WILDERNESS, WILDERNESS, AND VISITOR ACCESS TO CUMBERLAND ISLAND NATIONAL SEASHORE, GEORGIA

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Abstract.—Cumberland Island National Seashore (CUIS), located off the coast of Georgia, was created in 1972 to preserve the island’s ecosystem and primitive character. CUIS management staff has recently been charged with developing a Transportation Management Plan (TMP) to provide better access to the northern portion of the island, where several sites of historical significance are located. This assignment has created a conflict between providing transportation and preserving the island’s naturalness. Proposals include providing transportation by passenger vehicles, trams, horseback, and even a horse and carriage. A total of 2,227 public comments on the proposals were received from individuals and organizations and have been analyzed to help guide the decision-making process. Eighty-one percent of the comments expressed opposition to or offered only conditional support for the proposed TMP. Hence, CUIS is facing a delicate state of transition and will need to further consider the balance between preservation and use of the island.

1.0 INTRODUCTION

Cumberland Island National Seashore (CUIS) was created in 1972 to preserve the island’s primitive character and natural processes. CUIS managers are further charged with preserving the area’s natural, cultural, and historical aspects, while offering visitors a feeling of isolation and wonder. These ideals, set against the backdrop of the National Park Service’s (NPS) mission of protecting the natural character of the park while accommodating the recreation needs of visitors, cause some conflicts of interest (NPS 2007). The island has been inhabited for approximately 4,000 years and had been home to wealthy industrialists since the late 19th century. Human impacts on the island are obvious, but Cumberland has recovered from years of grazing and farming to such an extent that almost half of the island is now a federally designated “wilderness.” Imposing a low limit on daily visitors to CUIS over the past 30 years (a maximum of 300 people per day) has helped the island recover even further, resulting in a mostly pristine environment.

Although Cumberland Island has remained relatively unchanged throughout the tenure of the NPS, CUIS now faces some significant changes. The original “wilderness” designation meant that a portion of the main road that runs the length of the island is off-limits to vehicular traffic in accordance with the Wilderness Act of 1964. New legislation requires CUIS staff to provide better access for visitors to the northern portion of the island, where several sites of historical significance are located. To allow this access, the island’s wilderness designation had to be changed since the only access to the north end of the island is a dirt road that runs directly through the wilderness. The CUIS management staff now has been charged with developing a transportation management plan (TMP) to provide access to the northern portion of the island.

This paper provides a brief background of CUIS to enhance understanding of how the current situation developed. The TMP and related issues will then be discussed. Visitor perceptions of the proposed TMP will also be examined, along with issues related to the future of transportation on the island.
2.0 THE HISTORY AND MANAGEMENT OF CUMBERLAND ISLAND NATIONAL SEASHORE

2.1 Cumberland Island Ecology

Cumberland Island is a barrier island off the southern coast of Georgia near the border with Florida. It is one of the largest, most pristine, undeveloped barrier islands on the East Coast. The island is composed of second-growth maritime forests, inland salt marsh, grassy dunes, and miles of pristine beaches. The island has had time to recover from early settlers’ extensive farming and grazing, but the current incarnation of Cumberland Island is different from when the Europeans found it. Large stands of live oak and pine once covered the island, and undergrowth of such species as saw palmettos was less prevalent. The felling of the original large tree stands opened the door for more groundcover to develop, which resulted in its present-day look.

The mild climate, with temperatures in the 60s in the winter and mid-80s in the summer, makes Cumberland Island an ideal place for both humans and animals. This ecosystem is home to a wide variety of native and exotic wildlife, including bobcats, feral hogs, wild horses, armadillos, and deer. Federally protected loggerhead sea turtles use the many miles of beaches to lay their eggs.

2.2 Cumberland Island Cultural History

Cumberland Island has a long and storied history of human inhabitation stretching back 4,000 years. For most of this time the indigenous people, the Timucuan Indians, cultivated the land. They manipulated the local ecology by burning tracts of land to develop it for agriculture and encourage grazing by desirable animals such as the white-tailed deer (Dilsaver 2004). By the time Spanish explorers arrived in 1562, the island had visible signs of human impact. In fact, European settlers later adopted the trail system established by the Timucuans and today many of the trails are remnants of these ancient byways (Dilsaver 2004).

In 1783, Revolutionary War General Nathaniel Greene was awarded land on the island in recognition of his heroic role in the war. Greene built what would become one of the lasting images of the island, the original Dungeness Estate. Dungeness was the residence of the Greene family until it burned down. It remained in ruins until 1881 when the most famous residents of the island, the Carnegie family, razed the ruins and built their own Dungeness.

The Carnegies were the primary landowners on Cumberland for close to 100 years and they established several sites around the island. In 1972, after years of deliberation and negotiations, the Carnegies and other minor landholders sold their land to the NPS. Some families still reside on the island today as the result of agreements they have with the NPS, although many of these titles will revert to the NPS in 2010. Despite these few remnant in-holdings, the majority of the land on Cumberland Island is now owned and managed by the NPS.

2.3 NPS Involvement on Cumberland Island

On October 23, 1972, Public Law 92-536 was signed by President Nixon to establish Cumberland Island as a 40,500-acre National Seashore, making it one of the largest, mostly undeveloped, barrier island preserves in the world. The NPS decided early on that this island was a unique treasure to preserve and that preservation was made easier by its detachment from the mainland. The NPS subsequently set a visitor limit of 300 people per day to the island to limit visitor impacts on the ecological and recreational resources. A ferry runs twice daily to and from the island, taking up to 150 people per trip. It is not well understood how this visitor limit was established; the 300 people per day limit is generally accepted as an arbitrary number imposed by the NPS that lacks validation through scientific study. However, without imposing such restrictive limits, it is possible that social and ecological impacts would increase (Freimund and Cole 2001). A University of Georgia study in 1970 calculated that the island had a daily carrying capacity of more than 14,400 visitors (Ike and Richardson 1975). However, Ike and Richardson (1975) suggested that the NPS set the maximum at 10,000 and monitor visitor impacts to determine a more appropriate
number. Research on crowding at Wilderness areas by Dawson and Watson (2000) found that visitor satisfaction often remains high despite the perception of crowding.

From the outset, NPS managers considered designating a portion of the island as Wilderness. This discussion came to fruition in 1982 when the northern part of the island (roughly 9,986 acres) was established as a Wilderness to be managed by the NPS as part of the National Wilderness Preservation System. In accordance with the Wilderness Act of 1964, this new designation prohibited vehicular traffic on a portion of the main road that runs the length of the island. NPS staff members could use only primitive tools to maintain the trails in the Wilderness area and they were encouraged to use the water as their primary means of travel to the north end. Individuals who retained private property on the island were still allowed to use the main road with the agreement that when their use rights ended (most during 2010), the area would become a more “proper” Wilderness (Dilsaver 2004).

As time went on, it became apparent to many users and the park management staff that the north end of the island was inaccessible to many visitors due to lack of transportation. This realization led to new legislation requiring NPS to provide access to the environmental and historical sites at the north end of the island. Passed in 2004, Public Law 108-447 removed the main road’s Wilderness designation, once again allowing vehicular traffic access to the north end of the island. The legislation also required the NPS to develop a TMP to accommodate no less than five and no more than eight tours a day to the north end of the island.

3.0 THE TRANSPORTATION MANAGEMENT PLAN

As an agency, the NPS believes that resource conservation should take precedence over visitor recreation (NPS 2007). In 1981, researchers Bonnicksen and Robinson noted that the NPS is often hesitant to expand recreational development within national seashores because of its commitment to preservation. The NPS mission states that CUIS is to provide for public outdoor recreation use and enjoyment of significant shoreline, lands, and water and to preserve related scenic, scientific, and historical values (NPS 1984). The CUIS is mandated to preserve the island’s natural environment as well as its cultural heritage, and this is where the TMP comes into play.

Currently, the island is divided into two well defined areas: the north and south end. The south end of the island is where the majority of visitor activity takes place. This is the location of the two ferry drop-offs, Sea Camp and Dungeness Mansion, as well as easy access to the beach. The north end is primarily a designated wilderness and the only access is by foot or bicycle (private holdings are an exception; individuals are allowed to drive their private vehicles to the north end). The north end is the site of a 100-year-old Carnegie Mansion (Plum Orchard), and the settlement where the First African Baptist Church resides. Plum Orchard is undergoing a multi-million dollar renovation and will be a big attraction for tourists. The First African Baptist Church and the settlement are of great cultural significance in African-American history and heritage. The issue is how visitors will get to these historical and cultural sites.

The first issue to be addressed is how visitors will reach the north end of the island; specifically, what type of vehicle will be used to transport visitors around the island. Several ideas have been proposed, such as passenger vehicles (vans or SUVs), trams, horseback, and even a horse and carriage (Hartrampf, Inc. and Jordan, Jones, and Goulding, Inc. 2006). The idea getting the most attention is the vehicle proposal, but it faces several obstacles that must be overcome if it is to succeed. For instance, will the vehicles be gas-powered or possibly electric? Environmentalists argue that gas is not an option. With five to eight tours a day running to the north end of the island, gasoline-fueled vehicles will have a detrimental effect on the natural environment. Electric vehicles, however, come with their own problems. The overall trip to the north end and back (as the road currently exists, and allowing for touring the sites) takes approximately 3 to 4 hours. The electric car may be more environmentally friendly, but
would the vehicle have enough of a charge to make the return trip? If the answer is no, then a charging station may have to be built on the north end of the island, which would further impact the area and possibly be an expensive endeavor. Furthermore, these vehicles, electric or gas-powered, will need a hub from which to operate. This option would require the construction of a costly transportation center where the vehicles could be stored and maintained, and may be perceived as an intrusion in the natural environment.

Discussion has also included bidding the tours of the north end out to a private concessionaire. However, the public has made it clear that bidding is not an option, nor is it in the best interest of CUIS (Georgia Conservancy, n.d.). The concerns range from turning CUIS into an amusement park to prioritizing profit over protection to adding yet another burden to the already overworked NPS staff (Hartrampf, Inc. and Jordan, Jones, and Goulding, Inc. 2006).

Another factor to consider when discussing shuttling people back and forth to the north end of the island is the condition and maintenance of the road. The current road is primitive and is not maintained on a regular basis. The road is also narrow, treacherous, and riddled with washboard striations. In its present state, it would not be feasible to take five to eight tours a day, comfortably, to the north end of the island. Therefore, along with determining the mode of transportation, the road itself would most likely need modification to accommodate tours. Modification probably would include grading the road to provide a smoother and more comfortable ride. Vegetation encroaching on the road includes saw palmettos, pines, and live oaks, which would need to be pruned or removed altogether to accommodate the increased traffic safely. These adjustments to the natural environment go against the mission of the NPS and CUIS, and thus present a major challenge for park management.

Before vehicle type is chosen or new facilities are built, however, the main access point for the north end needs to be determined. There are currently two main access points to the island via the ferry: Sea Camp and Dungeness Dock. A third access point is being considered at Plum Orchard (Jerry Brumbelow, personal communication, 2007). The existing wharf at Plum Orchard could not accommodate the ferry, and a substantial monetary investment by the NPS would be needed to build a new dock. Plum Orchard, however, may be an ideal place for the hub of the tours to and from the north end.

Plum Orchard is the approximate mid-point of the island and could be an ideal place for incoming visitors to experience the historical, cultural, and natural wonders of CUIS. Renovations to the existing wharf at Plum Orchard would enable visitors to be ferried directly from Sea Camp or Dungeness Dock, thus alleviating the need for added vehicle traffic on the Main Road. Plum Orchard is also a good spot for the hub of the proposed transportation system. There is an existing facility on site, which with renovations would suit the needs of housing and maintaining the vehicles. Plum Orchard is a destination that visitors could enjoy in and of itself, with tours to the north end being an added value. This alternative is only one of the options at this point, but nevertheless one of the stronger options.

In light of the mandate to offer five to eight tours of the north end of the island to the visiting public, this paper, so far, has primarily discussed how visitors would reach the north end of the island but has neglected the possibly more important question of why visitors should be shuttled there. One major attraction at the north end of CUIS is Plum Orchard. With the possibility of offering ferry service to this location, the TMP is not necessary. However, sites such as the Settlement and the First African Baptist Church are not easily reached by foot or bike, nor are there suitable water depths for ferry service at the northern end. The TMP is necessary to access these destinations.

Another consideration is: What will be the interpretive value of the experience? The CUIS will need to provide drivers (if a private concessionaire is not involved), who will require interpretive training for the tour. The NPS-trained drivers may be a good option considering work done by Miller and Wright (1999), who found that the quality of visitors’ experiences in
Denali National Park in Alaska is largely affected by the courtesy and knowledge of tour bus drivers. These are subjective questions open for interpretation but are important to ask nonetheless because the NPS still has a no-action clause. It is unlikely that this alternative will be chosen, but at this stage of TMP development, all options must be weighed.

3.1 The Decision-making Process
As of this writing, CUIS managers and NPS regional and national managers are making decisions about the final form of the TMP. Decisions will be based on NPS and CUIS policy and the missions of the agency. Public comments have been collected and analyzed to help guide the decision-making process. In the upcoming months, intercept surveys will be conducted on the island to get a better understanding of visitors’ perceptions and desires regarding the TMP. A mail survey also will be conducted to help better understand visitor preferences and desired experiences regarding CUIS and the TMP.

3.2 Public Scoping Summary
Between August 1 and September 15, 2006 the NPS held an open comment period on proposals for the TMP. A total of 2,227 comments were received from individuals and organizations. About 86 percent of the comments were sent via email and the remaining 14 percent were sent by mail, fax, or in person at public meetings. Content analysis showed that 81 percent of the respondents opposed or offered only conditional support for the proposed TMP. Approximately 14 percent of the comments were in support of the TMP; about 5 percent of the respondents were uncommitted (Hartrampf, Inc. and Jordan, Jones, and Goulding, Inc. 2006) (see Table 1).

Specific public comments reflected a range of concerns and interests regarding the TMP. A few examples of pro-TMP comments are: “The Island should be more accessible to the general public…the tax payers”; “a means of having transportation for the disabled would be most beneficial”; and “The beauty of the island should be shared by all.” The comments of those opposed to the TMP generally have a more resentful tone: “Georgia’s last pristine wilderness…tourists are … ruinous to the environment”; “no changes to Cumberland Island”; and “our family goes there for peace and quiet and lack of people…this plan will undo that.” One comment in particular sums up much of this discussion: “Leave the park in its natural state and preserve the environment, the purpose of the NPS.”

3.3 Moving Toward the Future
Fitzsimmons (1976) noted, “Society has generally viewed the national parks as places for relaxed nature appreciation with largely unspoiled, scenic, natural landscapes, as opposed to commercial playgrounds amid scenic beauty.” Over the next few years, CUIS will be in a delicate state of transition and management will need to further consider the balance between preservation and recreation, a common theme for the National Park Service. Sax (1980) raises the concern that national parks may be turning into Disneyland, where people are there simply to be entertained on vacation. Perhaps the best way to educate visitors is to provide as much information as possible about the wide range of opportunities available within any given park. Educating the public would allow visitors to choose an experience that best meets their expectations (Shelby 1980).

Table 1.—Summary of public comments on Cumberland Island National Seashore transportation management plan Received in August and September 2006

<table>
<thead>
<tr>
<th>Category</th>
<th>Concerns</th>
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<tbody>
<tr>
<td>Tours</td>
<td>Privatization, Fee, Number of trips, Guided vs. Non-guided</td>
</tr>
<tr>
<td>Route</td>
<td>Beach Driving, Ferry Routes and Docks, Use of Main Road</td>
</tr>
<tr>
<td>Mode</td>
<td>Fuel Type, Non-Motorized Options</td>
</tr>
<tr>
<td>Support Facilities</td>
<td>Type/Use of Facility, Paving</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Limit on Number of Visitors</td>
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(Modified from Hartrampf, Inc. and Jordan, Jones, and Goulding, Inc. 2006).
The NPS is increasingly beginning to focus on alternative transportation systems in the national parks (White 2007). It will be important to understand the meanings that visitors construct about different transportation systems within the parks. White (2007) also states that very little research has been done on how visitors perceive transportation systems and how these transportation systems impact visitors’ experiences. Studies of existing NPS transportation systems (Miller and Wright 1999, Mace et al. 2006) have shown that visitors perceive such systems as a satisfying experience. In White’s (2007) study on a proposed transportation plan in Yosemite National Park (California), most people responded they would be in favor of a shuttle service to reduce emissions and traffic problems within the park. The situation at CUIS is unique. Unlike Yosemite and Zion National Park (Utah), where TMPs were used to reduce traffic and the impact of too many visitors, the TMP at CUIS has the potential to increase the number of visitors to the park.

Much remains to be decided at CUIS in the upcoming years. Developing a realistic carrying capacity for the island requires further research. Other national parks that are working through similar problems have decided to restrict access in hopes of decreasing congestion. Acadia (Maine), Grand Canyon, Yellowstone, and Zion National Parks have all instituted various shuttle systems to alleviate traffic congestion during peak visitation times of the year (Sims et al. 2005). The CUIS, however, is not concerned about further restricting access to the island, which is the major focus of many previous studies. Interviews and surveys along with public meetings need to be implemented to obtain a better understanding of what the best options for the TMP may be. This is the beginning of a long process for CUIS. We hope that when the transportation management plan has been fully implemented and evaluated, it will provide a model for other parks facing similar situations.

4.0 CITATIONS


Hartrampf, Inc. and Jordan, Jones, and Goulding, Inc. (2006). Summary public scoping comments for transportation management plan and environmental assessment: Cumberland Island National Seashore. Atlanta, GA.


