Cumberland Island Museum NEWSLETTER

The Chimneys

The Park Service has been working on salvaging/stabilizing remains of the hospital building, or so it was called, at the Stafford slave settlement. In the past, they have done archaeological investigations and stabilization of individual cabin chimneys.

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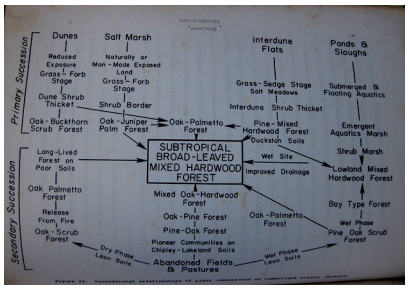
UPDATE ON FIRE

HISTORY The National Park Service (NPS) 1979 Fire Management Plan (FMP) states that on Cumberland Island the "general plant succession pattern is from grasses… climaxing in a mixed hardwood forest," and "that grazing and browsing animals … have severely restricted plant propagation of hardwood seedlings." Those comments were followed by a caveat: "documentation and research needs to be conducted before the park engages in any prescription burning. This should be an important active research effort lest it become a decision by default and possible existing unnatural conditions be perpetrated." Prophetic words.



BOZEMAN'S SUCCESSION FIGURE

Without that research, the NPS has continued to burn much of the island and now plans to deliberately burn 302 acres in the Wilderness this year, according to the recent update to the FMP. The complex relationship of fire to the various island ecosystems is never mentioned. Nor is the possibility that abuse of it may be detrimental to the survival/integrity of the communities. Their plan is a one-size-fits-all from the north end to Stafford; not an ecologically sound plan.

In 2019 we explained how the National Park Service was cutting firebrakes around structures, which was practical, but also along roads on the north end, which destroyed any Wilderness character they retained (vol.30(2&3) Aug & Dec2019. Then in April 2020, when the scope of their ecosystem destruction increased, showing no awareness of the relationship of various ecological communities to fire, we provided a detailed explanation of the events occurring along with a reminder of the NPS stewardship responsibility to the public. Presently, this plan authorizes deliberate burning of 302 acres in the Wilderness this year.

The NPS using words that sound professional, such as "beneficial" and "necessary for the health of the ecosystem" does not change the reality in the currently recovering maritime forest. In practice, The Cumberland Island Park Superintendent's signature is all that is required for carrying out the FMP, and they have that.

Most members of the public never read a Fire Management Plan until it is too late. How many can ecologically evaluate it? Instead, we blindly trust the NPS to manage our park lands in a way that will leave them unimpaired for future generations.

A major flaw in establishing the base line for the original NPS FMP was failing to acknowledge the impact feral livestock (horses and cattle) have had on the island. In the NPS's own words, "as recently as 1975, about 400 cattle, 100 horses, and 2000 hogs roamed the length of the island…." Fresh cattle sign was last seen in August of 1987, after which, all animals were confined. The scar they created

FREE-ROAMING CATTLE PRIOR TO 1987

ed during their decades of free-ranging (since the late 1800s) left attractive open vistas and open trails, but they were not sustainable without the animals. During the livestock's tenure, there were no beach dunes, a distinct browse line throughout the island and the understory was open and park

NO STABILIZING VEGETATION TO ANCHOR DUNES

-like. Then, freed from the intense grazing pressure, the recovering vegetation began its slow, inexorable reclamation of the land. For a person new to the island, which most staff and visitors are, the new understory growth was disturbing. Thick, unforgiving briar and grapevine tangles and brigades of saplings shoulder to shoulder grew up preventing easy human access and hiding trails. None of it good by our usual standards. Instead of appreciating the burgeoning new growth as natural recovery from intense grazing pressure, most island visitors saw it as a degradation of the landscape. They felt inconvenienced to have less access to parts of the island. The Park had a perfect fix. Blame it on the total fire suppression policy they had for 38 years and now burn it all!

Many people assume fires are a natural process when vegetation becomes thick. However, naturally occurring fires are

UNDERSTORY OPEN (*From BOZEMAN, 1975)*

relatively uncommon on Cumberland. During the period from 1977 through 2004 (27 yrs.), the island had only 0.62 lightning fires per year and they were suppressed. There were seven years no fires were recorded and very little acreage outside the scrub, the only fire-adapted island community, burned. Ten of the fires went out on their own. It is not possible to determine how many acres burned without precise descriptions of the areas.

UNDERSTORY 2022

WILDERNESS

When Cumberland Island National Seashore was being established, conservationists worried that the NPS might not give natural ecosystems adequate protection, so they worked to get most of the island congressionally designated Wilderness in 1982. This mandated

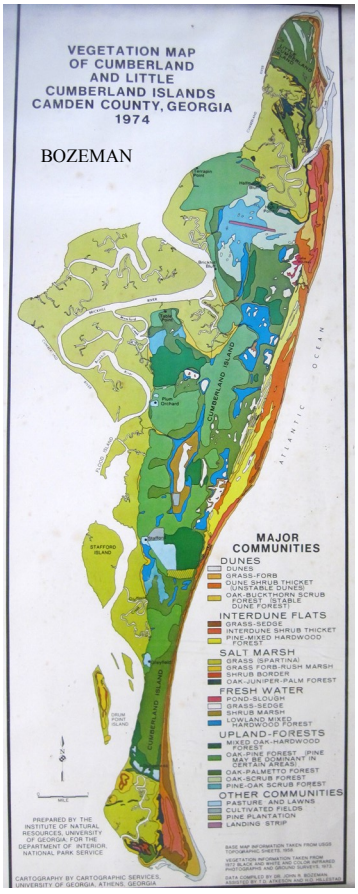
KILL YOUNG OAKS IN OLD FIELDS

DEAD SNAGS CUT WHY?

development of a Wilderness Management Plan (WMP) which the NPS has failed to complete in the intervening 40 years, leaving the management of Cumberland Island's Wilderness unfocused. This has resulted in severe mismanagement, in this case through manipulation of 2,542 acres scheduled to be burned 2021-2025, some areas as many as three times to kill small oaks and perpetuate pines in the recovering maritime forest.

NPS VEGETION MAP OF ISLAND

The "Ecological Survey of Cumberland Island" by Hillestad, et al. (contracted by the NPS, 1975) analyzed and described the major island plant communities both qualitatively and quantitatively and provided a practical map showing areal coverage of each community type. Functional relationships of the habitats and major communities with their successional relationships was also shown. The author, John Bozeman PhD, was limited to observations and analyses during one growing season only, which shaped his conclusions. Without rigorous observations over a century or more, some speculation is likely required to understand the succession of maritime forests. Bozrman's results are supported by many in that field



However, in 2015, to accompany the new Fire Management Plan (FMP), the Park Service produced their own map of "Vegetation and Developed Land Classes in Cumberland Island National Seashore," with 45 separate community divisions. No acreage is given for the communities. That lack of information likely contributes to the lack of detailed planning regarding the relationship of fire to specific communities in the FMP.

NPS VEGETATION MAP 2015

NEW FIRE MANAGEMENT OFFICER

Jordan Collier

Jordan Collier took over as Fire Management Officer (FMO) for the Atlantic Zone at the end of February 2022. He replaced Richie Sinkovitz as the FMO for Cumberland Island. and inherited the Fire Management Plan.

Jordan began his fire career as a firefighter with the Indiana Department of National Resources. More recently, he was Wildfire Operations Specialist at Everglades National Park.

PERTINENT FACTS RELATING TO FIRE AND MARITIME FORESTS AND WILDERNESS

Fire temperatures are higher under mature pines than under oaks, which ensures elimination of competitively superior oaks (Williamson and Black, 1981).

Writing of the pre-settlement natural habitats in northern Florida, Schwartz and Travis (1995) referred to the pine-oak hickory association as a mid-successional grouping of recent origin and not a natural community. In 1911, R. Harper commented that pine was scarce or absent on the SC and GA islands, and Bozeman, in the ecological survey of Cumberland Island (1975), outlined succession from old fields through grasses and forbs, to pine or pine-dominated forest, pine-oak forest, and eventually to a mixed oak hardwood forest/maritime forest. Meyers and Ewel (1990) explained that pines were successional following disturbance of the original hardwood hammock, and that the presence of pine on the Atlantic barrier islands may be a good index of human disturbance. In the absence of disturbance, maritime oak forest would presumably form a homogeneous cover across the upland portions of Cumberland Island (Turner and Bratton, 1987).

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NPS RESPONSIBILITY

The legislation establishing the Cumberland Island National Seashore (1972) directed the following: "…except for certain portions of the Seashore deemed to be especially adaptable for recreational uses, … the Seashore shall be permanently preserved in its primitive state, and no development of the project or plan for the convenience of visitors shall be undertaken which would be incompatible with the preservation of the unique flora and fauna or the physiographic conditions not prevailing…." Further protection was added in 1982 by the Wilderness designation.

Despite the fact that NPS policy requires a Wilderness Management Plan be developed with public input, that has not been done in the ensuing 40 years. NPS Management Policies, 2006, describe the purpose of Wilderness as including the preservation of Wilderness character and resources in an unimpaired condition and go so far as to state that appropriate restrictions may be imposed on any authorized activity in the interest of preserving Wilderness character. The Management Policies further state that management should seek to sustain the natural distribution, number, population composition and interaction of indigenous species. Environmental compliance requires proposals having the potential to impact Wilderness resources to be evaluated in accordance with procedures for implementing the National Environmental Policy Act (NEPA).

REPLACEMENT WILDERNESS SIGN

UPDATE ON THE OUTLET

Hurricane Irma closed off the "Whitney Outlet" in September 2017 (the first closure in over 40 years). Then in March of 2021, people dug channels from the nascent slough behind the primary dunes to and through the dunes. The es-

HUMAN-CAUSED BREACH IN THE DUNES, WILDERNESS

caping rush of water drained the slough and left a gaping chasm through the dune, which the NPS declined to repair, despite the fact it was within the Wilderness. Today, while some sand has accumulated at the site, modest storm tides will allow saltwater access to the interdune and likely kill vegetation. A fascinating study. Might this also be influenced by the opening of Christmas Creek?

NEW FRESHWATER DEVELOPMENT

Prior to last year, 2021, the road crossings to the beach on the south end of the island were sometimes flooded, while the northern access roads remained passable. That situation flipped in the last two years, as vegetation thickened in the interdune and stabilized the sand and dunes on the north end from Long Point to S. Fraser Rd., facilitating slough development. The park may also have put some sand on the Dungeness crossing. Presently, the Candler and S. Fra-

CANDLER'S BEACH ROAD ACCESSED FROM BEACH, APRIL 2022

ser Rd. crossings are frequently severely flooded, due to natural processes we presume. At the same time, those on the south end are dry. The only human caused change in the area we are aware of that might possibly affect tides and sand deposition on the north end was the opening of Christmas Creek to the Cumberland River. Fishermen in power boats now regularly access the creek that way and fish to its mouth at Long Point. Last week People said they waded across the mouth of the creek at Long Point at low tide and that the water was only

ALTERED DRAINAGE PATTERN FOR CHRISTMAS CREEK MARSH. Google Earth 2019 LONG CR. WAS OPENED TO CUMBERLAND RIVER TO ENABLE POWER BOAT ACCESS.

mid-shank deep. From all appearances,the original mouth of the creek may close off, joining Big and Little Cumberland islands.

SNIPPETS

- 25 March Electric box along Main Rd. in standing water. Low area north of Brickhill Bridge.

- 26 March Tal Galton leading group on ecotour of island.

Holly killed by deliberate ignition of pine stump across from Settlement.

From March 2021, NPS Law Enforcement under Chief Jared Brewer. Left: Caleb Hayes, Right: Giles Blummer.

In April , a New sign on Duckhouse Trail at beach. It fell over twice and has failed to deter bicyclists.

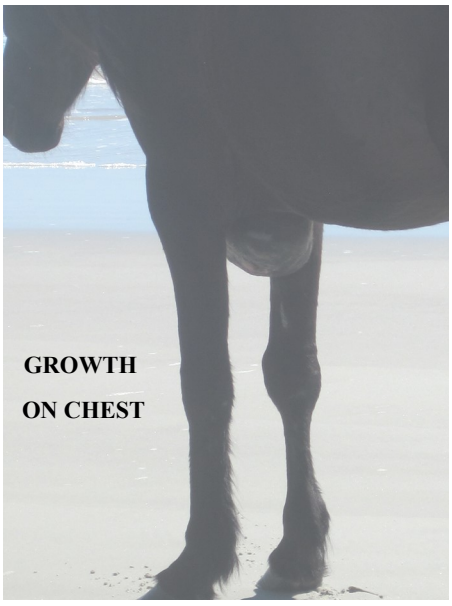
FALCON TRAPPING

In October 2020, falcon trappers based at Candler's trapped migrating falcons on the beach for private use. The Park restricted them from Park land, which meant they were allowed to operate only below the high tide line on the beach. They set up every day and captured many birds. (CIM NL31(2):2-3). Last year, 2021, they again had state permits and attempted to trap in the same location without a Park permit. The Park had banned falcon trapping within its legislated boundaries, which are offshore, so they were refused. One less hazard for the migrating birds.

OUR POOR HORSES ARE STILL SUFFERING

NASTY TEAR OR BITE WOUND ON INNER THIGH

WAITING TO DIE



GROWTH ON CHEST

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