SHELL·O·GRAM
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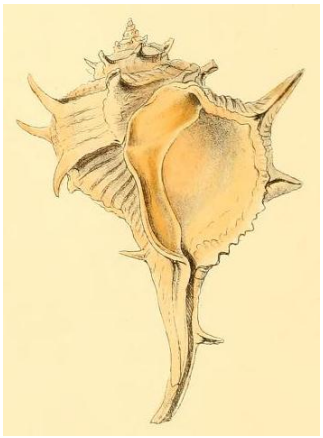
Upcoming programs

The May meeting of the Jacksonville Shell Club (JSC) will be on the third (not the customary fourth) Thursday, the 19th, at the usual time (7:00 PM) and place (Southeast Branch, Jacksonville Public Library (<http://www.yelp.com/biz/jacksonville-public-library-southeast-regional-jacksonville>). Harry Lee will give the shell-of-the-month presentation, but there there'll be a bonus - two species will be featured. In keeping with the main program (read on), Mediterranean marine gastropods will be addressed. Both are muricid snails, *Bolinus brandaris* and *Hexaplex trunculus*, each was described in the genus *Murex* by Linnaeus in 1758, and each has dozens of synonyms. Harry will try to show us why taxonomists lavished such attention on these two species. 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 do Americans – relishing many species, most notably gastropods, that are not customary stateside 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 illuminate his talk. Those who attended the April 28th meeting were given a teaser of Paul's program. He'll limit this talk to gastropods, and his Mediterranean bivalves will be in the spotlight next month.



Getting back on track, the June JSC meeting will be on the fourth Thursday, the 23rd. Time and place are as above. Rick Edwards will discuss the shell-of-the-month, one of his favorite cowries from Okinawa, *Mauritia mauritiana* (Linnaesus, 1758), a figure of which is provided on the R from Lovell Reeve's monograph on the *Cypraea* in the masterwork *Conchologia Iconica* (vol. 3, plate 1). The singular habitat and habits of this large species, which may exceed five inches in height, challenge the collector. Paul Jones will return to the podium and complete his presentation on Sicilian "frutti de mare," this time focusing on Pelecypods and Cephalopods, which, at least to the editor, seem more fit for human consumption that the snails he featured at the May meeting.

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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>. 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 Membership Chair at 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 on a gratis basis to no less than ten scientific institutions with permanent libraries. An electronic (pdf) version, identical except for "live" URL's and color (vs. black and white) images, is issued the next day and sent to about 200 individuals who have demonstrated an interest in malacological research. These pdf versions (ISSN 2472-2782) have also been posted to <http://jaxshells.org/letters.htm> beginning with the November, 1998 issue. We encourage members and friends to submit articles for publication. Closing date for manuscript submission is two weeks before each month of publication. Articles and images without explicit copyright restraint appearing in the *Shell-O-Gram* may be republished provided credit is given the author and this journal. As a courtesy, both the *Shell-O-Gram* Editor and author of the original version respectfully request a copy of the republished iteration. Contents of the *Shell-O-Gram* are intended to enter the permanent scientific record.

President's Message

Dear JSC Members,

We have had a few inquires now and then regarding a Shell Show for 2016. Unfortunately, the club will not be holding a shell show this year, but we have recently engaged in discussion on a potential avenue we can explore to possibly bring the show back next year. We will make an announcement should we be able to make accommodations for 2017. As always, thank you to everyone who has supported our shows in the past, we recognize your efforts and contributions. On another note, the 2016 COA Convention will be held in Chicago, IL this year from July 27th through the 31st.

Brian Marshall

Membership Dues are payable in September each year.
If you're in arrears, please send in your dues: Individual $15.00; Family $20.00, to
Charlotte Thorpe, Membership Chair, JSC
1010 24th St. N
Jacksonville Beach, FL 32250

mollusks in peril
2016 forum
presented by
The BAILEY-MATTHEWS
NATIONAL SHELL MUSEUM

Registration is still 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 at Matanzas Inlet

by Paul Jones

I have had some amazing recent success shelling on the minus low tides in the Matanzas Inlet area, about 18 miles south of St. Augustine, Florida. It seems to be a very lucrative environment for finding many of the common intertidal species in northeast Florida. It did take a few trips however, before I began to "get into the rhythm" of the area and figure out where and how to spot the various species.

Surprisingly, the area I have had by far the most success shell hunting in is at the Helen Mellon Schmidt Park in Summerhaven, Florida, about a mile south of the actual inlet itself. This is the area that used to be called the "Summerhaven River", as it was part of a tidal creek tributary branching off of the south end of the inlet. This area though was silted in several years ago when a series of tropical storms breached the sand dunes that separated it from the sea and filled it in with beach sand. It remains partially silted in today.

However, slowly the water is trying to return and what exists there now is a series of channels of water separated by bars of silty mud and sand that are apparently perfect habitats for many molluscan species to call home. The biggest surprise I've found lately is many huge live and perfect specimens of *Melongena corona* (Gmelin, 1791), the Florida Crown Conch (Figure 1 next page). I find then foraging among the small clusters of oysters that ring the channels and also partially submerged in the sandy sloughs that wind between

the sand bars.


Fig. 1

Other species I've found in the park itself are *Dinocardium robustum* (Lightfoot, 1786) [Fig. 2, below], *Strombus alatus* Gmelin, 1791, *Dosinia discus* (Reeve, 1850) and *Triplofusus giganteus* (Kiener, 1840). The latter species was found in 250 mm size! One *Strombus alatus* I found measured 120 mm! This last visit to the park also yielded a beautiful 137 mm *Busycotypus canaliculatus* (Linnaeus, 1758)!

At the actual inlet itself, I have found many small species of tellinid bivalves and many other types in the soft, muddy areas. I have seen many large, live *Oliva sayana* (Ravenel, 1834) crawling around in about six inches of water. *Strombus alatus* is here as well, but all the ones I've seen so far are immature [Fig. 3], so I did not collect them. There are hundreds of small, live *Neverita duplicata* (Say, 1822) crawling around on the mudflats as well as thousands of small crabbed univalves. Last month, I even found three perfect crabbed specimens of *Cancellaria reticulata* (Linnaeus, 1767)!


Fig. 2


Fig. 3

With the onset of warmer weather, I also plan to try some snorkeling in the area to see if that can bring to light even more specimens perhaps hidden beneath the surface. The trick there though, is to pick times when the water is clear enough to readily see the bottom. Sometimes, the currents in the water and windy conditions can combine to make the water cloudy with mud, silt and sand. I'll report back to all on what I am able to come up with at my new favorite shell hunting haunt! [Photographs by the author.]

Editor's note: Paul's discovery of living Florida Crown Conchs In the "Summerhaven River" near Matanzas was the first documented occurrence of the species living there. Over the years crabbed or empty specimens, usual rather small in stature, have been found by local collectors at Matanzas Inlet to as far north as Nassau Sound, but the northernmost living colony was known from the mouth of Pellicer Creek (St. Johns/Flagler county line), about three miles south of the inlet. This month a Canadian collector, Harold Lamb, found a few large living specimens and freshly-deposited egg cases in the Intracoastal Waterway near the SW rampart of the CR 206 bridge in Crescent Beach, about nine and a half miles NbyW of Paul's find. While random fluctuations in environmental conditions may be causative, it's difficult to dismiss global warming as a consideration. Observations like those of Paul and Harold, with the record-keeping at <http://www.jaxshells.org/corona1113.htm> by Bill Frank, may provide a framework for better understanding the role of climate in molluscan zoogeography.


Fig. 4

Another of Paul's finds/photos is Fig. 4, the so-called Crucifix Fish. The most likely source of this cranial remnant is the Gafftopsail Catfish *Bagre marinus* (Mitchill, 1815). American Samuel Dr. Latham Mitchill, Esq. (1764-1831) was a genuine renaissance man <https://en.wikipedia.org/wiki/Samuel_L._Mitchill>. Besides medicine and ichthyology, he made contributions to ornithology, herpetology, and mammalogy.

The genus *Bagre* Cloquet, 1816, although derived from the Latin pargus, was apparently taken directly from the Spanish (or Portuguese) word for catfish. Its few species, two Carolinian/Caribbean and two Panamic, are endemic to the New World.

Bill Frank goes south

Webmaster and malacologist Bill Frank of Jacksonville took heed from Brian Marshall and Paul Jones and exploited the very low mid-day tides early this month. His camera caught two shallow-water marine gastropods in characteristic but revealing behaviors. Fig. 5 depicts *Simnialena uniplicata* (G.B. Sowerby II, 1849) the One-tooth Simnia on a Seawhip. This striking example of camouflage is due to the larcenous habit of the parasite with its host's pigment. Might we call this a case of kleptochromatosis?


Fig. 5

Close by, near St Augustine Inlet, he caught the Florida Rocksnail *Stramonita haemastoma floridana* (Conrad, 1837) [Figs. 6, 7] in a frenzy of colonial egg-laying. Many probably most, members of the

Muricidae manifest this habit. Note the purple pigment, which is secreted by the hypobranchial gland, and which will be discussed as part of the May shell-of-the-month presentation (see page 1).

A three-eyed Florida Fighting Conch, *Strombus alatus* Gmelin, 1791.

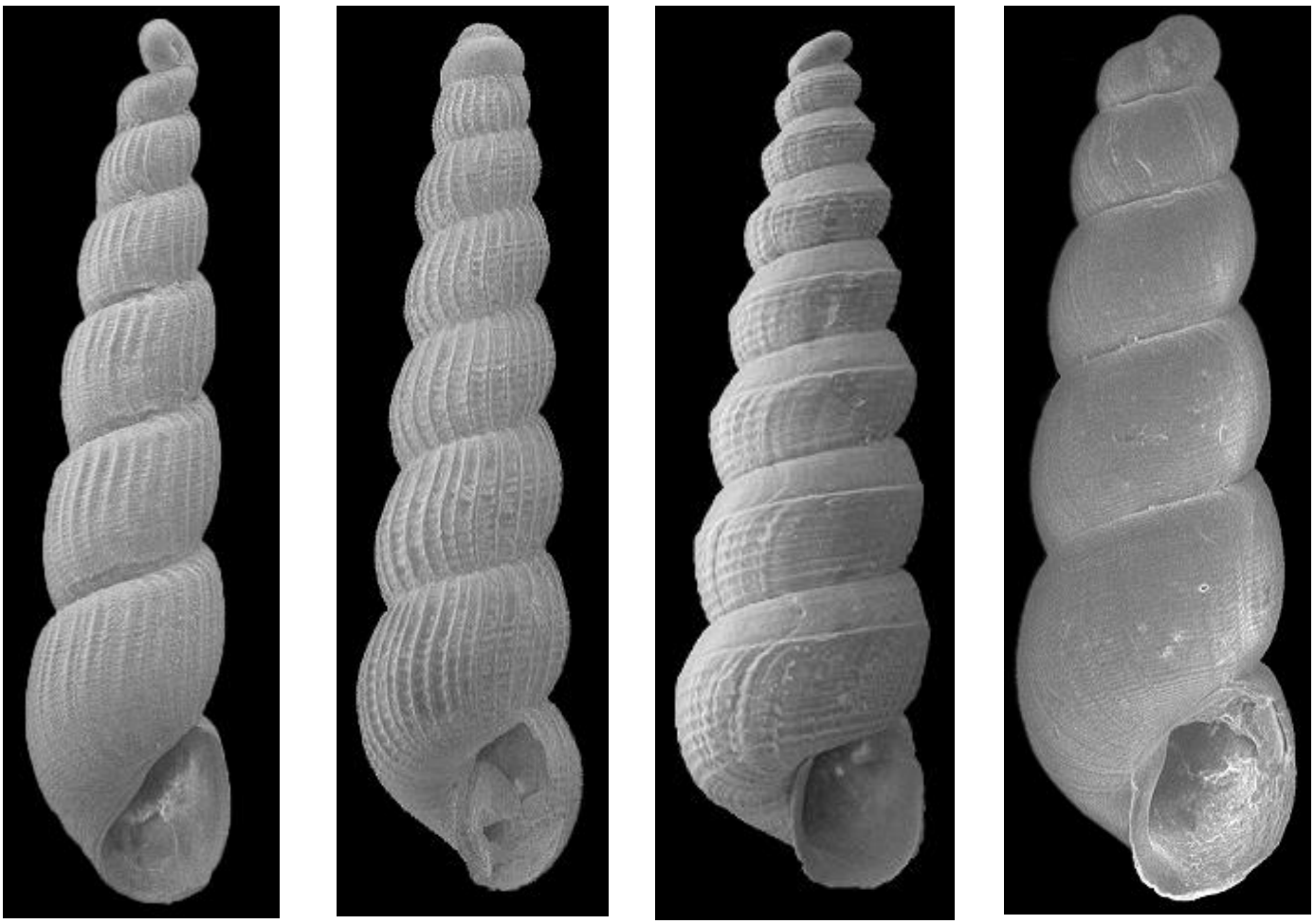
David Sanchez took this photograph after dark on the evening of April 30, 2016 in about 15 ft of water, near the Blue Heron Bridge, Lake Worth Lagoon, Riviera Beach, Palm Beach Co., FL. The right eyestalk bifurcates abut halfway from its base to the eye at its terminus. This feature normally protrudes through the stromboid notch, here shown to the viewer's (and snail's) right. The cause of this anomaly is unknown, but conch-watchers can imagine how the stalked, colorful strombid eye might be considered a piece de resistance by a hungry predator capable of inflicting considerable damage and perhaps stimulating a regenerative process gone awry. Of interest is the report of a similar malformation in the confamilal *Lobatus gigas* (Linnaeus, 1758) the familiar Queen Conch (Vélez-Villamil, 2014). The right eyestalk in that specimen split much closer to the eye. Both conchs were

liberated after being photographed. A somewhat different anomaly, duplication of the right eye of a Queen conch was demonstrated by Kronenberg (2013). Maybe there's something special about the right (vs. left) eye/stromboid notch anatomy playing a roles here?

N.B. Photo copyright 2016 by David Sanchez of Blue Heron Bridge Photography <https://www.facebook.com/DavidSanchezBHB/?hc_location=ufi>

Kronenberg, G.C., 2013. A specimen of *Lobatus gigas* (Caenogastropoda, Strombidae) with an abnormal eye. *Basteria 77*(4-6): 41-44. Vélez-Villamil, S., 2014. The three eyed *Lobatus gigas. American Conchologist 42*(3): 17. September [October].

A sampler of lower Pinecrest micro-Allogastropoda (Upper Plioccene ~ 3 million years old)



L to R: *Falsoebala* species, *Graphi*s species, *Murchisonella* species, *Henrya* species. All four species, not necessarily the same specimens, were collected on the July, 2013 COA convention field trip to the SMR 10 Sand and Shell Mine in northeastern Sarasota County led by Roger Portell and Dr. Ron Bopp. Each shell is about 1½ mm in height. SEM by Anne Heatherington, Dept. Geology, University of FL and Harry G. Lee. Specimens property of Department of Invertebrate Paleontology, Florida Museum of Natural History.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ROOM 104 | SATURDAY 2-9P | SUNDAY 9A-7P