

# Tidelines

November 2018

St. Petersburg Shell Club, Inc.

Web site: [stpeteshellclub.org](http://stpeteshellclub.org)

Shell Club meetings are held on the first Friday of the month, except June, July and August, at the **Seminole Recreation Center, 9100 113th Street North, Seminole**. The doors open at 6:30p.m. and the meetings start at 7:00 p.m. The public is always invited.



HOHOKAM  
ETCHED  
SHELL  
OF THE  
TWELFTH  
CENTURY  
ARIZONA  
STATE  
MUSEUM  
TUCSON

## Etched Shell

John was just browsing eBay and found this postcard from the 1930's. On the back it has a brief description. "In etching this shell, the design was first covered with a wax to resist and acid. The shell was then placed in the acid—probably made by fermenting the juice from the fruit of the giant cactus. This left the design in relief, which was then covered with red and green mineral paints, adding emphasis to the pattern. Diameter 4 inches." We think this is a very interesting artifact from the 1100's. And the process to make it was so involved. The Hohokam culture was centered in the state of Arizona and is one of four major cultures of the American Southwest and northern Mexico.



## A MESSAGE FROM THE DESK OF YOUR PRESIDENT

Hi all,  
In case you missed it on Oct 8th, it was World Octopus Day.



In addition, Oct 17th was National Fossil Day. Cheryl and I had the pleasure of two fossil trips during October. First to the Vulcan Mine in Brooksville to collect early Oligocene echinoids and mollusc trace fossils. Then on the 20th to the CEMEX site in Center Hill to collect similar age fossils.

If you are interested in photographing shells, I encourage you to attend the Suncoast Conchologists meeting Nov 6th, when Steve Geiger and I will be demonstrating techniques for photographing your shells.

Please keep our fellow collectors on Florida's panhandle in your thoughts as they recover from Hurricane Michael's devastation. The destruction was terrible there, and could easily have happened in the Tampa Bay area.

Be safe everyone, and keep enjoying our wonderful hobby.

**John**

### Club Officers and Committees

President John Jacobs; Vice President Robert Gould; Recording Secretary Toni Treadway & Sandy Boddy; Treasurer Tamara Hein; Newsletter Editor Cheryl Jacobs; Directors at Large: Peggy Dill, Marilyn Wall, Jane McKinney, Otis Taylor; COA Representative John Jacobs; Refreshments Bob Holzworth; Photographer John Jacobs; Field Trips Entire Board; Corresponding Secretary Pat Linn, Shell Show Cheryl Jacobs; Annual Picnic the Board; Raffle/Door Prizes Cheryl Jacobs & Peggy Dill; Facebook Cheryl Jacobs; Webmaster Cheryl Jacobs.

Tides are for Mullet Key Channel (Skyway). Other specific locations may be up to 2 hours later or earlier. Listings from saltwatertides.com .

### Forecast Minus Tides

#### Nov

8 Thu 6:24AM -0.1  
9 Fri 7:02AM -0.2  
10 Sat 7:42AM -0.2  
11 Sun 8:25AM -0.1  
22 Thu 5:25AM -0.2  
23 Fri 6:06AM -0.4  
24 Sat 6:51AM -0.5  
25 Sun 7:40AM -0.5  
26 Mon 8:34AM -0.5  
27 Tue 9:32AM -0.4  
28 Wed 10:34AM -0.2  
29 Thu 11:37AM -0.1

#### Dec

4 Tue 4:18AM -0.1  
5 Wed 5:01AM -0.3  
6 Thu 5:40AM -0.4  
7 Fri 6:16AM -0.5  
8 Sat 6:52AM -0.5  
9 Sun 7:28AM -0.5  
10 Mon 8:05AM -0.4  
11 Tue 8:45AM -0.3  
12 Wed 9:28AM -0.2  
13 Thu 10:14AM -0.1  
19 Wed 3:45AM -0.2  
20 Thu 4:30AM -0.4  
21 Fri 5:15AM -0.6  
22 Sat 6:01AM -0.7  
23 Sun 6:48AM -0.8  
24 Mon 7:36AM -0.8  
25 Tue 8:25AM -0.7  
26 Wed 9:15AM -0.6  
27 Thu 10:04AM -0.3  
28 Fri 10:53AM -0.1

See you next year!

### *Upcoming Club Meetings*

6:30pm Meet and Greet, 7pm Meeting

**Nov 2** Regular Meeting How to make a show display

**Nov 3** Tampa Bay Fossil Club Meeting: Auction

**Nov 6** Meeting of Suncoast Conchologists How to take pictures of your shells. With John Jacobs & Steve Geiger.

**Nov 26** Field trip We are going to South Skyway Bridge rest area. 730am meeting see article below.

**Dec 4** Meeting of Suncoast Conchologists Holiday party

**Dec 7** Holiday party

**Dec 8** Tampa Bay Fossil Club Meeting

**Jan 8** Meeting of Suncoast Conchologists

**Jan 4** Regular Meeting tba.

**Jan 5** Tampa Bay Fossil Club Meeting

### UPCOMING SHELL SHOWS & RELATED EVENTS

Jan 12-13, 2019 **54th ANNUAL BROWARD SHELL SHOW**, Pompano Beach, FL Emma Lou Olson Civic Center. 1801 NE 6th Street, Pompano Beach. Alice Pace E-mail: [alicepace90.aat.net](mailto:alicepace90.aat.net) Web site: [www.browardshellclub.org](http://www.browardshellclub.org)

Jan 19-20, 2019 **39th SEASHELL FESTIVAL ASTRONAUT TRAIL SHELL CLUB**, Melbourne, FL Eau Gallie Civic Center. 1551 Highland Ave, Melbourne. Alan Gettleman E-mail: [lychee@cfl.rr.com](mailto:lychee@cfl.rr.com)

Feb 8-10, 2019 **56th ANNUAL SARASOTA SHELL SHOW**, Potter Building at Roberts Arena, 3000 Ringling Blvd., Sarasota

Feb 22-23, 2019 **ST PETE SHELL SHOW**, This is our show and the set up is on Feb 21st. Don't forget to sign up to help out. Seminole Recreation Center, 9100 113th Street North, Seminole

March. 7 -9 **82nd SANIBEL SHELL SHOW**, Sanibel Community Center, 2173 Periwinkle Way

March. 9 -10 **TAMPA BAY FOSSIL CLUB FOSSIL FEST**, Florida State Fairgrounds, Tampa, FL

March. 14 -16 **39th MARCO ISLAND SHELL SHOW**, United Church of Marco Island, 320 North Barfield, Marco Island

May. 31-June 2 **22nd GULF COAST SHELL SHOW**, Panama City Beach Senior Center, 423 Lyndell Lane, Panama City Beach, 32407

Courtesy of Donald Dan and others

## **Field trip:**

### **South Skyway Field Trip**

November 26, 2018

Meet at 7:30am, low tide is at 8:30am (-0.5) We will meet at the rest stop at the south end of the Sunshine Skyway Bridge, the picnic table near the entrance to the parking lot for the rest stop. Bring water, buckets, shoes, gloves, hat, wear layers you can take off if you get warm.

Contact John Jacobs 813-309-2608 or 309-0295, email [johncheryl@earthlink.net](mailto:johncheryl@earthlink.net)

## **THE MAN BEHIND THE WORLD'S LARGEST PRIVATE SHELL COLLECTION**

June 27, 2018 Florida Museum Research News By Catalina Ruiz & Paul Ramey

**Volunteer Harry Lee has been transferring shells to the Florida Museum one car load at a time for eight years**

Nearly every Wednesday at 7:05 a.m. for the past eight years, Dr. Harry G. Lee drives 90 minutes from his home in Jacksonville to volunteer in the [Florida Museum of Natural History Invertebrate Paleontology Division](#), usually accompanied by a trunk full of shells. Lee began donating his shell collection to the museum on the University of Florida campus in 2010, and continues to personally transport increments of the nearly 1 million shells, estimated to be the largest private collection in the world. "The ability of museums to absorb a collection is limited by the manpower and other resources of a department," Lee said. "Especially with a collection of this magnitude." Today, Lee, a self-proclaimed museum rat and citizen scientist, considers his collection to be an



Continued on page 4

educational resource for future researchers. [Florida Museum Malacology](#) Collection Manager John Slapcinsky wholeheartedly agrees. “Harry’s website posts species lists of mollusks for many sites in Florida, and because his identifications and data are so well-trusted, these lists are a valuable resource,” Slapcinsky said. “UF students in our lab and in the invertebrate paleontology lab often use them to guide identifications of their own research specimens.”

Lee began collecting shells at the age of 6, while visiting his grandmother in South Orange, New Jersey. Her next-door neighbor, Max Hammerschlag, a retired scissors-maker, collected shells and taught Lee how to properly document and catalog different species. Hammerschlag gave the young Lee shells to take home and examine, and he started his collection in 1947. Although his dedication was minimized by the distractions of athletics and girls in high school, he knew he would continue to collect shells. “It was the one great continuum in my life,” Lee said. As an attending physician in internal medicine, Lee’s true passion never faltered. Every night he would return from a tiring day at the hospital and office, strip off his lab coat and get to work on his shells. During weekends and vacations, he traveled to distant lands hoping to discover hidden, rare shells, and would regularly scale cliffs, dive in deep oceans and trudge through swamps on his days off. His travels took him to Australia, Fiji, Hawaii, Kenya, Mexico, the Philippines, Somalia, Tahiti, Tanzania, and numerous West Indian islands, to name just a few. “Wherever the mollusks are, I will go,” Lee said.



This rare specimen shows left-handed coiling of the *Turbinella pyrum*, or sacred chank. Florida Museum photo by Kristen Grace

The most important discovery of his career, however, occurred while crawling in his own backyard in Jacksonville in 1980. Lee found a new-to-science species of carrot glass snail, *Dryachloa dauca*. It is the only species in its genus, and Lee and the late Florida Museum curator Fred Thompson described and named it that same year. Lee’s collection, estimated to be worth about \$1 million, is stored mostly in his basement, where every inch of wall space is covered with bookshelves and cabinets that hold the precious specimens. These include his sentimental favorites: the 36 shells Lee named and the 18 shells named after him. His most highly prized shell is the left-handed variant of the sacred shell of Hinduism, the Indian chank. This species is rare, with only 1 in 600,000 shells coiling in the opposite direction. Lee said he loves uncovering a shell’s story and believes that “shells are intrinsically beautiful.” “They form templates of evolution in beautiful, mosaic patterns,” he said. This belief and his collection also resulted in the creation of his book, “Marine Shells of Northeast Florida.” In a joint effort with about 50 shell club members over more than two decades, the Jacksonville Shell Club published the book in 2009. With the profits from book sales, Lee and the other members created a \$2,000-\$2,500 academic grant in 2010 for master’s and doctorate students, awarded annually by the Conchologists of America Inc., an international society for shell enthusiasts. After seven years, only about one-third of the collection has been

transported to the museum, and Lee does not know when he will finish. “It’s a work in progress,” he says.

### **Volunteer of the Year**

Lee has volunteered more than 2,000 hours integrating his shells into the museum’s collections and also working with fossil micro mollusks, defined as shells less than 5.5 mm in diameter. He removes and identifies these specimens from sediments he and others collect and photographs them with a scanning electron microscope. In 2017, he was honored as the museum’s James Pope Cheney Volunteer of the Year for research and collections, nominated by museum malacologist Slapcinsky and Roger Portell, the museum’s invertebrate paleontology collection director. Slapcinsky said Lee is well-known nationally and internationally among the malacology community as one of the most giving and knowledgeable amateurs. “Almost every molluscan collection by a mollusk enthusiast that has been donated to the (Florida Museum) Malacology Division in the last 40 years bears Harry’s fingerprints in the form of his identification labels,” Slapcinsky said. “He has corresponded with numerous amateurs and professionals, not only helping with identifications, but tracking down rare publications, sharing specimens and facilitating interactions between the lay community and the professional community.” Portell said Lee is responsible for building the museum fossil micro mollusk collection into an invaluable resource. “Micro mollusks are not common in museum collections because of the time and effort it takes to sort and identify them,” Portell said. “Harry has spent countless

Continued on page 5

hours looking through a microscope picking through hundreds of thousands of pieces of shell hash, sorting out thousands of whole shells of 500 species. He imaged over a thousand of these fossils using electron microscopy and also identified the species, many of which are new to science, further enhancing the importance of this collection. His contributions are appreciated more than most people could imagine.” Slapcinsky said he has benefitted personally from Lee’s help many times. “While Harry has not been volunteering in the Malacology Division directly, he is a walking encyclopedia,” Slapcinsky said. “He is well versed in Latin, and is a fount of historical, taxonomic and other arcane knowledge which he shares generously. Harry also is a tremendous asset to the molluscan community, as he answers questions on molluscan listservs, judges shell shows, serves as editor and writer for the Jacksonville Shell Club newsletter, ‘The Shell-O-Gram,’ served as a board member for the Bailey-Matthews National Shell Museum (on Sanibel Island), and is a scientific adviser and contributor for the JaxShells website. Lee is humble about the praise and receiving the Volunteer of the Year award, saying he is thankful to the museum for making his retirement entertaining. “It goes without saying that I find working at the Florida Museum quite gratifying,” he said. “Working among dedicated and talented scientists gives one a sense of camaraderie and common purpose.”

## Meet Phylliroe: the sea slug that looks and swims like a fish

Posted on November 18, 2015 by RR Helm in Deep Sea News



Meet Phylliroe, the swimming fish slug that can reach up to 5 cm in length. Photo (c) Fabien Michenet / nuditahiti.com

Biologists have a habit of naming things after cool animals. Cars named after comb jellies, internet passwords after giant squid. Most of these names I recognized, but then I saw my friend’s wifi signal: “*Phylliroe*”, an animal name I’d never heard before. It took me a while to figure out who this odd and honorary creature was—there’s not a lot of info out there on *Phylliroe*. But oh man, I get it now. *Phylliroe* is bizarre. Why? *Phylliroe* looks like a fish, moves like a fish, hunts like a fish. So what is it? Ladies and gentlemen, it’s a slug. If ever you need evidence that the world is huge and nature is crazy, a fish-shaped slug is it.

To be more precise, *Phylliroe* is a type of sea slug known as a nudibranch, and is about the size of a goldfish. It’s cousin to the much-loved sea bunnies and strawberry-smelling Melibes.

Nudibranchs get pretty crazy in both pattern and shape, but in my mind *Phylliroe* takes the cake. So why does *Phylliroe* look so fish-like? In order to answer that question, we’ve first got to learn a little bit about this sly slug. *Phylliroe*’s ancestors long ago left the sheltered seafloor, evolving into open ocean hunters out for blood, or, if we’re being scientifically accurate, out for jelly. Yep, this fish-shaped nudibranch noshes on jellies. It likely uses those long horns, called rhinophores, to sniff out the scent of unsuspecting jelly prey. To hold onto jellies, *Phylliroe* uses a remnant of its old sea-floor slug days: its foot. Most slugs, whether land or sea, have a long slimy body that sticks to the ground. The crawling surface of this body is called the foot, and for most slugs the slow creep of this foot is what propels them forward. But *Phylliroe*’s body is different; it swims with a fish-like tail now, and its foot is mostly gone except for a little remnant right near its mouth. When *Phylliroe* tracks down a jelly it uses this tiny slug foot to stick to it, then slurps it up—one helpless tentacle at a time. Once consumed, this meal passes through the digestive tract, which is powered by digestive glands—those white zigzag lines in *Phylliroe*’s

Cont. pg 6

### THE SHELL COLLECTOR’S CODE OF ETHICS

I realize that molluscs are part of our precious national wildlife resources, therefore:

I WILL make every effort to protect and preserve them not only for my own future enjoyment, but for the benefit of generations to come.

I WILL always leave every shelling spot as undisturbed as possible.

I WILL take only those specimens needed for my collection and for exchange at the time... Shells in a box cannot reproduce while I am waiting for a place to send them.

I WILL leave behind the damaged and the young specimens so that they may live and multiply.

I WILL **NOT** collect live egg cases unless they are to be used for study, and then, only in small quantities.

I WILL **NEVER** “clean out a colony” of shells.

I WILL practice and promote these conservation rules in every way possible.

©Fabien Michenet/NudiTahiti.com/2013



The white zigzag lines in Phylliroe's otherwise clear body are digestive glands, helping it liquify jelly prey. photo: (c) Fabien Michenet / nuditahiti.com

otherwise clear body. And when it's done digesting? *Phylliroe* defecates from an anus located in the middle of its right side. Because why not?

Think *Phylliroe* can't get stranger? Guess again. *Phylliroe* glows. It is one of the few nudibranchs known to produce its own light, and apparently this light is exceptionally bright and beautiful, though few have seen it. The ancestors of *Phylliroe* not only evolved to look and swim like fish, they also developed the ability to bioluminesce, something very few other sea slugs can do.

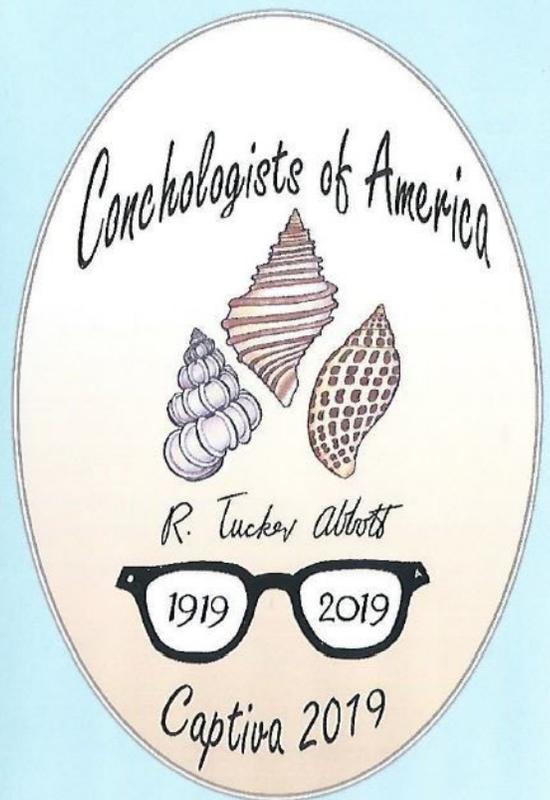
But the question remains: why does *Phylliroe* look so fish-like? What's the deal? It's hard to say for sure. Very few people have studied *Phylliroe*, so we have to make some guesses. Maybe the fish shape is a clever disguise. Maybe lady\* *Phylliroe* find gentlemen\* *Phylliroe* most sexy when they're most fishy. My personal guess? Both open ocean fish and *Phylliroe* are fast-moving predators living in a watery world. It doesn't matter if you start with a slug body or a dumpy guppy body; in this environment if you want to hunt down your prey you gotta get quick. And so over time, in the ancestors of both open-ocean fish and *Phylliroe*, the slow pokes were weeded out, and all but the sleekest and most agile remained, with streamline low-drag bodies and paddle-like tails. Two different animals, a slug and a fish, living in the same environment and hunting in similar ways evolved similar body types for similar functions. At least, that's my guess. Functional convergences like these are all around us—they're fascinating to think about but difficult to test. When it comes to *Phylliroe*, it's hard to know anything for sure. *Phylliroe*, simply put, are elusive creatures. And this makes them difficult to study. Tracking down a *Phylliroe* requires advanced submersibles, or brave scuba divers willing to search in the open ocean (often at night). And there may be other factors making *Phylliroe* difficult to find. One of the most well-studied species, *Phylliroe bucephala*, lives a pretty odd life indeed. Adults of this species have relatively few young, only about 240 eggs—a small number for nudibranchs. Worse still, young *P. bucephala* prey on a single species of jellyfish. Each young *P. bucephala*—tiny miniature of an adult—sticks to a jelly many times its own size and slowly eats it alive, like a moving edible house. No jellies, no *Phylliroe bucephala*. At least, that's one guess for why they're rarely seen [1].

I do know one thing: I now desperately want to see a *Phylliroe* in the wild. And in the meantime? Well, my car just got a new nickname.

\**Phylliroe bucephala* (and possible many other *Phylliroe*) are simultaneous hermaphrodites, meaning they're both lady and gentleman *Phylliroe* at the same time.

### References

[1] Lalli and Gilmer (1989) Pelagic Snails. Stanford University Press. Stanford, California. \*Nearly all *Phylliroe* facts in this article came from "Pelagic Snails". This book is packed full of awesome biology, and not just on *Phylliroe*. A surprisingly wonderful must-read for those interested in open ocean life.



South Seas Island Resort

Pre-Convention Field Trips  
June 17 & 18

Programs June 19 - 21

Bourse June 22 & 23

## MEMBER NEWS

Send in any member news to Cheryl Jacobs  
Email [stpeteshellclub@gmail.com](mailto:stpeteshellclub@gmail.com)

Would you like to have your picture in the Directory? If so please email or send us a picture. We can scan in and return your picture to you. You can also bring it to a meeting. Would love to have everyone pictured. We can then put a face to a name. Thank you.



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## Happy Birthdays

### Nov

4 - Rob Geater  
7 - Isabel McKinney  
7 - Gail Haseley  
9 - Carolyn Petrikin  
11 - Robert Holzworth  
13 - Marilyn Myers  
14 - Toni Rose Treadway  
21 - Tony Eyl

### Dec

12 - Robert Gould  
14 - Doug Boddy

### Jan

6 - Tamara Hein  
9 - Rachel Fields  
25 - John Jacobs



**St. Petersburg Shell Club, Inc.**  
**Founded 1936**  
**Annual Dues: Individual \$15.00**  
**Family \$20 (1 copy of TIDELINES per household)**

Meetings are held on the 1st Friday of the month, except June, July and August, at the **Seminole Recreation Center, 9100 113th Street North, Seminole**. Meetings start at 7:00p.m. and include educational short programs, social times, opportunities to identify shells, and a main program on some aspect of the shell collecting hobby. The club publishes "**TIDELINES**" 5-6 times a year with a special edition at Shell Show time. The membership year begins Jan 1st and dues are delinquent after Apr 1st. Please make your check payable to the St. Petersburg Shell Club.

Return the application to the membership chairperson at the address below.

Please complete—Detach and Return

New Member: Individual \_\_\_\_\_ Family \_\_\_\_\_  
 Renewal: Individual \_\_\_\_\_ Family \_\_\_\_\_

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_ Apt# \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_

Birthday: \_\_\_\_\_ Shell Interests: \_\_\_\_\_

If you use another address part of the year, please list where & when here:

**Donation to the Awards and Ribbons Fund for the Shell Show**

Print as you want to be listed.

Return to: Membership Chairperson  
 P. O. Box 3472  
 Seminole, FL 33775-3472

	Total Enclosed:
Membership	\$ _____
Awards and Ribbons Fund	\$ _____
Total	\$ _____

E-mail: [stpeteshellclub@gmail.com](mailto:stpeteshellclub@gmail.com)  
 Web site: [stpeteshellclub.org](http://stpeteshellclub.org)  
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**Show 'n Tell**

Bring that special shell to the meeting and talk for a few minutes about it. What was it that appealed to you about that specimen? Was it the color, the family, the location it came from?

Do you have a question on the identification of a shell? Whatever the reason, Blow your horn, show it off.



**HOW CAN I HELP**



It is time to have elections this year. Have you thought about helping the club by being an Officer, Board Member or on the Nominating Committee? PLEASE....step forward and help your club.

Other committee positions are also available.

Contact John Jacobs if you wish to help  
[johncheryl@earthlink.net](mailto:johncheryl@earthlink.net)