



November 2007

# FORT PULASKI NATIONAL MONUMENT

A Resource Assessment



National Parks Conservation Association®  
Protecting Our National Parks for Future Generations®

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# STATE ♦ OF THE ♦ PARKS®

## Center for State of the Parks

More than a century ago, Congress established Yellowstone as the world's first national park. That single act was the beginning of a remarkable and ongoing effort to protect this nation's natural, historical, and cultural heritage.

Today, Americans are learning that national park designation alone cannot provide full resource protection. Many parks are compromised by development of adjacent lands, air and water pollution, invasive plants and animals, and rapid increases in motorized recreation. Park officials often lack adequate information on the condition of critical resources.

The National Parks Conservation Association initiated the State of the Parks® program in 2000 to assess the condition of natural and cultural resources and to determine how well equipped the National Park Service is to protect the parks—its stewardship capacity. The goal is to provide information that will help policy-makers, the public, and the National Park Service improve conditions in national parks, celebrate successes as models for other parks, and ensure a lasting legacy for future generations.

For more information about the methodology and research used in preparing this report, or to learn more about the Center for State of the Parks®, visit [www.npca.org/stateoftheparks](http://www.npca.org/stateoftheparks) or contact: NPCA, Center for State of the Parks®, 230 Cherry Street, Suite 100, Fort Collins, CO 80521; Phone: 970.493.2545; Email: [stateoftheparks@npca.org](mailto:stateoftheparks@npca.org).

Since 1919, the National Parks Conservation Association has been the leading voice of the American people in protecting and enhancing our National Park System. NPCA, its members, and partners work together to protect the park system and preserve our nation's natural, historical, and cultural heritage for generations to come.

- \* More than 325,000 members
- \* 22 regional and field offices
- \* 35,000 activists

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Cover photo: Historic image showing breach of southeast corner of Fort Pulaski. National Park Service



## INTRODUCTION



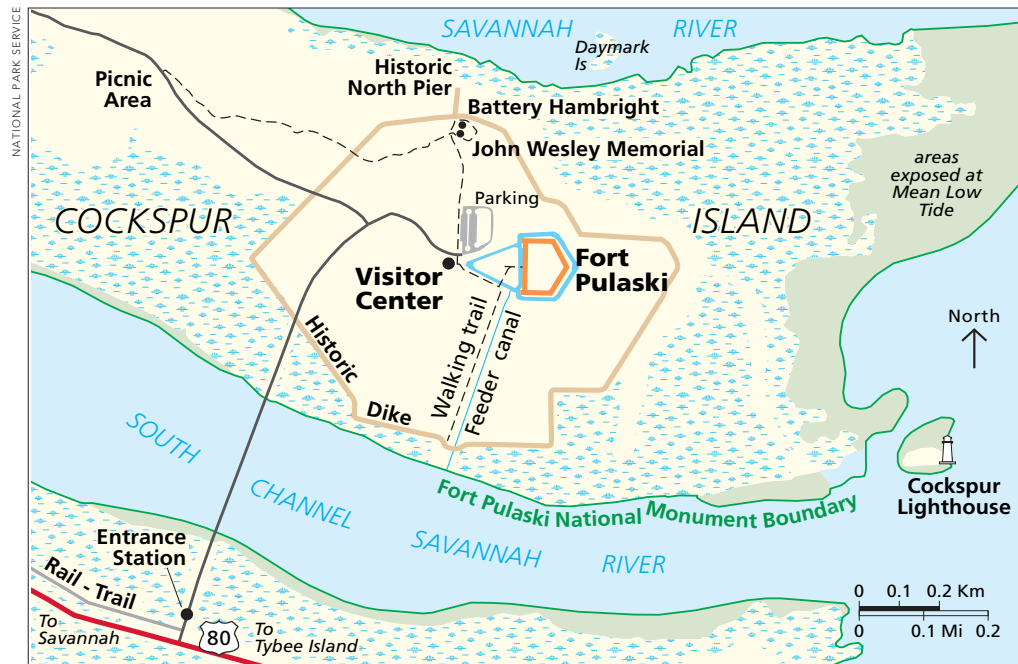
"You might as well bombard the Rocky Mountains."

—U.S. Chief of Engineers Joseph G. Totten

Before the outbreak of the American Civil War in 1861, many people believed that the eight-foot-thick brick walls of Fort Pulaski, located on Cockspur Island near Savannah, Georgia, were impervious to cannon fire. U.S. Chief of Engineers Joseph G. Totten went so far as to say that bombarding the fort was as pointless as attacking the Rocky

Mountains. The Confederate Army wanted to maintain control of the fort in an effort to keep the city of Savannah open to commerce by sea, via the Savannah River, which flowed past the fort. The Union Army planned to overtake the fort to seal off Savannah, as part of the Anaconda Plan to strangle the South with a naval blockade. Capturing Fort Pulaski and controlling the Savannah River were key objectives in the campaign of "total warfare" the Lincoln Administration waged against the South.

During the 1930s, the Civilian Conservation Corps restored Fort Pulaski.



With Confederate troops occupying Fort Pulaski in the spring of 1862, Engineer Captain Quincy A. Gillmore of the Union Army believed he possessed a weapon capable of piercing the walls of the mighty fort. He planned to capture the fort by employing new, more powerful rifled cannons, which were believed to be very accurate at long distances—a key factor as Union troops planned to attack from positions on Tybee Island more than one mile from the fort. The heavy cannons were pulled into firing position on carts that required the strength of as many as 250 men to budge. The fight for Fort Pulaski began on April 10, 1862, after Confederate forces rejected a summons for surrender from the Union Army. Though it would take 30 hours to validate Captain Gillmore's assumptions, the rifled cannons proved strong enough to breach the fort's walls. Once their gunpowder stores were compromised, the Confederate commanders surrendered. This Civil War battle marked the end of coastal masonry fortifi-

cations, which could not withstand the new rifled cannons.

Prior to the Civil War, people had long recognized that Cockspur Island was a strategically valuable area. Sitting in the Savannah River, at the mouth of the estuary and 15 miles east of Savannah, the island was a prime vantage point for protecting the mainland from naval assaults. The British built Fort George there in 1761 to guard against the Spanish and other enemies. In 1794, Americans built Fort Greene on the island. In 1804, a hurricane destroyed what was left of both of those early forts. The United States began construction of Fort Pulaski in 1829, with Robert E. Lee as one of the assistant engineers. This was Lee's first assignment after graduating from West Point Military Academy. Enslaved people from nearby plantations did much of the work, completing the main fort structure in 1847.

After the Civil War ended, Fort Pulaski was not regularly used. In 1867, the U.S. Army Corps of Engineers began using

Cockspur Island as a depository for materials dredged from the Savannah River. In 1873, the fort closed, and by the early 20th century, Fort Pulaski was falling into disrepair.

#### PROTECTING SHARED HISTORY

In 1924, President Calvin Coolidge formally recognized the importance of Fort Pulaski by establishing it as a national monument under the administration of the Department of War. The park's management was transferred to the Department of Interior in 1933, and the National Park Service has administered it since that time, except during World War II when the fort was again appropriated for military uses. The intent at that time was for the fort to be used for prisoners of war; however, it was never used for that purpose. The National Park Service resumed management of the fort in 1948.

Initially, Fort Pulaski National Monument encompassed only about 20 acres. Park size increased dramatically in 1939, when the state of Georgia deeded to the Park Service more than 5,000 additional acres, mostly on McQueens Island. Today the park includes 5,623 acres of land on Cockspur, McQueens, Tybee, and Daymark Islands.

The land within Fort Pulaski National Monument has historic importance beyond the Civil War battle. It is considered the first site of European colonization in Georgia; John Wesley, the founder of Methodism, and his followers arrived on Cockspur Island in 1736, and the island now includes a memorial to Wesley. The park includes Battery Hambright, which was used during the Spanish-American War, and the fort was also a stop along the Underground Railroad, sheltering escaping slaves from 1862 until the end of the Civil

#### FORT PULASKI AT A GLANCE

- In fiscal year 2006, Fort Pulaski received 356,000 visitors who toured the fort with rangers, watched musket firing and cannon demonstrations, explored scenic trails through woods and marsh, and participated in a host of other recreational and educational activities.
- The most prominent historic structure at the park is Fort Pulaski itself, though there are actually 23 structures total, including a lighthouse and the remains of several cisterns and dikes.
- The park provides important protection for salt marsh and tidal creek systems, which function as critical habitat for numerous bird species and act as nurseries for many commercially important fish species. While these systems are not unique to the area, they are becoming scarcer along the Eastern seaboard as a result of increasing coastal development. They are some of the best-protected wetlands in the area and overall are in very good condition.

War. The fort served as a prison for the "Immortal 600," a group of Confederate prisoners of war that were subjected to miserable conditions while imprisoned there during the bitter cold winter of 1865. The park's Cockspur Island Lighthouse represents early U.S. navigational history and Savannah's port history.

Rehabilitation of the fort also adds to its historical value because the Civilian Conservation Corps performed the work during the Great Depression. Each one of these events and time periods combine to increase the historical significance of Fort Pulaski National Monument.

## RESOURCE MANAGEMENT HIGHLIGHTS

- Fort Pulaski's new general management plan (GMP) and cultural landscape report (CLR) are both nearing completion. The GMP will serve as the main reference guide for maintaining resources and implementing future plans. The CLR will help park staff integrate cultural landscapes into overall cultural resources management activities.
- Several projects highlight the park's commitment to historic structure preservation. The Cockspur Island Lighthouse underwent extensive repairs between 1995 and 2000, led by the National Park Service Historic Preservation Training Center. As a result of this work, the lighthouse's condition was upgraded from "fair" to "good." In 2007, the park established a park preservation team and hired six graduate and undergraduate students who were majoring in historic preservation at the local Savannah College of Art and Design. The park spent more than \$120,000 on historic preservation; much of the historic preservation team's time was spent working on projects within Fort Pulaski itself.
- In March 2007, the park relit the Cockspur Island Lighthouse for the first time since 1909. This lighthouse, built in 1857, is one of just five surviving historic lighthouses in Georgia. It stood during the 1862 Battle of Fort Pulaski. The new Lighthouse Overlook Trail provides visitors with an opportunity to view the lighthouse.
- In 2007, staff from the Park Service's Southeast Archaeological Center and the Georgia Department of Transportation met with staff at Fort Pulaski to discuss the preservation of World War II bunkers and huts on the west end of Cockspur Island.
- During 2003 and 2004, park staff organized and cataloged all 33,000 pieces in the park's archives, removed paper clips and staples (which damage items), and placed documents in acid-free folders. In 2007, a team from the Park Service's Southeast Regional Office visited the park for two weeks and prepared a draft collection management plan, which includes recommendations and a plan for improving collections management, along with a list of proposed projects that need funding.
- Oyster Creek, which is located in the park on McQueen's Island, is the only area in Chatham County that is open for recreational oyster harvesting. The creek meets the high water quality standards that are necessary to allow this favorite activity to continue. This is an excellent example of a resource that is likely only to thrive with continued protection by the park.

Beginning in 1995, the Cockspur Island Lighthouse underwent extensive restoration work that was overseen by the National Park Service Historic Preservation Training Center.





## THE FORT PULASKI ASSESSMENT



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Recognizing Fort Pulaski National Monument's significance to our shared national heritage, NPCA's Center for State of the Parks set out to determine the conditions of the cultural and natural resources protected within the park. Researchers gathered information and used established, peer-reviewed methodologies to assess and systematically rate conditions of both cultural and natural resources at Fort Pulaski National Monument. These methodologies can be found online

([www.npca.org/stateoftheparks](http://www.npca.org/stateoftheparks)).

Current overall conditions of Fort Pulaski National Monument's known cultural resources rated "fair" with a score of 69 out of 100, while natural resources received a "fair" score of 79 out of 100. This report describes park resources and summarizes resource conditions.

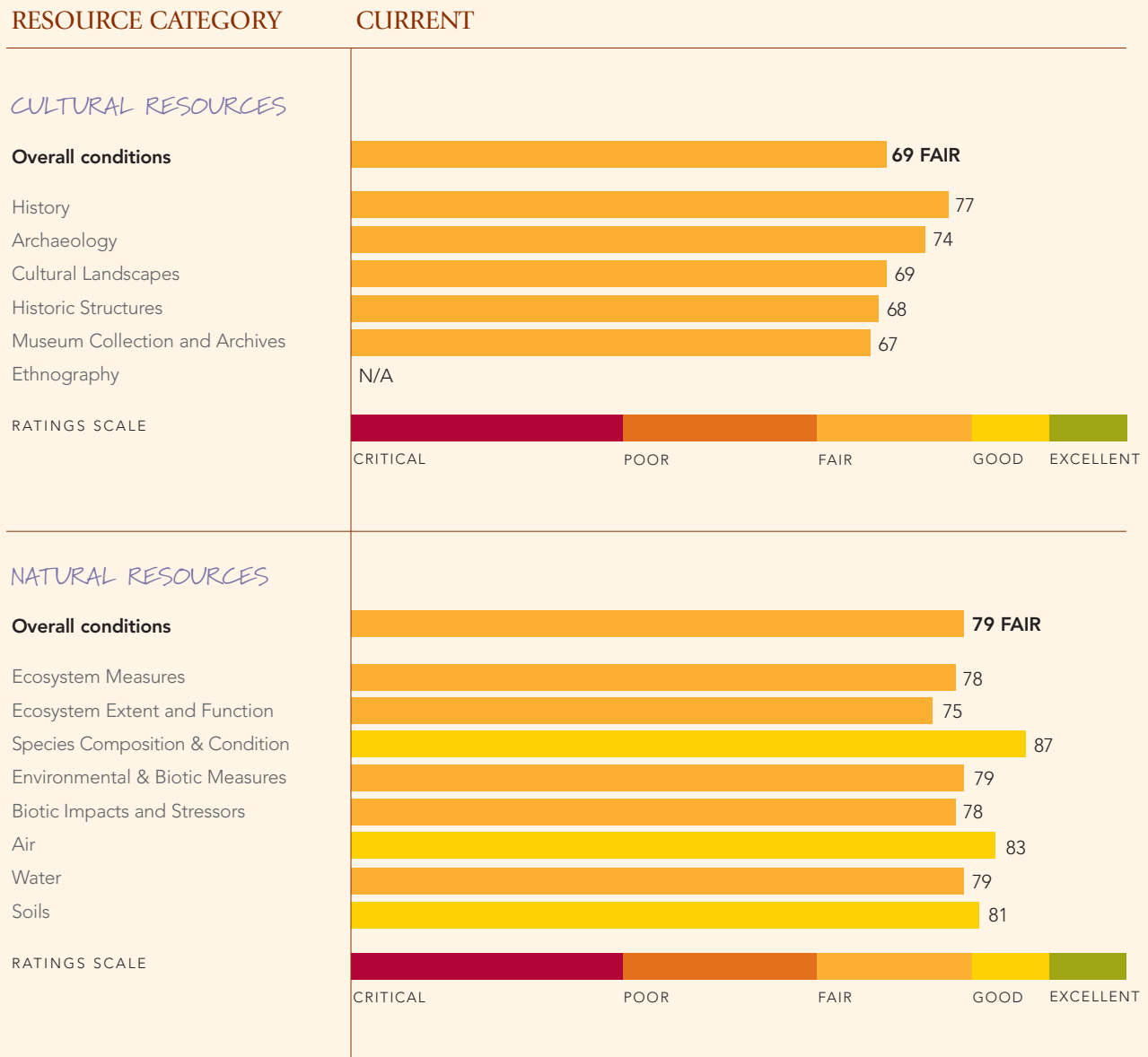
The Quarantine Officer's Residence, which now serves as the park headquarters, is one of only two historic structures at the park that has a completed historic structure report.

## KEY FINDINGS

- Fort Pulaski's cultural landscape and natural resources are threatened by proposed Savannah River dredging; expansion of Highway 80, which runs through the park on McQueens Island; and development that could destroy Battery Halleck, the only remaining Union battery on Tybee Island.
- Additional research on the history of Fort Pulaski and Cockspur Island beyond the Civil War would expand understandings of park resources and add to interpretive programs. Historical research topics in need of further study include American Indian habitation, Fort George and Fort Greene (earlier forts on Cockspur Island), the construction of Fort Pulaski, the fort's role in the Underground Railroad, and its rehabilitation by the Civilian Conservation Corps in the 1930s.
- Fort Pulaski lacks adequate, long-term storage space for its museum collection. A modular Bally building currently used for storage lacks climate controls and a fire suppression system. Park staff may relocate the collection to an off-site storage facility to ensure its continued preservation. A draft collection management plan has recently been completed, and the park has submitted numerous requests for funding to address various deficiencies in museum management.
- The park has 23 historic structures, but just two have received historic structure reports—the Cockspur Island Lighthouse and the Quarantine Officer's Residence, which now serves as the park headquarters. Additional historic structure reports would help staff interpret, protect, and preserve its other structures. To help meet this need and provide care for historic structures, Fort Pulaski has submitted a request for a full-time historic architect.
- The park's natural resources are vulnerable to activities outside Fort Pulaski's boundaries. Park staff are particularly concerned about the effects of pollution on water quality. Industrial facilities upstream—including paper companies, wastewater treatment plants, and a power plant—are permitted to dump millions of gallons of waste and chemicals into the Savannah River each day, while runoff from urban areas is a growing threat as urban centers grow. Most water quality data are collected from sites outside park boundaries. Establishing water quality monitoring sites within the park would help staff identify localized problems. In addition, little information is available to comprehensively characterize the park's air quality. With the number of industrial plants present upstream, additional air quality monitoring stations are warranted to help park staff identify issues and make informed management decisions.
- In 1996, Congress revoked the U.S. Army Corps of Engineers' permission to deposit dredge materials on Cockspur Island. The repeated deposition of dredge spoils from 1867 to 1996 had caused marsh habitat on Cockspur Island to decline, and remaining areas of Bird and Long Islands, adjacent to the park, are now connected after years of dredge spoil deposits.
- Since 2000, a number of scientific studies have been completed or are under way, including several studies of the health of the park's salt marsh; various biological inventories and geographic information systems (GIS) projects; and a study of Georgia's southern shoreline. The park needs additional funds to build upon this existing natural resources information.



Note: When interpreting the scores for natural resource conditions, recognize that critical information upon which the ratings are based is not always available. This limits data interpretation to some extent. For Fort Pulaski National Monument, 71 percent of the information required by the methodology was available.



The findings in this report do not necessarily reflect past or current park management. Many factors that affect resource conditions are a result of both human and natural influences over long periods of time, in many cases before the park's creation. The intent of the Center for State of the Parks is to document the present status of park resources and determine what actions can be taken to protect them in the future.



Fort Pulaski National Monument is committed to preserving its historic structures. In 2007, the park formed a historic preservation team and spent \$120,000 on preservation projects.

### CULTURAL RESOURCES— PRESERVING IMPORTANT PIECES OF AMERICAN HISTORY

At Fort Pulaski National Monument, the park's historic structures and museum exhibits bring to life the Battle of Fort Pulaski and other important events that have taken place on Cockspar and McQueens Islands. The most prominent historic structure at the park is the fort itself. Other distinguished structures include the Cockspar Island Lighthouse, which was built in 1855, and the Quarantine Officer's Residence, which now serves as park headquarters. Additional structures include the

remains of several cisterns and dikes for a total of 23 historic structures. Just two of the park's historic structures—the Cockspar Island Lighthouse and the Quarantine Officer's Residence—have been evaluated through historic structure reports, which document condition and guide further research, interpretation, and preservation. The park has requested funds to support a full-time historic architect to complete additional historic structure reports and manage preservation efforts.

In 1990, excavation on Tybee Island uncovered the remains of Battery Halleck. This is where the first shot was fired on Fort Pulaski by the Union forces to signal the

beginning of the battle in 1862. The cannon fire began on the morning of April 10 and lasted until the afternoon of the next day. The lasting legacy of the battle was that the success of the rifled cannons signaled the end of masonry coastal forts, a style of fortification that was at least 1,000 years old. After the battle, the Union Army occupied the fort and controlled access to the city of Savannah.

In October 1864, the Union Army used Fort Pulaski to house 520 Confederate prisoners. Later dubbed the "Immortal 600," they endured an unusually cold winter while imprisoned at the fort. Beginning in 1994, two excavations were performed in an effort to locate the graves of members of the Immortal 600 who perished during the winter of 1864. By 1999, archaeologists had uncovered the graves of 37 Union and Confederate soldiers, including 13 men of the Immortal 600.

Hurricanes, erosion, development, and vandalism all threaten the known and undiscovered historical and cultural resources at the park. An archaeological overview and assessment was completed in 2000 and identified 12 total archaeological sites. A 2005 assessment found all 12 sites to be in good condition.

When Fort Pulaski was in operation, vegetation on Cockspur Island was cut down to allow for clear fields of fire for the fort's gunners. After the fort's military significance declined, trees grew back that now block some of the historic viewsheds. Park staff would like to restore several of these viewsheds by removing some of the trees that block views of Tybee Island. This island is where Union troops launched their attack on the Confederate forces that occupied the fort. Restoring the historic viewshed will help visitors to better appreciate the Union Army's accomplishment in penetrating the

walls of the fort from more than a mile away. Revealing views of Tybee Island would also contribute to better interpretation of the island's role in the battle. Park staff will move forward with this work if it is approved in the park's new general management plan.

In addition to historic structures and archaeological sites, Fort Pulaski National Monument possesses a museum collection that includes artifacts directly associated with the fort and the battle such as cannonballs, bullet projectiles, leather and textile sashes, diaries, maps, and drawings. The park also houses additional Civil War artifacts not specifically associated with Fort Pulaski such as uniforms, weaponry, furniture, and flags.

In 2003, the park mounted a major effort to re-inventory and catalog its archives. By 2004, staff had organized and cataloged all 33,000 archival items. The next step to ensuring long-term preservation of the archives will be transferring them to an appropriate storage facility. The park currently stores items in a Bally building, a modular building that is too small and lacks fire suppression, climate, and humidity con-

Many pieces of military artillery are well preserved at Fort Pulaski, including cannons that were used during the Civil and Spanish-American Wars.



Fort Pulaski National Monument protects resources that go beyond the Civil War. Guns mounted at Battery Hambright helped guard the approach to the Savannah Harbor during the Spanish-American War.

ELIZABETH MEYERS



trol systems. Park staff may consider off-site storage locations to ensure the continued preservation of the collection.

Additional historical research would help park staff improve resource stewardship and interpretation of historical events beyond the Battle of Fort Pulaski. The park would like to do an overall historic resource study, which could cover a wide array of topics such as American Indian habitation and use, Fort Pulaski's role in the Underground Railroad, and Forts George and Greene. Incorporating these themes into park interpretation would enrich visitors' experiences. The park's immediate priorities for upcoming research will be on a munitions bunker built during World War II and the site of Fort George and Fort Greene. Fort George was built in 1761 to protect the colonies against Spanish ships attempting to sail up the Savannah River. American patriots destroyed it during the American Revolutionary War. The newly formed United States constructed Fort Greene in 1794. This fort was subsequently destroyed by a hurricane in 1804, along with what remained of the previous fortification. The exact sites of these former forts are unknown, but archaeologists suspect they were situated in the North Pier area of Cockspar Island.

## DEVELOPMENT, DREDGING, AND HIGHWAY EXPANSION THREATEN RESOURCES

Adjacent land use and upstream activities directly affect the health of the park's ecosystem and the continued preservation of cultural resources, and they are a constant and increasing concern. The proposed plans to dredge the Savannah River and expand Highway 80, along with the possibility of development near Battery Halleck, all threaten to damage certain natural and cultural resources associated with Fort Pulaski National Monument.

Dredging the Savannah River to allow larger commercial container ships to enter the Port of Savannah could result in damage to both natural and cultural resources at Fort Pulaski. Such deepening could affect sediment transport and water quality, accelerate coastal erosion, contribute to lowered dissolved oxygen levels, and result in the loss of freshwater marsh habitat, although such loss would likely occur upstream of Fort Pulaski. Additional threats to the park from increased shipping traffic include oil spills and a greater possibility of invasive species being transported in the ballasts of ships. The immense container ships passing next to the park would create large waves that could erode shorelines, some of which house historic structures and archaeological resources. The North Pier on Cockspar Island, a structure listed on the National Register of Historic Places, could be most at risk from shoreline erosion. This site was also the location of Fort Greene, which has not yet been fully researched. Erosion could wash away important artifacts. In late 2007,

researchers will engage in a shoreline erosion study, which will reveal how the port activity impacts the park's shoreline.

The plan to widen Highway 80, which runs through McQueens Island and connects Tybee Island to Savannah, could affect the park's cultural landscape, natural landscape, and wildlife. This proposal warrants continued attention from park managers, and cultural and environmental assessments are needed to determine potential effects. In order to widen the road, the Georgia Department of Transportation (GDOT) would require 22 to 30 acres of marshy parkland on McQueens Island. In exchange, GDOT is proposing to give the park 200 acres of wetland adjacent to the park. These lands include Bird Island and Long Island. Acquiring these lands would preclude development to the west of the park; in addition, these lands harbor historic World War II bunkers and Battery Hamilton, which is one of only two known Union batteries from the Battle of Fort Pulaski that still exist. While park staff consider the proposal beneficial to the park (the quality of land the Park Service would be giving up is poor), Congress must make the final decision. It is in the park's best interest to remain a key player in discussions of future development outside park boundaries.

In an effort to minimize any negative effects from dredging, highway widening, and development, park staff have been actively raising awareness in the community about these issues and have been maintaining good relationships with the Port Authority and GDOT.

Of the 11 Union batteries once located on Tybee Island, there is only one—Battery Halleck—that has not been destroyed by development. All land



ELIZABETH MEYERS

within the park's boundary on Tybee Island is in private ownership. The park is currently working with a landowner who is willing to donate about 4.5 acres on Tybee Island to the Park Service, including a small parcel that faces the fort. From this parcel, the park would be able to interpret the Union side of the battle for the first time in the park's history. This new unit of the park will be called "Battery Park" and is scheduled to open in 2008. It will include interpretive signs and feature one of two original historic rifled cannons that were used in the Battle of Fort Pulaski. The park will continue to work with Chatham County and the city of Tybee to manage this new unit and secure the preservation of Battery Halleck, which staff hope will eventually be added to the Battery Park unit.

The North Pier on Cocks spur Island is at risk for erosion if the Savannah River is deepened to allow passage of larger ships. Important artifacts could be washed away.



From the top of Fort Pulaski, visitors can look toward Tybee Island, where Union batteries were located. Park staff would like to remove some of the trees between the fort and the island to restore the historic viewshed, allowing visitors to better understand battle events.

### NATURAL RESOURCES— UPSTREAM ACTIVITIES AND INVASIVE SPECIES CAUSE CONCERN

While Fort Pulaski National Monument has been preserved primarily for its cultural and historical significance, the park also deserves distinction for containing one of the largest federally owned and protected salt marshes in the country. While these salt marsh areas are not unique in the region, they are becoming scarcer as coastal development increases, underscoring the importance of protecting these refuges. Sea level rise and global climate change are

also likely contributing to the loss of wetlands globally, making the wetlands present at the fort an increasingly important resource. The salt marshes perform an invaluable ecosystem service by filtering river water and improving the park's water quality. They also provide habitat for a variety of wildlife, including some threatened and endangered species.

The park's 5,623 acres of upland, tidal marshes, and mud flats provide refuge for federally protected birds such as the Bachman's warbler (*Vermivora bachmanii*), least tern (*Sterna antillarum*), wood stork (*Mycteria americana*), and piping plover (*Charadrius melodus*), as well as reptiles and

mammals such as the loggerhead sea turtle (*Caretta caretta*) and West Indian manatee (*Trichechus manatus*). Florida privet (*Forestiera segregata*) and swamp dock (*Rumex verticillatus*), two plants listed as species of concern by the Georgia Natural Heritage Program, also live in the park.

Some of Fort Pulaski's biodiversity can be attributed to the dredge spoil that was dumped on Cockspur Island from 1867 to 1996. This activity dramatically changed the ecosystem from marsh wetland to upland forest in certain locations, which, in turn, altered plant and animal species composition. Although it was created by human activities, this upland habitat contributes to the park's overall biodiversity.

Park staff are concerned about the effects of upstream pollution on water quality. Numerous upstream facilities have permits to discharge wastes totaling hundreds of millions of gallons per day into the Savannah River, which runs past the park. While industry regulations regarding runoff and wastewater treatment in the area have improved, scientists have measured elevated levels of heavy metals and radionuclides in the river. The sources of the radionuclides are the two upstream nuclear power facilities, one of which is still in operation. While this is certainly cause for continued monitoring, water runoff from the surrounding and upstream urban areas is actually the greatest threat to water quality, and it will likely become more of a concern as the city of Savannah continues to grow.

Invasive plants have become a problem at Fort Pulaski. The park has documented 68 non-native plant species; 18 of these are considered to be disruptive to natural communities due to their ability to dominate disturbed patches. The species of greatest concern are Chinese tallow (*Triadica sebifera*), Chinese privet (*Ligustrum sinense*),

Chinaberry (*Melia azedarach*), and oleander (*Nerium oleander*). Chinese tallow in particular has become dominant in several patches on Cockspur Island and is difficult to eradicate. Invasive plants disrupt the natural succession of native plants and can cause a loss of biodiversity. The park is currently controlling invasive species under the guidance of its integrated pest management plan. Chemical controls are used only when other options have been exhausted. In addition to invasive plants, the park harbors non-native European starlings (*Sturnus vulgaris*), common birds that can outcompete native species for food and other resources.

Though Fort Pulaski focuses on cultural resources preservation, natural resources also receive attention. Much of the park's upland habitat has been surveyed, and detailed lists of the resident plants have been compiled. An ongoing study uses photographs to track successional and location changes of upland habitat. Vertebrates, herpetofauna, bats, mammals, and some fish have also been surveyed. But the park needs additional funds to build upon this existing information. Regular monitoring of water quality within the park and securing better access to federal and state water quality data are top priorities.



GENE NIEMEN/U.S. FISH AND WILDLIFE SERVICE

The piping plover is one of several federally listed threatened or endangered species that can be found within the protected ecosystems of Fort Pulaski National Monument.



Volunteers and partnerships with living history groups allow the park to provide reenactments and demonstrations. Here, actors portray the imprisonment of the Immortal 600.

## STEWARDSHIP CAPACITY

### FUNDING AND STAFFING—BUDGET INCREASES AND EXTERNAL SUPPORT COMBINE TO PROTECT RESOURCES

The most significant factor affecting a park's ability to protect its resources is the funding it receives from Congress. In fiscal year 2007, Fort Pulaski National Monument had an annual operating budget of \$1.037 million to support staff and fund resource protection projects. The park's budget has increased for nine of the last ten years, and no essential projects have gone unfunded nor have any vital staff positions been left

unfilled. The park is also fortunate in that it has not lost any staff positions to recent budget constraints. The park receives additional personnel and project support from the National Park Service's Southeast Regional Office and the Southeast Coast Inventory and Monitoring Network.

### PLANNING—NEW GENERAL MANAGEMENT PLAN WILL SOON BE FINALIZED

Fort Pulaski National Monument is charged with managing and protecting a wide array of natural and cultural resources and requires a number of management plans to guide daily activities and overall goals. The



park's general management plan (GMP) is currently being updated and will provide general guidance and direction to park staff. In 2003, the park completed an administrative history.

Work will also soon be under way to study the potential effects that the proposed Savannah River dredging and deepening could have on the park. The deepening of the channel from 42 to 50 feet will allow larger ships to pass near the park, creating larger, more damaging waves. The study will focus specifically on what risks larger waves pose to the cultural and natural resources at the park.

#### RESOURCE EDUCATION—WIDE ARRAY OF PROGRAMS BENEFITS VISITORS

The rich history of Fort Pulaski is preserved and interpreted by park staff who present a plethora of programs and demonstrations that educate visitors and enrich the park experience. The interpretive staff at Fort

Pulaski, comprised of six rangers, presented 1,195 programs in 2006. Interpretive rangers were able to reach 44,193 people through these programs, and during the last ten years, the park has increased the number of programs offered. In 2007, the park received a score of 100 for visitor satisfaction. While the park does an exceptional job providing interpretive opportunities to visitors, adding more staff would allow the park to provide an even greater visitor experience, especially during the summer months when the park expands its hours of operation.

Regularly scheduled programs include daily ranger-led tours of the fort and musket and soldier demonstrations. In time for the park's 145th battle anniversary, the park received a replica 30-pounder Parrott rifle made by Steen Cannon and Ordnance Works of Ashland, Kentucky. This cannon tube, which weighs 4,200 pounds, is the largest Civil War cannon in the Park Service, easily eclipsing the next largest piece, which

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Park visitors are treated to regular cannon firing demonstrations. In 2007, Fort Pulaski plans to perform more black powder demonstrations than all of the other Civil War parks in the National Park System combined.

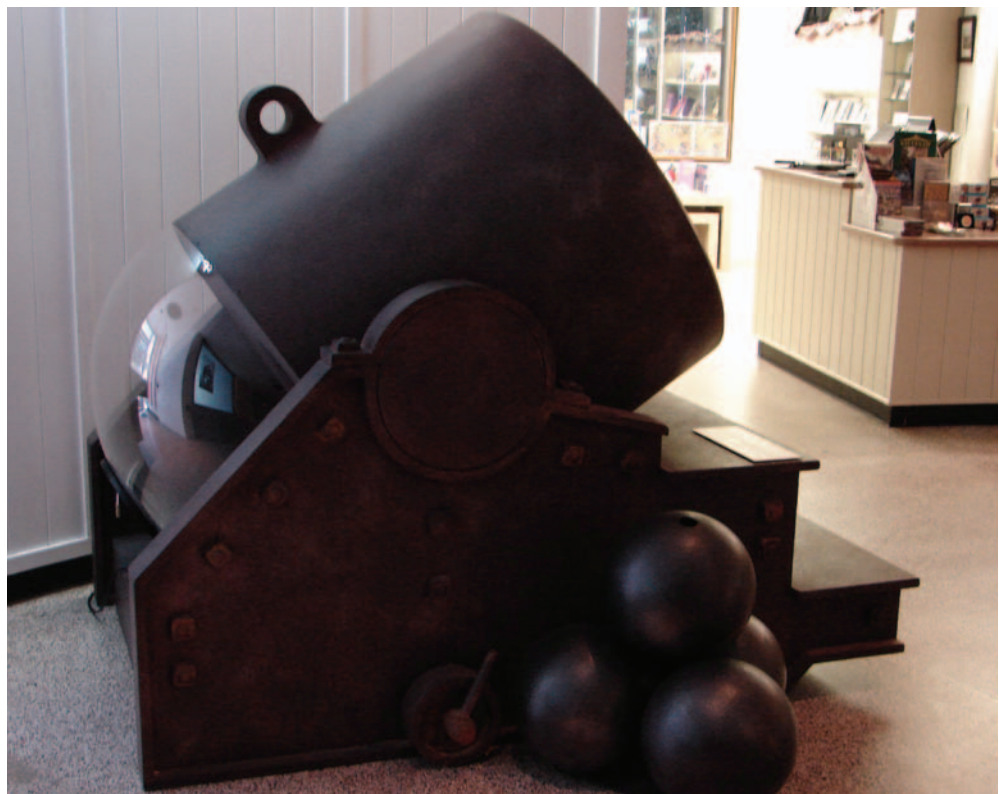
weighs 1,500 pounds. This type of rifle was essential to the Union Army's victory. The park purchased the reproduction rifle in 2007 using park entrance fees, and the rifle is now the centerpiece of the park's black powder program, which is the largest in the National Park Service. The park plans to fire the rifle 600 times in 2007 and is on schedule to perform more black powder demonstrations than all of the other Civil War parks in the National Park System combined.

Recent special events at the park have included the celebration of the 145th Anniversary of the Battle of Fort Pulaski, the Immortal 600 Weekend, Candlelantern Tours, Veteran's Day Celebration, and the relighting ceremony for the Cockspur Island Lighthouse.

While these formal interpretive programs are a vital component of visitor education at the park, a great deal of casual interpretation occurs each day at the visitor center. Fort Pulaski's visitor center is large enough to accommodate the current amount of visi-

tors and is well staffed. However, there was some concern that the exhibits at the park needed to be updated and expanded. To address this need the park completed an interpretive plan in 2005 that detailed what was needed to improve the interpretive exhibits, and what those upgrades would cost. In accordance with this plan, the park has added interpretive exhibits each year. In 2007, the park installed a High Definition theatre with revolving audio-visual programs at the visitor center, as well as an interactive 13-inch, full-scale replica of a seacoast mortar. This full-size replica includes interpretation of the weapon that was supposed to win the battle and serves as an interactive donation box. Donors receive the gratification of lights and an audible "boom" when a donation is made. New interpretive exhibits have also been placed in the Battery Halleck area on Tybee Island, which give visitors an insight into the Union Army's position during the battle. Through the park's exhibits, visitors can gain an

This full-scale replica of a seacoast mortar provides information on this weapon and serves as the park's donation box.



understanding of the park's significance and further immerse themselves in their park experiences.

Another boon to interpretation and visitor experience was the opening of an additional bookstore at the fort in 2006. Called the Sutler Store, it is designed to look like a general store in 1862. The store offers visitors the chance to take home books and memorabilia related to Fort Pulaski, as well as reproduction items that were used by soldiers. The park received the 2006 Herb Kalher Award from Eastern National for this innovation. The store is popular with visitors and has provided increased funding for the park. The park also began producing a newsletter in the summer of 2007 as a way to reach out to local communities and build support for the park.

#### EXTERNAL SUPPORT—PARK BOASTS OUTSTANDING RELATIONSHIPS WITH VOLUNTEERS AND SURROUNDING COMMUNITIES

Volunteers provide essential assistance to staff and visitors at Fort Pulaski by guiding tours and staffing the visitor center, fee booth, and bookstore, as well as assisting the maintenance department on a variety of tasks. In 2006, 233 volunteers dedicated 7,196 hours of their time to the park, which represents an increase in volunteerism over the last ten years. During the same year, the park installed four recreational vehicle pads for full-time volunteers to use, which give volunteers a place to live while they are serving in the park. These full-time volunteers dedicate 32 hours each week to their duties at the park and are often an invaluable resource to park visitors. In addition, the park also participates in National Public Lands Day, and invites volunteers to the park for the day.

Fort Pulaski National Monument main-

#### WHAT YOU CAN DO TO HELP

- **Support or become a member of groups helping to protect the park**, such as NPCA ([www.npca.org/support\\_npca](http://www.npca.org/support_npca)) and Eastern National ([www.easternnational.org](http://www.easternnational.org)). In addition, the park is in the process of forming a Friends of the Cockspur Lighthouse group.
- **Volunteer in the parks.** To learn about opportunities at Fort Pulaski National Monument, contact the park at 912.786.5787.
- **Become an NPCA activist** and learn about legislative initiatives affecting parks. When you join our activist network, you will receive *Park Lines*, a biweekly electronic newsletter with the latest park news and ways you can help. Join by visiting [www.npca.org/take\\_action](http://www.npca.org/take_action).

tains an excellent relationship with the surrounding communities and has collaborated with several public and private entities on park projects and programs. The park has partnered with Chatham County to build hiking and biking trails as well as a boat ramp and fishing pier at Lazaretto Creek. These facilities are located within the boundaries of the park and are jointly managed by the park and the county. Partnerships with outside living history groups allow the park to provide reenactments and demonstrations with participants in period dress and full military regalia. Local Boy and Girl Scouts are also invited into the park to camp in a "leave no trace" campground. While the scouts are in the park, they perform public service work that allows them to earn merit badges. The park lacks a formal friends group, though work is under way to establish Friends of the Cockspur Lighthouse.

# ACKNOWLEDGMENTS

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