

Tidelines

November 2023

St. Petersburg Shell Club, Inc.

Founded 1936

Web site: stpeteshellclub.org

Seashell
Diamonds
75th Annual
Shell Show

February 23-24,
2024

Shell Club meetings are held on the first Friday of the month, except June, July, August, & December at the **Seminole Recreation Center, 9100 113th Street North, Seminole**. The doors open at 5:30p.m. and the meetings start at 6:00p.m. The public is always invited.



The Lineate Dove Snail, *Suturoglypta iontha* (Ravenel, 1861), is a small (about 9 mm, or about 0.35 inch) gastropod of the dove-snail family Columbellidae. The species is found in seagrass beds around the barrier islands of Southwest Florida and other parts of the Florida coast. The shell is brightly colored and has a very elegant shape.

Dove snails are micro-scavengers or feed on the thin film of microorganisms that grow on seagrass blades. Notice the snail's triangular foot and eyes in the live snail, which was photographed by Dr. José Leal on Sanibel.

Have a great day!

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.



A MESSAGE FROM THE DESK OF YOUR PRESIDENT

Seasons Greetings all,

As a precautionary note, I thought it best to cancel the September 1st meeting due to possible problems in the aftermath of Hurricane Idalgo. My concerns were for the safety of those traveling the roads amid the debris caused by the storm surges and wind damage. Some of our members and potential visitors may have experienced flooding as well.

We had our October meeting with Gabrielle Scrogam giving a presentation on upside-down jellyfish. It was very interesting and most enjoyable. Sometimes a non-shell related program is just as fascinating as a shell-related one. I'll be showing off the Wilmington Conchologists of America convention held this past summer in Wilmington, NC. Many great presentations, silent auctions and other events to be seen. For the first time we are having a December meeting (on the 1st). Dr. Chelsea Korpanty will be discussing how molluscs and sedimentology are being used to determine environmental impacts on Boca Ciega Bay. We're also having a Holiday Party on December 15th. See inside for details.

Have you found anything new? Have a question about something in your collection? Bring it to the meeting to either show it off or have your question answered.

Thank you all. See you all November 3rd and December 1st. And have a safe and enjoyable holiday season.

John



Forecast Minus Tides

November

- 1 Wed 10:01AM -0.2
- 13 Mon 6:28AM -0.3
- 14 Tue 7:09AM -0.3
- 15 Wed 7:54AM -0.3
- 16 Thu 8:47AM -0.3
- 17 Fri 9:48AM -0.3
- 18 Sat 10:55AM -0.3
- 19 Sun 12:02AM -0.2
- 25 Sat 5:12AM -0.3
- 26 Sun 5:57AM -0.4
- 27 Mon 6:39AM -0.5
- 28 Tue 7:21AM -0.5
- 29 Wed 8:03AM -0.4
- 30 Thu 8:47AM -0.3

December

- 1 Fri 9:33AM -0.3
- 2 Sat 10:21AM -0.2
- 10 Sun 4:59AM -0.3
- 11 Mon 5:40AM -0.5
- 12 Tue 6:23AM -0.6
- 13 Wed 7:09AM -0.7
- 14 Thu 7:57AM -0.7
- 15 Fri 8:49AM -0.7
- 16 Sat 9:41AM -0.6
- 17 Sun 10:33AM -0.4
- 18 Mon 11:22AM -0.2
- 22 Fri 3:25AM -0.2
- 23 Sat 4:21AM -0.4
- 24 Sun 5:11AM -0.6
- 25 Mon 5:56AM -0.7
- 26 Tue 6:37AM -0.7
- 27 Wed 7:16AM -0.7
- 28 Thu 7:53AM -0.6
- 29 Fri 8:29AM -0.5
- 30 Sat 9:03AM -0.4
- 31 Sun 9:38AM -0.3

Tides are for Pass-a-Grille. Other specific locations may be up to 2 hours later or earlier. Listings from saltwatertides.com.

Club Officers and Committees

President John Jacobs; Vice President Robert Gould; Recording Secretary open; Treasurer Kathy Hofstad; Newsletter Editor Cheryl Jacobs; Directors at Large: Carolyn Petrikin, Jane McKinney, Otis Taylor; COA Representative John Jacobs; Refreshments open; Photographer John Jacobs; Field Trips Entire Board; Corresponding Secretary open, Shell Show Cheryl Jacobs; Annual Picnic the Board; Raffle/Door Prizes Cheryl Jacobs; Facebook Cheryl Jacobs; Webmaster Cheryl Jacobs.

Upcoming Club Meetings
5:30pm Meet and Greet, 6pm Meeting

Nov 3 Regular meeting. Speaker John Jacobs: "The Wilmington COA Convention and the Future"

Nov 7 Suncoast Conchologists meeting 7pm

Dec 1 Regular meeting. Speaker Dr. Chelsea Korpanty: "Using mollusks and sedimentology to detect environmental impacts to Boca Ciega Bay, FL"

UPCOMING SHELL SHOWS & RELATED EVENTS

Nov 18-19: The 56th Annual Gem, Mineral, Jewelry & Fossil Show, Expo Center South Florida Fairgrounds, 9067 Southern Blvd, West Palm Beach, FL

Dec 1: Withlacoochee Rockhounds Gem, Mineral, Fossil, & Jewelry Show, Veterans Memorial Park, 14333 Hicks Road, Hudson, FL

Jan 20-21: 44th Astronaut Trail Shell Show, Eau Gallie Civic Center, 1551 Highland Avenue, Eau Gallie, FL

Jan 27-28: 57th Broward Shell Show, E. Pat Larkins Community Center, 520 NW 3rd Street, Pompano Beach, FL

Feb 9-10: 60th Sarasota Shell Show, Potter Building at Robarts Arena, 2896 Ringling Blvd., Sarasota, FL

Feb 23-24: 75th St. Petersburg Shell Show, Seminole Recreation Center, 9100 113th Street North, Seminole, FL

Mar 8-9: 86th Sanibel Shell Festival, Marriott Sanibel Harbour Resort, 17260 Harbour Pointe Drive, Ft. Myers, FL

Mar 16-17: Fossil Fest, Tampa Fairgrounds, Tampa, FL

Apr 13: Florida United Malacologists (FUM) meeting, Bailey-Matthews National Shell Museum, 3075 Sanibel-Captiva Road, Sanibel, FL

Jun 11-16: Conchologists of America Convention, Hilton Hotel, Melbourne, Florida

Happy Birthdays

Birthday Shells per R. Tucker Abbott

November

4 – Rob Geater
7 – Isabel McKinney
9 – Carolyn Petrikin
13 – Marilyn Myers

December

12 – Robert Gould

November—Thorny oyster/
Chrysanthemum shell
(*Spondylus* any species such as *S. americanus*)



December—Abalone
(*Haliotis* any species)



Conchologists of America, inc.

2024 Convention

When: June 11-16, 2024

Where: Hilton Hotel, Melbourne, Florida

To attend the convention and participate in the presentations, field trips, and silent auctions, you must be registered. Registration forms will be available soon on the COA web site conchologistsofamerica.org.

The convention consists of several pre-convention field trips, the Welcome Party, Presentations/Talks, Silent Auctions, the Banquet, an Oral Auction, and the Dealers Bourse. No registration is required to attend the oral auction and the bourse. The bourse can consist of up to 10,000 square feet of space for dealers from around the world displaying a huge variety of shells and shell-related items.





The quest to re-create nature's strongest material by Fanni Daniella Szakál

Material inspired by limpet teeth could perform as well as the toughest manmade materials, or better.

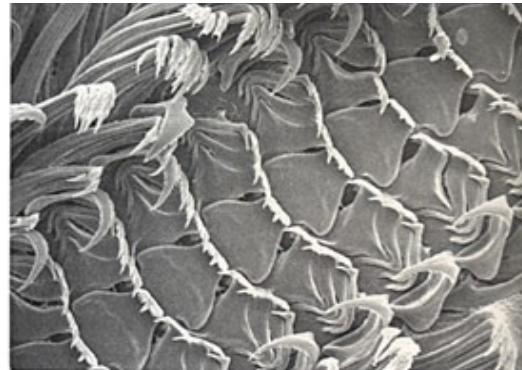
For a long time, spider silk held the top spot as the strongest biological material on the planet, inspiring researchers and startups worldwide to manufacture an artificial version. But not so long ago, spiders were pushed off their silky pedestal by the common limpet, a small marine snail dotting the shores of Western Europe (*Patella vulgata*).

The extraordinary mechanical properties of limpet teeth come from their composite structure: a flexible

scaffold made of chitin (a common substance found in insects, crustaceans, and other organisms), reinforced with nanocrystals of a form of iron oxide called goethite.

Exploiting the strength of such a material could offer solutions to some engineering challenges. “There are a lot of applications of technology that are limited by the strength and toughness of materials,” says Nicola Pugno, a researcher at the University of Trento in Italy, who was involved in the 2015 study.

Weaker and more fragile materials limit the lifetime of objects, and they can also prevent us from building new things for more extreme applications “because at a given point, we’ll reach the failure of the material,” says Pugno.



Scanning electron microscope image of radulas from two different limpets (Dr. Carole S. Hickman, Museum of Paleontology, University of California Berkeley)

While the appeal of replicating a particularly strong natural material is clear, figuring out how to do it is less so. “First you have to re-create these very fine structures in the lab, and then you have to find ways of production that are close to industrial manufacturing,” explains Zunfeng Liu, a researcher working on artificial spider silk at Nankai University in Tianjin, China.

In 2022, researchers at the University of Portsmouth in the UK created the first artificial limpet teeth using a curious approach: they manufactured a chitin scaffold via electrospinning, a method of producing small fibers from a solution using electricity, and then used cell cultures derived from the limpet radula to add the iron oxide crystals. “I’ll be honest—I did not expect this to work as well as it has, because it’s just so out there,” says Robin Rumney, lead author of the study.

Rumney and his colleagues are currently working on refining and scaling up production of the artificial limpet teeth with hopes of building body armor. If they succeed, limpet-inspired armor could be a stronger and more sustainable alternative to present-day bulletproof vests made of Kevlar, a material that requires a toxic manufacturing process and is difficult to recycle. Rumney also hopes to one day produce sustainable plastic substitutes, making use of the tons of chitin the fishing industry discards as waste.

For now, Rumney is just excited to analyze a recent gift from the British Antarctic Survey: a box of a different species of limpets from Antarctica with golden-colored, metallic teeth. Normally, generating metal compounds in the lab requires extreme temperatures. That these limpets are able to do it below 2°C is remarkable. “If we could adapt this technology of taking metal out of seawater,” Rumney says, “on the one hand we could get access to useful metals, and on the other hand to clean water.”

Fanni Daniella Szakál is a marine biologist turned science journalist based in Europe.

BIOTECHNOLOGY AND HEALTH October 25, 2023

Florida Fossils text and pics by John Jacobs

The fossil vase shells found in Florida, particularly the *Hystrivasum* species (Family Turbinellidae), are spectacular and unlike anything living today. Found in late Pliocene to early Pleistocene deposits these wonderfully sculptured shells have fascinated collectors since they were first discovered. *Hystrivasum horridum* (Heilprin, 1886) is one of about ten species within the genus. It's known to attain a length of over 100mm.



75th Annual St. Petersburg Shell Show

Get ready for the second oldest shell show in the United States. **Seashell Diamonds** will take place February 23-24, 2024 at the Seminole Recreation Center, Seminole, Florida. Scientific exhibit entries are coming in fast, so don't hesitate if you wish to enter. While we haven't been known for a large artistic showing, I'm encouraging the artisans to consider entering this show. We will be honored to have your artistic endeavors displayed here. Shell Show packets are available on the club web site at stpeteshellclub.org.

Major scientific awards will be the DuPont, Smithsonian Museum of Natural History, Florida Museum of Natural History, and, of course, the Conchologists of America. We are pleased to have as our scientific judges Dr. José Leal of the Bailey-Matthews National Shell Museum and Kevin Sunderland. Our artistic judge will be Linda Sunderland.

Help is always needed for the shell shows, so I encourage all members to participate in this year's show where possible. Sign up sheets will be available at the meetings or you can just email John Jacobs at johncheryl@earthlink.net or stpeteshellclub@gmail.com.

Presented by: The St. Petersburg Shell Club
& the Suncoast Conchologists



75th Shell Show Seashell Diamonds Feb. 23rd and Feb. 24th, 2024

Friday, 10AM-5PM

Saturday, 10AM-4PM

Seminole Recreation Center
9100 113th St. North
Seminole, Florida
1 Mile North of Park Blvd.

Minimum Donation of \$4
for an Adult at the door
Children under 15 Free with Adult
Teachers with ID Free

Beautiful Exhibits
Door Prizes,
Raffle Items
Shells for Sale

stpeteshellclub.org
suncoastconchologists.org
Facebook
E-mail: stpeteshellclub@gmail.com

Mollusca on Stamps

by John Jacobs

Many stamps have been issued depicting fossils in general and fossil molluscs in particular. The very first stamp to show a fossil was issued by Algeria in 1952 for the 19th Geologic Convention held in that country. The stamp depicts the middle Jurassic ammonite *Berbericeras sekikense* Roman, 1933 from the Lower Bathonian, Zigzag Zone, Gebel Sekika, Algeria.

Check out the Mollusks on Postage Stamps facebook page.



Maximum postcard issued for the event.



The companion stamp to the set.

The Bailey-Matthews National Shell Museum

As of May 1st, the museum is closed for about six months to renovate the damage caused by Hurricane Ian. Museum staff will also incorporate a number of upgrades to existing exhibits. So when the Museum reopens, things will be different from pre-hurricane status. I encourage you all to visit the Museum then. Also, by becoming a member, you will be supporting this wonderful institution. Additionally, donations can be made via the Museum's website at shellmuseum.org. At the top of the home page is a donate button.

This isn't just a museum. Researchers here conduct vital research expanding our knowledge of molluscs, especially in the Florida, Gulf of Mexico and Caribbean areas. If you have a specific interest and wish to examine the Museum's specimens, you only have to ask.

To me, the Bailey-Matthews is a national treasure which deserves to continue its goal of educating and bringing awareness of these fascinating animals which have a lineage going back more than 500 million years. Let's keep the Museum going for generations to come.



Holiday Party

We're looking at having a Holiday Party on Friday Dec 15 starting at 5pm. This will be a potluck event held at the Seminole Recreation Center in our regular meeting room. Since the center closes at 8pm, the earlier start time will allow us time for some CROWN and possible other activities. We'll have a gift exchange, but please keep it under \$10.

Please let us know if you will attend and what you will bring. Signup sheet will be at the Nov and Dec meetings as well. You can email stpeteshellclub@gmail.com.

If some can arrive a little early to help with setup, that would be great.



Shells – Crafts – Bags – Florida Books



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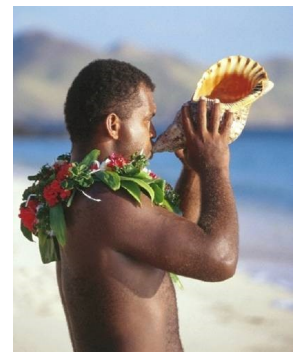
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Ken Lipe & Jim the Shell Man



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 shell?

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.

One Stop Sheller's Supermarket

Open 10 am to 5 pm

Monday thru Saturday

HAVE I RENEWED ?

Our club membership runs from January to December. If you are not sure if you have renewed, please call or email us.



Contact Cheryl & John Jacobs
stpeteshellclub@gmail.com
or 813-309-2608



“It’s never too early to renew.”

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 6:00p.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:

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

Membership \$ _____

Shell Show Awards and Ribbons Fund \$ _____

Total \$ _____

E-mail: stpeteshellclub@gmail.com
Web site: stpeteshellclub.org
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