

# Delnor-Wiggins Pass State Park

## History Highlights

Year 2020

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Delnor-Wiggins Pass State Park



Park Manager Terrance Torvund on Beach Cleanup Post-Tropical Storm *Eta*  
(November 12, 2020)

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## Preface

In October 2020, Park Manager Terrance Torvund appointed me the Park's first Volunteer Historian. *Delnor-Wiggins Pass State Park History Highlights 2020* is the first history I have authored on the Park. My research this past year has convinced me it is also the first history ever written on the Park.

Terrance and I met for the first time in August 2020 on the Park beach. I told him that I was an historian\* researching the Park's history online and in the Collier County library, but had found nothing published on the subject. I then asked him if he had ever considered having someone chronicle the Park's past using documents located at the Park. He responded "yes and the job is yours if you want it." Over the next several weeks, I combed through Park files but came across very little of historical value, so Terrance and I decided that I should concentrate on more current Park activities for which records were readily available.

Terrance and I drafted a topic outline for a 2020 history and periodically refined it until it looked pretty much like the Table of Contents on page 1, above. To produce the manuscript, I relied heavily on press clippings and Florida and Collier County primary sources online, but Terrance was my principle resource for historical information. He gave generously of his time, granting me interviews and sharing with me official correspondence. Without his assistance, I could not have written the history. I am extremely grateful to him.

There is a fairly long list of folks who supported me, including Assistant Park Manager Mark Nicoletti, Park Service Specialist Caitlin Brunk, Park Ranger Louis Berney, Florida Gulf Coast University Professor Phil Allman, Humiston and Moore Coastal Engineer Steve Foge, and Larry Bear, a former President and current board member of the Friends of Delnor-Wiggins Pass State Park. Especially helpful was former Park Manager Robert "Bob" Steiger, who contributed his historical perspective to the recent events covered here. In this first Annual Park History, I have attempted to establish a format and style for future Annual Park Histories. Terrance and Mark have reviewed the manuscript and I have integrated their comments and changes into it. I solicit reader comments. Please send them to: [docmatthewshistorian@yahoo.com](mailto:docmatthewshistorian@yahoo.com) Also, my recent history *State of Florida, Collier County, and Beach Access: The Case of Delnor-Wiggins Pass State Park – Part I: An Oral History with Robert M. Steiger, Former Park Manager* is available upon request through my email address.

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\* After receiving my PhD in History in 1981 from the University of California, Santa Barbara, where I had taught for three years, I started a career as an historian for the Department of Defense. I retired from the DOD in 2003 as a GS-15 (colonel/Navy captain) after 26 years of service with the Air Force and the Joint Chiefs of Staff. In retirement I became a consultant. My clients have included Office of the Secretary of Defense General Council, Lockheed Martin, United States Environmental Protection Agency, Homeland Security Associates, and Airlift/Tanker Association. During my careers as an academic, Federal Civil Servant, and consultant I have authored and coauthored dozens of books, monographs, oral histories, and articles for government, scholarly, trade, and popular presses [Matthews Vitae and Publications List. See also Berney, Louis, "Historian Documents Past of Pass: Delnor-Wiggins [Pass State] Park Anniversary Inspires James K. Matthews," *Naples Daily News*, 12/30/20].

## Feature Article – Covid-19

**Part 1 - Overview:** On March 23, 2020, the Florida Department of Environmental Protection, following Governor Ron DeSantis' direction, closed all Florida State Parks due to Covid-19. By then, many county and city beach parks across Florida had already closed, prompting beach enthusiasts to head en masse to State beach parks. For example, when the city of Naples and Collier County and Lee County announced that their beaches and beach parking lots would begin closing on March 19th--in large part because Florida east coasters, whose parks closed even earlier, began traveling to west coast beaches--Delnor-Wiggins Pass State Park (Park) rangers braced for an onslaught. So many Floridians and snowbirds beelined it to Delnor-Wiggins on the 20th that Park Manager Terrance Torvund was forced to close the Park's gates at 8:30 AM. They remained closed for six-plus weeks, until May 4. During the shutdown, Park rangers caught up on maintenance. They painted six bathhouses, the shops, and the ranger station; replaced damaged boards on boardwalks; and installed new tile and fixtures in Bathhouse 3.

When the Park reopened, rangers adopted the new sanitizing protocols. They donned masks, indoors and outdoors, and cleaned the bathhouses several times a day. They wore latex gloves for most duties and guests entering the Park were required to place correct change in a collection box or insert a credit card into a contactless reader. Free-use life jackets went into storage because rangers could not possibly clean them after every use. (See "Life Jackets Removed, Twice," below.)

Department of Environmental Protection distancing orders were strictly enforced at the Park. If a ranger came down with Covid-19, that Ranger and all others who were in close contact with him or her were required to go into quarantine. Consequently, Park employees needed to stay six feet apart. Only one person at a time was allowed in the Ranger Station and Ranger Lounge gatherings were prohibited. Similarly, only one person could undertake close-quarters projects such as boardwalk, bathhouse, and vehicle repairs.

To discourage large gatherings, rangers closed the Pavilion and pulled out some of the tables and barbecues in picnic areas. Park visitor hours were reduced: guests could no longer enter before sunrise or after sunset for special events such as weddings and community association meetings. Rangers roped off the southern Park boundary to discourage visitors from slipping in without being counted. Guests with annual passes were not permitted into the Park at sunrise as usual. They had to wait until 8:00 AM, when the gates opened to the general public, and all guests were required to leave at 5:00 PM instead of sunset. To help enforce social distancing, the Collier County Sheriff department increased utility terrain vehicle (UTV) patrols along the Park beach breaking up groups of 10 or more. Likewise, as school buses entered the Park, the Ranger at the

Ranger Station reminded their occupants that they could not congregate on the beach in groups larger than 10.

The annual Children's Art Show and monthly events, such as All-Abilities Drum Circle and Afro Dance took place as scheduled early in the year, but after the Park closed, the remaining Park programs and special celebrations were cancelled, including Keep Collier Beautiful, Wildlife and Wildlands Art Show, Nature Fest 2020, Coastal Cleanup, Seashells and Santa, and the Park Service's 85th Anniversary bash. (See "Park's 50th and Park Service's 85th Anniversaries Cancelled," below.) Thursday evening Interpretive Programs ("Ranger Walks"), just getting up-to-speed after an extended hiatus due to a shortage of certified presenters, came to an abrupt halt with the Park's closing. The Friends of Delnor-Wiggins Pass State Park (Friends) monthly meetings, usually held from October to March, were also scrapped as was their annual field trip. Torvund, convinced the pandemic would continue into the following year, nixed the Children's Art Show 2021 and Wildlife and Wildlands Art Show 2021.

One of the most challenging Covid-19 social distancing requirements was limiting occupancy of Park vehicles to one person. The Park owned three sand-capable UTVs and three golf carts. One of the carts broke down in March and did not run for the remainder of the year. The result: a persistent shortage of vehicles for routine chores, special projects, and training. (It was somewhat analogous to the Park losing three or four of its six vehicles at once in pre-pandemic days.) Any two-person job, such as clearing heavy downed tree limbs from the road, needed two vehicles instead of one.

Especially difficult was meeting objectives for turtle-count training, which required a trainer and a student to take two instead of one UTV. The Park had already been strapped for UTVs before the pandemic. They were old and trouble prone. (Reliability improved considerably with purchase of a new UTV early in the year with help from the Friends.)

Initially, like the rest of us, Park rangers experienced shortages. The previous year's red tide had already put P95 masks, used for dead fish pickup, in short supply. The Division of Recreation and Parks' District 4, the Park's higher headquarters in Osprey, Florida, was able to find masks and additional gloves in Sarasota for the Park. The Friends made sure Park employees had all the surgical masks they needed. When rangers ran out of sanitary wipes, they used homemade solution and cloth towels instead.

By the end of the year, rangers learned to adjust. They tweaked vehicle scheduling daily to complete jobs and training safely, if not as quickly as before the new distancing requirements. There were no more mask or supply shortages. Normal 8:00 AM to sunset Park hours returned and sanitizing protocols relaxed slightly. The Pavilion reopened but the picnic tables and barbeques pulled early on stayed in storage as did the life vests. The one



person in a vehicle and one person at a time in the Ranger Station rules remained in force.

Overall, the Park's Covid-19 precautions were successful. Park Service Specialist Caitlin Brunk emphasized that--in spite of challenges related to storms, predators, and transportation--the Park experienced a "truly successful" turtle-count year, with a total of 39 nests leading to 2,575 hatchlings making it into the Gulf. That 60% success rate compared to 57% in 2019. She summed up the crazy year succinctly: "Things got easier if only by practice." Most importantly, Covid-19 infected no Park employees in 2020.

**Part 2 – Park's 50<sup>th</sup> and Park Service's 85<sup>th</sup> Anniversaries Cancelled:** On September 8, 1970, the State of Florida acquired from Collier County the property that would become Delnor-Wiggins Pass State Park. Consequently, September 8, 2020, was the Park's Golden Jubilee. Planning for the Park's 50<sup>th</sup> shindig was not yet underway when the Florida Department of Environmental Protection's (DEP's) Covid-19 restrictions went into force. Not so for the Park Service's 85<sup>th</sup> anniversary: planning for it at the Park was nearly complete when the DEP ordered State parks to close their gates on March 23.

To support its 85<sup>th</sup> Anniversary in 2020, the Park Service in the fall of 2019 instructed all state parks to hold local observances during the following year based on each park's acquisition date or within 30 days of it. As a result, on November 9, Brian Fugate, District 4 Bureau Chief, Division of Recreation and Parks, directed Delnor-Wiggins Pass State Park Manager Terrance Torvund and the other District 4 state park managers to begin anniversary planning. Torvund set September 12, the first Saturday after his Park's acquisition date, for the celebration, noting that the weekend would allow for maximum participation by the community. To organize the festivities, he assigned Park Service Specialist Caitlin Brunk, who christened them "Commotion in the Ocean" to capture the Park's beach recreational orientation and the current and ever increasing threats of pollution to the area's waters.

The party should also be fun, so she planned water-themed games and other experiences for what would likely be a hot and humid September day. Sponge relays, paddleboard demonstrations, and fishing clinics would be on the agenda. The commemoration, she believed, should stress environmental stewardship and, in general, be educational for attendees. Consequently, she envisioned ranger-led Interpretive Programs, exhibits, and crafts. She would also invite local environmental groups to participate with their own displays and handouts. Activities would be free with a Park admission fee and a vendor or vendors would offer food and beverages. As part of her proposal, Brunk designed an advertising flyer, completed an event map and schedule, and drafted invitee agency instructions for Torvund to approve and forward to Fugate.



Hopefully, when it was safe, the Park Service would eventually reschedule its anniversary observance. Whatever the Park Service's decision, Delnor-Wiggins Pass State Park should consider honoring, post-pandemic, its 50th birthday following the Brunk Party Plan. Then all her hard work could be put to use. It certainly has not gone unnoticed.

**Part 3 – Lifejackets Removed, Twice:** As part of the Park's Covid-19 cleaning precautions, rangers in March 2020 removed the 40 lifejackets from their two beach racks, one each by Lot 1 and Lot 3, and placed them into storage: it was not possible to keep them sterilized between multiple uses day in and day out. In early April, a member of U.S. Coast Guard Auxiliary Flotilla 96, the organization assigned to check monthly the condition of the jackets and replace any found to be missing or in disrepair, noticed the jackets "had disappeared." In the Coastie tradition, he "leaned forward" in procuring and racking new ones.

The jackets and racks at the Park dated from December 18, 2014, when the Park, in conjunction with the NCH (formerly Naples Community Hospital) Safe and Healthy Children's Coalition, launched the "Kids Don't Float, Lifejackets Do!" lifejacket loaner program. The Coalition donated the jackets in multiple sizes for both stands. Coalition representatives at the dedication ceremony on the 18th included State Representative Kathleen Passidomo (R-Naples, Florida), Park Manager Robert "Bob" Steiger, and Tom Vizioli from the Coast Guard unit. The Park now has two sets of jackets in storage, cleaned and ready for use when the pandemic subsides.

**Part 4 – Shuttle Cancelled/Collier County Beach Shuttle Report:** Since the mid-1990s, Collier County has been pressing the State to erect a multistory parking garage in Delnor-Wiggins Pass State Park to help relieve traffic congestion near the Park--at the four-way stop at Vanderbilt Drive and Bluebill Avenue and east along Bluebill--during peak tourist season and on holiday weekends, when Park parking reached capacity forcing it to close its gate. As the State gently but steadfastly pushed back against the County's garage proposal, the public and environmental groups consistently and loudly expressed extreme dislike for it.\* The County's own documents, "Beach Shuttle Report" and "Park and Ride Study," should finally put the issue to rest.

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\*For a details on the debate over a parking garage at the Park and traffic backups outside the Park, see Matthews, James K., PhD, *State of Florida, Collier County, and Beach Access: The Case of Delnor-Wiggins Pass State Park – Part I: An Oral History with Robert M. Steiger, Former Park Manager* (January 2022). Request an electronic copy from the author at [docmatthewshistorian@yahoo.com](mailto:docmatthewshistorian@yahoo.com)

To help decrease the traffic backups, Collier Area Transit (CAT)--in partnership with the Florida Department of Transportation and the Collier County Tourist Development Council--provided bus service for beachgoers beginning in the winter of 2017 to coincide with the arrival of sun-seeking snowbirds. Over the next two years, CAT tweaked the routes, dates, and times of service based on ridership. Service enhancements and growing public knowledge of the shuttle resulted in a dramatic increase in use: from 1,903 passengers in 2017 to 6,737 in 2019. For each person riding the bus through the Park gate, CAT collected a \$2 fee for the Park, which amounted to \$5,296 in 2019 compared to \$1,092 the previous year. The shuttle was otherwise free.

CAT released its beach shuttle report in 2019. Based on previous experience, it planned to operate the service in 2020 between January 17 and April 27. The route would travel continuously from the CAT Creekside Connection along Immokalee Road to Delnor-Wiggins by way of the Conner Park parking lot between 8:00 AM and 3:10 PM and again from 4:30 PM until 7:10 PM every 30 minutes Friday through Monday. (The County had constructed the Conner Park parking lot as the state park's overflow lot. Located on Bluebill Avenue less than a mile from the state park, it opened to the public in September 2001.) Riders could flag down the bus anywhere along the line and board with all their beach gear: chairs, umbrellas, and coolers. Alternately, they could park at Conner Park, hop on the bus shuttle, and ride right into the state park without worrying about being denied access.

There were two changes to the 2020 CAT beach shuttle as originally outlined. First, it started early. At the request of Park Manager Terrance Torvund, CAT activated the shuttle for seven days over the Christmas holiday, traditionally one of the busiest times of year at the Park. Second, it ended early: the service started up again on Friday, January 17 and ran until Saturday, March 14, when Assistant Park Manager Mark Nicoletti informed the County that the Florida Department of Environmental Protection had ordered suspension of the shuttle due to Covid-19 restrictions. It did not run again in 2020.

Even with the early demise of the shuttle service in 2020, its tremendous popularity had already proven its worth, in several ways. Riders saw it as an opportunity to avoid being turned away at the Park gate when the Park's lots reached capacity. The County appreciated the improved vehicle flow outside the Park because it reduced cost to taxpayers for Sheriff Department traffic control. Paramount, from the State's perspective, the success of the shuttle supported its long-held argument that a County bus service to Delnor-Wiggins via Conner Park would serve as an alternative to expanding parking in the Park.

## Front Page Stories

**Collier County Park-and-Ride Study:** A follow-on CAT report further discredited the County’s position on parking in the state park (see above, “Shuttle Cancelled/Collier County Beach Shuttle Report”). The *Collier MPO* [Metropolitan Planning Organization] and *CAT* [Collier Area Transit] *Park and Ride Study*, released in November 2020, counted the number of days each of the County’s eight beach parking lots reached capacity in fiscal years 2017-2019. Conner Park, the County’s backup lot for the state park, had the lowest number of closure days, only 15, over the entire three-year period (see table below).

Collier County Beach Parking Days at Capacity

<u>Beach</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>
Barefoot Beach Access	84	54	72
Barefoot Beach Preserve	39	24	30
Clam Pass Beach Park	36	10*	29
Conner Park	9*	1*	5
South Marco Beach	156	177	164
North Gulf Shore Beach	32	16	35
Tigertail Beach Park	13	8	12
Vanderbilt Beach Park	71	29	45

\*4<sup>th</sup> Quarter (April –June) off-season not included but the lots were likely not full any day that quarter except for possibly Palm Sunday, Easter day, and Memorial Day weekend.

Conner Park did not appear on the study’s list of 32 parking lots considered for expansion funding, but three other beach park-and-ride lots--Pine Ridge, Vanderbilt, and Goodlette-Frank—were categorized “beach parking deficient.”

The two County analyses, “Beach Shuttle Report” and “Park and Ride Study,” need to be evaluated together. In combination, they showed that the number of parking spaces in the state park plus those at the rarely filled Conner Park overflow lot--along with the County’s seasonal shuttle bus service to the state park through Conner Park--met beach access and parking requirements for the state park and nearby area. Why then would the County continue to advocate for constructing a multimillion dollar, multistory parking garage at Delnor-Wiggins Pass State Park? Logically, it should not.

**Tropical Storm *Eta*:** Tropical Storm *Eta* (Ay tah) hit the Park twice during November, on Monday the 9th and Wednesday the 11th. Although damage was minimal on the 9th, it was substantial along the beach on 11th, when conditions and timing were particularly bad. The brunt of the storm raked the beach at morning high tide (9:44) which, at 2.2 feet, was only slightly above average. However, it coincided with 30 MPH sustained winds blowing on shore. Gusts registered 50-plus MPH on the Southwest Florida coast, from Naples to Tampa, as the storm moved north between 100 and 300 miles out in the Gulf. For a time

overnight on the 10th, *Eta*'s sustained winds registered over 75 MPH, making it a Category 1 hurricane.

The storm's surge caused serious damage to the boardwalk leading from Parking Lot 5 to the fishing area at the north end of the Park. The morning after the storm, Park Manager Terrance Torvund began referring to the raised footpath as the "Park Pier." Park Service Specialist Caitlin Brunk described the altered structure as "a risen platform, with the power of the seas having sucked out an area of sand at least four feet deep, twenty feet long, and ten feet wide" and lifting its base structure from the sand "making the entire boardwalk appear to jump and dance with the seas."

The damage was so severe that Torvund closed the boardwalk; he feared it might eventually need to be torn down. In the near-term, the closure meant loss of the main route to the Cocohatchee River for fishing, but visitors would still be able to navigate around the point at low tide. A contract engineer performed an inspection on the boardwalk the following month, but at year's end no decision on its fate had been made.

The Liars' Club plaque, at the end of the boardwalk by the benches, went into storage and remained there through 2020. It had marked the Club's meeting spot since the spring of 2014 to memorialize Jack Shea--Park "Volunteer Extraordinaire" and retired Boston firefighter--who coined the name Liar's Club. Between 2000 and 2010, when he died, Jack and a handful of other old-timer beach lovers would gather in the mornings at their meeting place to tell tall tales and discuss their "medical maladies," according to Larry Beer, a former Friends President who designed the plaque. Beer purchased the plaque with money donated to the Friends memorial fund by Jack's daughter and others.

The boardwalk was not the only storm damage of major concern. The eight buoys off shore, delineating the swimming area up and down the whole mile of Park beach, had washed into the Gulf. New buoys were back in place by the end of the year at a cost of about \$1,500, including associated hardware--anchors, chains, and concrete--a fairly common post-storm expense.

There was a safety cost, too. As in the past when buoys went missing, incidents of power boats straying into the swimming areas increased. To Park rangers, nothing is more important than the safety of their guests and a recent incident was fresh on their minds. Six-months earlier, on March 5, a Boston Whaler entered a buoy-marked swimming area off Vanderbilt beach, just south of the Park, and hit a swimmer with its propeller only 40 yards off shore. The victim died. (See "Swimmer's Death near the Park," below.)

Like other large storms that have pummeled the Park in recent years--for example, Hurricane *Irma* on September 10, 2017 and Tropical Storm *Alberto* on May 28, 2018--*Eta* moved tons of sand from the beach to the Gulf, river, and picnic areas. In short, *Eta* exacerbated one of the Park's most persistent

challenges: beach erosion and the resultant need for sand nourishment (see below, “Archaeological Survey Released”). Brunk noted that a GPS Shoreline Survey, to be conducted the following year by the Park Service’s District 4, would provide additional detail to the initial post-*Eta* beach damage assessment. At year’s end, nature, as was often the case post-storm, had begun to replace sand lost to *Eta*.

Park rangers also observed minor storm damage. Due to the heavy rains, pot holes on the Park road worsened and increased in number and parking lots were still partially flooded the following weekend. A few trash and recycle bin lids went missing and several footpaths had boards lost and broken. Some Park signs disappeared. Others would need to be reset.

As always, storm cleanup was a Park team effort. Behind the beach, a large number of fallen tree limbs and other debris needed to be removed. On the beach, rangers found crab traps (see cover photo), beach chairs, and nautical paraphernalia, such as weights, cords, and floats. At the wrack line, cigarette butts and microplastic--always a risk to wildlife--stretched the length of the beach.

Like many of its predecessors, *Eta* bequeathed unique anecdotes to the Park’s history. The Pelican Isle Yacht Club, a half mile up river, retrieved a plastic Park bench from the drink and two others could be seen off the Park’s point, one floating in the river and the other across the river at Collier County’s Barefoot Beach Preserve. As if for laughs, *Eta* replaced the lost seating with a half-dozen chaise lounges, likely from one of the resorts on Gulf Shore Drive south of the Park. Luckily, *Eta* was the only storm of the record 30 named storms in 2020 to do significant damage to the Park. (The next highest storm total recorded was 28 in 2005.) Not surprisingly, surfer dudes took advantage of the high waves at the Park’s “Point Break” immediately in front of the red flags designating dangerous surf.

**Swimmer’s Death near the Park:** After watching the evening news on March 5, 2020, and reading the newspaper the following morning, local residents believed a tragic incident had taken place at Delnor-Wiggins Pass State Park and its rangers had been involved in the rescue and recovery efforts. The reports were incorrect. On the afternoon of the 5th, a 2017 27-foot Boston Whaler veered into a buoy-marked swimming area off Vanderbilt beach, just south of the Park, and hit 75-year-old Onofrio Sozio, a Naples resident, with its propeller only 40 yards off shore. The boat’s captain, an Ohioan named James Allen, threw a life ring to the injured man and then motored north past the Park and up the Cocohatchee River. Witnesses pulled the swimmer to shore and North Collier Fire and Rescue paramedics took him to NCH hospital. He was later airlifted to Lee Memorial Hospital, where he succumbed to his injuries.

The witnesses gave Collier County Sheriff deputies a photograph of the boat showing Allen onboard. Working with Florida Fish and Wildlife Conservation Commission investigators, they found Allen and his boat at the Cocohatchee

River Park Marina. While searching for evidence, they discovered human remains on one of the boat's motors. Allen was arrested and booked at Collier County jail "for leaving the scene of an accident with serious injury or death."

Having taken place so close to the Park, the tragedy reinforced Park ranger commitment to the safety of Park guests. It also highlighted the fact that Park buoys warning boaters away from swimmers could not guarantee their safety. More importantly, it underscored the need to replace buoys as soon as possible after a storm takes them out to sea (see "Tropical Storm *Eta*," above).

**Osprey Pair Abandon Nest:** In early August 2020, Park rangers and visitors noticed that the Park's mated ospreys\* were not using their nest in an Australian pine at the north end of Lot 4. A possible explanation: on separate occasions, a biologist from the Florida Department of Environmental Protection--conducting a Nesting Bird Survey at the beach--and Park Ranger James Aldridge, on beach patrol, spotted at least one bald eagle in the nest. Park Manager Terrance Torvund theorized that the eagle or eagles had forced the ospreys to abandon the nest and perhaps had even eaten fledglings in it. Throughout the summer and fall and into the holiday season, the pair occasionally made appearances at the south end of the beach, but by year's end they had not reoccupied the nest or built a new one in the Park.

The vacated nest represented a significant loss for the Park. The ospreys had been local celebrities and Park employees considered them family members since they arrived in the spring of 2011 to build a nest at the top of a large and high dead tree stump near Bathhouse 5. For nearly 10 years, Park visitors from around the world had watched in awe their daily aerobatics as they fished in the Gulf and taught their young to fly. Photographer Erwin "Erv" Krause, the Park's Artist-in-Residence for 2011 and contributor to the annual Delnor-Wiggins Pass Wildlife and Wildlands Art Show, learned from the Park's German guests their words for osprey, "Seeadler" and "Fischadler." An Italian family of visitors told him to say "Falco pescatore." "Not surprising that they were familiar with the bird," he observed, "It is found on every continent except Antarctica."

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\*Ospreys, nicknamed "Sea Hawks," are raptors. They hover over water to locate a fish and then swoop down with talons extended for the capture. Plunging at such a force, they often become totally submerged. Unlike other birds of prey, ospreys have a reversible fourth toe and spines or "spicules" on their feet to help them grasp their prey, which they carry head first and parallel to their bodies to reduce wind resistance. In courtship, the male brings food to the female to keep her from mating with other males. They often mate for life. Their average life span is seven to 10 years.

The osprey male picks the nesting site--in the top of living or dead tree, or on manmade structure--and then the pair builds the nest together. Nests are commonly reused for many years. In southwest Florida, nesting begins in December. Females lay one to four eggs (usually three) between April and May. The female tends to the eggs and the male protects the nest. Incubation lasts approximately 32 days (May/June). Young ospreys take their first flight around 55 to 60 days after hatching (July/August) and the adults feed them until they are about 100 days old (fall). ["Osprey-*Pandion haliaetu*", Florida Fish and Wildlife Conservation Commission website; "Osprey Facts," U.S. Fish and Wildlife Service website]

Lucky beachgoers were able to behold an osprey, hovering low over Wiggins-Pass, descend to steal a fish from an unsuspecting angler along the Cocohatchee River. The ospreys' fans might also have witnessed them defend their nest and territory from marauding eagles and celebrated their new nest-building following Hurricane *Irma's* toppling of their first nesting tree in September 2017. They were one of the most photographed fauna in the Park's history. Hopefully, they would return soon as permanent, fulltime Park residents.

**Gopher Tortoise Survey Released:** The Department of Environmental Protection's (DEP's) Division of Recreation and Parks (Division) documented, in the Park's 2000 Unit Management Plan (UMP), that when the State bought the Park from Collier County in 1970 sightings of gopher tortoises\* "were common," but by the early 1980s they had "entirely disappeared." In an attempt to reestablish the population, the Division's District 4 Biologist Ken Alvarez moved "some" tortoises from Barefoot Beach Preserve to the Park. The Division was not optimistic, recognizing that "the prospect of maintaining a viable population of gopher tortoises [in the Park] is not favorable. Forage is limited and visitation is very heavy. The gopher tortoises have a difficult time in such circumstances."

Evidently the reintroduction worked. In its 2009 UMP for the Park, the Division recorded that "it is [now] common for visitors [at Delnor-Wiggins] to see a gopher tortoise foraging along the side of the road. Several large burrows are often visible within the beach dunes." The Division attributed the tortoise comeback to its protected status. The Florida Fish and Wildlife Conservation Commission (FWC) had listed them as a State-designated threatened species in 2007. Consequently, the Division included the gopher tortoise in the Park's "Imperiled Species Management" register (along with sea turtles and least terns) and required that the Park conduct tortoise and tortoise burrow survey counts periodically. The Park was thus integrated into the State-wide Gopher Tortoise Management Plan to "restore and maintain secure, viable populations of gopher tortoises throughout Florida so the species no longer warrants listing."

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\*Along with three other reptiles--the Florida pine snake, Florida brown snake, and Florida Keys mole skink--the Florida Fish and Wildlife Conservation Commission (FWC) classifies the gopher tortoise, *Gopherus polyphemus*, as a "Threatened Species," meaning it is "likely to become endangered within the foreseeable future." (The FWC defines "endangered" as "in danger of extinction in all or a significant portion of its range.") The gopher tortoise is one of five North American tortoise species. It is the only one found naturally east of the Mississippi River. It ranges along the southeastern Coastal Plain from Louisiana to South Carolina and Florida, and lives in parts of all 67 Florida counties. Living 40 to 60 years in the wild, they have been known to live 90-plus years in captivity. They are opportunistic herbivores, grazing on the dominant low-growing plants and grasses in their environment. Allman's student Lewis Barrett observed the Park's tortoises eating sea oats, knickerbean, and baby seagrape saplings.

Gopher tortoise burrows average 15 feet long and 6.5 feet deep, but they have been documented at 40 feet and 10 feet, respectively. Gopher tortoises spend about 85% of their lives in their burrows. They are a keystone species: upwards of 350 other species, called commensals, live in their burrows. If the tortoises die off their residents could die off, too, in a cascading collapse of an ecosystem. (Examples of commensal species using gopher tortoise burrows are burrowing owls, Florida mice, indigo snakes, rabbits, gopher frogs, and numerous types of invertebrates.) ["Florida's Endangered and Threatened Species," Florida Fish and Wildlife Conservation Commission, June 2021; Gopher Tortoise: Land Conservation Efforts at Our Preserves Are Underway to Protect this Keystone Species," The Nature Conservancy, 3/31/21; "Gopher Tortoise," Florida Fish and Wildlife Conservation Commission website, n.d.; Denchak, Malissa, "Keystone Species 101," Natural Resources Defense Council (NRDC), 9/9/19]



The park manager at the time, Robert “Bob” Steiger, had been contemplating conducting tortoise surveys for years. One of the most common questions he received from park guests was “how many gopher tortoises are there in the Park”? He really had no idea, so he contacted Phil Allman, Associate Professor in the Department of Biological Sciences at Florida Gulf Coast University (FGCU), to do a tortoise survey at the Park. It was the beginning of a long-term professional relationship between FGCU and the Park.

Allman submitted his survey report to the FWC in December 2020. Covering the period from 2013 to 2019, it considered three areas of tortoise activity: population structure and demography; movements and habitat use; and reproductive ecology. The work was groundbreaking: while the record on gopher tortoises in pine flat woods and scrub habitat north of the freeze line was extensive, little was known about their lives in a coastal dune environment like the Park’s. Furthermore, the warm weather there meant the tortoises did not hibernate (little research had been undertaken on year-round active gopher tortoises), allowing Allman and students to study them all year long. The project contributed to the scientific literature on the subject and the understanding of the Park’s natural resources and offered students an opportunity to carry out research in the field.

The FGCU team conducted line transect surveys\* weekly to find tortoises inside the park along the coastal dune from Wiggins Pass to the southern border and between the parking lots and the Gulf of Mexico. Tortoises were spotted on the beach, on the road, and in the secondary dune habitat south of Parking Lot 1, but were primarily found in the secondary dune system to the north between the sand and Parking Lots 3, 4, and 5 and all the way to Wiggins Pass. Using the capture-mark-recapture method, they caught the tortoises by hand for processing: measured, weighed and, on first intercept, marked for future identification with a sequence of notches on the marginal scutes (the large, hard, visible scale-like sections of shell). They recorded the GPS capture position for each tortoise.

The researchers processed 108 unique tortoise individuals, 3.6 per survey and 13.8 new individuals each year. Adult sex ratio was one male to one female and adult male and adult female average growth rates were similar--3.7 mm (.1457 in) per year and 3.1 mm (.1220 in) per year, respectively--in line with populations elsewhere. Juveniles grew at significantly higher rates than adults: 14.6 mm (.5748 in) per year, faster than tortoises in Georgia, but slower than those in northern Florida.

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\*Line transit surveys are widely used to estimate the abundance and density of animal and plant populations for conservation management. [See Owusu, Bright, “An Introduction to Line Transect Sampling and Its Applications,” Montana State University, 4/16/19]

Recording growth rates was central to the study: it would set a baseline not only for future research at the Park, but for all gopher tortoise populations on the extreme southern limit of their natural range. Jacob Wozny, one of Allman's students, elaborated:

The species [worldwide] is currently experiencing significant population declines due to habitat loss and human exploitation. Its recovery requires a complete understanding of growth rate, which is known to influence the amount of time individuals are exposed to high predation risks, how long it takes an organism to reach maturity, and the size of the animal at maturity [all of which] have direct and indirect consequences for lifetime survivorship....

Females were generally larger than males, with the largest male measuring 320.04 mm (12.60 in) and the largest female measuring 352.04 mm (13.86 in). Male mean body size was 282 mm (11.10 in). With a mean body size of 302 mm (11.89 in), the females were among the largest recorded for any gopher tortoise population. Wozny speculated that the large body size of Park female tortoises "may result from year-round foraging...and likely provides an opportunity for higher lifetime reproductive output." The team also found 33 juveniles, more than they expected, ranging in size from 85.90 mm (3.38 in) to 249.93 mm (9.84 in).

Allman and his students attached radio tags to 10 adult tortoises (six female and four male) and tracked them from July 2013 to April 2015. In a follow-on tagging, they tracked seven adults (four female and three male) between July 2015 and April 2017. At least once a week, the researchers visited the park to locate each tagged tortoise. They varied their Park arrival days and times to learn how their subjects altered territorial and other behavioral patterns.

Tortoise average home range was 1.38 acres with males roaming much wider (just under two acres) than females (just over two-thirds of an acre). Allman added that the Park's tortoises displayed smaller home ranges than other tortoises, which might "be a function of diet and habitat quality. Tortoises move to find mates and to forage, so they are expected to have lower home ranges when habitat quality is high and the necessary resources are readily available to them" as found at Delnor-Wiggins.

Allman's group studied the tortoise mating cycle. They collected 2.0 ml of blood from males and females captured or recaptured each month from July 2016 to June 2017, centrifuged the samples on site, and quantified progesterone, testosterone, and estradiol levels from the serum. This part of the study produced the first year-round hormone profile for gopher tortoises.

From the data, Allman theorized that the Park's tortoises might be laying two clutches of eggs instead of one per year like their cousins up north, where "typical Gopher tortoise behavior is to mate in the fall (September/October), hibernate through winter, lay a single clutch of eggs [between six and 10 ping

pong ball-sized eggs at a time, usually near the burrow entrance] in the spring (May), and then feed vigorously through the summer to acquire the energy needed to develop a clutch of eggs the following year.” (Incubation lasts 80 to 110 days and adults exhibit no maternal care of their eggs or young.) He observed that in Park female tortoise progesterone levels spiked twice, in October/November and again in February/March, noting “female progesterone is associated with ovulation and will therefore peak in reptiles just before depositing eggs.” The team used a portable ultra-sound machine in the field to count eggs inside females, determine when they might be laid, and record fertilization and development status.

Yearly, between October and November, the researchers combed the entire Park for burrows. Burrows with tracks, apron (a mound of loose sand around the half-moon shaped burrow entrance), or tortoise nearby was classified as “active.” Burrows without an apron or with an apron covered with leaves or other vegetation were listed as “not active.” They came across burrows in odd places: a half dozen or so active burrows had been dug on a sand mound in the wet mangrove area east of the Park road and five other active burrows were discovered in spoil--sediments of rock, soil, and shell--extracted during dredging and deposited in the mangroves on the extreme north end of the Park.

Allman’s work at the Park showed that some tortoises burrow-hopped: “Many of our tortoises seem to be going back and forth over the year to a couple of different burrows, as if they were moving from a summer home to a winter home.” He considered, but rejected as too invasive, inserting a fiber-optic camera-equipped cable into the burrows. He and his students would not even handle tortoises near their burrows fearing it would cause them stress.

Arriving at a total number of tortoises in the Park was not a precise process. After completing an early survey in 2015, Allman documented 175 burrows leading him to make a rough guess that the Park had 100 to 125 tortoises. He explained that, although he could identify “patterns” from burrow counts, it was “impossible to accurately assess population size from burrow surveys [because tortoises] will share burrows and a tortoise will use multiple burrows.”

As the researchers began applying the capture-mark-recapture methodology, they began feeling more comfortable with their tortoise count estimations. Allman affirmed that they could use the proportion of marked and unmarked individuals to model or predict the population size. By midway through the study, they had notched about 90% of the Park population, allowing Allman to more confidently estimate the total number of Park tortoises to be between 100 and 110.

Then, on September 10, 2017, Hurricane *Irma* pummeled the Park. Allman’s first post-*Irma* survey led him to believe the Park had lost up to 50% of its tortoise population (tortoises hide from storms in their burrows and often drown in them while others are washed out to sea), but subsequent surveys showed that the

casualty rate was more like 20% to 30%. By the end of 2019, at the completion of the study, he placed the tortoise population at between 80 and 90.

Allman and Park Manager Terrance Torvund understood both the possibilities and dangers for the tortoises' future in the Park. The professor believed it was "a very healthy population" and he concluded it had "room to grow." He predicted the need for more tortoise-related research at the Park and anticipated a continued close working association between it and FGCU, perhaps for decades to come.

Both men realized that beach erosion, especially on the north end of the Park, a favorite tortoise nesting haunt, would likely accelerate, at least in part due to global warming causing increasing storm frequency and strength. Since Torvund arrived at the Park as manager in July 2018, he had seen firsthand storm damage on the beach. One storm in particular, Tropical Storm *Eta* in November 2000, nearly demolished the boardwalk from Lot 5 to the Cocohatchee River (see "Tropical Storm *Eta*," above), an area designated by the DEP's Office of Resilience and Coastal Protection as "Critically Eroded."

While predator risks to juvenile tortoises at the Park were many—most any meat eater that crawled, slithered, or flew—adults faced no real peril in the Park, except of course for humans. Somehow confusing clawed tortoises with flippered turtles, Park guests were known to carry the non-swimmers from terra firma to drop them in Gulf to drown. Former Park Manager Steiger said tortoise rustlers were a problem: "I sometimes could hear tortoises scratching in car trunks and truck beds as I walked through the parking lots." The thieves would keep them or sell them as pets on the black market: as an endangered species, it was illegal to sell, buy, or possess gopher tortoises in Florida without a FWC permit.

Joanna Fitzgerald, Director of the Conservancy of Southwest Florida's von Arx Wildlife Hospital raised another concern. While Allman's 2013-2019 study found adequate food resources for tortoises at the Park, she had been seeing recently, 2020-2021, increasing numbers of ill Park tortoises: "Radiographs showed they had sand impact...When there is limited vegetation they can sometimes ingest the sand as they are eating smaller plants or plants that are low to the ground surrounded by sand." She also was treating more vehicle-injured tortoises than in the past.

Humans in their vehicles, like beach erosion, were a critical hazard for the tortoises. Torvund was becoming alarmed at the number of tortoises being run over at the Park. Allman was also concerned. He concluded, in his report summary, that tortoise deaths from cars exiting parking lots were an "emerging threat" contributing to the population's decline since *Irma*.

The two hazards related. Allman pointed out that erosion reduced the amount of habitat available to the tortoises creating a "coastal squeeze," which would result in them showing up more often in parking lots and on the road. Decreasing

nesting opportunities made females particularly vulnerable as they moved farther afield in search of suitable spots to lay their eggs.

By the end of 2020, there were plans underway to help remedy the two greatest dangers to the tortoise population. The Florida Department of Environmental Protection had completed an archeological survey of the Park. Its results would allow the Park to replenish the beach with sand, hopefully in 2021 (see below, “Archeological Survey Released”). Torvund was also exploring funding options to purchase new signage in the Park, including Radar Speed Limit and Blinking Gopher Tortoise signs, to remind visitors to obey the 15-mph speed limit, keep their eyes peeled for tortoises when driving, and to check under their tires for the creatures before backing out of parking spots.

**Archeological Survey Released:** In 2020, the Park took a big step forward in gaining approval for placing sand on the beach, an interminable bureaucratic process, to widen it and slow erosion. One of the Park’s greatest threats historically, erosion was accelerating rapidly, especially at the Park’s north point and along the mouth of the Cocohatchee River. Concerned over the recent loss of sand, Park Manager Terrance Torvund and his boss District 4 Bureau Chief Brian Fugate in late 2019 asked the Department of Environmental Protection’s (DEP’s) Park Service Director Eric Draper for help in funding and conducting an archaeological survey at the Park. In accordance with the Florida National Historic Preservation Act of 1996, the survey needed to be completed before the beach could be “nourished” (also referred to as renourished or replenished) with additional sand: in the operation, heavy machinery would be used to distribute the sand up and down the beach, which could damage evidence of prehistoric human activities.

Nourishment entailed tilling the sand one month prior to turtle nesting season for three years so that turtles would be able to dig nests to bury their eggs in the new sand. Tilling, required by the Florida Fish and Wildlife Conservation Commission in fulfillment of US Fish and Wildlife regulations for all beach nourishment projects with turtle nesting habitat, could also destroy artifacts. If the survey determined there were no items of historical significance at the Park beach, the DEP could move forward in the nourishment approval process, which would include the Florida Department of State and the US Army Corps of Engineers along with other government entities. Once it had satisfied all the governmental prerequisites, the Park Service planned to work with Collier County to nourish the beach with sand that the County dredged from Wiggins Pass.

Surveyors had a fairly good idea of what they might find at the Park before they started their work in 2020. Noted Southwest Florida archaeologist John G. Beriault over his long career documented that people walking the sand from Vanderbilt Beach through the Park and along Barefoot Beach Preserve recovered hundreds of lithic (from ancient Greek word “lithos” meaning “rock”) projectile points, such as stone arrowheads and spearheads, from the Middle

Archaic Period (approximately 8,000 to 5,000 years ago). One couple, the Saylor of Bonita Springs, had collected twenty-six projectile points over ten years from the Wiggins Pass area. The Park's 2009 Unit Management Plan noted that Park visitors had come across "three stone tools, commonly called Florida Archaic stemmed points [blades with notched bases for securing to shafts]" at the Park and the State Archives had revealed evidence of almost 100 lithic points unearthed at the Park, some of which had been retrieved by Park guests, handed over to Park management, and recorded by Assistant Park Manager Mark Nicoletti in the Florida Master Site file under site number 8CR970.\*

Remains of a ship at the Park, known by local residents as the "Wiggins Pass Wreck," had been uncovered and covered again and again by storms for decades. In 1915, Mother Nature made visible the wreck's cabin and hold. The Harrison Holloway family visited the site in that year and recovered a brass tray from the wreck which, according to Beriault, they displayed in their Kentucky home. In the 1930s, he continued, "Thomas Fernandez and his father, local fishermen from Estero, visited the site and observed that people had been setting fire to portions of the wreck to recover metal, likely bronze or brass fasteners."

Hurricane *Dennis* in August 1981 exposed ship pieces once more. A month later, Willburn Cockrell, an underwater archaeologist for Florida's Department of Historic Sites—in the Division of Archives, History, and Records Management--conducted a preliminary examination of the archaeological site. He determined that the ship remnants were from a 19th century wooden American sailing vessel and estimated its length to be 20 feet with a beam of 17 feet. The site consisted of wooden frames and planks with iron fasteners. He hypothesized that the wreck had been stripped before it was abandoned.

Cockrell finished his cursory investigation in October and hoped to return in November for an in-depth assessment, including precise mapping of the site. Unfortunately, he was unable to acquire the equipment, procure the funding, or find the time to finish the project because his "budget has been depleted by treasure hunters' lawsuits": Federal mandates had made it necessary to have agents like him onboard every treasure hunting expedition.

The Archeologist Society of Southwest Florida, headed by Beriault, and the Collier County Museum raised funds and arranged free use of a backhoe for Cockrell, but he told them he was unable to travel from Tallahassee to the site to accept them; he just did not have the time. Consequently, he recommended that

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\*The Bureau of Archaeological Research maintains the Florida Master Site File of archaeological sites for the Florida Department of State's Division's of Historical Resources. The Park's shipwreck and scatter sites, 8CR218 and 8CR970, respectively, are included in the Master Site File.

Park rangers cover the artifacts with sand so that nobody would be injured on the exposed boards and metal spikes. Reburying the relics on the beach, as they had been before *Dennis*, would also help preserve them for later study. In fact, the shifting sand had already begun to cover the visible parts before rangers finished their work. They did a great job: neither the Wiggins Pass Wreck nor any part of it have been seen since.

The Park had its own treasure hunting encounter two years later. Since as early as 1970, when the State purchased the Park from Collier County, there had been rumors of a shipwreck in shallow water less than a half-mile off Wiggins Pass. In mid-May 1983, treasure hunters, led by William C. Austin of Fort Myers, announced they had located it. Based on his archive research, some coins beachcombers had discovered on the beach, and his use of a “custom made, not on the market, machine”--similar to a standard metal detector, but supposedly capable of distinguishing precious metals from other ferrous material--Austin concluded that the wreck was a gold or silver-laden Spanish galleon dating from the 16th or 17th century. Austin laid claim to the vessel in the US Federal Court in Tampa and in late September, after securing funding, began salvage operations. He recovered “items of general shipwreck nature, including pulling blocks from rigging and cannon balls, but no treasure, before his hunt came to a screeching halt.

Officials at the Florida Department of State’s Division of Historical Resources (DHR) were incensed, asserting that the ship belonged to Florida. In early October, the Florida Attorney General filed a suit to block Austin and seek compensation for damages to state-owned land and property. The State argued that Austin, to proceed with the salvage, would need State permits to assure protection of the wreck and artifacts related to it.

The hearing was held at the Federal court in Miami later that month. In his testimony, Delnor-Wiggins Pass State Park Assistant Manager Jeff Dimaggio said he witnessed one of Austin’s crew tie a rope around an exposed beam of the ship, yank it off, and drag it ashore, and he had photos to prove it. The judge ruled that the wreck belonged to the State and Austin was to cease and desist.

In the meantime, State archeologists dated the timber, which park rangers had confiscated, to about 1900. They also debunked Austin’s treasure claims, scoffing at his gold and silver-finding machine: “if it worked, everyone would have one and wrecks would be found more often.” They added that the likelihood of treasure being on the ship, based on State records and past experiences with shipwrecks in Southwest Florida, was less than 1%. It was almost certainly a “wrecked or abandoned supply vessel.”

Undaunted, Austin pursued the required permits with the State and in December he entered into a contract with DHR’s Bureau of Archaeological Research to restart his salvage operation. Surprisingly, after months of media coverage--from



Tampa to Miami to Naples and Fort Myers--chronicling Austin's Wiggins Pass adventure in the field and in the courts, there is no mention of what he eventually identified from the wreck or even if he actually renewed his hunt for its "treasure." Similarly, there is no record of the ship or its parts being seen again.

In August 2017, the State sent archaeologists to the Park to pick up where Cockrell had left off in his 1981 examination of the Wiggins Pass Wreck. Melissa R. Price, Senior Archaeologist for the Bureau of Archaeological Research and several Florida Public Archaeology Network volunteers sought to map definitively the ship's location. They conducted remote sensing and shovel testing at the site area, but failed to locate the wreck.

The DEP--through the Naples firm Humiston and Moore Coastal Consulting Engineers--hired Archaeological and Historical Conservancy, Inc. (AHC) in Davie, Florida, to conduct the Park Service-requested survey in the Park. The contract was approved by the Florida Department of State and overseen by its Bureau of Archaeological Research. Called the *Phase I Cultural Resource Assessment of the Delnor-Wiggins Pass State Park Beach Renourishment Project*, the survey, undertaken between April and May 2020, primarily sought to (1) find the Wiggins Pass shipwreck ruins (site 8CR218\*) someplace under the sand from Bathhouse 3 to about 175 yards north of it and, if pinpointed, investigate it; and (2) examine site 8CR970\* containing confirmed prehistoric lithic points and other scatter (stone tool flakes, chips, and debris) at the northern end of the Park by Wiggins Pass.

Both sites were part of a much larger survey, the Area of Potential Effect (APE), a 6.3 acre section of the Park beach. It averaged about 100 feet wide, from the high tide line to the vegetation edge, and extended for approximately 2,450 feet from Wiggins Pass southward, about half the length of the Park beach. In their search for prehistoric cultural heritage at the Park, the archaeologists performed an archival review, metal and magnetometer detecting, and subsurface shovel testing.

They made 120 shovel tests across the APE. Holes were 50 cm (1.64 ft) in diameter, 100 cm (3.28 ft) deep, and GPS mapped. The sediments were sifted through a 1/4-inch screen. The scatter and wreck sites were shoveled on a grid spaced 10 m (32.81 ft) apart and the rest of the APE was bored along one transect, North to South, at 25 m (82.02 ft) intervals.

The shovel tests exposed a long list of miscellaneous trash of recent vintage. Most common was oxidized ferrous scrap. Bone bits dug up in the shipwreck area proved to be modern butchered pork rib (lunch). A single black lithic fragment, tentatively identified in the field as a prehistoric pottery shard, turned out to be water-worn rock.

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\*See footnote on p. 19.

The ACH team members catalogued no cultural materials of historical importance anywhere in the survey area. They established that the shipwreck (8CR218) was “deeply buried below storm-deposited sediments,” possibly 1.5 m to 2 m (4.92 to 6.56 ft), near the vegetation line of the beach dune and determined that the artifact scatter at site 8CR970 “was from elsewhere” and likely deposited there “from storms, erosion, and/or dredging activities.” They turned up no indicators of prehistoric human activity anywhere in the Park “associated with an intact prehistoric site,” concluding that “the beach nourishment in the [Park] will not adversely affect...any cultural resources...” They told DHR that, in their opinion, no additional survey work needed be conducted at the Park. DHR concurred with the ACH survey findings and recommendations and accepted them as “complete and sufficient.” Park Manager Terrance Torvund hoped to see sand deposited on the beach in 2021.

## Local Interest

**Park Visitation Fiscal Year 2019-2020\***: Park visitation totals dropped in FY 2019-2020 (477,776) by 61,857 compared to FY 2018-2019 (539,633). While the decrease--explained at least in part to the Park being closed for six weeks, from March 23 to May 4, 2020, due to Covid-19—at first seems dramatic, an historical perspective shows it was not out of the ordinary. The FY 2019-2020 total was higher by 17,770 than the total for FY 2017-2018 (460,006) and in line with annual totals over the last 20 years (since FY 2000-2001): during that period, the visitation high was 566,947 in FY 2013-2014 and the visitation low was 403,183 in FY 2009-2010. Park Manager Terrance Torvund was pleasantly surprised the numbers were not even lower for FY 2019-2020 considering the Park's six-week closure and the raging pandemic kept people close to home. He predicted Park visitation would climb considerably in the second half of 2020 and through 2021 as Covid-19 subsided and the public came to realize beach environments were relatively safe from infection.

Interestingly, Park Annual Pass sales for FY 2019-2020 (2,800) exceeded those for FY 2018-2019 (2,300) by 500, making the Park #2 among all 175 Florida State Parks. Torvund remarked that he would be quite pleased to retain the #2 status in the years to come but held no expectation of being #1. That honor, with 10,000 annual pass sales in FY 2019-2020, went to Honeymoon Island State Park in Pinellas County, which attracts local visitors from some of the State's largest metropolitan areas, including Saint Petersburg, Clearwater, and Tampa. Also, he added, "it is 'dog friendly'."

**Signage:** Following guidance issued by his boss Brian Fugate, Division of Recreation and Parks' District 4 Bureau Chief, to improve and expand Park signage, Park Manager Torvund designed five new signs, one each for Delnor-Wiggins' parking lot entrances, and installed them in 2020. Signs at Lots 1-3 were identical: availability of toilets, picnic tables, showers, sunbathing, and swimming but no fishing or power boating. The Lot 4 sign differed from the first three by adding the concessionaire symbol. The sign at Lot 5 showed swimming but no fishing or boating on the south end and noted that the north end was a no-swimming area. Lot signs 1-4 had matching back sides. Sign 5 was one-sided because that lot was the end of the road. All five signs measured 40 inches high and 30 inches wide and stated dogs must stay in the picnic and barbeque areas. The new signs gave beachgoers as well as rangers something to point to when challenging people fishing and boating in swimming areas or walking dogs on the beach.

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\*The Florida State fiscal year runs from July 1 through June 30, so FY 2019-2020 is only half of calendar year 2020 (January-June). The second half of calendar year 2020, July-December 2020 (FY 2021), will be discussed in the Park's 2021 History.

Torvund knew exactly how to design and procure the signs. In 2006, he had worked as an AmeriCorps Member where they were made: the Florida Department of Environmental Protection Sign Shop at Mike Roess Gold Beach Branch State Park, Keystone Heights. The parking lot signs, paid for by District 4, matched in style the new bathhouse signs installed at the Park in 2019.

**Record Bird Species Count:** In November 2020, the Cornell University website *ebird.org* reported that birders at Delnor-Wiggins Pass State Park had observed 200 different bird species since counting began there in February 1981. Between then and 2011, there were only a handful of birders reporting observations at the Park. The following year, the numbers of birders and counts began to increase rapidly so that by 2020 there were dozens of birders logging hundreds of sightings each month.

The increases in bird counts at the Park, total and specie type, have been extraordinary since mid- 2018, when the Torvund family arrived. Bente (BEHN teh) Torvund, wife of Park Manager Terrance Torvund, logged 181 different species between May and the end of 2020 making her the undisputed top birder at the Park. (Number 2 had recorded 90.) In the last month of the year alone, Bente birded 23 days and in eight of them she logged 20 or more different species. Her highest daily count in December was on the 13th, with 28 species and 121 individuals observed.

Bente Torvund, Sunday, December 13, 2020  
Delnor-Wiggins Pass State Park

Species Observed	Individuals	Species Observed	Individuals
Royal Tern	2	Sandwich Tern	2
Black Skimmer	4	Double-Crested Cormorant	1
Brown Pelican	18	Great Egret	3
Snowy Egret	1	Little Blue Heron	2
Tricolored Heron	1	White Ibis	7
Osprey	1	Red-Bellied Woodpecker	1
Downy Woodpecker	2	Pileated Woodpecker	1
Blue-Headed Vireo	1	Blue Jay	3
American Crow	1	Blue-Gray Gnatcatcher	23
Gray Catbird	1	Brown Thrasher	1
Northern Mockingbird	2	American Goldfinch	20
Common Grackle	7	Black-and-White Warbler	1
Palm Warbler	1	Yellow-Rumped Warbler	9
Yellow-Throated Warbler	1	Northern Cardinal	4

Totals: 28 species observed; 121 individuals

**Nurdles:** On October 3, 2020, a Florida Gulf Coast University (FGCU) student conducted a survey of the Park beach looking for a relatively new type of microplastic called “nurdles”: light, smooth, buoyant, and virtually forever-lasting orbs the size of lentils. Produced by US petrochemical companies from refined oil and gas, they were shipped overseas to be melted and shaped into forks, water bottles, garbage bags, cell phone cases, and a multitude of other items. They were washing ashore worldwide, including the Gulf coast, in alarming numbers.

In 2018, in response to a massive off shore nurdle spill during transport near Corpus Christi, Texas, a grass roots group of citizen scientists, “nurdle patrollers,” began monitoring nurdles along the Texas shore. Over the next two years, the movement spread to Florida and other states. Nurdle patrols conducted some 2,000 surveys covering the Gulf shore from Mahahual, Mexico to Fort Jefferson, Dry Tortugas National Park, in the Florida Keys, with the 20 highest counts recorded at sites in Texas.

Nurdle counts would help scientists determine the scope of the problem. The threat of microplastics on wildlife--such birds, fish, and turtles--had long been known and documented and scientists hoped nurdle research would result in regulation of polluters. Although the FGCU counter found no nurdles at the Park, the Gulf Stream Current and the construction of additional nurdle factories in the US almost assured that the plastic pellets would begin showing up on southwest Florida beaches sooner rather than later. They had already been found in small numbers on the beach near Sunshine Bay Bridge in Tampa Bay.

**Excellence in Park and Recreation Management Uniform Pins:** On September 24, 2019, the American Academy for Park and Recreation Administration, in partnership with The National Recreation and Park Association, announced the recipients of the 2019 National Gold Medal Grand Plaque Awards for Excellence in Park and Recreation Management.\* Florida State Parks, Department of Environment Protection, won the Gold Medal in the State Parks category, its fourth such honor since the award was established in 1997. Florida State Parks had also won Gold Medals in 1999, 2005, and 2013. It was the first time a State Park system had received the national award four times. Park Manager Terrance Torvund distributed the pins to his full-time employees in November 2019 and they became standard wear on Class A uniforms in 2020.

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\*The National Gold Medal Award honored park and recreation communities throughout the United States for demonstrating excellence and innovation in management, business practices, long-range planning, employee recognition, and environmental stewardship. The program included seven classes, five annually based on population size and one annually for the armed forces. The seventh class, for State Park systems, was awarded in odd number years. [NRPA Gold Medal Awards, Park and Recreation Management Excellence/National Recreation and Park Association website]

**Ranger Station Mold Remediation:** During a quarterly safety inspection on July 9, 2020, Park rangers found mold in the Ranger Station's attic and on the outside of its air vent. They closed down the building and opened the toll booths for fee collection. Administrative Assistant Jenn Marques began sharing office space with Assistant Manager Mark Nicoletti and Park Manager Terrance Torvund moved his office into the Friends meeting room.

Park management solicited bids for remediation and received several quotes (anything over \$2,499.99 required more than one). The low bidder was DryZone at \$3,048.47. (High bid was \$13,840.06.) Torvund asked District 4 for the funds and it transferred them to the Park. DryZone initiated remediation on August 3, which included containment of the station; HEPA (high-efficiency particulate air) vacuum and wipe down of the containment area; removal of the cork floor; scrubbing and sanding the subfloor; removal of the drywall in the air conditioning closet; and cleaning and sanding studs in the AC closet.

On July 13, the Ranger Station failed its inspection. Daane Labs found high levels of cladosporium and hyphal fragment\* spores in the AC unit and air ducts that exceeded the Healthy Home Standard (International Institute for Building Biology and Ecology) threshold, meaning mold growth was likely. DryZone returned, at no extra cost, to take out additional dry wall and flooring and remove and clean the AC unit and ducts. The remediators discovered more mold behind the air handler, which they scrubbed out.

On August 20, Southwest Florida Home Inspections Environmental Testing certified the Ranger Station as mold free. Torvund then needed to reinstall the drywall, AC unit, and ducting. He and his staff replaced the drywall themselves and requested and obtained \$1,785 from District 4 to get the air conditioner running again. Allied Air Services completed the work on September 10 and the station opened back up for business on September 16.

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\*Cladosporium and hyphal fragment fungi can cause allergies, asthma and respiratory diseases. Long term exposure might bring on sinus infections and ear and eye illnesses. [Medical News Today website; "Black Mold on Wood, Black Mold Control, [blackmoldcontrol.com/remove/fromwood](http://blackmoldcontrol.com/remove/fromwood), n.d.]

# Citations

## Feature Article – Covid -19

### Part I: Overview

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### Part 2: Park's 50th and Park Service's 85<sup>th</sup> Anniversaries Cancelled

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### Part 3: Lifejackets Removed, Twice

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### Part 4: Shuttle Cancelled/Collier County Beach Shuttle Report

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### Collier County Park-and-Ride Study

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## Tropical Storm *Eta*

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## Swimmer’s Death near the Park

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## Local Interest

### Park Visitation Fiscal Year 2019-2020

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## Ranger Station Mold Remediation

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