Marine Lab: Going Up!

By Eric Milbrandt, Ph.D., Marine Lab Director

The construction of the new SCCF Marine Laboratory with the U.S. Fish & Wildlife Service at Tarpon Bay checked off several key milestones. The placement of 40 hollow-core concrete panels by local Fort Myers company, Cement Industries, occurred in one day with a large crew and a big crane. Gay Thompson is an owner and President of Cement Industries and is a regular attendee of SCCF's Wines in the Wild and Beer in the Bushes.

Following the placement of the concrete panels, local contractor R Way Construction formed up the second level floor and poured concrete. We recently had an opportunity to ascend a ladder to the 12.5 foot elevated second level to share some pictures.

Dominik Weglinski with Hollon Contracting is the general contractor and has kept the project on schedule. We anticipate starting framing after the July 4th holiday and the move in date is scheduled for the end of December 2017.





Diamonds in the Mangrove Creek

By Chris Lechowicz, Director-Wildlife & Habitat Management/Herpetologist

SCCF has been conducting research on the elusive diamondback terrapin (*Malaclemys terrapin*) since 2013 on and around Sanibel Island. These brackish (mixture of salt and fresh) water turtles are found from Massachusetts to Texas along the coast. In southwest Florida they are limited to the mangrove creeks, lakes and forests that border the islands and mainland on the coast. In our area, terrapins are seldom seen crossing roads and do not inhabit freshwater bodies. Their primary diet is periwinkle snails (*Littorina sp.*), crabs (*Aratus* and *Uca*), and various fish.



A female terrapin basks in some red mangrove roots in a mangrove creek.

The word terrapin is specific name used for turtles that inhabit brackish water bodies such as salt marsh and mangrove systems. In the early 1900s in the northeast U.S., terrapin meat was prized as a delicacy and sold for as high as \$125 a pound. Terrapin populations took a sharp decline, as a result of mass harvesting to meet demand. Their numbers have been rebuilding since the market crashed from the Great Depression in the 1930s. It is not uncommon for long-term residents of the islands and the coast to have never seen one of these beautiful animals simply because of their proclivity for mangrove forests.

Until our study began in 2013, terrapins have not been See Diamondbacks on Page 3

Water Conditions: Too Much and Too Little

By Rae Ann Wessel, Natural Resource Policy Director

Whiplash is the only way to describe what's happened to water conditions. January 2016 is now in the record books as the wettest on record in the 85 years since record keeping began. It rained for 9 months, until it stopped raining in November 2016 and another record was set: the driest November in the past 85 years. A 7-month drought began. June 2017 arrived and has been delivering the pent up rainfall with gusto.

What's all this do to water conditions? If our poor Caloosahatchee was a person it could make a claim for whiplash. Too much rain dropped salinities to harmful levels for 9 months then flipped to water shortage for 7 months only to be faced with extreme flows three and one half times the harmful levels within one week.

Our Marine Lab is monitoring conditions of critical habitats — the seagrass, oysters and freshwater tapegrass — that aquatic life depends on. And we report these conditions with our recommendations to water managers but until restoration projects are built there is not enough capacity in the system to absorb these extremes.

The one thing that we do know is that more storage is needed to reduce harm from both too much and too little water. Two projects are key to helping manage water from increasingly variable weather conditions and changes in rainfall patterns.

Too Much Water - EAA Reservoir

The legislature this year passed Senate Bill 10 that accelerates the planning and implementation of a long awaited reservoir in the Everglades Agricultural Area (EAA) south of Lake Okeechobee.

The plan makes use of land already owned by the state and currently leased back to sugar, instead of buying additional land at this time. The plan provides a series of deadlines the state must meet to keep the project on track. The project remains a cost share project but will require changes from the Army Corps (USACE) to the use of the

EAA Reservoir Deadlines

7/1/2017 SFWMD must request USACE jointly develop a
 Post Authorization Change Report (PACR)
 7/31/2017 SFWMD must notify lease holders of changes
 8/1/2017 SFWMD and USACE begin development of the
 PACR

1/9/2018 SFWMD status report to legislature10/1/2018 Deadline for submission of Chiefs' Report to Congress

12/31/19 Deadline for Congressional Approval

lands currently designated for other functions.

The South Florida Water Management District (SF-WMD) has created a web page the public can access to track progress of the project: https://sfwmd.maps.arcgis.com/apps/MapSeries/index.html?appid=4d9807e424894aec9e9c1f74d323f17e

Too Little Water - C43 West Basin Reservoir

The June 2017 extremes in water flow were not discharges from Lake Okeechobee (lake water levels are low after seven months of drought). All of the water in June originated in the 865,000-acre Caloosahatchee watershed — a land area the size of almost two Lake Okeechobees — that borders the 75-mile-long river from the lake to the coast.

Watershed water that used to collect in wetlands, seep into the ground and slowly move toward the river is to-day expedited off the land through canals and ditches as unwanted stormwater runoff from developed urban areas, farms and ranchlands.

Our more developed watershed has fewer wetlands to collect and filter the water so a plan for a reservoir in the watershed was developed. The C-43 West Basin Reservoir is designed to collect watershed runoff from the area where it is being built in LaBelle, on the south side of the river, and hold it for the dry season to supply some of the water needed to manage salinity in the estuary.

The project is under construction with dedicated funding from the legislature and hopefully will be completed by 2022. To expedite the construction of this cost share project the Army Corps and SFWMD agreed that the SFWMD will build this project and the federal government's cost share will be met by the Army Corps constructing another project, the Broward Preserve Area.

Legislative Failure: Florida Forever

In 2014 over 78% Lee County voters and 74% statewide voted to support Amendment 1, The Water and Land Conservation Amendment: "to acquire, restore, improve, and manage conservation lands." The Constitutional Amendment designated 33% of real estate documentary taxes to fund the state land acquisition Trust Fund (LATF) that buys and manages the lands through the program known as Florida Forever.

Despite overwhelming public support since it passed, the legislature has snubbed the will of the voters by minimizing

See Florida Forever on Page 4

Our Success Depends on YOU!

Hooray, you did it again! Thanks to SCCF's wonderful supporters, we successfully reached the Annual Fund Drive goal for the 2016-2017 fiscal year that ended on June 30. Gifts of all sizes allowed us to balance our annual operating budget, and for that we are truly grateful to each and every one of you.

Particular thanks are once again extended to longstanding SCCF supporter Gretchen Valade and all who responded to her challenge grant this spring.

Without that remarkable generosity, reaching the Annual Fund Drive goal would not have been possible.

As always, we honor your donations with our pledge to remain mission-driven, fiscally conservative and responsibly prudent when it comes to spending your support dollars.

Diamondbacks -- Continued from Page 1

studied in Lee County. Through permits and permissions from the Florida Fish & Wildlife Conservation Commission (FWC), the U.S. Fish & Wildlife Service (USFWS), Lee County Parks and

Recreation (LCPR), and private land owners, biologists in the Wildlife Habitat Management Program (WHMP) at SCCF have been sampling various sites on and near Sanibel Island. SCCF research has included population ecology, satellite telemetry of female terrapins to locate nesting habitat, and seasonal activity. We have also partnered with other researchers on projects and are collecting data at our sites on seasonal hormone levels.

Wild diamondback terrapins are protected from commercialization in Florida. Unfortunately, they are highly prized in the national and especially international pet trade and poaching is becoming a serious problem in many areas. All of our research terrapins are able to be identified three different ways. They are photographed to highlight unique morphological characteristics such as the location of spots or lines, injuries, color patterns and injuries. They are also notched along the marginal scutes in a numbering pattern that represents a unique number and finally they are pit-tagged (micro-chipped) so they can be permanently identified with a pit-tag scanner. This helps us to be able to identify recaptured terrapins, as well as acts as a deterrent for poachers.

From our research we have learned many life history facts about terrapins in southwest Florida such as the lack of dormancy over the winter, seasonal migrations, and habitat preference difference by size class, and nesting distance. Current research is focused on discovering new localities, nesting substrate preferences, and comparing mangrove creeks that contain terrapins and ones that do not. Please report any sightings of these turtles In Lee County and take a photograph if possible.



SCCF Biology Intern Rachel Fisher releases an adult pair of diamondback terrapins back on the the J.N. "Ding" Darling National Wildlife Refuge after they were measured and marked with microchips (pit-tags).



A male diamondback terrapin looks out from a trap used by the SCCF research to capture terrapins to measure, mark and release.

2016-17 ANNUAL

FUND DRIVE



Florida State Budget Appropriations from the onservation Voters Water and Land Conservation Amendment Funds

	2015	2016	2017
TOTAL	\$759.4	\$902.9	\$736.3 *
Debt Service	\$191.1	\$175.7	\$170.3
Everglades, Estuaries, and Northern Everglades	\$79.2	\$215.2	\$155.4
Florida Forever (ARC)	\$15.2	\$15.2	\$0
Florida Communities Trust, Local Parks	\$0	\$10.4	\$0
Springs	\$38.6	\$50	\$50
Land Management	\$127.1	\$136	\$95.9
Rural Family Lands	\$15	\$35	\$0**
Beach Management	\$25	\$21.2	\$29.5
Historic Preservation	\$10.9	\$2	\$ 2
Water Supply/Wastewater	\$0	\$0	\$ 0.3
Regulatory/Pollution Control Programs	\$58	\$50.9	\$33.4
Existing Agency Operating Expenses	\$199.3	\$191.3	\$194

For explanatory notes for the graph and for more details, to go http://www.fcvoters.org/2017-budget-summary/

Florida Forever -- Continued from Pg 2 spending for Florida Forever, Florida Communities Trust and Rural and Family Lands, and instead has misappropriated up to a third of the funds to pay for agency salaries, benefits and office equipment previously and more appropriately funded from General Revenue (see chart, right). Budget Analysis is provided by Florida Conservation Voters on their website: http://www.fcvoters.org/2017-budget-summary/

misappropriated 31% of Amendment 1 funding for agency expenses.								
	<i>Total Funds</i> Dollars	<i>Florida Fo</i> Dollars	<i>rever</i> % Total	Agency Expenses Dollars % Total				
2017	\$730.5*	\$0	0%	\$ 227.3	31%			
2016	\$902.9	\$ 60.6	7%	\$ 242.2	27%			
2015	\$759 4	\$30.2	4%	\$ 257.3	34%			

* in millions

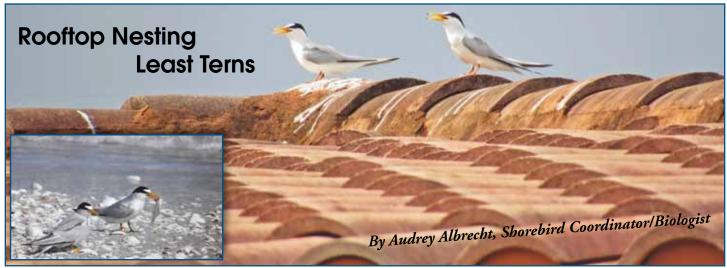
Notes from the Homestead

We are in the midst of summer when being outside feels as if you are wading through bathwater, and I can only focus on the weeds that are enveloping our beautiful gardens! I often just need to take a short break, look around at the wider world, and open my eyes to the wonder of the landscape rather than let it become overwhelming in the heat and rain.

One of the joys of summertime and an easy way to breathe a sigh of relief is to observe our showiest native passionvine, Maypop. A close relative of the more common Corky Stemmed Passionvine, Maypop (Passiflora incarnata) can only be enjoyed during the warmer months of the year, as it goes dormant in the winter. Don't expect to train the vines onto a trellis, as it reappears every year in a different place and often with many root suckers, several feet from the original plant! Like an endearing friend, it can be forgiven for its inability to be contained, as the flowers are the size of golf balls and a fabulous shade of purple. The gulf fritillaries, zebra longwings, and Julia butterflies all lay their eggs on the leaves, but don't worry about them being munched by the caterpillars. It grows quickly during the summer, and you probably will not notice the damage anyway if you're concentrating on the flowers.



- Jenny Evans, Native Landscapes & Garden Center Manager



On the roof: A breeding pair of Least Terns at an active Fort Myers rooftop colony in April 2017; Inset Photo: A banded least tern that fledged from a Pinellas County rooftop in 2010, found nesting on Sanibel in 2016.

In Florida and other coastal states, there has been a rapid decline in the available beach nesting habitat preferred by birds such as the Least Tern (Sternula antillarum). Development, sea level rise, and human disturbance all contribute to this decline. As a means to survive, Least Terns, Black Skimmers, and other species have resorted to nesting on gravel rooftops of large buildings like grocery stores. Over half of the Least Terns in Florida nest on rooftops. At this time there are no known rooftop nesting colonies on Sanibel or Captiva, but there are several nearby in Fort Myers.

The rooftops must be located near a water source in order for the adults to find fish to feed themselves and their chicks. Rooftop nesting provides some relief from ground based predators such as crabs, coyotes, and raccoons but still leaves them vulnerable to avian predators. Additionally, they are vulnerable to extreme heat and

heavy rains. Chicks are susceptible to falling from rooftops or being washed down gutters in heavy rains.

The Florida Shorebird Alliance (FSA) works to protect and monitor all our nesting shorebirds. The FSA consists of various agencies and volunteers across the state, including SCCF. In addition to regular beach nesting shorebird monitoring, they have a special program dedicated to protecting rooftop nesting colonies. Each month during the breeding season, volunteers across the state visit rooftop nesting sites and record numbers of adult birds observed flying above the roofs and check the building perimeters for fallen chicks.

If you are interested in learning more about rooftop nesting birds, or becoming a volunteer you can contact our shorebird biologist via email at *shorebirds@sccf.org* or you can visit the Florida Shorebird Alliance website at *FLshorebirdalliance.org/our-work/rooftop*

Where Do They Go?



September's more northerly breezes begin to carry orioles, warblers, grosbeak and other brightly colored feathered friends to our area. In early October, the white pelicans appear in northern Pine Island Sound in what — from a distance — looks like a new oyster bar but clarifies into over a hundred white pelicans standing in the shallows.

This year, I will eagerly look for my rose-breasted grosbeak, black and white warbler and orchard oriole friends. I especially will be wishing them safe passage to Cuba and beyond. After years of wondering, I finally saw one of the national parks of Cuba where my friends rest or spend their winters. There's pressure to make these lands serve other purposes and economic opportunities are scarce. So far Cuba has managed to save some rugged mountains flanked by nickel mines, coffee plantations and sugar cane fields. Park entrance fees are used to put on a festival and give away tools to farmers while celebrating the existence of their beautiful park.

As my feathered friends gain weight and strength for their long crossing from here to Cuba, I will always picture in my mind this beautiful valley for a long journey's respite.

Salto Guayabo Falls in La Mensura in Cuba

- Kristie Anders, Educator Director

SCCF AUG. - SEPT. 2017

Happenings Programs Opportunities

SATURDAY	N	12	19	26	2	6	1 G COASTAL CLEANUP	23	30	nter (or meet at the rwise specified. ad Preserve.
FRIDAY	4	11	18	2.5 Garden Walk-9@ BHP	1 SEPTEMBER Garden Walk-9@ BHP	8	1 ≤ Garden Walk-9@ BHP	22		All events are at the Nature Center (or meet at the Nature Center) unless otherwise specified. BHP is Bailey Homestead Preserve.
THURSDAY	3 Shorebirds-2	1 O Turte Trads-10	17 Shorebirds-2	24 Turde Trads-10	3.1 Shorebirds-2	√ Turde Trads-10	14 Shorebirds-2	2.1 Turde Tracks-10	2.8 Shorebirds-2	All events Natu B
Wednesday	2	9 Making Land Work tour at Bailey Homestead-8:30	16 Making Land Work tour at Bailey Homestead-8:30	2.3 Making Land Work tour at Bailey Homestead-8:30 Owl Tales-1	30. Making Land Work tour at Bailey Homestead-8:30 Otter Tales-1	ର Making Land Work tour at Bailey Homestead-8:30	13 Making Land Work tour at Bailey Homestead-8:30 Owl Tales-1	20 Making Land Work tour at Bailey Homestead-8:30 Otter Tales-1	27 Making Land Work tour at Bailey Homestead-8:30	
TUESDAY	1 August	8	1 5 Panthers/Corridors-10	22		5	1.2 Panthers/Corridors-10	19	26	
Monday		Fire w/ Purpose-10	Stormy Weather-10	21	28 Tides & Sea Level-10	CLOSED LABOR DAY	Fire w/ Purpose-10	1.8 Stormy Weather-10	75 Tides & Sea Level-10	
SUNDAY		9	13	20	27	6	10	17	24	

SCCF August - September 2017 Program Schedule

BAILEY HOMESTEAD: MAKING THE LAND WORK

This one-hour walking tour of the Bailey Homestead Preserve blends SCCF's mission-driven work on the historic property, the history of the land itself and some stories about the Bailey family, which farmed the land for three generations. Wednesdays at 8:30 a.m. No reservations. 1300 Periwinkle Way, meet at the Conservation Gateway Kiosk at the head of the Shipley Trail, near the entrance. Call Kristie or Dee at 472-2329 for more information. Free to members and children. \$5 for non-members.

CAPTIVA CRUISES

SCCF has a partnership with Captiva Cruises that offers a variety of waterborne experiences: The Dolphin & Wildlife Adventure Cruise narrated by SCCF Docents (4:00-5:30 daily), Cayo Costa State Park Beach & Shelling Cruise, Lunch Cruises to Cabbage Key, Useppa Island, Boca Grande on Gasparilla Island and Sunset Cruises. Call Captiva Cruises for reservations and additional information. 472-5300. www.captivacruises.com.

FIRE WITH A PURPOSE

Fire is used to open up existing wetlands, reduce fire endangerment to residential areas and maintain a balance in vegetation on SCCF's wild lands. What is the process necessary to perform a prescribed burn? Find out and join us at the SCCF Nature Center. Come learn the difference on Monday, August 7 and September 11 at 10 a.m. Members and children 17 and under are free. Cost is \$5 per adult, with members and children free.

FLORIDA PANTHERS AND WILDLIFE CORRIDORS

Florida panthers are the rarest mammals in North America – and their future depends on wildlife corridors. While not found on Sanibel, they play an important role in maintaining the ecosystems of Southwest Florida. The last few years have seen record-breaking panther deaths, but there is hope in protecting their habitat and allowing the elusive cat to spread north into its historic habitat. Prior to joining SCCF, Alexis Horn ran the Sierra Club's Florida Panther program. Learn what makes Florida panthers unique and why they are so vital to our environment. Tuesday, August 15 and September 12 at 10 a.m. in the SCCF auditorium. Cost of the program is \$5 per adult, with members and children attending for free.

GARDEN WALK AT THE HOMESTEAD

Take a guided walk through the native plant, wildflower, kitchen and tea gardens at the Bailey Homestead Preserve. Learn about the uses of the plants by humans, butterflies, birds and pollinators. You will end your walk with a sip of tea from the gardens infused with sea grape honey from the island. Meet for the walk on the deck at the Native Landscapes and Garden Center. Friday, August 25, September 1 and 15 at 9 a.m. Meet on the deck at the Native Landscapes & Garden Center. Free to members and children, \$5 for non-members.

STORMY WEATHER: HURRICANES, WATERSPOUTS & LIGHTNING Hurricanes are just one type of hazardous storms found in Southwest Florida. Waterspouts form at the edge of

afternoon storms and occasionally come ashore in which case they are re-titled tornadoes. Florida leads the nation in deaths by lightning. Which is more potent- positive or negative lightning. Stop in and find out. *Monday, August 14 and September 18 at 10 a.m. Free to members and children, \$5 for non-members.*

OTTER TALES

No one knows how many North American river otters live on Sanibel and Captiva. Some say there are fewer since 2004's Hurricane Charley. Come and learn about this large, aquatically adapted member of the weasel family. river otters are strong and graceful swimmers that capture the hears of all who see them. Otter sightings have increased recently on SCCF trails. Wednesday, August 30 and September 20 at 1 p.m. The cost of the program is \$5 with SCCF members and children attending for free.

OWL TALES

The nesting season for Great Horned, Barn, and Screech Owls of the islands has begun. The Great Horned Owl does not make its own nest but uses one built by an osprey, hawk, or eagle. The Screech and Barn Owls nest in tree cavities made by woodpeckers or nest boxes. Will the Barn Owls use the nest box on the side of the Nature Center this year? Island Screech owls are in the courting phase with males guarding territory and calling to females. Wednesday, August 23 and September 13 at 1 p.m. The cost of the program is \$5 with SCCF members and children attending for free.

SHOREBIRDS OF SANIBEL & CAPTIVA

Join SCCF biologists to learn about the shorebird species that nest on our beaches, including snowy plovers, least terns and wilson's plovers. SCCF has been monitoring beach nesting birds on Sanibel since 2002. Learn how you can safely share the beach and help us protect our feathered friends. Thursday, August 3, 17 and 31; September 14 and 28 at 2 p.m. Free to members and children, \$5 for non-members.

TIDES, CURRENTS & SEA LEVEL

Why are the tides so peculiar in our area? Just what does it mean when a tide chart says 2.2 or -.6? Where is sea level? Come learn about how tides behave in the Gulf and our back bay and why, in many instances, it is better to look at the barnacles on the pilings than depend upon a tide chart. Monday, August 28 and September 25 at 10 a.m. Members and children 17 and under are free. Cost is \$5 per adult, with members and children free.

TURTLE TRACKS

Sanibel Island had one of the first sea turtle monitoring programs in the country. Learn about the life cycles and habits of the sea turtles and shorebirds that nest on our beaches, SCCF's monitoring activities, and what we are doing to protect them. Thursday, August 10 and 24; September 7 and 21 at 10 a.m. in the Nature Center auditorium. Free to members and children, \$5 for non-members.



Sanibel-Captiva Conservation Foundation P.O. Box 839 Sanibel, FL 33957

August - September 2017 Member Update







@SCCF_SWFL



@SCCF_SWFL

Sign up for our blog at www.blog.sccf.org

SCCF Nature Center

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(1 mile west of Tarpon Bay Road) / P.O. Box 839, Sanibel 33957

SCCF Nature Center and Main Telephone:

(239) 472-2329

Fax: (239) 472-6421

www.sccf.org

blog.sccf.org

Native Landscapes & Garden Center: (239) 472-1932 (at the Bailey Homestead Preserve)

Marine Laboratory: (239) 395-4617

Wildlife & Habitat Management: (239) 472-3984

SCCF is dedicated to the conservation of coastal habitats and aquatic resources on Sanibel and Captiva and in the surrounding watershed through:



- Environmental Education
- Land Acquisition & Stewardship
- Marine Research
- Natural Resource Policy
- Native Landscapes & Garden Center
- Sea Turtles & Shorebirds
- Wildlife & Habitat Management

Nature Center Hours:

Monday - Friday 8:30 a.m. to 4 p.m. from October - May

8:30 a.m. to 3 p.m. from June - September

Native Landscapes & Garden Center Hours:

at 1300 Periwinkle Way, Bailey Homestead Preserve Monday - Friday — 8:30 a.m. to 5 p.m.

Saturday from 10 a.m. — 3 p.m. (January through April)

Visit our Nature Center

• Trails & Observation Tower

• Butterfly House

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• Education Center

\$5/adult, children under 17 free, members free.

Find the latest real-time water quality readings from our RECON sensors at www.recon.sccf.org

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