



**FLORIDA**  
**State Parks**  
*...the Real Florida*



*Delnor-Wiggins Pass State Park Volunteer News*  
MARCH 2014



This link will take you to a wonderful article about the **First Annual Children's Art Show:**

<http://www.naplesnews.com/news/2014/mar/06/friends-of-delnor-wiggins-pass-state-park-1st-annu/>



Thanks to all who helped make it happen!

left: Kathe Rasch, Leslie Burgess, Marcia Byrd, Terry Stone  
below: **Susan Zimmerman, Kathe Rasch, Diane Distefano** sell hats, shirts and snacks on behalf of the Friends.

For more photos, please visit the Friends of Delnor-Wiggins Pass Facebook page.



Volunteer, Kaye Klug bring more fun to the show as Spangles the Clown!

Thank you to others who helped make this show a success: **Julie Meyer, Ruth Rittermyer, Jay & Valerie**

**Thompson, Sally Madden, Tom & Carol Belfiori, Babs Fischer. Also, Gene Byrd** who expertly installed & took down all the rabbit cloth so that it can be used again next year.



## SAVE THE DATES!!!

### Field Trip to Koreshan State Historic Site

Thursday March 20, 2014, 11 AM

Corner of Corkscrew and US 41. ( 3800 Corkscrew Road Estero, Florida 33928)

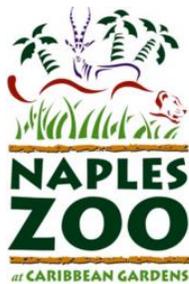
**Left** at light then first **right** to ranger station. Announce that you are with the Friends of Delnor-Wiggins. After ranger station take first right to Historic Settlement parking lot.

Please arrive by 10:45 AM so we can organize into 2 groups (if needed). We plan to talk about the history with botanical highlights since the Koreshans planted several exotic species that are still growing in the park. We volunteered for 10 years at the park so we will lead the tour. This is a walking tour but it is accessible. Optionally you can bring your lunch for a gathering in the park's picnic area at about 12:45 PM.

If you are planning to car pool from Delnor-Wiggins meet at the shop area at 10 AM.

**Sign up by emailing [donna.young@dep.state.fl.us](mailto:donna.young@dep.state.fl.us) so we can get an estimate of number attending.**

Tom and Carol Belfiori



### OUTREACH

**Saturday, April 5<sup>th</sup> Party for the Planet at the Naples Zoo** sign up to help host a table for The Friends of Delnor-Wiggins. This is a GREAT event and fun for all involved! And it will give us lots of exposure!



**SAVE THE DATE!**  
**Saturday, April 12<sup>th</sup> 8am-11am**

Volunteers wanted to help give out tee-shirts, direct other volunteers and also do beach cleanup. Email Donna Young if you would like to join us April 12<sup>th</sup>. [Donna.young@dep.state.fl.us](mailto:Donna.young@dep.state.fl.us)



Keep Collier Beautiful  
April 12, 2014

**Great American Cleanup**  
Collier County's "Bay Days"  
8:00 AM-11:00 AM  
**Volunteers Needed**




Cleanup/Signup Sites:  
Delnor Wiggins Pass, Vanderbilt Beach  
Lowdermilk Park, Naples Pier, Clam Pass, Rookery Bay NERR  
Tiger Tail Beach, Golden Gate Canals, Isle of Capri,  
Ten Thousand Islands National Wildlife Refuge, Naples Bay (NSYC),  
Bayview Park, Immokalee, Naples Cruise Club Key Island  
Additional Sites to be Added







## OUTREACH

We are registered to host a table for the Friends of Delnor-Wiggins. Volunteers that attended last year had a blast! If you would like to help out, email [donna.young@dep.state.fl.us](mailto:donna.young@dep.state.fl.us)

### 50<sup>th</sup> Anniversary Earth Day Festival

**SATURDAY, APRIL 19, 2014 ~ 10:00 AM - 4:00 PM**

Celebrate Earth Day during the 50<sup>th</sup> Anniversary Celebration of the Conservancy of Southwest Florida. The festival will include a variety of vendors and environmental exhibitors showcasing fun, educational and entertaining family activities and experiences. Enjoy local entertainment, keynote lectures, conservation speakers and children's presentations. Eat, play and learn while experiencing the new Conservancy Nature Center buildings, take an electric boat ride, rent a kayak or walk a nature trail.



### Save the Date..... NATURE FESTIVAL

Saturday, November 15<sup>th</sup>, 2014 10am- 3pm

Many volunteers needed. If you would like to help with this annual event, please email me. Informational meeting to follow. [Donna.young@dep.state.fl.us](mailto:Donna.young@dep.state.fl.us)



bala vinyasa yoga

Sunset Yoga on the Beach is back brought to you by **The Friends of Delnor-Wiggins** and **bala vinyasa yoga!** Sign up directly with the studio at [www.bvyoga.com](http://www.bvyoga.com) \$5.00 per class plus (does not include admission to the park) \$1.00 is donated to the Friends of Delnor-Wiggins .



**CLASS TIMES:** One hour before sunset on Thursday evenings,

**Paddleboard yoga** is Saturday, one hour before sunset

**Volunteers wanted to help sell our beautiful yoga shirts before each class. Please contact Donna Young for more info.**

Congratulations to our Park Manager, **Bob Steiger** for receiving his 30 year pin and certificate! We thank you for your continued dedication and determination to protect and preserve this beautiful park.



***ATTENTION BEACH STEWARDS and ALL VOLUNTEERS who are here this summer.....excellent opportunity to take the Florida Master Naturalist-Coastal Module class.***

There will be two opportunities to take the Florida Master Naturalist-Coastal Module this summer. Both classes will take up to 15 students. Click on the links below for class schedules and to register.

**June 5-26** at Rookery Bay NERR .

Classes and field trips will be on Tuesdays and Thursdays from 8:30AM-4:30PM

<http://conference.ifas.ufl.edu/fmnp/cs14-12.htm>

**July 7-Aug 4** at North Collier Regional Park

Classes will be Monday and Wednesday Evenings from 6PM-9:30PM

Field Trips will be on Saturday mornings and will be in both Lee and Collier Counties.

<http://conference.ifas.ufl.edu/fmnp/cs14-11.htm>

*(I have completed this course and loved it! I highly recommend it for our volunteers. - Donna)*

*Please enjoy this excellent article on the Horseshoe Crab written and submitted by our new Friends of Delnor-Wiggins Pass **President, Carol Belfiori**. Carol and her husband Tom have been volunteers in Florida state parks for many years and give our Wednesday morning Beach Combing program. They are passionate about environmental education.*

## The Horseshoe Crab

by Carol Belfiori

The horseshoe crab is an ancient blue-blood. It is a living fossil. According to biological classification, it is *Limulus polyphemus*. It is estimated to have existed for 445 million years. There are four species of horseshoe crab one of which lives in the North American waters on the East coast and Gulf of Mexico. The other 3 species live in Indo-Pacific waters. This creature has survived longer than 99% of all animals that ever lived.



We find dead horseshoe crabs on the beach at Delnor Wiggins State Park. If recently deposited, the horseshoe crab can be turned over to expose the six pairs of appendages and the closely-packed book gills which are used for breathing. The first pair of appendages are called the chelicera and are used to put food into the mouth. The tail is called a telson. The only danger of being pierced by the telson is possible pathogenic bacteria on it. An overturned horseshoe crab on the beach is often eaten by gulls. In the water, the favorite food of horseshoe crabs is the surf clam also called the “bar clam” or “hen clam”. Horseshoe crabs prefer to live in seawater less than 150 feet deep.]

These creatures are not really crabs at all. They are arthropods but are not crustaceans and are in their own class, merostomata (base of legs surrounding the mouth). Some sources say they are more closely related to spiders than to crabs. Like all arthropods, they molt. A new soft exoskeleton forms beneath the old one. Water causes the folds to expand and unfurl splitting open the old shell and the animal crawls out of the old shell. Molting happens 16 or 17 times before the animal reaches maturity at 9 to 10 years. Most horseshoe crabs can live about 20 years.

Three Nobel Prizes in Science have been awarded for research on aspects of the horseshoe crabs’ physiology. Unlike mammals and fish, the blood of the horseshoe crab is bluish-green not red. Our blood is red because the oxygen carried by iron in our red blood cells. Oxygen is needed by all living creatures to keep every cell of our bodies alive. Oxygen is carried by copper not iron in the amebocytes or blood cells of the horseshoe crab (hence the bluish-green color). From these blood cells a cell-free reagent LAL (limulus amebocyte lysate) is produced. LAL was developed in the 1960s. The cells are separated from the blue plasma and put into distilled water where they rupture. The LAL is freeze –dried . Since LAL was found to be a test for endotoxins (from gram negative bacteria) in the 1970s, horseshoe crab blood is unbelievably valuable. All LAL manufacturers are licensed by the FDA. The harvesting of horsecrab blood is carefully regulated. In Cape Cod, large animals give 12 ounces of blood

***Continued...***

which contains about one ounce of amebocytes. The blood is worth more than \$15,000 per quart or \$60,000 per gallon. Only 3 drug companies are license to produce LAL. LAL is used for testing for endotoxin contaminations of all human injectables and all implantable devices such as joint replacement, stents, pacemakers, and kidney dialysis equipment. In the presence of contamination, LAL causes clumping. This is not an immune system phenomena since the horseshoe crab doesn't have an immune system.

Last Spring, I saw a pair of horseshoe crabs attached to each other in Wiggins Pass. The female was much larger. Attached pairs can stay attached for hours, days or weeks. In Florida, one attached pair was observed attached for 51 days. The pair crawl up on the beach where the female releases a clutch of eggs, (a sticky ball of 3000-4000 eggs) then another and another. Then the attached pair go back into the water together. Rangers here at Delnor Wiggins have seen clutches of the eggs. The eggs are tiny. About a million eggs weigh slightly more than a pound. Only, 0.06% of the eggs survive to maturity. The 2008 PBS Nature show entitled "Crash: A Tale of Two Species" describes how the Red Knot (a bird that is sometimes seen at our park) times its migration to feed on millions of horseshoe crab eggs in Delaware Bay. The Nature show claims that 300 tons of eggs are needed to feed Delaware Bay's migratory birds. If you are at Broadkill Beach across from Cape May or at the Prime Hook State Wildlife Management Area in late May you can observe the horseshoe crabs depositing the clutches of eggs from observation platforms. The females usually complete their nesting in one week and don't come back for a year. Unattached males return repeatedly to ensure that all eggs are fertilized. The tiny shell-less greenish eggs stick together in the cluster in about 3-4 inches of sand. By the 4<sup>th</sup> day, a telson can be seen and by the 8<sup>th</sup> day legs and book gills can be seen. The embryo molts 4 times inside the egg. The larva move off the beach when about 3 inches wide. In addition to the Red knot, the horseshoe crab eggs are food for Ruddy Turnstones, Sanderlings and Semipalmated Sandpipers.

Most of the information in this article is from the 2012 book titled [HORSESHOE CRAB: BIOGRAPHY OF A SURVIVOR](#) by Anthony Fredericks which is published by Ruka Press.

***\*Every Wednesday morning at 9:30 a.m. during the Winter season, Tom and Carol Belfiori do a Beach Combing Talk on the beach at the South end of Parking Lot 5. They have collected numerous specimens of all the wonderful things to be found in the wrack lines and swash zone at Delnor Wiggins State Park. Everyone is welcome.***



## *Delnor-Wiggins Pass State Park Volunteer Beach Stewards*



Gloria Beaudry, Randy Chapman, Kaye Klug, Gerry Guthier, Jane Moore, Bill Moore, JoAnn Linck, Tom Belfiori, Nancy McFarland, Doug McFarland, Carol Belfiori, Josie Arpaia, Richie Twiefel, Tom McDonald.

**Missing from the photo;** Ira Rubenstein, Ken Harrison, Jeanette McDonald, Hank Linck, Carol Fletcher, Brian Settle, Vicki Sowinski

**Below,** Tom McDonald, Kay Klug, Richie Twiefel, Carol Fletcher & Ira Rubenstein check the amount of “Florida Snow” we had this winter! We’ll take it!



Join our team! Contact Donna Young for more information.  
[Donna.young@dep.state.fl.us](mailto:Donna.young@dep.state.fl.us)

We are very fortunate here at the park to have such great volunteers and dedicated staff. When volunteers, **Doug & Nancy McFarland** joined our team of volunteers recently, they asked, “What does the park need?” The result is this wonderful utility golf cart donated by the McFarlands! This could not have come at a better time with budget constraints prohibiting us from replacing a cart that wound up in golf cart heaven late last year. Thank you, thank you!



## **FYI:**

### **Florida State Parks Pocket Ranger®**

With Florida’s state parks offering some of the most outstanding outdoor recreational activities available, amidst some of the most beautiful natural settings, there’s now an app that makes it easier to find just the right one for the activity of your choice.

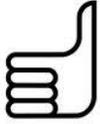


The Department of Environmental Protection’s Florida Park Service’s recently launched free smart phone app, the Florida Pocket Ranger®, is like having your own personal park ranger on hand to answer questions, give directions or let you see what events are taking place ... and where.

If you’re looking to spend some outdoor time in a particular part of the state, but aren’t sure where the state parks are in that area, the app directs you. Or, maybe you just want

to find a place where you can go for a quiet picnic – the app lets you know where the parks are located regionally, and uses GPS to take you there. And if you’re not familiar with using GPS, there’s also a short video tutorial.

You can download the **Florida State Parks Pocket Ranger® app** today onto your personal smartphone from iTunes, Android Market, and at [www.PocketRanger.com](http://www.PocketRanger.com).



**FOR MORE INFO AND PHOTOS, Please visit  
The Friends of Delnor-Wiggins Facebook Page**



<https://www.facebook.com/friends.delnorwiggins>

**PLEASE SHARE YOUR PARK PHOTOS WITH US! WE WILL POST THEM ON OUR FACEBOOK PAGE AND IN THIS NEWSLETTER**



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239-597-6196 239-597-8223 fax  
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**New direct line to reach Donna Young:**

New desk phone # - 239-821-1618  
Park cell phone # 239-821-1618

