

November-December, 2002

**Volume 43(6)** 

Editorial Board: Bill Frank, Editor Harry G. Lee, Asst. Editor

Club Officers:
Pam Rice, President
Billie Brown, 1<sup>st</sup> Vice Pres.
Claire Newsome, Secretary

Charlotte Lloyd, Treasurer

# **November Meeting**

The Tuesday, November 26<sup>th</sup> meeting of the Jacksonville Shell Club will be held at the Southeast Branch Public Library at 7:00 PM.

The program and Shell-Of-The-Month will be devoted to a pictorial survey of the marine fauna of northeast Florida. Charlotte Lloyd and Harry Lee will discuss the animals depicted in a series of photo's (many underwater) taken by Char. Members are encouraged to each bring a special specimen of a locally collected marine animal (shells accepted!) for identification or some other amplification in this open forum.

## **December Christmas Party**

The traditional Club Christmas Party will be held at the home of Charlotte Lloyd in Jacksonville Beach on Saturday, December 14<sup>th</sup> beginning at 6:30 PM.

As is customary, each attending member is asked to bring a shell-related gift (about \$10 in value) for a member of the same sex. The Club will furnish a ham and soft drinks but attendees are asked to bring other food items. Please contact Charlotte at 246-0874 for directions and to see what other food items might be needed.

We are looking forward to celebrating this holiday season with our shell-loving friends.

# Stramonita biserialis on Catalina Island: An El Niño Anomaly

By Phill Liff-Grieff

Summer camp is a place for kids to have fun, relaxation, camaraderie and a wonderful opportunity to get away from the rest of the family for a number of weeks. It is a place where kids can learn new things and try on new roles. And, of course, Parents' Day is an important part of the experience as it allows the campers to replenish their supply of candy, cookies and other essential snack foods.

In July of 2000, my wife and I took part in the annual Parents' Day ritual as we visited our son at the Catalina Island Marine Institute (CIMI), an outstanding marine sciences-focused camp based at Toyon Bay on Catalina Island. Loaded down with our snorkel gear and bags of candy, we were prepared for a day of camp fun.

I greatly enjoyed touring the underwater photography lab, the shark and ray tank, the algae lab (doesn't every summer camp have an algae lab?) and the invertebrate lab. I was curious, however, about the hermit crab in the touch tank that had taken up residence in a Thaid shell I had never seen before in Southern California; *Stramonita biserialis* (de Blainville, 1832). As this species lives south of Ensendada, Mexico, it clearly didn't belong in Toyon Bay. Did someone accidentally drop a shell into the bay? Were exotic shells brought in to give the kids something to find on their marine excursions? No one knew anything about the shell or how it got there. [Continued on page 3.]



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## www.jaxshells.org

The <u>Shell-O-Gram</u> is issued bimonthly and mailed to all regular members. Annual membership dues are \$12.50 individual and \$15.00 family (domestic), and \$20.00 (foreign). Lifetime membership is available.

Send dues to: Charlotte M. Lloyd 1010 N. 24<sup>th</sup> Street Jacksonville Beach, FL 32250-2883

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

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 is mailed to Editor at the above address.

#### MEMBERSHIP DUES REMINDER

This is a reminder to send in your membership dues. You can determine when your membership expires (or when it expired) by checking the numerical entry that appears before your name on your newsletter mailing label. An entry of "8/02" would indicate that your membership expired on the last day of August, 2002.

Your club needs your continued support and participation.

Family \$15.00 Individual \$12.50
Please mail check, payable to Jax Shell Club to:
Charlotte Lloyd, Membership Chairman
1010 N. 24<sup>th</sup> Street
Jacksonville Beach, FL 32250-2883

#### **Upcoming Events**

+++January 17-19<sup>th</sup> - **Space Coast Shell Festival**, The Melbourne Auditorium, 625 E. Hibiscus Blvd., Melbourne, FL. Contact Jim or Bobbi Cordy, 385

Needle Blvd., Merritt Is., FL 32953, Phone: (321) 452-5736 or E-mail: cordy@yourlink.net.

+++January 31<sup>st</sup> - February 2<sup>nd</sup> - **Broward Shell Show**, Pompano Beach Recreation Center, NE 18th Ave. & NE 6th St., Pompano Beach, FL. Contact Jim VunKannon, 2219 NE 16th Court, Ft. Lauderdale, FL 33305, Phone: (954) 561-0120.

+++February 7<sup>th</sup> - 9<sup>th</sup> - **Sarasota Shell Show**, Sarasota Municipal Auditorium, Tamiami Trail, Sarasota, FL. Contact Lynn Gaulin, 3417 58th Ave. W. Bradenton, FL 34210, Phone: (941) 755-1270 or E-mail: ehgaulin@worldnet.att.net.

+++February 14<sup>th</sup> - 16<sup>th</sup> - **Naples Shell Show**, The Nature Conservancy, 14th Avenue N., Naples, FL. Contact Gary Schmelz, 5575 12th Ave. SW Naples, FL 34116, Phone: (941) 455-4984 or E-mail: schmelz@att.net.

+++February 21<sup>st</sup>-23<sup>rd</sup> – St. Petersburg Shell Show, Treasure Island Community Center, 1 Park Place, Treasure Island, FL. Contact Bob & Betty Lipe, 348 Corey Ave., St. Petersburg Beach, FL 33706, Phone: (727) 360-0586 or Email: rlipe1@tampabay.rr.com. Exhibits accepted at the club web site: http://web.tampabay.rr.com/shellclub.

#### Officers/Board Of Directors

At the September 26<sup>th</sup> regular meeting of the Jacksonville Shell Club the membership unanimously approved the following slate of officers/board of directors for the 2002-2003 fiscal year:

President - Pam Rice Vice-President - Billie Brown Secretary - Claire Newsome Treasurer - Charlotte Lloyd Board of Directors

Harry Lee, Mary Reynolds, Chris Cavan, Gertrude Moller, Ruthie Abramson and John Fatu

#### **Meet Our New Club President**

My name is Pam Rice, newly elected president of the Jacksonville Shell Club. Let me tell you a little about myself since I don't know everyone in the club yet. My daughter Amanda and I have been members of the club for almost a year and a half now. I found out about the club by doing a search under "shells" on the Internet and lo and behold I saw Jacksonville Shell Club. I had no clue that clubs existed for people like us! Anyway here I am!

Born in San Francisco, I was adopted by a Navy doctor and his wife. My parents moved us (my adopted brother Jeff, and, now that the pressure was off, my parents bore a daughter, Debbie) from San Francisco to Scotland (where my little brother F. Richard Walton Jr. was born), then on to Massachusetts and finally to Indiana, where I grew up. My parents divorced, my dad married again, had one child, my baby sister Susan, after 8 years of marriage they divorced. My dad married again, for the last time in 1974 to my step mom Jan. Jan joined the family with two daughters, my sisters Sandy and Karen.

I joined the Navy after 1½ years of college. I attended boot camp in Orlando, was stationed at Service School Command, Great Lakes, IL; Naval Air Station Key West, FL; Marine Corps Air Station, Iwakuni, Japan and Navy Recruiting District Houston, TX. As a civilian I moved to El Cajon (San Diego), CA with friends from Houston and five years ago moved to Orange Park, FL with friends from San Diego. As you might infer from my travels, after I was stationed at Key West I became hooked on anything remotely connected with the ocean and therefore had to live near it.

The love of my life is my daughter Amanda. My other loves are shelling (of course), photography, movies, art, animals in general, and anything to do with getting back to nature.

#### Stramonita biserialis — Continued from page 1.)

The day culminated with time to snorkel with the kids in the bay. To my-surprise, I immediately encountered two mature *Stramonita* feeding on barnacles exposed at low tide. The species was indeed living in Toyon Bay! Plans were quickly made to return to perform a more detailed survey.

In August, the CIMI management invited us back to make a detailed survey of Toyon Bay and its surroundings. In all, we encountered 46 mature specimens of *Stramonita biserialis* living in two distinct colonies - one at each point enclosing the bay. No *Stramonita* were found beyond those two colonies.

I examined the evidence in front of us in an effort to determine if we were looking at a range extension for the species or simply a one-time anomaly. My biggest clue was the simple fact that all of the specimens observed in the bay were fully mature and no egg masses or juveniles could be found. Clearly, all of the specimens arrived at around the same time and were not adapting well enough to breed.



Stramonita biserialis (de Blainville, 1832) (54 mm.)

The two colonies of this gastropod found in this unlikely location were the result of warm currents spawned by an El Niño condition. They must have settled on the two points where they were found and survived the increasingly cooler conditions that prevailed over the ensuing years. Survived, but not thrived as they were not able to reproduce and should perish within one generation.

It was very easy to test this hypothesis. The following summer (2001), I found myself at another annual Parents' Day and I checked the location of the first colony – no thaids were to be found. This past July, I checked the second site and found no specimens had survived there as well. The lifespan of this pioneering colony of gastropods had ended.

As we look ahead to the next El Niño cycle, I can't help but wonder what species will find its way into our waters.

\*Originally published in the Pacific Shell Club Newsletter "Las Conchas," Vol. 34, Issue 1, October 2002.

\*\*Go to http://www.jaxshells.org/grieff.htm on the Internet.

## Without Blue Crabs, Southern Salt Marshes Wash Away

The blue crab harvest needs to be scaled back immediately, say biologists.

Their study suggests that over-harvesting of blue crabs may be triggering the colossal die-off of salt marshes along the southeastern United States.

Southern salt marshes stretch from Chesapeake Bay to

the central-Florida coasts and are some of the most productive grasslands in the world. The marshes temper coastal flooding, filter mainland run-off and act as nurseries for commercially important fish and other species. The marshes also protect barrier islands, which buffer shorelines from erosion.

In experiments along the Virginia and Georgia coasts, Brown University researchers supported by the National Science Foundation (NSF) manipulated local populations of marsh animals. The scientists found that when blue crabs disappeared from a salt marsh, their main prey - periwinkle snails [Littoraria irrorata (Say, 1822)] - flourished. Once free of predation from blue crabs, the snails ate all of the cordgrass in the marsh.

Cordgrass dominates the southern marsh, anchoring it and providing its animals with habitat. Without the plants to bind sediment and protect wildlife, the salt marsh ecosystem collapses, the scientists found. In fact, the study shows that overgrazing by periwinkle snails will convert a southern salt marsh into a barren mudflat within 8 months.

"Cut back the blue crab harvest," said project member Mark Bertness, "because even if we're half right, the results of over-harvesting could be disastrous."

Hundreds of miles of southern salt marshes have died in recent years, particularly in Louisiana and Florida. Bertness and colleague Brian Silliman surveyed several of the dead and dying marshes and found relatively high densities of periwinkle snails, but few blue crabs. The researchers believe the effects shown in the experiments may already be at work in the southern marshes.

For more than 50 years, ecologists assumed that the 1/2- to 3/4-inch long, black or gray periwinkles ate only dead and dying plant materials in southern salt marshes. But Silliman and Bertness found that unchecked populations of the snail readily ate living cordgrass. Moreover, the greater the nitrogen content of the grass (nitrogen is the prime nutrient in mainland run-off), the more attractive the grass is to the periwinkles.

The study may cause upset among ecologists. For decades, the prevailing model of marsh ecology was that bottom-up forces, such as currents and nutrient flow, primarily determined plant productivity. But the new study indicates that a top-down process - the control of grazers (snails) by consumers (crabs) - chiefly establishes the growth of marsh grass.

According to the researchers, this top-down phenomenon "implies that over-harvesting of snail predators, such as blue crabs, may be an important factor contributing to the massive die-off of salt marshes across the southeastern United States."

## Field Trip To Matanzas Inlet

On Sunday, November 3<sup>rd</sup>, four members of the Jacksonville Shell Club (Bill Frank, Pam Rice, D.D. Jewell, Charlotte Lloyd) and Charlotte's friend Frank Thorpe, car-pooled to the now condominium sprouting area at Matanzas Inlet (just north of Marineland) to take advantage of the day's minus 0.86 tide - ostensibly to collect the area's *Fasciolaria lilium hunteria* (G. Perry, 1811) [Banded Tulip] variety which has orange to red (rather than violet-brown spiral bands). This color variant is very rare to absent in other Florida populations.



**Fort Matanzas** 

By prior arrangement, the group met at the Fort Matanzas Ranger Station where they availed themselves of the National Park Service's free 45-minute guided boat/land tour of 16<sup>th</sup> Century Fort Matanzas on "Rattlesnake Island." It was quite interesting – and yes the ranger confirmed the obvious – the island had more than its share of rattlesnakes. It was hard to imagine the difficult day-to-day life that the nine Spanish soldiers (one officer and eight enlisted men) faced while manning this small meager six cannon outpost in the middle of nowhere – guarding the southern approach to St. Augustine.

Following the tour it was time to get down to some "serious shelling" in the Matanzas River just north of the inlet. Unfortunately, to put it succinctly, the collecting was horrible. Other than a medium-sized *Busycon sinistrum* Hollister, 1958 [Lightning Whelk] found by Charlotte, the only other live species seen were *Nassarius vibex* (Say, 1822) [Bruised Nassa], *Ilyanassa obsoleta* (Say, 1822) [Eastern Mud Snail], a pair of *Pollia tincta* Conrad, 1846 [Tinted Cantharus), and ever-

present *Littorina irrorata* (Say, 1822) [Marsh Periwinkle].

It was then decided to return north and use the remainder of the day's minus tide to shell the area near St. Augustine Inlet at Vilano Beach, where during a trip during July, Charlotte had found both living and dead specimens of the elusive Tulip as well as a small *Pleuroploca gigantea* (Kiener, 1840) [Horse Conch].

After a thorough search both north and southeast of the new Vilano Beach Bridge, it was obvious that this was not going to be our day. *Nassarius acutus* (Say, 1822) [Sharp Nassa], *Mercenaria mercenaria* (Linnaeus, 1758) [Northern Quahog], and very colorful *Urosalpinx cinera* (Say, 1822) [Atlantic Oyster Drill] joined our list of live specimens found. Three additional Lightning Whelk were also seen; some of which were enjoying a Quahog meal. As the tide began rushing in, it was time to return home after enjoying another day "in the field" communing with nature.

While one always has high hopes for a shelling trip to an area a distance away and not often visited, an experienced sheller soon learns that the key to successful collecting is to go as often as you can. Today's beach devoid of shells can turn into a bonanza in a matter of days – despite the absence of any apparent factor that has changed.

Post script: Two other club members also made the trip (Chris & Scott Cavan) but due to a miscommunication, didn't arrive at the Fort Matanzas Ranger Station until after the first group had already departed for Vilano Beach.

\*Go to http://www.jaxshells.org/matanzas.htm on the Internet.

### **Cumberland Island Field Trip**

The club is planning a field trip to Cumberland Island on Sunday, February 16<sup>th</sup> 2003 for a 2:00 PM minus low tide (minus 0.23 feet). Cumberland Island is located 7 miles east of St. Marys, Georgia, and is accessible by a concession operated passenger ferry (approximately a 45-minute trip). We will meet at the Cumberland Island Ranger Station in St. Marys, Georgia no later than 8:30 AM. Reservations should be made well in advance of the field trip date. You must carry your lunch and drinks with you since there is only water and restrooms available on the island. You should dress appropriately for the weather.

Listed below is pertinent information:

**Ferry Prices:** \$12.00 Adult, \$7.00 Child [12 and under], \$9.00 Senior [65 and over], plus a user fee of \$4.00 perperson/visit.

**Reservations**: 10 AM to 4 PM Monday through Friday by phone or fax only – 888-817-3421 or (912) 882-4335 – Fax (912) 673-7747

**Ferry Schedule:** The ferry departs St. Marys at 9:00 and 11:45 AM, and departs from Cumberland Island at 10:15 AM and 4:45 PM. There is no service on Tuesdays and Wednesdays.

To visit the Cumberland Island National Seashore Web Site go to: www.nps.gov/cuis/index.htm.



