



SHELL-O-GRAM

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JACKSONVILLE SHELL CLUB, INC.

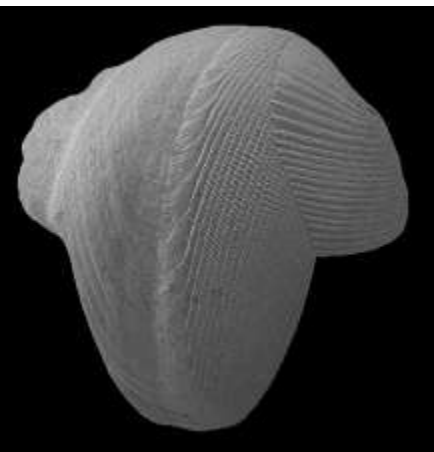
Sept.-Oct., 2023

Volume 64 (no. 5)

Upcoming meetings

The Jacksonville Shell Club, Inc. (JSC) customarily meets on the **fourth** Thursday of each month except for November (a week earlier due to Thanksgiving) and December (traditional Xmas get-together) at 7:00 PM in Function Room D of the Southeast Branch, Jacksonville Public Library

<https://www.jaxpubliclibrary.org/locations/southeast-regional>. The main program on **September 28th** will be presented by **Paul Jones** and will deal with the olives and strombs (families Olividae and Strombidae) of the Panamic Province. As with the predecessor programs on mollusks of tropical western America (TWA) given on April 27 and June 22, he'll draw strongly from his collection derived from the field work of the late JSC member Jim Knight, who brought back hundreds of species from Las Perlas Islands, Pacific Panama. As with the shells featured in those talks, we'll be able to appreciate the closeness (cognate taxa) and differences between the more familiar Caribbean fauna and Paul's TWA species. **Harry Lee** will present the shell-of-the-month [L]. Who knows this little clam, collected



near Jupiter by **Rick Edwards**? Hint: despite the small size of its shell, the animal and its relatives are responsible for millions of dollars of damage annually in the US alone.

On **October 26th** we'll convene at the customary time and venue. The shell-of-the-month will be presented by **Paul Jones** on *Circulus angulatus* (A. Adams, 1850) a tiny (but not strictly micro-) snail he discusses in shorter format on page nine of this issue. Taken intertidally near Matanzas Inlet, St. Johns Co., FL it was previously



known a junior synonym, *Cyclostremiscus beaultii* (P. Fischer, 1857) and in deeper water (see our NE FL book). **Harry Lee** will give the main program attempting to put little white clams (LWC's) into a semblance of order. Plio-Pleistocene fossil and Recent shells (often with bizarre animals and habits to match; L: photo by Ari Dimitris taken off Landerdale-by-the-Sea, Broward Co.) found in and near FL waters will be featured.

There are dozens of species, many undescribed. At least some LWC's can out-crawl most gastropods.

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The club customarily meets monthly at the Southeast Branch of the Jacksonville Public Library, 10599 Deerwood Park Blvd., Jacksonville, Florida <https://www.jaxpubliclibrary.org/locations/southeast-regional>.

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 about two days later and sent to about 200 individuals who have demonstrated an interest in malacological research and/or Florida mollusks. These pdf's (ISSN 2472-2782) have also been posted to <http://jaxshells.org/letters.htm> since November, 1998. We encourage members and other 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 *Shell-O-Gram* Editor-in-Chief. As a courtesy, the editor should receive a copy of the republished version. Contents of the *Shell-O-Gram* are intended to enter the permanent scientific record. The club is a chartered corporation in the State of Florida and a non-profit educational organization under the provisions of Section 501(c)(3) of the US IRS Code.

Membership Dues are payable in **September** each year.

Many of you have complied, but if you're in arrears, please send in your dues:

Individual \$15.00; Family \$20.00, to

Harry G. Lee, Treasurer, JSC

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Shell-cleaning, -swapping, -give-away, & ID clinic very soon

Paul Jones will host another in a series of these popular functions beginning at 9:30 AM Saturday, September 2 at 3609 Crazy Horse Trail, St. Augustine, FL 32086. Since virtually all attending will have been there at least once before and know the itinerary, here's his phone: (904) 347-7254 & email: jonesp0854@gmail.com. Afterwards, we will adjourn to a local restaurant to enjoy a nice lunch together. It may be hot and COVID could be lurking, so appropriate precautions are in order. Guests are welcome, too.

***Vexillum albocinctum* (C.B. Adams, 1845) (Gastropoda: Costellariidae): An update with new type images and additional information on synonyms of this species.**

by Richard Salisbury (rsalisbury8@msn.com) and Harry G. Lee

The original description of this species indicates that the type specimen came from Jamaica. The size was given as about 5mm Hmax and 2.5mm Dmax [1 pollux = 24.6mm]. No figure of this very small shell accompanied the description [**below**].

Descriptions of supposed new species of marine shells, which inhabit Jamaica

PAGE 2

MITRA ALBO-CINCTA. *M. t. minima*, fusiformi; anf. 6, fasciâ superiore fuscâ, inferiore albâ majori ornatis, striis decurrentibus et costis latis spiralium anfractuum latitudine brevioribus—instructis; canali brevi. Div. 40°; spiræ long. .11 poll.; long. tot. .2 poll.; lat. .1 poll. *M. savignyi* affinis. [Size: 5.1 mm x 2.5 mm from Cernohorsky 1978]

Confusion about the identity of *Mitra albocincta* C. B. Adams, 1845 began in 1950, when Clench and Turner published a paper entitled, "The Western Atlantic Marine Mollusks described by C. B. Adams". On page 253 of that paper, they listed *Mitra albocincta* with an accompanying figure [**below; R**].

albo-cincta Adams, Mitra

Plate 36, fig. 10

1845, Proc. Boston Soc. Nat. Hist. **2**, p. 2.

M. t. minima, fusiformi; anf. 6, fascia superiore fusca, inferiore alba majori ornatis, striis decurrentibus et costis latis spiralium anfractuum latitudine brevioribus—instructis; canali brevi. Div. 40°; spiræ long. .11 poll.; long. tot. .2 poll.; lat. .1 poll. *M. savignyi* affinis.

Jamaica. [Size 5.1 x 2.5 mm per Cernohorsky 1978]

Fig. 10. " *albocincta* Adams. Holotype MCZ 177080 (3x).

As shown immediately **above**, this specimen shell was identified as the "holotype" in the facing plate explanation on p. 376 from the MCZ collection, number 177080. The shell illustrated on the plate was later measured by Walter Cernohorsky to be 18.0 x 8.5 mm. That is considerably larger than the size listed for *Mitra albocincta* in the original description.



Cernohorsky in his 1978 publication "The Taxonomy of Caribbean – Atlantic Costellariidae (Mollusca: Gastropoda)" wrote in detail about *Mitra albocincta* on page 98 of that paper [**next page**]:

As pointed out already in the discussion of *V. (P.) histrio* (Reeve), some mix-up probably occurred with Adams' types of Mitridae and Costellariidae. C. B. Adams (1845) described *M. albocincta* as having 6 whorls and gave the size as 0.2 poll. x 0.1 poll. = 5.1 x 2.5 mm. The specimen selected and illustrated by Clench & Turner (1950) as the holotype of "*M. albocincta* C. B. Adams" disagrees with Adams' diagnosis. The Clench & Turner "type" measures 18.0 x 8.5 mm which is over three times the size as given by Adams (op. cit.), the shell has 8 whorls and a missing protoconch and not 6 whorls as given by Adams. The specimen illustrated by Clench & Turner (op. cit.) as the "holotype" of *M. albocincta* is in my opinion the type-specimen of *M. monilifera* C. B. Adams for which Adams gave a size of 18.8 x 9.1 mm. All available evidence and the existence of the 2 probable syntypes of *M. albocincta* in the British Museum (Nat. Hist.) which originated from the C. B. Adams collection and were accessioned in 1845, strongly suggest that *M. albocincta* C. B. Adams is an earlier name for *M. gemmata* Sowerby.

As stated **above**, Cernohorsky's contention was that the selected "holotype" could not be *Mitra albocincta* mainly due to the size not matching the original description. He suspected that there was a mix up in types and that the specimen that Clench and Turner selected was actually the type specimen of *Mitra monilifera* C.B. Adams, 1850. We completely agree with Cernohorsky's observations. Cernohorsky went on to say that he had



found two probable syntypes of *Mitra albocincta* at the British Museum (NHMUK) London: catalog numbers 1845.3.5.85, 86. Those two specimens were accessioned by the NHMUK in 1845 from a C.B. Adams collection. See new images of these shells [respectively; L]. It has also been documented that the specimens in C.B. Adams type lot were originally from Mr. Hanley. Cernohorsky also stated that he strongly suggests that *Mitra albocincta* was an earlier name for *Mitra gemmata* G.B. Sowerby II, 1874.

Andreaia Salvador did research on *Mitra gemmata* and also provided images of the lectotype and two paralectotypes [**below** lectotype NHMUK 1900.3.19.36 L and .37 paralectotype R (the second paralectotype is not shown here)]. These specimens look just like those described as *Mitra albocincta* by C.B. Adams in 1845.



What is even more convincing is that the specimens in G.B. Sowerby's collection also came from Mr. Hanley. To us these are all the same species. **The earliest name for this species is *Vexillum albocinctum* (C.B. Adams, 1845).** Photographs of live-collected specimens are presented on the next page.

Vexillum albocinctum (C.B. Adams, 1845) alive on sand/rubble bottom, Little Torch Key, Monroe Co., FL.
George and Bunnie Cook! 1978; 7.70mm and 7.24mm respectively:



Florida Mollusca Exotica: Part 4, (second of two installments): Freshwater Gastropods

by Robert R. Fales (Edison, NJ fales@verizon.net)

We continue with our survey of Florida exotic freshwater gastropods by looking at *Biomphalaria*.

Heterobranchia, order unassigned (superfamily Lymnaeioidea), **Planorbidae**

Biomphalaria spp.¹⁻⁵

The nomenclature of planorbid snails in general has been confusing, and is particularly true for *Biomphalaria* spp. Shell morphology is of limited use for identifying different species because of phenotypic plasticity, the limited descriptions of cryptic species, and the difficulty in applying species-diagnostic characters to juvenile specimens. The confusion has resulted in suspect identifications and characterizations of ranges and distributions, and consideration of the long evolutionary history of *Biomphalaria* spp. makes it clear that invasions into new geographical areas have been a regular feature. Approximately 30+ “species” of *Biomphalaria* spp. are now distributed worldwide. *Biomphalaria* spp. are hermaphroditic, being able to self-fertilize, and are highly fecund, which supports successful invasions. The study and correct identification of *Biomphalaria* spp. in general is important because many species are susceptible natural intermediate hosts for the bloodfluke trematode parasite *Schistosoma mansoni*. This parasite causes schistosomiasis (Bilharziasis) in humans, resulting in significant morbidity and potential mortality, especially in underdeveloped countries. The two species presented below have Neotropical origins.

***Biomphalaria glabrata* (Say, 1818)⁶⁻⁸** (Bloodfluke Planorb): Native to the West Indies, Venezuela, Surinam, French Guiana, and Brazil. Found in at least a dozen locations from Jacksonville to Miami as early as 1913; recorded from Sanibel Island, Lee County, in 2008; current status uncertain (possibly a result of the presence of ***Melanoides tuberculata* and *Tarebia granifera* [see above]**). *Biomphalaria glabrata* uses a generalist feeding strategy, subsisting mainly by selecting decaying macrophyte tissue, colonial diatoms, and smaller green algae in preference to living macrophyte tissue, filamentous green algae, or small adpressed forms of epiphytic diatoms and epiphytic bacteria. Thus, it is unlikely to have an impact on agriculture or horticulture, although it could impact native species that use a similar feeding strategy. The snail is the most important obligatory intermediate host for the bloodfluke trematode *Schistosoma mansoni* in the Americas, as well as a host for other trematode parasites. This is a potential concern because the snail can inhabit almost any kind of freshwater environment.

***Biomphalaria havanensis* (L. Pfeiffer, 1839)^{1,4,5,9-12}** (Ghost Rams-horn; R): The type locality is Havana, Cuba, and the species is common in the Neotropics, but the specific native range is in question. At least one source states categorically that *B. havanensis* is exotic in the United States, while others imply (depending on your interpretation of their presentations) that the species’ native range includes south Florida, but are not explicit; thus, I have chosen to include *B. havanensis* here since Lee¹⁴ found a massive flotilla in W Central FL including the figured specimen. The taxonomy has been in constant flux, with *B. havanensis* often being confused with



B. obstructa (Morelet, 1849) (now considered a *taxon inquirendum* by MolluscaBase¹³), *B. orbigny* Paraense, 1975, *B. peregrina* (d'Orbigny, 1835), and a genomically confirmed, but as yet unnamed, *Biomphalaria* sp. in Cuba. Thus, identifications in the literature must be viewed cautiously. There is no consensus as to when or where *B. havanensis* was first recorded as present in Florida, and precious little other coverage beyond that in studies of taxonomic status. We can probably expect similar feeding strategies and agricultural and horticultural impacts as for *B. glabrata*. *Biomphalaria havanensis* is a known intermediate host for *Schistosoma mansoni*. The species has also been artificially infected with the trematode *Bulbophorus damnificus*, which can cause losses in farmed Channel Catfish (*Ictalurus punctatus*), and may be a natural intermediate host.

This completes our survey of exotic freshwater gastropods. In our next installment of the series, we begin to look at exotic terrestrial snails.

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Local and regional records of mutant reverse-coiled gastropods (Part 3 of 3)

In the spring of 1974, the late Henry McCullagh and the editor were in Doctortown, GA working various habitats near the US 301 bridge over the Altamaha River. We were principally in search of the several pearly freshwater mussels endemic to that great watershed. Borne by my 13-foot Boston Whaler, aptly dubbed *Megaloniais* [the Washboard, America's largest pearly freshwater mussel; see Lee, 1986], we covered about five river miles fetching up on sandbars, chasing down sand tracks, and "noodling" (the braille method) in deeper waters. Our efforts were rewarded, and all the specimens we culled now repose at the Florida Museum in Gainesville.



After hauling out at the launch ramp near the NW rampart of the bridge, we tried our hand at shore collecting. Although there weren't many mussels in the extensive, boggy overbank downstream of there, there were plenty of terrestrial and aquatic snails, many moribund or freshly dead from flooding and/or stranding. Conspicuous among them were dozens of high and dry *Campeloma lima* (Anthony, 1860). I had found a sinistral specimen nearby less than a decade earlier, and, while we examined all the shells we could, darned if I didn't duplicate that

brehtaking feat [**above**; 25.8mm]! The literature tells us that members of this genus, which is pretty near endemic to the US, are prone to reversal of coil, but that fact didn't detract from crowning moment of what was probably the most enjoyable and productive field trip of a lifetime.

Lee, H.G., 1986. Champion clams of Florida. *Shell-O-Gram* 27(6): 3-4. <<http://www.jaxshells.org/champion.htm>>

A rarely seen tiny gastropod from Matanzas Inlet

by Paul Jones

Shell collecting in the "Summerhaven River," a tidal creek that runs south from Matanzas Inlet in Northeast Florida, has been especially good lately. One such surprising find for me was the spotting of what I call: "a teeny, tiny tornid" – *Circulus angulatus* (A. Adams, 1850), formerly known as *Cyclostremisus beauii* (P. Fischer, 1857), Beau's Vitrinella [**below**].



I found it alive (or very fresh dead) sitting in a small tide pool on the exposed intertidal sandbar in the middle of the "Summerhaven River" on the New Moon minus tide, June 18, 2023. Shelling conditions are excellent in this spot during the monthly New and Full Moon low "spring" tides that expose a wide sand/mud flat. Lee (2009: 66) reported only about a half dozen specimens Beau's Vitrinella, all bycatch of the erstwhile (1980's) Calico Scallop fishery from 100-140 ft., 30-55 mi offshore, most notably from the digestive tracts of batfish. This find may be one of the very few examples of this species found intertidally – at least in NE Florida.

The shell is tiny, measuring no more than 8.99 mm (or about 1/3 of an inch) at its widest point and was found either alive or in a very fresh dead condition, and the operculum has since dried in the aperture of the shell. It was found in virtually perfect condition.

It was at this same spot in July, 2022 where I found what turned out to be a modern World Record Sized (WRS) *Strombus alatus* (Gmelin, 1791), Florida Fighting Conch, that measured 118.8mm, or about 4¾ inches. That shell is now officially recognized as the largest specimen that has been verified with a digital caliper measurement and a photograph [R]. JSC members and friends have accounted for numerous specimens in excess of 110mm, and the St. Augustine or Matanzas areas have produced all of them.



Lee, H.G., 2009. *Marine shells of northeast Florida*. Jacksonville Shell Club, Jacksonville, FL. Pp. 1- 204 + 19 color pls. 28 May. [Checklist at <http://jaxshells.org/marine.htm>]



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