

A Consideration of Collective Memory in African American Attachment to Wildland Recreation Places

Cassandra Y. Johnson

University of Georgia
and USDA Forest Service
Southern Forest Experiment Station
Forestry Sciences Lab
320 Green St.
Athens, Georgia 30602
USA

Abstract

This study examines the effect of race on place attachment to wildland areas. It is generally assumed that African Americans have a more negative impression of wildlands, compared to white ethnic groups. Studies from past decades report that blacks show less aesthetic preference for wildland, unstructured environments and are also less environmentally aware than whites. While it is assumed that blacks are wildland averse, few studies have considered some of the sociohistorical factors that may have contributed to the formation of such attitudes. One possibility is that blacks' collective "memory" of sociohistorical factors such as slavery, sharecropping/Jim Crow, and lynching may have contributed to a black aversion for wildland environments. Racial differences in aesthetic appreciation of wildlands are tested with a place attachment scale developed by Williams et al. (1992) using confirmatory factor analysis and structural equation modeling. The data are from a 1995 survey of residents in a rural, southern county in the Florida panhandle. Results show significant racial variation, with African Americans having less attachment to wildland recreation areas. Sex and age are also significant predictors of place attachment.

Keywords: African American, collective memory, environmental meaning, place attachment, wildland recreation

This paper examines racial variation in place attachment (Williams, Patterson, Roggenbuck, and Watson 1992). "Attachment to place" is rooted in the social psychological and environment and behavior literature. Similar concepts are topophilia (Tuan 1990), place identity (Proshansky 1978), sense of place (Steele 1981), and place dependency (Stokols and Shumaker 1981). The most agreed upon definition of attachment is that of a deep, positive, affective bond to a setting or type of setting. This bond has less to do with rational thought, as in the case of establishing satisfaction (Williams

1989); rather, it is determined more by emotion in that attachments may be formed with objects or places which are undesirable to the objective observer. For example, an adult may have an attachment to a camping area now surrounded by interstate traffic because the person camped in the area as a child. To the objective observer, this particular camping area might seem undesirable, but to the "attached" adult, the area continues to command visitor loyalty because of some emotional bonding that occurred at some point in the person's life (Rowles 1983).

Attachment is the process of turning physical space into a place endowed with either individual or collective meanings. As Low (1992) writes, place attachment is "the symbolic relationship formed by people giving culturally shared emotional/affective meanings to a particular space or piece of land that provides the basis for the individual's and group's understanding of and relationship to the environment" (165). Low and Altman (1992) note that physical properties may be only incidental to attachment. That is, the physical place may simply provide the background upon which ideas, feelings, and memories are formed. Attachment derives more from what was *experienced* in a particular environment rather than the shape, size, or location of the environment.

Williams et. al. (1992) argue that recreation managers and researchers should pay more attention to these symbolic and emotional attachments visitors have for recreation places rather than continue to view different recreation places as if they were undifferentiated commodities. A recognition of the meanings people hold for outdoor places can help managers understand better why certain publics concern themselves very much for some management policies but seem to care little about others.

Williams et. al. (1992) developed Likert scales to measure emotive attachment to wilderness areas in general (wilderness attachment) and attachment to four specific wilderness places (place attachment). The analysis examined the relationship between these two types of attachment,

respectively, and four independent variables— 1) use history of either wilderness areas or a specific wilderness place and perceived substitutability, 2) sociodemographic characteristics, 3) mode of experience and trip characteristics, and 4) sensitivity to recreational impacts and wilderness conditions. Place attachment was found to be more closely associated with both lack of nonwilderness substitutes and with lower income and education. As expected, attachment to specific wilderness areas was associated with certain sociodemographic characteristics such as membership in wilderness advocacy groups and nature study and also with trip characteristics (preference for longer stays). Gender (male) was significant for attachment to one of the four wilderness areas.

Williams et al.'s (1992) seminal piece has contributed much to our understanding of the more emotive aspects of outdoor recreation by calling theoretical attention to the emotional component of the recreation experience and by providing an empirical measure of place attachment. However, neither Williams et al. (1992) nor subsequent place attachment investigations have addressed whether attachment to types of recreation areas varies by race or ethnic group affiliation (Mitchell, Force, and McLaughlin 1993; Brandenburg and Carroll 1995). Presumably, Williams et al. (1992) was not able to do this because their sample contained only white respondents. This is not surprising given that the sample consisted of on-site visitors to wilderness areas. Empirical studies of on-site wilderness visitors show that the overwhelming majority of visitors are college educated white males (Lucas 1989; Watson, Williams, Roggenbuck, and Daigle 1992). Indeed, one of the greatest disparities among racial/ethnic groups, in terms of outdoor recreation participation, continues to be in activities associated with wilderness, wildland, or primitive recreation areas (Washburne 1978; Dwyer 1994; Woodard 1993).

Yet it is important to understand better why African Americans and other groups appear averse to wildlands, because as Bixler and Floyd (1997, 444) observe, "to ignore apprehensions of wildlands and only investigate what is preferred by those already actively involved...does little more than support the status quo." A number of explanations have been proposed to explain why African Americans seem to have less interest in most wildland areas and activities. Taylor (1989) presents three general categories of theories which address the more general "concern gap" between African American and white involvement in the environment. These are: 1) social psychological, which includes marginality and hierarchy of needs or the idea that blacks have less interest in wildland recreation pursuits because more lower-level, material needs such as food and shelter compete for limited black resources; 2) cultural, including African American mythology, slavery, and segregation; and 3) mea-

surement error, including inappropriate indicator measures and sampling techniques.

This paper does not wish to suggest that blacks are environmentally *unconscious*; rather, in relation to whites, they appear to be generally less aware of environmental issues. However, more recent studies show, that in some instances, African Americans display a similar degree of concern as whites for the dangers of environmental toxins. And environmental activism among both rural and urban African Americans has been mounting in recent decades, for example, grassroots involvement in the environmental justice and environmental racism movements, which are an extension of the 1960s civil rights movement (Bullard 1990). These trends notwithstanding, there still exists a measurable and significant divide between black and white participation in natural area recreation and environmental activism.

Most of the empirical or theoretical studies devoted to wildland recreation participation thus far have attempted to determine the influences of socioeconomic barriers on recreation preferences and behavior (Floyd, Shinew, McGuire, and Noe 1994; O'Leary and Benjamin 1982; Washburne 1978). Analyses of socioeconomic variables have been limited to mostly personal or household income and education level. Other components of social structure such as ethnicity or racial sub-culture have been examined only indirectly, and even less attention has been given to sociohistorical/cultural hypotheses such as slavery, sharecropping, or lynching on African American perceptions of wildlands. However, a consideration of these historical structures may be useful in helping to better understand the lack of a black presence in wildland areas. This negative imageability or symbolism may be especially salient for rural, southern African Americans because much of this group's collective memory is associated with the land (Johnson et al. 1997).

This paper uses the term collective memory in the tradition of Halbwachs (1980) who refers to it as an image of the past within the bounds of social context, for example, meaningful events that occur in one's family, neighborhood, ethnic/racial group, or nation. Writing in the same tradition, Rapaport (1997, 20-21) argues that memory of historical events is not restricted to individuals but shared by ethnic communities that continually relive collective traumas, for example the Holocaust. Successive generations of racial minorities can also be influenced by structural events that impacted their respective groups even though subsequent generations have no direct memory of such events. Although younger generations of African Americans did not witness lynchings or have direct experiences with sharecropping, they do remember stories related to them by older relatives who lived these experiences. It can be argued that these "memories" are retained by younger African Americans and

become a part of their collective identities, that such histories contribute to what it means to be black in American society; and these memories or narratives about the land influence black Americans' choices for outdoor recreation venues. Indeed, to forget these places of oppression would be to disgrace the memory of those who suffered and endured such hardships.

Bixler, Carlisle, Hammitt, and Floyd (1994) make a similar point, noting that wildland fears may be learned not only directly but also vicariously. Stokols (1990, 642) refers to this as social imageability or the "capacity of a place [or category of place] to evoke vivid and widely held social meanings...." This imageability is the gradual process of assigning meaning to a place based on past experiences. Such symbolism can arise even for people who have no direct contact with a place. The history of a place or type of place can be passed to successive generations via storytelling or various other media. Such transference occurs "when people gather together and remind themselves of events or conditions they once experienced" (Rapaport 1997, 20); and, for successive generations, the places referred to in racial and ethnic histories can come to symbolize a certain atmosphere or mood although no direct personal contact has been established.

The place where much of slave labor, sharecropping, and lynching occurred — the mostly wild, primitive, and in some cases semi-structured environment — may be important for understanding African American perceptions of wildland recreation places. Because beatings and hangings often took place in unprotected wild areas, it can be argued that contemporary blacks associate these wild places with terror. Though innocuous, wildland recreation activities like wilderness exploration, backpacking, and camping¹ have nothing to do with the horrors of past generations, the "memories" of terroristic acts taking place in such areas remain.

While the present study does not empirically address this linkage between black perceptions of wildlands and sociohistorical events, it discusses some historical aspects of black Americans' relationship to the land and the natural world. It is suggested that the legacies of these oppressive institutions cannot be divorced from either an historical or contemporary black land aesthetic. It is further suggested that such conditions may contribute either directly or indirectly to the avoidance of wildlands by many African Americans.

Sociohistorical Factors Associated with African Americans and the Land

Traditional African and European peoples worldwide have had different historical and philosophical relationships with wildlands and wilderness type areas. Thompson (1983) and Holloway (1990), contend that the KiKongo Bantu of central Africa brought an environmental perspective to the

Americas which saw humans as being endowed with a vital force that placed them at the center of a harmonious, self-regulating universe (Tempels 1959).² Riley (1996) also writes that traditional African cultures stressed their interconnectedness with the nonhuman environment. Similar differences in environmental world views are recognized for Native American, Asian American, and Latin American groups (Tuan 1990; Wyckoff 1995).

Bantu ontology provides a basis for identifying an early African American environmental ethic and land relationship. However, a more complete examination of contemporary African American ontology necessitates looking at the slave folk culture that emerged in the New World, a culture that was influenced by both European and Native American peoples. According to Levine (1977), the spiritual form of song, in particular, allowed slaves to maintain a vital link to the inter-connectedness of an older world order. For the materially bound slave, God, nature, and the supernatural evolved into active, vibrant entities which were present in every aspect of the slave's existence. Superstitious beliefs encouraged the believer to search for meaning in the natural world and to align oneself with universal forces. Only by comprehending the natural world could one hope to avoid unforeseen dangers and also attract to oneself good luck and fortune (Brewer 1968).

This spiritual world of slaves is important in understanding the bases of contemporary African American ideas about the natural environment. Because slaves' lives were so integrated with much of the natural world, they, like their ancestors, saw it not as a romantic place of rebirth or re-creation, but as a continuous, familiar extension of themselves (Meeker 1973). Along with the spiritual dimensions of slave life however, one must also consider the obdurate reality of forced labor on black perceptions of the land. While it is true that slaves lived close to nature and relied on signs from the natural world to help guide their lives, they were, at the same time, chattel property, compelled to work lands which offered them no direct, material benefits or gains. Despite the slave and freedman's adaptation to and perhaps appreciation of the land, one cannot disregard the nature of the relationship. This condition of servitude marks a fundamental difference between the slave and the African relationship to the land.

In the years immediately after slavery, approximately 88 percent of African Americans resided in the former slave states. Most freedmen occupied themselves with some form of contract farming with white planters, where the former worked as either wage earners, sharecroppers, or tenant farmers (U.S. Department of Interior 1872). Relative to whites, few blacks were landowners (Lemaistre 1988; Schweninger 1990) although black ownership varied by region in the Black Belt and generally increased until 1930 (Hargis and Horan

1997). For the most part, though, African Americans' economic relationship to the land is largely a history of disenfranchisement. Scholars have even questioned the popular myth of the government's granting of forty acres and a mule to the freedmen, suggesting that rumors of land redistribution probably originated among zealous abolitionists (Oubre 1978). It could be argued that this lack of ownership and personal stewardship, coupled with the harsh working conditions of sharecropping and tenant farming contributed to the development of a more negative land aesthetic among blacks. The land (including wildlands) may have represented oppression and servitude more than economic opportunity or spiritual freedom.

The random mob violence perpetuated against blacks during Reconstruction and the first third of this century may also have contributed to a black aversion for the land and wildland places. Beck and Tolnay (1990) report that approximately 3,000 African Americans were lynched in the South between Emancipation and the Great Depression in the 1930s, a span of about 70 years. The places where many of these violent acts occurred is important for understanding contemporary black impressions of wildlands and wooded areas. Often blacks were summarily executed in what Raper (1933, 6) calls "open country" (wooded areas). Of eleven black lynchings that took place in Florida in the 1930s, eight occurred in wooded areas. Tolnay and Beck (1991) hypothesize that such random violence in the Deep South was a push factor in the net migration of more than one million blacks from the "Cotton South" states of South Carolina, Georgia, Alabama, and Mississippi during the first three decades of this century. Lynchings continued in the South as late as the 1950s (Woodward 1974).

Some theorists argue that the experiential interactions of both race and gender must be considered in order to fully understand why African American women, in particular, fear wildlands and participate less often in leisure pursuits than other societal groups (White 1991; Shiner 1995). Riley (1996) writes that the embracing of nature is more problematic for black women than for other race/gender groups in American society. She argues that black women's bodies are objectified in Western societies, and women of color are considered by whites to be more sexual and primitive than white women. Because black women have been portrayed as being more animalistic and less feminine, they have sought to debunk this image by distancing themselves from anything relating to the environment and nature.

Empirically, studies show that African Americans generally prefer more developed settings over wild, natural areas. Results from the 1982-83 *Nationwide Recreation Survey* showed that blacks participated more often than whites in activities which required developed settings, for instance out-

door team sports (U.S. Department of the Interior 1986). However, blacks engaged much less than whites in camping, backpacking, and day hiking. Dwyer and Hutchison's (1990) research on attitudes of Illinois residents also indicated that African Americans felt Illinois park management should emphasize developed facilities and conveniences rather than preserved natural areas.

The landscape planning literature also reports that preferences for natural settings vary by ethnic group affiliation, most notably between African Americans and whites (Zube 1981). For example, Peterson (1977) found that black high school students favored structured, developed settings over backcountry type areas, and Kaplan and Talbot (1988) found that African Americans preferred landscaped settings over natural, unaltered scenes.

Despite the seeming aversion blacks demonstrate for wildland places, it is important to recognize that blacks, particularly in the rural South, show a great deal of enthusiasm and interaction with cultivated landscapes such as gardening and yard designs (Westmacott 1992). But these outdoor settings are readily distinguishable from more rugged, unstructured places where one is more likely to feel isolated. It could be argued that isolation connotes absolute defenselessness in the black American mind, a "falling off the earth" region. The popular novel and television mini-series *Roots* magnified this symbolism (Haley 1977). The hero, a young African male, was captured by slave traders while alone in the forest. The African Kunta Kinte experienced ultimate death, a separation from all he held sacred as he was forced into servitude in a foreign land. The *place* of his capture, an isolated woodland, may be important in understanding contemporary black views toward wildlands. Such areas may represent a state of being disconnected from the whole.

The next sections discuss the quantitative analyses used to examine degree of affectation or attachment to wildland places. These sections include sampling design, factor analyses, and structural equation modeling.

Method

Black and white responses to wildland place attachment are compared by first analyzing the place attachment scale with exploratory factor analysis to replicate the earlier work of Williams et al. (1992). The place attachment scale is then subjected to confirmatory factor analysis, which is incorporated into a structural model. Confirmatory factor analyses were performed because they provide unique solutions to model equations, unlike exploratory analyses which yield multiple solutions for a given set of equations. Also, with confirmatory models, the investigator specifies substantive relationships among variables based on theory or other a pri-

ori information. Statistical tests indicate whether the data confirm to the substantive model (Long 1983).

Confirmatory factor analysis assumes the existence of unobserved or latent factors that can be indexed by observed variables. In this study, the items comprising the place attachment scale are observed variables that point to the underlying place attachment construct. Confirmatory factor analysis is best suited for the latter stages of research when the researcher has a fairly clear conceptualization of the underlying latent factor or factors and of the scale intended to measure the factors (Hatcher 1994). The proposed scale should first be administered to a pretest sample, and exploratory factor analysis should be used to determine the number of underlying factors, the loading of observed variables on the latent constructs, and the correlation among the latent factors. Having developed an acceptable scale, the researcher then performs confirmatory factor analysis using a new sample.

Place Attachment Scale

Williams et al. (1992) developed both a wilderness and a place attachment scale to measure attachment to general wilderness settings and specific wildland recreation settings, respectively. Thirteen place attachment and five wilderness attachment statements were used to measure each of these latent variables. Exploratory factor analysis of these statements revealed three dimensions of place involvement: place dependency, place identity, and place attachment.

The present study adapted four wilderness attachment statements from Williams et al. (1992) to measure attachment to wildland recreation areas (Table 1). For example, one of the statements reads, "I find that a lot of my life is centered around recreating in the woods." This statement captures the identity aspect of wildland place attachment. Two statements reflect identity, one attachment, and the other dependency. An additional attachment and dependency statement (both adapted from the place attachment scale) were included in the survey so that each dimension of attachment was represented by two statements. These statements were measured with a five-point Likert scale ranging from strongly disagree to strongly agree, including a neutral category.

Using a pretest sample of 73 respondents, these six statements were used to replicate Williams et al.'s (1992) exploratory factor analysis. Results are shown in Table 1. The analysis used squared multiple correlations as prior communality estimates. Extraction of factors was specified with principal components. The eigenvalues and scree test both indicated that only one factor was meaningful. Each of the six place attachment variables loaded highly on this single factor. The factor seemed to be an overall affectation or attachment to wildland areas. It appears that respondents

could not distinguish the different dimensions of the construct. Perhaps a scale with only six items was not able to elicit this discrimination. This analysis produced a Cronbach's alpha of 0.91.

Table 1. Exploratory Factor Analysis of Place Attachment Scale

Item	Item Loading mean	Eigenvalue	Cronbach's alpha	% variance
Place attachment		4.12	0.91	0.69
Identity:				
I find that a lot of my life is centered around recreating in the woods.	2.56	0.87		
I hardly ever take time to go to wooded areas to recreate.	3.13	0.65		
Dependency:				
One of the main reasons I live in a rural area is that I have so many chances to recreate in the woods.	2.65	0.85		
Wooded recreation areas are best suited for the kinds of recreation I like most.	2.96	0.84		
Attachment:				
I get more satisfaction from visiting wooded recreation areas than any other type of recreation places.	3.01	0.87		
I am very attached to wooded recreation areas.	3.01	0.87		

N=261. Based on a Likert scale ranging from 1 to 5 where 1=strongly disagree, 2=disagree, 3=not sure, 4=agree, 5=strongly agree.

Sample

The study sample is a subset of a larger sample drawn from 1990 census tracts of a six-county area surrounding the Apalachicola National Forest in Florida. This study includes respondents from Gadsden county, where 57 percent of the population is African American. Because the overwhelming majority of African American respondents were from Gadsden county, it was decided to limit the analysis to respondents from this county. Fifty-six percent of the larger white sample were also Gadsden county residents. For the larger sample, the black sample was drawn at random from telephone directories in census tracts that contained at least 50 percent black households. The white sample was selected at random from the tracts, irrespective of racial density.

The survey instrument was administered as a household, mail survey. Surveys were mailed in late December 1994, followed two weeks later by a postcard reminder to non-respondents. Three weeks after the postcard reminder was mailed, a replacement survey was sent to those who still had not responded. Following Dillman (1978), the postcard reminder and replacement survey were sent to help increase

response rate and reduce non-response bias. Undeliverable addresses and surveys that came back marked "return to sender" reduced the original sample of 571 for Gadsden county to 537 valid addresses. A total of 263 responded for a response rate of 48.9 percent. Of these, 147 were white and 116 African American. Responses from racial or ethnic groups other than African American or white were not included in the analyses.

To reduce sex bias in the sample, we asked that the adult in the home, 18 or over, who most recently had a birthday complete the questionnaire. To assess the representativeness of the sample, aggregated sample characteristics—race, sex, age, education, and household income were compared to 1990 U.S. census figures for the population (U.S. Department of Commerce 1991a; U.S. Department of Commerce 1991b; U.S. Department of Commerce 1992; U.S. Department of Commerce 1993). See Table 2.

The sample and population were comparable only for sex. It appears that the sample had more education and higher income levels, compared to the population. This is not uncommon in survey research, as more affluent persons tend to respond to surveys. Within the sample, blacks and whites were statistically different for sex, education, and mean household income.

Table 2. Comparison of Population, Sample, and Racial Group Characteristics

Characteristic	Population 28,510	Sample N=263	Blacks N=116	Whites N=147
Percent black	57.0	44.0	—	—
Percent male	43.7	50.8 (50.0)	32.7 (47.1)	56.6 (49.7)
Median age	32.8 ¹	51.0 (15.65)	52.5 (14.2)	51.0 (16.5)
Percent college or technical school graduate	29.5 ²	54.2 (49.9)	46.1 (50.1)	61.5 (48.8)
Median household income	\$19,985	\$37,000 (\$22,719) [N=169]	\$25,493 (\$23,994) [N=70]	\$42,000 (\$20,857) [N=99]

Chi-square tests showed the black and white sub-samples were significantly different for sex ($p = 0.0001$); education ($p = 0.013$); and median household income ($p = 0.0008$). Number in parenthesis is standard deviation. ¹Includes persons less than 18 years of age. ²Includes only residents 25 and over.

Results

Confirmatory Factor and Structural Equation Analyses

The analysis followed a two-step procedure based on Hatcher (1994). First, a confirmatory factor analysis was used to develop a place attachment measurement model. The

place attachment model was analyzed using the CALIS procedure in PCSAS. The measurement model employed multiple indicators for place attachment. Appendix A shows covariances for the six place attachment indicator variables. Next, a structural model was developed with place attachment as the endogenous or dependent variable (Figure 1). Race and three other independent variables—sex, age, and education were included as exogenous predictor variables. The independent variables were added to the analysis to test for racial differences in place attachment, while controlling for other demographic factors.

Measurement Model

The measurement portion of the model assesses the relationship between the latent variable (place attachment) and the observed indicator variables. This is accomplished by analyzing the covariance among the observed variables (Long 1983). Place attachment was measured by six manifest variables. The basic form of the equation is shown in (1). The equation shows that the variance in x_i is apportioned into two parts, that part associated with the underlying factor ($\lambda_{ij}\xi_j$) or place attachment and that portion due to error (δ_i). The lambda (λ) is a coefficient or factor loading of the latent place attachment construct (ξ) on the indicator variable, x_i .

$$x_i = \lambda_{ij} \xi_j + \delta_i \quad (1)$$

The model was estimated with maximum likelihood techniques. The chi-square produced from such analyses is a commonly used index of goodness-of-fit for confirmatory models (Hatcher 1994). Chi square tests the null hypothesis that the predicted x_i covariance matrix is not significantly different from the observed matrix. In other words, the measurement model provides a good fit to the data. Ideally, one would want to fail to reject the null hypothesis. In the present analyses, the model chi-square was significant, $\chi^2 (10, N = 263) = 47.1, p = 0.001$, which suggests the discrepancy between the observed and predicted covariances is significant. Although widely used, chi-square is a very stringent test of good fit. Models are rarely accepted or rejected based on this statistic alone because the chi-square can be influenced by sample size and model complexity.

Hatcher (1994) recommends supplementing the chi-square with Bentler's Comparative Fit Index (CFI) and/or Bentler and Bonett's non-normed index (NNFI). The CFI and NNFI indicate the percentage of covariation explained by a model. Values range from zero to one with values over .90 indicative of good fit. Both the CFI and NNFI were 0.983, which indicates an acceptable fit. Also, the factor loadings of the manifest variables on place attachment were highly significant. Table 3 shows the six place attachment scale items

with standardized factor loadings. Both the individual (R-square) and composite reliability scores for place attachment indicated there was strong internal consistency among the indicator variables. This provides further support for the legitimacy of the measurement model. The next section summarizes results from the structural equation models.

Table 3. Reliability Estimates of Place Attachment Indicators

Latent variable & indicators	Place attachment statements	Standardized t-value		R ²
		factor loadings	factor loadings	
Place attachment		-	-	0.909
x_1	I get more satisfaction from visiting wooded areas than any other type of recreation area.	0.856	16.1	0.732
x_2	I find that a lot of my life is centered around recreating in the woods.	0.842	15.4	0.709
x_3	One of the main reasons I live in a rural area is that I have so many chances to recreate in the woods.	0.829	15.1	0.688
x_4	I hardly ever take time to go to wooded areas to recreate.	0.582	9.8	0.339
x_5	I am very attached to wooded recreation areas.	0.824	-	0.678
x_6	Wooded recreation areas are best suited for the kinds of recreation I like most.	0.785	18.5	0.617

N = 263

Structural Model

Again, the purpose of this analysis is to examine the impact of race on perceptions of wildland attachment using a measure of attachment suggested by Williams et al. (1992). At the same time, controls must be employed for other differences between black and white respondents. These differences may be associated with age, sex, or education level of respondent. The initial iteration of the structural model assessed the singular effect of race on place attachment. This first model was compared to a subsequent one that included age, sex, education, and race as predictors. The purpose of this two-step modeling procedure was to determine, first of all, whether race was a significant predictor of place attachment, and if so, whether it remained significant after control variables were included in the analysis. These analyses were also part of the CALIS procedure in PCSAS.

Age was measured as a continuous variable, and sex, race, and education were dichotomous. Males were coded one, females zero. Similarly, blacks were coded one and whites zero. Education levels of high school or less were coded zero, and college or technical school graduate were coded one.

In the first model, race was significant at $p < 0.001$, and

the effect was negative. With an R-square value of 9.5 percent, race accounted for just under ten percent of model variance. The next model included race, sex, age, and education as controls. Race was again negative and significant at $p < 0.001$. Sex was positive and significant at $p < 0.001$. Age was negative and significant at $p < 0.01$. Education was not significant. Results indicate that African Americans were less likely to have stronger attachment to wildlands, compared to whites. Also, males were more likely than females to be more attached to wildlands, and older respondents had less attachment compared to younger ones. The R-square increased to 20 or 20 percent variance accounted for with the inclusion of sex, age, and education. The fact that race remains significant after including other sociodemographic variables indicates that race is a reasonably strong predictor of attachment to wildland environments. These findings are summarized in Figure 1. The model includes race, sex, age, and education level as predictors of place attachment. Also shown are the six place attachment indicator variables and the error term associated with place attachment.

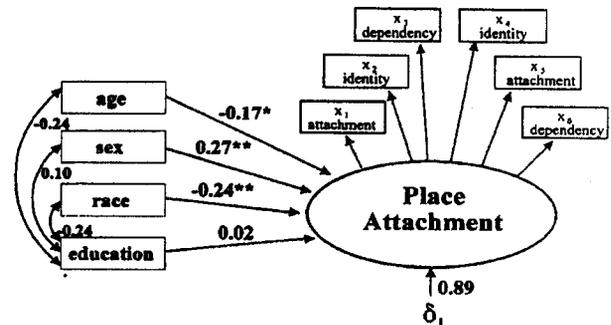


Figure 1. Place attachment structural model. Standardized path coefficients appear on single-headed arrows. Correlations appear on curved double-headed arrows; * $p < 0.01$; ** $p < 0.001$.

Discussion

This study proposed that African Americans have less aesthetic appreciation of wildlands, compared to whites. This proposition was examined empirically with a place attachment scale developed by Williams et al. (1992). It was argued that sociohistorical factors such as slavery, sharecropping, and lynching may contribute to this lack of interest and appreciation. These collective impressions may be especially salient for rural blacks because these groups are more likely than either urban or suburban blacks to have had familial members employed in sharecropping and are also more likely to have been exposed personally to rumors, threats, and actual experiences of lynchings. African Americans were not

asked directly whether such collective experiences influenced their views of nature and wildlands; rather the influence of these factors are assumed to form part of the collective memory African Americans associate with wild, unstructured places. Whether these associations actually exist in whole or in part is a matter of further empirical investigation. These connections are posed in this study to encourage thinking about societal groups and their associations with the land in terms of respective histories and shared memories.

Collective memory is a construct that can be used to help better understand relationships between people and the environment. As a social psychological construct, collective memory mediates between demographic variables such as race, gender, and income, on the one hand, and attitudes, and ultimately behavior, on the other hand. It can be argued that collective memory shapes or even dictates the meaning that a group of people with common memories attribute to objects or events. In Rapaport's (1997, 20) words, collective memory is the "cultural cloth from which patterns of meaning are drawn." For example, events such as the Great Depression, World War Two, Vietnam War, and Civil Rights movement provided collective memories specific cohorts of Americans. But such rallying points or memories seem largely absent for today's youth. Indeed, much of the criticism leveled against members of today's younger generation, the so-called Generation X (those born in the mid-1960s through the early 1980s) is that they have no noteworthy cultural cloth, no meaningful metaphors that delineate the parameters for their lives. It may well be that collective memories exist for younger generations but are located in non-traditional events or occurrences that are not yet fully recognized by older generations. The point is that collective memory is important for ordering people's lives and imparting meaning to objects and places.

The present study employed a quantitative measure of attachment to wildlands. However, it is not sufficient to continue to rely solely upon demographic variables like race and income to provide information about people's interactions with the natural world. To be sure, these variables give some indication of variance in environmental perception, but they can also mask the complexity within categories of sociodemographic variables. A variable like race indicates the degree of racial variation in environmental perception or wildland interaction, but race alone does not say what aspects of race contribute to these variations. Such information requires a deeper understanding of people and their relationship to places.

For instance, this research would have been enhanced with more qualitative assessments of attachment to wildlands, which included some analyses of people's life histories in the community and resident dependence on forestry

resources for their livelihood, not just for recreation. Information from long time residents and older community members would have been enlightening, as they would have been able to talk more about their personal feelings for wildlands and also about their work histories and the social atmosphere (relations between blacks and whites) in the Florida panhandle and how these influence their interaction with wildlands. The forestry industry was a primary employer for panhandle blacks during the first part of the century. Many African Americans worked in the lumber industry and turpentine camps for low pay and miserable working conditions. Surely, such experiences contributed to local black impressions of nature and wildland places.

Results from the factor analyses employed in this study supported the high reliability for place attachment found by Williams et al. (1992). However, the exploratory factor analysis uncovered only one underlying factor, which seemed to be a non-distinct affection for wildlands. Williams et al. (1992) identified three distinctive components of place attachment—dependence, identity, and attachment. It may be that because only two statements per factor were used, no variation was detected in the exploratory scale. However, the factors were highly correlated, and the coefficient alpha indicated the scale was reliable. The more rigorous confirmatory results also indicated that the overall scale and the individual items were good measures of place attachment.

As hypothesized, the theoretical model showed race was a significant predictor of attachment to wildlands. Blacks were less likely than whites to show liking for such places. Sex was also significant. Males were more likely to have stronger attachments to wildlands, compared to females. Reasons for these differences are varied, but may well have to do with the kinds of activities that typically occur in wildlands, for example hunting and fishing. Hart (1978) also contends that girls and boys are socialized differently with respect to outdoor places. Boys are encouraged to explore and control their surroundings, while girls are taught to adapt to unknown spaces. Even for less rigorous or less traditionally male activities like nature observation or hiking, women may be more hesitant than males to participate from fear of aggressive acts.

Age was also significant and had a negative effect. Education was not significant although the coefficient was positive, indicating that more educated individuals are more appreciative of wildlands. This is contrary to Williams et al.'s (1992) bivariate analysis of education level and place attachment which showed lower education was associated with higher levels of place attachment. Studies of National Wilderness Preservation users have shown that more highly educated persons tend to visit these areas. However, the present study did not ask specifically about wilderness areas.

Income was not a significant predictor of place attachment in any of the analyses.

Natural resource agencies such as the USDA Forest Service and the National Park Service are making sincere efforts to attract more ethnic and racial minorities to federally managed recreation areas. This proactive management is highly commended. However, agencies should first be aware of the various ways that different ethnic groups experience nature. An instructive place to start is with historical impressions of American wildlands and how these might differ across racial and ethnic groups. The content of African American place meanings is important in understanding black responses to both the environment and their lack of visitation to federal and state managed recreation areas. Too often, investigators ignore the perspective of subject groups and assume minorities would have the same ideas about the outdoor environment as the majority culture. If black leisure emphasizes activities such as team sports and visiting with family and friends, then wooded areas probably would not be suited for these activities. For pre-civil rights black southerners, there may remain negative associations with rural, wooded areas given the incidence of race-related violence directed against blacks in such areas. Such places may also connote strictly menial or harsh workplace settings. Further research is needed to explore these factors, in particular, African Americans' collective memory of wildlands and their appreciation, or lack thereof, of such places.

Endnotes

1. It should be noted that blacks have been shown to participate relatively frequently in some wildland related activities such as fishing (Dwyer 1994). Wildland activities blacks are least likely to engage in are less consumptive activities like backpacking, hiking, and camping.
2. While some scholars contend that Africans lost all ties to their respective cultural heritages when they were brought to the Western hemisphere (Frazier 1957), others insist that African retentions are apparent in many aspects of black American life (Mathis 1978). Most contemporary scholars agree that blacks were able to hold onto some of their cultural heritage although specific practices had to be modified to fit New World structural conditions (Creel 1990; Holloway 1990).

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Appendix A. Covariances for Place Attachment Items

	x_1	x_2	x_3	x_4	x_5	x_6
x_1	1.75	1.28	1.30	0.91	1.37	1.29
x_2	1.28	1.82	1.37	1.04	1.32	1.34
x_3	1.30	1.37	1.83	0.95	1.30	1.26
x_4	0.91	1.04	0.95	2.12	1.02	0.91
x_5	1.37	1.32	1.30	1.02	2.09	1.66
x_6	1.29	1.34	1.26	0.91	1.66	2.14

N=263