



Southeast Coast Inventory and Monitoring Network

Southeast Coast Network News December 2023



Left, meeting attendees listen to OCMU's Gregory Luna Golya talk about some of the cultural and natural resource management issues at the park. Right, OCMU's Lead Interpretive Ranger, Robin Barker, "swears in" the SECN's Mallorie Davis and Alyssa Sanderson. Superintendent Carla Beasley records the "ceremony." NPS photos / M. Forbes Boyle.

FY2024 Workplan Approved at Steering Committee Meeting

The Southeast Coast Network's FY2024 Workplan was approved by the SECN Board of Directors at the annual Steering Committee meeting held in November at Ocmulgee Mounds National Historical Park. Thanks to everyone who was able to attend and provide feedback on our program. Special thanks to OCMU Superintendent Carla Beasley and her staff for hosting, and OCMU's Gregory Luna Golya for a great tour of the park. Copies of the approved workplan were sent to the SECN Steering Committee representatives, meeting attendees, and Park Superintendents. Let us know if you have any questions.

Katie and Wayne in the Community

Hydrologic Technician Katie Dagastino and Wildlife Intern Wayne Ryan recently volunteered with Rivers Alive, picking up trash, planting grass and flowers, and collecting water samples along the North Oconee River near downtown Athens, Georgia. More than 150 volunteers, including Katie and Wayne, picked up 1,920 pounds of trash, 780 pounds of recycled material, 560 pounds of scrap metal and 33 tires, of which Wayne got three of them! In addition, the volunteers planted 300 native

grasses and flowers and collected water samples from 28 sites. Rivers Alive, a joint program of the Georgia Environmental Protection Division's Outreach Education Programs and the Keep Georgia Beautiful Foundation, is part of the continuing statewide campaign to clean and preserve over 70,000 miles of Georgia's rivers and streams. Great job Katie and Wayne!



Left photo, some of the volunteers from Rivers Alive with a portion of the trash collected. The SECN's Katie Dagastino (third from the right) and Wayne Ryan (fifth from the right) participated in the cleanup event. Right photo, Wayne standing on a tree over the river. Photos courtesy of Katie Dagastino.

Ches co-authors paper on Corrected Digital Elevations Models

Coastal Ecologist William "Ches" Vervaeke recently co-authored a publication, *Corrected Digital Elevation Model in Coastal Wetlands in Nassau and Duval Counties, Florida, 2018*. Vegetation and elevation data for the project were collected at Timucuan Ecological and Historic Preserve. The study's main objective is to reduce the elevation error of the digital elevation model (DEM) in coastal wetlands in and around the park. Sea-level rise is expected to transform habitats across the entire coastal zone including forested wetlands, freshwater marshes, and upland forests and grasslands. Natural resource managers need to know the magnitude of these changes and have the most accurate elevation data to assist with future-focused land management and decision-making. Periodically produced DEMs provide high-resolution elevation data that can be used to monitor coastal zone changes, but elevation bias is typically unknown in wetlands and can be substantial. The paper is available at [USGS ScienceBase Catalog](#). Great work Ches!

Stephen at UNG GIS Day

Physical Scientist Stephen Cooper lectured at the University of North Georgia's GIS Day, sponsored by UNG's Institute for Environmental and Spatial Analysis in Gainesville, Georgia. Stephen described how geospatial data and analysis are used in monitoring efforts at the Southeast Coast Network.



SECN Physical Scientist Stephen Cooper talks to students at the University of North Georgia during GIS Day in November. NPS photo.



SECN Botanist Forbes Boyle checks on a patient as Lucas Hunkler and Stephanie Niche from Cumberland Island National Seashore look on during Wilderness First Aid training at the park last month. NPS photo / Chad Thomas.

Learning about Wilderness First Aid

The SECN Botanist Forbes Boyle and Biological Technician Mallorie Davis joined staff from [Cumberland Island National Seashore](#) in late November on the island to participate in Emergency Medical Services training hosted by staff from the Office of Wilderness and Survival Medicine at the Medical College of Georgia. The day-long training provided general information

regarding emergencies and incidents within wilderness environments like those found on Cumberland Island. Five wilderness medicine experts were on site to address topics that included: CPR and use of AEDs on adults and young children, heat and cold emergencies, dealing with a patient going into anaphylaxis, snake and insect bites, patient assessment and packaging, wheeled litter, response to lightning and drowning emergencies, and park-specific procedures for responding to and reporting out emergency incidents. The training also served as an orientation to the new partnership between the Seashore and the Medical College of Georgia. Future, topic-specific trainings held twice a year are expected.

SECN Staff Participate in RSS Workshop

Staff from the Southeast Coast Network including Botanist Forbes Boyle, Aquatic Ecologist Eric Starkey, Coastal Ecologist William Vervaeke, and Wildlife Biologist Michael Parrish provided input on important natural resources of [Cumberland Island National Seashore](#) and [Fort Frederica National Monument](#) during the recent Resource Stewardship Strategy Workshop. Input was solicited from park staff and regional partners to develop a planning document that bridges the gap between the park's foundation document and everyday management of natural and cultural resources at the park. Julie Bell and her team from the Denver Service Center guided the group through the process with CUIS-FOFR Chief of Resources Michael Seibert and his staff providing hospitality and a tour of both parks. The SECN staff will continue to assist with reviews of the final documents but also gained valuable insight into the day-to-day operations and concerns of a park where our main focus is on Vital Signs monitoring.

Using SECN Data to Help NPS Fire Management

In November, SECN Botanist Forbes Boyle met with the Southeast Regional Fire Ecologist Rob Klein along with fire ecology staff from the South Florida Fire and Aviation District and fire managers from [Cumberland Island National Seashore](#) to discuss fire management objectives related to fuel load reduction and ecological condition on the island. The group set goals to prioritize areas for continued prescribed burning, focusing on sites that provide habitat for gopher tortoises, minimize impacts to structures during wildfire events, and improve quality of barrier island pine flatwoods. Monitoring approaches to track success of these objectives were also a focus of the week-long meeting, including utilizing data already being collected within SECN long-term vegetation monitoring plots in most of the high-priority fire management areas to supplement other monitoring efforts conducted by the fire team.



From left, Aerin Land (Fire Ecologist NPS South Florida Fire and Aviation), Kayleigh Hendley (CUIS Cultural Resources Program Manager), Alex Scronce (CUIS Fire Management Officer, acting), Lucas Hunkler (CUIS Prescribed Fire Specialist), Denise Gazawie (EVER fire effects monitoring lead), and Rob Klein (SERO Fire Ecologist). NPS photo / M. Forbes Boyle.

FY2024 Monitoring Updates

With the FY2024 Workplan approved, preparations for the upcoming monitoring season have begun. Data collected during the FY2023 field season continues to be processed along with FY2022 data so reports and data packages are coming soon.

Wadeable Streams

Thirteen sites at Chattahoochee River National Recreation Area will be surveyed this spring. Data processing and analysis continues for FY2023 parks including [Kennesaw Mountain National Battlefield Park](#), [Horseshoe Bend National Military Park](#) and [Ocmulgee Mounds National Historical Park](#). Processing continues for data collected from wadeable stream monitoring surveys conducted in FY2022 at [Congaree National Park](#) and a summary report from FY2021 data collection at [Chattahoochee River National Recreation Area](#) will be published in early 2024.

Vegetation Communities

Ninety-one vegetation monitoring plots across [Chattahoochee River National Recreation Area](#), [Cumberland Island National Seashore](#) and [Fort Frederica National Monument](#) will be resampled and four new plots established in the spring and summer of 2024. Data collected in FY2023 at [Cape Hatteras National Seashore](#), [Fort Pulaski National Monument](#), [Timucuan Ecological and Historic Preserve](#) and [Fort Matanzas National Monument](#) continues to be processed and analyzed. Data collected in FY2022 at [Horseshoe Bend National Military Park](#), [Cape Lookout National Seashore](#), [Moores Creek National Battlefield](#) and [Canaveral National Seashore](#) is being also processed. Reports for data collected during FY2021 at [Congaree National Park](#), [Ocmulgee Mounds National Historical Park](#) and [Kennesaw Mountain National Battlefield Park](#) have been published and [Chattahoochee River National Recreation Area](#) is currently being reviewed.

Water Quality

Water-quality data were collected at [Fort Pulaski National Monument](#), [Cumberland Island National Seashore](#), [Canaveral National Seashore](#), [Fort Matanzas National Monument](#), [Timucuan Ecological and Historic Preserve](#) and [Congaree National Park](#) in October and November at fixed sites. Monthly visits to parks are planned to continue in FY2024 with assistance from park staff and partners at [Cape Hatteras National Seashore](#) and [Cape Lookout National Seashore](#). A park-wide water-quality assessment is planned for July 2024 at [Canaveral National Seashore](#). Data collected during last summer's park-wide water-quality assessments at [Cumberland Island National Seashore](#) and [Fort Matanzas National Monument](#) will be reported early next year.

Landbird and Anuran Communities

Automated recording devices (ARDs) will be deployed at 124 sampling locations across [Cape Lookout National Seashore](#), [Cumberland Island National Seashore](#), [Fort Sumter and Fort Moultrie National Historical Park](#), [Horseshoe Bend National Military Park](#), and [Kennesaw Mountain National Battlefield Park](#) starting this month through March 2024, when recordings will begin. Vocalization collections using ARDs for the FY2023 wrapped up with retrievals from [Fort Matanzas National Monument](#) and [Timucuan Ecological and Historic Preserve](#) in October. Data sets from landbird and vocal anuran monitoring in FY 2022 are being processed for publication. Vocalization data collected in FY 2015 and 2016 are also being processed and data sets from these monitoring events will be published in the coming weeks with reports for all three seasons to follow early next year.

Coastal Wetlands

Surface Elevation Table (SET) sites at [Canaveral National Seashore](#), [Fort Matanzas National Monument](#), [Timucuan Ecological and Historic Preserve](#), [Fort Pulaski National Monument](#), [Fort Frederica National Monument](#), [Cumberland Island National Seashore](#), [Cape Hatteras National Seashore](#) and [Cape Lookout National Seashore](#) will be read twice in FY2024. First readings were conducted from October to November with second readings planned for February through May. An updated SET monitoring protocol and associated SOPs were published in November. An interim data package will be published in this winter.

Shorelines

In 2024, Spring surveys will be conducted at [Canaveral National Seashore](#), [Fort Matanzas National Monument](#), [Timucuan Ecological and Historic Preserve](#), [Canaveral National Seashore](#), [Cape Lookout National Seashore](#) and [Cape Hatteras National Seashore](#). Fall surveys, requested by the parks, are planned for [Canaveral National Seashore](#), [Fort Matanzas National Monument](#), [Cape Lookout National Seashore](#) and [Cape Hatteras National Seashore](#). Data collected in FY2023 is in process and briefs, along with an updated dashboard, are planned for each park.



Collecting automated recording devices isn't as easy as taking them off the tree. The SECN's Wildlife Intern Wayne Ryan, and SIP Intern Alyssa Sanderson, recently encountered lots of brambles, spiny palmettos and a less-than-friendly Eastern Diamondback Rattlesnake at Timucuan Ecological and Historic Preserve. They also came across a gopher tortoise and a green treefrog. The recordings on the ARDs will be analyzed and data will be processed over the coming weeks. SECN staff / Wayne Ryan

Recent Publications

The Southeast Coast Network recently published the following reports:

- Monitoring Coastal Wetland Elevation in Southeast Coast Network Parks: Protocol Implementation Plan. Available at: [DataStore - Monitoring coastal wetland elevation in Southeast Coast Network parks: Protocol implementation plan \(nps.gov\)](https://www.nps.gov/datastore/monitoring-coastal-wetland-elevation-in-southeast-coast-network-parks-protocol-implementation-plan)

- Terrestrial Vegetation Monitoring at Kennesaw Mountain National Battlefield Park: 2021 Data Summary. Available at: [DataStore - Terrestrial vegetation monitoring at Kennesaw Mountain National Battlefield Park: 2021 data summary \(nps.gov\)](#)
- Standard Operating Procedure 2.3.05 Monitoring Coastal Wetland Elevation Data QA/QC and Data Publication-Version 1.0. Available at: [DataStore - Standard Operating Procedure 2.3.05 Monitoring Coastal Wetland Elevation Data QAQC and Data Publication—Version 1.0 \(nps.gov\)](#)
- Standard Operating Procedure 1.3.22 Conducting the Global Position System Shoreline Survey-Version 1.1. Available at: [DataStore - Standard Operating Procedure 1.3.22 Conducting the Global Positioning System Shoreline Survey—Version 1.1 \(nps.gov\)](#)
- Standard Operating Procedure 1.3.21 Survey Timing and GPS Mission Planning for Coastal Shoreline Monitoring-Version 2.1. Available at: [DataStore - Standard Operating Procedure 1.3.21 V 2.1 Survey Timing and GPS Mission Planning for Coastal Shoreline Monitoring—Version 2.1 \(nps.gov\)](#)
- Standard Operating Procedure 2.3.10 Post Survey GPS Data Processing-Version 2.0. Available at: [DataStore - Standard Operating Procedure 2.3.10 Post Survey GPS Data Processing—Version 2.0 \(nps.gov\)](#)
- Standard Operating Procedure 2.3.11 Coastal Shoreline Monitoring Annual Change Analysis-Version 2.0. Available at: [DataStore - Standard Operating Procedure 2.3.11 Coastal Shoreline Monitoring Annual Change Analysis—Version 2.0 \(nps.gov\)](#)

For More About the SECN: <https://www.nps.gov/im/secn/index.htm>