Welcome to the bi-weekly **Wednesday Update**!

We’ll email the next issue on Feb. 10.

By highlighting SCCF’s mission to protect and care for Southwest Florida’s coastal ecosystems, our updates connect you to nature.

Thanks to Gary Biltgen for this photo of a juvenile blue heron (*Egretta caerulea*).

**DO YOU HAVE WILDLIFE PHOTOS TO SHARE?**

*Please send your photos to info@sccf.org to be featured in an upcoming issue.*

---

**Learn Where Candidates Stand on Protecting Environment**

Hang on to those mail-in ballots that started arriving in island mailboxes today. You’ll want to hear what the six candidates up for three Sanibel City Council seats have to say at SCCF’s first-ever **Candidate Forum on the Environment**.

On Wednesday evening, Feb. 10, SCCF will livestream the forum at [sccf.org](http://sccf.org) as CEO Ryan Orgera, Ph.D., pictured here, moderates a
live, socially-distanced panel featuring all six candidates up for election.

“A majority of the council seats are on the ballot this year, potentially creating the first major shift in our city’s leadership at one time in many years,” said Orgera. “The City of Sanibel is unique in our region, not just for its natural beauty, but because nature is given equal footing with human residents. That is ensured by city leadership.”

With its distinct Comprehensive Land Use Plan and City Charter developed when the City was created in 1974 as a response to the potential for runaway growth, SCCF has been a long-standing partner in protecting the Sanctuary Island.

Not just a typical virtual event, the SCCF livestream production will be directed by former CBS News producer Arlene Dillon, pictured here, who is a long-time Sanibel resident. Dillon’s 25 years of experience in network television news included 12 years covering the White House and producing live special events.

“This election is important not just for Sanibel but for our whole region,” said Dillon, who is volunteering her time and talent. “I’m happy to help produce an engaging program that will inform voters.”

The forum is intended to help voters understand where candidates stand on critical issues specific to the environment including: land use, water quality, Everglades restoration, living with wildlife, coastal resilience, and the role of science in policymaking.

Candidates will be seated at a safe social distance; no audience will be present. Questions have not been provided in advance, only broad topics. Candidates include Mary Bondurant, Scott Crater, Tim Drobnyk, John Henshaw, Jason Maughan, and Mike Miller.

SCCF is strictly non-partisan and will not endorse any candidates. Go to sccf.org to watch live on Feb. 10 at 7pm. If you can’t watch live, the forum will also be recorded and available for viewing at sccf.org anytime before the election.

Mail-in ballots are recommended to be sent through the postal service by Feb. 20 for the March 2 election, according to the Lee County Elections Office. Mail-in ballots can also be dropped off at the main office at 2480 Thompson St. in Fort Myers up to 7pm on March 2, when in-person voting will take place at island precincts.

Click here or on video above to watch a promo.

Keep Up with Legislation Related to Florida's Environment

By Holly Schwartz, Environmental Policy Assistant

Did you know you can keep up with the 2021 Florida Legislative session, which starts on March 2, through SCCF’s Legislative Tracker? We track bills related to the environment as well as provide an assessment of our position.

There’s already been a flurry of activity signaling a busy session. The Senate has filed 301 bills, which is outpaced by the House’s 522 bills filed. The varied number of bills filed can be partly explained because local funding projects are filed through the House.

Interim committees began meeting the week of
Jan. 11, mostly with agency update presentations. A House Ways and Means Committee budget briefing discussed the projected $2 billion budget deficit due to the COVID-19 sales tax lag. As a result, the Senate budget chief stated that there is simply no funding this year for the Multi-use Corridors of Regional Economic Significance (M-CORES) Program, which had been slated to receive $100 million this year to continue its implementation.

Climate change—specifically sea-level rise—was also discussed during the first week of interim committee meetings. Senate Bill 514 establishes the Statewide Office of Resiliency and creates a Sea Level Rise Task Force, an effort which received Senate support last year but failed to pass in the House. However, it appears that the House is taking the issue of climate change seriously. The House committee assigned to hear environmental legislation has been renamed to the 2021 Environment, Agriculture and Flooding Committee. (The word “flooding” replaces the committee’s 2020 title word “general government.”)

This week, interim committee meetings continue.

*Please check our updated 2021 Legislative Tracker for links to SCCF’s legislative priorities and the latest information on the environmental bills filed to date.*

---

**Marine Lab Continues to Track Red Tide Bloom**

The most recent daily sampling map from the Florida Fish and Wildlife Conservation Commission (FWC), pictured here, shows that a patchy bloom of the red tide organism, *Karenia brevis*, still exists in Southwest Florida based on sampling conducted over the past eight days.

*This week’s daily samples collected by SCCF’s Marine Lab and Sanibel Sea School at local beaches have ranged from high concentrations (>1 million *K. brevis* cells/liter) to low (>10,000 cells/liter).*

Yesterday's samples showed concentrations of more than 2 million cells/liter at both Tarpon Bay Road Beach and at Gulfside City Park. Counts today were medium with 330,000 cells/liter at Bowman's Beach and low with 94,000 cells/liter at West Gulf Drive Access #1 Beach.

*Click button below to learn more about red tide and to track it.*

---

**Paul McCarthy Memorial Lecture Features Dr. Kathryn Sullivan**

Dr. Kathryn Sullivan will talk about her astounding experiences of spending more than 500 hours in space and plunging seven miles down into the depths of the ocean next week.

Join us to deepen your understanding of space and sea for her 45-minute virtual presentation at the 3rd Annual Paul McCarthy Memorial Lecture at 5:30pm on Feb. 4.
A distinguished scientist, astronaut, and ocean explorer, Sullivan joined the NASA astronaut corps in 1978 and holds the distinction of being the first American woman to walk in space.

Her submersible dive to the Challenger Deep in June of 2020 made her the first woman to dive to full ocean depth.

The **Paul McCarthy Memorial Lecture Series** was conceived by the Boler Family Foundation, which underwrites the speaker fees and expenses, as a way to honor a dear family friend. Paul McCarthy, pictured here, was the founder of Captiva Cruises, and an engaged and community-focused presence on the islands for years. Feb. 6 would have been Paul's 68th birthday.

Paul was deeply committed to preserving the environment and began a partnership program with SCCF to have trained docents narrate nature-oriented cruises. Last year's lecture featured famed oceanographer Dr. Sylvia Earle.

The lecture by Dr. Sullivan will be presented virtually through Zoom. Unlike other SCCF presentations this year, the 45-minute lecture will only be offered live at **5:30pm on Thursday, Feb. 4.** It will not be available for recorded viewing.

*Don't miss this exciting adventure into space and sea!*

[Click here](#) to register for the lecture. $20 for adults; $10 for students.

---

**Join Green Readers for Book Discussion**

Dr. Kathryn Sullivan is also the author of *Handprints on Hubble, An Astronaut's Story of Invention* (MIT Press, 2019), which is the January selection for SCCF’s nature-inspired book club, **The Green Readers**.

A book discussion, led by SCCF CEO Ryan Orgera, will take place the night before the lecture, on Wednesday, Feb. 3 at 7pm. [Click here](#) to register.
SCCF is proud to recognize the Sanibel Captiva Trust Company as a sponsoring partner for our new magazine.

“Our new publication is a great way to offer members and neighbors a deep dive into the work SCCF does and the nature that surrounds us,” said SCCF CEO Ryan Orgera. “We are so grateful to have the Trust Company as a funding partner for this inaugural issue.”

The magazine, Connecting You to Nature, will be published twice annually in the winter and spring. The first issue will be mailed island-wide and to all SCCF members in mid-February. It will deepen readers’ understanding of how the land, water, and wildlife on and around Sanibel and Captiva depend on SCCF’s stewardship in partnership with the community.

“SCCF has done irreplaceable conservation work for over 50 years and we’re happy to help share their stories,” said Sanibel Captiva Trust Company Founder and Chairman Al Hanser.

Doc Ford’s Rum Bar & Grille will be joining the Trust Company as the funding co-sponsor for the inaugural issue.

If your company is interested in future underwriting opportunities, please contact SCCF Development Director Cheryl Giattini at 239-395-2768.

---

**Everglades Coalition Conference Next Week**

The 36th Annual Everglades Coalition Conference will be held virtually next week, Feb. 2-5, for four full days of in-depth conversations and panels related to Everglades restoration in an open, accessible forum.

SCCF is one of more than 60 regional, state, and national organizations committed to the protection and restoration of the Everglades that the Everglades Coalition represents. For the past 36 years, the Coalition’s annual conference has been the largest forum for discussing Everglades restoration progress, challenges, and opportunities.

The conference brings together diverse stakeholders including conservation groups, elected officials, business leaders, local, state, tribal, and federal partners, scientists, and students to engage in meaningful dialogue about restoring America’s Everglades.

---

**2021 Everglades Update to Address Importance of EAA Reservoir**

Please join SCCF and the Everglades Foundation Feb. 24 from 6 to 8 pm for a virtual panel discussion to explore the benefits of the Everglades Agricultural Area (EAA) Reservoir.
The EAA Reservoir was one of the original Comprehensive Everglades Restoration Plan (CERP) projects conditionally authorized by Congress in the Water Resources Development Act of 2000.

A vital component of Everglades restoration, it is the only project that will provide the dual benefits of reducing damaging discharges to the Caloosahatchee and St. Lucie estuaries and restoring freshwater flows to the Everglades and Florida Bay. The project will reduce the damaging discharges from Lake Okeechobee to the estuaries by more than 55% and almost double freshwater flows south to the central Everglades.

The EAA Reservoir Project has had a long history filled with uncertainty and mired in litigation, politics, and the state’s plan to acquire U.S. Sugar’s lands and assets. It wasn’t until 2018, when the coastal communities of the Caloosahatchee and St. Lucie estuaries were devastated by harmful algal blooms, including blue-green algae and red tide, that the State of Florida made the project a top priority.

On January 10, 2019, Governor DeSantis issued Executive Order 19-12, Achieving More Now for Florida’s Environment. Among the Governor’s top priorities for reducing the damaging discharges from Lake Okeechobee to the coastal estuaries was a plan to accelerate construction of the Everglades Agricultural Area (EAA) Reservoir.

As we celebrate the 20th anniversary of Everglades restoration, the project is finally moving forward. The South Florida Water Management District recently broke ground on the stormwater treatment area for the project and we are finally starting to see progress on construction. Meanwhile, some Florida lawmakers are raising concerns about funding for the EAA Reservoir citing budget shortfalls related to the COVID-19 pandemic to justify halting the project.

Join us to learn more about this critical Everglades restoration project and the benefits it will provide to the Everglades and coastal communities and how we can keep this project moving forward.

The program will be moderated by SCCF CEO Ryan Orgera, Ph.D., and the panel will include:

- **Steve Davis, Ph.D.**, Vice President of Communications and Engagement and Senior Ecologist, Everglades Foundation
- **Capt. Daniel Andrews**, Co-Founder & Executive Director, Captains for Clean Water
- **Marisa Carrozzo**, Everglades and Water Policy Manager, Conservancy of Southwest Florida
- **James Evans**, Environmental Policy Director, SCCF

REGISTER FOR EVERGLADES UPDATE

---

**January Shorebird Observations Included These Species of Gulls**

SCCF’s January monthly shorebird surveys of Sanibel and Captiva’s gulf beaches yielded a couple of interesting surprises.

One of the most exciting finds on Sanibel were Bonaparte’s gulls (*Chroicocephalus"
They nest near water in forests in northern Canada and eat insects during the breeding season. Though they sometimes nest on the ground, they also nest in trees, which is unusual among gulls. In the winter, they can be found along the coast and on lakes and rivers. They are small and agile, and employ a variety of foraging techniques, sometimes acting more like a tern than a gull.

“If you are walking along the water’s edge and see gulls foraging in the surf close to shore, they could be Bonaparte’s gulls,” said SCCF Coastal Wildlife Manager Audrey Albrecht.

Another interesting find was an adult herring gull (Larus argentatus), identifiable by its pale gray back, pink legs, and massive stature in comparison to the far more common laughing gulls and royal terns pictured here with one.

“Though herring gulls are not uncommon, we typically see more juveniles than adults,” Albrecht said.

In January, a total of 1,403 individuals of 28 different species were observed. There were lower numbers of some shorebird species compared with years past, but this may be explained by the presence of large flocks of shorebirds foraging recently on the exposed mudflats in San Carlos Bay (seen from the road as you approach the causeway).

---

**Marine Lab Initiates Two Hard Clam Studies to Guide Restoration**

During the past few months, the habitat of an important bivalve species, the Southern hard clam (Mercenaria campechiensis), has been evaluated throughout Charlotte Harbor and preparations are underway to begin a small-scale hard clam restoration pilot study.

Hard clams are large (up to six inches), round, white bivalves with prominent concentric ridges on the outer surface. “They play a vital role in estuarine ecosystems as filter feeders and in transferring energy throughout the food web,” said SCCF Research and Policy Associate Leah Reidenbach. “With the filter-feeding activity of clams, large populations can reduce phytoplankton and increase water clarity, which benefits seagrass leading to more habitat for invertebrates and fishes.” They also permanently remove nitrogen through excretion and benthic microbial denitrification in the sediment and through accumulation in the shells during growth.

Prior to the 1960s, hard clams were abundant in Southwest Florida and were part of a healthy estuarine ecosystem, but populations were reduced through overharvesting. As broadcast spawners, low densities of hard clams make it difficult for populations to rebound to sustainable levels. Through restoration, hard clam densities may return to a level that allows...
populations to become established and self-recruit for population growth.

Very little is known about the abundance and distribution of the natural population of hard clams throughout Charlotte Harbor, so a habitat suitability model was developed to map optimal hard clam habitat. Ultimately, the goal is to create harvest-free restoration areas or “spawner sanctuaries.”

Research Associate Mark Thompson used long-term data on water quality in the Charlotte Harbor Estuary to create a habitat suitability map using a model based on multiple environmental factors that are critical for optimizing hard clam growth, survival, and reproduction. The map shows optimal habitat for spawner sanctuaries (average salinity greater than 25, a sandy bottom, and high food availability) and unsuitable habitats (anoxic, muddy areas, with an average salinity less than 12.5).

Based on the map, logistical factors, and discussions with local stakeholders, 10 potential restoration sites were selected and surveyed for the presence of hard clams. Adult hard clams were found at three of the sites at low densities. Now, SCCF is in the process of collaborating with local conservation groups to share our research and develop a statewide plan guiding restoration practices and projects.

In a separate but parallel project supported by the Sanibel Captiva Shell Club, SCCF will complete a small-scale pilot study to evaluate the effectiveness of hard clam restoration in Pine Island Sound. Twelve thousand hard clams will be planted at densities of approximately 13 clams m⁻². The restoration site will be monitored for one year for changes in water quality, phytoplankton community structure, and hard clam survival, growth, and reproduction. The results from this project (starting March 2021) will provide important insight for future large-scale restoration projects.

---

**Keeping Firelines Cleared for Wildlife at SCCF Preserves**

Work has begun on clearing fire lines on SCCF properties. Prescribed fire season typically begins in March or April and lasts until the rainy season begins. Fire lines provide access to the fire units that perform these burns and become active wildlife corridors.

Several SCCF conservation lands east of Tarpon Bay Road have dried out significantly from the summer rains. Staff is currently working on Frannie’s Preserve and the C. R. Johnston Tract, as well as small sections of the Sanibel Gardens and Erick Lindblad Preserves where it is sufficiently dry.

SCCF Conservation Steward Victor Young and Field Technician Dustin Lucas have been diligently working on getting these passageways open for the upcoming prescribed fire season. The equipment primarily being used is the skid-steer loader with various attachments to cut down shrubs and small trees and move debris. Hand-cutting of overhanging branches is done with pole saws and chain saws. The use of both heavy equipment and hand-held tools makes this task very efficient.

Wildlife such as bobcats (*Lynx rufus*), otters (*Lutra canadensis*), raccoons (*Procyon lotor*),

---
and Virginia opossums (Didelphis virginiana) are often seen using these fire lines to traverse the properties. “When fire lines run through densely wooded areas, many forms of wildlife see that cleared path as edge habitat (where two habitats meet),” explained SCCF Director of Wildlife & Habitat Management Chris Lechowicz. “Edge habitat is often productive for viewing wildlife because animals use it as a quick route for accessing different habitats.” For example, black racer snakes (Coluber constrictor) are often seen basking in the sun on open passageways. However, if a human or predator approaches, they quickly move to the densely wooded area off the path.

“Although our fire lines were created to control wildfires and for controlled burning, these pathways are beneficial to wildlife, especially on closed properties where there is minimal human disturbance,” Lechowicz said.

---

Sanibel Sea School Opening Summer Camp Registration Soon!

Sanibel Sea School is excited to announce a full lineup of summer camps beginning on June 7.

“We are thrilled to get back to a more normal summer,” said Director Nicole Finnicum. “With the cancellation of summer camps last year, we are ready to have campers back on campus, surfing, snorkeling, and making memories in the ocean.”

In accordance with CDC and American Camp Association guidelines, summer activities will be modified to take necessary precautions to slow the spread of COVID-19, including smaller group sizes at both locations and masking indoors.

**General registration for Sanibel Sea School summer camp will open Saturday, Feb. 13 at 10 a.m. Space will be limited so it’s important to register when it opens.**

The Sanibel Sea School staff has been working to rollover registrations from last year’s canceled camp into this year’s sessions. “We are allowing our 2020 participants to apply their tuition to this year’s camp and offering them priority registration,” said Finnicum. “Space will be limited this year with our rollovers and smaller camp sizes.”

This year, a variety of biology-themed camps are available for children and teens ages 4-18 at two different locations – Sanibel Sea School’s flagship campus on the east end of Sanibel, as well as at a brand-new location, The Bailey Homestead.

Each week will have a different theme, with highlights such as sharks, coconuts, manatees, and Calusa. Island Skills for participants ages 6-13 will include activities such as surfing, seining for fish, snorkeling, and learning basic waterfolk skills. The little ones, ages 4-6 years old, will learn about mullet, anemones, and seahorses while getting comfortable in the ocean.

Camp inquiries can be sent to camp@sanibelseaschool.org. More information can be found at sanibelseaschool.org/sanibel-camps.

---

Florida peperomia: Care-free in the Shade

Florida peperomia (Peperomia obtusifolia) is a perennial plant perfect for warm, moist shady places. In fact,
the natural habitat for this epiphytic plant is the stumps of old cypress trees in a swamp.

It grows above the water line under the shade of old majestic cypress. In this location, the temperature stays fairly constant year-round. The water provides plenty of moist, humid air while the tall cypress provides plenty of shade.

The dark green leaves are waxy and thick and hold water like a succulent. The tiny flowers of the peperomia are on spikes that can reach up to 6 inches long and one-quarter of an inch wide. These spikes are impressive in their orderliness and there can be hundreds of flowers on one flower spike.

This plant would grow well under the shade of a large tree where the leaf litter keeps the soil moist. It really doesn’t require much in the way of maintenance. Dead leaves and older flower spikes fall off and contribute to the soil. The Florida peperomia can be easily propagated by cuttings.

**SCCF's Native Landscapes & Garden Center at the Bailey Homestead is open Monday through Thursday, 10am to 3pm. We will also continue to offer contactless deliveries and curbside pickup. Simply place your order online by midnight on Tuesday for pickup or delivery that Wednesday.**

*Please email our Garden Center Assistant Sue Ramos at sramos@sccf.org with any questions or requests.*

*SCCF members will get their discount by entering this promo code: SCCFMBR10*

---

**Coastal Watch Virtual Workshops: Nurturing Mangrove Propagules**

Coastal Watch held two virtual workshops in January to introduce its newest conservation and education initiative, “Back to Our Roots,” which invites residents to adopt and raise their own mangrove. Two more workshops are scheduled for February.

Workshop participants learned about the role mangroves play in Southwest Florida’s marine ecosystem, including their importance to wildlife and how they aid in coastal storm protection. Coastal Watch’s conservation initiative coordinator, Kealy McNeal, also discussed the common species of mangroves endemic to Sanibel—red, black, and white mangroves —and their distinguishing characteristics.

“During our workshops, we dove into mangrove education so that participants understand the importance of this project,” said McNeal. “Our goal is to create mangrove advocates across our islands to encourage conservation of these important trees.”
The workshops concluded with information on how participants can adopt their own mangroves to grow at home. McNeal shared several methods to grow mangrove propagules at home and offered tips on how to ensure they thrive.

After the workshop, participants picked up starter kits that include soil, a one-gallon planting pot, and a red mangrove propagule. After participants raise their propagules, Coastal Watch will collect them to be planted at a local restoration site near Sanibel or Captiva later this year.

*Coastal Watch will be hosting two additional workshops in February for those interested in participating in this educational restoration project. The next virtual workshops are scheduled for: Thursday, Feb. 9 at 6pm, and Saturday, Feb. 20 at 1pm. Registration opens Feb. 1.*

---

“*Natives in the Garden*”

*Exhibit Features Outdoor Art*

More than a dozen locally created 3D works are on display for the joint SCCF and Sanibel-Captiva Art League “Natives in the Garden” outdoor exhibit at the Bailey Homestead Preserve.

*The exhibit is open now through March 12, Monday-Thursday, 10am to 3pm.*

The original works of weather-resilient, outdoor art featured in “Natives in the Garden” were created by members of the Sanibel-Captiva Art League and SCCF, and 20 percent of the proceeds of works sold will support SCCF’s mission. Pictured here is a piece submitted by Bob Marshall.

---

*’Weeds and Seeds’ Invites Native Plant Lovers on Virtual Walks*

Weeds & Seeds walks have gone (mostly) virtual! Please join us for the next walk on Monday, Feb. 8 at 9am.

Weeds and Seeds is a group of amateur botanists who enjoy sharing their enthusiasm for native plants. A leader will be "on location", highlighting plants from the field, while another will be showing identifying characteristics through high-resolution pictures "in studio."

The program should take about an hour, and is designed to be engaging and interactive. All levels welcome, and conversations and questions are encouraged.

*Walks will occur on every other Monday at 9am, through the end of March.*

Pre-registration is required through Zoom, though you do not need a Zoom account (you will just need to enter your name and email address). After registering, you will receive a confirmation email containing information about joining the meeting.

If you are new to Zoom and would like a quick walkthrough of features (or need to troubleshoot a problem), join the meeting at 8:45am and we will do our best to assist.
WATCH: Evening at the Homestead on Sand Dunes

Dr. Patrick Hesp, presented an engaging and informative talk called, *Sand Dunes, A Global & Local Perspective* on Wednesday, Jan. 20, 2021, as part of SCCF’s annual Evenings at the Homestead series of lectures.

[Click here](#) to watch the recorded video on our SCCF YouTube Channel.

---

In case you missed us on WINK News...

On Jan. 22, SCCF Coastal Wildlife Director Kelly Sloan explained research underway to see if sea turtles exposed to red tide pass brevetoxins down to their hatchlings. Above, Research Associate Andrew Glinsky tests for red tide toxins in blood samples from hatchlings and in eggs that didn't hatch. [Click here to watch](#).

---

[Click here](#) to subscribe to the Wednesday Update and other SCCF mailing lists.

---

Stay Connected!