



# SHELL•O•GRAM

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**JACKSONVILLE SHELL CLUB, INC.**

November-December, 2018

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## Upcoming meetings

The **November** meeting of the Jacksonville Shell Club (JSC) will be held at the usual venue, the Southeast Branch of the Jacksonville Public Library <http://www.yelp.com/biz/jacksonville-public-library-southeast-regional-jacksonville>, on the **third** Thursday (the **15th**) in Function Room **D** at 7:00 PM. Thanksgiving



necessitated this annual JSC exception several decades ago forcing the club to meet on the third Thursday of this month rather than the customary fourth. We're in for a treat on the occasion as Rick Edwards, travelling with his lovely wife, Roz, has recently returned from a trip to Ecuador and Peru, notably including a tour of the Galápagos Islands. Although shell collecting is strictly forbidden, Rick and Roz were able to otherwise appreciate many species of marine mollusks and chronicle them *in situ*. A significant proportion of the the Galapagan marine malacofauna is endemic, and



another share is composed on Indo-West Pacific interlopers. Thus the mix is quite unlike the more familiar continental Panamic Province assemblages. Harry Lee will provide a look at some classic shell rarities associated with the islands. These were obtained by dredging in a bygone era when such activities were licit, so beware of an aura of nostalgia in the room. Two such classic shells are those above: *Sveltia gladiator* (R. Petit, 1976) **above L** and *Sthenorhytis turbina* (Dall, 1908) **above R**.

The **December** JSC meeting will be **in the field** on **Saturday** the **22<sup>nd</sup>**. Paul Jones [[jonesp0854@gmail.com](mailto:jonesp0854@gmail.com); (904) 347-7254] has arranged with Connie of Tidewater Tours, Cedar Key, a three-hour "drop off" shelling trip to a shoal off Seahorse Key, about five miles offshore. The boat leaves the municipal pier a 7:30 AM, and the charge per person is \$20.00. Paul just needs need to know how many folks will be coming. If the number exceeds ten, he must call Connie back to engage a bigger boat. In that case, Paul wrote "the price may change a little, but it should still be very reasonable!!" Thus far Harry Lee, the Galdo's, Paul, and Tammy are "signed up." If you want to come along but cannot make it on Dec. 22, let him know, and he may call her back to schedule another tour for January 5<sup>th</sup>. Lodging is now available at the Beachfront Motel [(352) 543 9960], the traditional JSC overnight accommodation, beginning ~ 1970, just three blocks W.

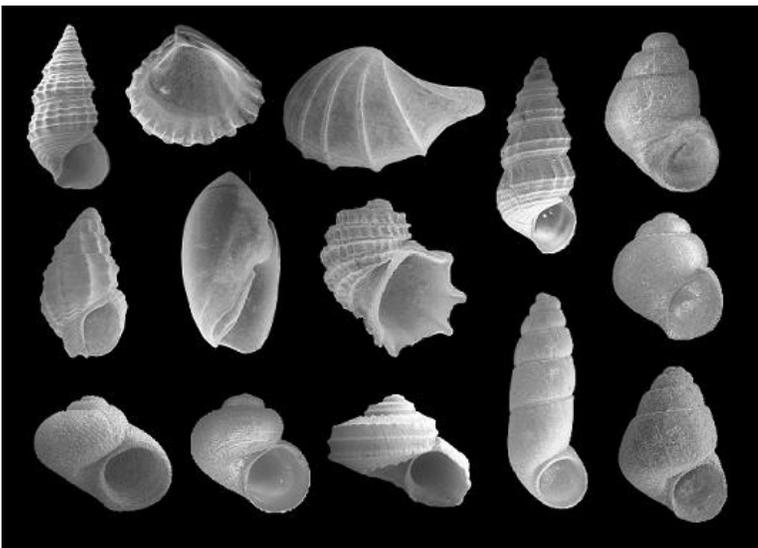
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This club meets monthly at the Southeast Branch of the Jacksonville Public Library, 10599 Deerwood Park Blvd., Jacksonville, Florida <<http://jpl.coj.net/lib/branches/se.html>>. Please address any correspondence to the club's address above. Annual membership dues are \$15.00 individual, \$20.00 family (domestic) and \$25.00 (overseas). Lifetime membership is available. Please remit payment for dues to the address below and make checks payable to the Jacksonville Shell Club. The club's newsletter and scientific journal, the *Shell-O-Gram* (ISSN 2472-2774) is issued bimonthly and mailed to an average of 15 regular members and friends by specific request and no less than ten scientific institutions with permanent libraries. An electronic (pdf) version, identical except for "live" URL's and color (vs. B&W) images, is issued the next day and sent to about 200 individuals who have demonstrated an interest in malacological research. These pdf's (ISSN 2472-2782) have also been posted to <<http://jaxshells.org/letters.htm>> since November, 1998. We encourage members and friends to submit articles for publication. Closing date for manuscript submission is two weeks before each month of publication. Articles appearing in the *Shell-O-Gram* may be republished provided credit is given the author and the *Shell-O-Gram*. As a courtesy, the editor and author should receive a copy of the republication. Contents of the *Shell-O-Gram* are intended to enter the permanent scientific record.

Membership Dues are payable in September each year.

If you're not paid up, please send in your dues: Individual \$15.00; Family \$20.00, to  
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On the L is a selection of micromollusks from the site where the 2013 COA Convention (Sarasota) was held. Each belongs to a different genus, and most are in different families. The largest is about six millimeters in maximum dimension. All genera survive to the present, but a little over half the species are extinct. Thus these micro's met with the same fate over the last 3,000,000 years as their **arguably** more charismatic counterparts in the coeval molluscan megafauna. The collecting site was a sand/shell mine dubbed SMR 10, which dug down forty feet into the Tamiami Formation, which sediments date to the late Pliocene Epoch.

*Costoanachis sparsa* (Reeve, 1859) probable egg capsules

by Anne DuPont and Harry G. Lee

How are underwater photographers helping malacologists identify mollusk spawn? Let us tell you a short story.....

Last week my (A.D.) dive buddies, Jason Spitz and Monica Schandel, excellent underwater photographers, did a night dive at the Blue Heron Bridge (BHB), in Lake Worth Lagoon (LWL), Riviera Beach, Palm Beach Co., FL. This landmark is less than a km N of Peanut Is. (PI), the malacofauna fauna of which had been studied intensively for decades; see <<http://jaxshells.org/peanut.htm>>. Jason sent me a couple of his photos of egg capsules taken on that dive for possible ID e.g., **below**.



Since I (AD) was not familiar with any mollusk egg cases in the shape of a flask, I sent the images to HL and Bill Frank of the prodigious website <<http://jaxshells.org/>>. I knew I was in trouble when HL wrote “Why don't you prepare a paper for the *Shell-O-Gram*?”

I (AD) thought a good starting point might be to create highly cropped image of Jason's photo (see **page 5**) to more clearly demonstrate the egg cases in the shape of a flask with fluted outer walls.

In researching the spawn of *Costoanachis* spp. in the BHB/PI area, I (AD) came across Marcus and Marcus (1962), which includes a plate depicting the egg capsules of three “*Anachis*” species from Brazil. I also sent the images to Carole Marshall, who is working on a book, *Mollusks of Lake Worth Lagoon*. She mentioned the Scheltema (1968) paper, which included sketches of three “*Anachis*” spp. egg capsules, and she later sent me a photocopy of the Marcus and Marcus (1962) work.

After reviewing all the referenced material on the spawn of *Costoanachis* spp. in the BHB/PI/LWL known to Carole and featured at <<http://jaxshells.org/peanut.htm>>, we can summarize egg capsule information thus:

- *Costoanachis avara* (Say, 1822) egg capsules were figured by Scheltema (1968: fig. 2a; see **page 5**). The shells are common at BHB/PI/LWL, but the capsules are **distinct from** Jason's in lacking flutes.
- *Costoanachis simplicata* (Stearns, 1873) is an interloper from the Gulf of Mexico. There is only one record of occurrence (PI) although from the very reliable Linda Zylman and confirmed by HL. It's a very **long shot** due to its rarity in BHB/PI/LWL.
- *Costoanachis sertulariarum* (d'Orbigny, 1839) capsules were figured by Scheltema (1968: fig. 2c, as the synonymous *Anachis floridana* (Rehder, 1950) and likewise Marcus and Marcus (1962: pl. 8, figs. 45-47; as *A. brasiliiana* (von Martens, 1897)); see **page 5**. Its shells are common at BHB/PI/LWL and in Brazilian waters, where *C. avara* does not occur. The capsules are **distinct from** those in Jason's photo's.
- *Costoanachis similis* (Ravenel, 1861) is quite uncommon at BHB/PI/LWL. It's generally a more northern taxon, e.g., true Carolinian Subprovince. It's a **long shot** due to its scarcity.
- *Costoanachis scutulata* (Reeve, 1859) is uncommon at PI. A warmer water species, it's certainly not a Carolinian taxon – a **long shot** due to scarcity at BHB/PI/LWL.
- *Costoanachis sparsa* (Reeve, 1859) capsules were figured by Marcus and Marcus (1962: pl.8, fig. 44; see **page 5**). The species is common in BHB/PI/LWL area (see **below**: Marlo Krisberg photo, PI) and, accounting for parallax, **match those in Jason's photo** (depicted in close-up on the **page 5**).
- A *Costoanachis translirata* (Ravenel, 1861) capsule was figured by Scheltema (1968: fig. 2b; see **page 5**). Although not uncommon at BHB/PI/LWL, the capsules are **distinct from** those in Jason's images.
- The capsules of a fairly close relative of our (preceding) *Costoanachis* spp., *Anachis lyrata* (G.B. Sowerby I, 1832), a species limited to the continental shores of Central and South America, [Marcus and Marcus, 1962: pl. 8, fig. 48, as the synonymous *Anachis veleda* (Duclos, 1846); see **page 5**] are **very different** from all the above figured species as well as those in Jason's images.



E. & E. MARCUS — COLUMBELLIDAE — PLATE 8

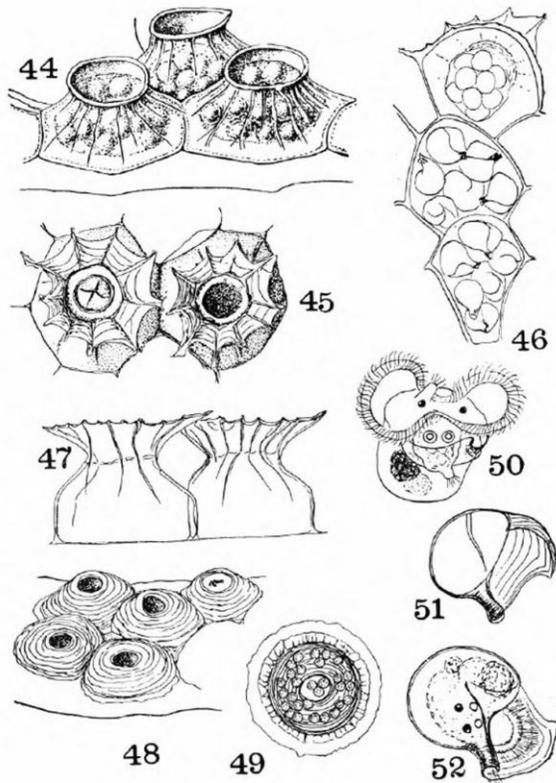
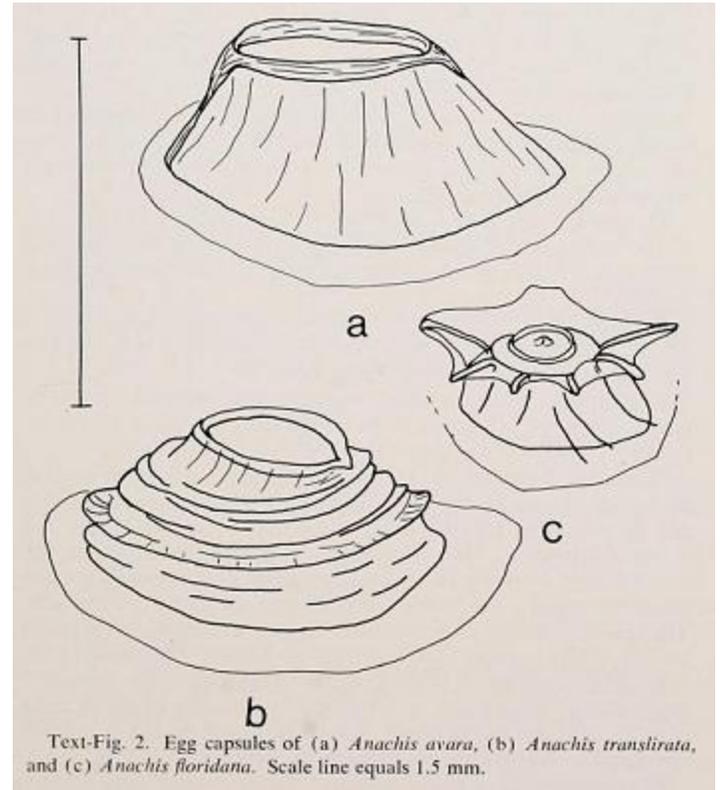
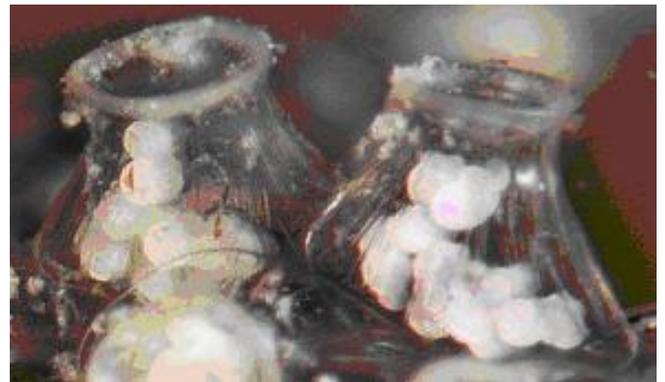


PLATE 8

- Fig. 44 — Three egg capsules of *sparsa*.
- Fig. 45 — Two egg capsules of *brasiliiana*, seen from above.
- Fig. 46 — Basal view of egg capsules of *brasiliiana* with newly laid eggs and veliger shells.
- Fig. 47 — Two egg capsules of *brasiliiana*, side view.
- Fig. 48 — Five egg capsules from a spawn of *veleda*.
- Fig. 49 — Egg capsule of *veleda*, basal view.
- Fig. 50 — Veliger of *brasiliiana*.
- Fig. 51 — Shell of same.
- Fig. 52 — Shell of veliger of *sparsa*.



Text-Fig. 2. Egg capsules of (a) *Anachis avara*, (b) *Anachis translirata*, and (c) *Anachis floridana*. Scale line equals 1.5 mm.



E. & E. MARCUS — COLUMBELLIDAE — PLATE 8

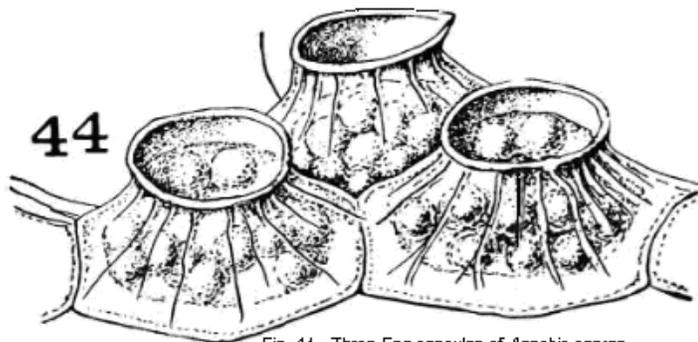


Fig. 44 - Three Egg capsules of *Anachis sparsa*

Now we can put a name on the molluscan spawn Jason captured photographically: “probable *Costoanachis sparsa* egg cases” <<http://www.jaxshells.org/sparsa.htm>>.

Learning all about the *Costoanachis* spp. in our SCUBA diving area has increased our knowledge and will help us become more aware of egg capsules and better underwater photographers to take *in situ* photos of mollusk eggs in Lake Worth Lagoon. Hopefully the next time, or at least soon, we’ll catch the snail in the process of oviposition! Maybe other congeners can be caught in the act.

Marcus, Ev. and Er. Marcus, 1962. Studies on Columbelloidea. *Faculdade de Filosofia, Ciências e Letras, Universidade de São Paulo Boletim 261, Zoologia 24*: 335–384. December.

Scheltema, A.H., 1968. Redescriptions of *Anachis avara* (Say) and *Anachis translirata* (Ravenel) with notes on some related species (Prosobranchia, Columbelloidea). *Breviora 304*: 1-19. <<http://biostor.org/reference/4236>>

### *Euglandina rosea* (Férussac, 1821) October Surprise by Bill Frank

During a molluscan survey on 10/6/2015, I discovered an extensive *Euglandina rosea* population in the roadside swale along US-1 about 3.1 miles northwest of International Golf Parkway in northern St. Johns County, Florida. It was immediately clear that not only was the *Euglandina* population larger than ever seen at any location previously in over 20 years of field work, but the snails present attained a size much larger than elsewhere. This led to the site, which in actuality extends for a distance of about three miles along US-1 on both the east and west side of the road, being dubbed ‘The Giant *Euglandina* Site.’ Less than a week after site discovery, an 87.0 mm. empty shell was found and is likely the largest *Euglandina rosea* shell ever documented. The site was revisited on a periodic basis over the next three years, and a large number of



large/extra large shells were found - mostly empty shells but with a significant number of living specimens as well. Those specimens, 60 mm. in length or larger, are chronicled on eight pages of the <<http://jaxshells.org/>> website, specifically <<https://www.jaxshells.org/bige.htm>>. The presence of an ample supply of venomous Florida Cottonmouths and thick vegetation was a hindrance in regards to a proper survey of the some six miles of habitat. In the late summer of 2018, probably St. Johns County authorities or contracted workers sprayed herbicide along US-1 on the west side of US-1 thus presenting a golden collecting opportunity. About twelve visits were made to the site during October, 2018, and it was a real surprise as to the number of empty shells still present despite nearly three years of previous periodic surveys. Some of the larger empty shells (64 specimens) found during October are illustrated on **page 6**.

**From your *Shell-O-Gram* editors:**

# HAPPY



# AND





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