

# SHELL-O-GRAM

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Volume 36:3

## Editorial Board:

William M. Frank, Editor  
Charlotte M. Lloyd, Asst. Editor  
Harry G. Lee, Asst. Editor  
Billie Brown

## Club Officers:

Bill Lyerly, President  
Selma Thigpen, 1st Vice-Pres.  
Harry Lee, Secretary  
Bill Frank, Treasurer



## May Meeting

The May 18th meeting (one week earlier than usual) of the Jacksonville Shell Club will be held at the Reid Medical/Science Building of Jacksonville University at 7:30 PM.

The educational program will be presented by The Reverend Henry T. Close of Atlanta on Liguus tree snails. Rev. Close is an authority on the genus and has written numerous articles on Liguus since at least 1978; most recently a six part treatise published in Of Sea & Shore Magazine.

Refreshments will be served and visitors are cordially invited to attend. Don't miss it!

## June Meeting

The June 22nd meeting of the Jacksonville Shell Club will be held at the usual time and place.

The educational program will be presented by Charlotte Lloyd on "Diving and Shelling Cozumel, Mexico." Charlotte just recently returned from a trip to Cozumel and those of you who are familiar with her photographic talents know this is a program which should not be missed.

The Shell-Of-The-Month will be presented by Mary Reynolds on Neverita duplicata (Say, 1822).

Plan now to attend!

## Cumberland Island 1995

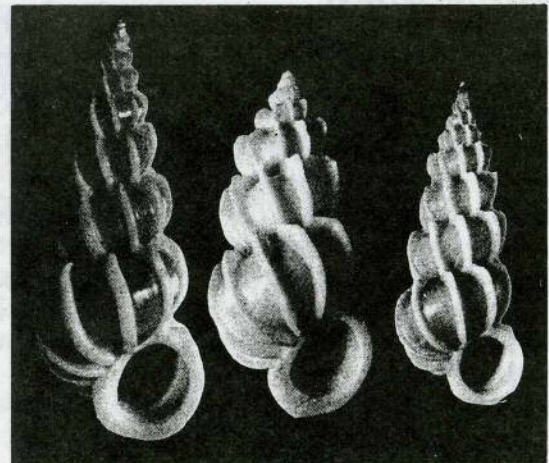
Nine members of the Jacksonville Shell Club (Bill & Betsy Lyerly, Judy Blocker, Bill Frank, Betty Hunter, Dottie Eanetta, Kaye & Mike Noble, and Teresa St. John) traveled to the wilds of Cumberland Island, Georgia on Saturday March 18th to take advantage of beautiful warm weather and a minus 0.9 foot tide. This was the club's first organized outing to the island in over five years.

On-island, the group was joined by club member and 21-year island resident, biologist Carol Ruckdeschel.

After exploring the island beaches for miles, both north and south of the Sea Camp base over a period of six hours, everyone had all the shells (and walking) that were desired.

Not surprisingly, the list of live species observed is similar to what can be found in the Jacksonville area. These include Busycon carica (Knobbed Whelk), Busycon carica eliceans (Kiener's Whelk), Busycotypus canaliculatus (Channeled Whelk), Terebra dislocata (Common American Auger), Oliva sayana (Lettered Olive; only one), Epitonium rupicola (Brown-banded Wentletrap; only one), Donax variabilis (Florida Coquina), Nassarius acutus (Sharp-knobbed Nassa; only one), and Neverita duplicata (Shark-eye Moon).

Other than whelks, the drift line, both at the high tide point and between tides, was somewhat sparse. However, at the high tide line Dosinia discus (Disk Dosinia), Dinocardium robustum (Giant Atlantic Cockle), Tellina alternata (Alternate Tellin) were the predominant species. Near the low tide mark, Epitoniids including E. angulatum (Angulate Wentletrap), E. humphreysii (Humphrey's Wentletrap), and gem E. multistriatum (Many-ribbed Wentletrap) were also found. continued on page 3



Epitonium humphreysii

Epitonium angulatum





## President's Corner

**Jacksonville Shell Club, Inc.**  
 1865 Debutante Drive  
 Jacksonville, FL 32246

THE SHELL-O-GRAM IS ISSUED BI-MONTHLY AND MAILED TO ALL REGULAR MEMBERS. ANNUAL MEMBERSHIP DUES \$12.50 INDIVIDUAL, \$15.00 FAMILY. LIFETIME MEMBERSHIP AVAILABLE.

## SEND DUES TO:

BILL FRANK, 1865 DEBUTANTE DRIVE,  
 JACKSONVILLE, FLORIDA 32246.

THE CLUB MEETS THE FOURTH THURSDAY OF EACH MONTH, 7:30 PM AT THE REID SCIENCE/MEDICAL BUILDING, JACKSONVILLE UNIVERSITY, JACKSONVILLE, FL. PLEASE ADDRESS ANY CORRESPONDENCE TO THE CLUB'S ADDRESS SHOW ABOVE. CLOSING DATE FOR ARTICLES TWO WEEKS PRIOR TO THE FIRST OF EACH MONTH OF PUBLICATION. ARTICLES MAY BE REPRINTED IF PUBLISHER SENDS TWO ARTICLES TO THE SHELL-O-GRAM; ONE FOR AUTHOR, AND ONE FOR THE SHELL-O-GRAM LIBRARY, AND THE AUTHOR'S NAME AND PUBLICATION MENTIONED IN THE PUBLICATION.

## Notes from the April 5, 1995 Board Meeting:

-The wording of our By-Laws pertaining to election of the board and officers was discussed. No action was taken.

-The scallop dump at Darien, Georgia was discussed. It's a lot of work but a good spot.

-The storage room has a new lock. Billie Brown has one key and I have the other.

Thank you Selma and Andy for manning the Shell Club booth at Earth Day, April 23rd, at the Jacksonville Landing. I helped some on Sunday afternoon and we were all pleasantly surprised at the large turn-out and the interest in our exhibit and the Shell Club. Free shells were a big hit with the kids, both young and old. Selma made a big effort to get us on TV-4 News but if it aired, I missed it.

I have expressed concern before over the low attendance at club meetings, but it is particularly important now that everyone attend and get involved in the Shell Show; both as exhibitors and workers. Time is short and your help is needed!

*Bill*

**Shell Show Up-date**  
 by Judy Blocker

The Shell Show plans are getting more exciting with each passing day. I walked through the Sea Turtle on the 1st of April and it is really pretty. It's going to be a beautiful setting. We also have five great vendors attending the show - including club member Bill Conklin with his radiographic prints and new book.

The rules and regulations, entry forms, etc., have all been mailed to the other shell clubs and potential exhibitors.

The three raffle items are gorgeous. Dan Goad, the artist of one of our two framed prints, has one of his works on display in the lobby of the Sea Turtle.

Our committee chairpersons are:

**Publicity** - Claire Newsome

**Raffle** - M. K. Maxwell (We all must give her our support by selling tickets before the show.)

**Auction** - Charlotte Lloyd (Now is the time to peruse your collection and donate shells or shell-related items.)

**Scientific Displays** - Bill Frank

**Arts & Crafts Displays** - Betty Hunter

**Trophies & Ribbons** - Bill Lyerly (Contact Bill at 771-5632 if you are willing to sponsor one of the trophies or plaques.)

**Gate** - Harry Lee. (He'll be calling for volunteers to share the time at the admission table. Or better yet, call him first at 384-6419.)

**Door Prizes** - Kay Noble (Many are needed. Contact her at 783-3014 with your donations.)

**Hospitality** - Dottie Eanetta (She will be in contact with club members as show-time approaches to arrange for your donations.)

**Banquet Decorations** - Billie Brown

**Shell Store** - Selma Thigpen (Again, check your collection or your crafts for items you can donate.)

Don't delay. Call the appropriate chairperson now to donate items or volunteer to work during the show. There are many jobs which still must be filled and we need everyone to contribute.

Additionally, we are going to need all the help we can get to both set-up and take-down the show. Don't shirk here!

Our next Shell Show meeting will be at my home in Neptune Beach on Saturday, May 20th at 1 PM. All chairpersons, workers, and interested parties are invited to attend. Mark your calendar now. Call me at 246-4012 if you need directions.



## Predators Influence Growth Of Snails

Common freshwater snails hunted by crayfish grow larger, reproduce later in life and live longer than snails not exposed to the predator, researchers have found.

Water-borne chemicals excreted when the crayfish devour the snails apparently cue a defensive physiological reaction in other snails, according to two zoologists with the University of Oklahoma. The crayfish are unable to eat the larger snails.

While it is common in the animal world for the presence of a predator to alter prey's behavior, physiological changes triggered by predators have never before been recorded, said Alan P. Covich, co-author of the study, which appears in the current issue of *Science*.

"It is an unusual reaction," Dr. Covich said. "We were really startled by our findings."

The snail, known as the pond snail, inhabits lakes, rivers and streams throughout the United States. Those snails living in streams without crayfish typically live three to five months, growing rapidly to about four millimeters, at which point they reproduce according to the study.

But snails living in streams with crayfish live 11 to 14 months and more than double in size, growing to 7 to 10 millimeters in length and reproducing later in life, the study said.

Dr. Covich and his colleague, Dr. Todd A. Crowl, found that both predator and prey emit chemical signals when crayfish forage on snails. Neither the presence of crayfish nor the death of the snail itself triggers the changes, but taken together, the signals emitted by predator and prey cue the snails' defensive reaction.

The snails evidently transform energy normally used for reproduction into energy for growth, Dr. Covich said. By delaying reproduction, the snails are able to grow larger more quickly.

"At this point, we don't know what the signal is or how it is detected by the snails," Dr. Covich said. He speculated that the chemical emitted by the snail may be a blood protein.

Dr. Crowl said, "Our whole picture of animals' life histories being genetically controlled has to be reconsidered."

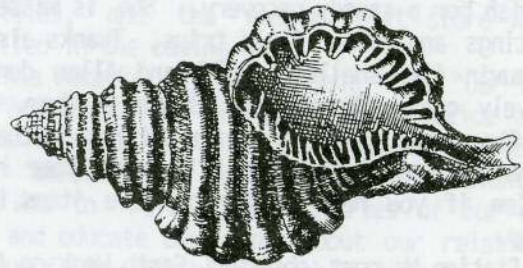
If other species of snails are found to have similar physiological reactions, the finding could have applications in controlling snail populations, said Dr. Crowl, who now works for the Utah State University and Otago University in Dunedin, New Zealand.

While the pond snail is harmless, other species, especially those from tropical regions, are vectors of infectious diseases, such as schistosomiasis, he said.

Reprinted from Long Island Shell Club Newsletter *Irradians*, April 1990; originally published in the *New York Times* on February 27, 1990.

**Editors' note:** One of us (H.G.L.) has quite recently reviewed the paper by Todd A. Crowl & Alan P. Covich (*Science* 247: 949-951, February 23, 1990). The snail observed in Oklahoma spring runs and used in the laboratory experiments was *Physella virgata virgata* (Gould, 1855) a close relative of our local *Physella hendersoni* (Clench, 1925).

Regrettably the experiments failed to include a group of snails that were slaughtered by artificial means rather than by the crayfish. Furthermore, the conclusion that there was a chemical transmitter involved in the change in growth and reproductive maturity is reasonable, but an infective agent was not excluded by the experimental design. We shall search the literature for subsequent reports by these workers.



Cumberland Island 1995 continued

By far the most common species found were *Busycon carica* and the weakly morphologically differentiated sub-species *eliceans*. Live (as well as dead and dying specimens) were plentiful from above the high tide line to the low water mark. At low water, they were buried virtually everywhere. Only the most dedicated of shellers could have even envisioned excavating them in search of a albino specimen.

The third most common species was *Terebra dislocata* followed by *Busycotypus canaliculatus*, which was found in the same areas as the *B. carica* and subspecies *eliceans*. However, it was much less common with a ratio of about one *B. canaliculatus* to about 40-50 of the aforementioned. Of note, all of the whelks were small, measuring less than 100 mm in length.

Everyone participating in the trip had a great time during the all-too-short respite from the hustle and bustle of the mainland. This is an easy trip for club members and one that provides an opportunity to not only learn about and enjoy nature, but to easily add to one's collection of local shells. Let's do it again in the immediate future!



## Club News

by Billie Brown

Dear friends - By the time this reaches you Paul and I will probably be back home. We are at the cabin in North Carolina. Everyplace you look is color. Wildflowers; trillium, purple phlox, white & purple violets, yellow yarrow - apple trees & dogwood scattered up and down through the mountains. Breathtaking!

Gertrude Moller was again a judge at the Sanibel Shell Fair. She and June Bailey of Sarasota judged the craft division. Gertrude says that the competition was fierce and the attendance was tremendous.

Selma Thigpen (384-0697) is asking if you have shells or items to donate to the shell club store, give her a call. Shell related items are also welcome. Honorary Life Member Gerald Combs (always a dedicated supporter of the JSC) donated a bag of shells. Louise Ryals also donated shells and we thank both of you very much. Louise has been ill, and we wish her a speedy recovery. She is missed at our meetings and on our field trips. Thanks also to Fred Chauvin for shells. Hazel and Allan donated some lovely craft items. Our thanks to them. Get your crafts ready to sell at the store - either on consignment or as a donation. We need **your** help! Call Selma if you need advice or have items to be picked up.

Naval Station Mayport observed Earth Week on April 7-12. On April 7th, I took our shell board exhibit for an all day session to show and tell how conservation and environmental conditions enable us to pursue our shell collecting (or not). It was interesting to the personnel to know that "we also re-cycle" and salvage our shells, etc., from the dumps to be used for various projects.

The 9th of April was a shell walk with "local shell expert" Bill Frank as leader to reference and identify shells for the participants. Unfortunately, only four adults and three young children attended; probably due to the early hour on a Sunday morning.

On April 11th and 12th, I once again set up our display boards at the Navy Exchange-Commissary Complex; this time to visit with the people who stopped to see the exhibits, etc. I handed out our fliers for the shell show. People were interested and happy to know we would be having a show again this year. But perhaps the best thing that came out of the hours spent was the fact that a few more people know that "there is a Jacksonville Shell Club!"

I also made contact with shell club member John Shellhorn. John works with the City of Jacksonville as the Regulatory and Environmental Resources Coordinator. We had some time to visit and exchange news of members. John and wife Nancy are expecting

a baby next month and hope to become active again in the JSC in the near future.

Had a workday on March 25th. We made Christmas ornaments for the show. Thanks to Betty Hunter, Betsy Lyerly, Charlotte Lloyd and Selma. Also thanks to Bill Lyerly and Andy Hutchison for spending their time cleaning out the store room.

Please keep our ill or home bound members in your thoughts.

Our love and sympathy to former long-time member Verneda Miniard on the death of her husband, Arco.

Also, birthday greetings to Gertrude Moller on June 15th; "her 39th." Gertrude just recently returned from a two week vacation with friends in Arizona.

### Kiwanis Science Fair - 1995

For the second year in a row, your Editor accompanied by Club President Bill Lyerly braved the crowds at the FCCJ South Campus Gym on March 2nd to judge the Kiwanis Science and Engineering Fair on behalf of the JSC. As in the previous year, the club offered a \$50 cash award for first prize and a \$25 second place award to the best project dealing with marine biology.

Despite over 400 entries, less than a dozen projects could be remotely construed as being within our area of interest and only three of these were deemed worthy of final consideration.

After hearing presentations by the finalists, we selected O. Lee Burnett of Stanton College Preparatory School as the first place winner for his study of the "Maritime Wetlands Of The Guana River (St. Johns County) and Garcon Point (Santa Rosa County)." It was obvious that Mr. Burnett had spent considerable time in his studies in that not only did he identify all the flora and fauna (both Latin and common names) of the respective areas, but had photographed it as well. Not leaving any stone un-turned, he also compared pH (acidity/alkalinity) of the soils in the respective areas.

Second place was awarded to Daniel Adam Drake, also of Stanton, for his project dealing with "Marine Organism Attraction To Various Surfaces." During his studies, Mr. Drake suspended untreated wood, treated wood, bare aluminum, and painted aluminum from a dock in the St. Johns River. He then not only measured the accumulation of growth but video-taped the results as well.

President Lyerly, accompanied by wife Betsy, returned to the gym the next evening and personally presented the awards to these two outstanding young men.



## A Few Hours In Darien

Where there is an active scallop fishery, as in the Florida Panhandle or in the Port Canaveral area, one of course expects to find scallop dumps. However, for a variety of reasons including the value of scallop shells for road building and the apparently increasing difficulty in finding a suitable disposal site for this odoriferous by-product, a scallop dump can be virtually anywhere.

Such is the case of Darien, a hamlet of 1,700 people on the central coast of Georgia, where shells from the Port Canaveral fishery are trucked to be used in the construction trades.

Recently, Betty Hunter and I traveled to Darien (85 miles north of Jacksonville) to reconnoiter this facility. After inspection of the large piles for over an hour, it became quite clear that much searching would be necessary to produce any desirable shells (small mountains of Argopecten gibbus but little else). This was confirmed by the owner who had observed the same when feeding the aggregate into the crusher via conveyor belt.

While previous culling may have contributed to this situation, the owner stated that the composition of the loads varied by how easy it was for the scallop trawlers to obtain scallops. When scallops were plentiful in the fishing grounds, he got virtually only scallops, but when the scallops were not so plentiful, more by-catch was seen - apparently the result of increased trawl times.

This was partially borne out by the composition of the piles themselves. Some were especially "dirty" with a good selection of desirable shells, plain old dirt/sand, and the remnants of other sea life (crabs, etc.).

Overall, the species seen were quite similar to what is found in the west coast dumps. These included Murex fulvescens, Murex pomum, Phalium granulatum, Oliva bifasciata bollingi, Distorsio clathrata, Distorsio macgintyi, Conus delessertii, Bufo, Cymatium parthenopeum, and Architectonica nobilis. No; there were not any junonias!



Distorsio macgintyi



Conus delessertii

To insure continued access to dumps like the one at Darien, it is imperative one obtain permission from the owner before shelling. Likewise, the owner's rules should be respected (such as **no spreading** of the piles, interfering with on-going work, or **no more than** a few visitors at a time).

### Bailey-Matthews Museum To Open Soon

Dr. R. Tucker Abbott, the Founding Director of the Bailey-Matthews Shell Museum on Sanibel Island, recently addressed a group of over 200 well-wishers upon the occasion of the "Hard Hat" opening of museum. The event, held March 23rd, gave the guests an opportunity to explore the empty but spacious areas where exhibits, study collections, library facilities, and the museum gift store will be installed in the coming weeks.

In his remarks, Dr. Abbott said that "Our mission was first conceived and put into practice as long ago as 340 B.C. by Aristotle and later expanded by Pliny the Elder in 50 A.D. Their mission, like ours, was to reveal the mysteries of our natural world and educate the people about our relationships with our fellow creatures on this Earth."

Dr. Abbott continued, saying that "We were all born upon this unique and ecologically fragile sphere, whether put here by God, providence or the process of evolution. We owe it to mankind to understand and protect our home planet."

"In brief, our mission is to disseminate knowledge about our natural world mainly through the many facets of molluscan shells, whether it be in the field of oceanography, paleontology, medicine, agriculture, geography or literature and art."

"You stand here in a beautiful but barren and empty building. Our mission will fill it. The museum is like a lepidopterous chrysalis about to burst into a gorgeous butterfly, or should say like a free-swimming molluscan veliger about to develop into a beautiful seashell."

Dr. Abbott concluded by stating "It is said that an ancient Egyptian monument on the banks of the Nile bears the message: "The gods do not take away from your lifespan the hours that you spend in shell collecting." Come join me and stretch your lifespan and your mind in helping the shell museum and our globe survive."

The museum is expected to formally open before the end of May.

Abridged/adapted from the Sanibel-Captiva Island Reporter, March 31, 1995.



## Sanibel Shelling Ban Under Fire

Sanibel's live shelling ban, which took effect on January 1st, is being criticized by the very people most would expect to support it.

An editorial in the March issue of American Conchologist, the official publication of the Conchologists of America, lambastes the people of Sanibel for banning live shelling.

"The people who are really hurt from this ban are the shell seekers, scientists and naturalists," said Lynn Scheu, Editor of American Conchologist in an interview. "Most scientists are located inland and rarely have time to study these animals in their habitat, so most of their information comes from shellers and naturalists."

This whole thing is about biology and Sanibel has too many sob sisters around that don't have a clue about the science of malacology," Scheu said. "The real danger isn't from shell seekers but from poor water quality, sewage, fertilizer run off and canal dredging."

Scheu explained when an area is dredged, the silt in the water is stirred up and stays suspended in the water for months. Fish can swim out of the silt but stationary animals such as mollusks cannot. The silt, in turn, severely damages their breathing and kills them.

Scheu said the trend to protect wildlife is going on everywhere and although it does have some merit for certain animals, it is completely unnecessary for others.

"I truly think people are trying to do their part to save the environment, but before banning something completely, the people and legislators need to know more," Scheu said.

Scheu said she hopes the people who passed the shell ban are angered by her comments because she's so livid with them for being so ignorant.

"They are fanatics," Scheu said. "Almost like the right-to-lifers. They want their way or nothing."

Scheu said once a shell reaches the beach, the mollusk living inside is, for the most part doomed.

"There are so many shells in the ocean, that the few numbers of people collecting them wouldn't amount to anything significant," said Dr. Gary Rosenberg of the Academy of Natural Sciences in Philadelphia. "Once something washes up on the beach, for the most part it's already dead. There's no way its going to make it back to it's habitat."

"There is some evidence to indicate if you throw the animal back into the ocean, the attachment muscle inside the shell ruptures and causes its death," Scheu explained. "Or if you place the animal back in the water, there's a great

possibility that it will wash up on shore again. The only way to save these animals is by taking them out to sea in a boat and gently dropping them in the water."

Dr. Bill Lyons, who works for Florida Natural Resources seemed perplexed at the reasoning for the shell ban.

"Our message was there was no biological evidence that harvesting on the edge of the sea harms the species," Lyons said. "I have no idea or rationale as to why they imposed a shelling ban."

Bill Teehan of the Marine Fisheries Commission in Tallahassee agreed he had seen no evidence of any depletion in shells, but said he bowed to the outcry for the ban.

Dr. Rosenberg said he believed marine mollusks are not in any general threat, and one storm can kill more mollusks than anyone can collect.

Sanibel's Natural Resource Director, Bob Loflin, said the police have issued warnings and that \$500 fines will be given eventually, but as for now the city is in the stage of informing the public of the newly-implemented law.

Adapted/abridged from the Sanibel-Captiva Island Reporter, March 17, 1995.



**The Walkers**

Hazel and Allan Walker celebrated their 50th wedding anniversary on March 18th. They were married in Portsmouth, Virginia in 1945. She is the former Hazel Barrs.

They have two children, four grandchildren, and one great-grandchild.



### St. Augustine's Sea Monster Turns Out To Be A Whale!

Dealing a blow to sea monster lore, a team of Maryland biologists has determined that a huge mass of flesh which washed ashore on Anastasia Beach near St. Augustine, Florida in November 1896 is not the remnant of an enormous octopus, as some scientists and fisherman had theorized.

Tissue specimens saved from the unidentified animal (subsequently named Octopus giganteus by Professor A. E. Verrill of Yale University in 1897) are almost certainly part of an ordinary whale, the researchers concluded.

"I wanted it to come out to be an octopus. Everyone likes a giant octopus story," said Sidney K. Pierce, a professor of zoology at the University of Maryland, who led the study.

Clyde Roper, Curator of Invertebrate Zoology at the Smithsonian's National Museum of Natural History, praised the research for its scientific rigor. "This settles the question of the great Florida sea monster," he said.

It was a stormy winter night 99 years ago when waves threw a gargantuan fleshy corpse upon the beach near St. Augustine. A local physician trained in natural history (Dr. DeWitt Webb) examined the 6-foot-high heap of rubbery cadaver while local boys jumped on it. Based in part of what appeared to be a tentacle-like limb 18 inches in diameter, he made an initial determination that the mass was the remains of a giant octopus.

A team of horses dragged the bulk above the high tide line, and specimens were sent to the Smithsonian Institution and elsewhere. Most experts concluded that it did not resemble octopus flesh after all. But the animal's identify remained a matter of debate and came up for discussion every few decades.

Recently, University of Maryland zoologist Eugenie Clark, a world-renowned marine researcher who teaches an under-graduate course called Sharks and Sea Monsters, organized a new effort to settle the issue and arranged to get preserved tissue samples from the corpse.

The microscopic studies indicated that the specimen is almost pure collagen, a stretchy kind of connective tissue that can accumulate in thick layers beneath the skin of whales, fish and other creatures. But an analysis of the sample's amino acids, the building blocks of collagen, showed a pattern seen in the collagen of warm-blooded mammals such as whales.

Adapted in part from a L.A. Times-Washington Post Service article published in the Florida Times Union, April 3, 1995.

### Beaches Renourishment Again Delayed

New federal regulations have caused a renourishment project for Duval County's beaches to be delayed a fourth time until June and may increase the cost Jacksonville pays for the work.

However, a federal official says he does not know what the added costs might be because this is the first time a renourishment project in the United States has involved using sand from federal waters.

The sand would be dredged seven miles off shore, in waters where mineral rights are controlled by the Minerals Management Service of the U.S. Department of Interior.

Normally, sand is dredged from nearer shore or from river bottoms. But the cost of this project, currently slated at \$14 Million, could rise because new regulations that took effect in October allow the agency to assess a fee for any mineral removed from federal waters.

The project, which is being planned by the Army Corps of Engineers, originally was scheduled for June 1993 and was pushed back three times before being delayed again in March.

The most recent delay resulted from new regulations requiring the project to be approved by the Minerals Management Service.

Philip Grissinger, chief of Jacksonville's engineering division, said the project had been approved and funded when the regulations took effect.

"It appears that we are being retroactively regulated by this additional law," he said. "We are not pleased about that. And those (potential) extra charges are not in anybody's budget."

Grissinger said the city is asking the Mineral Management Service to waive its fees.

Abridged from an article in the Florida Times Union.

### Welcome New Members

Mrs. D. D. Jewell  
3165 Victoria Park Rd.  
Jacksonville, FL 32216  
PH: 443-6086

Paula J. McRoberts  
2941 Sunset St.  
Jacksonville, FL 32254-2461  
PH: 781-9291

### Corrections to JSC Membership Listing

--ZIP Code--

Jack & Geynell Gebert  
32266-4828 vice 32255

--Address--

Ms. Selma Lawson  
10922 Walnut St.  
St. Petersburg, FL 33716



### Queen Conch Still in Trouble Despite Ban

**Key West (AP)** - Protection from poachers seeking the chewy meat and pink shells of the Queen Conch is not enough to bring the animals back in large numbers to the Florida Keys, a study concludes.

Harvesting conch in Florida was banned nine years ago. Since then, the mollusk has survived but not prospered, the study by the Florida Marine Research Institute and the Caribbean Marine Conservation Center shows.

"Since 1985, there's been really no change in the population," said state biologist Bob Glazer, who researches the Keys conch population and co-authored the report.

Surveys of conch larvae in similar areas of the Keys and the Bahamas found 500 times as many larvae in the Bahamas. Conch in the Keys just haven't bounced back and show no signs of doing so without help.

"The natural stock is depleted to the level at which recovery would be very, very slow at best," said Allan Stoner, a biologist with the Caribbean Marine Conservation Center. "The local reproductive stock is so small that we depend upon the arrival of larvae from upstream nations."

And those nations - like Cuba and Mexico - have been allowing various levels of conch harvesting. The conch populations in Mexico, for instance, going through the same kind of collapse as Florida's.

In 1973, 350 metric tons of conch were harvested in Mexico. By 1989, the haul had dropped to 25 metric tons, Glazer said.

Some Caribbean nations, such as Venezuela, have closed conch fisheries to save the species. But official proclamations do not stop people from harvesting conch, and there's not enough enforcement to stop poaching, Glazer said.

If the Keys conch were going to come back on its own, it should have done so by now, the scientists said. Conch start breeding at about 3 years old, so three generations have matured since the ban. But the adult population remains about the same.

One remedy could be to restock the Keys with lab-grown conch. Glazer is experimenting with different breeding techniques and trying to find out whether domestic conch could live in the wild.

"Our goal is not to restock the Keys," Glazer said. "Our goal is to determine whether it's feasible to restock the Keys."

From the Orlando Sentinel, June 6, 1994.

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**The Shell-O-Gram**  
1865 Debutante Drive  
Jacksonville, FL 32246

