



Cumberland Island Museum NEWSLETTER

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Editors: C. Ruckdeschel and A. Mahoney

**IN THE NAME OF
FIRE**

Left: Firebrakes along Shell Rd.

Right: Trail returned to road

C I Museum News

CUMBERLAND ISLAND EXHIBIT

Fernbank Science Center, Atlanta, GA

Thanks to Carolyn Rader, an exhibit of Diane Kirkland's photographs, "*Cumberland Island, A Fragile Beauty*," was



CAROLYN RADER

presented jointly by Fernbank Science Center and the **Cumberland Island Museum** at Fernbank in Atlanta. This was accompanied by a talk on Sunday 30 June 2019, given by Carol Ruckdeschel and a book signing for her volume: "*A Natural History of Cumberland Island*." The event was supported by a grant from the Georgia Humanities Council.

Doing this was a challenge far outside my (CR) usual realm. A friend from St. Marys generously offered to drive me up to the big city for the event. I have been primarily on an ATV for many

years, and definitely dared not drive myself. We drove up Saturday, and were at the planetarium at 2pm Sunday, after a quick check at the DeKalb Farmer's Market. Following that, things are a blurr. I had been warned that there might be 200 people present. Gulp. But anything over 20 or 25 is all the same to me. I shuddered, but endured. Later I was told they had to turn people away because the building was filled to capacity, 500 people! That is more people than I might see in a year on the island. The book signing followed the talk, and I was told that they ran out of books. All overwhelming for me.



CR SIGNING BOOKS



FERNBANK PLANETARIUM

From all the energy and love for Cumberland that the people at the exhibit displayed, the impetus for revitalizing WildCumberland was born. Many volunteered to help, so look forward to hearing more from WildCumberland.org in the months ahead. Check the website: www.WildCumberland.org.

ATV

The brakes on the ATV used for the weekly surveys went out rather suddenly a couple months ago. Adjustments helped only slightly. Upon close inspection after removing the right rear wheel, it became clear that not only the protective cover, but the brake housing had been sand-blasted open, which allowed sand to partially fill the compartment. The shoes still had plenty of miles left on them, but the drum had been gouged and grooved, so both were replaced. Considering the vehicle gets a minimum of 160 miles a week, and is 9 going on 10 years old, that is understandable. All is back in working order now.

SEA TURTLES

Sea turtles are all classified as Endangered Species, which requires special efforts be made managing their nesting habitat and other aspects of their lives. When I first came to Cumberland and began working with sea turtles, not a single nest survived the hundreds of hungry hogs roaming everywhere. This was true for most of the Georgia barrier islands in the late 1960s and early 1970s.

In 2001, the conservation group, Defenders of Wild Cumberland, filed a legal action against the NPS for failing to control the hogs and thus protect the sea turtles, which they then agreed to do. This relieved enormous pressure on the turtles. Slowly, nesting numbers climbed, presumably a result of greater protection of all nesting areas along the East Coast. This year, the number of nests on Cumberland Island is the highest recorded, well over 1000. Saving eggs, coupled with other protective measures, has worked. The state has since decided, based on a model, that a total of 2800 nests on Geor-

gia beaches would indicate sufficient recovery to meet regulations.



TIDE OVER TURTLE NEST

Now, state protocol directs the turtle technicians to move no more than 30% of the clutches that had been laid low on the beach, thus subject to inundation, up onto the dunes. They based this figure on a population model done in 1987, which showed that a 40-50% hatch success should be sufficient to recover the population. The actual number of low clutches relocated up on dunes usually depends upon the amount of turtle activity and thus the amount of time the technicians have that day. But they are continually warned against moving more than 30%. Everyone knows that nesting cycles are just that, up one year and down the next, hopefully creating a happy medium. This year, fewer than 30% clutches were moved. Turtle workers often are not familiar with tides and details of hatching, so usually follow orders.

On 3 August 2019, three days after the new moon, a light east wind pushed the already high tide even



TIDE OVER TURTLE NESTS



TIDE OVER TURTLE NESTS



KAYLA SILVA AND ABBY FLORES, TURTLE GIRLS

higher, inundating 252 of the remaining low turtle nests on the island, many of which were due to hatch within a day or two. The turtle girls were devastated at the mortality. They did not expect that. It will be interesting to see how many clutches hatch this season. Have sea turtles really “recovered” to the point

we no longer need to be concerned about losing clutches? With warming conditions, we should expect more and more nesting sea turtles on Cumberland Island, and hope the “model” takes that into account.

BALLOONS

A First Step

Judging from the number of balloons, both latex and mylar, found dead on Cumberland Island, we, and no doubt the entire state, has a balloon problem. They wash ashore on the beach and fall from the sky all over the island. Even in the most remote places, you are likely to come across a dead balloon.



Notice at the grocery store check-out lines the colorful balloons begging to be released from their tethers. Besides birthdays and graduations, every holiday produces an increase in numbers, especially Valentines Day. In 2018, on my (CR) survey following Valentines Day, I counted 50 dead balloons on the beach.

The St. Marys Earthkeeper, Alex Kearns, took the local balloon issue to the St. Marys City Council and sparked their interest. They confirmed her case with the staff at Crooked River State Park and with Gary Ingram, superintendent at Cumberland National Seashore. All agreed that balloon releases were posing a problem to the maritime and terrestrial environment. The Council changed an ordinance this June, to make intentional releases of balloons in the city illegal, with a \$100 fine for the first offense and \$500 for the second.

The next step Alex says, is to talk with the folks at Kingsland and those in the County about passing similar ordinances. Thank you, Alex!

SNAKE IN CHICKEN HOUSE

For over a month, a snake has been stealing eggs from my chicken house. I peeked in at all times of day, hoping to see it, but it remained elusive. In desperation, I tried using a trail camera to verify the species and size. After an inordinate number of mishaps, I finally got a picture; it was a fairly large Chicken Snake, as expected. I beat it to the eggs for a couple of days, then finally saw it. It was a most beautiful, docile Chicken



CHICKEN SNAKE

Snake, but the odor from it scared the devil out of my cat. Could it be the same snake that traumatized the cat in my house months ago?

SNAKE ON THE MAINLAND

Exotic species are showing up everywhere, even in Camden County. At the end of July 2019, a Ball Python, *Python regius*, was spotted in St. Marys. This species is bred in captivity for the pet trade. It is native to sub-saharan Africa, and may have trouble with our winters, if they ever get cold again.



BALL PYTHON, CAMDEN COUNTY

THE HARVEST IN THE SETTLEMENT

This is certainly a good year for plants in the Settlement, both wild Muscadines on the island and my Scuppernongs have bountiful fruit, as did my figs. The Moringa trees produced many fruiting structures, which are a favorite culinary treat for me, and butter-nut squash did well also. I am particularly excited about some new additions to the garden. A friend



POMEGRANATE

gave me a Pomegranate tree, which had flowers the second year and thereafter, but now has its first gorgeous fruit! Likewise, my Kafir Lime tree, *Citrus hystrix*, has supplied its flavorful leaves for years, and now has its

first fruit. Two other plants, herbs, Cuban Oregano, *Plectranthus amboinicus*, and Culantro, *Eryngium foetidum*, a hot-



KAFIR LIME



BITTER GOURD

weather Cilantro-flavored plant native to the tropical Americas and the West Indies, are both doing well. My Bitter Gourd vines, *Momordica charantia*, are producing, and one

Banana Tree has a robust flowering stalk. The season began poorly, with drought and high heat causing the regular summer garden plants to fail.

JARED BREWER

Chief, NPS Cumberland Island Law Enforcement

In February 2019, Jared Brewer came to Cumberland Island as Chief of Law Enforcement. At that time, there were no Park law enforcement people serving here. Two employees of the Camden County Sheriff’s Office were here several days a week fulfilling the Navy contract, but also surveyed the entire island.



JARED BREWER

transferring to Cuyahoga Valley National Park in Ohio. After eight years in Cuyahoga, he went to Lava Beds National Monument in NE California as Chief of Law Enforcement. Following three years at Lava Beds, he transferred to Cumberland Island National Seashore.

Cumberland Island is, and has been, vastly under-staffed for a number of years. We hope soon the Park can get back to its original status and function as it was intended.

Jared is very friendly and is looking forward to meeting visitors and island people, and seeing that things run smoothly here.

PARK ISSUES

Besides addressing the new development threatening the island and the potential facility for launching rockets over the National Seashore, the Park has an uncontrolled bicycle problem, a continuing horse problem, and intrusions from commercial tour businesses to address. The new Chief Ranger has his hands full. Mechanized equipment is not permitted



BICYCLE TRACKS BEHIND DUNES



BOAT TOURS ON S. POINT

in Wilderness, yet bicyclists ignore the rules. Both kayak and two-person, outboard propelled, compact watercraft tours come regularly from Amelia Island and land on South Point. The people then wander the dunes and shore.



FIRE

and FIREBREAKS

In planning for future fires, the NPS has for the last few years been mulching, grubbing, and mowing firebreaks along every major road on the north end of the island, over 12 miles, and around all structures. The area cleared along roads ranges from six feet to over 60 feet wide, and around structures, up to 100 feet. It totals a little over 40 acres, absolutely destroying any Wilderness character of the area. A new road has also been opened and a foot trail was returned to a road. It is



AERIAL PHOTO OF FIREBRAKE IN SCRUB NPS PHOTO



ironic that this unsightly destruction occurs only on the north end of the island. The roads on the south end are free of firebreaks, despite the many more structures to be protected in the area. And this is not a one-time incursion. These major modifications of existing vegetation will require regular maintenance with heavy equipment, guaranteeing the continuing loss of Wilderness character into the future.



FIREBRAKE BEING MOWED ALONG N. FRASER RD.

Mowing opens the area to invasion by non-native plant species. It changes light conditions, wind patterns, soil and water availability, enhances predation, and fragments the landscape, essentially creating a loss of functional habitat. Is this devastation of the ecosystem and Wilderness character likely to offer effective fire protection? Once, while using my outdoor shower, dark flakes began falling around me. Some pieces were glowing. The sky was FULL of floating, falling debris from a fire ... on the mainland miles away!



FIRE ALONG THE NOMINAL BUNKLEY TRAIL

The most recent natural fire on Cumberland Island, 29 June through 24 July, was in the scrub. It went out on its own, having done little good, despite all the ineffective backfires which were set, new road opened, and foot trail opened to vehicles. The backfires served the fire people well by burning out many



NPS PHOTO NEAR SOURCE OF IGNITION

stumps and down trees, which will facilitate future mowing, but encroached little on the adjacent natural habitat.

Scrub communities are rarely appreciated. Their thick tangles of low vegetation are not inviting to humans. One island person called them the “badlands.” On nutritionally poor soil, this specialized plant association depends upon intense, infrequent fires to maintain itself, while eliminating invading species. Such fires occurred in 1954 and 1981, with a lesser burn in 2008. This recent fire (2019) was, for the most part, superficial due to the amount of moisture in the system. While the ponds had no standing water, the soil remained moist enough to protect the plants from fire. It is this fascinating pyrogenic community, which has not caused the loss of any structure, that the fire people fear and want to manipulate for better control.



BUNKLEY POND

The NPS Fire Management Plan for the island has not been completed, so we cannot learn how frequently they plan to impose controlled fire on the scrub within Wilderness. They say prescribed fires are necessary due to prior mismanagement, i.e., their own efforts toward total suppression of natural fires. The majority of the scrub community is in Wilderness, but about a quarter of it is in the area that lost legal protection when Greyfield successfully lobbied and had it removed from Wilderness, allowing the NPS to have free reign. On 30 July 2019, the park conducted a controlled burn of the scrub in the area immediately south of the Candler compound. From the behavior of the natural fire on adja-

cent land during the weeks prior, it was clear the moisture level was high, allowing for good control. Their drip-torch ignition was augmented by helicopter aerial ignition, leaving a distinctly mosaic burn. Overall, few pines were killed. The fire did not reach the Candler compound, and backfires lit there did not carry into the adjoining land.

Was it a success? For the fire people it was; for the scrub community, probably not. There will be slightly less fuel for the next fire. Studies have shown that increased fire frequencies increase palmetto dominance, and that some other native species can be eliminated by fire cycles of less than ten to 20 years. Manipulating fire frequency could potentially shift species composition. For reptiles, it has been found that there may be a change in domi-

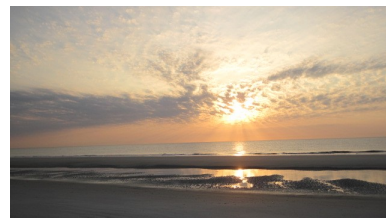


TOKEN BACKFIRES BEHIND CANDLER COMPOUND

nance and number of species, when habitat itself changes in long-unburned forests. We will be keeping an eye out for the revised/updated Fire Management Plan.



NPS BACKFIRE ALONG SHELL RD



THE TOLL OF ISLAND LIFE

FOR MORE INFORMATION GO TO:

WildCumberland.org



Photos by E. Elliott



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CHECK OUR WEBSITE: : WWW.CIMUSEUM.ORG