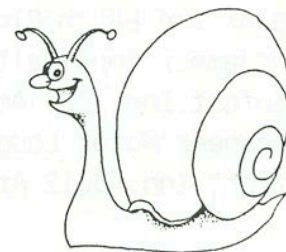


P L E A S E R E M E M B E R
A U C T I O N D O N A T I O N S
D O O R P R I Z E S
O C T O B E R S H E L L S H O W



"If you weren't at our May meeting at Surf City/Topsail Beach, you missed a very good time and great programs. Thanks to Vicki Wall, Carl Truckner, Betsy Roberts, Ann Buddenhagen and Bob Tomlinson for their participation, and to Dianne Geary for all the Surf City planning that she did to make our weekend more comfortable.

"When you think of **Ruth**, you think of enthusiasm, helpfulness, and auction purchases. She has served **four** times as President and has also been Secretary, Program Chairman, Publication Chairman, displayed her shells at numerous shell shows and shared her trips and shell knowledge in programs for the Club.

"CONGRATULATIONS TO RUTH AND CHARLOTTE !!!"

+

A Few Places to Stay (Unless shown otherwise, all are on Salter Path Rd, NC Hwy 58, in Atlantic Beach [AB] or Pine Knoll Shores [PKS], both Zip 28512; all rates for 2 persons/2 double beds; all rates plus NC 8% tax; the rates have been checked but there might be errors/misunderstandings so, if you are concerned, please verify rate with reservation)

Comfort Inn, 3012 Arendell St, Morehead City 28557; tel 1-919/247-3434; \$51

PROGRAM NOTES ON THE WEEKEND'S ACTIVITIES

Friday, September 25th

We think that there should be shells to look at when you come to a Shell Club meeting. This time we suggest that you enjoy the array of shells in the Auction from all over the world, even if you don't buy any.

If you do buy shells, you are likely to find **huge bargains** in the Auction, as many sell for only a fraction of actual value.

If you are not familiar with our Auction, you should know that it is our **only** fund-raising effort of the year and thus . . . **very important** for the Club. We are asking for your contributions, which can be either shells or shell-related items, but don't have to be. In the past, members have donated shells; books; handmade items, including clothing; stationery; and a variety of gift items.

What you may not realize is how entertaining the Auction is ! There will be a lot of laughs and a good feeling of fellowship. We hope to reassemble the efficient crew that triumphed in running things last year, and some have already "signed" their "contracts".

There is **quite a delay** if members ask to see items "under the hammer" while the Auction is in progress. To keep things moving, we ask that you examine items **before the meeting**, and do make notes, to determine which ones you want to bid on. To help make this possible, we request that you submit **early** your items to be auctioned. We are extending the social period on Friday evening by a half hour to allow more time for both delivery and examination. We begin at **7:00** instead of 7:30.

Saturday, September 26th



The major daytime activity is to be the trip to Aurora to find fossils. As discussed in an earlier newsletter, the visit is heavy with uncertainty. If we fail to get a reservation, we will inform those who signed up for the trip well ahead of time so that plans for Saturday can be modified.

We are fortunate to have **John Timmerman** as both the administrative and the technical leader for the trip. John has been to Aurora many times and knows both the Texasgulf (fossil pit owner) procedures and the fossils. He will be making the telephone call to request reservations and, if we go, he will provide instructions and answer questions Friday night.

If we **do not** go to Aurora, there will be many possibilities for Saturday. A leading candidate is a trip to ever-popular Cape Lookout National Seashore, where shelling has often been good in the past. The ferry, holding 49 passengers, leaves from Calico Jack's Inn & Marina on Harker's Island at **10:00am** and **1:00pm**; it returns at 12:00noon and 4:30pm. Low tide at CLNS is expected at about 2:25pm. The round trip fare is \$12; the telephone number for more information is 1-919/728-3575.

Because of the possibility of the Aurora trip, we have made **no** special arrangements for the ferry this year; we are on "equal footing" with the general public and you might want to be early at the ferry landing to enhance your chances for getting a place on the vessel. You should allow at least 60 minutes to drive to the ferry landing from the center of Atlantic Beach.

Amenities at Cape Lookout are minimal and you want to consider taking over water, lunch, hat, appropriate shoes, collecting equipment and . . . **insect repellent**.

continued

PROGRAM NOTES ON THE WEEKEND'S ACTIVITIES (continued)

Saturday, September 26th
(continued)

Another possibility is Shackleford Banks by ferry. The Cape Lookout National Seashore can have heavy traffic on it, with four-wheel-drive vehicles churning along the ocean side. Sometimes the wind is such that you can't hear them and might step in front of one approaching from the rear. Vehicles may not be the picture some of us have in our minds when we think of a National Seashore ! Shackleford Banks does **not** allow vehicles and is therefore a more peaceful and natural place and . . . one which has shells.

Ferry service to Shackleford Banks leaves from **both** Harker's Island (**but** at The Sanddollar, Barber's Harbor, telephone 1-919/728-6181, also \$12, but ferry runs whenever someone wants to go and returns when requested) **and** from the Beaufort waterfront, across from "The Cedars", at 10:00am and 1:00pm, returning at 1:15pm and 4:00pm, same fare, telephone 1-919/728-6888.

There are other possibilities for shell collecting, the beach opposite Fort Macon being a popular and frequently-productive spot. Or, drive (thru Camp Lejeune) to North Topsail Island. Or, try the scallop dumps in the area, the best being 20-some miles north of Beaufort.

There will activities of interest at both the **Aquarium**, our meeting place, and the **NC Maritime Museum**, in Beaufort, during day on Friday and Saturday and after 1:00pm on Sunday, the 27th. At the Aquarium, there will be special programs on Saturday at 10:00am ("Behind the Glass: Feeding") and at 3:00pm in the Auditorium (program tba), plus a film repeating at 11:00am, 2:00pm and 4:00pm. And, lots of interest, just walking thru. At the Maritime Museum, the great worldwide, speciewide, **Watson Shell Collection** will continue on display (probably thru the rest of 1992) and is a veritable "**must see**" ! And, don't forget, they now have an additional exhibit building across Front Street.

Ann Buddenhagen has had to delay the final part of her program on "How to Identify a Shell", but save your "handouts" from May's Part I until Ann returns later on. Instead, on Saturday night, with our thoughts on fossils, we have John Timmerman speaking on fossil collecting in our state. It will be a fossil weekend no matter how the Texasgulf trip turns out. John's talk is based partly on his article about Aurora in the September 1991 issue of "American Conchologist" (COA's excellent publication), and partly on his collecting at Castle Hayne (just north of Wilmington NC), and partly on his general knowledge of and experience with marine fossils . . . both vast.

During the "Mostly for Beginners" session, Dean Weber will talk about containers for shells and will discuss and display some that can be used in the field for collecting and at home for storage. This is information generally not "found in books" and comes best from the (literally) worldwide shell collecting travels of Dean (and Dottie). **Don't miss Saturday's session !**

DJABCHEILFKG

Member Needs Ride

. . . Virginia Harmon, who lives in Greensboro NC, is looking for a ride to the September meeting. She can leave early and stay later to suit the driver's plans. She is also willing to drive if she can find riders to go with her. Please call her at 1-919/272-5119 to make arrangements. Many thanks !

by Dean Weber

 $+ 5 +$

THOSE PUZZLING OLIVE SHELLS

by R Tucker Abbott

Do olive shells "talk"? Dr Ben Tursch of Belgium recently investigated this preposterous question in his laboratory aquariums. By "talk" he meant "how do olives communicate", for he and many malacologists before him have always wondered why and how certain species, like some olives, congregate together and assemble in localized colonies.

The answers were inconclusive, except to say that the local movement of olives is affected by the nature of the sandy or muddy substrate, by the direction and strength of the water currents, and perhaps more importantly by the nearby presence of food.

If ever a marine snail was a possessive glutton, it's the olive. It is unique in having a special, open pouch for packing its lunch. An olive locates a juicy dead shrimp or a small live clam by sensors in its forefoot. Grabbing the prey by its foot, the snail passes it back to an expandable pouch on the underside of the rear of its foot. Sometimes this pouch is swollen with food to a size equal to the rest of the foot. The pouch-filled olive then digs down into the sand, and curls up in happy contentment as it gently nibbles away at this captured lunch.

Olives have another unique feature. They are the only family of marine snails that occasionally exhibits a "harelip" malformation specimen of olive that has a single, raised, spiral ridge running around the last whorl. A "harelip" break in the mantle edge causes the formation of this strange circle in one out of several thousand specimens. Curiously, this rare abnormality occurs in half the known species of Oliva. It's a family trait.

Another unique trait is common to olives.... adults do not have an operculum. No one, to my knowledge, has explained the defense mechanism they must use to ward off poisonous marine worms, shell-seeking hermit crabs and marauding fish. Olives may possess a repugnant taste or, like some cowries and cancellarias, produce excessive amounts of sticky slime. Since early exploration days naturalists have observed olives swimming by flapping the foot and mantle edge in order to escape starfish and other carnivorous gastropods. It is interesting to note that most of their cousins, the Olivella, do possess an operculum.

Female olives release their small, crystal-clear, balloon-like egg capsules freely on to the sandy bottom. Each small, 2mm-long cap-

sule may contain from 20 to 50 eggs, which hatch as tiny free-swimming veligers in about a week. The helpless cilia-covered veligers, resembling miniature helicopters, emerge one every minute, and in most cases fall prey to small hungry fish.

We seem to know more about the natural history of the olives than we do about their speciation. Malacologists have been struggling with their identification and classification ever since Linnaeus proposed his infamous Oliva ispidula. So confusing was its description that today we refer to that common Indo-Pacific species as O. ispidula (Roding, 1798). Early naturalists published many beautiful color plates of innumerable species --- Charles Chenu of Paris being one example. One of his plates, published in 1843, adorns the front cover of the September 1991 "American Conchologist". Duclos, Marrat, C W Johnson, Porreca and Ziegler, Petuch and Ben Tursch have all entered the fray. All told, about 800 names have been proposed in the family, including about 50 generic and subgeneric names. One could conservatively estimate that there were about 250 living species.

There seems to be light at the other end of the olive's siphon, however. Ben Tursch and his colleagues have been undertaking a very thorough and scientific analysis of all the reliable characters --- radula, reproductive system, morphometric studies of nuclear whorls --- and with a reasonable attitude toward variation within a species.

When you purchase an Oliva from a dealer these days, you are spinning the wheel of identification chance. When you see that a new species has been recently described you must judge it by the biological evidence presented, and not by the morphological characters and colors. This large and fascinating family, with its endless array of colors and patterns, is surely a continuing challenge to any shell collector. What you name it is not as important as the delights of tracking down another of nature's gems for your own collection.

(Reprinted: 9/91 "American Conchologist")

JOSE RAMON GUTIERREZ SANCHEZ
C/ Juan Cortes Cortes 2/7-F
29010 Malaga, España (Spain)

WANTS TO EXCHANGE SEASHELLS OF THE WORLD

SOME NEW WAYS TO COLLECT SEASHELLS !

by Alta Van Landingham

You would think that, after thousands of years, and thousands of people collecting seashells, all of the methods of collecting would be known and that all of us would know all the methods. Not so !

New ways to collect keep cropping up every year. Sometimes it is a new collector who discovers the new way, and sometimes it is a longtime collector who discovers the new way. All we can say is: "Hey, why didn't I think of that ?"

One of the most bizarre ways to collect mini-shells was introduced by Ruth Dixon, a longtime collector. Ruth and I had attended a COA Convention in 1984 at St Petersburg Beach. COA had planned a nice collecting for all of us at Fort DeSoto Beach, a State Park. We went and, unfortunately, the weather was terrible. A thunderstorm came up; it was scary and most of us deserted the beach and headed back to the hotel. But it was such a likely looking place, Ruth and I decided to go back the next day and be there for the low tide. We were there from 1:00pm until 8:30pm, when I had to, almost literally, drag Ruth off the beach ! She had already found one of the two Golden Olives found on that trip. She told me her feet hurt, and I said, well, yes, we have been walking for 7 or more hours. She said, yes, but they hurt in a different way. I was not too sympathetic as I thought, well, how many ways can feet hurt ? We got back to our fancy hotel, the Don Cesar, about 9:00pm, and slogged thru the lobby with our muddy feet and our drippy shell bags. Getting to our suite, we both headed for the bathroom. Pulling off muddy shoes, socks, etc, I kept hearing a click click from Ruth's shoes and socks. And I said "Ruth, what is that noise I keep hearing ?" Upon closer inspection, we found that her shoes and socks were filled with a multitude of the mini-shells ! No wonder her feet hurt, and in a different way from "usual" !!! I can't remember, but I think she had at least 20 different species in her socks and shoes. She and I both fell on the floor in total hysterical laughter.

At the Red Sea in Egypt, Rose Bunch also used her feet and shoes, but in a different manner. She wore soft plastic sandals with a bit of a heel on each shoe. Each heel had four compartments, sort of.

Rose sat down on the boat, ready to go back to the hotel, and crossed her legs, and I said, Rose, what do you have in the heels of your shoes ? When we looked, closely, she had collected Strombus fasciatus in all four compartments of each shoe. Some were still live ! It was our very best story for that Egypt trip in 1985.

Sue Stephens went with us to Eleuthera mainly to collect some of the Murex pomum with different-colored apertures. In Eleuthera these shells do seem to have different colors than we find elsewhere. Sue is a very good shell collector, but she didn't seem to find any of those Murex; in fact, she seemed to have a blind spot for them, as all of us were finding them all around her. She found loads of other shells that she didn't really want, and either put them back, or gave them to someone else who wanted them. One day, however, she found a very old medicine bottle and put it in her collecting bag. Back at the cottages, she discovered that inside the medicine bottle was a very rare **Muricopsis** that she, nor any of us, ever expected to find ! Well, that was her breakthrough. After that, she did find Murex pomum. Sue also did another strange collecting bit . . . one day she surfaced from her snorkeling and there were some strange-looking things all over her tee shirt. When we all looked closely, we found that she had collected a number of Chitons, with 3 different species all clinging to her shirt !

Again in the Red Sea at Egypt, I didn't actually collect this one myself, but I did instigate the collection. I mentioned to our guide that, as well as collecting seashells, I also collected insulators from all over the world. He just happened to know of a sunken boat that had a lot of white china insulators on it and went right down to get me some of them. He brought up two and one of them had, inside it, a fairly rare Isogomon legumen, which is hard to collect. They are very fragile and usually in deeper water.

Two friends of mine, Janet and Dave Fazenbaker, were camping in the Blue Ridge Mountains and the table at their assigned site just happened to have a Scotch Bonnet on it. It was a dead shell, but still with animal and operculum. They had been hunting for years for a Scotch Bonnet with operculum !

continued

SOME NEW WAYS TO COLLECT SEASHELLS !

(continued)

At the Suez Canal, in Fayed (Great Bitter Lake) in Egypt, we also found Murex tribulus in the palm trees. We found them from 6 or so feet deep, right on into shallow water and onto the beach, and right up to the trees. The tree-collected specimens were all dead, but still with animal and operc intact. After three years of this same happening, we are still at a loss to explain how the Murex got into the palm trees. None of the local people can explain it either. We do know for sure that there is not a tide surge large enough to

bring them up to the palm trees, so I suppose it will always remain an intriguing mystery !

Here we are, right now, in the middle of New Mexico, at 7200 feet, and I have just been presented by a local person with a rock that has a number of fossil shells embedded ! He found it near our house !

So, no matter what, shells ARE where you find them and HOW you find them. Just keep an open mind, and . . . you will be surprised how they do turn up !

Q U I Z

(submitted by VP Dean)

Match the dozen shells with their length in inches. Answers elsewhere.

Length in inches	0.1	0.3	0.7	0.9	1.5	2.0	3.0	4.0	5.0	6.0	8.0	18.0
Shell	<u>J</u>	<u>D</u>	<u>B</u>	<u>A</u>	<u>C</u>	<u>E</u>	<u>H</u>	<u>I</u>	<u>L</u>	<u>F</u>	<u>K</u>	<u>G</u>

- ✓A. Cayenne keyhole limpet, Diodora cayenensis
- ✓B. Angulate wentletrap, Epitonium angulatum
- ✓C. Common Atlantic slippersnail, Crepidula fornicata
- ✓D. Green erato, Erato mauguriae
- ✓E. Scotch bonnet, Phalium granulatum
- ✓F. Lightning whelk, Busycon sinistrum
- ✓G. Horse conch, Pleuroploca gigantea
- ✓H. Lettered olive, Oliva sayana
- ✓I. Junonia, Scaphella junonia
- ✓J. Common Atlantic marginella, Marginella apicina
- ✓K. Stiff penshell, Atrina rigida
- ✓L. Sunray venus, Macrocallista nimbosa

Your rating for number right:

- 1-2 Oops !
3-4 Not bad for a beginner
5-6 Another 30 years and I'll
have this thing licked
7-8 I'm a whiz at Tic Tac Toe
10-12 You deserve the Nobel Prize

Lengths are from Seashells of North America, by R. Tucker Abbott.


SEASHORE SURVEY CONTINUED

Following our item in the 10/91 newsletter, there are now more specifics from the "America's Best Beaches" survey: From the VA line all the way to Key West, the ratings say that the best beach for walking is our own Hammocks Beach! For complete highlights of the survey, see the July/August 1992 issue of the "TRAVEL/HOLIDAY" magazine.

Walking

Hammocks Beach State Park, North Carolina



 One of North Carolina's numerous barrier islands, Hammocks is a short ferry ride from the mainland fishing village of Swansboro. The island's 890 acres consist of marshlands, shifting dunes (up to 60 feet high), a maritime forest, and three and a half miles of pristine shore. Because of its remote location, Hammocks is never crowded. *Information:* Tel: 919-326-4881. *Getting there:* From Raleigh, take I-40S and State Hwy. 24 southeast to the town of Swansboro. Turn right on Hammocks Beach Rd.; then continue two miles to the ferry parking lot (ferry: adults, \$2; children 4-12, \$1; operates May-Sept. only). 