

THE INFLUENCE OF PLACE ATTACHMENT  
ON USER PERCEPTIONS AND PREFERENCES:  
A STUDY AT KENNESAW MOUNTAIN NATIONAL BATTLEFIELD PARK

by

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(Under the Direction of Craig A. Miller)

ABSTRACT

Located in the Greater Metropolitan Atlanta region of Georgia, Kennesaw Mountain National Battlefield Park (KMNBP) was set aside for protection by the War Department in 1917, and transferred to the National Park Service (NPS) in 1933. In 2006 the population of Metro Atlanta reached just over five million. Development coupled with high real estate values has resulted few public recreation sites available in the region. This lack of outdoor recreation opportunities has resulted in unsustainable pressure being applied to KMNBP, with over 1.4 million visitors in 2007; this has led to a number of management considerations. The objective of this study was to: (1) examine the relationship between place attachment, and type and frequency of use; and (2) investigate associations between a recreational user's place attachment and management issues regarding crowding and fees. Data for this study were obtained via self-administered intercept survey of a random sample of visitors at KMNBP from February through September 2007. Mean overall place attachment was considered moderate. Results suggested that place attachment had a significant relationship with frequency of visits, activity type and proposed fee options. There was, however, no significant relationship found between place

attachment and perceived crowding. A more focused examination of the two main dimensions of place attachment (place dependence and place identity) would give the management at KMNBP an even better understanding of who their visitors are, along with greater insight into their preferences and attitudes. There are many more of our national historic sites experiencing management issues similar to those of KMNBP. The NPS management is constantly wrestling with the question of how to balance the mission of a National Park Historic Site when it becomes a recreational use area due to the pressures of urban sprawl.

INDEX WORDS: Activity Type, Crowding, Frequency of Use, Kennesaw Mountain National Battlefield Park, National Historic Site, Place Attachment, Recreation Fees, Urban Park

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## CHAPTER I

### Introduction

#### *Greater Metropolitan Atlanta Population Explosion*

Located in the Greater Metropolitan Atlanta region of Georgia, Kennesaw Mountain National Battlefield Park (KMNBP) is the site of a Civil War battle in which 5,350 soldiers were killed. The battle was fought from June 19 to July 2, 1864. The Park was set aside for protection by the War Department in 1917, and transferred to the Department of the Interior as a unit of the National Park Service (NPS) in 1933. Home to historic earthworks, cannon emplacements and monuments, the purpose of the 2,923 acre park is to protect and interpret the grounds of some of the most intense fighting of the Atlanta Campaign (National Park Service, n.d. a).

The Atlanta of today is a much different place than it was when the park was created in 1917. In 1920 the population of Atlanta was approximately 622,283; by 1990 the population of Greater Metropolitan Atlanta was just under three million (United States Census Bureau, 2008). Between 2000 and 2006, the metropolitan area grew by 20.5%, making it the fastest growing metropolitan area in the nation during that time (Apple, 2000). In 2006 the population had reached just over five million, encompassing 28 counties surrounding the city (United States Census Bureau, 2007). Metro Atlanta is projected to add another two million people over the next 25 years (Harris, 2007).

With rapid population growth comes a great amount of development. Each day during 2006, the Metro Atlanta region lost 54 acres of trees and gained 28 acres of asphalt, concrete and impermeable surfaces (Harris, 2007). Development, coupled with high real estate values and a

lack of planning for green space, has resulted in few public recreation sites in the region. Green space plays an especially important role in providing recreation opportunities in urban environments (Walker, 2004). The lack of outdoor recreation opportunities in Metro Atlanta has resulted in unsustainable pressure being applied to KMNBP. In 2005, the Civil War Preservation Trust listed KMNBP as one of the nation's most endangered Civil War battlefields (NPS, 2008).

### *Place Attachment*

Social science concepts can provide managers with potential information associated with visitors' attitudes and perceptions that might not otherwise be represented in the management decision-making process (Cheng, Kruger & Daniels, 2003). Concepts such as place attachment remind managers that the public is involved with specific places under their authority, and that their Park is not just acres to be allocated to various uses during a planning cycle (Williams, Patterson, Roggenbuck & Watson, 1992). Previous research has also suggested that activity involvement leads to users' attachment to settings (Bricker & Kerstetter, 2000; Kyle, Bricker, Graefe & Wickham, 2004a; Moore & Graefe, 1994). Furthermore, Kyle et al. (2004a) found that the influence of activity involvement on place attachment differed by activity type; results also suggested that when the activity holds an important place in a user's life, an emotional bond with the recreation setting is likely to form. It has also been observed that increases in frequency of activity involvement were accompanied by an increase in strength of place attachment (Bricker & Kerstetter, 2000). The NPS needs to understand who the visitors to KMNBP are and how they feel about the park and possible management actions.

### *Activity Type and Frequency of Visitation*

Visitation numbers for KMNBP reflect the rapidly growing population of Atlanta. Kennesaw Mountain National Battlefield Park had approximately 750,000 visitors during 1990, rising to nearly 1.4 million people in 2006, and 2007, making it the second-most visited national battlefield in the country behind Gettysburg National Military Park which reported just over 1.6 million in 2006 and 2007 (National Park Service, n.d. b). In 2008, visitation to KMNBP exceeded all previous years, with just over 1.4 million visitors (National Park Service, n.d. b). Differing uses, including walking for fitness, bicycling and horseback riding, conflict with not only the NPS mission to protect the historic resources of the site, but also lead to conflicts among the various types of visitors. The trails at KMNBP also provide excellent training terrain for cross country runners; thus, cross-country running teams from many local schools run on the trails for practice. At least 25 organized running groups used the park trails during 2006 to train or practice on a regular basis (D. Brown, personal communication, August 28, 2006).

Increased use of the park by all the various types of users has created many issues for KMNBP's managers. This wide range of uses creates conflict with the mission of KMNBP, which states:

Kennesaw Mountain National Battlefield was authorized for protection by the War Department in 1917 and was transferred to the Department of the Interior as a unit of the National Park System in 1933. The 2,923 acre Battlefield includes the site of some of the heaviest fighting of the Atlanta Campaign of the Civil War. The Battlefield was set aside as an important cultural property dedicated to public inspiration and interpretation of the significant historic events that occurred. (National Park Service, n.d. a)

The varying uses conflict with the park's mission, and also with the overall mission of the NPS to protect the historic resources of the site, as well as its mission to provide for the visitor experience. "[The purpose of the NPS] is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

(National Park Service, n.d. c)

Many management considerations have arisen due to increased use of the Park. Several management options for Kennesaw Mountain Drive (providing vehicular access to a panoramic view of the region, giving visitors a greater understanding of the historical importance of the mountain) are being considered. Implementing a new user fee is also being considered. Congress has passed legislation permitting NPS sites to collect daily and/or annual entrance fees, with 80% - 100% of those funds being used for improvements at the site; KMNBP would be permitted to keep 100% of the funds raised through entrance passes (Department of the Interior, 2007).

### *Crowding*

Visitors' perceptions of crowding in outdoor recreation settings is a main focus of concern for managers and researchers; there is typically an assumed negative relationship between increasing visitor density and visitor satisfaction (Manning & Lime, 1996). Overcrowding may also lead to negative impacts on the resource, including soil erosion and compaction. Kyle, Graefe, Manning and Bacon (2004a) concluded that as visitors' strength of place attachment grew stronger, their sensitivity to crowding increased. Visitors to KMNBP are dependent on the park for their outdoor activities, creating an attachment, which in turn could lead to perceptions of overcrowding.

### *Recreation Fees*

Discussion of implementing visitor fees in recreation areas is often met with controversy from users; user input, rather than management assumptions, should serve the main role in determining prices (Howard & Selin, 1987; McCarville, 1990; McDonald, Noe & Hammitt, 1987; More, Dustin & Knopf, 1996). It is important for managers to understand who their visitors are, to anticipate reactions to fees and to develop appropriate pricing policies. Public meetings, public comment periods and visitor surveys are all methods employed by managers to understand more about their visitors.

### *Problem Statement*

In examining existing literature and in discussion with the managers at KMNBP, several problems were identified. Presently there is little knowledge of the relationships between strength of place attachment, frequency of visits and activity types. There is also a lack of understanding at KMNBP concerning visitors' levels of place attachment, perceptions of crowding, and preferences for a fee program.

### *Statement of Purpose*

The objectives of this study were to: (1) examine the relationship between place attachment, and type and frequency of use; and (2) investigate associations between a recreational user's place attachment and management issues regarding crowding and fees.

### *Hypotheses*

- 1) Strength of place attachment will vary by activity type.
- 2) There is a positive relationship between level of place attachment and frequency of visits.
- 3) There is a positive relationship between level of place attachment and perceived crowding.
- 4) There is a relationship between preference for user fees and levels of place attachment.

## CHAPTER II

### Review of Literature

#### *Place Attachment*

Place attachment describes a positive connection or bond between a person and a particular place (Giuliani & Feldman, 1993) – this is a frequently used definition of place attachment in recreation research. There has, however, been much debate in the literature as to the meaning of “place attachment” (Altman & Low, 1992). Despite the many variations in defining place attachment, the heart of the research deals with people’s relationships to place. Understanding the attachments people form with certain places has been studied in many disciplines – sociology, geography, anthropology and environmental psychology, to name just a few.

Human geographers and environmental psychologists laid the groundwork for research of place attachment in the field of recreation. Tuan (1980) introduced the concept of “geopietty,” which refers to people’s attachment to nature in general, and certain places in particular. Tuan used this term to express a broad array of emotional and social bonds between humans and their physical home – an intricate network of relations between people and nature.

Building on the work of human geographers and environmental psychologists, Schreyer, Jacob and White (1981) were the first to introduce place attachment to outdoor recreation, suggesting that place attachment represents a user’s valuing of a recreation setting. Place attachment has since been shown to assist researchers and managers in their understanding of

visitor responses to a number of management issues on public lands (Arnberger & Brandenburg, 2007; Budruk, Stanis, Schneider, & Heisey, 2008; Kyle, Absher & Graefe, 2003). Place attachment reminds managers that the public is involved with specific places under their authority, and that their lands are not just acres to be allocated to various uses during a planning cycle (Williams et al., 1992).

Most place attachment research in outdoor recreation follows the method devised by Williams and Roggenbuck (1989) to obtain quantitative measurements – a sequence of statements related to the dimensions of place attachment. Williams et al. (1992) built upon this work by devising a standardized scale for measuring place attachment – up to that point, empirical approaches had employed individualized methods tailored to the specific study (Brown, 1987; Shumaker & Taylor, 1983).

Two dimensions of place attachment have been consistently accepted and examined in recreation literature: functional place attachment and emotional place attachment (Schreyer et al., 1981; Moore & Graefe, 1994; Vaske & Kobrin, 2001; Warzecha & Lime, 2001). Functional place attachment (place dependence) refers to the capacity in which the resource meets the goals of the users (Schreyer et al., 1981; Stokols & Shumaker, 1981; Williams & Roggenbuck, 1989) and emotional place attachment (place identity) refers to the emotional aspects of a person-place relationship and how place contributes to an individual's self-identity (Schreyer et al., 1981; Williams & Roggenbuck, 1989). A third dimension, "lifestyle," has been reported (Bricker & Kerstetter, 2000), and "place indifference" has been acknowledged as well (Williams & Roggenbuck, 1989).

Place dependence is affected by two main factors: how well the place suits a user's needs and how the place compares to other available places (Stokols & Shumaker, 1981). In recreation

resource management, the term “resource specificity” is used to describe the relative importance an individual places on a specific recreation resource (Jacob & Schreyer, 1980). It has been further explained that place dependence implies more than a prerequisite or need that could be satisfied by providing a few specific setting features (Williams et al., 1992). Place dependence refers to the overall, total capacity of a place to satisfy the needs and goals of the user (Williams et al., 1992).

The second dimension of place attachment, place identity, emphasizes that a place offers opportunities to meet needs, and also reflects how a person identifies himself or herself, thereby creating strong emotional and symbolic bonds between a person and specific places (Williams et al., 1992). Place identity is based on “those dimensions of the self that define the individual’s personal identity in relation to the physical environment” (Proshansky, 1978, p. 155). Place identity may stem from a personal connection to a particular place, or perhaps a place that elicits fond childhood memories. Place identity may also be based on intangible symbols of self: religious or patriotic places are indicative of an individual’s personal identity in a larger context (Williams et al., 1992). Twigger-Ross and Uzzell (1996) discussed how places become essential to one’s personal identity if they provide uniqueness, continuity, self-esteem, and self-efficacy. Place identity is an emotional state that may influence or enhance one’s recreation experience (Twigger-Ross & Uzzell, 1996).

Place dependence and place identity have been measured together and correlated to one another. Williams and Roggenbuck (1989) combined thirteen statements found to differentiate and define place dependence and place identity into a single scale, and reported that this scale was highly correlated with a scale made up of six items that loaded highly on two or more of the three factors. A study of rail-trail users at three locations related place dependence and place

identity in a causal manner – strong correlation was shown between the two dimensions of place attachment, and it was noted that they displayed similar relationships to variables such as distance from the resource, months associated with the resource, and importance of activity (Moore & Graefe, 1994). The final model from Moore and Graefe (1994) proposed that place dependence was a precursor to place identity.

Place identity has also been shown to be an intermediary of the place dependence-environmentally responsible behavior relationship as well. Obtaining data from a survey of adolescents age 14 – 17 who participated in local natural resource work programs, Vaske and Kobrin (2001) showed that place identity mediated the relationship between place dependence and environmentally responsible behavior. They found that place dependence influenced place identity, and that place identity was significantly related to environmentally responsible behavior. From their findings, Vaske and Kobrin (2001) suggested that promoting an individual's attachment to a setting facilitates an increase in environmentally responsible behavior.

Research has also demonstrated that users' level and type of attachment to specific recreation settings impact both their leisure behavior and the way in which settings are managed. A positive relationship is seen to exist between user attachment to settings and a lack of substitutes, as well as frequency of use. In a study of four wilderness areas (three in the southeast and one in Montana), place attachment was associated with previous visits, rural residence, a setting (rather than activity or group) focus, visiting alone and/or on weekdays, hunting in the area, and sensitivity to site impacts and horse encounters (Williams et al., 1992). Place attachment may also be predicted by how long users have been linked with the resource, the importance they assign to their activity, and the distance between the resource and the user's

home (Moore & Graefe, 1994). In a study of an urban park district, Mowen and Graefe (1999) showed that there are significant connections between place attachment, activity involvement, desired experiences and frequency of use. Most notably, they found that place attachment had the strongest relationship with visitation among non-active recreationists (golf, spectators of active sports, and renters of picnic and recreation center facilities).

In a study of users at the Mono Basin Scenic Area in California, it was found that as individuals' attitudes toward the fee program grew more positive and their emotional attachment to the setting grew more intense, their support for spending fee revenue increase as well (Kyle et al., 2003). In this case, place identity was most pronounced and consistent, whereas place dependence on the Mono Basin Scenic Area had little relationship with support for spending fee revenue; the researchers acknowledge that this result may have been a consequence of visitors having access to similar areas for their recreation experiences.

There is also a relationship between specialization and place attachment. Specialization takes into consideration level of experience, skill and abilities, centrality to lifestyle, lasting involvement, and equipment and economic investment (Bricker & Kerstetter, 2000). Highly specialized individuals rated the place identity dimension most important, whereas no relationship existed between specialization and place dependence (Bricker & Kerstetter, 2000). Bricker and Kerstetter (2000) also found that place dependence was positively related to "support for management options" (such as development of amenities and trails), whereas place identity held a negative relationship. This study suggests that users with strong attachments to a place have specific needs when it comes to enjoying their selected recreation experiences. For these users, recreation goals are jointly linked to that place; therefore, management actions

related to recreation settings can have substantial effects for the individuals using those locations. However, special examination of the type and intensity of their attachment is warranted.

The NPS has recognized the importance of place attachment by acknowledging that a key step in interpreting our nation's heritage is to understand the meanings the visitors have assigned to the resource. The first step of the NPS Interpretive Process Model is, "Select a tangible place, object, person, or event that you want the audience to care about" (National Park Service, 2002). Examining the level and type of place attachment visitors feel toward the parks will aid management in devising new park policies regarding issues such as fees, types of use, and various other changes to a park.

Managers should consider giving special attention to the most resource-dependent users and should recognize that users' attachments to places may warrant special attention for these places during the planning process (Moore & Graefe, 1994). Place meanings play a large role in individuals' preferences for recreation settings, as well as the ways in which they value them (Bricker & Kerstetter, 2000). Place attachment is strongly associated with greater sensitivity to resource impacts (Young, Williams, & Roggenbuck, 1990), environmentally responsible behavior (Vaske & Kobrin, 2001), a perceived lack of alternate settings (Williams et al., 1992), and visitor perceptions of user fees (Kyle, Absher & Graefe, 2003).

#### *Activity Type and Frequency of Visitation*

Activity type and frequency of visitation are valuable predictors of why people use a recreation area and their perceptions of various aspects of the area, including place attachment (Arnberger & Brandenburg, 2007; Daigle, Hannon & Stacey, 2003; Kyle, Bricker, Graefe & Wickham, 2004; Lee, Scott & Moore, 2002).

Increased activity involvement results in stronger place attachment (White, Virden & van Riper, 2008). White et al. (2008) found that over time, users developed a stronger emotional connection to the study area and became more dependent on the recreation opportunities provided there. Hammitt, Backlund and Bixler (2004) also found a link between experience use history and dimensions of place attachment; a major component of determining experience use history is frequency of visitation and/or involvement.

### *Crowding*

Crowding in outdoor recreation is a major concern among managers and researchers, and has been extensively researched over the last several decades (Absher & Lee, 1981; Manning & Lime, 1996; Shelby, Heberlein, Vaske, & Alfano, 1983; Stankey, Lucas & Lime, 1976; Vaske & Shelby, 2008). The research is often focused on backcountry and wilderness areas (Bultena, Field, Womble & Albrecht, 1981; Dawson & Watson, 2000; Shelby, 1980); however, in the past decade crowding research has begun to take a closer look at frontcountry areas (Manning, Lime, Freimund & Pitt, 1996; Vaske, Donnelly & Petruzzi, 1996).

Crowding has been defined as a negative, personal, subjective assessment of the number of people encountered in a given area, and involves a value judgment that the density or number of encounters with other visitors is too many (Manning & Ciali, 1980; Shelby, Vaske & Donnelly, 1996). Perceived crowding often emphasizes the subjective or evaluative nature of the concept (Shelby, Vaske & Heberlein, 1989). In other words, the visitor makes the distinction between what is crowded and what is not crowded based on a value judgment. For this reason, crowding is a difficult concept to measure and varies with time, availability, accessibility and the actions taken by management (Shelby et al., 1989).

Crowding is often not so much a response to visitor density of an area than it is to preferences of the visitor (Absher & Lee, 1981); thus density is not a complete cause for crowding. Manning (1999) identified three categories of variables that influence recreationists' perceptions of crowding: (1) personal elements of recreation such as motivations (Absher & Lee, 1981; Ditton, Fedler & Graefe, 1983), expectations and preferences (Shelby et al., 1983; Webb & Worchel 1993), and past setting experience (Graefe, Donnelly & Vaske, 1986; Webb & Worchel, 1993), (2) characteristics of the setting which often influence setting density such as time, availability of fish and game, resource location and convenience, and setting management practices (Shelby et al., 1989), and (3) characteristics of those encountered, including type and size of the group encountered (McKay & Moeller, 1976), the behavior of other groups (West, 1982), and perceived alikeness of those encountered in the setting (Adelman, Heberlein & Bonnickson, 1982). Place attachment is another construct which has received much attention in the literature, but its effect on perceived crowding has not been examined extensively.

### *Recreation Fees*

Taking into consideration visitors' expectations and ability to pay when making fee decisions in public recreation areas, helps to address concerns regarding access to these sites (Crompton, 1984; Howard & Selin, 1987; Richer & Christensen, 1999). By examining users' opinions of first-time fees for a public recreation area, McCarville, Reiling, and White (1996) gave insight into possible communication strategies to gain support for first-time fee initiatives. Results suggest support was greater for fees intended to be allocated back to the site at which they were collected and used to enhance valued services. As previously mentioned, Congress has passed legislation permitting NPS sites to collect daily and/or annual entrance fees, with 80%

- 100% of those funds being used for improvements at the site; KMNBP would be permitted to keep 100% of the funds raised through entrance passes (Department of the Interior, 2007).

Recreationists' approval of a fee program may be dependent on the nature of their relationship with the resource (Kyle, Absher & Graefe, 2003). Williams and Watson (1998) found that preferences regarding fees differed among visitors with differing types of attachment to the resource. Kyle, et al. (2003) also found that as visitors' attachment to an area increased their support for the fee program grew more positive as well. Research has also shown that experience and familiarity with a resource may affect a user's preferences toward fees (Williams, Vogt & Vittersø, 1996).

A survey of visitors to the Big South Fork National River and Recreation Area in Tennessee showed a weak relationship between willingness to pay and preference for development only for visitors willing to pay the highest fee level, leading researchers to suggest that the administrators may be able to charge a low to moderate fee without visitors desiring added benefits (McDonald et al., 1987). Moreover, research has shown that visitors may expect more benefits as fees are implemented or increased (McDonald et al., 1987); expected benefits could include improved and/or added facilities, increased staff and increased programming for the public.

## CHAPTER III

### Methods

#### *Study Context*

Data for this study were obtained via self-administered intercept survey (See Appendix A) of a random sample of visitors at KMNBP. The sample frame for this study was individuals over 18 years of age who visit KMNBP for multiple types of use. Data were collected via systematic random sample stratified by days of the week and hours of the day and by sites within KMNBP. Surveys were distributed at five parking areas (Visitor Center, top of Kennesaw Mountain, Burnt Hickory Road, Illinois Monument and Cheatham Hill Road picnic area) and to motorists at the bottom of Kennesaw Mountain Drive.

Survey distributors were students from the University of Georgia and wore hats and vests that identified them as NPS volunteers. All survey distributors participated in a training session regarding how to approach visitors and administer the survey, as well as how to answer frequently asked questions concerning the survey and the park. The survey was administered from February 24, 2007 through September 30, 2007, on varying days of the week, times of day, and sites in the park.

The survey instrument was approved by the University of Georgia Internal Review Board April 12, 2007 under project number 2007-10589-0. A Human Subjects Permit was also obtained, number 45 CFR 46.101(b).

### *Sample Selection*

An intercept survey was deemed appropriate for this study. An intercept survey allowed researchers to address complicated issues (i.e. visitor questions regarding management policy and other issues at KMNBP) and to gather more data than other methods, such as mail or phone surveys. Because visitors to the park come from the entire United States and beyond, hence an intercept survey was the strongest and most applicable method that would ensure capturing the appropriate sample frame. The sample size was determined following the guidelines set forth by Salant and Dillman (1994), and are as follows:

A. Total visitors = 1,316,120 (2006)

B. Sample size = 1,066 (confidence level = .05, confidence interval =  $\pm 3$ )

Visitors on foot were approached as they entered the respective parking area; motorists at the start of Kennesaw Mountain Drive were signaled to stop by a survey distributor. To achieve randomness of the sample the first respondent was chosen randomly, and every fifth person thereafter was asked to complete a survey. Visitors on foot were approached as they entered the parking area (assumed to be exiting), informed of the intent of the survey, that participation was completely voluntary and that their answers would remain confidential. Motorists at the base of Kennesaw Mountain Drive were signaled to stop their vehicle and were then given the same information as the pedestrians. Visitors who agreed to participate in the survey were handed a questionnaire along with a letter from the superintendent of KMNBP explaining the purpose of the study (See Appendix B). Participants were asked to fill out the questionnaire at the time of receiving it. However, if unable to complete the questionnaire at the time of receiving it, survey participants still desiring to participate were given the option of returning it to a staff member at the KMNBP Visitor Center or mailing it to The Daniel B. Warnell School of Forestry and

Natural Resources at the University of Georgia in Athens, Georgia. The survey garnered an approximate response rate of 80%.

### *Survey Instrument*

The survey instrument (See Appendix A) was designed in cooperation with NPS staff at KMNBP, and follows Dillman's methods for intercept surveys (Dillman, 2007). The initial survey period was used to test the questions and language of the questionnaire. Data gathered from the pilot period were examined and the survey instrument adapted accordingly after approximately 300 surveys had been completed. In an effort to shorten the length of the survey, several items were removed which had no effect on the research presented here.

To measure place attachment, statements were adapted from Williams and Roggenbuck (1989) and Williams (2000). Respondents rated the place attachment statements for KMNBP on a five-point Likert-type scale from "strongly disagree" to "strongly agree," eight statements were given:

- KMNBP is the best place for what I like to do.
- I am very attached to KMBNP.
- Doing what I do at KMNBP is more important to me than doing it in any other place.
- No other place can compare to KMNBP.
- I get more satisfaction visiting KMNBP than from visiting any other park in the Atlanta Region.
- KMBNP is very special to me.
- The things I do at KMNBP I would not enjoy as much at another site.
- I identify strongly with KMBNP.

To determine activity type, respondents were asked to choose one of the following which best described the reason for their visit to KMNBP that day:

- walk/hike trails
- running/jogging
- walk dog
- bicycling
- bird watching/wildlife viewing
- picnic
- learn about the Battle of Kennesaw Mountain or Civil War
- other recreation (Please identify)

To determine frequency of visits, respondents were asked if this was their first visit to KMNBP. If they responded it was not their first visit, respondents were asked to choose from the following categories as to how often they visited KMNBP:

- More than once a week
- About once a week
- Less than once a week, but more than once per month
- About once a month
- Less than once per month, but several times per year
- About once per year

Visitors' perceived levels of crowding were measured using a standard single-item, nine-point crowding scale. Visitors were asked to rate the level of crowding they experienced that day at KMNBP ranging from 1 (Not Crowded) to 9 (Extremely Crowded).

<b>Not Crowded</b>			<b>Moderately Crowded</b>				<b>Extremely Crowded</b>	
1	2	3	4	5	6	7	8	9

Regarding fee preferences, respondents were asked which of the following visitor entrance passes they would be most interested in purchasing (options are standard entrance fee options for the National Park Service):

- daily entrance pass at \$5.00 per person if entering by foot, bicycle or bus
- daily entrance pass at \$10.00 per vehicle (excluding buses)
- annual entrance pass at \$20.00 per vehicle (or per family if not entering by vehicle) for entire year
- I would not be willing to pay for any entrance pass

#### *Data Analysis*

Variables were coded by the researcher, and data were entered into Microsoft Excel, and imported into SPSS v. 15.0 for Windows for data analysis (SPSS, 2007).

Users' level of place attachment was ranked on a continuum scale (Attachment Scale) from "None" to "High." Five categories were chosen, based upon the Likert-type scale ranging from Strongly Disagree to Strongly Agree. The score for each respondent was calculated by averaging the sum of the responses to the eight place attachment statements. Responses were converted to the Attachment Scale as follows:

- $1.0 - 1.4 = 1$  (None)
- $1.5 - 2.4 = 2$  (Low)
- $2.5 - 3.4 = 3$  (Moderate)
- $3.5 - 4.4 = 4$  (High)
- $4.5 - 5.0 = 5$  (no respondents fell into this range)

Reliability of place attachment statements was determined using Cronbach's Alpha. Pearson's Correlation was then used to determine if a relationship existed among the place attachment variables. Place attachment was used as an independent variable in some circumstances, and a dependent variable in others.

Cross tabulations with Pearson's chi-square were employed to examine relationships between place attachment and frequency of visits; using place attachment as the dependent variable. The relationships between place attachment and activity type were also examined using cross tabulations with Pearson's chi-square; using place attachment as the dependent variable. Pearson's Correlation, and cross tabulations employing Pearson's chi-square was used to investigate relationships between place attachment and fee preferences; using place attachment as the independent variable.

## CHAPTER IV

### Results

#### *General Demographics*

A total of 1,088 completed questionnaires were received. Approximately 61% of respondents were male, with the largest percentage of the sample (24.4%) falling between the ages of 41 and 50, providing a mean age of 42 years old. The majority of respondents (88.1%) indicated their race or ethnicity to be white/Caucasian.

Almost 85% of respondents indicated they lived in the Greater Metropolitan Atlanta Region. Of the respondents from the Greater Metropolitan Atlanta Region 89% reported a drive time of 30 minutes or less with a mean drive time of 19 minutes, ranging from one to 120 minutes. Nearly 90% of the total respondents indicated they traveled to the park by personal motorized vehicle.

#### *Place Attachment*

The eight place attachment statements used in this study were developed following previous research (Williams, 2000; Williams & Roggenbuck, 1989), and when tested for reliability were found to have a Cronbach's Alpha of .931, indicating high reliability. Mean overall place attachment was considered moderate (mean = 2.79), with the largest percentage of respondents (48.9%) falling into the "Moderate" category (Table 1). Almost 10% of respondents fell into the place attachment category of "None" (Table 1). Standard deviation for place attachment was .870, with 75.6% of the variance explained.

Table 1. Overall Place Attachment Scores  
for Visitors to Kennesaw Mountain  
National Battlefield Park. (N = 1088)

Place Attachment	n	%
None	105	9.7
Low	236	21.7
Moderate	532	48.9
High	215	19.8
Mean = 2.79		
Standard Deviation = .870		
Variance = .756		

### *Activity Type*

Most visitors to KMNBP are using the park for fitness activities, with 82% indicating their main reason for visiting was for walking/hiking or jogging/running. The greatest percentage of respondents (49.4%) reported that their main reason for visiting KMNBP that day was for walking/hiking, followed by jogging/running (21.4%), whereas the activity with the least participation was picnicking (2.2%) (Table 2). All activities fell into the “Moderate” group on the Attachment Scale, except for “learn about the Battle of Kennesaw Mountain or the Civil War” which was rated “Low” (Table 3). Place attachment was highest among people jogging/running (mean = 3.13) and lowest for people visiting KMNBP to learn more about the Battle of Kennesaw Mountain or the Civil War (mean = 2.24). Standard deviations of the seven activities were similar. Chi-square analysis of the relationship between activity type and place attachment was examined using each activity type as a binomial variable (Table 4). This test indicated that dog walking ( $\chi^2 = 3.697, p = 0.003$ ), jogging/running ( $\chi^2 = 7.039, p = <0.001$ ),

learning about the battle or the war ( $\chi^2 = 20.354, p = <0.001$ ) and walking/hiking ( $\chi^2 = 9.244, p = 0.026$ ) were significant at the .05 level (Table 4).

Table 2. Main Reason for Visiting Kennesaw Mountain National Battlefield Park. (N = 1261)

Activity Type*	n	%
Walking/hiking	623	49.4
Jogging/running	270	21.4
Learn about the Battle or the War	153	12.1
Dog walking	97	7.7
Bird watching	60	4.8
Bicycling	30	2.4
Picnicking	28	2.2

\* Some respondents gave multiple responses.

Table 3. Mean Place Attachment Level by Main Reason  
for Visiting Kennesaw Mountain National Battlefield Park.  
(N = 1261)

Activity Type*	Mean Place Attachment	S D
Jogging/running	3.13	0.82
Dog walking	3.03	0.83
Bicycling	2.97	0.93
Picnicking	2.86	0.85
Walking/hiking	2.78	0.83
Bird watching	2.78	0.80
Learn about the Battle or the War	2.24	0.83

\* Some respondents gave multiple responses.

Table 4. Strength of Place Attachment by Activity Type at Kennesaw Mountain National Battlefield Park. ( N = 1261)

Activity Type*	Attachment Scale				X <sup>2</sup>	p
		None	Low	Moderate	High	
Picnicking	n	2	6	14	6	0.236
	%	1.9	2.5	2.6	2.8	
Dog Walking	n	8	8	54	27	3.697
	%	7.6	3.4	10.2	12.6	
Birdwatching	n	5	12	34	9	1.710
	%	4.8	5.1	6.4	4.2	
Jogging/ Running	n	12	38	122	98	7.039
	%	11.4	16.1	22.9	45.6	
Learn about the battle or the Civil War	n	32	59	56	6	20.354
	%	30.5	25.0	10.5	2.8	
Bicycling	n	3	4	14	9	2.665
	%	2.9	1.7	2.6	4.2	
Walking/Hiking	n	54	139	323	107	9.244
	%	51.4	58.9	60.7	49.8	

\* Some respondents gave multiple responses.

\*\* p is significant at the .05 level

*Frequency of Visitation*

First-time visitors comprised 16.2% of the respondents. The majority of respondents (83.8%) reported this was not their first visit to KMNBP (Table 5).

Table 5. Frequency of Visits to Kennesaw Mountain National Battlefield Park. (N = 1088)

Frequency of Visits	n	%
First time	176	16.2
About once per year	76	7.0
Less than once per month, but several times per year	109	10.0
About once a month	90	8.3
Less than once a week, but more than once per month	93	8.5
About once a week	158	14.5
More than once a week	386	35.5

A significant positive relationship ( $R = .470, p < 0.001$ ) was found between place attachment and frequency of visits to KMNBP. Chi-square analysis of the relationship between frequency of visit and level of place attachment ( $\chi^2 = 23.128, p < 0.001$ ) was significant at the .05 confidence level (Table 6). The analysis showed that the most frequent visitors to KMNBP (those that visited more than once per week) were most likely to be considered to have a high level of place attachment (61.9%) (Table 6). First time visitors to KMNBP were most likely to

fall into the place attachment categories of “None” (37.1%) or “Low” (38.6%) (Table 6). These results suggested that as frequency of visitation increases, so does the level of place attachment.

Table 6. Strength of Place Attachment by Frequency of Visit to Kennesaw Mountain National Battlefield Park. (N = 1088)

Frequency of visits		Attachment Scale			
		None	Low	Moderate	High
First visit	n	39	91	41	5
	%	37.1	38.6	7.7	2.3
About once per year	n	15	30	29	2
	%	14.3	12.7	5.5	0.9
Less than once per month, but several times a year	n	11	30	59	9
	%	10.5	12.7	11.1	4.2
About once a month	n	5	20	54	11
	%	4.8	8.5	10.2	5.1
Less than once a week, but more than once per month	n	6	21	56	10
	%	5.7	8.9	10.5	4.7
About once a week	n	9	18	86	45
	%	8.6	7.6	16.2	20.9
More than once a week	n	20	26	207	133
	%	19.0	11.0	38.9	61.9

$\chi^2 = 23.128, p < 0.001$

### *Crowding*

Mean response for perceived crowding was 3.69, falling between “Not Crowded” and “Moderately Crowded” (Table 7). Standard deviation for perceived crowding was 1.962 (Table 7). The majority of the respondents (82.4%) rated their perceived crowding in the “Not Crowded” to “Moderately Crowded” range. The largest percentage of visitors (22.3%) responded they felt a crowding level of “3” which falls directly between “Not Crowded” and “Moderately Crowded.” Responses decreased notably over the “Moderately Crowded” mark, with only 1.3% of respondents indicating that they felt “Extremely Crowded.”

Table 7. Overall crowding scores of visitors to Kennesaw Mountain National Battlefield Park. (N = 1065)

	n	%
1 (Not Crowded)	156	14.6
2	168	15.8
3	238	22.3
4	134	12.6
5 (Moderately Crowded)	182	17.1
6	88	8.3
7	52	4.9
8	33	3.1
9 (Extremely Crowded)	14	1.3

Standard Deviation = 1.962

Although the mean crowding scores appeared to decrease slightly moving from a high level of place attachment to no place attachment (Table 8), the relationship was found not significant ( $R = -0.056, p < 0.070$ ). The one-way ANOVA did not detect a significant relationship at the  $p < 0.05$  level between the two variables ( $F(3, 1061) = 1.134, p = 0.334$ ).

Table 8. Mean Crowding Scores of Visitors to Kennesaw Mountain National Battlefield Park Shown by Strength of Place Attachment. (N = 1065)

Attachment Scale	Mean Crowding Level	n	SD
None	3.87	94	2.38
Low	3.82	233	2.04
Moderate	3.67	524	1.85
High	3.53	214	1.93

( $F(3, 1061) = 1.134, p = 0.334$ )

#### *Recreation Fees*

Approximately half of respondents (49.7%) preferred the proposed entrance fee option of an annual pass at \$20 per vehicle or family, whereas 36.4% of respondents said they would not be willing to pay for any entrance pass (Table 9). Daily pass options were the least preferred, with 4.7% choosing a daily pass at \$10 per vehicle and 9.2% choosing a daily pass at \$5 per person on foot, bicycle or bus. Chi-square analysis of the place attachment scale and proposed entrance fee options showed that visitors with moderate and high attachment preferred the \$20 annual pass option (51.7% and 65.1% respectively) (Table 10). Thirty-one percent of respondents with no attachment preferred the annual pass option, however nearly the same

amount (27.6%) said they would not be willing to pay for any pass. Respondents falling into the low attachment category were most likely (43.6%) to respond that they were not willing to pay for any pass.

Table 9. Preference for Proposed Entrance Fee Options at Kennesaw Mountain National Battlefield Park. (N = 1039)

Fee Option	n	%
Daily pass at \$5/person if on foot, bicycle or bus	96	9.2
Daily pass at \$10/vehicle (excluding buses)	49	4.7
Annual pass at \$20/vehicle (or per family)	516	49.7
I would not be willing to pay for any entrance pass	378	36.4

Table 10. Preference for Proposed Entrance Fee at Kennesaw Mountain National Battlefield Park by Strength of Place Attachment. (N = 1039)

Pass Options		Attachment Scale			
		None	Low	Moderate	High
Daily pass at \$5/person if on foot, bicycle or bus	n	13	34	37	12
	%	12.4	14.4	7.0	5.6
Daily pass at \$10/vehicle (excluding buses)	n	8	25	15	1
	%	7.6	10.6	2.8	0.5
Annual pass at \$20/vehicle (or per family)	n	33	68	275	140
	%	31.4	28.8	51.7	65.1
I would not be willing to pay for any entrance pass	n	29	103	191	55
	%	27.6	43.6	35.9	25.6

$\chi^2 = 12.473, p < 0.001$

## CHAPTER V

### Discussion and Implications

A solid understanding of visitor perceptions is vital to the development of a successful management plan. This study was designed to gain a greater understanding of visitors' perceptions at Kennesaw Mountain National Battlefield Park. This was achieved through (1) examination of the relationship between type and frequency of use, with place attachment; (2) investigation of associations between a recreational user's place attachment and management issues regarding crowding and fees. A discussion of results and conclusions, along with thoughts on future research are described in this chapter. Comment excerpts from the survey, as well as from the Atlanta Journal-Constitution online blog have also been incorporated to illuminate important issues and trends.

Results of this study supported the first hypothesis: visitors' levels of place attachment at KMNBP were found to have differed somewhat between activity types. Highest levels were found among visitors coming to the park to jog/run or walk a dog which, as previously mentioned, is indicative of place dependence. This is supported by the earlier findings of Backlund and Williams (2003), and Kyle and others (2004b) where activity involvement was shown to be a good predictor of place dependence. Residents of Atlanta have very few areas for outdoor recreation activities; those who depend on KMNBP for their outdoor activities may tend to develop a stronger attachment to the park, because of the fundamental interaction between activity and place.

Responses suggested KMNBP was used mostly as a local day-use recreation area, as evidenced by the largest percentage of visitors (35.5%) responding that they visited the Park more than once a week, followed by 14.5% responding that they visited about once a week. Whereas 7.0% of visitors responded they visited about once per year and 10.0% responded they visited less than once per month, but several times per year.

Results of this study supported the second hypothesis, indicating that a significant positive relationship existed between frequency of visits and place attachment. Previous research has implied that activity involvement is often a precursor to place attachment (Bricker and Kerstetter, 2000; Kyle, et al., 2004; Moore and Graefe, 1994; Schreyer and Beaulieu, 1986). Research has also shown that participation in different activity types often leads to different levels of place attachment (Daigle et al., 2003; Kyle, et al., 2004; Mowen and Graefe, 1999; Warzecha, Lime and Thompson, 2000).

When examining five different activity groups in county parks in Virginia, Mowen and Graefe (1999) found that place attachment was positively and significantly related to frequency of visitation. Furthermore, Backlund and Williams (2003) found in an analysis of ten separate studies of recreationists, that visitation in the past twelve months had the strongest association with place attachment; although the overall relationship was weak, frequency or infrequency of visiting a site was generally a good predictor of at least the place dependence dimension of attachment. The results from KMNBP were consistent with these findings, the most frequent visitors were joggers/runners and dog walkers, visitors who are *dependent* on the resource because they had very limited areas for these types of activities. On the other hand, White et al. (2008) found evidence that setting experience, which included frequency of visitation, was an important factor in the formation of place attachment, especially for the identity dimension.

The third hypothesis was not supported by the study results. There was no significant relationship found between level of place attachment and perceived crowding at KMNBP. The overall perception of crowding was lower than expected; however, there could be several possible explanations for this outcome. Whereas prior research has indicated that more experienced visitors (who were also found in this study to have stronger place attachment) were more sensitive to crowding (Arnberger & Brandenburg, 2007; Graefe et. al, 1986; Graefe & Moore, 1992), others found that along with increased experience at a site may come specific expectations of crowding, which lead to psychological adjustments and the employment of coping mechanisms regarding evaluation of crowding (Kyle, et al., 2004; Shelby et al., 1983).

Displacement (temporal and/or spatial) is a type of behavioral coping used by some recreationists (Arnberger and Brandenburg, 2007; Hall & Shelby, 2000; Hammitt & Patterson, 1991; Kuentzel & Heberlein, 1992; Manning & Valliere, 2001). Frequent visitors were better able to better anticipate more crowded days and times at the park, and may have adjusted their visits to times and places they knew to be less crowded than others. Arnberger and Brandenburg (2007) found that to avoid crowded areas and times, one fourth of the locals (59% of those who perceived crowding) at a peri-urban national park in Austria displaced their use temporally to avoid crowded times. Similar findings were demonstrated by Manning and Valliere (2001) in their study of residents living near Acadia National Park, where almost half of the respondents were found to be adopting behaviors of temporal or spatial displacement.

Rationalization is a type of cognitive coping sometimes adopted by recreationists (Heberlein and Shelby, 1977; Manning and Ciali, 1980; Manning and Valliere, 2001). Recreation activities are voluntary, and sometimes involve a substantial investment of time, money and effort; however, to rationalize an experience, some visitors may not want to admit

they felt crowded or were dissatisfied, regardless of conditions. In one study at Acadia National Park, Manning and Valliere (2001) found evidence that 25% to 30% of residents living near the park were employing rationalization as a coping mechanism in response to more crowding.

It may simply be that because of KMNBP's urban location, many of its visitors consider crowding an acceptable trade-off just to be able to enjoy the outdoors close to home. Eighty-five percent of visitors responded that they live in the Greater Metropolitan Atlanta region, therefore when coming to the park, these visitors may not feel crowded in comparison to the urban surroundings in which they reside and/or work. Mean perceived crowding for visitors with no attachment to KMNBP, although not statistically significant, was just slightly higher than the more experienced visitors; in fact, crowding increased very gradually moving from high place attachment to no place attachment. It appears that first time visitors and less frequent visitors feel most crowded, which may support the idea that the most frequent visitors expect it to be crowded and are therefore less sensitive to it.

Results of this study supported the fourth hypothesis: preferences did appear to differ somewhat between the levels of place attachment. Overall, most visitors preferred the annual entrance pass option; however the option of no entrance pass did come in as a close secondary choice. This preference could be due to the lack of options, the \$5 and \$10 daily passes may have seemed too expensive, as well as the \$20 annual pass; perhaps the visitors who indicated a preference for no fee would have agreed to a less expensive annual pass.

Majorities of moderate and highly attached visitors preferred the annual pass option. Taking into consideration that most of the visitors were local and frequently visited the park, this is the most economical choice. Furthermore, Williams and Watson (1998) found that the place dependent respondents were more accepting of fees; the visitors at KMNBP seemed to fit into

this category of dependence on the resource. There also may tend to be a sense of ownership among these frequent visitors, by paying a fee these visitors most likely felt like they are doing something good for “their” park.

Respondents with low place attachment were most likely to respond that they would not be willing to pay any entrance fee, as nearly half responded this way. Interestingly, the visitors with no place attachment seemed more willing to pay an entrance fee than the visitors with low place attachment; 31% of these visitors preferred the annual pass, with just slightly less (27.6%) responding they would not be willing to pay for any pass. A possible explanation for this could be that because many of the visitors exhibiting no place attachment were first time visitors, hence they may have arrived at the park expecting to pay a fee. This explanation would hold true especially if these visitors frequent national parks and are aware of the fee demonstration program.

### *Future Research*

The residents of Atlanta have very few areas for outdoor recreation activities; those who depend on KMNBP for their outdoor activities may tend to develop a stronger attachment to the park, because of the fundamental interaction between activity and place. A more focused examination of the two main dimensions of place attachment (place dependence and place identity) would provide the management at KMNBP better understanding of who their visitors are, along with greater insight into their preferences and attitudes. It could also be recommended to add one or more dimensions into a more in-depth survey of place attachment. Hammitt et al. (2006) used 26 statements falling into five different dimensions of place attachment (familiarity, belongingness, identity, dependence and rootedness) to test the attachment of trout anglers on the

Chattooga River in South Carolina; this method offered a very rich picture of why and how recreationists' were attached to the resource. Taking a more in depth look into the reasons behind results such as the low level of place attachment for people coming to learn more about the Civil War or the Battle of Kennesaw Mountain could certainly lend insight to the management of the park.

It appears that first time visitors and less frequent visitors felt most crowded, which does support the idea that the most frequent visitors expected it to be crowded and were therefore less sensitive to it and/or have adopted coping strategies. Further examination into user perceptions of crowding could be extremely beneficial to the management at KMNBP, especially regarding coping strategies. If the frequent visitors to the park are adopting coping strategies, this would have a significant effect on their responses to the questions regarding crowding and conflict on this visitor survey. Giving the management a greater understanding of how and why visitors are coping with crowding and/or user conflict at the park would greatly aid them in making management decisions regarding visitor use. The issue of coping was acknowledged, the question, "Did you plan your visit today to avoid other times that you think are more crowded?" was added to this questionnaire approximately halfway through distribution. Approximately 20% of respondents indicated they did plan their visit to avoid other times, with only 636 responses this number is not statistically significant, but certainly could be indicative of a trend of displacement.

If a fee program were to be implemented at KMNBP, it would provide an outstanding opportunity to investigate place attachment in regards to user willingness to pay, attitudes towards a new fee program and preferences for fee spending. This is another area where a closer look at the dimensions of place attachment would come into play. In past research, recreationists

falling into the two different dimensions have been shown to have differing attitudes toward fee programs (Williams & Watson, 1998).

The intensive and conflicting park uses at KMNBP present a challenge to the NPS whose mission includes both protecting the historic resources of the site and providing for visitor experiences. The following comments from the Atlanta Journal-Constitution online blog in 2007 reflect some of the tension around recreational usage and over usage at the park:

*“...Face facts, y’all, that is a recreational park. The civil war is over and has been over for 150+ years!!! Now it’s just some woods and a hill where people jog, walk and bicycle...”* (John, 2007)

*“For some reason the name is Kennesaw Mountain National Battlefield Park. It should be renamed Kennesaw Mountain National Recreation Area for what it actually is...If you travel the SE you’ll quickly realize there’s about a zillion Civil War parks. Losing one is no loss...”* (Bob, 2007)

*“THIS COUNTRY IS HEADED TOWARDS A NEW CIVIL WAR ...NOBODY WILL CARE ABOUT THE OLD CIVIL WAR IN A FEW MORE YEARS.”* (Harold, 2007)

The park management does not face total opposition, however. Another quote from the same blog read:

*“...if we forget what happened in our past then we might repeat it in our future...If there are not enough Park Rangers to patrol the park then maybe we should contact our representatives...”* (Sharon, 2007)

The following comment from the visitor survey also shows there are some people who understand the issues and the mission of KMNBP:

*“My impression is that most people visiting here use the park as a recreation area. They come here to have fun, hike, walk their dog, or picnic. I tried to come here on a Sunday and left because there was no place to park. This park should be first and foremost a historical area, not a place to jog or walk your dog.”*

Kennesaw Mountain National Battlefield Park is certainly not an isolated incident of urban sprawl creating conflict at a national historic site. Valley Forge National Historic Park in Pennsylvania, located on the edge of the city of Philadelphia, is experiencing very similar encroachment. Manassas National Battlefield Park in Virginia is under the threat of the sprawl of Washington, DC. Manassas, like KMNBP, has also recently been determined to be a globally important bird area by the Audubon Society. There are many more of our national historic sites experiencing management issues similar to those of KMNBP. The NPS management is constantly wrestling with the question as to how to balance the mission of a National Park Historic Site when it becomes a recreational use area due to the pressures of urban sprawl. It is important to find an answer to this question, so that our country's historic sites are not lost under the feet of running teams and dog walkers.

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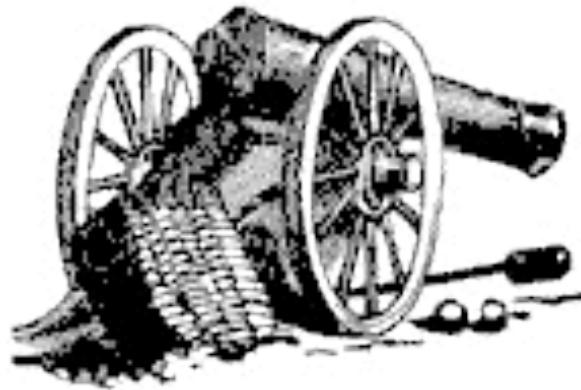
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## APPENDIX A

Kennesaw Mountain National Battlefield Park Visitor Survey

# Kennesaw Mountain National Battlefield Park Visitor Survey



The Warnell School of Forestry and Natural Resources  
University of Georgia

The Warnell School of Forestry and Natural Resources of the University of Georgia is requesting disclosure of information that is necessary to assist the National Park Service at Kennesaw Mountain National Battlefield Park manage the visitor experience.

Disclosure of information is voluntary.

**Section I.** We are conducting this survey of visitors to help us maintain a quality visitor experience and protect the unique resources of Kennesaw Mountain National Battlefield Park. Please take 10 minutes of your time to complete this questionnaire and return it to the survey volunteer before leaving the park. Thank you for your assistance.

1. Is this your first visit to Kennesaw Mountain National Battlefield Park?  
       \_\_\_\_\_ Yes                      \_\_\_\_\_ No
  
2. If this is **NOT** your first visit, how often do you visit Kennesaw Mountain National Battlefield Park?  
       \_\_\_\_\_ More than once a week  
       \_\_\_\_\_ About once a week  
       \_\_\_\_\_ Less than once a week, but more than once per month  
       \_\_\_\_\_ About once a month  
       \_\_\_\_\_ Less than once per month, but several times per year  
       \_\_\_\_\_ About once per year
  
3. How many people are in your party today? \_\_\_\_\_ people
  
4. Which of the following describes your group? Please check all that apply.  
       \_\_\_\_\_ family                                      \_\_\_\_\_ friends  
       \_\_\_\_\_ classmates                                      \_\_\_\_\_ team activity  
       \_\_\_\_\_ I'm here alone                                      \_\_\_\_\_ other (please identify): \_\_\_\_\_
  
5. Approximately what time did you arrive at the park today? \_\_\_\_\_ AM / PM
  
6. Did you plan your visit today to avoid other times that you think are more crowded?  
       \_\_\_\_\_ Yes                      \_\_\_\_\_ No
  
- 6a. If "Yes," please provide the times of day you attempt to avoid:  
       \_\_\_\_\_

7. Which of the following places at Kennesaw Mountain National Battlefield Park have you visited today?

Please choose all that apply:

☐ Visitor Center                      ☐ Illinois Monument  
☐ Kennesaw Mountain                      ☐ Cheatham Hill Road picnic area  
☐ Pigeon Hill (Burnt Hickory Road)                      ☐ Kolb's Farm

8. In which of the following activities did you participate during your visit today? Please choose all that apply:

☐ attended interpretive program                      ☐ bicycling  
☐ viewed exhibits at the visitor center                      ☐ walk dog  
☐ hiking/walking                      ☐ bird watching/wildlife viewing  
☐ running/jogging                      ☐ picnic  
☐ other (please identify): \_\_\_\_\_

9. If you visited the Visitor Center, which of the following activities did you do? Please choose all that apply:

☐ watched video of battle                      ☐ viewed displays and exhibits  
☐ attended interpretive talk                      ☐ visited bookshop  
☐ picked up a map or other information                      ☐ received information from staff at desk  
☐ used restrooms

10. **In your opinion**, which of the following **BEST** describes Kennesaw Mountain National Battlefield Park (please check only one):

☐ an Atlanta recreation area                      ☐ a national historic site

11. Please evaluate the following facilities and services available at Kennesaw Mountain National Battlefield Park by circling the number that best matches your opinion.

	<b><u>Poor</u></b>	<b><u>Fair</u></b>	<b><u>Good</u></b>	<b><u>Excellent</u></b>
Trail Maintenance	1	2	3	4
Number of Parking Areas/Spaces	1	2	3	4
Maintenance of Parking Areas	1	2	3	4
Other (Please identify): _____	1	2	3	4

12. Which of the following parking areas, if any, did you use during your visit today to Kennesaw Mountain National Battlefield Park? Please choose all that apply:

☐ Visitor Center parking lot      ☐ Illinois Monument (Cheatham Hill Drive)  
☐ Cheatham Hill Road (picnic area)      ☐ Burnt Hickory Road (Pigeon Hill)  
☐ Kolb's Farm      ☐ top of Kennesaw Mountain  
☐ Road shoulder on Old 41 Highway      ☐ Other (please identify): \_\_\_\_\_

13. Is the place you are now parked the **first** place you tried to park today?

☐ Yes      ☐ No

- 13a. If "No," please list the place or places you tried to park before parking here:

\_\_\_\_\_

14. Using the scale below, please rate the level of crowding you experienced at Kennesaw Mountain National Battlefield Park today. Please circle the number that best matches your response:

<b>Not Crowded</b>			<b>Moderately Crowded</b>				<b>Extremely Crowded</b>	
1	2	3	4	5	6	7	8	9

15. Which of the following reasons **best describes** your visit **today** to Kennesaw Mountain National Battlefield Park? Please choose the **one response** that **best describes** your reason for visiting:

☐ walk/hike trails      ☐ running/jogging      ☐ walk dog  
☐ bicycling      ☐ bird watching/wildlife viewing      ☐ picnic  
☐ learn about the Battle of Kennesaw Mountain or Civil War  
☐ other recreation (Please identify): \_\_\_\_\_

16. Please give your opinion to the following statements about visitors at Kennesaw Mountain National Battlefield Park (KMNBP) by circling the number that best matches your response:

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Unsure</b>	<b>Agree</b>	<b>Strongly Agree</b>
Other visitors interfered with my enjoyment of KMNBP.	1	2	3	4	5
Too many different activities are allowed at KMNBP.	1	2	3	4	5
There is enough room for all visitors at KMNBP.	1	2	3	4	5
The number of people at KMNBP makes it difficult for me to take part in my activities.	1	2	3	4	5
I have no problems with other visitors at KMNBP.	1	2	3	4	5

17. Please tell us how you feel about Kennesaw Mountain National Battlefield Park (KMNBP) as a place to visit, and for recreation, by circling the number that best matches your response to the statements below:

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Unsure</b>	<b>Agree</b>	<b>Strongly Agree</b>
KMNBP is the best place for what I like to do.	1	2	3	4	5
I am very attached to KMNBP.	1	2	3	4	5
Doing what I do at KMNBP is more important to me than doing it in any other place.	1	2	3	4	5
No other place can compare to KMNBP.	1	2	3	4	5
I get more satisfaction visiting KMNBP than from visiting any other park in the Atlanta Region.	1	2	3	4	5
KMNBP is very special to me.	1	2	3	4	5
The things I do at KMNBP I would not enjoy as much at another site.	1	2	3	4	5
I identify strongly with KMNBP.	1	2	3	4	5

18. Did you encounter any organized running teams at the park today? \_\_\_\_\_ Yes \_\_\_\_\_ No

18a. If "Yes," did the teams interfere with your activities at the park? \_\_\_\_\_ Yes \_\_\_\_\_ No

19. Have you visited other National Park sites in the past 12 months? \_\_\_\_\_ Yes \_\_\_\_\_ No

19a. If "Yes," please identify the NPS sites: \_\_\_\_\_

20. Have you visited other National Park sites in the past 5 years? \_\_\_\_\_ Yes \_\_\_\_\_ No

20a. If "Yes," please identify the NPS sites: \_\_\_\_\_

21. Do you live in the greater Atlanta Metropolitan Region? \_\_\_\_\_ Yes \_\_\_\_\_ No

21a. If "Yes," how long does it take for you to drive to Kennesaw Mountain National Battlefield Park?

\_\_\_\_\_ minutes

22. If you are not from the greater Atlanta Metropolitan Region, where is your home?

\_\_\_\_\_ In Georgia, but not from the greater Atlanta Metropolitan Region

\_\_\_\_\_ In another state (Please identify): \_\_\_\_\_

23. How did you travel for your visit to Kennesaw Mountain National Battlefield Park?

\_\_\_\_\_ private automobile

\_\_\_\_\_ RV

\_\_\_\_\_ air travel/rental car

\_\_\_\_\_ school bus/van

\_\_\_\_\_ tour bus

\_\_\_\_\_ bicycle

\_\_\_\_\_ walked/jogged

\_\_\_\_\_ other (please identify): \_\_\_\_\_

**Section II. User Fees.** Congress has passed legislation permitting NPS sites to collect daily and/or annual entrance fees, with 80% - 100% of those funds being used for improvements at the site. **Kennesaw Mountain National Battlefield Park would be permitted to keep 100% of the funds raised through daily or annual visitor passes to improve services and facilities in the Park.**

1. Which of the following visitor entrance passes would you be **most interested** in purchasing?  
Please **check one response**.

☐ daily entrance pass at \$5.00 per person if entering by foot, bicycle or bus

☐ daily entrance pass at \$10.00 per vehicle (excluding buses)

☐ annual entrance pass at \$20.00 per vehicle (or per family if not entering by vehicle) for entire year

☐ I would not be willing to pay for any entrance pass

2. Would you support an annual entrance pass that included an additional \$5.00 fee to ride the shuttle bus to the top of Kennesaw Mountain throughout the year, instead of paying a separate \$2.00 fee per ride?

☐ Yes, I would support an annual entrance pass that included \$5.00 for the shuttle bus

☐ No, I would not support an additional \$5.00 annual pass fee for the shuttle bus

**Section III. Kennesaw Mountain Road.** Please complete this section if you have been to the top of Kennesaw Mountain. If you have not been to the top of Kennesaw Mountain Road, please go to **Section IV**.

1. Do you feel there are **enough** signs (speed limit, lane usage, etc.) for visitors using Kennesaw Mountain Road?      ☐ Yes      ☐ No

2. The management staff at Kennesaw Mountain National Battlefield Park is considering several options for managing conflicting uses of the Kennesaw Mountain Road. Which of the following options would you prefer? Please **check one response**:

\_\_\_\_\_ Improve/reroute the trail to the top of the Mountain to make it accessible, and reserve the road for motor vehicles and bicycles.

\_\_\_\_\_ Allow all current users on the Mountain Road, but separate different types of uses by time of day.

\_\_\_\_\_ Prohibit personal vehicles and provide daily shuttle service to the top of Kennesaw Mountain, allowing pedestrian access daily and bicycle access Monday through Friday.

\_\_\_\_\_ Other (Please explain):

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3. Please give your opinion to the following statements about **users of Kennesaw Mountain Road** by circling the number that matches your response.

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
Other visitors on the <u>road</u> interfered with my enjoyment of Kennesaw Mountain.	1	2	3	4	5
I feel that the Mountain Road should be open for all users (pedestrians including dog walkers and baby strollers, cyclists, vehicles).	1	2	3	4	5
Too many different activities are allowed on the Mountain Road.	1	2	3	4	5
There is enough room for all types of activities on the Mountain Road.	1	2	3	4	5
The number of pedestrians (including dog walkers and baby strollers), cyclists, and vehicles on the Mountain Road makes it difficult for me to take part in my activities.	1	2	3	4	5
I had no problems with other visitors while using the Mountain Road.	1	2	3	4	5

4. Have you ever taken the shuttle to the top of Kennesaw Mountain? \_\_\_\_\_ Yes \_\_\_\_\_ No

4a. If “Yes,” which of the following describes your reason(s) for taking the shuttle?

Please choose all that apply:

- \_\_\_\_\_ convenience – did not want to walk to the top  
 \_\_\_\_\_ I did not have time to walk to the top  
 \_\_\_\_\_ walking to the top is difficult for me and/or those in my party  
 \_\_\_\_\_ reasonably priced  
 \_\_\_\_\_ other reason (please explain) \_\_\_\_\_

4b. If “No,” which of the following describes your reason(s) for not taking the shuttle?

Please choose all that apply:

- \_\_\_\_\_ prefer to walk  
 \_\_\_\_\_ shuttle times inconvenient  
 \_\_\_\_\_ shuttle fees too high  
 \_\_\_\_\_ other reason (please explain) \_\_\_\_\_

**Section IV. General Information.** The following questions are important to help us understand more about visitors to Kennesaw Mountain National Battlefield Park. Please tell us something about yourself by checking the responses that apply. All responses voluntary and are kept completely confidential.

1. What is your gender? \_\_\_\_\_ Male \_\_\_\_\_ Female

2. Please give your age. \_\_\_\_\_ Years

3. What is your ethnic/cultural group?

- \_\_\_\_\_ Caucasian/White \_\_\_\_\_ Hispanic  
 \_\_\_\_\_ African-American \_\_\_\_\_ Native American (American Indian)  
 \_\_\_\_\_ Asian-American \_\_\_\_\_ Other (please specify) \_\_\_\_\_

4. Do you belong to any of the following groups? Please choose all that apply:

- \_\_\_\_\_ birding club (Audubon Society, etc.) (please identify): \_\_\_\_\_  
 \_\_\_\_\_ trail or hiking club (please identify): \_\_\_\_\_  
 \_\_\_\_\_ cycling club (please identify): \_\_\_\_\_  
 \_\_\_\_\_ running team or club (please identify): \_\_\_\_\_  
 \_\_\_\_\_ other (please identify): \_\_\_\_\_

### **Comments**

**Thank you for taking your time to respond to this survey. Your answers will help the National Park Service staff at Kennesaw Mountain National Battlefield Park better manage the historic, cultural, and natural resources of the park.**

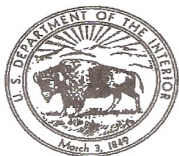
**Please return this survey to a researcher  
at Kennesaw Mountain National Battlefield Park  
or to the Visitor Center Information Desk.**

**If you are unable to return the survey at the park,  
surveys may be mailed to:**

**KEMO Visitor Survey  
Warnell School of Forestry and Natural Resources  
180 East Green Street  
Athens, GA 30602**

## APPENDIX B

## Letter from Superintendent Dan Brown, Kennesaw Mountain National Battlefield Park



United States Department of the Interior

NATIONAL PARK SERVICE  
Kennesaw Mountain National Battlefield Park  
905 Kennesaw Mountain Drive  
Kennesaw, GA 30152  
(770) 427-4686  
(770) 528-8399 FAX



November 20, 2006

Dear Park Visitor,

The National Park Service is working with the University of Georgia (UGA), Warnell School of Forestry and Natural Resources to conduct a visitor survey at Kennesaw Mountain National Battlefield Park. The information gathered by this visitor survey will assist the park with addressing various park issues of interest to visitors and park staff. Some of these issues include the use of park trails by organized running groups, conflicts between pedestrians, bicycles and vehicles on the road up Big Kennesaw Mountain, and the proposed implementation of a park entrance fee. The park needs your input in determining how best to approach these and other management issues.

The visitor survey instrument is being administered by UGA students who are working as park volunteers. We know that your time is valuable. Your participation and cooperation in this survey is greatly appreciated.

Sincerely,

Daniel R. Brown  
Park Superintendent