



Sarah Thompson and author excavating the base of the Altamaha jar

Archaeology in the face of erosion at Mission Santa Catalina de Guale By Matthew Napolitano

When American Museum of Natural History archaeologists closed down the dig at Mission Santa Catalina de Guale in the late 1990s, they knew it was one of the most important Spanish colonial sites in America. But because the mission is located on the western scarp—thought to be one of the most geologically stable spots on the island, they believed the unexcavated archaeological deposits should survive, safe and intact for decades. It turns out we were all wrong. In recent years, Wamassee Creek has been meandering closer and closer to the island, literally carving away parts of the unexcavated mission deposits. In fact, the mission site has become one of the fastest eroding places on St. Catherines Island. Whatever the cause of the accelerated erosion, we're losing five to ten feet of the mission site each year. We can't stop the erosion, but we can rescue the information and artifacts that are disappearing at a record clip.

To mitigate the erosion in the most impacted area, archaeologists returned to Mission Santa Catalina in the fall 2011, and have spent six full field seasons excavating the most endangered parts of the site. We chose specific excavation areas based on the results of remote sensing surveys and proximity to the eroding edge. Perhaps the highest risk area is a shell midden with a large oak tree growing out of it. The midden and oak tree are severely undercut and whenever the oak tree falls into Wamassee Creek—and that will happen sooner than later—it will take the midden and surrounding area with it. This area also contains a strong magnetic anomaly, suggesting other important features buried nearby. We first tested here in the fall 2011 and returned to the same area this last September.

Both excavations discovered a variety of mission period artifacts, including ball buttons from military uniforms, majolica pottery fragments, dozens of glass beads, and assorted iron artifacts. The most exciting find was a nearly intact Altamaha-style jar. Although the vessel had broken long ago into more than two dozen pieces, it remained in place. Whole ceramic vessels are extremely rare at Mission Santa Catalina, and it took us days to meticulously excavate and document the jar. We collected all the surrounding soil for future botanical analysis and accurately mapped each of the broken sherds. We are sending a sample of sherds out for residue analysis to study any preserved starch grain or pollens that may still be on the sherds which will help us understand better what life was like at the mission—then we'll reconstruct the vessel good as new.

Our efforts to mitigate the alarming erosion of Mission Santa Catalina illustrate the importance of conservation goals to the overall program of archaeology on St. Catherines Island. The erosion will doubtless continue and we will keep directing our excavations at the mission site and other high-risk spots on the island. It's all about trying to save the past for the future.



View from Wamassee Creek of the eroding scarp and shell midden at Mission Santa Catalina de Guale

Mid-winter Waterbird Count 2013

On the cool and breezy morning of January 17th, a select handful of bird-counters disembarked from the boat at the island, ready for an adventure getting to their pre-determined area of beaches. This is not the first time for any of these birders, and they arrive ready to go conduct the annual Mid-Winter Waterbird count. Started as the annual Piping Plover Count 13 years ago, over the years it has become more encompassing, recording every bird that one sees on the beach, with a focus on any bird using the shoreline/ocean for a living. The protocol remains the same, conducting the surveys in the 4 hours around high tide (shorebirds congregate at high tides and are usually much easier to see & count). This annual survey is conducted along the entire Georgia coast at the same day and time. Approximately 50 volunteer birders (in addition to all of the Georgia's islands staff members) are needed to accomplish this task.



Black-bellied Plover
Pluvialis squatarola



A favorite on these counts are the Black-bellied Plovers. Their name is a bit of a misnomer, at least in the winter, when the only black to be found on these Plovers is on the "armpit" which can only be seen while flying (photo, left). They, like most shorebirds have a much less noticeable plumage in the winter-time, black and white speckling that resemble grey from a distance. In the old world, these birds have the common name Grey Plover, more indicative of their winter plumage. This is the plumage that we usually see them in throughout the

winter at SCI, but come April & May (when there is still snow on their breeding grounds), the molting of their feathers brings the full-frontal dark-black plumage that is just so eye-catching. It is striking enough that it is a favorite shorebird among artists, as seen in these portraits (special thanks to artists, James Coe (top right), and Allen Brooks (right).

Black-bellied Plovers are the largest N. American plovers, a group of medium-sized shorebirds with upright posture, large eyes, rounded heads, thick necks, short, rather chunky bills and medium length legs. Black-bellies are cosmopolitan birds, being found on most of the world's coastlines. They breed at 2-3 years of age, in the far Northern hemisphere, on the tundra and low-lying coast. They are seasonally monogamous, spending approximately 2-3 months together, nesting, incubating, raising and fledging chicks. The adults have gender roles with males making the scrape (literally, a scrape on the ground that is used as a nest), and females line the scrape with lichen. They share incubation and chick-tending duties until around day 12 when the female abandons the chick(s) to the male's care. He remains with the chick(s) until they are independent at about 23 days.

The chicks are born precocial (I think of them as pre-made), coming out of the egg a little wet but ready to go within 20-30 hours. The parents will lead the newly hatched, yellow, pebble-patterned downy chicks away from the nest and to the feeding areas within that time. The chicks begin feeding on their own within 12 hours of hatching. In a little less than a month, the chicks are ready to fledge and start out on a trans-continental migration to warmer, southern regions for the winter, some coming and spending the winter here on SCI.