitudes Toward Tourism: A Study of Residents in the Mt. Rogers Area of Southwest Virginia

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COMMUNITY ATTACHMENT, SENSE OF PLACE, AND
ATTITUDES TOWARD TOURISM:
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(ABSTRACT)

In response to growing concern over the sustainability of natural resource extractive industries such as mining, logging, and energy production, a growing number of rural communities are looking to their natural, cultural, and historic resources as new sources of economic revitalization. Unfortunately, while both government officials and residents have come to accept tourism as a potential boon to local economies, relatively little attention has been given to its potential for creating both social change and social problems.

This study investigates the relationship between attitudes toward tourism development and place bonds among residents of the Mt. Rogers area of Southwest Virginia. Attitudes toward tourism are measured as feelings about economic, social and environmental impacts of development and as support for tourism, both overall and for individual types of recreation based development. Place bonds are measured through length of residence, local sentiment, local identity, and regional identity.

Findings indicate that the four measures of place bonds may be measuring different types of attachments to place. Data analysis also reveals that there is not difference in
concern for tourism impacts between long and short-term residents. Long-term residents are, however, less supportive of tourism development than those of shorter tenure. Neither local sentiment nor local identity are significantly correlated with any of the tourism attitude variables. Residents with high regional identity are more positive about the impacts of tourism than those with a relatively weaker sense of regional identity. Those with high regional attachments are also more supportive of development, especially nature programs and folk-cultural based tourism. New residents with high regional identity are the most supportive of tourism overall. They are also the youngest, most educated and the most active in recreation, as well as having the highest mean annual income and being least satisfied with the quality of life in their communities.

The findings of this study suggest that there may be more than one type of attachment to community or place. They also reveal that certain groups are more receptive to tourism development than others. The complexity of residents’ place bonds as well as the wide range of attitudes toward tourism found in this study suggest that there is a need for further community-based research on the topic of tourism development.
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CHAPTER I

INTRODUCTION
Introduction

In 1989 the White House Economic Policy Council Working Group on Rural Development found that "new lifeblood for rural America will be found primarily in off-farm employment opportunities, especially in industries such as tourism, retirement living, and commercial recreation" (Le Duc, p. 10). Opinions such as these, put forth by members of this and other governmental bodies, as well as the representatives of the business community and even residents themselves, have arisen in response to growing concern over the sustainability of natural resource extractive industries such as mining, logging and, in some cases, energy production. As a result, a growing number of rural communities are looking to their natural, cultural and historic resources as new sources of economic revitalization (Allen et al., 1993, p.27). There are no simple panaceas, however. Developing the recreation and tourism potential of a community or region can have both positive and negative effects ranging from increased revenue and job opportunities to environmental degradation and loss of local cultural identity (Mathieson and Wall, 1982). Unfortunately, while both government officials and residents have come to accept tourism as a potential boon to local economies, relatively little attention has been given to its potential for creating both social change and social problems (Crandall, 1987).

Early research into the effects of tourism development also focused heavily on the economic benefits received by the destination area. Those studies which address socio-cultural impacts indicate that increased crime, displacement of residents, disruption of
local life, value conflicts, and the transformation of local culture can often accompany the
growth of tourism in a given area (Young 1973; Jafari 1974; Turner and Ash 1975;
Murphy, 1985; Dogan, 1989; McCool and Martin, 1992). Armed with this information many,
in both research and management circles are calling for a "better understanding of the
values attached to people's environments, more complete information about places, local
values and their sensitivity to outside influences, and much greater attention given to

As May implies above, the concept of attachment to a locality is a seemingly
important issue in investigating the socio-cultural impacts of tourism development.
McCool and Martin (1994) states that the disruptions in community life created by tourism
development "may lead to feelings of alienation from the community and to a loss of an
important dimension of rural living: a sense of belonging or attachment" (p.29). Since
tourism development is being sought by local governments as a means for increasing the
quality of life in rural communities, it would seem only logical to look into this most
threatening of possible impacts. There has been, however, little attention given to the
issue of community attachment in the tourism literature. Evidence does suggest that
attitudes toward tourism may differ between long term or 'native' residents and those of
shorter tenure. Length of residence is often used as a measure of community attachment
(Janowitz and Kasarda, 1974; Goudy, 1990). Sheldon and Var (1984) noted that long term
residents are more sensitive to the cultural impacts of tourism, while Um and Crompton
(1987) demonstrated that native residents perceive tourism impacts less positively than
newcomers to the area.

The findings reported above by no means go undisputed. Both, Purdue, Long and Allen (1990) and Allen, Hafer, Long and Purdue (1993) found that perceptions of tourism development were not related to sociodemographic characteristics—length of residence in particular. Similarly, McCool and Martin's 1994 study shows no difference in attitudes toward tourism between residents classified as "oldtimers" and "newcomers". McCool and Martin's study also found that the correlation between length of residence and community attachment, while statistically significant, was not high (.20). These mixed results suggest a need for more study of the role of community attachment in tourism research.

McCool and Martin (1994) defines community attachment as "the extent and pattern of social participation and integration into the community, and sentiment or affect toward the community" (p.30). Widely used measures of attachment such as sorrow to leave and preference for one's community over all others, frequently termed local sentiment, are often used to capture this intense relationship between individuals and the places in which they live (Janowitz and Kasarda, 1974; Goudy, 1990). Bonds with community vary in intensity, however, and local sentiment may tap only a portion. For example, McCool and Martin, after reporting ambiguous results in their 1994 study of community attachment (as local sentiment) and attitudes toward tourism, suggest that there may be different types or patterns of attachment. Shamai (1990) proposes a scale of sense of place which may offer some clarity to this issue. Designed to "find the different
levels of intensity of feeling and behavior of different people who usually reside in the same place at a given time" (p. 349) and distinguishing between a sense of belonging to a place, the emotive level attachment to place, and a more behavioral "commitment", this scale could allow a fuller exploration of the range of feeling residents hold for the areas they call home.

McCool and Martin's study also suggested that residents may be "attached" in different ways- some through social networks and others through connections to the physical setting (p. 34). Here again, Shamai (1990) may offer some insight. The study looked at feelings toward Toronto, Ontario, and Canada in order to "explore feelings toward different levels of place nested in each other" (i.e., city, province, nation) (p. 347). Though these "nested allegiances" were found to vary little in Shamai's study population, this method may offer a means for differentiating between attachments to community, in the social sense, and bonds to the more geographic elements of locality and region.

Finally, most studies of residential attitudes toward tourism, and all of those taking into account community attachment, have been carried out in communities where tourism development is already in an advanced stage. There remains a question of how attachment may relate to issues surrounding new tourism development. Attitudes toward both new and proposed tourism development are relatively unexplored. Such attitudes are likely based on myths and long held beliefs about tourism's economic, environmental and social impacts, both positive and negative. Depending on the history of a region with respect to tourism, one could expect residents with longer tenure, deeper roots, and a stronger sense
of place to perceive tourism in a different light than more recent residents. Since those with high levels of attachment have been shown to have less positive perceptions of actual impacts (Um and Crompton, 1987), it would seem plausible that they would also be more sensitive to possible negative impacts of proposed development in their home region.

In view of the issues discussed above, this study was designed to investigate the community and place bonds of residents of the Mt. Rogers area of Southwest Virginia. In light of the longstanding role of the U.S. Forest Service in managing the recreation and tourism resources of the Mt. Rogers National Recreation Area, the project also sought to reveal how local residents' ties to place, both community and region, affect their beliefs about specific tourism impacts and attitudes toward particular types of tourism development. Local sentiment, as sorrow to leave or feeling at home in the community, and sense of place, which touches on a full range of place ties from belonging to active commitment, offer two different vehicles for investigating the relationship between place bonds and tourism attitudes. Both will be examined in this study.

Background to the Problem

Residents develop views about tourism and its possible impacts from many sources: the media, general hearsay, and personal experience, to name a few. Those living in the Mt. Rogers area have had their share of information from each of these sources over the last thirty years. The following discussion, based on information from Butsch (1990),
describes the history of the region with respect to tourism development.

In 1966 the Mt. Rogers National Recreation Area was proposed as a means of stimulating the ailing economy of the region. Loss of the timber industry, which had sustained the five county area for over a century, had left local officials and residents desperate for opportunities. Recreation and tourism offered them hope. Federal recreation planning in the 1960's focused more on national policy than local needs and conditions, however. Legislation creating the NRA had given authorities permission to condemn private lands in order to acquire additional acreage for the project and dozens of families were moved out. When residents raised concerns over this and other possible impacts, their questions were "deflected by references to the highly 'technical' nature of the planning process" (p. 160). Finally, local leaders agreed to let the 'experts' handle the situation. The plan experts presented included a ski area and privately run restaurants, lodges and shops, a large campground, man-made lakes and a scenic highway. The Forest Service planners claimed that these projects would stimulate growth in communities along the borders of the NRA. Encouraged by local leaders, residents believed them. Yet, most of these projects never received funding.

By the 1980's many had begun to question the feasibility of the original proposal and attempt were made to create a more manageable plan. In the 1990's, the Forest Service has, again, been considering the expansion and development of the Mt. Rogers NRA. The general planning process of the Forest Service involves consideration of many development options, including tourism, and often includes research into the needs and
interests of local residents. Successful implementation of any development project depends, to a large degree, on support from local communities and individual private landowners.

1990 census data reveals that 25 to 30% of the population in the five counties is above the age of 55. The presence of this older population, in combination with extended length of residence that also characterizes the citizens of towns in the area, as well as the presence of many long established families, may mean that past experience with recreation development will color present day attitudes towards tourism. Low levels of formal education, only 50% graduate highschool in some counties, and relatively low median incomes of around $20,000 also characterize the population.

**Problem**

Repeatedly, managers, planners and policy makers are being made aware of the need to keep in touch with residents' attitudes toward and perceptions of development projects (Murphy, 1985; Allen et al., 1988; Lankford, 1994). Evidence that community attachment may influence these views (Sheldon and Var, 1984; Um and Crompton, 1987) and questions as to how attachment and attitudes toward tourism are related (McCool and Martin, 1994) indicate a need for further investigation of residents' ties to the places in which they live. Since the success of tourism development in many areas depends on cooperation with local communities, maintaining local values, culture and quality of life.
would seem a priority. As such, attachment to place may be an important determinant of successful coexistence between residents and the tourism industry.

The purpose of this study is to examine the relationship between attitudes toward tourism development and community (place) attachment, both local and regional, among residents living adjacent to or within the Mt. Rogers National Recreation Area in Southwest Virginia. Within the context of a broad economic development agenda for Southwest Virginia, the Mt. Rogers area is seen as a viable tourism destination. The U. S. Forest Service, in responding to rising local interest in tourism development, has sought input from local residents on possible changes which could be made within the NRA to support potential development in the region. This study will address several issues which might come to bear on the success of any tourism development plan.

**Study Objectives**

1. To develop, describe and evaluate an alternative measure of place attachment that discriminates residents’ attitudes toward tourism more precisely than local sentiment measures commonly used.

2. To examine the relationship between length of residence, age, income and the local sentiment measure of place bonds.

3. To examine the relationship between residents’ attitudes toward tourism and local sentiment.

4. To examine the relationship between length of residence, age, income and sense of place.
5. To examine the relationship between residents' attitudes toward tourism and sense of place.

6. To compare findings on local sentiment and sense of place to previous research in the sociological and tourism literature.
CHAPTER II

LITERATURE REVIEW

Introduction

In order to examine the relationship between the bonds rural residents form with the communities and regions in which they live and their attitudes toward potential tourism development in those places, several bodies of research need to be investigated: 1) research into community bonds, 2) the study of people-place relationships and 3) literature on the socio-cultural impacts of and attitudes toward tourism development. This review will begin with a look at the diverse meanings of community and the importance of maintaining the ties between community and place. Next, sociological and psychological literature will be reviewed to reveal the nature and extent of human bonds with local community and region. Research into the type and range of attitudes toward tourism will then be discussed. Finally, the few studies which have focused on attachment to community in relation to tourism attitudes will be examine.
Community Bonds

Definition of Community

Before an approach to community attachment can be taken some definition of the referent 'community' is needed. Community has long been a provocative topic in the realm of social science research. Attempts to describe it, either as a scientific concept or as a social phenomenon, have, however, resulted in an exhausting list of possible definitions (see Hillery, 1955). Fortunately, most fall into one of two major categories. The first is an approach which ties community to "particular kinds of territorial and social environments" (Wilkinson, 1986). Conventionally the definition of community in this sense, often termed 'the local community' and exemplified by neighborhood or town, consists of three basic elements: location, local society, and a common or mutual sense of identity (Wilkinson, 1991; Flora et al., 1992) Thus, community exists in a location containing the structures (businesses, schools, churches, groups) through which residents meet their daily physical, social, and emotional needs; it is a "spatial-social context" for human life (Hummon, 1992, p255).

The work of classic social theorists such as Toennies, Marx, Weber and Durkheim questioned the sustainability of such local communities, however. They held that the quality of local community life would inevitably decline with the rise of mass society, urbanization and the growth of capitalism (Fischer et al., 1977; Hummon, 1992). Those who followed this school of thought began to put forth 'relational' definitions of
community "concerned with the quality of character of human relationship, without reference to location" (McMillan and Chavis, 1986, p8). Derived from the study of modern mobile societies, this second category of definition accepts that communal bonds may, and often do, transcend ties to specific locales (Proshansky, Fabian, and Kaminoff, 1983; Feldman, 1990). For example Carroll and Lee (1980) deals with occupational community among Pacific Northwest loggers where common experiences and values connect members and create a sense of common life (p.142).

Wilkinson (1991) argues that across all of the views on community one element is essential - social interaction. Social interaction as defined by Mead (1934) is "a process in which people use their minds to interpret the symbols and understand the meanings and intentions of the acts of other" (p.14). According to Wilkinson this process creates a "social bond of shared meanings" that is the basis for community (p.14). Social interaction must occur in a setting, however, and since most people "live, move, and have most of their being" in local settings Wilkinson holds that the local settlement or territory is still the most likely place to find community (p.22). Thus, local community is an unbounded field of social interaction that takes place in a territory with constantly changing borders (p.35), or as Flora et al.(1992) states local community is locality, "a geographically defined place where people interact" (p.15).

Most of the research dealing with attachment to community assumes a geographic definition of community (Janowitz and Kasarda,1974; Gerson et al.,1977; Shumaker and Taylor,1983; Sampson,1988; Goudy,1990). Based on this fact and the argument
presented above for the continued value of spatial-social views of community a locality based definition will be used in this study.

Community Attachment

Since Wirth (1938) argued that the increasing size, density and heterogeneity of urban life would weaken primary ties and disrupt collective local sentiments and emotional attachments to place, the fate of community has been a topic of some debate (Hummon, 1992, p.257). Seeking to disprove Wirth's "decline of community" hypothesis, many researchers have set out to locate this 'sense of community' in contemporary society. The following section outlines attempts to define community attachment in terms of three types of bonds; sense of community, local sentiments and attachment to place. Attachment to place will be dealt with separately in the following section.

Community attachment can be defined as "the extent and pattern of social participation and integration into the community, and sentiment or affect toward the community" (McCool and Martin, 1994, p.30) Close inspection of this definition reveals several components which have been utilized, both singularly and in combination, as operational definitions of community attachment.

One approach to community attachment, described as "sense of community", is presented in Riger and Lavrakas (1981) and McMillan and Chavis (1986). Here, sense of community, or attachment, is explained using two factors based on the 'extent and pattern of social participation' elements of the above definition. The first, termed "social bonding", deals with numbers of people known and the depth of those relationships. The
second factor, "behavioral rootedness", is indicated by rental vs. ownership of residence, expected length of stay in the community, and actual length of residence. McMillan and Chavis then go further, proposing a model based on four elements: 1) membership, 2) influence, 3) integration and fulfillment of needs, and 4) shared emotional connection. These elements work together to create the experience of sense of community.

Most research on community attachment focuses on the latter portion of the definition, however. Community attachment in this case deals with the "nature and sources of deeper emotional ties to place" (Hummon, 1992, p. 256) and may be seen as "an affective relationship...that goes beyond cognition, preference, or judgment" (Riley, 1992, p. 13). Often equated with 'sorrow to leave' and 'preference for one's community over all others', termed local sentiments, this concept has been shown to be unrelated to community size, structure, or density (Janowitz and Kasarda, 1974; Gerson et al., 1977; Sampson, 1988; Goudy, 1990). Instead local sentiments have been linked to long term residence, stage in the lifecycle and position in the social structure (Janowitz and Kasarda, 1974; Gerson et al., 1977, Goudy, 1990), though length of residence is considered the best and most consistent indicator (Hummon, 1992).

As discussed in chapter 1, community has both a social and a physical component. Recent research suggests that residents may develop attachments to each element separately (McCool and Martin, 1994). Having dealt mainly with the social component thus far, the discussion will now turn to bonds between people and the physical settings of their daily lives. In addition to the sociological literature on community, geography,
environmental psychology and environment-behavior studies have also investigated people-place relationships. The following section will examine some of these perspectives.

**Place Bonds**

**Definition of Place**

A local community, as defined previously, is a "geographically defined place where people interact" (Flora, 1992). The literature on attachments to places, community or otherwise, rarely defines what is meant by the term "place", however. Tuan (1977) defines place as a "centre of felt value". Tuan expands on this definition by stating that "space becomes place when we attach meaning to a particular geographic locale" (Williams et al., 1992, p.31). Lukerman (1964) goes even further, breaking the definition into five constituents: 1) location, 2) integration of nature and culture, 3) uniqueness, 4) emergence within a historico-cultural sequence of change and 5) meaning to human agents. These definitions clearly show that "place" is an intricate combination of physical, psychological and cultural elements. Bonds with the places that provide settings for community are no less complex.

**Place Attachment**

Riley (1992) poses the idea of "attachment to the ordinary landscape". He defines attachment as "an affective relationship with the landscape" that, in this case, is focussed on the ordinary or that which is "experienced in daily life" (p. 13). Landscape is used here
to represent a "setting for human experience and activity". In rural areas this ordinary landscape consists, in large portion, of natural settings. Rural communities are surrounded by a natural environment that provides a source of income, sustenance and recreation to their citizens. Similarly, the study of attachment to rural outdoor settings have focussed mainly on visiting recreational users (see Williams et al, 1992). Little research has been done to examine the bonds between these places and the people who actually live in, or around, them. It is clear, however, "that the individual's own life, body, and experience play a major role in attachment to the landscape" (Riley, 1992, p.18). Natural settings, like their counterparts in the built environment, exist as places to which individuals become attached "because of their emotional, symbolic and spiritual qualities" (Williams, 1991). This individual relationship to place is the basis for more collective sentiments and has been discussed more fully in the study of a concept known as place identity.

**Place Identity**

Proshansky, Fabian, and Kaminoff (1983) defines place identity as a "substructure of the self identity of the person consisting of broadly conceived cognitions about the physical world in which the individual lives... a potpourri of memories, conceptions, interpretations, ideas and related feelings about specific physical settings and types of settings" (p. 59-60). As stated in Relph (1976),"there is for virtually everyone a deep association with and consciousness of the places where we were born or grew up and where we live now" (p. 60) (emphasis added). Korpeia (1989) notes that such places are important in the process of developing our sense of who we are- they provide us with a
sense of privacy, control, and security. Applied to both communities and the geographic regions in which they occur, the concept of place identity offers a unique look at the connection between people and places. Settings, from this perspective, can be seen as "defining qualities for persons as individuals, but also defining qualities for the individuals as members of groups" or communities (Rivlin, 1982). The work on place identity supports the argument that physical environments should not be ignored in the study of community attachments.

Sense of Place

Shamai (1991) attempts to tie the varying concepts relating to place bonds into a comprehensive topic called "sense of place". Sense of place is defined, according to Datel and Dingemans (1984), as "the complex bundle of meanings, symbols, and qualities that a person or group associates with a particular locality or region" (Shamai, 1991, p. 348) and encompasses a range of feelings that includes belonging, attachment, identity and commitment (p. 350). Shamai's study found that by ranking these levels of sentiment and creating a scale of sense of place, one could differentiate between levels of intensity of bond with a range of places from the local to the national. Research on place bonds on a regional or national scale are scarce, however.

Development of a sense of regional identity has been dealt with in a few qualitative studies. Cuba (1987) attempts to explain the evolution of sense of place among contemporary settlers in Alaska and Reed (1983) investigates regional consciousness, identity, and affiliation in white residents of North Carolina. Reed's study describes types
and percentages of people who demonstrate certain kinds of regional bonds, such as regional identification, regional affiliation, or regional consciousness. Regional identification is defined as "a sense of empathy with other group members and closeness to them" (p. 56). Regional affiliation refers to a regional "reference group" that people use to "orient themselves" and is operationalized as self-designation (as a group member) and designation by others (p. 11). The third type of bond, regional consciousness, refers to "a cognitive representation of the category southerner" - in other words, an understanding of what a 'southerner' is. Reed examined each of these place bonds using structured interviews, thus analysis of the data and generalization of the findings are limited. Shimai's scale may offer a systematic method for researching regional level bonds and could even allow comparison between local and regional levels of sense of place.

Summary

The concepts discussed above all deal with relationships between people and the settings in which they conduct their daily lives. Local communities have social and physical components and are situated in a larger geographic setting. All of these aspects affect the life experiences of the people who reside in rural areas and influence how they see themselves as individual and as community members. The sense of connection between residents brought on by this common life helps sustain a sense of community in the face of disruption and change. Today, many rural communities are facing widespread decline in traditional industries such as mining, agriculture and forestry (Long et al., 1990). Often the culture and identity of these communities is bound up in the very
industries being lost. As many turn to tourism as a source of economic revitalization they
must deal with the potential changes that will inevitably occur to community life and the
surrounding environment. The nature and strength of attachment to community, and to
the surrounding landscapes, may be an important determinant of how residents perceive
potential impacts of the incoming tourism industry.

Attitudes Toward Tourism

Research on the impacts of and attitudes toward tourism has focussed primarily on the
developing world. Recently, however, interest has turned to tourism development in
industrialized nations. Studies have shown that residents' attitudes may vary according to
length of residence (Sheldon and Var, 1984; Um and Crompton, 1987), social class
(Husbands, 1989; Mansfeld, 1992), state of the local economy (Perdue et al., 1990; Allen
et al., 1993), development type (Murphy, 1981), extent of development (Allen et al.,
1988) and geographic region (Ritchie, 1988). Though most studies indicate residents
support tourism as an economic strategy (Murphy, 1981; Sheldon and Var, 1984; Perdue
et al., 1987; Um and Crompton, 1987; Long et al., 1990; Allen et al., 1992) evidence
exists that at least certain segments of the local population are concerned about the
possible impacts of tourism growth (Pizam, 1978; Cheng, 1980; Lankford, 1994; Long et
al., 1994; McCool and Martin, 1994). Reasons given for these negative views includ fear
that local governments might fail to mitigate impacts such as increased crime and
environmental degradation (Lankford, 1994), concern over impacts observed in neighboring communities (Cheng, 1980), and lack of concern, on the part of developers, for possible disruption of local leisure patterns (O'Leary, 1976; Knopp, 1980).

While numerous attitude studies have been conducted in areas where tourism development is already taking place very few have looked at attitudes toward proposed development. Pearce (1980) found that the majority of residents expected positive reactions to visitors when asked how they would feel about foreign tourists. Keogh (1990) looked at attitudes of residents toward proposed development of a park in their small coastal community. He found that most had both positive and negative expectation about probable impacts. Ritchie (1988), however, focussed on the degree to which residents would encourage or support particular types of tourism. Results indicated that residents would be more likely to support festivals and events than hunting facilities, resorts or theme-parks.

Examination of the above research reveals that residents express a wide range of views with respect to tourism development. While many support development for the economic benefits it may bring there is still concern over possible negative affects on both the local physical environment and community life. Support for short term, low impact projects such as events and festivals could represent residents desire to minimize the influence of tourists on the local area.
Community Attachment and Attitudes Toward Tourism Development

Residents' level of community attachment has been shown to affect their attitudes toward tourism development (Sheldon and Var, 1984; Um and Crompton, 1987; McCool and Martin, 1994). In each case, however, attachment was measured differently. Sheldon and Var (1984) used length of residence as a measure and found that lifelong residents were more sensitive to the socio-cultural impacts of tourism than were short-term residents. Um and Crompton (1987) combined length of residence with birthplace and heritage to create a Guttman scale measure of community attachments. Their findings indicated that the greater the level of attachment the less positively residents perceive the impacts of tourism on their community. The results of McCool and Martin's 1994 study were not so clear. Comparing measures of local sentiment (sorrow to leave and preference for community over all others) and length of residence they were able to demonstrate only a weak correlation. Comparing each of the two measures with attitudes toward particular types of tourism impacts they concluded that people living in communities with higher levels of tourism development have the strongest sense of community attachment, but also have the shortest tenure. Those demonstrating high levels of attachment viewed the impacts of tourism with more concern than those who were "relatively unattached", but saw the benefits more positively. McCool and Martin propose two possible explanations. First, highly attached newcomers living in tourism settings may infact be a kind of tourist who has settled in these places. The second
explanation is that a highly attached newcomer may use the local physical environment as a frame of reference when answering survey questions, while long term residents think of social and interpersonal ties. New residents often choose to live in an area because of its physical attributes and have had little time to become integrated into local society.

Summary and Hypotheses

The literature reviewed in this section emphasizes the importance of both community and place in the lives of individual residents. Ties to other members of the community and to the geographic locale both influence how residents perceive quality of life. The strength of these bonds could also affect how residents view potential impacts of proposed development projects. Research into the relationship between community attachment and attitudes toward tourism development has been sparse, however. Most agree that longer term residents are more highly attached and view the impacts of tourism in a less positive light than those of shorter tenure (Sheldon and Var, 1984; Um and Crompton; 1987), though recent studies reveal that length of residence and traditional measures of local sentiment such as "sorrow to leave" may not adequately differentiate between the different attitudes toward tourism held by residents (McCool and Martin, 1994). McCool and Martin (1994) suggests that there may be different types of attachment, based on physical as well as social elements of the home place, which influence attitudes toward tourism. Further, Shanai's 1991 paper on sense of place proposed a scale that would
measure not only bonds with the local community, but with a series of places "nested" within one another and ranging from the local to the regional or even national. Since recreation based tourism development often takes place on a regional scale Shamai's measure may offer insights into attitudes toward tourism not revealed by measures previously used. By testing this new scale in the manner of previous research, the present study will attempt to clarify some of the conflicting findings suggested in the above discussion. Thus, local and regional identity, measures based on Shamai's sense of place scale, will be tested along with the more conventional measures of attachment, length of residence and local sentiment, to further examine the relationship between place bonds and attitudes toward tourism.

In order to examine length of residence, local sentiment, local identity, and regional identity as measures of different types of place bonds it must first be established that they are not simply alternative measures of the same attachment. While one would expect some correlation among the four based on the common pool of emotion from which they extend and the fact that they have the same place referents, this correlation should be weak if the four are in fact distinct measures (Hypothesis 1).

**Hypothesis 1:** There is a weak correlation between four measures of place bonds—length of residence, local sentiment, local identity, and regional identity.

**Hypothesis 2:** Local sentiment, local identity and regional identity are not associated with length of residence, age, or income.
To further establish the relationship between the four measures, local sentiment, local identity and regional identity are examined with respect to variables commonly considered to be predictors of attachment (age, length of residence, income). Such exploration will enhance the argument that length of residence should be viewed independently. If length of residence is distinct from the other three measures it should not be a strong predictor of any of the other three measures.

In sociological research, the two most commonly used measures of place bonds are local sentiment and length of residence. Local sentiment refers to an emotional relationship between a resident and his/her local community and is most often operationalized as "sorrow to leave". Several studies in the sociological literature have closely tied this measure to such demographic characteristics as length of residence, age, and income (Janowitz and Kasara, 1974; Goudy, 1990). Of the three, length of residence has been shown to be the best predictor. Age and income were found to be inconsistent predictors of local sentiment. Based on these studies other researchers have used length of residence as a measure of attachment (Um and Crompton, 1987; Sheldon and Var, 1984). As a result, this study will look at length of residence as both a predictor of place attachment and as a distinct measure of place bonds. McCool and Martin (1994), however, found only a .20 correlation between local sentiment measures and length of residence and call into question the use of the two as interchangeable measures of place attachment. They also suggest that there may in fact be patterns of attachment which could be better understood through the study different types of place bonds. This study
will attempt to further distinguish four-length of residence, local sentiment, and local and regional level bonds, as measured using the Shimai (1991) scale by examining the relationship between these measures and the predictor variables in the established systemic model of place attachment.

**Hypothesis 3: Longterm residents will demonstrate more concern for the impacts of tourism and less support for tourism development than those of shorter tenure.**

As discussed above, length of residence is often used as a measure of place attachment. Two of the three studies on place attachment and attitudes toward tourism reviewed in this study do just that. Um and Crompton (1987) combines length of residence with measures of birthplace and ethnic origins to create a Guttman scale of attachment, while Sheldon and Var (1984) looks at lifelong versus relocated residents. Sheldon and Var found that lifelong residents were indeed more sensitive to the impacts of tourism on their community than were newer residents. Similarly, Um and Crompton concluded that the more attached residents were, in terms of length of residence, birthplace, and ethnic heritage, the less positively they perceived tourism' impacts. McCool and Martin (1990), however, found that in areas of Montana where tourism development is rapidly increasing there was no difference in attitudes toward tourism between long and short term residents. Since each study was conducted in a different setting where different levels of tourism development exist, this study will test hypotheses based on both findings.
Hypothesis 4: Highly attached residents will demonstrate more concern for the impacts of tourism than those who are less attached, and will therefore show less support for tourism.

Hypothesis 5: Highly attached residents will see the benefits of tourism more positively than the less attached, and will therefore show more support for development.

McCool and Martin began their study of community attachment and attitudes toward tourism with the hypothesis that "residents with strong feelings of attachment are more likely to have negative attitudes toward tourism than residents who are less attached to their community" (p. 29). At the end of their analysis, however, they found themselves facing some confusing results. Highly attached residents did show more concern over costs and negative impacts of tourism than those who were less attached. However, they felt more positively about the benefits tourism development brings to the community. These findings suggest that attitudes toward tourism may not be clearly defined by looking at impacts alone. In this study support for tourism will be examined along with attitudes toward impacts, both positive and negative. Based on McCool and Martin's findings, both positive and negative attitudes toward tourism can be related to strong community attachment—both possibilities will be examined in this study.

Hypothesis 6: Regional identity will be more strongly related to attitudes toward tourism than either local sentiment or local identity.

In attempting to explain their somewhat unexpected findings, McCool and Martin
proposed that residents could be attached in different ways. They suggest that newer residents might demonstrate attachment to the local physical environment, while established residents, who have had more time to build interpersonal networks, might feel a stronger attachment to the more social aspects of community. The measures of attachment used in their study, local sentiment and length of residence, did not reveal these differences, nor did they fully explain the attitudes toward tourism held. This study will look at two additional measures, local identity and regional identity, with the hope of shedding some light on this situation.

Research has shown that local bonds influence residents concern for the impacts of tourism and often lead to negative attitudes toward development (Um and Crompton, 1987; McCool and Martin, 1994), thus, a strong sense of local identity, like a high level of local sentiment, should be related to more negative attitudes toward tourism. Regional level attachment has not been examined in relation to tourism development. However, since tourism development often takes place on a regional scale, it seems logical to conclude that those residents' who demonstrate high levels of regional attachment would also hold negative attitudes toward development within the region. In this study regional identity is assumed to measure a bond more closely tied to the physical environment than to local social networks. As such, it may offer a new level on which to examine attachments and attitudes toward tourism. The suggestion that patterns of attachment might exist, and thus influence attitudes, has not been examined in prior studies. By
looking at combinations of types of attachment, regional as well as local, and relating them to attitudes toward tourism impacts and support for tourism, this study will attempt to clarify some of McCool and Martin's findings.
CHAPTER III

METHODOLOGY

Introduction

This chapter deals with the research methods of the study. Discussion will focus on: 1) description of the sample, 2) the survey instruments used 3) description of dependant and independent variables and 4) the statistical methods which will be used to analyze the data.

Data for this study were obtained as part of a U.S Forest project for the Mt. Rogers National Recreation Area. The purpose of the survey was to obtain information about local residents' use of the area and attitudes toward potential tourism development projects. Data collection was conducted through a mail-back survey in September, 1993. Two thousand households in five counties were contacted.
Research Design

The Sample

A random sample of residents from Carroll, Grayson, Smyth, Washington and Wythe counties in Southwest Virginia were selected for this study (see Appendix B). All five counties border the Mt. Rogers National Recreation Area (NRA) and several small communities are actually inside the boundaries of the NRA. Names were drawn from local telephone directories. The area was divided into twelve segments a representative sample of 2,494 was drawn. Residents who live nearest to the NRA were more intensely sampled than those residing in the outlying portions of the study area. The sample was stratified in order to more heavily represent those who would be most affected by tourism development in the NRA. Finally, mail surveys were sent to each selected household with a cover letter requesting that the adult household member with the next birthday complete a questionnaire dealing with attitudes toward quality of life, economic development, tourism, community and use of the Mt. Rogers NRA as well as a series of demographic questions. Due to incorrect addresses, lack of forwarding information or death of addressee, some 157 surveys (6.3%) were returned unopened. Approximately three weeks after the initial mailing, a reminder postcard was sent to those residents who had not returned a completed questionnaire. Two weeks later a second letter and a second copy of the survey were mailed. A final reminder postcard was mailed after two more weeks. To increase response, a one hundred dollar savings bond was offered and articles describing the study were run in local newspapers. In the end, 1,069
completed surveys were received resulting in a final response rate of 42.7%.

The Survey Instrument

Development of the survey instrument took place in several stages. First, an initial draft of the questionnaire was presented at a focus group in Damascus, Virginia, one of the communities directly adjacent to the Mt. Rogers NRA. Participants were asked to complete the questionnaire and offer reactions to the content, clarity and presentation of the survey itself. Second, a random sample of 100 residents were selected for a pre-test of the mail survey. Weak response resulted in telephone interviews with non-respondents. Input from these sources led to considerable reworking of the style, length and content of the questionnaire.

The final survey instrument is a booklet in six parts. A copy is included in Appendix A. The first section deals with "Concerns About Your Community" and includes questions on quality of life, attitudes toward economic development, and important local issues. The second section focusses on attitudes toward tourism and asks if respondents feel aspects of their lives would improve or worsen if the number of tourists increased in the area. A second series of items asked about support for different tourism development strategies. The tourism section is followed by a set of questions designed to tap residents feelings about their particular community. Respondents are first asked to name or describe the place they consider to be their community and give information about how long they have lived there, the number of generations of their family who have lived there, and whether they have lived in other communities in the Mt. Rogers area. The remainder of the section is devoted to
residents' relationship to the places in which they live. The first set of questions, used in the work of Goudy (1990), deal with local sentiment and ask how sorry or pleased residents would be to leave the community, how interested they are in what goes on in the community and how much they feel at home there. The final question, based on Shimai's 1990 proposed scale of sense of place, asks respondents to answer true or false to items dealing with their sense of belonging, attachment or commitment to a series of places including their town, community (if different), the Mt. Rogers area, Southwest Virginia, and the Southern Appalachians. The fourth section of the questionnaire deals with usage and opinions of the Mt. Rogers NRA and the fifth asks about individual values, status and entrepreneurship. The final section consists of a series of demographic questions designed to profile respondents

Non-Response Bias

The possibility of non-response bias was examined through a random sample of forty-one individuals who did not return a completed survey. In order to determine if non-respondents were significantly different from those who did respond, demographic information (age, gender, last year of school completed, occupation, and length of residence) was collected. Non-respondents were also asked several questions from the survey instrument. Results of the analysis of phone interviews revealed that non-respondents are less educated, use the NRA less frequently and are less supportive of tourism and economic development. While this does indicate that point estimates on some variables may be biased, this study focuses primarily on relationships among variables. To the extent that such bias exists, the generality of these relationships may be limited to the sample.
Dependent Variables

Potential Impacts of Tourism

Feelings about potential impacts of tourism was measured using a five point Likert-type scale which asked how much the list of items, crime, local revenue, quality of the natural environment for example, would improve or worsen for the resident if tourism were to increase in the area. Three types of impact, economic, social, and environmental, were included. Economic impact was measured using four items, jobs, income, local business revenues and taxes. The social impact section consisted of seven items ranging from traffic and crime to character of the local culture. Environmental impact was measured by one item which asked how the natural environment would improve or worsen. The items in each section were summed to yield overall indexes of the economic, social, and environmental impacts. Maximum scores for each index are 20, 35, and 5 respectively. (See Appendix A, question 7)

Support for Tourism

Support for tourism was also measured on a five point Likert scale. In this case respondents were asked to indicate how strongly they would support or oppose different types of tourism, such as nature based, cultural or folk events. Other items dealt with increasing promotion and visitor services development and included improved transportation, roads and facilities, information for tourists, small businesses, visitor services and promotion.
of the area as a tourist destination. One item asked if respondents would oppose or support "no new development". All twelve items were combined to form an overall index of tourism support. Each of the six tourism types: nature based, attraction based, cultural/historical, folk events, outdoor recreation, and nature programs, are tested individually as well as in the overall tourism support measure (See Appendix A, question 8).

Independent Variables

Systemic Variables

Based on work in sociological literature (Janowitz and Kasarda, 1974; Goudy, 1990) length of residence, age, and income have come to be defined as variables in a systemic model of community attachment. These variables have been shown to be positively related to measures of local sentiment and social bonds (density of relationships and organizational membership), though length of residence was found to have the strongest relationship. As a result, length of residence has often been used alone as a measure of place attachment. While recent studies have called such use into question (McCool and Martin, 1994), this study uses length of residence as both an independent measure of place bonds and as a variable in the systemic model of community attachment. (Appendix A, questions 12, 38, 48)

Local sentiment

Frequently used as a measure of attachment to community, local sentiment consists of a series of three items asking how sorry or pleased the respondent would by to leave his/her
community, how much interest he/she has in what goes on, and how at home the respondent feels in the community. A five point scale was used in each case to indicate strength of feeling. The three items are combined to produce an index of local sentiment. (Appendix A, questions 17-19)

Local and Regional Identity

In an attempt to broaden understanding of place bonds a team of researchers constructed a Guttman type scale (a cumulative scale in which each item is designed to measure an increasing level of attachment) was developed following the example of Shimai (1991). Six of the seven true/false statements were designed to represent the phases of sense of place (belonging, attachment, commitment/sacrifice) in Shimai's proposed scale and directly refer to the levels: 1) not having any sense of place, 2) knowledge of being located in a place, 3) belonging to a place, 4) attachment to a place, 5 and 6) sacrifice for a place (see Table 1). The last two statements were originally one item, "I am willing to invest my time, talent or money to make this an even better place". Analysis of pretest responses revealed, however, that respondents who answered true to this statement crossed out the word money, indicating that this was a higher sacrifice than they were willing, or able, to make. Sacrifice of money was then placed in a separate statement. In addition to items based on Shamai's sense of place levels, an initial statement was added to address possible negative feelings and to avoid a "positive" bias in the scale. The first statement, "I have negative feelings for this place",

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<table>
<thead>
<tr>
<th>Phase</th>
<th>Level</th>
<th>Item (this study)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>(0) Not having any sense of place.</strong></td>
<td>I have no particular feelings for this place.</td>
</tr>
<tr>
<td>Belonging</td>
<td><strong>(1) Knowledge of being located in a place.</strong> When people know that they live in a place, but do not feel that they are part of it.</td>
<td>I do not think of myself as being from this place.</td>
</tr>
<tr>
<td></td>
<td><strong>(2) Belonging to a place.</strong> There is a feeling of belonging. What is happening in the place is important.</td>
<td>What happens in this place is important to me.</td>
</tr>
<tr>
<td>Attachment</td>
<td><strong>(3) Attachment to a place.</strong> Involves higher emotional attachment to a place. A place has a meaning.</td>
<td>I have an emotional attachment to this place- it has meaning to me.</td>
</tr>
<tr>
<td></td>
<td><strong>(4) Identifying with place goals.</strong> When the majority of people recognize the goals of the place and are in conformity with them.</td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td><strong>(5) Involvement in a place.</strong> Residents take an active role in the community because of commitment to it. Investment of resources for the place.</td>
<td>I am willing to invest my talent or time to make this an even better place to live.</td>
</tr>
<tr>
<td></td>
<td><strong>(6) Sacrifice for a place.</strong> Readiness to give up personal and/or collective interests for the sake of the place. (pre-test indicated money to be the highest sacrifice)</td>
<td>I am willing to make financial sacrifices for the sake of this place.</td>
</tr>
</tbody>
</table>
was gives respondents an opportunity to voice a feeling of negative, though possibly strong, relationship to the places listed. For each statement, respondents were asked to indicate true or false for each of five levels of place (your town, your community— if different, Mt. Rogers area, Southwest Virginia, and Southern Appalachian region). False responses were scored 0 and true 1, then each 'place' column was totaled and score given (1 to 7). Town and Community scores were summed to give a 0 to 14 score for "local identity", and the three regional scores (Mt. Rogers, SW Virginia, and Southern Appalachians) were added to obtain a regional identity value from 0 to 21. (Appendix A, question 20)

Data Analysis

Hypotheses are tested using the variables described above. Initial tests, using correlation procedures, are conducted to determine the relationship between the four place bond variables (length of residence, local sentiment, local and regional identity). Correlations are also run for each of the four variables with measures of age and income.

The next stage of analysis are a series of multiple regressions. Attitudes toward economic, social, and environmental impacts and overall support for tourism, as well as support for the six individual types of tourism development function as the dependent variables for the regression series. The four place bonds variables will be entered as independent variables to determine which contribute to the explanation of variance in tourism attitudes. Finally, local sentiment and local / regional identity are divided into low and high response categories and
length of residence into less than 10 years, 10 to 30, and 30 or more years of residence. Possible combinations of these categories are then tested against each dependent tourism variable using analysis of variance procedures. All data analysis is conducted using SPSS-X.
CHAPTER IV

RESULTS

Chapter IV sets forth results of data analysis and hypothesis testing concerning place attachment and attitudes toward proposed tourism development presented in chapter II. A discussion of general characteristics of the respondents is presented first, followed by a review of the measures and their reliability. Finally, results of the hypothesis tests are presented, and the chapter is summarized.
Description of Respondents

In order to better understand the feeling and attitudes of residents in the Mt. Rogers area, respondents were first be described with respect to age, length of residence, household type, occupation and income. Table 2 summarizes the general description of demographic characteristics for respondents from all five counties in the study area.

Age and Length of Residence

The mean age of respondents is 48. As percentages indicate the majority of the population are middle aged or older with 46.9% over the age of 55. Only 5% of respondents are under 35. Data on length of residence also indicates the presence of a large population of older residents.

Average duration of residence in the region is 32.4 years, with only 21% of respondents stating that they had lived in their present community for ten or fewer years. Of those remaining, 29% had been in residence for 11 to 30 years and another 28.4% for 31 to 50. Twenty percent reported a length of residence of 51 or more years.

Household Type, Occupation, and Income

The largest percentage of respondents (43.2%) reported being married with no children at home. Another 33.1% of households consist of a married couple with children in the home. Only 5.3% of households are made up of single parent families.

Of the respondents, 30.2% indicate "retired" as their job status. Of those still working, 13.2% work in trade positions, 6.5% in middle management and sales, and 5.9%
in clerical or secretarial positions. Another 13.6% hold professional or technical positions, while 7.3% describe their occupation as "homemaker" and 9.3% are self-employed.

Income from the above occupations varied considerably. The largest percentage of respondents earn between $10,000 and $30,000 per year. Some 16.0% earn less than $10,000, while another 29.3% earn between $30,000 and $50,000 yearly. Only .2% of those responding reported an annual income of more than $50,000. These findings are consistent with figures in the 1990 census for the five counties in the Mt. Rogers Area.

**Reliability and Refinement of Measures**

**Attachment Measures**

As noted in Jurowski (1994)\(^1\), the low correlation between length of residence, number of generations in the community and local sentiment variables (see Table 3), as well as relatively low reliability coefficient (Cronbach's alpha= .6615), suggest that there may be variables other than those included in the systemic model (Janowitz and Kasarda, 1974; Goudy 1990) involved in the explanation of community attachment. This study looks at several alternative measures. Table 4 provides a complete summary of reliability values for all measures used in this study.

\(^{1}\) Companion study of tourism issues in the Mt. Rogers area which utilized the same data base as the present study.
Local Sentiment

Previous studies of community attachment looked at each local sentiment variable separately. Here, sorrow to leave, interest in what goes on in the community, and feeling at home in the community were combined to form an index of local sentiment. Cronbach's alpha for this index was .6891. Analysis revealed, however, that the alpha could be increased to .7480 by deleting the "interest in what goes on" variable. Therefore, the final index of local sentiment consisted of the mean value of "sorrow to leave" and "at home in the community".

Local and Regional Identity

Identity measures in this study are based on the "Sense of Place Scale" proposed by Shamai (1991). The original scale consisted of seven statements designed to measure increasing intensity of bonds with place. Five levels of place were listed and true/false responses to all seven items were requested for each. The first two levels, "your town" and "your community (if different)", represent possible local points of attachment. The other three levels of place were designed to measure bonds on the regional scale and consisted of "the Mt. Rogers area", "Southwest Virginia", and "the Southern Appalachians". Two indexes were then computed by summing the scores of first the two local measures and then the three regional categories. Reliability coefficients are relatively high for both indexes (Cronbach's alpha = .8343 for local and .8397 for regional).

Tourism Attitude Measures

Attitudes toward the impacts of tourism are measured in three parts. Residents were
asked to respond to a series of items when asked "do you believe the following will improve or worsen for you " if tourism increases in the region?" The first four items concerned employment and leisure opportunities, as well as local revenue. These items were summed to create an index of economic impacts (Cronbach's alpha = .8060) with a maximum score of 15. The next seven items were then combined to measure concern for the social impacts of tourism (Cronbach's alpha = .8225). This index ranges in score from 1 to 35. Finally, a single item, "the quality of the natural environment", is used as a measure of concern for environmental impacts (score 1 to 5).

Overall support for tourism is measured using an index of twelve items concerning support or opposition to different types and elements of tourism development (see Appendix A, question 8). Cronbach's alpha for this index is .9031, and the highest possible score is 60. Each of six types of tourism development included in question 8 of the survey instrument (nature-based, attraction-based, cultural and historical, folk events, outdoor recreation-based, and nature programs) are also used as individual variables in data analysis.

Hypothesis Test Results

Place Bonds

Hypothesis 1: There is a weak correlation between four measure of place bonds - length of residence, local sentiment, local identity, and regional identity.
Recent research (see McCool and Martin, 1994) suggests that there may be different types of attachment operating within the same community. To examine this possibility, multiple measures of place bonds are tested in this study. The conventional measures of attachment, length of residence and local sentiment (sorrow to leave, interest in the community, and feeling at home) are tested along with two new measures, local and regional identity, which incorporate different intensities of bonds and multiple levels of place (see chapter 3, table 1). The following discussion presents the findings of analysis designed to support the use of these concepts as separate measures of place bonds.

Correlations between the four place bonds measures used in this study, length of residence, local sentiment, local identity, and regional identity, are quite variable (see Table 5). Length of residence is significantly correlated with local sentiment (.29), while not correlated with either of the two identity measures (.03 for local, .01 for regional). Correlations between local sentiment and local and regional identity are also relatively low. The correlation coefficient for local sentiment with local identity is .32. The value for local sentiment with regional identity is somewhat lower at .24. Correlation of the two identity variables reveal a moderate relationship with a value of .68.

Hypothesis 2: Local sentiment, local identity and regional identity are not associated with age, length of residence, or income.

Sociological research during the past two decades supports the idea that demographic variables such as age, length of residence, and socio-economic status
(income) are consistent predictors of community attachment. Based on the findings of Janowitz and Kasarda (1974) and other sociological researchers, length of residence in particular has been used interchangeably with other measures of local sentiment, such as feeling at home in the community, preference for one's community over all others, and sorrow to leave. Recently, however, other research has suggested that this relationship is not a strong as it would appear. McCool and Martin (1994) found only a weak (.20) correlation between length of residence and local sentiment. Based on this finding they chose to examine the two separately in relation to tourism attitudes. This study examines the hypothesis that variables from the systemic model are, at best, weakly correlated with local sentiment, local identity, and regional identity. For the sake of comparison with prior research, and to strengthen the argument for its autonomy as a place bond measure, length of residence is, in this portion of the analysis, examined as a predictor of other measures of place attachment.

Regression analysis of the systemic variables from Janowitz and Kasarda's model (length of residence, age, income, number of generations in the community) and place bond measures is reported in Table 6. Length of residence is somewhat correlated with local sentiment and uncorrelated with the other two measures. Age is not significantly related to any of the measures. Income, while not significant with respect to local sentiment, does demonstrate a weak relationship with both local and regional identity. Number of generations in the community only contributes significantly to the model for regional identity. While local sentiment, local identity, and regional identity are not
unrelated to the systemic systemic variables as suggested in Hypothesis 2, they do
demonstrate different patterns of relationship. Length of residence is the strongest
predictor of local sentiment and contributes, in combination with income, to the
explanation of local identity. Regional identity shows a distinctly different pattern, with
length of residence insignificant and income and number of generations in the community
significantly correlated with regional bonds.

**Length of Residence and Attitudes Toward Tourism**

**Hypothesis 3:** Longterm residents will demonstrate more concern for the impacts of
tourism, and thus less support for tourism development, than those of
shorter tenure.

Prior research supports the hypothesis that longterm residents will hold more
negative attitudes toward tourism than new residents (Sheldon and Var, 1984; Um and
Crompton, 1987). In order to compare the findings of this study to previous research on
community attachment and attitudes toward tourism, respondents were categorized as
new residents, who have lived in the same community 10 or fewer years, or longterm
residents, who have resided in the same locale for more than 30 years. One way analysis of
variance was performed to determine if there is significant difference between the two
groups with regard to concern for three types of tourism impacts (economic, social,
environmental), overall support for tourism, and support for six individual types of
tourism (nature based, theme/attraction, cultural, folk events, outdoor recreation based,
and nature programs). A summary of the findings is given in Table 7.

**Concern for Impacts**

No significant difference exists between new and longterm residents with respect to any of three impact variables. Both groups feel that economic factors would improve with increased tourism development. Respondents feel that social elements would improve somewhat or stay the same and that the quality of the natural environment would worsen somewhat or stay the same as the tourism industry grew. These findings do not support the first proposition in Hypothesis 3. There is no difference in concerns for the impacts of tourism between long and short term residents.

**Support for Tourism**

Significant differences do exist when looking at overall support for tourism. New residents, with a mean score of 45.8, show stronger support for tourism than do longterm residents (mean score 43.8). New residents also support nature based, cultural, and outdoor recreation tourism development, as well as folk events and nature programs, more than their longterm counterparts. There is no significant difference found with respect to theme or attraction based tourism development. This option is seen as a less favorable type of development by both groups with a mean score of 2.93 and 3.02. These findings do support the second proposition in Hypothesis 3. Longterm residents are less supportive of tourism than those of shorter tenure.
Place Bonds and Attitudes Toward Tourism

Hypothesis 4: Highly attached residents will demonstrate more concern for the impacts of tourism than those who are less attached, and will therefore show less support for tourism.

Hypothesis 5: Highly attached residents will see the impacts of tourism more positively than the less attached and will therefore show more support for development.

In order to examine the role played by length of residence, local sentiment, and local and regional identity in the explanation of variance in tourism attitudes among residents in the study area, a series of multiple regression models are constructed. Each of the three tourism impact variables (economic, social, and environmental), overall support for tourism and the six individual types of tourism are designated as dependent variables. The four place bonds measures are then entered as potential independent variables in a multiple regression for each of the tourism attitude variables. Table 8 summarizes the results of the analysis for each model.

Concern for Tourism Impacts

Regression analysis reveals that regional identity is the only variable to significantly contribute to the explanation of residents’ concern for the impacts of tourism. Regional identity is a significant variable in the models for economic and social impacts of tourism (multiple $R = .170$ and .118). None of the four place bonds measures figured significantly in explaining attitudes toward environmental impacts. (See Table 8)
Support for Tourism

Regression analysis for the overall support and individual development dependent variables again reveals that neither local sentiment nor local identity contributes significantly to the models. Length of residence and regional identity are consistently significant with regard to overall tourism and five of the six individual types of tourism development (see Table 8). None of the four independent variables is significant in the model for theme/attraction based development, however. Length of residence demonstrates a consistent negative relationship with support for tourism, indicating that the longer an individual is in residence the less likely that individual is to support tourism. Regional identity, on the other hand, is positively related to support, such that the stronger a resident's sense of regional identity the more s/he will support tourism development.

These findings support both Hypothesis 4 and Hypothesis 5. Residents who are highly attached through long length of residence are less supportive of tourism, while those who have strong regional bonds are more positive about impacts and more supportive of tourism development.

Patterns of Length of Residence and Regional Identity

Hypothesis 6: Regional identity will be more significantly related to attitudes toward tourism than either local sentiment or local identity.

In reviewing the literature on community attachment and attitudes toward tourism one
finds that the majority of researchers agree that stronger bonds to place, whether through
length of residence, density of social ties, or affect alone, lead to less positive views of
tourism development. This is supported by analysis reported earlier in this chapter, which
demonstrates that, indeed, longer length of residence is related to less support for tourism.
Based on the findings of previous researchers, this paper takes the stance that strong
regional ties, like length of residence or local sentiment, would also lead to negative
attitudes. In fact, regional attachments, which may be more closely related to bonds with
the geographic locale than local ties, could produce even stronger negative feelings in the
face of nature-based or outdoor recreation tourism, which tend to take place on a regional
scale and directly impact the physical environment. The data, however, show that a strong
sense of regional identity is related to more, not less, support for tourism. As discussed in
Chapter II, McCool and Martin (1994) found that strong attachment may or may not lead
to less support for tourism, depending on the attachment measure used. In offering
possible explanations for their findings, McCool and Martin suggest that patterns of
different types of attachment may exist. These types of place bonds, some social in nature,
others more closely tied to the physical, may, in combination, influence residents’ attitudes
toward tourism. To further explore this possibility, residents are grouped according to
length of residence and level of regional identity (low or high), the two variables found to
contribute to the explanation of tourism attitudes. Each group is then described on the
basis of demographic characteristics, rating of quality of life, and level of recreational
activity in the last 12 months in order to gain a better understanding of the type of resident
in each group, their lifestyle, and their relationship to the recreation resource which might be affected by tourism development, the Mt. Rogers NRA.

Description of Groups

Table 9 summarizes the descriptive information for the four combinations of length of residence and regional identity: (1) new resident/low regional identity, (2) longterm (old) residents/low regional identity, (3) new residents/high identity, and (4) old residents/high identity.

Groups 1, 2 and 4 are all composed of residents with a mean age more than 60 years. Group 3, short term residents with high regional identity, are considerably younger (average age of 47). With respect to education, this third group also stands out. New residents with high regional attachment have a higher level of formal education than members of the other three groups (mean years education 13.52). Groups 1 and 4 average 12.92 and 12.38 years of school respectively, indicating some education beyond high school. Group 2, longterm residents with low regional attachment, have least formal education with 11.81 years of education on average. Members of group 2 also have a lower annual income than the other three groups (table 10). All groups rated quality of life as good or excellent. The final descriptive parameter was frequency of recreational use in the past twelve months. Members of groups 3 and 4, those with high regional identity, are considerably more active with respect to recreational use than those who had
low regional attachment (groups 1 and 2). Members of groups 3 and 4 report an average of 6.12 and 5.69 uses of the recreation area in the past twelve months, while groups 1 and 2 average only 1.66 and 1.44.

**Group Differences in Attitudes Toward Tourism**

After completing the description of all four groups, analysis of variance is performed to determine if differences exist with regard to attitudes toward tourism.

**Impacts**

Group 2, longterm residents with low regional identity, differed significantly from the other three groups on two of the three impact variables. Members of Group 2 hold considerably less positive views on the economic impacts of increased tourism (mean response 13.66). They are also somewhat more pessimistic about social impacts. Longterm residents with high regional attachment hold the most positive views of both economic and social impacts. No significant difference was found with respect to environmental impacts (see Table 11).

**Support for Tourism**

Significant differences are found for overall tourism support as well as for five of the six individual development variables. Groups 1 and 4 have similar mean scores on all support variables. Group 2 (longterm/low regional) demonstrates the least overall support for tourism (mean ~ 42.21), while Group 3 (new/high regional) is most supportive. The greatest differences are in the individual development categories. Again, Group 2
shows least support for all but one development type. New residents with high regional attachment hold considerably more favorable views of nature based, cultural/historic, folk events, and outdoor recreation based development. The greatest difference of opinion is found in the "nature programs" category where Group 2 respondents' average score was 3.76 and Group 3's 4.32. There is no significant difference for theme/attraction based development, which, once again, was the least favored option. (see Table 11).

Summary

The following section summarizes the results of data analysis as discussed in Chapter IV.

1. Correlation (<.4) exists between length of residence and the other three place bonds measures - local sentiment, local identity, and regional identity.

2. The correlation between local sentiment and local identity (.32) is somewhat higher than that between local sentiment and regional identity.

3. The four variables based on the systemic model of Janowitz and Kasarda (1974)- age, length of residence, income, and number of generations in the community, are at best weakly correlated with place bonds measures. Significant correlations:

4. No significant difference in attitudes toward tourism impacts, economic, social or environmental, exist between new and longterm residents.

5. Longterm residents are less supportive of tourism than residents of shorter tenure.

6. Neither local sentiment nor local identity contribute significantly to the explanation of
variance in tourism attitudes.

7. Residents with a strong sense of regional identity hold more positive views of the impacts of tourism than those with relatively weaker attachment.

8. Support for tourism tends to increase as regional identity becomes stronger.

9. Residents with a strong sense of regional identity are more likely to support tourism than those attached at the local level alone.

10. New residents (<10 yrs.) with high regional identity tend to be the youngest, most educated and most active group, as well as earning the highest yearly income.

11. Longterm residents with low regional identity are the least educated and least active, and earn the lowest annual income on average.

12. Residents with low regional attachment participated in recreation activities at the Mt. Rogers NRA far less in the past twelve months than those with high regional attachment.

13. Longterm residents with low regional attachment are the least positive about tourism impacts and the least supportive of tourism.

14. New residents with high regional attachment hold the most positive views of tourism's impacts and are the most supportive of development.
<table>
<thead>
<tr>
<th>Age</th>
<th>(%)</th>
<th>Job Status</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 75</td>
<td>10.1</td>
<td>Unemployed</td>
<td>3.0</td>
</tr>
<tr>
<td>55 to 74</td>
<td>36.8</td>
<td>Retired</td>
<td>30.2</td>
</tr>
<tr>
<td>35 to 54</td>
<td>40.0</td>
<td>Professional</td>
<td>16.5</td>
</tr>
<tr>
<td>25 to 34</td>
<td>11.4</td>
<td>Management/Clerical</td>
<td>12.4</td>
</tr>
<tr>
<td>&lt; 25</td>
<td>1.2</td>
<td>Trade</td>
<td>13.2</td>
</tr>
<tr>
<td>mean: 48</td>
<td></td>
<td>Self-employed</td>
<td>9.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of Residence (years)</th>
<th>Other</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 10</td>
<td>21.6</td>
<td></td>
</tr>
<tr>
<td>11 to 30</td>
<td>30.1</td>
<td></td>
</tr>
<tr>
<td>31 to 50</td>
<td>27.9</td>
<td></td>
</tr>
<tr>
<td>50 or more</td>
<td>20.4</td>
<td></td>
</tr>
<tr>
<td>mean: 32.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Income                  |       |     |
| 10,000 or less           | 16.0  |     |
| 10,001 to 20,000         | 20.5  |     |
| 20,001 to 30,000         | 20.8  |     |
| 30,001 to 40,000         | 17.9  |     |
| 40,001 to 50,000         | 11.4  |     |
| 50,000 or more           | 13.2  |     |

<p>| Household Type            |       |     |
| Single                    | 18.4  |     |
| Single w/ children        | 5.3   |     |
| Married no children       | 43.2  |     |
| Married w/ children       | 33.1  |     |</p>
<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Income</th>
<th>Length of Res.</th>
<th>Generations</th>
<th>What-goes</th>
<th>Sorry to leave</th>
<th>At Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.00</td>
<td>0.046</td>
<td>-0.056</td>
<td>0.007</td>
<td>-0.054</td>
<td>0.033</td>
<td>-0.020</td>
</tr>
<tr>
<td>Income</td>
<td>1.00</td>
<td>0.219*</td>
<td>-0.076</td>
<td>0.078</td>
<td>-0.032</td>
<td>-0.040</td>
<td></td>
</tr>
<tr>
<td>Length of Res.</td>
<td>1.00</td>
<td>0.225*</td>
<td>0.107*</td>
<td>0.269*</td>
<td>0.263*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generation</td>
<td>1.00</td>
<td>0.077</td>
<td>0.093*</td>
<td>0.143*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What-goes</td>
<td>1.00</td>
<td>0.296*</td>
<td></td>
<td>0.393*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sorry to leave</td>
<td>1.00</td>
<td></td>
<td>0.606*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At Home</td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* indicates significance at the .05 or better probability level. (N = 1069)
<table>
<thead>
<tr>
<th>Measure</th>
<th>n</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Sentiment</td>
<td>1056</td>
<td>.75</td>
</tr>
<tr>
<td>Local Identity</td>
<td>1015</td>
<td>.83</td>
</tr>
<tr>
<td>Regional Identity</td>
<td>965</td>
<td>.84</td>
</tr>
<tr>
<td>Economic Impacts</td>
<td>1013</td>
<td>.81</td>
</tr>
<tr>
<td>Social Impacts</td>
<td>1019</td>
<td>.82</td>
</tr>
<tr>
<td>Tourism</td>
<td>1047</td>
<td>.90</td>
</tr>
</tbody>
</table>

* N= 1069
Table 5. Correlation Matrix for Place Bond Measures

<table>
<thead>
<tr>
<th></th>
<th>Length of Residence</th>
<th>Local Sentiment</th>
<th>Local Identity</th>
<th>Regional Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of Residence</td>
<td>1.00</td>
<td>.29*</td>
<td>.03</td>
<td>.01</td>
</tr>
<tr>
<td>Local Sentiment</td>
<td></td>
<td>1.00</td>
<td>.32*</td>
<td>.24*</td>
</tr>
<tr>
<td>Local Identity</td>
<td></td>
<td></td>
<td>1.00</td>
<td>.68*</td>
</tr>
<tr>
<td>Regional Identity</td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

* indicates significance at the .01 probability level.
Table 6. Regression Results for Place Bond Measures

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Length of Residence</th>
<th>Age</th>
<th>Income</th>
<th>Gerations</th>
<th>$R^2$</th>
<th>F Test</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Sentiment</td>
<td>.309*</td>
<td>.011</td>
<td>.003</td>
<td>.003</td>
<td>.078</td>
<td>14.39</td>
<td>4, 685</td>
</tr>
<tr>
<td>Athome</td>
<td>.251*</td>
<td>.001</td>
<td>.000</td>
<td>.080</td>
<td>.039</td>
<td>6.95</td>
<td>4, 683</td>
</tr>
<tr>
<td>Whatgoes</td>
<td>.150*</td>
<td>-.064</td>
<td>.106*</td>
<td>.058</td>
<td>.095</td>
<td>18.06</td>
<td>4, 684</td>
</tr>
<tr>
<td>Sorry</td>
<td>.297*</td>
<td>.018</td>
<td>.003</td>
<td>.043</td>
<td>.109</td>
<td>21.05</td>
<td>4, 685</td>
</tr>
<tr>
<td>Local Identity</td>
<td>.160*</td>
<td>.037</td>
<td>.159*</td>
<td>.041</td>
<td>.035</td>
<td>6.06</td>
<td>4, 663</td>
</tr>
<tr>
<td>Regional Identity</td>
<td>.063</td>
<td>-.021</td>
<td>.154*</td>
<td>.105*</td>
<td>.037</td>
<td>6.21</td>
<td>4, 649</td>
</tr>
</tbody>
</table>

* indicates significance at the .05 or better probability level.
Note: figures in this table show standardized beta coefficients
Table 7. ANOVA for Length of Residence and Tourism Attitudes

<table>
<thead>
<tr>
<th>Attitudes</th>
<th>New (&lt; 10 yr)</th>
<th>Established (11-30 yr)</th>
<th>Old (&gt; 30 yr)</th>
<th>F Test</th>
<th>Prob. F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concerns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Econ. Impact</td>
<td>14.87</td>
<td>14.88</td>
<td>14.45</td>
<td>1.78</td>
<td>.162</td>
</tr>
<tr>
<td>Social Impact</td>
<td>19.02</td>
<td>19.04</td>
<td>19.02</td>
<td>0.00</td>
<td>.999</td>
</tr>
<tr>
<td>Env. Impact</td>
<td>2.66</td>
<td>2.67</td>
<td>2.71</td>
<td>0.62</td>
<td>.618</td>
</tr>
<tr>
<td>Overall Tourism</td>
<td>46.24</td>
<td>45.45</td>
<td>43.80</td>
<td>6.38</td>
<td>.018*</td>
</tr>
<tr>
<td>Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature Based</td>
<td>3.68</td>
<td>3.61</td>
<td>3.38</td>
<td>11.61</td>
<td>.000*</td>
</tr>
<tr>
<td>Theme/Attraction</td>
<td>2.85</td>
<td>2.99</td>
<td>3.02</td>
<td>1.25</td>
<td>.285</td>
</tr>
<tr>
<td>Cultural/Historic</td>
<td>4.05</td>
<td>4.00</td>
<td>3.84</td>
<td>5.21</td>
<td>.002*</td>
</tr>
<tr>
<td>Folk Events</td>
<td>4.12</td>
<td>4.06</td>
<td>3.90</td>
<td>4.44</td>
<td>.012*</td>
</tr>
<tr>
<td>Outdoor Rec.</td>
<td>4.15</td>
<td>4.08</td>
<td>3.97</td>
<td>7.34</td>
<td>.001*</td>
</tr>
<tr>
<td>Nature Programs</td>
<td>4.22</td>
<td>4.14</td>
<td>3.95</td>
<td>8.72</td>
<td>.000*</td>
</tr>
</tbody>
</table>

* indicates significance at the .05 or better probability level.
Table 8. Regression Results for Place Bond Measures and Tourism Attitudes

<table>
<thead>
<tr>
<th>Attitude Variables</th>
<th>Length of Residence (n=1036)</th>
<th>Local Sentiment (n=1056)</th>
<th>Local Identity (n=1015)</th>
<th>Regional Identity (n=965)</th>
<th>$R^2$</th>
<th>$F_{\text{Test}}$</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Econ. Impacts</td>
<td>-.035</td>
<td>-.061</td>
<td>-.045</td>
<td>.196*</td>
<td>.030</td>
<td>6.61</td>
<td>4,844</td>
</tr>
<tr>
<td>Social Impacts</td>
<td>.011</td>
<td>.017</td>
<td>.011</td>
<td>.102*</td>
<td>.014</td>
<td>3.14</td>
<td>4,890</td>
</tr>
<tr>
<td>Env. Impacts</td>
<td>.038</td>
<td>.071</td>
<td>-.082</td>
<td>.000</td>
<td>.009</td>
<td>2.01</td>
<td>4,879</td>
</tr>
<tr>
<td>Overall Tourism</td>
<td>-.084*</td>
<td>-.033</td>
<td>.014</td>
<td>.153*</td>
<td>.032</td>
<td>7.45</td>
<td>4,904</td>
</tr>
<tr>
<td>Nature Based</td>
<td>-.125*</td>
<td>-.008</td>
<td>-.028</td>
<td>.113*</td>
<td>.025</td>
<td>5.65</td>
<td>4,899</td>
</tr>
<tr>
<td>Theme/Attraction</td>
<td>.059</td>
<td>-.011</td>
<td>-.059</td>
<td>-.006</td>
<td>.007</td>
<td>1.58</td>
<td>4,896</td>
</tr>
<tr>
<td>Cultural</td>
<td>-.100*</td>
<td>.007</td>
<td>-.063</td>
<td>.158*</td>
<td>.025</td>
<td>5.83</td>
<td>4,899</td>
</tr>
<tr>
<td>Folk Events</td>
<td>-.071*</td>
<td>-.056</td>
<td>.043</td>
<td>.147*</td>
<td>.033</td>
<td>7.92</td>
<td>4,901</td>
</tr>
<tr>
<td>Outdoor Rec.</td>
<td>-.098*</td>
<td>-.052</td>
<td>.036</td>
<td>.136*</td>
<td>.034</td>
<td>8.05</td>
<td>4,900</td>
</tr>
<tr>
<td>Nature Programs</td>
<td>-.138*</td>
<td>-.021</td>
<td>.023</td>
<td>.205*</td>
<td>.063</td>
<td>15.11</td>
<td>4,897</td>
</tr>
</tbody>
</table>

* indicates significance at the .05 or better probability level.
Note: figures in this table show standardized beta coefficients.
Table 9. ANOVA for Length of Residence/Regional Identity Combinations

<table>
<thead>
<tr>
<th></th>
<th>New/ Low Regional n=241</th>
<th>LT/ Low Regional n=189</th>
<th>New/ High Regional n=230</th>
<th>LT/ High Regional n=255</th>
<th>F Test</th>
<th>Prob. F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>64</td>
<td>71</td>
<td>47</td>
<td>71</td>
<td>1.57</td>
<td>.196</td>
</tr>
<tr>
<td>Quality of Life</td>
<td>2.07</td>
<td>2.22</td>
<td>2.00</td>
<td>1.95</td>
<td>6.29</td>
<td>.000*</td>
</tr>
<tr>
<td>Recreation Use (12 mo)</td>
<td>1.66</td>
<td>1.44</td>
<td>6.15</td>
<td>5.69</td>
<td>4.82</td>
<td>.003*</td>
</tr>
<tr>
<td>Education (yrs.)</td>
<td>12.92</td>
<td>11.81</td>
<td>13.52</td>
<td>12.38</td>
<td>8.86</td>
<td>.000*</td>
</tr>
</tbody>
</table>

* indicates significance at the .01 probability level.
Table 10. Chi Square Analysis for Length of Residence/Regional Identity Combinations with Respect to Income

<table>
<thead>
<tr>
<th>Income (Thousands of Dollars)</th>
<th>New/ Low Regional (%)</th>
<th>LT/ Low Regional (%)</th>
<th>New/ High Regional (%)</th>
<th>LT/ High Regional (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 10</td>
<td>37.6</td>
<td>57.8</td>
<td>23.7</td>
<td>34.7</td>
</tr>
<tr>
<td>10 to 20</td>
<td>23.1</td>
<td>16.1</td>
<td>27.4</td>
<td>27.4</td>
</tr>
<tr>
<td>20 to 30</td>
<td>14.5</td>
<td>13.6</td>
<td>22.8</td>
<td>19.7</td>
</tr>
<tr>
<td>30 to 40</td>
<td>11.3</td>
<td>3.7</td>
<td>14.0</td>
<td>11.7</td>
</tr>
<tr>
<td>&gt; 40</td>
<td>13.6</td>
<td>9.3</td>
<td>12.1</td>
<td>11.7</td>
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</table>

Note: significant at .000.
Table 11. ANOVA for Length of Residence/Regional Identity Combinations

<table>
<thead>
<tr>
<th>Attitude Variables</th>
<th>New/ Low Regional</th>
<th>LT/ Low Regional</th>
<th>New/ High Regional</th>
<th>LT/ High Regional</th>
<th>F Test</th>
<th>Prob</th>
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<td>Concerns</td>
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<td></td>
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<tr>
<td>Economic</td>
<td>14.90</td>
<td>13.66</td>
<td>15.10</td>
<td>15.27</td>
<td>9.55</td>
<td>.000*</td>
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<tr>
<td>Social</td>
<td>19.03</td>
<td>18.20</td>
<td>19.12</td>
<td>19.82</td>
<td>3.03</td>
<td>.023*</td>
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<tr>
<td>Environment</td>
<td>2.75</td>
<td>2.69</td>
<td>2.54</td>
<td>2.70</td>
<td>0.56</td>
<td>.159</td>
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<td>Overall Tourism Support</td>
<td>45.71</td>
<td>42.21</td>
<td>46.67</td>
<td>45.74</td>
<td>8.94</td>
<td>.000*</td>
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<tr>
<td>Support</td>
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<td></td>
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<td>Nature Based</td>
<td>3.66</td>
<td>3.22</td>
<td>3.75</td>
<td>3.60</td>
<td>11.34</td>
<td>.000*</td>
</tr>
<tr>
<td>Theme/ Attraction</td>
<td>3.09</td>
<td>3.03</td>
<td>2.78</td>
<td>3.00</td>
<td>1.77</td>
<td>.078</td>
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<tr>
<td>Cultural</td>
<td>3.94</td>
<td>3.71</td>
<td>4.12</td>
<td>4.00</td>
<td>6.09</td>
<td>.000*</td>
</tr>
<tr>
<td>Folk Events</td>
<td>4.00</td>
<td>3.76</td>
<td>4.18</td>
<td>4.09</td>
<td>6.57</td>
<td>.000*</td>
</tr>
<tr>
<td>Outdoor Rec.</td>
<td>4.11</td>
<td>3.71</td>
<td>4.18</td>
<td>4.06</td>
<td>10.53</td>
<td>.000*</td>
</tr>
<tr>
<td>Nature Prog.</td>
<td>4.05</td>
<td>3.76</td>
<td>4.32</td>
<td>4.13</td>
<td>13.84</td>
<td>.000*</td>
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</table>

* indicates significance at the .05 or better probability level.
CHAPTER V
DISCUSSION AND CONCLUSIONS

Introduction

This chapter offers discussion and interpretation of study findings. The first section examines the nature of place bond measures and compares findings to those of previous research on community attachment. Relationships between variables of the systemic model (age, length of residence, income) and place bond measures are then discussed. The third section deals with the role of length of residence with regard to attitudes toward tourism. Finally, the relationship between all four place bond measures and attitudes toward the impacts of tourism and support for development is discussed. A summary of conclusions is then put forth, along with discussion of the study's limitations.
Place Bonds Measures

The literature on people/place relationships comes from fields as diverse as rural sociology, environmental psychology, geography, landscape architecture, and recreation and leisure studies. Each of these areas of concentration has contributed a unique perspective to the understanding of the bonds between people and the places in which they live, recreate, socialize, and experience daily life. Unfortunately, little work has been done to bring together the full range of ideas and concepts put forth by researchers in each of these fields. Recently, however, some researchers have begun to examine a broader concept of place bonds.

McCool and Martin (1994) found that conventional measures of community attachment, such as sorrow to leave and length of residence, were not consistent in explaining residents' attitudes toward tourism. Sociological literature on community attachment predicts that these two measures, often used interchangeably, should function in a similar manner. To explain their findings, McCool and Martin suggest that residents may be attached to different aspects of the local community. Some may feel strong ties to the social elements of community life, while others may develop a strong connections to the physical environment.

The idea of different types of attachment, or place bonds, has also been addressed in the geography literature. Shamai (1991) holds that attachment, identification, commitment, awareness, involvement, or any of a wide range of other concepts used to
refer to feelings about place, are in fact different aspects of "sense of place". He suggests that phases and levels of sense of place are represented by these different aspects of place bonds.

Four measures of place bonds were examined in this study. Length of residence was determined by asking respondents "how long have you lived in the place you consider to be your community?". The second measure, local sentiment, was obtained by summing the score for three five point Likert scale items: 1) how much do you feel at home in this community?, 2) how interested are you in what goes on in this community?, and 3) Suppose that for some reason you had to move away from this community, how sorry or pleased would you be to leave? The final two measures, local and regional identity, were measured using a scale developed for this study and based on the work of Shimai (1991). This latter scale contains a series of seven items representing increasing levels of sense of place. Participants were asked to give a response to each item for a set of five nested levels of place (your town, your community (if different), Mt. Rogers area, Southwest Virginia, and the Southern Appalachians). Total score on the two local levels, town and community, was combined to form "local identity", while a summation of scores for the latter three place categories is represented by "regional identity".

Correlation of the four measures (length of residence, local sentiment, local identity, and regional identity) revealed that while a relationship does exist between local sentiment and length of residence, it is weak. Correlation of .29 was comparable to McCool and Martins' finding of .20. Correlation between length of residence and both
local and regional identity was not significant. Though the correlation between local and regional identity was moderately high at .68, the two indices seem to be measuring somewhat different elements of place bonds. Local identity is, for example, correlated more strongly with local sentiment than is regional identity. The referent (town, community) is the same for both local sentiment and local identity. The regional categories (Mt. Rogers, SW Virginia, Southern Appalachians) are much broader in scale and relate less directly to social and physical aspects of community life. Though regional categories may have a social component, regional culture for example, there is an overlying sense of the geographic or physical locale. For these reasons, local and regional identity were treated as separate measures. In addition, the high correlation between the two may be, in part, attributable to shared method variance (i.e. the layout of the question) (see appendix A, q. 20).

**Place Bond Measures and the Systemic Model**

Sociological research has supported a model of community attachment introduced by Janowitz and Kasarda (1974). This systemic model served to explain community attachment, measured as local sentiment and density of local social network, using life-cycle stage, socio-economic status, and length of residence as predictors. In previous community studies, length of residence was found to be the most significant of the three predictors, though socio-economic status (income) was also significant. Age, or stage in
the life-cycle, did not seem to contribute significantly to the explanation of community attachment. Goudy (1990) repeated Janowitz and Kasarda's study in a rural setting and found similar results. Once again, length of residence was shown to be the most consistent predictor of community attachment. In this case, however, both age and income were also significant.

Based on the findings of Janowitz and Kasarda and other sociological researchers, length of residence has been used as an interchangeable measure of community attachment, along with various elements of local sentiment, such as feeling at home, and sorrow to leave. For the sake of comparison with prior research, and to strengthen the argument for its autonomy as a measure, length of residence is used, in this portion of the analysis, as a predictor of other place bonds measures.

A separate examination of the systemic variables and the component variables in the local sentiment index showed that length of residence is most strongly related to "sorrow to leave". In the analyses of both Janowitz and Kasarda and Goudy, however, length of residence was more closely tied to feeling at home in the community (see Table 6). Income was significant with only one of the three index components, interest in what goes on in the community. This is also consistent with prior research. As in Janowitz and Kasarda (1974), age did not significantly contribute to the explanation of any of the dependent variables.

With respect to local identity, both length of residence and income were significant variables. Regional identity is best explained by a combination of income and number of
generations in the community (see Table 6). The role of income as a predictor in each of these cases may be enhanced by the nature of the final item in the identity scale which states "I would be willing to sacrifice money for this place". The ability to sacrifice funds could play a role in the response to this item, thus affecting the score on both the local and regional identity indices.

As in comparisons of this analysis with prior studies, length of residence is a consistent predictor of place bonds measures, the strength of that prediction is low. Values for multiple R-square, reveal that a small percentage of the variance is actually explained. Low correlation between length of residence and local sentiment (.29), local identity (.03), and regional identity (.01) suggests that length of residence may not be a strong indicator of community attachment.

Finally, inconsistencies between this and prior studies with respect to the significance of the other systemic variables (age, income) may indicate that these predictors are also less reliable than previously thought.

**Length of Residence and Attitudes Toward Tourism**

Length of residence is tested against attitudes towards tourism to determine if significant differences exist between new residents (less than 10 years) and longterm residents (more than 30).

Attitudes toward tourism are measured in two parts. First, attitudes toward the
economic, social and environmental impacts of tourism are assessed by asking respondents how much they felt items in each category would worsen or improve with increased tourism. In addition, respondents indicate how much they would support or oppose types of tourism and aspects of development, including no new development in the region. Overall support for tourism is then measured as a sum of all twelve support items. Support for six individual types of tourism development is also tested against length of residence.

There is no significant difference in attitudes toward tourism impacts—economic, social or environmental, between new and longterm residents. (At finding is consistent with those of McCool and Martin (1994) who also finds no difference of opinion on impacts, benefits, or costs of tourism development. Both Sheldon and Var (1984) and Um and Crompton (1987), however, conclude that longterm residents or those with high community attachment (as length of residence, birthplace, ethnic origin) perceive the social and economic impacts of tourism less positively than new residents. On the issue of environmental impacts (quality of the natural environment), all studies, including the present, agree that no difference in opinion exists between new and longterm residents.

While prior investigations of community attachment and attitudes toward tourism have focused almost solely on the impacts of tourism, this study also examines support for tourism. Analysis of variance reveals that longterm residents are less supportive of tourism than those of shorter tenure. This difference of opinion exists for overall tourism and for five of the six individual types of development. Both long and short term residents
are less supportive of attraction based development, designed for large groups of tourist, than any other type of development.

**Place Bonds and Attitudes Toward Tourism**

This study also examines the relationship between the four place bond measures (length of residence, local sentiment, local identity, and regional identity) and attitudes toward tourism. Multiple regression reveals that of the four measures, only regional identity is significantly correlated with attitudes toward tourism impacts. Residents with a strong sense of regional identity hold a more positive view of the social and economic impacts of tourism than those with relatively weaker regional bonds. Though other studies have found that attachment, regardless of how it is measured, leads to more concern about the impacts of tourism (Sheldon and Var, 1974; Um and Crompton, 1987), McCool and Martin (1994), found that highly attached residents, while concerned about costs, are more positive about the possible benefits of tourism.

Neither local sentiment nor local identity contribute significantly to the explanation of tourism attitudes (impacts or support). A possible explanation for this unexpected finding could lie in the fact that this study deals with potential development rather than impacts which already exist in the community. It is feasible that residents may not see impacts or benefits of tourism as directly affecting their community. Outdoor or nature based tourism, in particular, tends to occur on a regional level and may not be seen as important
on the local or community level. Again, regional level attachments do seem to influence attitudes toward tourism.

If, as others suggest, highly attached residents demonstrate more concern for the impacts of tourism, they should, logically, be less supportive of development. However, when reviewing McCool and Martin's findings we see that, while highly attached residents are more concerned about costs and negative impacts of tourism, they are more positive about its benefits. Residents who expect positive benefits from tourism, though concerned about possible negative impact, may be supportive of tourism development.

Again, multiple regression analysis performed in this study reveals that residents with high sense of regional identity are more likely to expect social and economic conditions to improve with increased tourism than their relatively less attached counterparts. They are also more supportive of both overall and individual types of tourism, especially nature programs and culture based development.

As discussed earlier in this chapter there is no difference in attitudes toward the impacts of tourism (economic, social, environmental) between new and longterm residents. Longterm residents are, however, less supportive of tourism development than those who are relatively new to the community.

Exchanging Length of Residence and Regional Identity

In order to further understand the ties between length of residence, regional identity,
and attitudes toward tourism, respondents were categorized as new or longterm residents and as low or high on regional identity. Four groups (new/low regional, longterm/low regional, new/high regional, longterm/high regional) were then described on the basis of age, quality of life rating, income, education, and recreational use. Longterm residents with low regional identity are older (avg. age 71), have the least formal education, the lowest average income and are the least frequent users of the recreation area. New residents with high regional identity, on the other hand, are younger than all other groups (avg. age 47). They are the most educated, have the highest average income, and are the most active recreation users. Residents scoring low on regional identity, regardless of length of residence, participate in recreational activities much less frequently than those with a strong sense of regional identity.

These two groups (LT/low regional, New/high regional) are again the most disparate in their attitudes toward tourism. Long term residents with low regional identity are the most concerned about the social and economic benefits of tourism and are also the least supportive of tourism development of all types, except theme/attraction based. New residents with high regional identity, on the other hand, are the most supportive of tourism overall, and of nature based, cultural, folk event, and outdoor recreation based development. They are especially supportive of nature programs.

Developing a regional identity often begins with defining the elements which distinguish the region, and its people, from other places (Cuba, 1987). Reed (1983), in a study the regional identity of Southerners, found that residents who have lived or who
have experienced extended visits outside the region have a higher level of regional consciousness than those who have not traveled. Regional residents with localized, long-term roots in a particular community are the least likely to demonstrate strong regional consciousness. Though regional consciousness is measured as concern for, and understanding of, regional history and way of life, it seems logical to conclude that both residents who have traveled outside the region and migrants who have chosen to move there might have a better understanding of the unique and valuable assets of the region, both social and geographic. Working class residents, like those in category 2 (LT/low regional), tend to be oriented toward immediate family and friends and to place emphasis on attachments to the home and immediate neighborhood (Guest and Stamm, 1993) rather than larger scale or regional attachments as indicated by low scores on regional identity. These residents also tend to be more suspicious of organizations oriented toward politics or civic "improvement" (Guest and Stamm, 1993), which lends support to the finding that they are more concerned about impacts and less supportive of tourism than other groups.

Findings of this study converge with those of McCool and Martin (1994) in that both studies found that the group of residents with the strongest positive view of potential tourism are new residents with a high level of attachment. Research into the development of place bonds among new residents (migrants) reveals that migrants, depending on their purpose for moving, may seek out a particular place over all others based on place imagery or direct experience of the locale (Cuba, 1987). McCool and Martin (1994) suggests that new residents may quickly develop strong attachments to place, since they
have chosen to relocate to their new community. But why would these new residents support development of the region to which they are attached? This question can be examined in two parts. First, why would new residents be supportive of tourism and secondly, why those who are strongly attached to the region support tourism.

Conventional wisdom holds that longterm residence and strong attachment lead to less, not more, support for development. Research by those in recreation and leisure and in sociology support this view. Even the popular press proclaims the dismay of attached residents, new or longterm, in the face of development which may alter the physical or cultural landscape of a particular locale. The Disney America controversy currently under debate in the Monasses area of north-central Virginia serves as a good example. Such politicization of development issues may lead to greater awareness resistance rather than support. Discussions of resource management issues in the recreation and leisure studies literature also tend to focus more intensely on conflicts with development plans than with support. Emphasis placed on opposition to development could have lead researchers to overlook situations or locales where tourism development and local residents coexist peacefully.

Another possible explanation is that new residents with strong regional identity, who are the most educated of all groups, are simply more aware of the potential benefits, both economic and social, than other residents and feel that these benefits outweigh possible negative impacts. Findings which indicate that number of generations in the community plays a significant role in determining the level of tourism support held by regionaly
attached residents suggests that residents in this category may be return migrants. If so, they may have experienced successful development elsewhere or have become accustomed to the benefits and recreation/leisure opportunities available in a more developed area. Residents in this group are the least satisfied with the quality of life in their present community.

Still another characteristic of new residents with high regional identity is that they are younger and more active - by far the most frequent participants in recreational activities. It is possible that, since these residents use recreation facilities in the region more often, they perceive more personal and direct benefits from potential development. Support for low impact recreation and event-based tourism, as well as folk events, could reflect these residents desire to utilize potential facilities and leisure opportunities.

While the issues discussed above offer some insight into attached residents' support for tourism, there is still a need for sound tested explanations. Furthermore, continued evaluation of the measures used to assess both attachment and tourism attitudes is needed if understanding is to be increased with regard to this issue. Clarification of respondents' understanding of the referent (community, region, place) is also needed. As McCool and Martin (1994) suggests, present measurement techniques do not address the issue of attachment to different aspects of "the community" (social or physical for example) nor do they incorporate the wide array of interrelated concepts used to study people/place relationships. A better understanding of how such concepts as place identity, attachment, involvement, and commitment, function together could lead to a more solid explanation of
the role of place bonds in the formation of attitudes toward tourism. Qualitative studies which examine the role of place and place bonds in the lives of individual residents could provide valuable insight into elements missing from currently used measures.

Further research into the community aspects of tourism development is also needed as rural areas become more focused on tourism as an economic development option. Applied research which examines the impacts of development on both individual residents and communities as a whole, and which seeks to understand the ways in which tourism can incorporate elements of local life, can only empower communities and management agencies and broaden the scope of tourism itself. Such research will expand our understanding of the nature of tourism and its potential as both an economic strategy and as an instrument through which community well-being can be fostered.

Summary of Conclusions

The results of this study provide support for the hypothesis that long-term residents have less positive views of tourism development than newcomers. Residents with a strong sense of regional identity, on the other hand, perceive the impacts of tourism more positively and are thus more supportive of tourism development. Neither local sentiment nor local identity affect residents' attitudes toward tourism.

New residents with a strong regional identity are the most supportive of nature-based tourism. Members of this group tend to be younger, more educated, and more active than
other residents. Personal interest in outdoor recreation may play a part in support for outdoor recreation and cultural development, as well as nature based tourism such guided nature walks and cross-country ski trails.

Results also support the suggestion by McCool and Martin (1994) that more than one type of attachment could be influencing attitudes toward tourism. Here, a new measure, regional identity, which may have closer ties with attachment to the physical landscape than traditional local sentiment measures, is the best indicator of tourism support.

Comparison of the results of the present study with the findings of previous studies on attachment and attitudes toward tourism reveals that length of residence is, as Brougham and Butler (1981) suggests, inconsistently related to attitudes toward tourism impacts. As a predictor of community and regional attachments, length of residence is also suspect. While significant, correlations with local sentiment (.29) are not strong enough to suggest that length of residence can serve as a proxy measure of community bond. No significant correlation exists between length of residence and either of the identity measures of place bonds.

These findings support the conclusion that multiple types of place bonds may coexist not only in the same community, but within the same individual. Just as examining place attachment increases the understanding of attitudes toward tourism, so might bonds with different aspects of local and regional life, as well as different levels of place, be more clearly understood by looking at attitudinal variables such as tourism support. Differences in strength and nature of attachments, not evident when simply measuring place bonds,
may be revealed when issues like tourism development, which inevitably alter and impact the physical and cultural landscape of a region, are brought into the analysis.

**Implications for Management**

Tourism development is fast becoming one of the most important, and profitable, economic options in both public and private sectors. Understanding the views of local residents is essential to the success of any such project since tourism development includes not only the attraction, in this case a recreation area, but facilities, amenities, and local flavor provided by residents of surrounding communities. Understanding the types of residents who are inclined to support tourism is also beneficial.

The findings of this study suggest that managers and members of the tourism industry who wish to find local support for tourism should look toward relatively affluent, well educated, middle aged residents, especially those who actively utilize existing facilities. These residents may be concentrated in areas where large numbers of immigrants have chosen to settle or resettle as the case may be. Longterm residents with little experience beyond the local community are not likely to support development and may, in fact, oppose changes which alter the nature of local life. However, they are also unlikely to organize.
Limitations

Comparisons between this study's investigation of place bonds and variables in the systemic model and the work of both Janowitz and Kasarda (1974) and Goudy (1990) is incomplete in that this study did not address, nor control for, ties to the local social network. Number of generations in the community is the only variable to address this issue and is significantly correlated only regional identity.

Comparisons with other work on community attachment and attitudes toward tourism could also be influenced by the nature of this study. Unlike prior studies, this research focuses on a region where tourism is not yet a large sector of the regional economy and where large-scale tourism impacts are not readily visible. As a result, respondents may have drawn on images and opinions of tourism gleaned from past experience, experience with other regions, the media, or other secondary information sources.

Finally, this study, like so many others, fails to clearly reveal the source, or referent of residents' attachments. Though able to distinguish between different measures of attachment, little real understanding of the nature of those attachments is generated. In order to truly understand place bonds and how they may affect residents' attitudes, researchers must develop measurement techniques which delve into the origin of attachments. Are residents attached to social aspects of the community, the physical environment (natural or built), or simply to some symbolic image of the place? In the end this research still leaves these questions unanswered.
Literature Cited


APPENDIX A

SURVEY INSTRUMENT
Concerns About Your Community

1. How would you rate the quality of life in your community? Check one.
   - Excellent
   - Good
   - Fair
   - Poor
   - No opinion

2a. How concerned are you about the following aspects of your community? Please circle one answer for each item.

<table>
<thead>
<tr>
<th></th>
<th>Not at All</th>
<th>Slightly</th>
<th>Somewhat</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The environment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Schools</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Crime</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Recreation/culture</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Economic development</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. Roads/transportation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Other, please specify</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

2b. Which of the above are you concerned the most about? (Write the number here.) ________

3. People have been talking about proposed changes to Highway 58. Do you oppose or favor the proposed changes?
   - Oppose any change
   - Neutral
   - Favor northern route through Victoria, Troutdale, Mt. Rogers
   - National Recreation Area
   - Favor southern route into Tennessee through Damascus
   - Favor some other route
   - I don't know about any proposed changes

4. Some people think this area needs more economic development. Others feel that things should be left the way they are. What do you think? Check one.
   - Things should be left the way they are
   - Economic development is needed but some things should be protected
   - Economic development should take priority over other concerns

5. The following are some opinions we have heard expressed by the people who live near you. Please tell us how much you agree or disagree with what other people are saying.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>Neutral</td>
</tr>
<tr>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

6. Which of the following can do the most to improve the quality of life in your community? Check one.
   - Federal government agencies
   - State government agencies
   - City and county government agencies
   - Non-government community organizations
   - The business community
   - Individual residents
### Your Feelings About Tourism Development

7. If the number of tourists coming to Mt. Rogers increases, do you believe the following will improve or worsen for you? Will improve or worsen for your community? Circle the number that best describes your feelings about each.

<table>
<thead>
<tr>
<th>Will these improve or worsen?</th>
<th>For You</th>
<th>For Your Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment opportunities</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Opportunities for shopping</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Opportunities for recreation</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Residues from tourists for local governments</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>The price of goods and services</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>The cost of land and housing</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Traffic congestion</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>The crime rates</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Local services such as police and fire protection, utilities, roads</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>The quality of the natural environment</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>The preservation of the local culture</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>The relationships between residents and tourists</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

8. Indicate how much you would oppose or support the following types of tourism development in the Mt. Rogers region. Circle one for each of the different types of development.

<table>
<thead>
<tr>
<th>Type of Development</th>
<th>Strongly Oppose</th>
<th>Oppose</th>
<th>Neither</th>
<th>Support</th>
<th>Strongly Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature-based development (for example, wildlife trails)</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attractions designed for large numbers of tourists such as theme parks and large resort complexes</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural or historic-based attractions (such as visitor centers or museums)</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visitor services (for example, hotels, restaurants)</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small, independent businesses (for example, gift shops, gift services, campgrounds)</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural and folk events (such as concerts, art and crafts, dance, festivals)</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outdoor recreation programs (for example, organized hikes, bike rides, competitive events)</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature programs (such as guided nature walks)</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion of the area as a tourist destination (such as television advertising or brochures)</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved transportation, facilities and roads</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information for tourists (such as maps and publications)</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prohibiting all new development</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Is there anything else you might oppose or support?
10. It would be best for me if the number of tourists visiting the Mt. Rogers Recreation Area (check one):
- Decreased a great deal
- Decreased somewhat
- Did not change
- Increased somewhat
- Increased a great deal

11. It would be best for this community if the number of tourists visiting the Mt. Rogers Recreation Area (check one):
- Decreased a great deal
- Decreased somewhat
- Did not change
- Increased somewhat
- Increased a great deal

[Box: Your Feelings About Your Community]

12. Name the place you consider to be your community.

13. How long have you lived there?
- Months
- Years

14. Have you lived in other communities in the Mt. Rogers area?
- Yes, if yes, where? ____________________________ how many years? ________________
- No

15. How many generations of your family have lived in the Mt. Rogers area?
- How many generations in the same community as you? ________________

16. Which local organizations are you a member of?

17. How much do you feel at home in this community. Circle one.
- Hot at All
- A Little
- Some
- A Lot
- Very Much

18. What interest do you have in knowing what goes on in this community? Circle one.
- None
- A Little
- Some
- A Lot
- Very Much

19. Suppose that for some reason you had to move away from this community, how sorry or pleased would you be to leave? Circle one.
- Very Sorry
- Sorry
- No Difference
- Pleased
- Very Pleased

20. Please indicate by circling T or F whether the following statements are true or false for each of the places listed.

[Boxes: T/F options for each place listed]

[Box: Your Use Of and Opinions About the Mt. Rogers Recreation Area]

21. How many times have you participated in outdoor recreation activities in the Mt. Rogers National Recreation area in the past 12 months?

__________________ (If zero, go to Question 20.)
22. List at least three recreational activities you participate in most often while at the Mt. Rogers NRA.

23. List at least three recreation sites you use most often while at the Mt. Rogers NRA.

24. Is there one site or place in the Mt. Rogers NRA that is particularly special to you?
   - Yes. (Go to Question #25)
   - No. (Go to Question #28)

25. Please name or describe the site that is especially important to you.

26. What, if any, improvements would you like to see made to this site?

27. If the Forest Service did not have enough money to keep a site you use open, which of the following actions would you prefer?
   - Adding a user fee of $2 (or raising an existing fee by $2)
   - Closing the site permanently
   - Leasing the area to a concessionaire who will charge user fees
   - Shortening the length of time the site is in operation (for example, closing the site earlier in the season).
   - Other: please describe:

   - Nothing
   - A Little
   - Some
   - A Lot
   - A Great Deal

29. Are there any facilities, services, or programs that the Forest Service is not currently offering that you think should be provided? Please list below what you would like to see provided.

30. What benefits do you and your community receive from being near the Mt. Rogers NRA?
   - Benefits to You
   - Benefits to the Community

31. Please indicate whether you agree or disagree with the following statements concerning the Forest Service management of the Mt. Rogers NRA. Circle the number.

| The Forest Service is currently providing the type of recreational facilities, services, and programs that are important to me. |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
| Everyone who uses the recreation area should pay fees. |  |  |  |  |
| Before the Forest Service makes any changes, residents in the area should be asked for their opinion. |  |  |  |  |
| The designation of FR 50 and 503 as a scenic byway has been beneficial to the local area. |  |  |  |  |
| Property owners need to work with the Forest Service on projects to make Mt. Rogers more attractive to tourists. |  |  |  |  |
| Some user groups are not paying their fair share of the costs of maintaining the areas designated for their use. |  |  |  |  |
32. Please indicate the extent to which each statement below describes your general feelings about the Mt. Rogers NFRA. Circle the number that best describes how you feel about each statement.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

This is my favorite place to go during my free time
1 2 3 4 6

Because of my lifestyle, this place is important to me
1 2 3 4 5

No other place can compare to this area in terms of what I like to do
1 2 3 4 5

Coming here is one of the most satisfying things I do
1 2 3 4 5

I wouldn't substitute any other area for doing the type of things I do here
1 2 3 4 5

I use this place to help define and express who I am inside
1 2 3 4 5

33. Listed below are statements about the relationship between humans and the environment. For each one, please indicate the extent to which you agree or disagree with it.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

We are approaching the limit of the number of people the earth can support
1 2 3 4 5

Humans have the right to modify the natural environment to suit their needs
1 2 3 4 5

When humans interfere with nature it often produces disastrous consequences
1 2 3 4 5

Human ingenuity will ensure that we do NOT make the earth unlivable
1 2 3 4 5

Humans are severely abusing the environment
1 2 3 4 5

The earth has plenty of natural resources if we just learn how to develop them
1 2 3 4 5

Plants and animals have as much right as humans to exist
1 2 3 4 5

The balance of nature is strong enough to cope with the impacts of modern industrial nations
1 2 3 4 5

Despite our special abilities humans are still subject to the laws of nature
1 2 3 4 5

The so-called “ecological crisis” facing humankind has been greatly exaggerated
1 2 3 4 5

The earth is like a spaceship with very limited room and resources
1 2 3 4 5

Humans were meant to rule over the rest of nature
1 2 3 4 5

The balance of nature is very delicate and easily upset
1 2 3 4 5

Humans will eventually learn enough about how nature works to be able to control it
1 2 3 4 5

If things continue on their present course, we will soon experience a major ecological catastrophe
1 2 3 4 5

34. People often have very different ideas about what has gone on before and what we can expect in life. Here are three ways of thinking about things. Which of these three statements do you agree with most? Please check one.

- It is best to give most attention to what is happening now in the present

- It is best to keep up the old way of doing things

- It is best to focus on the future
35a. Please tell us how important each item is in influencing your daily life. Circle one for each value.

<table>
<thead>
<tr>
<th>Item</th>
<th>Not at All Important</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sense of belonging</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>2. Sense of accomplishment</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>3. Fun &amp; enjoyment</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>4. Warm relationships</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>5. Self fulfillment</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>6. Being well respected</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>7. Excitement</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>8. Security</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>9. Self respect</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

35b. Which of these values are most important to you? Write the number of your choice in the blank.

Most Important
Second most important
Third most important

36a. Think of the person in the community you respect the most. Why do you feel this person has so much respect in this community?

36b. What rating would you give this person for:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wealth &amp; economic success</td>
<td>1</td>
<td>2 3 4 5</td>
<td>6</td>
</tr>
<tr>
<td>Skill, knowledge, or talent</td>
<td>1</td>
<td>2 3 4 5</td>
<td>6</td>
</tr>
<tr>
<td>Commitment to their community</td>
<td>1</td>
<td>2 3 4 5</td>
<td>6</td>
</tr>
<tr>
<td>Individual popularity</td>
<td>1</td>
<td>2 3 4 5</td>
<td>6</td>
</tr>
<tr>
<td>Commitment to hard work</td>
<td>1</td>
<td>2 3 4 5</td>
<td>6</td>
</tr>
<tr>
<td>Moral standing</td>
<td>1</td>
<td>2 3 4 5</td>
<td>6</td>
</tr>
</tbody>
</table>

37. Provided that financing were available and considering the problems that go along with owning your own business, please tell us if you would be interested in owning and operating, owning but not operating, managing and/or working in any of the following types of tourist business. You may check more than one box for each item. Check no boxes if none of these is interesting to you.

- Own but not operate
- Own & operate
- Manage
- Be employed in

Retail store
Restaurant
Tourist cabins
Motor hotel
Campground
Riding stables
Bike rental shop
Guide service
Other; please specify

38. In what year were you born?

39. Gender:  ____ Male  ____ Female

40. Ethnic Group:  ____ White  ____ African-American  ____ Hispanic  ____ Asian  ____ Other

41. Which of the following best describes your household? Check only one.

- Single adult living alone or with other single adults
- Single adult living with children or dependents
- Married couple living without children or dependents at home
- Married couple living with children or dependents at home

42. If you have children living in the household, what is the age of the youngest child in the household? Check one.

- No children
- 0-30 mos.  ____ 2-5 yrs.  ____ 6-11 yrs.  ____ 12-17 yrs.  ____ 18 or over
43. What schools do, did, or will your children attend? (If no children, write the nearest school)
   Elementary
   Middle/Jr. High
   High School
44. Including yourself, how many people make up your household?
45. What was the last year of school you completed? Circle one.
   Grade School  High School  College  Graduate School
   1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21
46a. Which of the following best describes your and your spouse's present employment situation?
   Self
   Spouse
   (If applicable)
   Student
   Homemaker
   Temporarily laid off
   Unemployed
   Retired
   Professional/technical
   Executive/administrator
   Middle management
   Sales/marketing
   Clerical or service
   Skilled/unskilled operator
   Self-employed/business owner
   Government/military
   Other (please specify)
46b. What kind of work do you do (or if retired or laid off, did you do)?
   (For example, plumber, homemaker, gift shop owner, toy store clerk, waitress)
46c. If employed outside the house, is your work (Circle one):
   Full time
   Part time
47. How much of the income of the company you work for (or business you own) comes from the tourist trade? Circle one.
   None
   A Little
   Some
   A Lot
   Almost All
48. What is your approximate household income before taxes?
   Check one.
   $10,000 or less
   $10,001 - $20,000
   $20,001 - $30,000
   $30,001 - $40,000
   $40,001 - $50,000
   $50,001 - $60,000
   $60,001 or more
49. What part of your current household income comes from the money spent by the visitors to the Mt. Rogers NRA?
   Approximately
49. How likely is it that your current household income will increase if the number of visitors to the Mt. Rogers NRA increases?
   Not at all likely
   Extremely likely
   1  2  3  4  5  6  7
   We appreciate your willingness to respond to our questionnaire and welcome any comments you wish to make.
   COMMENTS:

Thank you for your help in completing this survey. Please drop the survey in the mail as it is. It is NOT necessary to add postage or secure the open end with a staple or tape.
APPENDIX B

MAP OF THE STUDY AREA
APPENDIX C

DIVISION OF THE SAMPLE
The sample is divided into twelve sections based on overlap in the telephone directories for each county. The ambiguous nature of the relationship between phone exchange, from which the sample is drawn, and town of residence necessitated this division.

Section 1
Galax

Section 2  Carroll County
            Hillsville
            Sylvatus
            Laural Fork
            Cana

Section 3  Grayson County
            Elk Creek/Troutdale
            Comer's Rock

Section 4  Grayson County
            Fries

Section 5  Grayson County
            Independence

Section 6  Grayson County
            Mouth of Wilson

Section 7  Wythe County
            Austinville
            Cripple Creek
            Max Meadows
            Rural Retreat
            Wytheville

Section 8  Smyth County
            Marion
            Chilhowie

Section 9  Smyth County
            Saltville
            Rich Valley

Section 10 Smyth County
            Sugar Grove

Section 11
            Bristol

Section 12  Washington
            Abingdon
            Konnarock
            Glade Spring
            Damascus
            Meadowview
VITA

Carla M. Riden was born in Mobile, Alabama on February 15, 1969. She was a 1987 honors graduate of Mobile County High School in Grand Bay, Alabama. In 1991 she received her B.A. in Geology from the University of Alabama at Tuscaloosa. She has worked for the Alabama Geological Survey, the Alabama-Mississippi Sea Grant Consortium, and a number of environmental consulting firms. Since 1992, she has studied human dimensions of natural resources while enrolled in the Recreation program within the College of Forestry at the Virginia Polytechnic Institute and State University.