

September-October, 2011

Volume 52 no.5

Upcoming Programs

The September and October meetings of the Jacksonville Shell Club (JSC) will be on **Wednesdays at 7:00 PM**, the 28th and 26th respectively. As usual the venue will be the Southeast Branch of the Jacksonville Public Library. The change from our time-honored Thursday to Wednesday was forced upon us by the library, which has its own library-sponsored programs. One of the latter is a newly-formulated monthly teen movie event, which co-opted our slot as "in-house" events are given preferential treatment in that regard.

The future is unclear, but come next year, things may have changed again. At the July 27th JSC meeting, members indicated that Tuesday evenings were preferable to Wednesday in the event that Thursday was not available in 2012. Email the VP at: <u>shells@hglee.com</u> or call <u>389-4049</u> if you have a case to make for one of these three days.

The program for the **September 28th meeting** will be given by Harry Lee on the genus *Phosinella* in the western Atlantic. Aspects of the biology of this rather small group of borderline microsnails has undergone an upheaval in the last few years, and the situation now seems to have been settled. Although superficially treated in most popular shell books, many of the "facts" therein have proven inaccurate. Over the years several JSC members have collected at least one of these members of the family Rissoidae. The Shell-of-the-month will be presented by Brian Marshall on a freshwater relative of *Phosinella*, the freshwater snail *Littoridinops tenuipes* (Couper, 1844), the Henscomb Hydrobe. Brian only recently got his feet wet collecting snails of this family, the Hydrobiidae.

The **October 26th meeting** will feature Ruthie Abramson who will present a program on shells depicted on stamps and coins. Being inherently driven to collecting, many of us have, if only temporarily, taken up stamp- (philately) and/or coin-collecting (numismatics). Some even have assembled "topical" collections involving two or three of these pastimes (i.e., shells-on-stamps; shells-on coins). Harry Lee will present the Shell-of-the-month, *Tricornis oldi* (Emerson, 1965), Bill Old's Conch, which counts being featured on a Somali postage stamp among its great distinctions.

A Note From Your Treasurer

It is again time to pay your Dues for the coming year. September 1 is our due date and beginning of our year. This month we also elect our officers and Board Members. Since we do not have many fund-raising activities we really rely on our members paying their dues on time. Remember: our dues are still \$15. for individuals or \$20. for Families.

You can now pay your dues by visiting **Paypal** -- go to Paypal and type in: **neflshells@bellsouth.net** - pay your dues and remember to include your name.

Jacksonville Shell Club, Inc. 1010 N. 24th Street Jacksonville Beach, FL 32250

Editor: Charlotte M. Thorpe Asst. Editor: Harry G. Lee

This club meets each month at the Southeast Branch of the Jacksonville Public Library, 10599 Deerwood Park Blvd., Jacksonville, Florida. Please address any correspondence to the club's address above.

The *Shell-O-Gram* is issued bimonthly and mailed to all regular members. Annual membership dues are \$15.00 individual and \$20.00 family (domestic) and \$25.00 (foreign). Lifetime membership is available. Please send checks for dues to the above address and made out to the Jacksonville Shell Club. For members that use PayPal, you can now go to PayPal to pay dues. Use neflshells@bellsouth.net as the address and be sure to add a note with your name.

We encourage members to submit articles for this publication. Closing date for article submission is two weeks prior to the first of each month of publication. Articles may be republished provided full credit is given the author and this newsletter and one copy of the complete publication in which the article appears.

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Dinocardium robustum robustum (John Lightfoot, 1786) In sand under dock at minus low tide, St. Augustine, Florida

President's Message:

Hello All,

If all goes as scheduled, this is my swan song.

I have enjoyed being your president. Some things were accomplished, but some were not. Wish we had had our Shell Show in 2011, but it is looking good for 2012 already. I would have liked to see more of you at the meetings, but what we lack in number, we make up in quality.

I wish all success to our new President and will be happy to serve you as immediate past President.

Barbara Cathey

PS Sorry I will miss the September meeting. I have to see a Grandson get married (Laura's son). Looking forward to the road trip.

At the July 27 JSC meeting the Chairman of the 2011 Nominating Committee, Tab Parker, presented the following slate of officers and JSC Board members on behalf of his committee members, Jeff Ward and Harry Lee:

President: Brian Marshall VP: Harry Lee (incumbent) Secretary: Mary Reynolds Treasurer: Charlotte Thorpe (incumbent)

Board of directors slate: Brian Marshall (officer), Harry Lee (officer), Mary Reynolds (officer), Charlotte Thorpe (officer), Barbara Cathey (Past-President), Rick Edwards, Claire Newsome, Tab Parker, Jeff Ward.

There were no nominations from the floor. Consistent with the JSC Bylaws, nominations will be reopened at the September meeting, and an election will follow. Elected officials will immediately take office. All terms are for one year. The next scheduled election will be September , 2012.

SOME UPCOMING ACTIVITIES TO THINK ABOUT

Cedar Key will have two possible tides for us to visit this year. The first of the lowest is from 11-24 thru 11-27 with minus low tides from - 0.86 to-1.10. In January they are 1-20 thru 1-24 with minus tides of - .72 to -.93. So it looks like November is the month to go.

Also our Christmas Party will be hosted by Claire Newsome and it will be on December 10th this year. There will be more information in the November/December SOG. Plan early to attend.

Phosinella (Rissoidae: Rissoininae) in the western Atlantic by Harry G. Lee



About a year ago, I came to the conclusion that *Phosinella pulchra* (C.B. Adams, 1850: 114), as interpreted by Redfern (2001: 34; plate 17, fig. 141), was a distinct biotaxon (see **fig. 1**). A close look at the uncharacteristically well-preserved holotype, including its protoconch (Clench and Turner, 1950: plate 33, fig. 8) confirmed Redfern's identification and placed its synonymy with *P*. *cancellata* (Philippi, 1847), as asserted by Desjardin (1949: 204) and Ponder (1985: 83) in serious doubt. Since the C.B. Adams taxon is the type of *Phosinella* Mørch, 1876; see http://bhl.ala.org.au/item/53851#page/73/mode/1up (subsequent designation by Nevill, 1885: 73, 83),** this is no small taxonomic matter.

Delving further, I found that the figures of "*Rissoina (Phosinella) cancellata* Philippi" in Ponder (1985: plate 135, figs. A and B) were not consistent with Redfern's clearly-expressed concept of that taxon but fit that of the latter's *P. sagraiana* (d'Orbigny, 1842); see Redfern (op. cit. 34; plate 17, figs. 140, 142, respectively) and **fig. 2**.

Working independently, Rolán and Fernández-Garcés (2010) agreed with this assessment, but they took the research a bit further and located the holotype of *R. cancellata* at the Zoologische Museum, Berlin. This specimen is actually not at all the species Redfern described and figured; it is clearly

synonymous with *R. sagraiana*. They considered Redfern's "*R. cancellata*" a theretofore unnamed species and dubbed it *Rissoina cancellina* (fig. 3).



An additional cloud over Adams' *Rissoa pulchra* was nomenclatorial: it is a primary junior homonym of *Rissoa pulchra* Forbes, 1844, and neither I nor Rolán and Fernández-Garcés (2010) could find a synonym to recruit into usage. However, those workers argued that the Forbes taxon was not identifiable and its name had been used much less frequently than *R. pulchra* C. B. Adams, 1850, so they proposed protecting its availability.

Stepping back to a generic perspective, we can appreciate *Phosinella* in the western Atlantic includes the four taxa of Redfern (2001: plate 17, figs. 140-143): the three mentioned above and *P. redferni* (Espinosa and Ortea, 2002), which is based on the former author's *Rissoina* sp. B (Redfern, op. cit. 34, plate 17, figure 143); fig. 4. To those we may add *P. fenestrata* (Schwartz, 1860) recently redescribed by Rolán and Fernández-Garcés (2009) and *Rissoina fenestrata* of Leal (1991: 75-76; pl. 9, figs. A, B) not of Schwartz, 1860.

This study will continue with a scrutiny of the last two taxa, determination of their relationship with the four figured species, and an analysis of the global zoogeography of *Phosinella*. Stayed tuned!



** Two years later the type species was restricted to *Rissoina sagraiana* d'Orbigny, 1842 by Tryon (1887: 320; see http://tinyurl.com/443zyuh), but the die had been cast.

Adams, C.B., 1850. Descriptions of supposed new species of marine shells which inhabit Jamaica. *Contributions to Conchology* 7: 109-123. April. http://www.archive.org/details/contributionstoc00adam; http://www.biodiversitylibrary.org/item/48996#page/124/mode/2up

Clench, W.J. and R.D. Turner, 1950. The western Atlantic marine mollusks described by C. B. Adams. *Occasional Papers on Molluscs* 1(15): 233-403 incl. pls. 29-49. June 26.

Desjardin, M., 1949. Les Rissoina de l'île de Cuba. Journal de Conchyliologie 89(4): 193-208 + pls. 9-10.

Leal, J.H., 1991. Marine prosobranch gastropods from oceanic islands off Brazil. Backhuys, Oegstgeest, Netherlands. x + pp. 1-418 incl. 22 pls.

Mørch, O.A.L., 1876. Synopsis molluscorum marinorum Indiarum occidentalium imprimis insularum danicarum. *Malakozoologische Blätter 23*: 45-58, 87-143.

Nevill, G. 1885. Hand list of Mollusca in the Indian Museum, Calcutta. Part II. Gastropoda. Protobranchia-Neurobranchia (cont'd.). Government Printer, Calcutta. x + 306 pp.



Page 4

Ponder, W. F., 1985. A review of the genera of the Rissoidae (Mollusca: Mesogastropoda: Rissoacea). *Records of the Australian Museum* supplement 4: 1-221. Rolán, E. and R. Fernández-Garcés, 2009. New information on Cuban Rissoina (Mollusca: Rissoidae) 1. *Rissoina fenestrata* and *R. vanderspoeli*. *Novapex* 10(2): 59-64. 10 June.

Rolán, E. and R. Fernández-Garcés, 2010. New information on the Caribbean Rissoina (Gastropoda, Rissoidae) of the group *R. sagraiana-cancellata*, with the description of a new species. *Iberus 28*(1): 79-89.

Schwartz von Mohrenstern, G., 1860. Über de familie der Rissoiden insbesondere die gattung Rissoina. Denkschriften der Mathematisch-Naturwissenschraftlichen. Classe der Kaiserlichen Akademie der wissenschraften 169: 70-188, pl. 1-11.

Acknowledgments: I am grateful to David Kirsh, who inspired this article and who provided specimens and photographic services. I am indebted to Bill Frank for technical assistance and advice in related matters.

APPENDIX (data on the specimens in Figures 1-4):

Fig. 1. *Phosinella pulchra* (C.B. Adams, 1850): Store Bay, Tobago Island, Republic of Trinidad and Tobago, dredged at 60 - 70 meters, May, 2004 (4.6 mm).

Fig. 2. *Phosinella sagraiana* (d'Orbigny, 1842): In shell grit taken by SCUBA from a depth of 69 feet off Boynton Beach, FL (4.3 mm).

Fig. 3. Phosinella cancellina (Rolán and Fernández-Garcés, 2010): Grand Cayman Island (7 mm).

Fig. 4. *Phosinella redferni* (Espinosa and Ortea, 2002): "Xeno Beach," Tarpum Bay, Eleuthera, Bahamas (5.7 mm).

Honorary Shell Club Members Celebrate 90th Birthday

Life time honorary members Alan and Hazel Walker celebrated their 90th Birthdays this year. Our club members are doing fine and have birthdays 129 days apart.



For many years Alan was the club's photographer and publicity chairman. We were lucky to have him as he was a photographer for the Times Union, and we always had our Shell Show and other events in the paper. Alan also crafted stained glass and his displays won Awards in the Arts and Crafts division, and he won awards in the Scientific Division. at our Shell Shows.



Hazel also displayed beautiful shell craft during our Shell Shows and won many awards. She worked hard at the Show with various jobs and we were very fortunate to have her and Alan's support for all of our endeavors.

Both attended meetings, cookouts, and collecting trips. Cedar Key is one of our best memories as Hazel always a dinner at their room for everyone, and there was always plenty of seafood chowder.

Alan's birthday is on January 7th, and Hazel's is on June 9th.

A VERY HAPPY BIRTHDAY TO YOU BOTH!

The Shell-O-Gram

Amathina in the western Atlantic - or - What is Cyclothyca pacei?

by Harry G. Lee

A well-known friend of the Jacksonville Shell Club, David Kirsch of Durham, NC, reported that he recently collected some beach drift in Boca Raton, Florida and found a 4 mm. cap-like shell that he thought he knew. He recalled that the species name had "*tri-*" in it, and possibly "*Ama-*" something but that he couldn't find it in Abbott's *American Seashells* (1974), Colin Redfern's



Bahamian Seashells, or Marine Shells of Northeast Florida. He subsequently checked Okutani's Marine Mollusks in Japan and there it was: Amathina tricarinata (Linnaeus, 1767). Wondering whether others had found this species in the western Atlantic, he made a posting to the Conchologists of America-sponsored listserve, Conch-L. At that time I became involved.

David's specimen is referable to *Cyclothyca pacei* Petuch, 1987 (22; pl. 4, figures 6, 7). It seems to prosper on the shells of living pectinids and *Spondylus americanus*. According to the original description, in which the genus name is consistently misspelled "*Cyclotheca*," the favored host is *Chlamys imbricata*. [= *Caribachlamys pellucens* (Linnaeus, 1758); see below]

Cyclothyca was placed in the Capulidae by Stearns (1891: 212) and Petuch (*loc. cit.*) whereas the affinities of the usually much larger *Amathina tricarinata* (Linné, 1767: 1259: sp. 762; see below for URL), the monotype of its genus, *Amathina* Gray (1842: 63; see Gray, 1847: 157; genus 267 <<u>http://www.biodiversitylibrary.org/item/46217#page/659/mode/1u></u>), are with the only remotely-related Heterobranchia.

But wait! I examined some juvenile *C. pacei* shells and discovered that, like the Heterobranchia, they are heterostrophic. That is, the embryonic shell is sinistral, and the axis of coil rotates through about 270 degrees at the metamorphosis to the teleoconch. The shells of the two nominal taxa are in fact very close! So close that, allowing for differences in size, and accounting for the natural variability of shell form induced by irregularities of substrate topology, they could be the same species! In any event the resemblance between "*Cyclothyca*" pacei Petuch and *Cyclothyca* Stearns 1891 [Type species *Capulus corrugatus* Stearns, 1891* <<u>http://www.biodiversitylibrary.org/item/53445#page/256/mode/1up>;</u>

http://www.biodiversitylibrary.org/item/53445#page/271/mode/1up] is infinitesimal compared to it and *A. tricarinata*

http://www.conchology.be/?t=68&u=382584&g=2b1241a09fd2e68953efd13a83abee20&q=1a175e0a6b6b7bcd00fdd00b49f69fa2>.

In its specialized niche, "Cyclothyca" pacei is a common species. In the original description it was noted that Bob Pace found up to five C. pacei on a single living Caribachlamys pellucens (Linnaeus, 1758) <http://www.jaxshells.org/imbric.htm> (Petuch, *loc. cit.*). Wayne Harland (pers. comm., 21 June, 2011) recalled finding it commonly on Spondylus spp. and certain Caribachlamys off Broward Co., and I have found several dozen shells of this ectosymbiont in Spondylus americanus <http://www.jaxshells.org/samerica.htm> grunge from off SE FL provided me by Tom Honker and by Jeff Whyman. Given that Caribachlamys spp. and S. americanus have been ultra-favorites with collectors for a long time, it is astounding that C. pacei could have escaped detection from the dawn of snorkel and SCUBA collecting in that region as long as it did. Could it be that this snail is simply an ecophenotypic descendant of an immigrant A. tricarinata? The latter is known to be associated with oysters and pen shells in Japan. Just maybe, when introduced to, say, Biscavne Bay in bilge water pumped



out from one of the Japanese merchant fleet sometime in the middle third of 20th Century, it took up with the most available hosts in the vicinity and rapidly adapted to those substrates?

* Although Petuch (loc. cit.) reported *Cyclotheca corrugata* Stearns [sic (orthography; neither parentheses nor date)] as being based solely on a 19th Century lot from Nicaragua and its Panamic provenance had been questioned earlier (Keen, 1971: 467), any doubt had been removed with James McLean's 1974 collection of the species in Costa Rica (Keen and Coan, 1975: 22). More recently it has been found in Ecuador (Kate Clark, pers. comm. Feb. 26, 2000 <<u>http://www.listserv.uga.edu/cgi-bin/wa?A2=ind0002D&L=conch-l&P=R1649></u>).

Gray, J.E., 1842. [Mollusca] pp. 48-92 in: *Synopsis of the Contents of the British Museum 44th edition*. G. Woodfall and Son, London. [not seen; see Gray (1847: 157; genus 267: <<u>http://www.biodiversitylibrary.org/item/46217#page/659/mode/1up</u>>]]. continued on page 7

The *Shell-O-Gram* in the formal (peer-reviewed) scientific literature by Harry G. Lee

Over its 52 years of existence, the JSC newsletter has reached members, friends, and institutions locally, regionally, and globally. From time to time researchers have found information recorded in its pages to be of sufficient relevance to receive acknowledgment in scientific publications. Here follows what must be considered a partial list of such media.

Journals citing the *Shell-O-Gram* (in some of these more than once):

Contributions to Zoology Ellipsaria Florida Fish and Wildlife Conservation Commission Florida Marine Research Institute Special Publications Journal of Shellfish Research Journal of Shellfisheries Research Molecular Reproduction and Development The Nautilus University of Central Florida Undergraduate Research Journal

Books citing the *Shell-O-Gram*:

Camp, D.K., W.G. Lyons, and T.H. Perkins, 1998. *Checklists of selected shallow-water marine invertebrates of Florida. Florida Marine Res. Inst. Tech. Rep. TR-3.* Florida Dept. Envir. Protection, St. Petersburg. xv + 1-238. Felder, D.L., and D.K. Camp [ed's], 2009. *Gulf of Mexico Origin, Waters, and Biota: Volume 1. Biodiversity.* Harte Research Institute for Gulf of Mexico Studies, Corpus Christi. 1393 pp.

Lee, H.G., 2009. *Marine shells of northeast Florida*. Jacksonville Shell Club, Jacksonville, FL. Pp. (1)-204 incl. numerous text figs. + 19 color pls.

Simberloff, D.C. Schmitz, T.C. Brown, 1997. *Strangers in paradise: impact and management of nonindigenous species in Florida*. Island Press, Washington D.C. 467 pp.

Sturm, C.F., T.A. Pearce, and Á. Valdés [eds.], 2006. *The Mollusks: a guide to their study, collection, and preservation*. American Malacological Society, Los Angeles and Pittsburgh. 445 pp.

Watters, G.T., M.A. Hoggarth, and D.H. Stansbery, 2009. *The freshwater mussels of Ohio*. Ohio Univ. Press, Columbus. [i]-xiii + 1-421 (incl. numerous text figs and maps).

Williams, J.D., A.E. Bogan, and J.T. Garner. *Freshwater mussels of Alabama and the Mobile Basin in Georgia, Mississippi, and Tennessee*. Univ. Alabama, Tuscaloosa.xv + 1-908

Websites citing the Shell-O-Gram:

Malacolog 4.1.1 2,400">http://www.malacological.org/publications/2400_malacology.php">http://www.malacological.org/publications/2400_malacology.php

.... on the subject of websites, here are some scientific resources citing <u>our</u> website, <u>http://www.jaxshells.org</u>: *Checklists of selected shallow-water marine invertebrates of Florida*. Florida Marine Res. Inst. Tech. Rep. TR-3. Florida Dept. Envir. Protection, St. Petersburg. xv + 1-238.

Harper, E., J.D. Taylor, J.A. Crame [eds], 2000. *The evolutionary biology of the Bivalvia*. Geological Society of London. *Naturwissenschaften*

NOAA Technical Memorandum Southeastern Naturalist

Despite its incompleteness, this dissemination indicates the impact we amateurs have on the business of science. How about (1) a hand for our editor, Charlotte Thorpe, and her predecessors, including Minnie Lee Campbell, June Dawley, and Bill Frank, whose efforts play(ed) a huge role in the JSC's involvement in the scientific enterprise and (2) allowing the *Shell-O-Gram* to publish your thoughts, observations, art work, photographs, memoirs, whatever; help the international scientific community better understand shells and their makers!

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Gray, J.E., 1847. A list of the genera of Recent Mollusca, their synonyma and types. *Zoological Society of London, Proceedings for 1847* [15](178): 129-219. Nov. 30. <<u>http://www.biodiversitylibrary.org/item/46217#page/631/mode/1up></u>. Keen, A.M., 1971. *Sea shells of tropical west America*. Stanford Univ. Press, CA, pp. 1-1064 incl. numerous figs. + 22 pls. Sept. 1.

Keen, A.M. and E. Coan, 1975. *Sea shells of tropical west America: additions and corrections to 1975*. Western Society of Malacologists Occasional Paper 1. 66 pp. June 22 [p. 22; vidi 1988 reprint]

Linné, C. von, 1767. Systema Naturae, seu per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Tomus II Editio duodecima, reformata. Laurentius Salvius, Holmia (Stockholm). Pp. 533-1327. http://gdz.sub.uni-goettingen.de/no_cache/dms/load/img/?IDDOC=215230

Petuch, E.J., 1987. *New Caribbean molluscan faunas*. Coastal Education Research Foundation, Charlottesville, VA, pp. 1-154 incl. 29 pls. + A1-A4.

Stearns, R.E.C., 1891. Scientific results of expeditions of the U.S. Fish Commissions Steamer Albatross. *Proceedings of the United States National Museum 13*: 205-225, pls. 15-17. [These are the proceedings for the year 1890, but, based on Library of Congress imprint, not published until 1991; see URL's in text above.]

Acknowledgments: I thank David Kirsh for his resource collecting, powers of recollection, and photography. Bill Frank provided considerable technical assistance

SNORKELING AT PEANUT ISLAND - Charlotte Thorpe

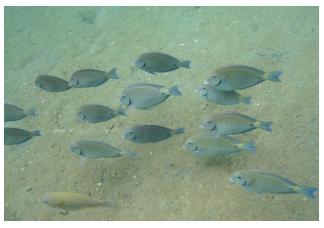
I had promised my 12 year old grandson Dylan Lloyd that I would take him snorkeling during the summer. We had thought about the Keys, and then I talked to a friend about renting a houseboat in the Bahamas. One thing or another came along to delay our plans, so one week before he had to go back to school - Frank and I decided to take him to West Palm Beach and "Peanut Island". It was a great decision on our part because Peanut Island is only a 4.5 hour drive, and the Island has had a lot of improvements. It is a very special spot to visit. (In past years our shell club members would visit and we have a large checklist of the shells found in that area. Visit www.jaxshells.org.) It had been over 18 years since I had visited, and the improvements included docks, shuttle rides to the island, picnic areas with grills, restrooms, and a lifeguard. This was the first time that Dylan had snorkeled outside of a pool. He did great! He is a real expert on marine fish and he knew the names and would point them out to me. I brought along two underwater cameras and he enjoyed taking photos. Here are some of our photos.



Snorkeling at the Singer Island Bridge



Strombus alatus Gmelin, 1791 in 3' of water.



Blue Sturgeon Fish in 7 ft. water at Peanut Island



Dylan investigates a crevice in 4 ft. water.



8 inch Bahamian Sea Star



French Angel in 8 feet of water



Sally Lightfoot Crab - Percnon gibbesi 2 ft water



10 inch Scorpion Fish on rock at 5 ft.



Sepioteuthis sepioidea squid in 10 ft. water



A very happy Dylan in his element.