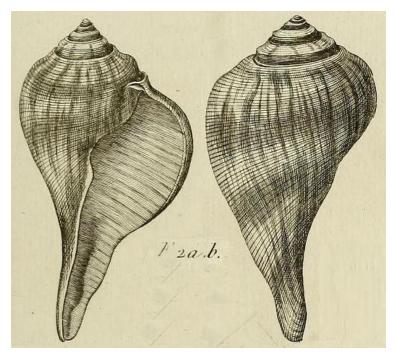


Mar.-Apr., 2016 Volume 57: No. 2

Upcoming programs

The March meeting of the Jacksonville Shell Club (JSC) will be on the (usual) fourth Thursday, the 24th, at the customary time (7:00 PM) and place (Southeast Branch, Jacksonville Public Library < http://www.yelp.com/biz/jacksonville-public-library-southeast-regional-jacksonville). The shell-of-themonth presentation by Paul Jones will feature *Solenosteira cancellaria* (Conrad, 1846), the Cancellate Cantharus, a Gulf of Mexico endemic found commonly at Cedar Key (CK) and among the 321 species recorded, mostly through the collecting effort of JSC members since the 1970's, on the CK checklist posted at http://jaxshells.org/cedarkey.htm>. Harry Lee will follow with a talk on the mollusks of Peanut Island (PI). This oft-visited artificial island in Lake Worth Lagoon just inside the Inlet of the same name, has been intensively studied, particularly for its malacofauna, over several decades. As with CK, we have maintained a running account of the species collected, or otherwise encountered, there. The PI checklist, posted at http://jaxshells.org/peanut.htm>, has now reached a rather amazing 744 taxa. A substantial number of shell-less, or at least conchologically-challenged, opisthobranch anails — over 100 species - populate the inventory.



Nearly all these sea-slugs have been brought to our attention through the photographic endeavors of Anne DuPont and her all-female diving buddy network including Sandra Edwards, Lureen Ferretti, Linda Ianniello, Susan Mears, Suzan Meldonian, and Judy Townsend. The good works of these ladies will be apparent to the audience, who are promised to nonpariel nudibranch and other marvelous mollusk images.

Since early, for that matter all, voting will be finished in March, the JSC April meeting has been cleared for the fourth Thursday, the 24th. Time and place are as above. Brian Marshall will discuss the shell-of-the-month, the Pear Whelk, *Busycotypus spiratus* (Lamarck, 1816: 8; pl. 433, fig. 2) an attractive and not always common species in shallow Florida waters. The original figure (L) is

included on p. 1 since it has just entered its second century of existence yet continues to serve taxonomists quite well. Paul Jones will give the main program, the shells of Sicily. Besides conventional shelling techniques, Paul haunted the fish markets in pursuit of "frutti de mare." Sicilians love their marine mollusks even more than Americans – relishing many species, most notably gastropods, that are not customary American fare. While that may seem an unpalatable prospect, Paul exploited this cultural mismatch to the advantage of his shell collection, landing many fine specimens of species otherwise out of his bathymetric reach. We haven't looked at Mediterranean marine mollusks since the late JSC founding member, Gertrude Moller, brought home so many treasures from the Aegean in the 1980's. Although Gertie was a tourist, Paul lived in-country for several years, and we can expect a rather sizeable collection will inform his talk.

Lamarck, J.-B.P.A. de M. de [ed.], 1816. *Tableau encyclopédique et méthodique des trois règnes de la nature vers, coquilles, mollusques et polypiers tome second*. Agasse, Paris. Pp. 1-16 < http://www.conchologia.com/publication_pdf/3.pdf; planches 391-488. http://biodiversitylibrary.org/page/37162176> 14 Dec.

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This club meets each month 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. The Shell-O-Gram (ISSN) is issued bimonthly and mailed to all regular members and certain institutions. An electronic version (ISSN), identical except for "live" URL's and color (vs. B&W) images, is issued concurrently and has been regularly posted to http://jaxshells.org/letters.htm since November, 1998. Annual membership dues are \$15.00 individual, \$20.00 family (domestic) and \$25.00 (overseas). Lifetime membership is available. Please send checks for dues to the above address and made out to the Jacksonville Shell Club. We encourage members and friends 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 the Shell-O-Gram. The provision of a free copy of the republished version to the editor and author of the original is requested as well.

President's Message

Dear JSC Members,

In February, Jacksonville Shell Club members attended the Annual Cedar Key field trip. Attendees included Rick and Roz Edwards, Paul Jones, Harry Lee, and Carole Lojek, as well as Heaven, Anton, and Brian Marshall. As always, you never know what to expect each year you visit, and each year always has different observations to offer than the year prior. Although our chartered boat trip was cancelled as a result of a high wind advisory, we visited our traditional sand flat located at 1st and G Streets in front of the Beachfront Motel. An article is included in this *Shell-O-Gram* with a brief account of this year's collecting and observations.

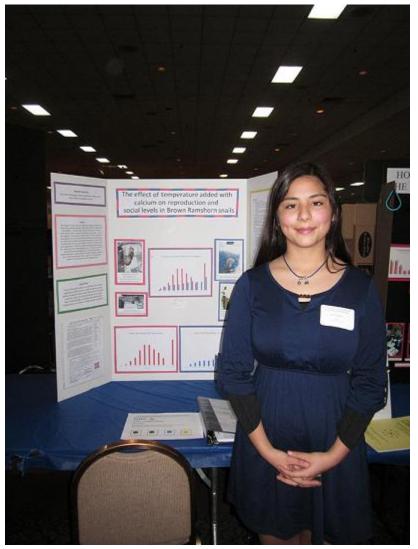
Corrigendum

We credited Angel Yanagihara for the digital photograph reproduced as Fig. 1 in Lee (2016: 1, 4) but failed to indicate that the image is a professional work product and is copyright-protected. For those reasons, it should only be reproduced with her permission and not with a copyright mark. Address any correspondence to Angel A. Yanagihara, Ph.D., Assistant Research Professor, Bekesy Laboratory of Neurobiology, PBRC and Asia Pacific Institute of Tropical Medicine, JABSOM, University of Hawaii at Manoa, 1993 East West Road, Honolulu, Hawaii 96822, USA.

Lee, H.G. and E. Dunham, 2016. Terebra guttata (Röding, 1798): suppression of a senior synonym, Shell-O-Gram 57(1): 3-6. Jan.

61st Northeast Florida Regional Science & Engineering Fair (NEFRSEF)

Freshly returned from the JSC Cedar Key field trip, official club emissaries, Rick Edwards (R..E.) and Harry Lee reprised their annual participation in the NEPRSEF, serving as special judges on behalf of the JSC. As with the last few years, the event was held in the great hall of the Morocco Shrine Auditorium, on St. Johns Bluff Rd. Members will recall the venue, by far the most spacious of a handful of such rooms, as the setting for one of



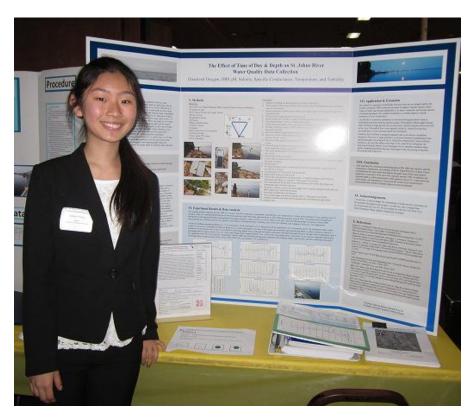
the several JSC shows usually conducted in a smaller, adjacent room in the complex. Judging commenced at 12:30 PM Monday, February 7. There were over 260 projects, and, since our judging criteria were "excellence in a project dealing with malacology, invertebrate zoology, or marine science," we felt the need to look, perhaps only very briefly, at every one of the little stations. After about two hours, a couple dozen interviews with young researchers, caucuses, and re-interviews, the two of us reached consensus.

Alice Baker (L), an eighth-grader at Darnell-Cookman Middle High was our Junior Division winner. Using commercially-provided lots of the native freshwater snail, *Planorbella duryi* (Wetherby, 1879), AKA the Seminole Ramshorn, she maintained them in her home laboratory in four groups, each in a uniformly-sized container but with a different water temperature, ranging from 25 to 35 degrees Celsius as determined by adjustable aquarium heaters (one tank without) and immersed thermometers. Over a period of five weeks she observed their behavior at daily (or less) intervals,

Intervals, specifically noting the snails' relative positions in the aquaria, tracking the number of egg clutches, hatching rate, and survival of hatchlings. Although there was a positive correlation between temperature and egg clutches laid, the survival of hatchlings was lower at the highest temperature. She also noted a negative correlation between snail aggregation and temperature, and therefore egg-laying.

Although Alice confessed uncertainty as to the reason for these correlations, her speculations were plausible and well thought-out. She applied the term "socialization," and posited that by aggregating, the snails might conserve heat. Alice received a check for \$50.00 from the JSC at the awards ceremony two days later, on the evening of February 9.

Our Senior Division winner was Bettina Huang (R), a sophomore at James Weldon Johnson Middle School. Hr project was titled "The effect of time of day and depth on St. Johns River water data collection." Taking advantage of her home's proximity to the river, she was able to secure an observation point that was readily accessible at pretty much any hour of day. Our researcher measured water temperature, density of suspended particulates, salinity with fairly sophisticated equipment, one piece of which was a float designed to allow sampling at a fixed point below the surface of the water column. This instrument allowed her to compare depth of the sampling operation to other variables. Bettina's results



demonstrated that, at a single geographic point, suspended matter was more highly concentrated and water temperature highest during the warmest time of day (~ 3:00 PM) and in shallower samples. She concluded that such variables must be taken into account if comparative studies are to be meaningfully interpreted. Bettina took the stage with Patricia that Wednesday and received our check for \$75.00. [Photographs by R.E.]



Registration is now open!

May 22-24, 2016 the **Bailey-Matthews National Shell Museum** on Sanibel Island, Florida, will be hosting a 2.5 day forum titled "**Mollusks in Peril**." We will bring together some of the country's foremost experts on current large-scale threats to molluscan populations to discuss, through presentations and panels, the challenges facing the second most diverse group of animals on earth.

As our planet is subjected to unprecedented rates of human-induced environmental change, populations of mollusks inhabiting a wide range of habitats are being exposed to exceptional amounts of ecological stress. These stressors include, but are not limited to, alterations caused by climate change and other large-scale environmental disturbances. **Mollusks in Peril** will provide a forum for discussion on the possible ecological drivers of extinction risk, the synergies that enhance ecological stress, and the taxonomy, ontogeny, and geography of change in and risk to marine, freshwater, and terrestrial mollusks.

We hope to see you there! http://mollusksinperil.org

Shelling Trip to Cedar Key, Florida report

by Paul Jones

On February 7th, 2016 I journeyed over to Cedar Key, Florida to meet up with JSC members Rick and Roz Edwards, Harry Lee, Carol Lojek, JSC President Brian Marshall, Heaven Marshall, and Anton Marshall for the annual minus tide shell hunt. This was my first trip with the club, although I have been to "CK", as I call it, many times before. It is such a great place to hunt for shells on the exposed muddy sandbars during the wintertime minus tides.



We all met up before sunrise at the familiar Cedar Key Beachfront Motel at 1st and G Streets in anticipation of going on a boat trip that would take us to the outer keys for some shelling way off the "beaten path." Even before we were to meet the boat, we had already done some shelling on the exposed shoreline directly in front of the motel. We encountered numerous Banded Tulips *Cinctura hunteria* (G. Perry, 1811) **[L]** and *Carditamera floridana* (Conrad, 1838) among other species. We noticed, however, that there was a pretty stiff wind picking up, and our concern began to grow right along with it.

We all showed up at the Tidewater Tours boat landing at the prescribed time, and sure enough were soon met by the boat

owners with unfortunate news. They informed us that due to the Weather Service declaring a Lake Wind Advisory in effect that day for the Cedar Key area, they would not be able to take us out! Apparently, their insurance would not have covered them had they taken us out under such conditions.

Dejectedly, we huddled to devise a Plan B. We decided to "hit" the widening sandbar directly in front of the boat landing as a nice, wide muddy sandbar was developing on the lowering tide. Soon, we were sagging deep

into the very soft "pluff" mud of the bar searching for treasures. We found a few live Baby's Ear shells *Sinum perspectivum* (Say, 1831) and noticed the telltale holes of many Angel Wings, *Cyrtopleura costata* (Linnaeus, 1758). Anton and I couldn't resist "going in" for one of the wings, so we worked together and soon dug out a

lovely 5¼ inch (130 millimeters) specimen!

Soon, however, we all grew weary of sinking deep into the soft mud, so we decided to relocate back to the tried and true sandbar in front of the Beachfront Motel. Once there, Brian, Heaven and Anton were soon out of sight down the sandbar as it looked for all-the-world as if someone pulled the plug out of the Gulf of Mexico! Harry stayed near the motel to look for minis among the oysters, while Carol and I forged out across the bar into the ever increasing wind. We soon encountered several live whelks - *Busycon perversum sinistrum* (Hollister, 1958) and *Busycotypus spiratus* (Lamarck, 1816) [R] and noticed thousands of small snails crawling around on the muddy sand that looked like Nassa mud snails everywhere we went.

Later, when we caught with Harry, he told us that some of the larger of these small snails were in fact a type of cantharus in the Buccinidae family, *Solenosteira cancellaria* (Conrad, 1846) – a Gulf of Mexico endemic species. We also came across dozens of starfish, sand dollars and a few large horseshoe crabs. When we caught up with Brian, Heaven and Anton, they



told of finding over a dozen live whelks on one small area of the bar. Above is one of their pictures.

By that point, the cold wind had become really bad, so we reluctantly called off our hunt for the day, all pretty happy with what we had seen and procured for our collections despite not being able to make the boat trip.

I had not initially planned to go back the next day (February 8th), but when I checked the Weather Underground forecast for Cedar Key, it showed calm winds! Based on that information, I hastily decided to make the solo trip back to catch the low tide once again. I found that going through Gainesville, Florida at 4:00 a.m. was by far the best time of the day to accomplish that feat, so the drive back to "CK" the next morning from my home in St. Augustine was not too bad at all.

I arrived back at "CK" just in time for morning twilight to begin and noticed that it looked as if a beautiful sunrise indeed was about to unfold! The sky soon filled with fiery colors lighting up the high clouds near the eastern horizon and I went around to all the familiar spots of "CK" taking pictures of one of the most spectacular and beautiful sunrises I have ever seen. **[bottom of page]**.

I re-visited the sandbar in front of the Beachfront Motel, this time with dead calm winds, and the hunting was a lot more comfortable and enjoyable than the day before. I found lots of the usual sandbar critters once again and took photos of each of them before returning them unharmed. I even came across a lovely live specimen of the Florida Fighting Conch *Strombus alatus* Gmelin, 1791 [R] much to my surprise. I was quite tempted to keep it for the collection, but its spire was badly chipped, so I returned it unharmed after photographing it.



All in all, I would say we made the most of the 2016 Cedar Key trip despite the largely inclement weather and I personally enjoyed the shelling with all my colleagues very much. We all came away asking the same question: When can we go back?

