SHELL·O·GRAM
Official Publication of the
JACKSONVILLE SHELL CLUB, INC.

March-April, 2017_____Volume 58 (no. 2)

Upcoming programs

The **March** meeting of the Jacksonville Shell Club 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 customary fourth Thursday, the **24th**, at 7:00 PM. Paul Jones will put the endemic orange form of the Banded Tulip, *Cinctura hunteria* (G. Perry, 1811) in the spotlight. To our knowledge this morph [**L**] is endemic to St. Johns County, FL. See Paul's article on pp 4-6 of this issue.

Following Paul, Harry Lee will take the podium and discuss the discovery of 80 genera of mollusks heretofore unknown in the Pinecrest beds, which were deposited in southern FL during the final millennia of the Pliocene Epoch, about 2.6 to 3.0 million years ago. Although the Pinecrest was already reknowned for having one of the richest and best-known fossil faunas on the E. coast of the New World, these new records clearly place it in ascendency. A single genus-level character, being <5.50 mm in maximum dimension, characterizes these addenda. Evidence for, and implications of, this large-scale shift in the composition of this splendid fauna will be explored.

On Thursday **April 27** we'll reconvene at the above time and venue, where Harry Lee will present the shells-of-the-month, the "Giant Carnivorous Landsnails" of Mexico and Central America. This informal group of species was recognized by Dr. Fred Thompson in 1987, and it includes *Euglandina hyperion* Thompson, 2014 [**R**], which measures 94 mm in height. Another of the species is discussed on pp. 7-9 of this issue and, although unnamed, may the largest shelled terrestrial snail living in North America

The main feature will be delivered by Rick Edwards, who will bring us up to date on his and Roz's latest adventures in the West Indies. This time he'll take us to Aruba, Bonaire, and Granada. Rick has regularly up-graded his underwater photography gear and should have a few movie clips to enliven his already stunning images of seascapes and biota.

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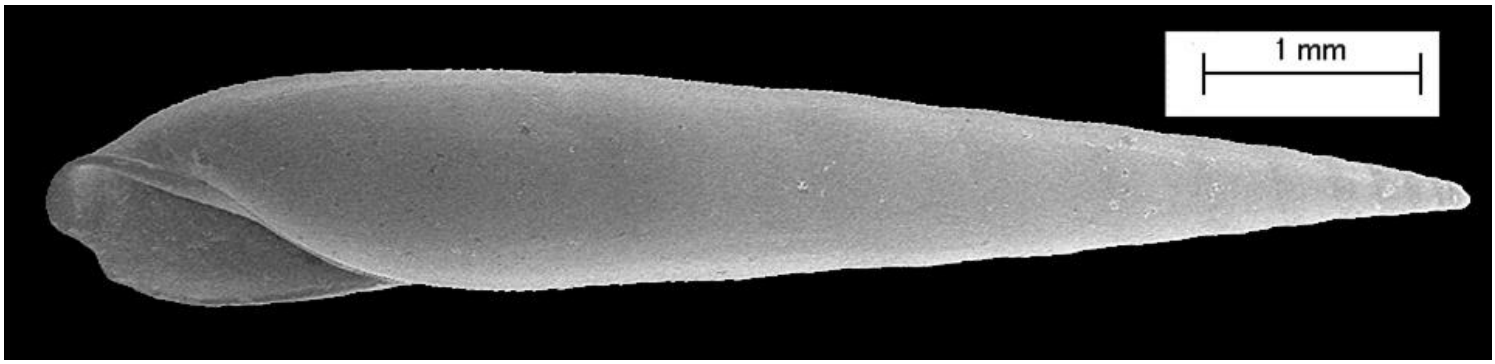
This club meets monthly at the Southeast Branch of the Jacksonville Public Library, 10599 Deerwood Park Blvd,, Jacksonville, Florida <http://jpl.coj.net/lib/branches/se.html>. Please address any correspondence to the club's address above. Annual membership dues are $15.00 individual, $20.00 family (domestic) 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.



"Strombiformis" dalli Gardner and Aldrich, 1919. Skinniest of the mollusks from SMR 10, an exposure of the Upper Tamiami Formation, lower Pinecrest beds in NE Sarasota Co. FL (3,000,000 years old).

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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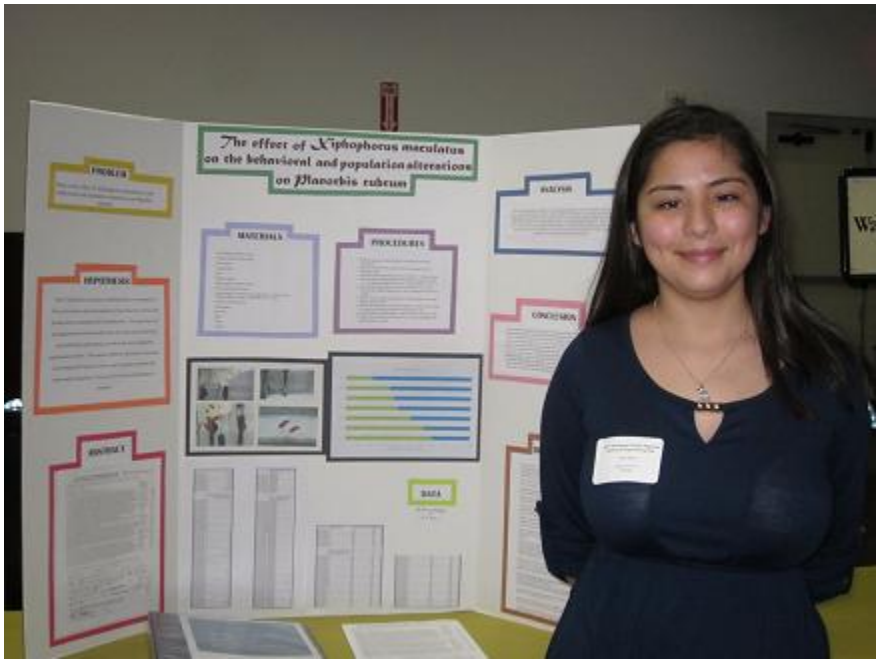
Jacksonville Science Fair Shell Club Winners



Alice Baker, a ninth-grader at Stanton College Preparatory High School won the JSC Senior Division Award, a check for $75.00, for her work with the Red Ramshorn, an albino strain of a planorbid snail called "*Planorbis rubrum*"* in the aquarium trade, and its interaction with *Xiphophorus maculatus* (Gunther, 1866), the Southern Platyfish. Using appropriate experimental controls, she demonstrated a beneficial effect conferred by the fish on the growth and reproduction of the snails. Remarkably there was little direct interaction, e.g., even slight antagonism of the snails by the cohabiting fish as the animals pretty much kept to themselves. Alice was advised by Mr. Kabarbera.

Ripley Selhorst won the JSC Junior Division Award. The seventh-grader at James Weldon Johnson Middle School took home a $50.00 check for her protect "Microplastics in my backyard." She painstaking filtered surface water from a small assortment lf localities and examined the particles retained on the paper membranes. Rather surprisingly, plastics of a variety of shapes and sizes were found. Fibers were the most abundant of these morphologies. Her project received special consideration because of the threat these microplastics pose to marine biota globally and throughout the food chain. Jeanne M. Murphy was Ripley's faculty advisor

Photo's by Rick Edwards

* This binominal construct, which is a nomenclatorial malapropism, seems to have its origin in the red pigmentation of the snail's body, due to hemoglobin, the normal oxygen-carrying pigment in planorbids, which is quite apparent due to the (abnormal, mutant) lack of melanin in the soft tissues. The actual identity of the species is unclear, but it may be *Biomphalaria glabrata* (Say, 1818). In any event, the specific epithet *ruber, rubra, -um* does not appear to have been made available in combination with any planorbid genus in the formal taxonomic literature.

A new shelling area at Matanzas Inlet

by Paul Jones

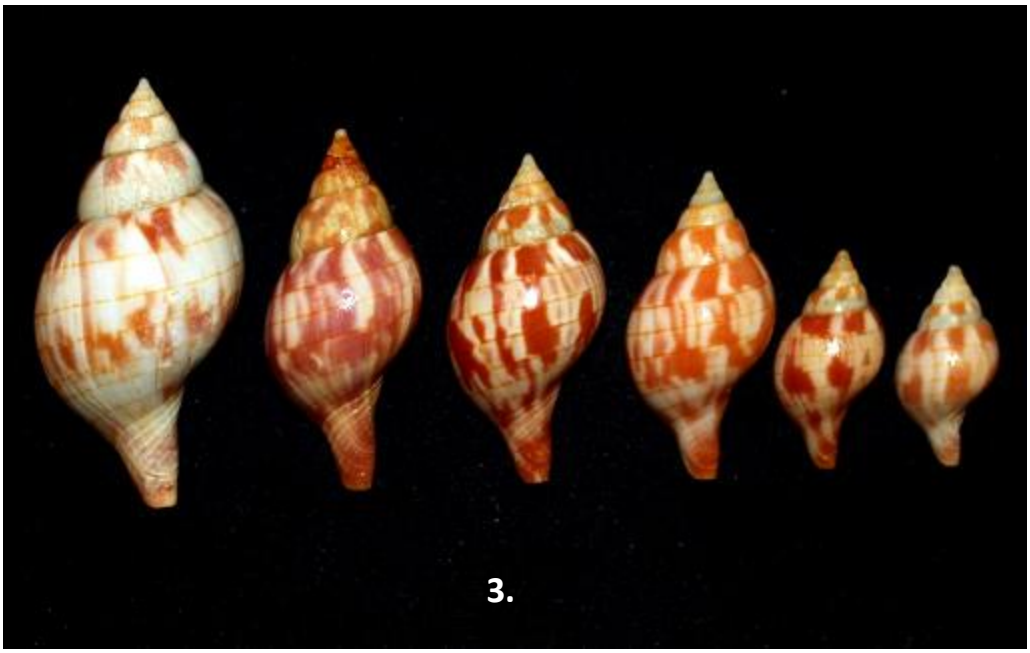
We are very fortunate in the St. Augustine, Florida area to have not one, but two seaside inlets in which to access and do intertidal shelling in and around. The first one, of course, is St. Augustine Inlet itself, which I wrote about recently. It covers a rather large area, is heavily populated around most of its boundaries and can be very much of a hit-or-miss proposition for good shelling, depending upon what part of it you go to. Also, access to much of it is restricted due to the development. The second inlet, Matanzas Inlet, located about fifteen miles south of the city, could hardly be more the opposite in just about every respect.

Matanzas Inlet is small, compact in area, and almost completely uninhabited around its borders. This makes for much easier access to its various habitats and tends to produce a much more pristine environment for marine life. The Matanzas Inlet habitats are quite varied too, ranging from sand/mud flats, oyster bars and intertidal creeks to rock jetties, even stretches of open beach. I've been shelling certain parts of it off and on for many years with mostly good results, yet recently stumbled upon a heretofore unexplored area that is proving to be the most lucrative collecting of all.

The area I've found is actually along the west bank of the inlet, bordering on the Intracoastal Waterway which runs past it slightly to the west. Access to the area is through the St. Johns County Helen Mellon Schmidt Park in Summer Haven, Florida. A winding road through the park ends up in a large peninsula bordering on the Fort Matanzas National Monument grounds. It is in this area that a long stretch of rock jetties is exposed at very low tides, as are vast flats of tidepools, mud flats and oyster bars. Sea life of all sorts abound in this area and a low tide walk along this stretch of the inlet reminds me very much of our Cedar Key, Florida minus tide excursions, perhaps even a bit better!

Recently, fellow JSC member Rick Edwards and I covered this area on a Sunday afternoon's -.5 low tide and came away with some amazing treasures even with a stiff onshore wind blowing that kept the tide from going out as far as we had hoped it would. We each pretty much easily filled our collecting buckets and did not even take most of the live mollusks we saw, just the empties and/or the crabbed ones. We did photograph many of them, however. And gorgeous live mollusk specimens were indeed all around us!
The entire area is just loaded with Tulip Shells – both *Fasciolaria tulipa* (Linnaeus, 1758) and *Cinctura hunteria*

(Perry, 1811), especially many of the prized orange color form [fig. **3**] of *C. hunteria* that seems endemic to the two inlets. We spotted several live *Triplofusus giganteus* (Kiener, 1840) [p**. 6**] among the oyster bars, a couple of them up to twelve inches in size! Other univalve species frequently encountered were: *Stramonita floridana* (Conrad, 1837), *Nerita fulgurans* Gmelin, 1791, *Neverita duplicata* (Say, 1834), *Gemophos tinctus* (Conrad, 1846) and *Urosalpinx cinerea* (Say, 1822), the latter species also was found in albino form.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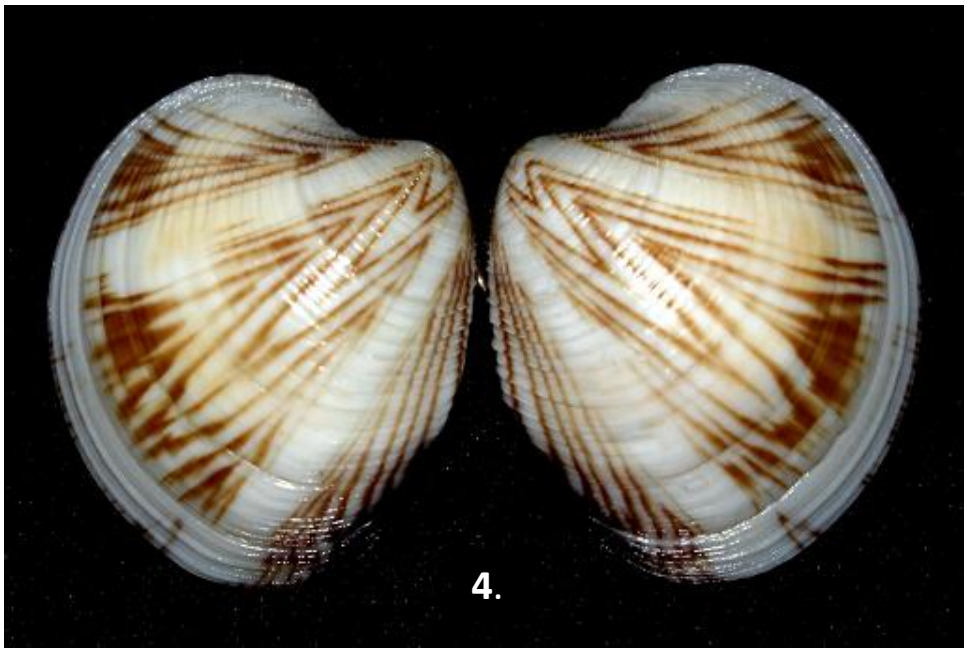
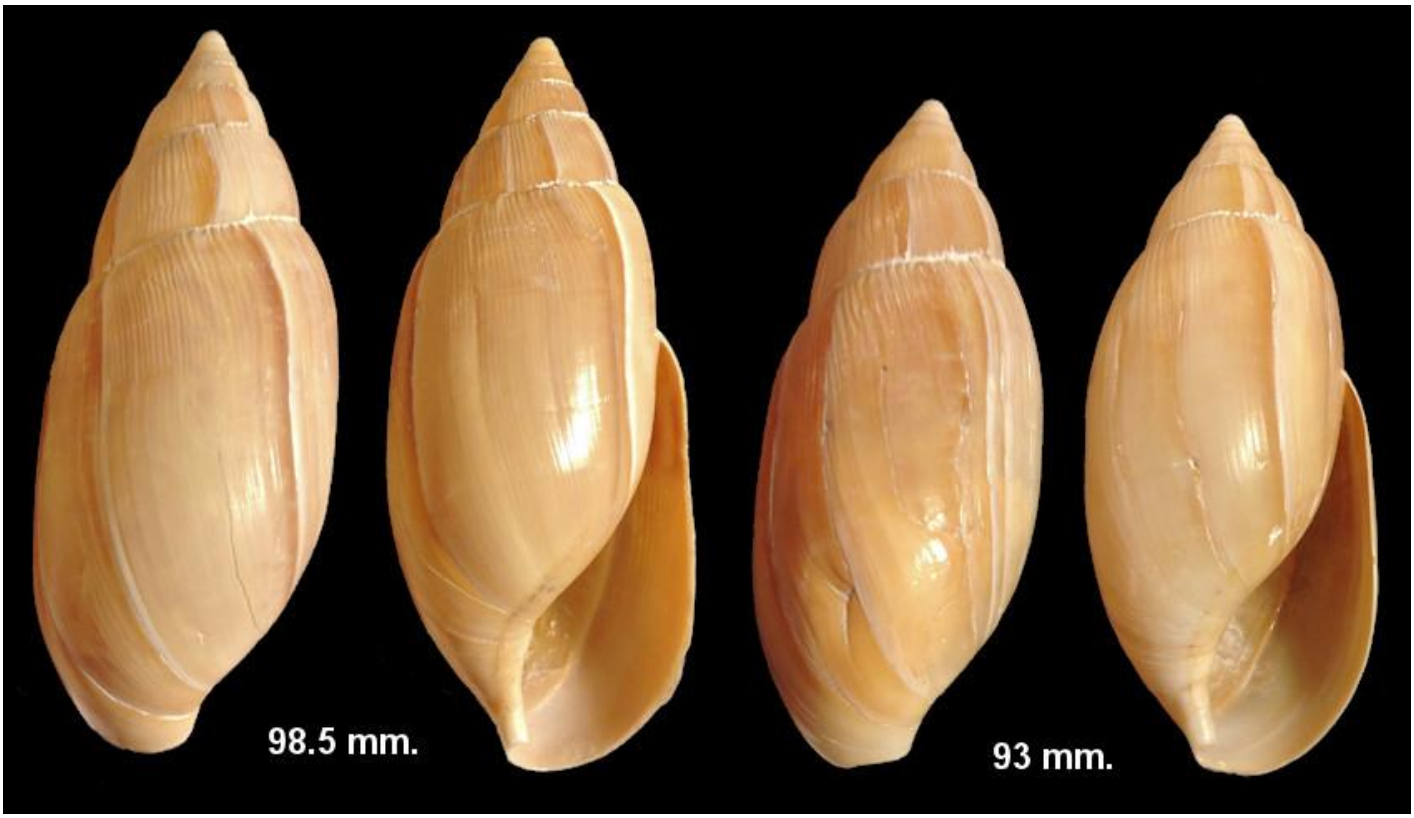
Bivalves are also very well represented with *Crassostrea virginica* (Gmelin, 1791), *Mercenaria mercenaria* (Linnaeus, 1758), *Mercenaria mercenaria* form *notata* (Say, 1822) [fig. **4**], *Dosinia discus* (Reeve, 1850), *Dallocardia muricata* (Linnaeus, 1758), *Pinctada imbricata imbricata* Roding, 1798, *Chama cristella* (Lamarck, 1819) and many huge *Atrina* Pen Shells both alive and empty among others. We also noticed many live specimens of the invasive species *Perna viridis* (Linnaeus, 1758), nestled in the cracks of the rock jetties. The sizes of some of the specimens are amazing as well. So far, I have found a 70mm specimen of *P. imbricata imbricata* and an 81 mm specimen of *D. discus*! Rick and I are certain that frequent trips to the area will yield many additional mollusk species.


4.

We are planning a summer time JSC Field Trip to the area where Rick and I shelled, with the added opportunity to snorkel in the nearby calm waters of the inlet. Other than a bit of walking in order to get around the jetties (or to climb over them), the area is a wading/beachcombing sheller's dreamland! There are many other types of marine life to be found as well as mollusks in the area – sea urchins abound, purple sea whips, along with orange, white, yellow and lavender sea sponges to name but a few. On my first visit to this area, I even encountered a small live sea turtle in a tidepool. A visit to this area becomes much more than just a shell hunt, it becomes an entire course in marine science!

A heretofore unrecognized species of giant carnivorous land snail from Mexico

by Harry Lee

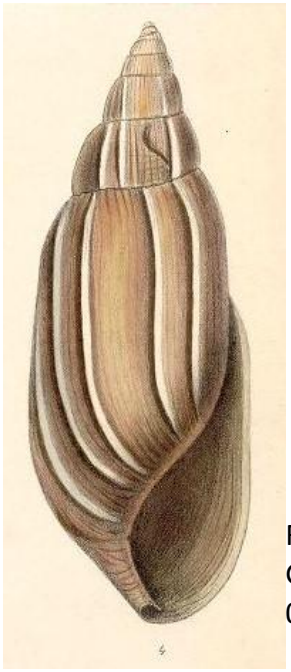


East facing slope, xeric conditions, limestone slides, 15 miles southwest of Pinal de Amoles, Querétaro, Central Mexico, G.B.! 1997. From the Bud Rogers collection.

I received a request to identify two rather unusual land snails [**above**] from a collector friend of the late Henry McCullagh [see Nov.-Dec., 2016 *Shell-O-Gram*]. It seems Louie Rundo, a high school biology teacher from Brecksville, Ohio, inherited these shells from Bud Rogers, a well-known collector and exhibitor in FL shell shows in the late 1990's. At one of these shows, Bud received a major award for the larger specimen, and he noted on its label that a judge informed him that it might be the largest land shell occurring in North America. I remember the occasion well since I was that self-appointed off-the-cuff authority, and the venue was the Astronaut Trail Shell Show.

Although I'd done very little work with shells of this sort, I recalled that Fred Thompson [see Jan-Feb., 2017 *Shell-O-Gram*] had published a monograph on the group of such giants (Thompson, 1987), so I blithely proceeded thinking this would be a slam-dunk. Almost immediately, in reading the abstract, I saw that my expectation that Bud's shell was in contention for the mantle of North American champion as I read the abstract First I glanced at Fred's figures, then gave them the once-over, twice-over, etc. I decided that only one species was in contention, *Euglandina vanuxemensis* (I. Lea, 1834). However, that species had a very different color pattern, a better-developed sculpture, and a less rectilinear outline. I then pored over the text in more detail. In his discussion of *E. vanuxemensis*, Fred reported a specimen figured by Eduard von Martens

(1891: pl. 2, fig 4; reproduced **below L**) with characters similar to those of Bud's/Louie's shells. Furthermore, he had collected a similar specimen in the highlands near Pinal de Amoles, Queretáro State, essentially the same provenance as place the pair from Ohio! I have lifted the paragraph **below R** from (Thompson, 1987: 32)



Martens (1890: pl. 2, fig. 2) figured the specimen from Zimapan, based on a drawing of a shell presented to Mr. Abraham Lincoln and later deposited in the Peel Park Museum. It differs from typical *E. vanuxemensis* by its slender form, weak subsutural crenulation and its coloration, having longitudinal reddish streaks on a white background. It is similar to another specimen I have examined from 9.5 mi SW of Pinal de Amoles, Queretaro (UF 21329). Martens also figured the specimen from Omilteme. It differs in shape from other specimens I have examined, being considerably wider and ovate in form, and its subsutural denticles are weak and poorly defined. I do not believe the specimens in question are *E. vanuxemensis*. Other records given by Martens and Baker are geographically proximal to the distribution based on specimens I have examined.

Further delving turned up the actual specimen treated by von Martens (and drawn by G.B. Sowerby III) at the Manchester Museum (UK) see **below L** and Fred's shell (UF 021329: 89.4 mm; **below R**). To further fuel the investigation, there are photographs of this

apparently undescribed species (I hestitate to call it "new" with such a rich history).

Thus Bud Rogers' shells have mightily stirred the taxonomic stew, Fred Thompson has been vindicated, and that extravagant prediction in Melbourne, FL is approaching validation!

Acknowledgements:
Photographs were provided by Louie Rundo, Brecksville, Ohio, John Slapcinsky, FLMNH, Gainesville, FL, and professionals Henry McGhie and Rachel Petts at the Manchester Museum, U.K. Image editing was provided by Bill Frank of Jacksonville

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Don Swenson adds another exotic species to his Coral Cove Checklist

The above specimens of *Fissurella nimbosa* (Linnaeus, 1758) were beach-collected at Coral Cove Park FL by Don Swenson of Merrimack, NH, this winter. This stretch comprises the northernmost 1.1 miles of the Palm Beach Co., Florida coastline. The area is near the southern end of Jupiter Island and runs from barely inside Martin Co., south by east about 3/4 the way to Jupiter Inlet. Ninety percent of the collection was taken from northern half of the span, yet a few species were limited to the southernmost few hundred yards of shoreline. This tract is a mere 13 miles north by west of the famous shelling grounds of Peanut Island. Don has been collecting here during more than half the winters from 1995-96 to present and an account of his Coral Cove This species has apparently never been found in FL waters until now.

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