Shaping Cockspur: Centuries in the Making

For hundreds of years, humans have shaped Cockspur Island's landscape: first by indigenous hunters and fishers, then by engineers and soldiers for military purposes, then by navigators to promote commercial shipping at the port of Savannah, and now for the preservation of Fort Pulaski. Take a walk around the outside of Fort Pulaski to see how, like potters with clay, humans have molded Cockspur Island's landscape to fit changing needs.

Beginning at the first drawbridge, use Map 2 to find your way around the fort.

Basics

Time: 30-60 Minutes

Distance: About ½ Mile

Directions: See the map on the last page. From the first drawbridge, walk counterclockwise around the outside of the moat until you return to your starting point.

Safety:

- Watch out for armadillo holes and fire ant hills in the grass.
- Alligators are common in and around the moat and feeder canal. Do not approach, tease, or feed the alligators.
- Avoid walking along the edge of the moat. Please stay in the grass to avoid tripping or falling in.

Stop 1: the Moat

- Fort Pulaski's design was influenced by French engineer Simon Bernard and U.S. Army engineer Joseph Totten, blending European architecture with American military needs.
- To be a barrier to enemy soldiers attacking the fort, a moat was dug around the fort to a depth of seven and half feet. (See Map 1.)
- Swimming across posed a double risk: drowning and wet gunpowder.
- This defensive feature created an additional habitat for native wildlife on Cockspur Island.
- Though they live in the freshwater ponds on the island, alligators use the partially saltwater moat to hunt the plentiful fish that enter through the feeder canal.

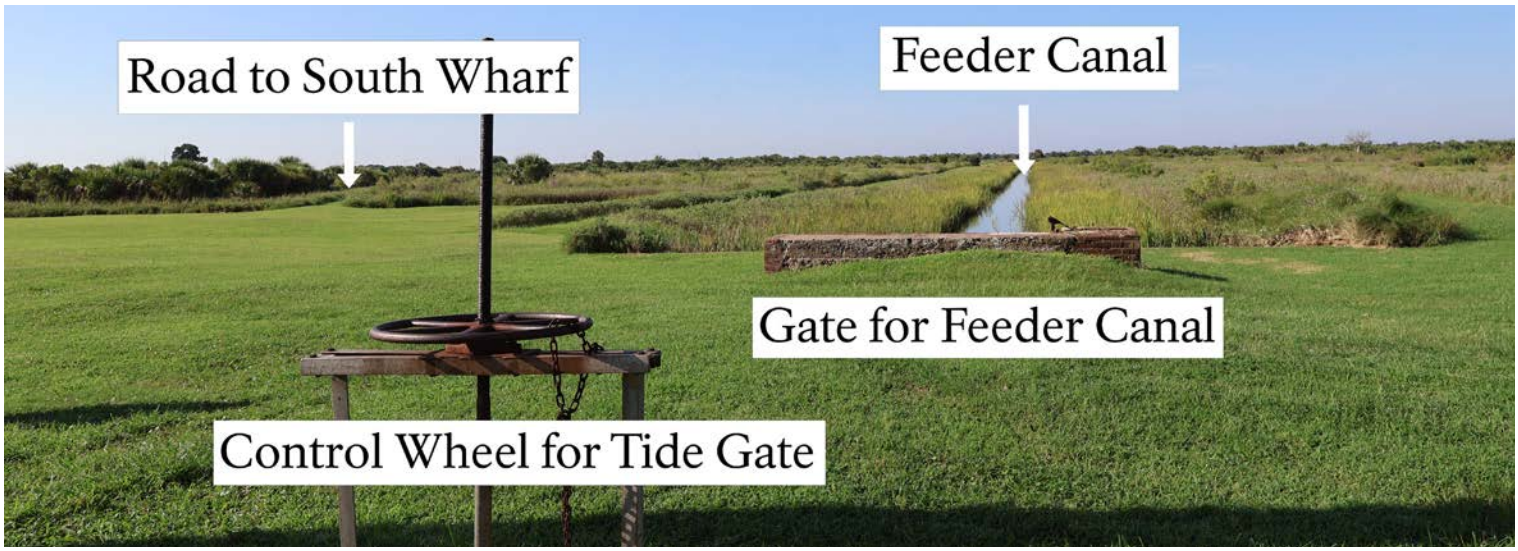
Who benefitted from the construction of the moat the most: the fort's defenders or the island's wildlife? Why?

Stop 2: Feeder Canal

- Engineers used the island's location in the Savannah River to keep the moat filled with water.
- To connect the moat to the south channel of the river, enslaved workers dug a canal and built tide gates at both ends.
- When the gates are open, the tide moves water in and out of the moat. When closed, the water level stays the same.

- During the Civil War, soldiers dumped waste into the moat and flushed it by opening the gates—turning it into what may have been the world's largest toilet!
- The canal and gates still work today – you can even see the wheel rangers use to open one of the gates near the palm trees.

Dumping waste into the moat benefitted people but harmed wildlife. Can you think of any actions in your neighborhood that benefit humans but negatively affect local animals or the environment?



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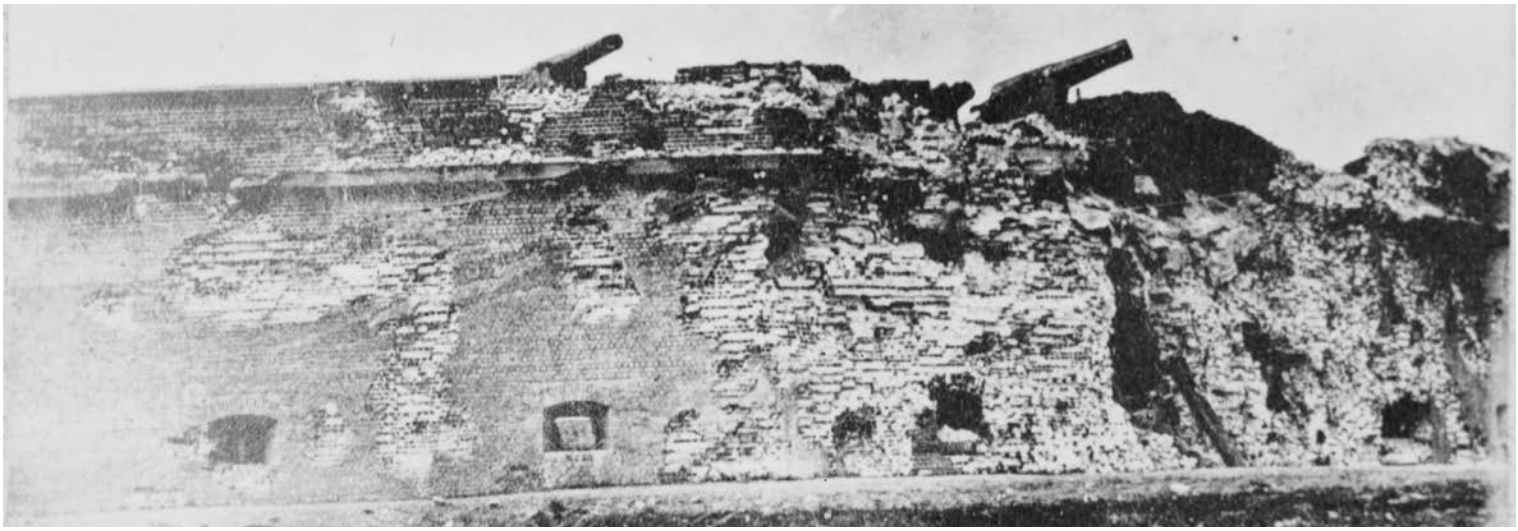
Stop 3: Road to South Wharf

- Before work on the fort began, two piers—one on the north side of the island and one on the south—were built to receive shipments of construction materials. (See Map 1.)
- From this spot, you can see a mowed path that was once a road leading to the south wharf on the river.
- During the fort's 18-year construction between 1829 and 1847, canals connected both piers to the building site so workers could float supplies on flat-bottomed boats.
- A small railroad also ran from the south pier to the fort, where mules pulled carts loaded with bricks along its narrow tracks.

If you were to build Fort Pulaski today, what tools would you use? Compare and contrast modern construction and transportation methods with those used to build Fort Pulaski.

Stop 4: the Breached Corner

- With its 7- to 11-foot-thick walls, Fort Pulaski was thought to be the strongest brick fort in the nation.
- It was built to withstand a bombardment by inaccurate smoothbore cannons firing spherical cannonballs.
- During the Civil War, Fort Pulaski was occupied by 385 Confederates. In April 1862, the U.S. Army used a new artillery technology – rifled cannons firing bullet-shaped projectiles – from nearby Tybee Island to knock down the walls and force the Confederates to surrender.



The Breached Corner after the Battle of Fort Pulaski.
Library of Congress

- The effectiveness of rifled cannons marked the end of brick-and-mortar fort construction.
- The large section of red-orange brick on this corner indicates the repair work done by U.S. soldiers to patch the holes following the battle.
- If you look above the second opening to the left of the patch, you can see a small, dark circle. That is a rifled projectile that has been embedded in the wall since 1862! At least 5 more can be found as you continue to walk around the fort.
- The cannon protruding above the fort was damaged during the bombardment – proof of the increased accuracy of rifled cannons.
- The National Park Service has not repaired this damage because it is a visible reminder of the power of rifled cannons and the fight for freedom that happened here during the Civil War.

How do you think the invention of rifled cannons changed the way forts were built after what happened here during the Bombardment of Fort Pulaski?

The Breached Corner was repaired during the Civil War. Battle scars still remain.
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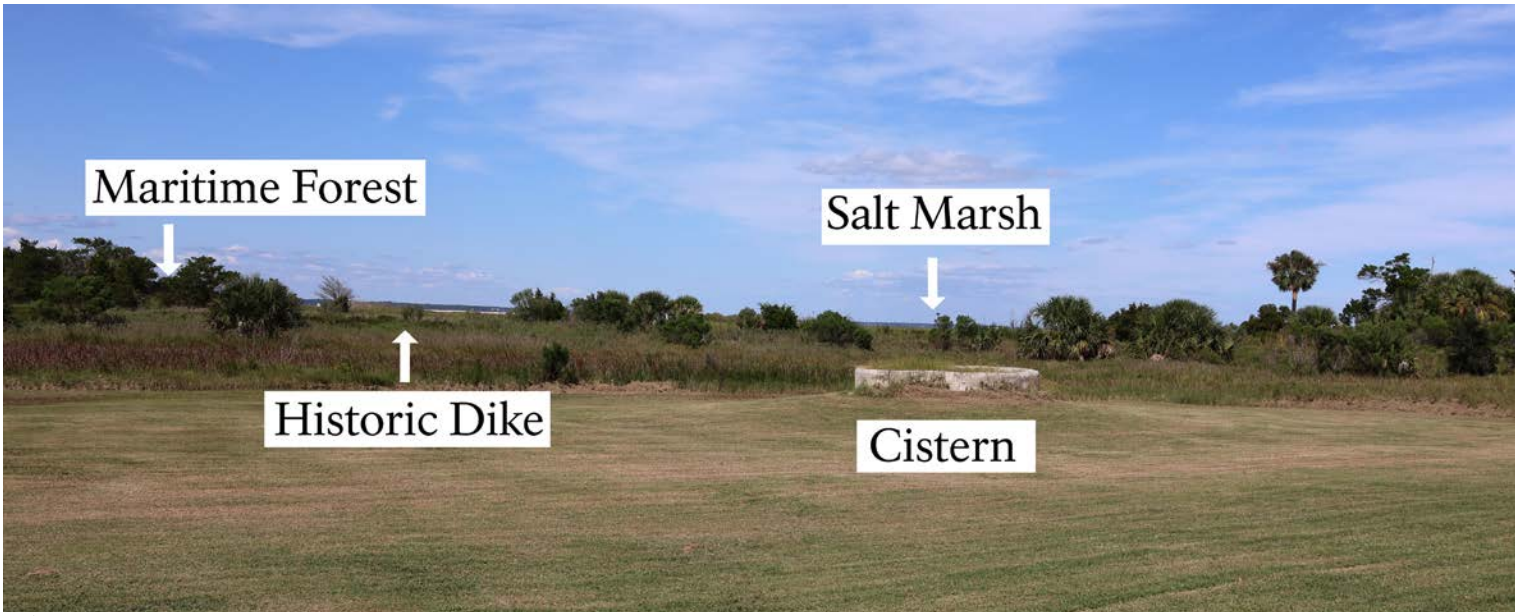
Stop 5: A Changing Landscape

- From this position looking northeast beyond the brick cistern in front of you, you can see the many eras of human engineering on Cockspur Island.
- In the far distance beyond the trees you can see salt marsh, the original habitat of the island.
- Salt marsh develops where land is protected from waves yet is submerged daily by the rise and fall of the tide. Only marsh grasses, not trees, can grow in such a harsh environment.
- When Cockspur Island was selected as the location for the fort, the first feature engineers designed was a dike system – a network of raised earthen barriers that protected the interior of the island.
- Between the salt marsh and where you currently stand, you can see the historic dike, which is about 12 feet above sea level to block high tides and storm surges and keep the island's interior dry.
- Once the dike was completed, laborers constructed the Worker's Village with workshops, barracks, and offices for the U.S. Army Corps of Engineers and a mixed labor force of free and enslaved workers.
- An important feature of the village was freshwater storage. The round brick structure in front of you is one of the many cisterns built on the island to store fresh water and supply it to the workers.
- After the Civil War, Cockspur Island's landscapes continued to change.
  - Hurricanes destroyed the Worker's Village, leaving the cisterns as the only remnants of the once bustling village.
  - In 1909, all shipping was shifted to the north channel of the Savannah River.
  - To accommodate the ever-increasing size of cargo vessels, the river has been repeatedly dredged – the sand from the bottom of the river was deposited on the island, eventually raising part of the island out of the salt marsh.
  - The higher sections of land, no longer covered by saltwater tides, supported new plant growth.
  - Through ecological succession, trees grew on both sides of the historic dike creating vibrant maritime forests that provide shelter for deer, coyotes, and bobcats.



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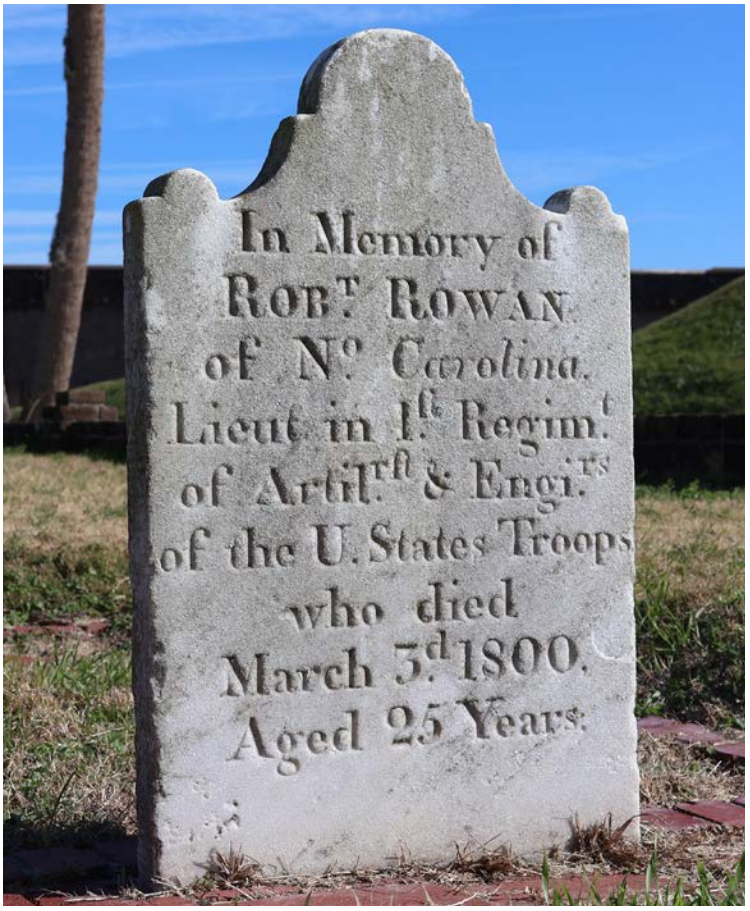
- From this one spot you can see the time capsule of Cockspur Island's changing landscapes – each layer telling the story of how people shaped and have been shaped by this beautiful coastal environment.

What problems might sea level rise cause for the wildlife on Cockspur Island and the preservation of Fort Pulaski?

Stop 6: Cemetery

- This cemetery serves as the final resting place for a diverse group of people.
- It was first used a burial ground for laborers, including enslaved workers, who died while building the fort.
- During the Civil War, several dozen soldiers were laid to rest here - 13 Confederate prisoners who died from disease and starvation during their imprisonment and about two dozen U.S. soldiers who died from other causes.
- Though the U.S. dead were later reinterred at Beaufort National Cemetery, the Confederates remain, along with Charles Sellmer, the infant son of a soldier stationed here in 1872, and Lt. Robert Rowan, who served at Fort Greene, built before Fort Pulaski in the 1790's and destroyed by a hurricane in 1804.

How might the stories of the people buried here help us understand the history of Fort Pulaski and the Civil War?



Lieutenant Robert Rowan was reburied during the construction of Fort Pulaski.
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Stop 7: Demilune

- The demilune is a triangular feature built to protect the single entryway into the fort. Its purpose and appearance changed over time.
- At first, the demilune was flat with earthen parapets and 28 gun platforms along the edges with space for the fort's kitchen in between.
- After the Civil War, these earthen mounds were constructed to protect new gun platforms and shelter their magazines in tunnels underneath.
- Inside the tallest mound was a radio control room that was connected to torpedoes in the north channel of the river by long cables. Those torpedoes could be remotely detonated from the demilune at the press of a button!

Why do you think engineers used earth instead of brick to strengthen the demilune? Think about how new weapons might have changed the way forts were built after the Civil War.

The Demilune during the Civil War.
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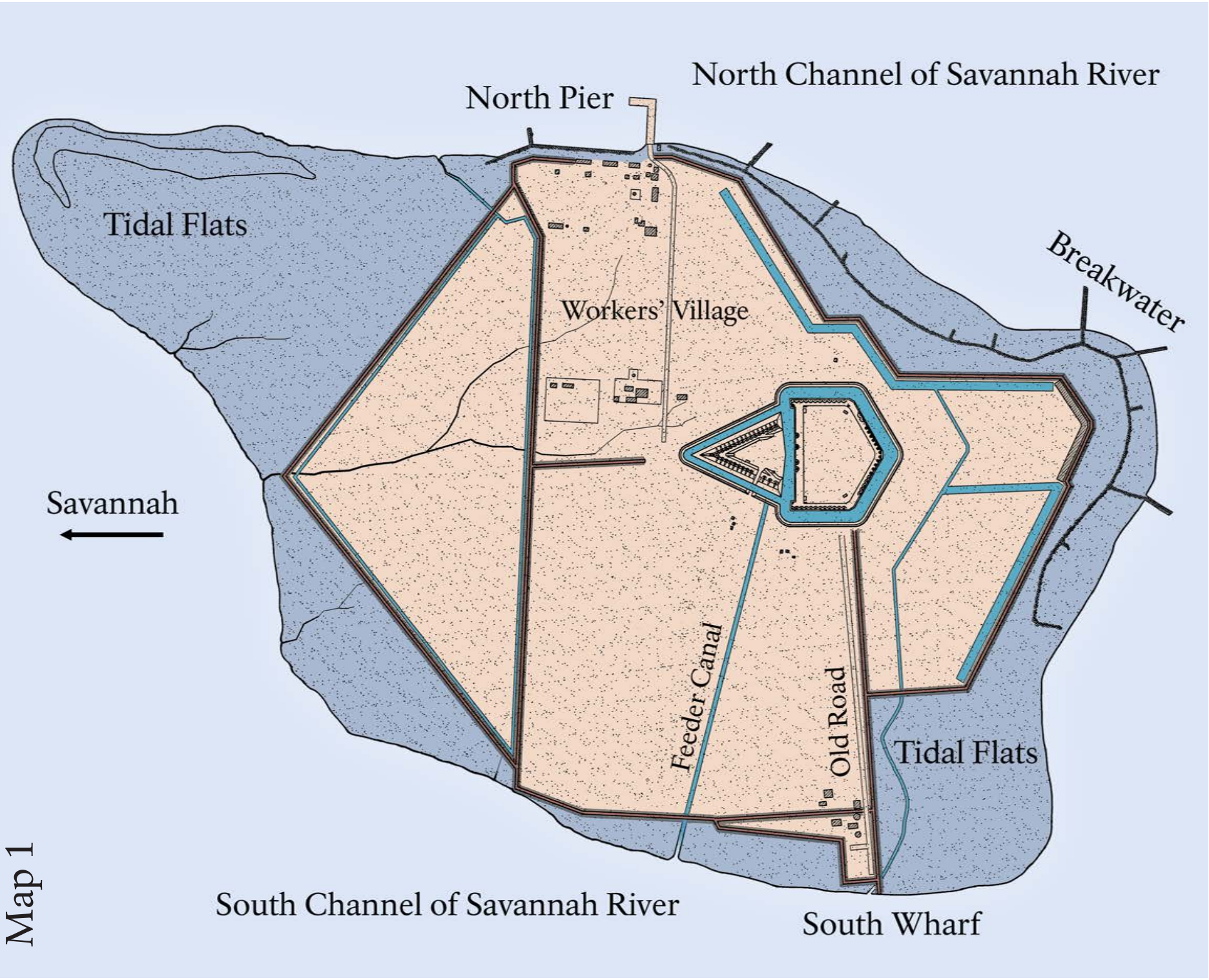
Conclusion

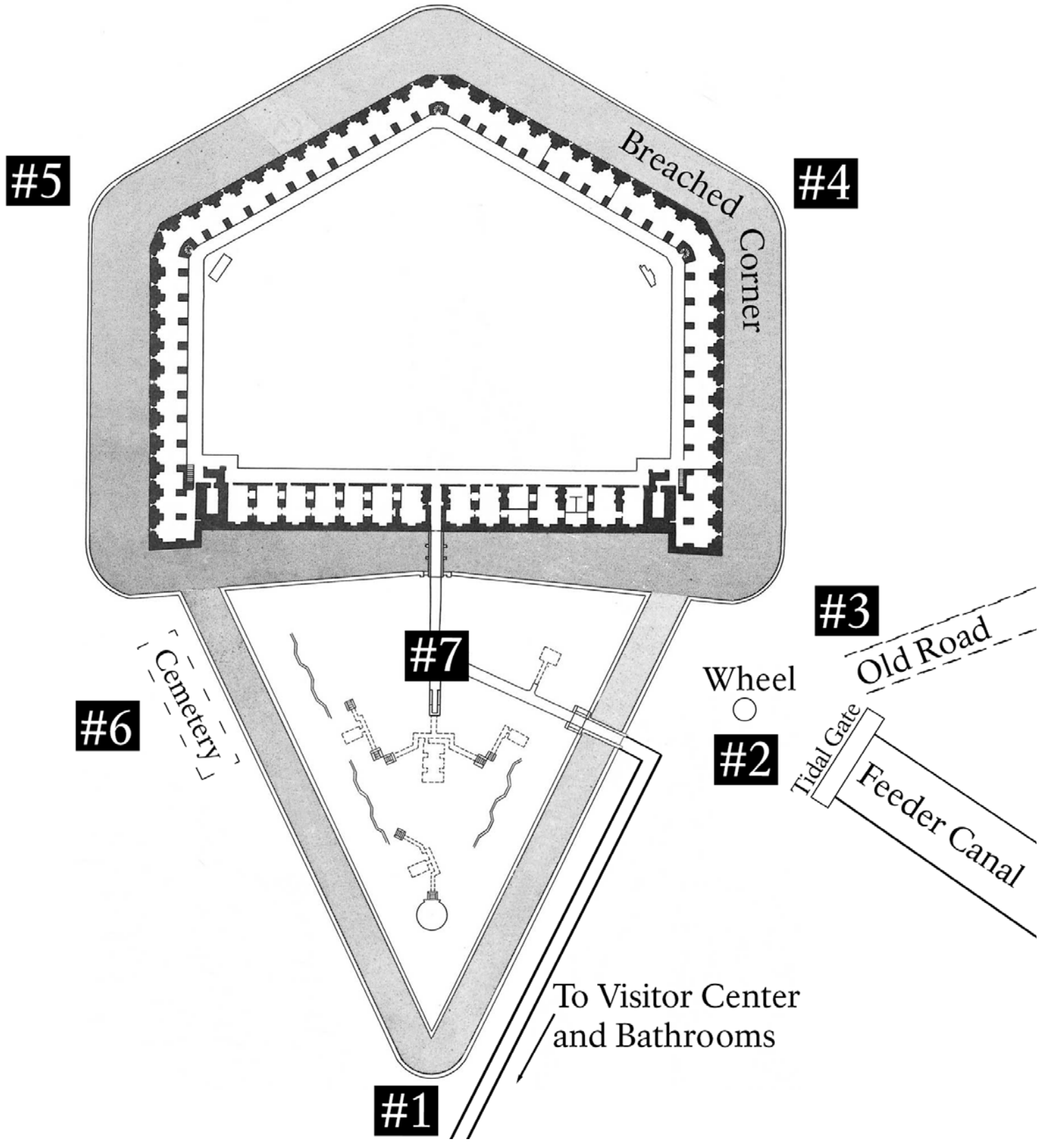
Now that you have completed the walk around the outside of the fort, take a moment to reflect on the layers of history all around you. Cockspur Island tells a powerful story of human impact and the island's resilience. As the landscape continues to change, the National Park Service manages the island to preserve the historic fort, related structures, and their surrounding natural resources. By learning and sharing its history, you can help protect Cockspur Island for years to come.

Cockspur Island in 2012. The island still relies on the ditch and drainage system constructed in the 1830s.
NPS PHOTO


North Channel of Savannah River
North Pier
Tidal Flats
Breakwater
Workers' Village
Savannah
Feeder Canal
Old Road
Tidal Flats
South Channel of Savannah River
South Wharf

Map 1

Map 2


#5
Breached Corner
#4
#3
Old Road
#7
Wheel
#6
Cemetery
#2
Tidal Gate
Feeder Canal
To Visitor Center
and Bathrooms
#1