

Quarterly Journal of the Conchologists of America, Inc.

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CONCHOLOGISTS



OF AMERICA, INC.

In 1972, a group of shell collectors saw the need for a national organization devoted to the interests of shell collectors; to the beauty of shells, to their scientific aspects, and to the collecting and preservation of mollusks. This was the start of COA. Our membership includes novices, advanced collectors, scientists, and shell dealers from around the world. In 1995, COA adopted a conservation resolution: Whereas there are an estimated 100,000 species of living mollusks, many of great economic, ecological, and cultural importance to humans and whereas habitat destruction and commercial fisheries have had serious effects on mollusk populations worldwide, and whereas modern conchology continues the tradition of amateur naturalists exploring and documenting the natural world, be it resolved that the Conchologists of America endorses responsible scientific collecting as a means of monitoring the status of mollusk species and populations and promoting informed decision making in regulatory processes intended to safeguard mollusks and their habitats.

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Front Cover: Angaria sphaerula (Kiener, 1839), approximately 60mm+, from the Philippines. This magnificent shell was one of several displayed at the Cape Canaveral COA Convention by Donald Dan. This color variety has been called 'sunburst' by dealers and is both uncommon and beautiful. There were many other notable rarities at this year's bourse; it was truly an exciting event. Make plans now to attend next year at Philadelphia. Photo by Tom Eichhorst.

Back Cover: *Chicoreus spectrum* (Reeve, 1846) collected and photographed by Bill Kreis. This is one of the spectacular shells collected during a recent expedition to the Dominican Republic. See Karen VanderVen's story on page 26.

Editor's comments: Robert Robertson wrote to clarify some of the mystery presented in the He Jing piece (Interesting Boring) in the June issue. Dr. Robertson states that many of the bore holes were actually "... muricid and naticid drill holes with the resting sites, often with central hummocks, of *Sabia* (hipponicid limpets). This issue is missing two planned book reviews. I try to present articles in pretty much the order I receive them, but this time I was faced with articles that had already been delayed too long. The book reviews will appear next issue.

One of the books due for review is "Living Shells" by Charles Rawlings (ISBN13: 978-1-57197-509-6), priced at approximately \$32 to \$38 on Amazon.com (also from Ivy House Publishing Group, phone- 919-782-0281). Readers of this magazine will recognize the name, Charles Rawlings, as a frequent contributor of superbly detailed, high quality photographs of mollusks from around the world. These are not scenes of under-sea life you will see elsewhere.

Another book that will be reviewed in the next issue is "Seashell Poems and Reflections to Soothe the Soul" by Bev Bethell Dolezal (ISBN 978-1-4507-6482-7), priced at \$15 from http://www.bahamabevs.com. This gem has 12 original poems, each accompanied by a sea-related image. This small book (25 pages) celebrates in poetry the author's love of the sea and of seashells.

Then there are the books I picked up at the convention, each deserving of a review so our readers know what is out there for dedicated shellers. Still to be reviewed are:

"Compendium of Bivalves" by Markus Huber (ISBN 978-3-939767-28-2) with 901 pages of facts and full-color illustrations of 3,300 bivalves!

"Fossil and Recent Muricidae of the World" by Didier Merle, Bernard Garrigues, & Jean-Pierre Pointier (ISBN 978-3-939767-32-9) with 648 pages of color and black & white images of more than 650 species of Muricidae.

"Philippine Marine Mollusks," vols. I-IV by Guido T. Poppe (ISBN vols. 1-4: 978-3-939767-19-0) with 2,947 pages of color images of Philippine mollusks.

Finally, a correction on "Shells of the Hawaiian Islands" by Mike Severns, reviewed in the June 2011 issue. I inadvertently listed incorrect ISBN numbers and, more importantly, incorrect prices for this superb two-book set.

"The Land Shells" (ISBN 978-3-939767-34-3): 98 Euros (\$139 US, not \$235, so \$96 or 41% less), plus postage to the US of 16 Euros = \$23 (total \$162).

"The Sea Shells" (ISBN 978-3-939767-35-0): 128 Euros (\$182 US, not \$297, so \$115 or 39% less) plus postage to the US of 20 Euros = \$28 (total \$210).

Both volumes in slip case (ISBN 978-3-939767-33-6): 190 Euros (\$270 US, not \$431, so \$161 or 37% less) plus postage to the US of 36 Euros = \$51 (total \$321). This set of books is well worth the higher price I mistakenly listed, so it is a steal at \$321!

Tom Eichhorst

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Noteworthy mollusks from the Gulf of Mexico, including new record sizes and geographical extensions

Emilio F. García

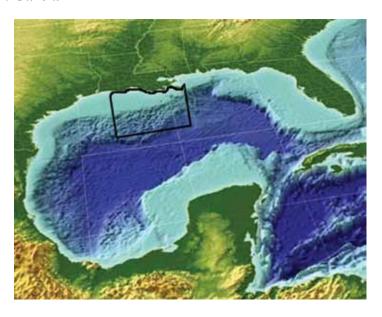
The offshore benthos of the Gulf of Mexico continues to surprise us with unexpected discoveries. These discoveries may represent "forms" that might be undescribed species, extended geographical distributions, sizes larger than previously reported, or species, even genera, that have been only recently described. Examples of all of the above are presented here. All but one were collected during different campaigns on the R/V Pelican, either with a box core sampler that is simply dropped to the bottom to grab sediment, a regular 3 x 2 x 1 ft. dredge for hard substrates, or the Benthic Skimmer, a rather large dredge especially designed to work in the soft-mud conditions of deep water (see García, 2007). The specimens were collected between 60 and 1,745 meters deep. in an area approximately that shown on the map at right (from latitude 27°35'N to 29°20'N, and from longitude 88°15'W to 93°18'W). For a complete list (other than Polyplacophora and Cephalopoda), as well as for many images of molluscan species found in offshore waters of Louisiana, refer to García & Lee (2011)*. Mr. Bill Frank, the webmaster of JAXSHELLS has done a superb job bringing these images to the public. Most of the material for this study is based upon work supported by the RAPID grant from the National Science Foundation.

PLATE I

(Figures 1-5, page 5)

Atrina cf. seminuda (Lamarck, 1819) (Fig. 1). The 250 mm specimen pictured in the plate was collected using the Benthic Skimmer. It was dredged off the Mississippi river delta in 334-250 m, an unusually deep habitat for an Atrina. The single specimen differs in external sculpture from A. seminuda; because of the "tremendous range of variation" (Turner & Rosewater, 1958:318) of this species, however, the definitive identification for this deepwater population may have to be established by additional specimens and anatomical work. Darryl Felder, my colleague at the university whose guest on the Pelican I have been on many occasions, tells me that he has seen specimens nearly 24 inches long, and so has Douglas N. Shelton, with the Alabama Malacological Research Center.

Neopycnodonte cochlear (Poli, 1795) (Fig. 2). The genus *Neopycnodonte* is placed in the family Gryphaeidae, also called "foam oysters," and lives at greater depths than any other Recent oyster (Mikkesen, and Bieler, 2008: 118). The specimen illustrated



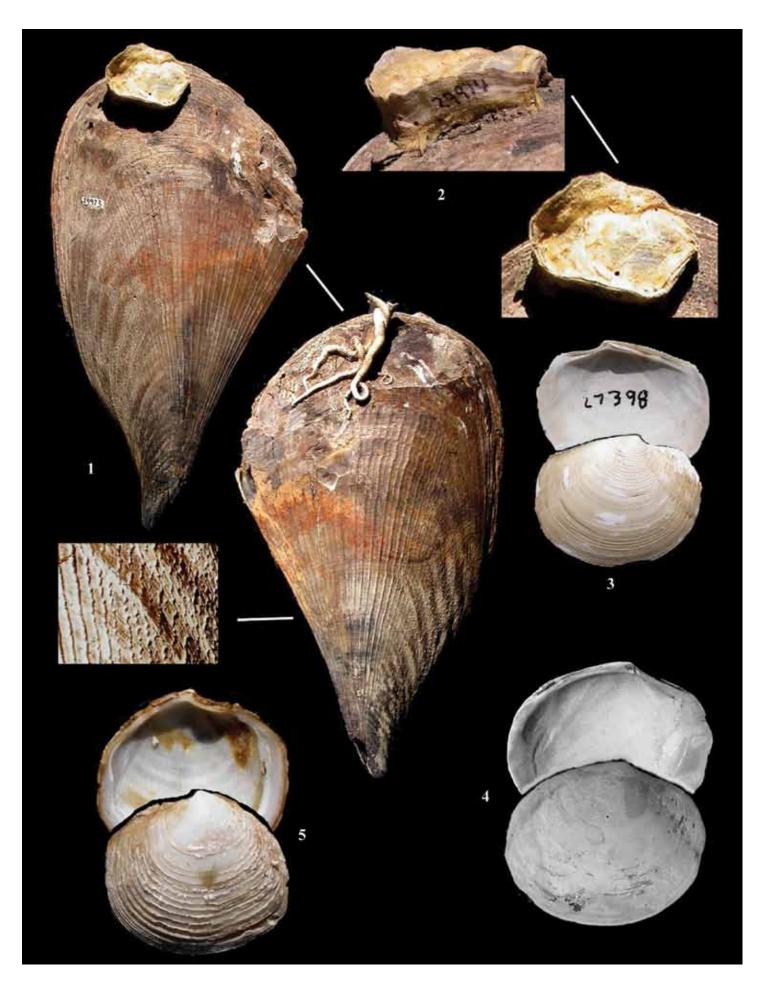
was attached to the *Atrina cf. seminuda* treated above. It is the first time this species has been reported from the Gulf of Mexico, other than the Florida Keys (Turgeon et al., 2009). This specimen measures 46.8 mm.

Jorgenia luteophyla Taylor & Glover, 2009 (Fig. 3). This recently described lucinid species has been assigned to the newly erected genus *Jorgenia* Taylor and Glover, 2009. The new genus differs from the similar genus *Lucinoma* in lacking the prominent commarginal lamellae of the latter and in having small cardinal teeth (Taylor & Glover, 2009:133). There are also other differences. The specimen pictured is a paratype and was dredged by the Benthic Skimmer off Louisiana in 850-610 m.

Jorgenia louisiana Taylor & Glover, 2009 (Fig. 4). Also assigned to the recently erected genus Jorgenia, this species was collected at "Bush Hill," a site of hydrocarbon cold seeps that occur off the Louisiana coast in 540-555 m. An image of Jorgenia louisiana has previously appeared in American Conchologist as a "Lucinoma" sp. (García, 2003:28, fig. 7). The specimen figured is a paratype.

"Myrteopsis" lens (Verrill & Smith, 1880) (Fig. 5). Another deepwater lucinid not reported from the Gulf of Mexico, other than the Florida Keys (Turgeon et al., 2009). The specimen in the plate was dredged off Louisiana in 334-250 m. A previous lot, also from off Louisiana, was dredged in 450 m (EFG 13649) and a third lot off Tampa, Florida, in 308-323 m (EFG 25330).

^{*}The listing and images of mollusk species referred to here, "Report on molluscan species found in the offshore waters of Louisiana, including many extensions of known range and un-named species," (www.jaxshells.org/efg1030.htm) includes a listing of 577 species found in these waters! This was possible in large part because of two factors: the availability, starting in 1993, of the research vessel *Pelican* from the Louisiana Universities Marine Consortium, and the long-term dedication of many individuals.



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PLATE II

(Figures 6-14, page 7)

Glossocardia agassizii (Dall, 1886) (Fig. 6). Although this species had already been reported from Louisiana (Odé, 1964-2001), it is included here because of its rarity. The specimen photographed measures only 24.3 mm, but a second specimen from the same lot, not as well-preserved, measures 31.6 mm (EFG 30008). The maximum reported size was 27 mm (Rosenberg, 2009). Glossocardia has been placed in the family Trapezidae.

Graptacme perlonga (Dall, 1881) (Fig. 7). One of the most elegant of the tusk shells, this species can grow to 90 mm. It was reported by Dall (1881: 36) as having been collected in the Yucatan Strait in 640 fathoms; otherwise, it had not been reported from elsewhere in the Gulf of Mexico. The figured specimen was collected alive with a box core sampler off Vermilion Parish, Louisiana, in 400 m, and measures 58.3 mm.

Calcarovula piragua (Dall, 1889) (Fig. 8). A specimen of this very rare species, formerly placed in *Phenacovolva*, was first dredged in 2005 off the Louisiana coast. A photo of the live animal appeared in Lorenz & Fehse (2009: 602, fig. A272) where it was erroneously stated that the specimen was dredged off the Florida coast. The specimen figured here was recently dredged off Alabama on a hard substrate. It was photographed in an aquarium on a piece of gorgonian that came up in the same dredge haul. It is assumed that the specimen was living on that particular species, as no other gorgonian was present. Calcarovula piragua has now been collected alive in the northern Gulf from 28°02.51'N, 92°26.88'W, in 60-74 m, to 29°26.37'N, 87°34.3'W, in 76-80 m.

Pseudosimnia vanhyningi (M. Smith, 1940) (Fig. 9). This rare species has also been reported by García & Lee (2003). A single eroded specimen was collected in 1994 off Alabama in 122 m (EFG 14563) and another in 1996 off Louisiana, in 66 m (see Lorenz & Fehse, 2009:192, fugs. 3 and 4). Two rather fresh specimens were recently obtained in the same haul off Mobile Bay, Alabama, in rubble. Smith originally described *P. vanhyningi* as having a "surface covered with interrupted regularly spaced spiral lines" (1954:46), a character that is not shown even in these fresh specimens; also, the holotype is more rotund in appearance (see Lorenz & Fehse, 2009: 192, fig. 1).

Polinices leptaleus (Watson, 1881) (Fig. 10). When I retrieved the single live specimen of *P. leptaleus* from the Benthic Skimmer it was a "wow" moment. I immediately took it to the aquarium, hoping for a photo of the animal, but it was not to be. I had never seen this species before, but knowing it was a *Polinices* that lived at great depths helped me begin my search. Accessing the everhelpful *Malacolog* lead me to Watson's taxon and, with the help of Harry Lee, I managed to download an 1886 report, also by Watson, where the author figured and re-described the species (pp. 441-442, pl. xxvii, fig. 7). *Polinices leptaleus* had not been recorded from the Gulf of Mexico, other than the Florida and Yucatan Straits, and its maximum size had been reported as 8.9 mm (Rosenberg, 2009). The specimen pictured measures 14.5 mm.

Ranella olearius (Linnaeus, 1758) (Fig. 11). Ranella olearius was originally described from the Mediterranean; however, besides other eastern Atlantic localities, it has also been reported from the southern Indian Ocean and New Zealand. With this geographical distribution it is not surprising that the species has crossed the Atlantic and has been recorded from Uruguay and Brazil, to northern South America, the Lesser Antilles, and Bermuda (Henning & Hemmen, 1993; Rosenberg, 2009). Bermuda seems to be the nearest locality to the Gulf of Mexico recorded.

Mr. Frank Frumar, of Kirkwood, Missouri, sent me a specimen of *R. olearius* collected ("crabbed") in a Golden Crab trap set in the Florida Straits in 685 m. It was brought to him by Bill Whipple, captain of the F/V *Falcon*. When he first obtained the specimen several years ago, Frank brought it to Kevan Sunderland, of Sunrise, Florida, who was the first to properly identify it. The juvenile specimen measures 72.2 mm and is the only record of the species for the Gulf of Mexico.

(*P.S.* The unfortunate news is that when I sent the specimen back to Frank, via certified mail, it was lost by USPS, notwithstanding the fact that his address and my return address were correct, and that the package had a "tracking" number which ultimately meant absolutely nothing. In spite of numerous phone calls and trips to the post office by Frank and myself, the parcel remains "lost").

Epitonium krebsii (Mörch, 1875) (Fig. 12). This species is rather uncommon. Even though it has previously been recorded from Louisiana (García & Lee, 2002: 11), it is included here because the recorded maximum size for this species is 19 mm (Rosenberg, 2009), but the specimen pictured in the plate measures a breathtaking 27.7 mm. And no, the costae are not scalloped, only chipped.

Cosmioconcha rikae K. & D. Monsecour, 2006 (Fig. 13). Dead specimens of *C. rikae* are not uncommonly dredged off the Louisiana-Mississippi-Alabama coast. I have 15 lots in the collection from such dredgings. What is interesting about this lot is that the specimens were unusually large and colorful; the largest, collected empty, measured 17.6 mm. The largest specimen reported before was 14.2 mm (Rosenberg, 2009). Other than size and color, differentiating characters between this population and typical specimens were not detected. The animal has a siphonal canal patterned with pale tan elongated oval blotches surrounded by brownish specks.

Vexillum articulatum (Reeve, 1845) (Fig. 14). This extraordinary specimen, both in color and size, had to be placed in context with other specimens collected in the Gulf of Mexico and elsewhere so that an appropriate identification could be reached. See "On *Vexillum* (Pusia) articulatum (Reeve, 1845) and *V*. (*P*.) trophonium (Dall, 1889)," that follows this article.



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PLATE III

(Figures 15-20, page 9)

Volutomitra bairdii (Dall, 1889) (Fig. 15). A very eroded empty shell of the "typical" form of this rare species was collected off Louisiana in 2003 by means of a box core sampler in 640-680 m. On a cruise made some years later, two smaller specimens with a pink central band were dredged alive at the same general depth (García, 2007, figs. 9, 10). As I had not read of V. bairdii with pink bands I catalogued them as V. cf. bairdii, but on a rather recent cruise, using the Benthic Skimmer, we dredged a number of live specimens that intergraded from specimens having a band that was almost brown in color (see fig. 15, right), to a very pale pink band, to the typical white shell. This color band seems to show only on sub-adult specimens, although white sub-adults were also found. The maximum reported size for the species is 35 mm (Rosenberg, 2009), but one of our specimens is 39.4 mm. The animal is white.

Gymnobela agassizii (Verrill and Smith, 1880) (Fig. 16). This species has been previously reported from the northwestern Gulf of Mexico (Pequegnat, 1963), but it is included here because of its rarity. The species was collected alive just east of the Mississippi river delta, in 1,350 m. The animal is white.

Gemmula periscelida (Dall, 1889) (Fig. 17). Although this beautiful turrid was collected by the *Pelican* in Bahía de Campeche in 2005 and reported from off Alabama and Texas by other expeditions, this is the first time that the *Pelican* has collected it in the northern Gulf. The animal is white and rather active. Older specimens are covered with a black stain, as is often the case with deepwater shells.

Pleurotomella pandionis (A. E. Verrill, 1880) (Fig. 18). This interesting turrid was originally reported by Verrill as living off the Massachusetts coast, and more than a century later it was reported as inhabiting the Gulf of Mexico (Davenport, 2000). As no images accompanied Davenport's article, the identification was questioned (Rosenberg, 2009). Three lots representing this species have been collected off Louisiana, at a depth between 1267 and 1350 m, confirming Davenport's report.

Scaphander punctostriatus (Mighels & Adams, 1842) (Fig. 19). A deepwater species, the animal is too large to retract into the shell. The white animal is designed to "plow" through the soft mud where it lives. It moved at a very slow pace when it was placed in the aquarium.

Scaphander watsoni Dall, 1881 (Fig. 20). Also very slow-moving, the animal is very similar to the preceding species, but both the animal and the shell are more elongate. The outer yellowish coloring is in the very thin epidermis; the darker orange is stain.

REFERENCES

Bieler, R. & Mikkelsen, P. M. 2004. Marine bivalves of the Florida Keys: a qualitative faunal analysis based on original collections, museum holdings and literature data. In: R. Bieler & P. M. Mikkelsen, eds., *Bivalve Studies in the Florida Keys*, *Proceedings of the International Marine Bivalve Workshop*, Long Key, Florida.

Dall, W. H. 1881. Reports on the results of dredging, under the supervision of Alexander Agassiz, in the Gulf of Mexico, and in

the Caribbean Sea, 1877-79, by the United States Coast Survey Steamer *Blake*. *Bulletin of the Museum of Comparative Zoology* 9: 33-144.

Davenport, R. 2000. Preliminary report: Mollusks collected on the DGOMB-2000 cruise in the Gulf of Mexico. *Texas Conchologist* 37: 6-12

García, E.F. 2003. Unexpected molluscan finds from the hydrocarbon vents off the Louisiana coast. *American Conchologist* 30(4): 28-30.

García, E.F. 2007. Results of deep-water dredging in the Gulf of Mexico using the "Benthic Skimmer," and report on several geographic extensions, including two species not previously reported in the western Atlantic. *The Festivus* 39(2): 13-18.

García, E.F. & Lee, H.G. 2002. Report on molluscan species found in the offshore waters of Louisiana, including many extensions of known range and un-named species. *American Conchologist* 30(4):10-13.

García, E.F. & Lee, H.G. 2003. Report on molluscan species found in the offshore waters of Louisiana, including many extensions of known range and un-named species, II. *American Conchologist* 31(1):26-29.

García, E.F. & Lee, H.G. 2011. Report on molluscan species found in the offshore waters of Louisiana, including many extensions of known range and un-named species. http://www.jaxshells.org/efg1030.htm

Lorenz, F. & Fehse, D. (2009). "The Living Ovulidae - A manual of the families of Allied Cowries: Ovulidae, Pediculariidae and Eocypraeidae." Conchbooks, Hackenheim, Germany.

Odé, H. 1964-2001. Distribution and records of the marine Mollusca in the northwest Gulf of Mexico. A continuing monograph. *Texas Conchologist*, Vols. 1-38.

Rosenberg, G. 2009. Malacolog 4.1.1: A Database of Western Atlantic Marine Mollusca. [WWW database (version 4.1.1)]. http://www.malacolog.org/

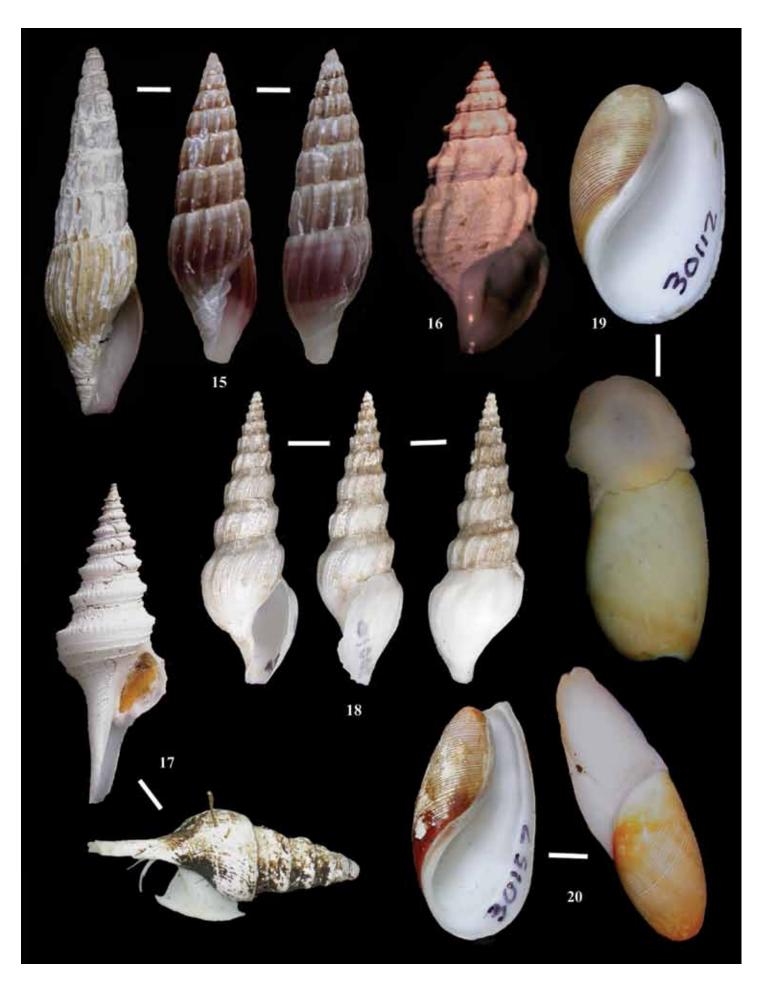
Smith, M. 1940. New Recent and fossil molluscs from Florida. *The Nautilus* 54: 44-46, pl. 2.

Turgeon, D., Lyons, W., Mikkelsen, P., Rosenberg, G. &Moretzsohn, F. 2009. Bivalvia (Mollusca) of the Gulf of Mexico. In: Gulf of Mexico: Its Origins, Waters, and Biota. I,I. *Biodiversity*. D.L. Felder & D.K. Camp, eds, Texas A & M University Press, pp. 579-699.

Taylor, J. & Glover, E. 2009. New lucinid bivalves from hydrocarbon seeps of the western Atlantic (Mollusca: Bivalvia: Lucinidae). *Steenstrupia* 30(2): 127-140.

Turner, R.D. & Rosewater, J. 1958. The family Pinnidae in the western Atlantic. *Johnsonia* 3(38)285-328.

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On Vexillum (Pusia) articulatum (Reeve, 1845) and V. (P.) trophonium (Dall, 1889)

Emilio F. García

While trying to elucidate the identity of the Vexillum illustrated in the preceding article on the Gulf of Mexico (fig. 14), I contacted Richard Salisbury, who provided photos of specimens and of type species, and Harry G. Lee (HGL), who sent species in his collection that might be assigned to the Vellium articulatum/ histrio complex. Harry and Richard also sent important literature that was of great help to this project. It was fortunate that Harry had one lot of multiple specimens from the Bahamas, collected alive by James Jacaruso, that I presume to be referable to Vexillum articulatum (Reeve, 1845) (see figs. 9-10), and I have in my collection (EFG) one lot of multiple specimens of V. histrio (Reeve, 1844) from the west end of Roatán Island, Honduras (see figs. 3-5). I also have in my collection three lots from southwest Florida and two lots from Louisiana, that I presume to be Vexillum articulatum. Many other specimens and photos of specimens were examined. In the adjoining plate I used the most pertinent specimens to illustrate what I consider to be variations on two distinct taxa, Vexillum histrio and V. articulatum.

When I first began this project I encountered problems often found when dealing with old taxa: the description was vague, of barely five lines, with only color pattern to go by; there was no holotype, or geographical distribution, and the outline of the figure did not quite resemble any western Atlantic species. All I had was a color pattern that very much resembled some forms of other western Atlantic *Vexillum*, particularly *V. histrio*.

Because of the problems listed above, I considered Reeve's taxon to be a *nomem dubium*; there was so little to go by. Then Richard Salisbury sent me a photo of a specimen from the collection of the late Andy Adams dredged off Boynton Beach, Florida (fig. 7), that Richard had labeled "*Vexillum articulatum*" and which, indeed, was very similar to Reeve's figure. So I decided to begin my investigation from scratch.

Inspecting the western Atlantic Vexillum taxa in Cernohorsky (1978) led me to a close scrutiny of a seldom-cited taxon that seems to have flown under the radar for many years, Vexillum trophonium (Dall, 1889). Dall's description of the unusual protoconch of *V. trophonium* states: "Stilifer-like nucleus of five or more whorls, acute, yellowish-brown, polished, glassy" (p. 161). This is a very accurate description of the protoconch of several juvenile specimens I had dredged in the Gulf of Mexico (see fig. 12), together with several adults. One of the juveniles was dredged off Louisiana (see http://www.jaxshells.org/arrest.htm) [this image also appeared in Garcia (2008: 7; fig. 19)] sympatrically with my problematic 22.4 mm specimen shown in fig. 14 of the previous article. Moreover, Dall's holotype shows a profile that compares favorably with the Boynton Beach specimen and the 22.4 mm Louisiana specimens. I have seen photos of similar specimens from the Al Deynzer collection; but those specimens are no longer in his possession (Al Deynzer, pers. com.). The holotype of Mitra trophonia (fig. 8) does not show the color markings of these two specimens, however, Dall's description states: "color from pale yellow to deep orange, with a narrow opaque white band... and may in some specimens be represented by a series of spots on the crests." [my bold letters] (p. 161)

The juvenile specimens studied are either solid orange in color (fig. 12) or have a light-yellow peripheral band. As the number of whorls increases, dark blotches begin to appear in the intercostal spaces, either at the anterior edge of the peripheral band

or at its center. Some specimens, however, lack a peripheral band (fig. 10), while others may have the dark spots at both the anterior and posterior edges. Figure 11 shows a specimen where the dark spots do not begin to show until the end of the 5th whorl. I consider the color pattern of the band to be one of the least reliable of the characters for the species.

Vexillum articulatum is most similar to V. histrio, from which it differs by having a proportionately narrower shell with less conspicuous, wider, less numerous axial costae (compare figs. 1-5 with figs. 7-11). Unfortunately, I have not been able to locate a Vexillumm histrio with an intact protoconch. Redfern's image of the protoconch of V. histrio (2001, pl. 53, fig. 489A) is probably not of that species as his figure 489B of an adult V. "histrio" represents another species. Redfern's figure 489A has the characters of V. articulatum as treated in this study, a species that has been found in the Bahamas (Figs. 9-10). Redfern has confirmed this similarity (pers. com.).

Specimens of *V. articulatum* with dark spots at the anterior edge of the interspaces are similar to the marking of *Vexillum cubanum* Aguayo & Rehder, 1936 [= *V. arestum* Rehder, 1943)]. Cernohorsky (1978: 92) considered the two taxa to be possible synonyms; however, the needle-like protoconch of about 5 whorls of *V. articulatum* is very different from that of *V. cubanum* as drawn by Kaicher (1977: 1440) or that of *V. arestum* as described by Rehder (1943: 201). *Vexillum cubanum* does not attain the large size of *V. articulatum*.

Since there is no type material or locality data for Reeve's *V. articulatum*, the only concrete evidence is his colored figure. One may presume, as Cernohorsky (1978) has, that another species of western Atlantic *Vexillum* may be referable to Reeve's taxon, but most of the solid evidence points to *Vexillum trophonium* (Dall, 1889).

My thanks to Richard Salisbury, Harry Lee, Colin Redfern and Al Deynzer for their collaboration.

REFERENCES

Cernohorsky, W. O. 1978. The taxonomy of Caribbean--Atlantic Costellariidae (Mollusca: Gastropoda). *Records of the Auckland Institute and Museum* 15: 87-109.

Dall, W. H. 1889. Reports on the results of dredgings, under the supervision of Alexander Agassiz, in the Gulf of Mexico (1877-78) and in the Caribbean Sea (1879-80), by the U. S. Coast Survey Steamer *Blake*. *Bulletin of the Museum of Comparative Zoology* 18: 1-492, pls. 10-40.

García, E.F. 2008. Molluscan findings from a recent dredging expedition off the Louisiana coast. *American Conchologist 36*(4): 4-9. December.

Kaicher, S. D. 1977. Card Catalogue of World-wide Shells. Pack #15 - Mitridae Part IV, cards [i-ii], 1435-1540. S. D. Kaicher, St. Petersburg, Florida.

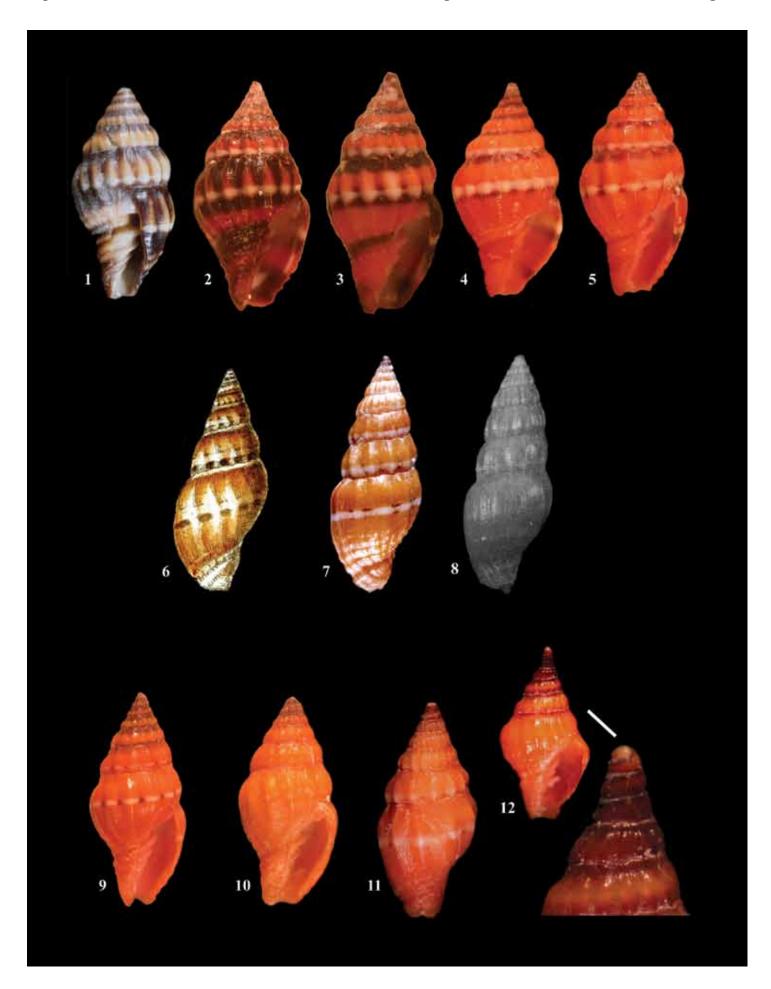
Redfern, C. 2001. "Bahamian Seashells." ix + 280 pp., 124 pls. Bahamianseashells.com: Boca Raton, Florida.

Reeve, L. 1844. Monograph of the genus *Mitra*. *Conchologia Iconica* 2: pls. 1-27.

Reeve, L. 1845. Monograph of the genus *Mitra*. *Conchologia Iconica* 2: pls. 28-39.

Rehder, H. A. 1943. New marine mollusks from the Antillean region. *Proceedings of the United States National Museum* 93(3161): 187-203, pls. 19-20.

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Epilogue/prologue to "junkyard bug" report with two early references Harry G. Lee

In a recent report (Eichhorst, 2010: 25), the larva of the lacewing (Arthropoda: Insecta: Neuroptera: Chrysopidae), also known as an aphis-lion, was reported as "The world's smallest and (probably ugliest) shell collector." The article was based on a discovery by active COA member David Kirsh, whose memorable photographs of this gnarly "junkyard bug" illuminated the story.

Mention was made of an earlier documented discovery of this sort by Dan Dourson (2006), who enumerated six species of land snails from a similar larva found in the Great Smoky Mountains National Park, not too far from David's discovery in Rockingham Co., NC. Dan's report was brought to the attention of the Conch-L list-serve subscribers by Dr. Tim Pearce (pers. comm., 22 April 2010 < http://www.listserv.uga.edu/cgi-bin/wa?A2=ind1004D&L=conch-l&P=R95 >).

A third observation of this lacewing larva découpage, apparently previously unpublished, was made by one of Dan's colleagues, Dr. Ron Caldwell (Dourson, pers. comm, 25 April 2010).

On 27 October 1928 David T. Jones of Marietta College in southeastern Ohio, while searching for snails in leaf litter on a wooded hillside in nearby Vinton Co., came across such a snailladen larva (Jones, 1929). With the assistance of two colleagues, he gathered four more specimens likewise adorned. Back in the laboratory, eight individual shells of probably four species were found stuck to the most prolific collector. In reference to five of these shells, identified as *Punctum "pygmaeum*,"* he marveled at the little collector's resourcefulness as he himself had found only one shell in the vicinity after a 15 minute search! Jones also remarked that he had seen such an association in Squaw Hollow, not far from campus. Regrettably, that particular Aphis-Lion larva evaded capture.

Sometimes it seems like "...there's nothing new under the sun." (Anon., ca. 250 BCE: 1: 10).

Anon., ca. 250 BCE. *Ecclesiastes 1:9.* New International Version, 12 chapters, 222 verses, 1973.

Dourson, D. 2006. Larvae [*sic*] makes discovery for ATBI. *Appalachian Highlands Science Journal 1*: 4. Dec. http://science.nature.nps.gov/im/units/aphn/docs/ahsj%20final%20low%20res.pdf

Eichhorst, T. 2010. The world's smallest and (probably ugliest) shell collector. *American Conchologist 38*(2): 25. "June." See also < http://www.jaxshells.org/mare20.htm>.

Jones, D.T. 1929. A snail-collecting Aphis-Lion. *Marietta College Research Publication* 1: 1-9, 3 plates.

Lee, H.G. 2010. Is it luck or good planning; Vermont campaign continues to thrive. *Shell-O-Gram 51*(2): 6-10. March.



Above: The original image provided by David Kirsh of his "junkyard" bug (green lacewing larva or aphis-lion) with its collection of juvenile *Glyphyalinia wheatleyi* (Bland, 1883). Below: A better look at the "junkyard" shell collector by Dan Dourson of Bakersville, North Carolina.



Harry G. Lee shells@hglee.com

^{*} a frequent misidentification of *P. minutissimum* (I. Lea, 1841) in those days. That fact notwithstanding, *P. pygmaeum* (Draparnaud, 1801) has recently been discovered in the USA for the first time (Lee, 2010: 6-7).

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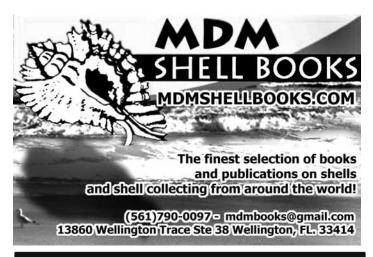
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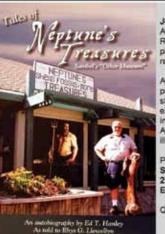
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Romancing the Stones: a shelling expedition to the Dominican Republic

Karen VanderVen

Nag, nag, nag. How much can a man take? For years Glenn Duffy's ardent shelling fans on various trips had heard his stories of living for years in the Dominican Republic and the shells to be found there. They begged him to organize a trip. Finally, participants in a tour to Venezuela last year convinced him and he announced a tour scheduled for July 2010. Filling up quickly with a contingent from Florida's Englewood Shell Club, the expedition involved 18 shellers* who flew to Santo Domingo in mid-July. There we were met by Glenn and his old friend Randy Hooks, who would help guide the expedition. A three-hour scenic bus ride brought us to our hotel in Salinas, on the southeast coast of the Dominican Republic. The picturesque hotel was nestled on a beautiful cobalt bay surrounded by mountains. Our prime shelling spot was just minutes away.

Glenn had primed us ahead of time with the names of the signature shells of the area and we each constructed our personal collecting agenda accordingly. On our lists? The famous *Xenophora conchyliophora*, the Atlantic carrier shell, was at the top. These aren't just *any* carrier shells. Only from this area of the world do they come with *stones* attached around the characteristic concentric whorls. Then of course, there was *Strombus gallus*, the rooster-tail conch. Other treasures, such as *Turritella exoleta*, *Conus daucus* and *Oliva jamaicensis*, were very much anticipated.

Early the next day, to catch a morning minus tide, we burst onto the long coastal beach area that we would shell at different spots the rest of the trip. There were four types of habitat available, thus accommodating the predilections of every sheller (and the residence of many mollusks): 1) the tide lines up and down the beach; 2) in the water, acres of turtle grass; 3) on-shore and off-shore reefs; and 4) shallow water sand patches or pits. Interestingly, some shells were found in areas where one would usually not expect to find them, e.g. a species typically found in *Thalasia* grass beds would be spotted in bare sand or a sand-dweller would be found in the grass beds. "There's nothing to it but to get to it," Bill Kreis would say during the trip, and we had no trouble doing so each and every day.

Splendor in the Grass

The first day our main intent was to find the stone-studded carrier shells (*Xenophora conchyliophora*) and perhaps a rooster-tail (*Strombus gallus*). Glenn warned us that we had to look carefully for the carriers since their camouflage is so effective. So I set out, travelling parallel to the beach and in water as deep



Above: Dominican Republic skyline. Photo by Brenda Kreis.

Below: Our hotel nestled between the ocean and the mountains. Photo by Linda Powers.



as I thought I could dive, covering veritable acres in several hours. And...no *Xenophora*.

The next day I tried a new approach to finding *Xenophoras*. I simply did not look for them since I thought the search was hopeless. Then, swimming away from the grass into a sand patch, I noticed a little round patch of algae. I swooped down

^{*} The shellers in addition to Glenn, Randy and myself, included Mel Abe, Rachel Mann, Homer Rhode, Matt and Dona Blaine, Winston and Elizabeth Barney, Bill and Brenda Kreis, Clare Horner, Rita Stonehouse, Ruth Middlebrooks, Linda Powers, Marilyn Boyd, Bet Hamilton, Ted and Ellen Strasser, and Alan Gettleman.

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An early morning visitor outside the hotel room. On vacation from Australia perhaps? Photo by the author.



A flock of flamingoes contributes to the exotic atmosphere of this wonderful place. Photo by Brenda Kreis.



The group gathers to inspect a bonus haul of *Xenophora conhyliophora* and other treasures. Photo by Brenda Kreis.



A pile of queen conch shells in the bush, harvested from the turtle grass flats for bait or maybe a meal. Photo by Brenda Kreis.



Low tide shelling was a chance to check tide pools while snorkelers expanded their search range. Photo by Brenda Kreis.



Bet Hamilton's rooster-tail conch. Despite plans to collect this species, it proved to be rather elusive. Photo by author.



Above: Clare Horner's queen helmet. This deep orange color tends to fade over time to peach. Photo by the author.

Below: The spectacular golden Atlantic Triton's trumpet (Charonia variegata) found and photographed by Matt Blaine.



and of course it was a *Xenophora* – my first. As the trip continued, we all found them here and there and I ended up with a nice size sequence. In fact, one of mine, covered with tiny pebbles, is less than an inch wide.

There were many fine shells retrieved from the grasses over the days. Matt brought in a handsome golden variety of *Charonia variegata*. I was amazed to see a lovely little red *Conus daucus* simply lying in the turtle grass. Glenn and Clare found many beautiful *Fasciolaria tulipa*. There were lovely milk conchs (*Strombus costatus*) and I could not resist a small specimen whose dorsum was a deep rich dark red. Bet found one of two roostertail conchs recovered during the trip. Marilyn found two most attractive hawk-wing conchs (*Strombus raninus*).

Some very collectible bivalves were also to be found: Argopecten gibbus, Caribachlamys sentis, Arcopagia fausta, Tellina listeri, Ctenocardia media, Dallocardia muricata, Trachycardium magnum, and Trachycardium isocardium.



These exquisite little *Epitonium lamellosum* are difficult to spot, hidden in the tideline drift, but Ellen Strasser had the "eye" and found near-perfect specimens. Photo by the author.

Beach Reading

Each day an intrepid group carefully combed the multiple tide lines up and down the beach, heads down, carefully reading the flotsam and jetsam, and the tide pools left exposed by the low tides. From their thoroughness some of the most exciting finds emerged. Perhaps most intriguing were the *Epitonium lamellosum* specimens that Ellen seemed to have a magic touch for spotting on one of the higher tidelines. She brought in six from one day of beach walking and we all gasped in admiration (and a wish to find some ourselves). The next day, first thing, I stalked along the sand, head down and eyes swiveling in that all-too-familiar shelling posture, and there it was, lying out just waiting for me to happen by. Clare also found one, as well as a perfect live *Pecten ziczac*, right where the waves lapped on shore. Just offshore, in a few inches of water, I found a colorful *Spondylus ictericus*. Mel actually found a large live *Conus daucus* on shore.

Reef Encounters

The first few days of the super low tides exposed an onshore reef where the adept sheller had a rare opportunity to scan the nooks and crannies and tide pools for small mollusks, while being careful to avoid the spiny sea urchins nestled alongside. Among the best finds were live *Cymatium nicobaricum* and *Gemophos tinctus*.

Glenn arranged a night snorkel for those of us who wanted to participate, so Homer, Clare, Linda, Bill, and I retrieved our dive lights and decided to take the plunge. On arriving at the pathway to the beach we encountered armed men in camouflage. Apparently the area is closed after sunset. With his usual tactful persuasiveness, Glenn convinced them to let us go ahead. While we didn't find a lot of mollusks out taking an evening stroll on an offshore reef, we enjoyed the beautiful night and armed police protection.

Other days, the reefs yielded some fine shells. Linda and

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A rather impressive *Cymatium femorale* found (and photographed) by Bill Kreis. Even those who do not collect Ranellidae find room for this handsome shell in their collection.

I found *Cypraecassis testiculus*, *Conus regius*, *Conus jaspideus* (in an unusual purple shade), *Cypraea cinerea*, *Cypraea acicularis*, and *Oliva jamaicensis*.

Show Some Spine

One day we piled into two boats for an enjoyable trip around the mangroves where, before arriving at a far beach, we sighted a spectacular flock of flamingoes. On shore there were *Asaphis deflorata* and for me, an Atlantic planaxis (*Planaxis nucleus*). Among the best finds were live *Cymatium nicobaricum* and *Gemophos tinctus*. The shells here were not as prolific as those from Punta Salinas beach, although persistent Clare finally came in with a live pair of *Chicoreus brevifrons*.

Completing the boat trip was a crossing back over to another unplumbed area of the Punta Salinas beach. Here Alan retrieved a rare and deep-water *Chicoreus spectrum*, which may have been dumped by fishermen. Later Bill found one, also probably dumped.

While excitement about this shell swirled on shore, several of us worked offshore in an area that was breathtaking for the number of huge, spiny sea urchins present. There was almost no way to avoid contact with them. Sure enough I felt a sharp pain

and found that a spine that had gone right through the pad of my smallest finger, evidenced by a narrow black stripe underneath my skin. Nothing deterred me from further shelling and I decided it could wait until the end of the day. Amazingly, by the time I got back to the hotel, ready to do some radical self-surgery with my sewing-kit needle, most of the spine had dissolved.

It's The Pits

Interspersed among the acres of turtle grass were gray volcanic sand pits that were well-worth searching for shells. Arrayed out here-and-there were a variety of bivalves, such as paper cockles (*Papyridea soleniformis*), buttercup lucines (*Anodontia alba*), and the ever-ubiquitous codakia, *Codakia orbicularis*. I couldn't resist taking a few pairs that had especially bright yellow interiors.

Swimming slowly along, I spotted a *Latirus*-shaped shadow on the bottom and headed down like a shot. *Latirus infundibulum*! Soon I found another and Bet, nearby, retrieved two.

Apparently helmet shells (*Cassis*) favor both sand and grassy habitats. For us, these beautiful treasures seemed to favor the sand. Lucky shellers found them either completely on top of

the sand surface, or with enough of a shoulder protruding to give them away. Clare pulled up a spectacular queen helmet (*Cassis madagascariensis*), as did Linda. Others found *Cassis flammea* and *Cassis tuberosa*, such as the one I found with colorful wide dark brown bands on its outer lip. Glenn said this was an unusual color trait.

Going to the Bleach

As with any shell trip, we'd want to stop on the way back to the hotel for the 'ABC's' of shelling - alcohol, baggies, and Clorox, especially the latter as Glenn had encouraged us to clean our shells as we went along. There was another thing we wanted, ice cream. It's been my experience that a day in the water develops a compelling craving for ice cream (helado in Spanish). We would tumble out of the vans at a little open bodega and clustering around the counter we'd try to explain to the pleasant but non-English speaking clerks that we wanted "Clorox," while hungrily licking the chocolate popsicles we had dug from the little freezer in the corner. This scenario occurred day after day. I would stand back and wonder what our contingent looked like to the locals, as we nodded vigorously when still another bottle of Clorox was retrieved from behind the counter and as we scrabbled in our packs for our pesos, ice cream already dripping onto our damp and sandy wetsuits.

We enjoyed our meals at the hotel, which featured delicious and fresh seafood and if one wanted a change, amazingly tasty pasta. Our server, Damien, was particularly personable. There were no desserts available, which fueled our craving for ice cream.

Shells of the Trip

While the anticipated rooster-tails were not prolific (in addition to Bet's, there was only the one other that Clare found on the beach), the fascinating stone-ringed *Xenophoras* were to be found in numbers. The *Chicoreus spectrum* specimens found by Alan and Bill were dubbed as "Shell of the Trip" by Glenn, based on his extensive knowledge of Dominican Republic mollusks. Surfacing after the trip was over was a very uncommon and unusual looking find, *Cymatium (Gelagna) succinctum* (Linnaeus, 1758) brought in by Randy Hooks. According to Dr. Harry Lee, with whom Glenn consulted, this is the first report of this species in the Caribbean. Futhermore, Glenn indicated, Bill's *Conus spurius atlanticus* is also an unusual shell. Other outstanding finds were the fine *Cassis* examples (fresh, clean and beautifully marked), the gold *Charonia variegata*, and the *Conus daucus* in a range of colors.

Our trip home was uneventful, except for a one-half mile hike from the airliner arrival gate to Miami Airport customs - traveler beware! Since this was the only less-than-pleasant occurrence on this phenomenal trip, there are really only delightful memories and wonderful additions to our shell collections.

Karen VanderVen kvander@pitt.edu

List of species - Dominican Republic (July 2010)

Winston Barney, Bill Kreis, Glenn Duffy, and Karen VanderVen

GASTROPODS

Buccinidae

Gemophos tinctus (Conrad, 1846) - painted cantharus Pisania pusio (Linné, 1758) - glossy cantharus

Bullidae

Bulla striata (Bruguière, 1792) - common bubble shell

Bursidae

Bursa granularis cubaniana (d'Orbigny, 1842) - Cuban frog shell

Cancellariidae

Trigonostoma rugosum (Lamarck, 1822) - rugose nutmeg

Cassidae

Cassis tuberosa (Linné, 1758) - king helmet Cassis flammea (Linné, 1758) - flame helmet Cassis madagascariensis (Lamarck, 1822) - queen helmet Cypraecassis testiculis (Linné, 1758) - reticulated cowrie helmet Semicassis granulata granulata f. peristephes (Pilsbry & McGinty, 1939) - scotch bonnet, smooth form

Cerithiidae

Cerithium lutosum (Menke, 1828) - dwarf cerith Batillaria (Lampania) minima (Gmelin, 1791) - false cerith Planaxis nucleus (Bruguière, 1789) - black Atlantic planaxis

Columbellidae

Columbella mercatoria (Linné, 1758) - West Indian dove shell

Conidae

Conus (Dauciconus) daucus daucus (Hwass, 1792) - carrot cone Conus (Chelyconus) ermineus (Born, 1778) - agate cone Conus (Gladioconus) mus (Hwass, 1792) - mouse cone Conus (Jaspidiconus) jaspideus (Gmelin, 1791) - jasper cone Conos (Jaspidiconus) mindanus (Hwass, 1792) - Bermuda cone Conus (Stephanoconus) regius (Gmelin, 1791) - royal cone Conus (Stephanoconus) regius f. citrinus (Gmelin, 1791) - royal cone

Conos (Spuriconus) spurius (Gmelin, 1791) - alphabet cone

Calptraeidae

Crucibulum auricula (Gmelin, 1791) - rosy cup & saucer

Cypraeidae

Erosaria acicularis (Gmelin, 1791) - yellow cowry Luria cinerea cinerea (Gmelin, 1791) - Atlantic gray cowry Macrocypraea zebra (Linné, 1758)- zebra cowry

Epitoniidae

Epitonium lamellosum (Lamarck, 1822) - lamellose wentletrap *Opalia* species

Fasciolariidae

Fasciolaria tulipa (Linné, 1758) - true tulip Latirus infundibulum (Gmelin, 1791) - brown-lined latirus Leucozonia nassa (Gmelin, 1791) - chestnut latirus Leucozonia ocellata (Gmelin, 1791) - white-spotted latirus

Mitridae

Mitra barbadensis (Gmelin, 1791) - Barbados miter Mitra nodulosa (Gmelin, 1791) - beaded miter

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Muricidae

Chicoreus brevifrons (Lamarck, 1822) - West Indian murex Chicoreus (Phyllonotus) pomum (Gmelin, 1791) - apple murex Chicoreus spectrum (Reeve 1846) - pink or spectral murex Coralliophila galea (Reeve, 1846) - helmet coralsnail Favartia cellulosa (Conrad, 1846) - pitted murex Muricopsis oxytata (M. Smith, 1938) - hexagonal murex Stramonita rustica (Lamarck, 1822) - rustic rock shell Thais deltoidea (Lamarck, 1822) - deltoid rock shell

Naticidae

Tectonatica pusilla (Say, 1822) - miniature or Atlantic moon snail

Neritidae

Nerita (Theliostyla) tessellata Gmelin, 1791 - checkered nerite Vitta virginea (Linné, 1758) - virgin nerite

Ovulidae

Cyphoma signatum (Pilsbry & McGinty, 1939) - fingerprint flamingo tongue

Olividae

Oliva (Strephona) jamaicensis (Marrat, 1867) - Jamaican olive

Ranellidae

Charonia variegata (Lamarck, 1816) - Atlantic triton's trumpet Cymatium (Monoplex) nicobaricum (Röding, 1798) - goldmouthed triton

Cymatium (Ranularia) cynocephalum f. caribbaea (Clench & Turner, 1957) - Caribbean dog head triton

Cymatium (Gelagna) succinctum (Linné, 1758) - lesser girdled triton

Cymatium (Gutturnium) muricinum (Röding, 1798) - white-mouthed triton

Cymatium (Turritriton) labiosum (Wood, 1828) - lip triton Cymatium (Septa) pileare (Linné, 1758) - common hairy triton Cymatium (Cymatium) femorale (Linné, 1758) - angular triton

Strombidae

Strombus (Strombus s.s.) pugilis Linné, 1758 - West Indian fighting conch

Strombus (Lobatus) raninus Gmelin, 1791 - hawk wing conch Strombus (Lobatus) costatus Gmelin, 1791 - milk conch Strombus (Lobatus) gigas Linné, 1758 - pink or queen conch

Tonna

Tonna maculata (Dillwyn, 1817) - Atlantic partridge tun

Turbinidae

Astralium phoebium (Röding, 1798) - long-spined star shell Lithopoma caelatum (Gmelin, 1791) - carved star shell Lithopoma tectum (Lightfoot, 1786) - West Indian star shell Lithopoma tuber (Linné, 1767) - green star shell Turbo castaneus (Gmelin, 1791) - chestnut turban

Turritellidae

Turritella exoleta (Linné, 1758) - eastern turret shell

Xenophoridae

Xenophora conchyliophora (Born, 1780) - Atlantic carrier shell

BIVALVES

Arcidae

Arca zebra (Swainson, 1833) - Atlantic turkey wing Anadara notabilis (Röding, 1798) - eared ark

Cardiidae

Acrosterigma magnum (Linné, 1758) - magnum prickly cockle Ctenocardia media (Linné, 1758) - Atlantic strawberry cockle Dallocardia muricata (Linné, 1758) - yellow prickly cockle Laevicardium serratum (Linné 1758) - egg cockle Papyridea soleniformis (Bruguière, 1789) - paper cockle Trachycardium egmontianum (Shuttleworth, 1856) - prickly

cockle

Chamidae

Chama congregata Conrad, 1833 (attached to Chicoreus pomum) - little corrugated jewel box

Corbiculidae

Polymesoda floridana (Conrad, 1846) - southern marsh clam

Glycymerididae

Glycymeris decussata (Linné, 1758) - decussate bittersweet

Limidae

Ctenoides mitis (Lamarck, 1807) - smooth flame scallop Ctenoides scabra (Born, 1778) - rough flame scallop

Lucinidae

Anodontia alba (Link, 1807) - buttercup lucine Codakia orbicularis (Linné, 1758) - tiger lucine Lucina pensylvanica (Linné, 1758) - Pennsylvania lucine

Mytilidae

Modiolus americanus (Leach, 1815) - tulip mussel

Pectinidae

Caribachlamys sentis (Reeve, 1853) - scaly scallop Euvola ziczac (Linné, 1758) - zigzag scallop Argopectem gibbus (Linné, 1758) - calico scallop

Pinnidae

Pinna carnea Gmelin, 1791 - amber pen shell

Pteriidae

Pteria colymbus (Röding, 1798) - Atlantic wing oyster Pinctada imbricata (Röding, 1798) - Atlantic pearl oyster

Spondylidae

Spondylus ictericus (Reeve, 1856) - digitate thorny oyster

Tellinidae

Arcopagia fausta (Pulteney, 1799) - lucky tellin Leporimetis intastriata (Say, 1826) - twisted duck clam Tellina listeri (Röding, 1798) - speckled tellin

Veneridae

Lirophora paphia (Linné, 1758) - king Venus Macrocallista maculata (Linné, 1758) - calico clam Periglypta listeri (Gray, 1838) - princess Venus



Algae gone, the *Xenophora conchyliophora* are still hidden under their stone armor. Photo by Winston Barney.

Cracking a queen conch (*Strombus gigas*), vanishing uses, and rare abnormalities

Robert Robertson (photos by author unless noted otherwise)

Strombus gigas Linnaeus, 1758, now sometimes called Eustrombus gigas or Lobatus gigas, was once common in the greater West Indian region in shallow waters down to known depths of 61 meters. It is relatively low on the food chain, being the largest herbivorous gastropod present, and is being fished out in places throughout its range. This may have undesirable long-term effects on the shallow water ecology of the region because this species has or had a wide range of predators feeding on it, including Homo sapiens Linnaeus, 1758.

In 1992 Strombus gigas was listed as a "threatened" species by the Convention for International Trade of Endangered Species (CITES). It was listed under Appendix II, the first large-scale fisheries product to be regulated by CITES. Fortunately, S. gigas can be cultured in the lab and populations, at least theoretically, can now be enhanced artificially. Nonetheless, it seems worthwhile to publish old observations and photographs showing how humans interacted with and used this species. Archeological "kitchen-middens" of queen conch shells with round holes in them show that pre-Columbian Lucayan Indians in the Bahamas used the species as food.

Until recently, Bahamians used dinghies to fish for queen conchs, with one man sculling over the stern and another man near the bow with a "conch hook" on a long pole. Visibility was enhanced with a glass-bottomed bucket ("water glass"). After being hooked into the boat, the living conchs would survive for some days if kept damp with seawater.

Most gastropod bodies, including those of conchs, are attached inside the shell by only a single muscle, the columellar muscle. Bahamian fishermen used to be adept at making a slit in the spire of the shell with a hatchet (preferred over a machete), a process called "cracking" (or "knocking") a conch. Placement of the slit has to be precise (see the location shown in the photos). A knife is next inserted in the slit to cut the muscle. The whole body then slides easily out of the shell. The body is varicolored and only the muscular parts are eaten or used for fish bait.

The empty shells can be used as ornaments or tools, but they also used to accumulate in huge piles or middens. Such conch piles are often near aggregations of living conchs, but they can also be found near towns and settlements (as shown here). Before refrigeration, the meat was dried and then transported for use in other areas. Occasionally the shells from such middens were made use of, as for example being incorporated into the concrete walls of a house. The shells also used to be burned with wood and charcoal to make lime. A use growing in popularity today involves the porcelaneous pink, yellow, or white conch pearls sometimes found in these shells and recently commercially cultured (see *American Conchologist*, 37(4), December 2009).

Shells with rare abnormalities can sometimes be found in the middens, although the shells illustrated here with spirally keeled apices may not have come from such a source. Double outer lips and odd apical knobs occur, but sinistrality has not yet been reported in Strombidae (although a generous price has been adver-



Above: The approximate range of *Strombus gigas* in light blue. Map is from the U.S. National Oceanic and Atmospheric Administration (NOAA).

Below: A freshly collected specimen of *Strombus gigas* showing the vividly colored aperture. These colors will fade in time.

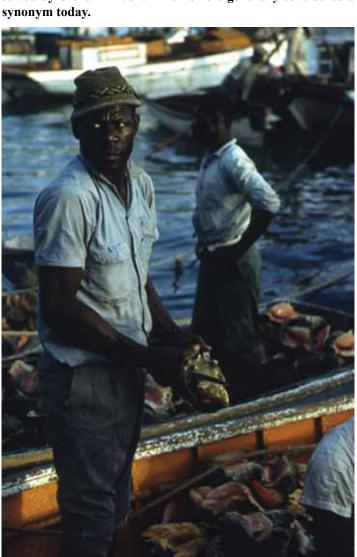


tised for such an abnormality). A thorough morphological study of intraspecific shell variation in conch piles might have taxonomic implications. Space limitations cause museum samples of large species to be necessarily sparse. Sample sizes of some of the taxa recently described are tiny and the generic characters used tend to be nebulous. An intergeneric hybrid has also been reported, but of course, this does not disprove generic rankings. Such rankings are by their very nature, subjective. So far, phylogenetic inferences from anatomical and molecular data differ. Without further infor-

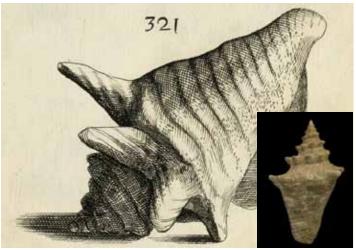


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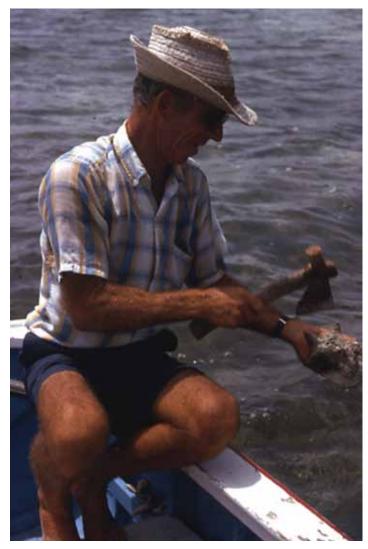
A living *Strombus gigas* (Bahamas) showing the operculum and part of the foot. This small heavy form was named *Strombus samba* by Clench in 1937. This name is generally considered a synonym today.



Conch fishermen in native sloops at dock, Nassau Harbor, Bahamas, May 1966. Note the dark periostracum as well as algae and other encrustations typical of shallow water species.



Strombus gigas (wrongly printed sinistral) in Recreatio mentis et occuli (1684) by Philippo Bonanno, named the neotype by Abbott and Clench in 1941 when the original Linnaean type specimen was thought lost. The actual holotype (inset) was found in 1953 at Uppsala University.



The late Beltron Malone, a fisherman at Hope Town, Abaco, Bahamas, opening ("cracking") a queen conch with a hatchet, August 1970.



Queen conch with knife in slit ("crack") severing internal columellar muscle.



Dorsal view of a "cracked" conch shell showing the precise positioning of the slit through which the columellar muscle was cut.



The soft body parts of *Strombus gigas* removed from the shell. The brown portion on the left is the edible foot.

mation, we would seem to presently be at an impasse, leaving us to enjoy this often colorful shell, appreciate its long shared history with mankind, and hopefully preserve it in the wild.

References (selected)

Barney, W.A. 2010. New generic assignments for Strombidae: a summary of recent changes. *American Conchologist* 38(3): 19-22.

Bonanno, F. 1684. "Recreatio mentis, et ocvli in observatione animalium testaceorum: Italico sermone primum proposita." Ex typographia Varesii, Rome, Italy, pp. 270, 593 w/ Pls. & index.

Doran, E., Jr. 1958. The Caicos conch trade. *Geographical Review* 48:388-401.

Galoustian, G. 2009. Scientists at FAU's Harbor Branch Oceanographic Institute are the first to 'unlock' the mystery of creating high-quality cultured pearls from the Queen Conch. *American Conchologist* 37(4): 12-14.

Kronenberg, G.C. 2008. An intergeneric hybrid (Gastropoda: Caenogastropoda: Strombidae) with remarks on the subdivision of Indo-Pacific *Tricornis. Basteria* 72 (4-6): 331-343.

Kronenberg, G.C., & Lee, H.G. 2007. Genera of American strombid gastropods (Gastropoda: Strombidae) and remarks on their phylogeny. *The Veliger* 49(4): 256-264 [with Harry G. Lee].

Landau, B.M., Kronenberg, G.C., & Herbert, G.S. 2008. A large new species of *Lobatus* (Gastropoda: Strombidae) from the Neogene of the Dominican Republic, with notes on the genus. *The Veliger* 50(1): 31-38.

Latiolais, J.M., Taylor, M.S., Roy, K., & Hellberg, M.E. 2006. A molecular phylogenetic analysis of strombid gastropod morphological diversity. *Molecular Phylogenetics and Evolution* 41: 436-444.

NOAA Fisheries, Office of Protected Resources. 2011. at: http://www.nmfs.noaa.gov/pr/species/invertebrates/queenconch.htm, accessed July 2011

Robertson, R. 1959. Observations on the spawn and veligers of conchs (*Strombus*) in the Bahamas. *Proceedings of the Malacological Society of London* 33: 164-171, pl. 11, see p. 165, footnote.

Robertson, R. 1962. The status of *Strombus canaliculatus*. *Nautilus* 75: 128-130, pls. 11, 12.

Robertson, R. 2005a. Large conchs (*Strombus*) are endangered herbivores having many predators and needing dense populations of adults to reproduce successfully. *American Conchologist* 33(3): 3-7.

Robertson, R. 2005b. New strombid names and knowledge of interrelationships. *American Conchologist* 33(4): 3.

Salisbury, A.E. 1953. Mollusca of the University of Oxford Expedition to the Cayman Islands in 1938. *Proceedings of the Malacological Society of London* 30: 39-54, see pp. 47, 48, & pl. 8.

Simone, L.R.L. 2005. Comparative morphological study of representatives of the three families of Stromboidea and Xenophoridea..., with an assessment of their phylogeny. *Arquivos de Zoologia* [Museu de Zoologia da Universidade de São Paulo] 37: 141-267.

Smith, M. 1940. "World Wide Sea Shells." Lantana, Florida, see p. 131, sp. 1629a.

Stoner, A.W. 1997. Shell middens as indicators of long-term distributional pattern in *Strombus gigas*, a heavily exploited marine gastropod. *Bulletin of Marine Science* 61: 559-570.

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Piles (middens) of recently discarded *Strombus gigas* shells, Hawksbill Creek, Grand Bahama, Bahamas, July 1983.



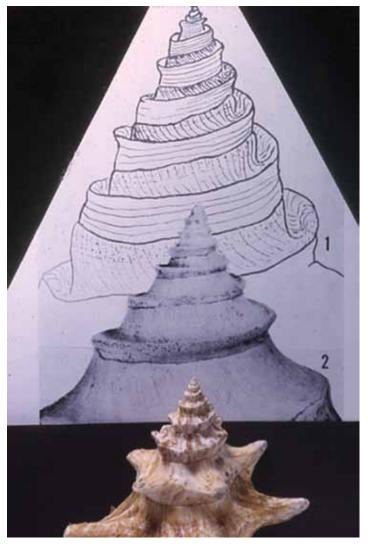
Conch shells being burned to make lime, Acklins Island, Bahamas, September 1958.



A closer view of a portion of a midden in Belize City, Belize, July 1961.



House incorporating *Strombus gigas* shells, Cockburn Harbor, South Caicos, Turks and Caicos Islands, January 1968. Photo by G.F. Quinby.



Apices of *Strombus gigas* shells, the upper two showing the abnormal form named as *Strombus canaliculatus* by Burry, 1949. This name is now considered a synonym. The bottom shell shows the normal spine development.





Perfect weather and record crowds marked the 75th Annual Sanibel Shell Show on the 3rd of March 2011. From door opening to closing, more than 2,000 people took advantage of this event to view the many colorful shell displays. Most participants also walked away with one of the more than 1,800 bags of shells that were provided free to visitors. This year was the first for the Sanibel Superstar Trophy, awarded to long-time COA member Gene Everson.

2011 Shell Show Special Awards

Scientific Division

DuPont Trophy: Best in Classes 1-26, sponsor: Delaware Museum of Natural History, winners: **Ken & Joyce Matthys**

C.O.A. Award: entry that best furthers interest in shells & shell collecting, sponsor: Conchologists of America, winner: **Pat Linn**

Sanibel Shell Fair Perpetual Gold Cup: best in class 11, Sanibel-Captiva Shells - self-collected, sponsor: Sanibel Community Association, winner: Barbara Hansen

Howard Sexauer Award: best worldwide shells, sponsor: The Sexauer Family, winner: **Sheila Nugent**

Shell of Show (any source): best single shell in show, sponsor: Sanibel-Captiva Shell Club, winner: **Irene Longley**

Marilyn Northrop Memorial Award: Shell of Show: self-collected, sponsor: Gene Everson, winner: Gene Everson

Shell of Show: fossil, best single shell included in any fossil exhibit, sponsor: Sanibel-Captiva Shell Club, winner: **Irene Longley**

Best of the Blues: best in class 26, sponsor: Sanibel-Captiva Shell Club, winner: **Irene Longley**

Sanibel Superstar Trophy: most outstanding entry in Class 27, sponsor: Sanibel-Captiva Shell Club, winner: **Gene Everson**

Judges' Special Awards: one awarded by each scientific judge to

any exhibit, sponsor: Sanibel Captiva Shell Club, winners: Barbara Hansen and Carole Marshall

Judges' Merit Ribbons: awarded to a non-blue ribbon exhibit that judges felt was noteworthy of recognition, winner: Harry Berryman

S.C.A Trophy: best student exhibit, sponsor: Sanibel Community Association, winner: **Bethany Namour**

Artistic Division - Hobbyist

Myrtle Williams Weinstein Perpetual Trophy: best shell flower exhibit, sponsor: The Weinstein Family, winner: Leslie Anding

Gertrude A. Ford Perpetual Trophy: best miniature flower arrangement, sponsor: The Ford Family, winner: **Tyler Schoenherr**

Best Picture or Mosaic: sponsor: She Sells Sea Shells, winner: Carol & Martin Strange

Flo Ioreo Pertetual Memorial Trophy: best lamp, sponsor: Shellcrafters of the SCA, winner: Eileen Underwood

Wanda Will Perpetual Memorial Trophy: best jewelry, sponsor: Shellcrafters of the SCA, winner: **Elaine Alvo**

Dorothy K. Putnam Trophy: best mirror, sponsor: SCA, winner: **Ethel Weber**

Best Single Sailor's Valentine: sponsor: She Sells Sea Shells, winner: **Adelaide Coy**

Best Miniature Sailor's Valentine: sponsor: Sandy Moran, winner: **Cynthia Lamb**

Best Double Sailor's Valentine: sponsor: Lily & Co., winner: **Hans Peter Hoppenbrouwers**

Bettie K. McGowan Memorial Trophy: best holiday exhibit, sponsor: The McGowan Family, winner: **Susan Ross**

Best Shell Related Exhibit: sponsor: The Lesinski Family in honor of John & Grace Sheperd, winner: **Marilee McNeilus**

Daniel E. Malone Memorial Trophy: best student exhibit, sponsor: Island Reporter, winner: **Anna Fastenau**

Best in Show: sponsor: Bailey's General Store, winner: **James Cowperthwait**

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Artistic Division - Professional

Best Single Sailor's Valentine: sponsor: Sanibel Seashells, winner: **Suzanne Marie Dietsch**

Best Double Sailor's Valentine: sponsor: The Bank of the Islands, winner: **David Rhyne**

Best Miniature Sailor's Valentine: sponsor: Sandy Moran, winner: **Karine Mirzakhanyan**

Best Medium Sailor's Valentine: sponsor: Lily & Co., winner: Wendy Marshall

Best Flower Exhibit: sponsor: Susan Andrews, Sanibel Susan Realty Associates, winner: **Brandy Llewellyn**

Meta Neujahr Perpetual Award: sponsor: SCA & The Neujahr Family, winner: **Cheryl Whitten**

Best Picture or Mosaic: sponsor: Rosier Insurance - Marge Meek, winner: **Karine Mirzakhanyan**

Best Miscellaneous Exhibit: sponsor: Jerry's Foods, winner: Charles Barr

Best in Show - Captain Tom Clifford Memorial Trophy: sponsor: M. Patricia and Dennis Clifford, winner: **David Rhyne**

All Artistic

Judges' Special Award: one awarded by each artistic judge to any Artistic Division exhibit, winners: Donna Carey and Barbara Walling

Judges' Merit Ribbons: awarded to a non-blue ribbon exhibit that judges felt was noteworthy of recognition, winners: **Sandi Blanda** and **Susan Saunders**



Gene Everson was awarded the first Sanibel Superstar Trophy.



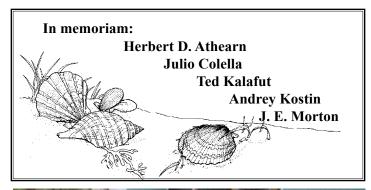
For the second year in a row, Pat Linn won the COA Award. She is shown here with her eight-foot display of Xenophoridae.



Barbara Hansen won the Sanibel Shell Fair Perpetual Gold Cup for Sanibel-Captiva self-collected shells.



Charles Barr won best miscellaneous art exhibit.





Herbert D. Athearn 1924-2011

Herbert Athearn passed away 9 January 2011 at age 87. He grew up the oldest of three brothers, all interested in natural history (as was their mother). As a teenager he became involved as a specimen collector for the Cambosco Scientific Company (later the Cambridge Botanical Society), supplying natural history specimens (insects, fish, reptiles, shells, plants, etc.) to various schools and universities. Herb's collecting trips brought him an intimate knowledge of the nations waterways and wilder areas.

After serving in the US Army during WWII, Herb worked for Glenwood Range Company in Massachusetts and volunteered at the Museum of Comparative Zoology at Harvard University, Cambridge, Massachusetts. He became Curatorial Assistant under William Clench and Ruth Turner, and worked with both the museum collection and with field collecting. Herb married and in 1955 moved to Tennessee where he worked as a postal carrier. He collected before the war, but added an intensity after moving to Tennessee. His cataloged collection of freshwater snails, mussels, and clams totaled over 23,000 lots (more than 13,000 were freshwater mussels) and at least 25% of his collection had yet to be cataloged upon his death. Arthur Bogan and Paul Johnson in Ellipsaria (March 2011, vol. 13, no. 1, pp. 31-33), wrote, "Herbert D. Athearn is generally regarded as the most widely traveled and prodigious collector of freshwater mollusks in the 20th Century. No other individual made such widely dispersed and prolific collections of freshwater mollusks. His collection records are often the first or only species locality data recorded for many water bodies."

From 2000 to 2007, Herb transferred his collection to the North Carolina State Museum of Natural History where it will keep several freshwater unionid enthusiasts quite busy, now and in the future.



Julio Colella 1926-2011

I just returned from the Paris Shell Show where I saw old friends, but sadly learned the bad news that our dear friend Mr. Julio Colella passed away at age of 85. He was one of the first shell collectors we met back in 1983 when we went to a meeting of Sociedade Brasileira de Malacologia (SBMA). He invited Jose and me to go to his home and literally gave us dozens of shells on this first visit! He and his family always made us feel welcome and at home during the many hours we spent looking through his collection. He had thousands of species of mollusks and at that time we had maybe 400. Julio was one of the founding members of Conquiliologistas do Brasil (member number six).

After his wife Myra passed away a few years ago he moved to Santos (a city on the beach about 60 kilometers from São Paulo) with his collection. In this picture are both Jose (right) and myself (left), with Julio and Myra in the middle.

Marcus Coltro

It is with great regret that we have to inform you that our dear friend Andrey Kostin died in a tragic accident on Saturday 2 July. We are deeply saddened, beyond words, and our thoughts are with his family. The shell community lost a passionate collector, so full of life, humor and good spirit. He was an avid diver and traveler in search of shells and adventure. Andrey shared our love for the ocean and our vision of discovering more secrets of the sea. When diving for shells in the future we will always remember his enthusiasm during our shared travels and adventures.

Jana and Felix Lorenz



Andrey Kostin 1978-2011

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Ted Kalafut 1941-2011

I first met Ted Kalafut at the January 1976 Greater Miami Shell Club Annual Shell Show. Ted and I spoke only briefly during that event and I realized he knew shells and shell collecting. Within the next year we had our first collecting trip together,



Conus kalafuti da Motta, 1987

and by 1978, Ted entered a shell show exhibit for the first time. This would mark the beginning of Ted's many Florida and Caribbean shell exhibits, most taking top honors. We collected together on a number of trips and soon developed several special collecting spots throughout Florida, the Keys, and then over to the Biminis, Eleuthera, Bahamas, Bonaire, and especially Roatan, Honduras. We worked the lobster traps at most sites and I soon discovered it was best to let Ted approach the fishermen alone. He would wander over with a six pack under one arm and the other extended for a handshake. Within minutes the group was laughing and trading stories. After about 30 minutes Ted would walk away with a large box of shells and the fishermen wishing him the best. I would have been lucky to get the time of day from the same group.

Ted discovered some 8 or 10 new species and he ended up having maybe half that many named for him. A favorite was the small but often bright red *Conus kalafuti* (see his story about this shell in the December 2007 *American Conchologist*). Ted ended up spending 9 to 10 months of the year on Roatan and was a shell dealer for a number of years. There are a number of collectors who have Honduran shells because of Ted. In his prime collecting days he could free-dive to 60 or 70 feet. Even when such feats were things of the past he kept up his interest in shells and became a talented photographer. He will be missed by those who knew him, and for those who didn't, just ask and we can tell you lots of stories.

Bob Pace



John Edward Morton 1924-2011

John Edward Morton died on the 6 March 2011 at the age of 87. John was a graduate of Auckland University and moved to the University of London to study for his PhD under the supervision of Alistair Graham. He remained in London as a lecturer until he returned to New Zealand in 1960 to take up the position of foundation Professor of Zoology at the University of Auckland. He was an inspirational teacher, instrumental in establishing the Leigh Marine Laboratory and built an excellent department where he stayed until his retirement. He was actively engaged in environmental causes in New Zealand, particularly in the latter stages of his career and after his retirement.

He produced many outstanding works on mollusks, including his book "Molluscs," first published in 1958, which proved very popular and went to nine editions. He published several other books, including some on seashore ecology, the most recent on Pacific shores in 2004.

Winston Ponder (a JEM student)



2011 COA Convention

Tom Eichhorst (photos by the author and other COA members)

The 2011 COA Convention was held at the Radisson Resort at the Port, Cape Canaveral, Florida, 13-17 July. For many attendees this was a trip down memory lane as we last met here 10 years ago. The hotel was the same huge rambling affair with great amenities and a friendly and helpful staff. The pool still looked like it had been cut out of a cliff of huge boulders and the grounds still had numerous grass-lined trails through areas of palm trees and other tropical vegetation. Surprisingly, even though the rooms had been upgraded and refurbished, the room rates were the same as 10 years ago! New this year was the venue for the bourse. For 2011 we gathered under a huge tent-like building for a bourse that included 42 dealers. A grand ending for a wonderful adventure. What about the other events?

COA Convention 2011 opened with a welcome party, "Space Coast Treasures." This gala featured lots of folks in pirate costume, some really great food and drinks, a couple of mermaids, and fun musical entertainment. COA President Alice Monroe greeted the 188 attendees on behalf of the Astronaut Trail Shell Club, sponsor of this year's event. Like a swimming duck, things looked calm and well controlled on top of the water, but underneath there was some furious paddling. Convention goers saw chairpersons Alan Gettleman and Doris Underwood at the podium calmly orchestrating events and introducing speakers, but "underneath" were numerous volunteers (from various clubs) whose paddling ensured the talks, auctions, dinners, field trips, meetings, and registration went smoothly and without incident. Thanks are certainly owed to the many who made this year's event such a success. The hard workers this year included:

Dona Blaine	Matt Blaine	Jim Brunner
Linda Brunner	Steven Coker	Jim Cordy
Ed Dunham	Alan Gettleman	Phyllis Gray
Eleanor Hillman	Linda Koestel	Harry Lee
Bob Linn	Pat Linn	Betty Lipe
Bob Lipe	Charlotte Lloyd-Thorpe	Bill Lyons
Don Pisor	Emilio Power	Rachele Ross
B.J. Shouppé	Nan Stewart	Doris Underood

Sadly, as reported in the last issue, Bobbi Cordy, originally co-chair with Doris Underwood, passed away in February. Alan Gettleman stepped up and filled the role of vice chair to ensure a perfect convention.

The oral auction featured over 100 lots of specimen shells and shell-related artifacts. Auctioneers Harry G. Lee and Charlotte Lloyd worked the crowd until a total of almost \$7,500 was raised for COA. This will go towards our annual academic grants awards, again totaling \$15,000 for the year 2011. Thanks to all who participated, both those who bought items and those who donated items to be auctioned. As an example of our membership largess, Bob and Juying Janowsky, of Mal De Mer Shells, Books, & Stones (www.mdmshellbooks.com), donated two gift certificates, one for \$50 and one for \$100. The \$50 gift certificate sold

for \$80, and the \$100 gift certificate sold for \$120!

The programs this year, as usual, were varied and interesting: ranging from tips on shell photography, to pearl culture, to rare shells, to marine and land shells of the Hawaiian Islands, and so on. Also presented were the specifics about the 11 grant recipients who were awarded COA Academic Grants for 2011.

The penultimate convention event was the banquet on Friday evening where Jose Leal brought everyone up to speed on recent happenings at the Bailey-Matthews Shell Museum on Sanibel Island, Florida. The ultimate experience was, of course, the bourse, a world-renown event where thousands of shells and related items are displayed for sale. Also on sale this year were several new books - enough to put my checked luggage in the "overweight" category.

So there you have COA 2011. A week spent with new and old friends, immersed in shells and shell-related activities, in a wonderful vacation spot. The COA convention is perhaps the pinnacle of benefits of COA membership. If you haven't been, you really do owe it to yourself to makes plans now to attend next year's convention. Set aside a bit of money each month and set the upcoming convention in Philadelphia as a goal for 2012. Next year's event will be a "joint" meeting of the American Malacological Society (AMS) and COA. AMS will meet from Saturday 16 June to Thursday 21 June 2012. COA will meet from Tuesday 19 June to Saturday 24 June 2012. The hotel will be the Crowne Plaza in Cherry Hill, New Jersey (just minutes from the Academy of Natural Sciences, Philadelphia). There is a lot to see and do within a short distance from the hotel. Hopefully, I'll see you there.



Dennis Sargent providing some smooth melodies at the welcoming party. Photo by John Jacobs.

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Left to right, pirates: Karlynn Morgan, Charlotte Lloyd-Thorpe, & Vicky Wall. "Avast ye maties!" Photo by John Jacobs.



Sue Hobbs directs traffic behind her display tables as shellers line up with their purchases. Photo by John Jacobs.



A unique shell show entry by Harry Lee - a pair of *Semele rupicola* Dall, 1915 (the rock semele) that have matured inside a bottle. Photo by John Jacobs.



THE BOURSE!!



The lineup for the bourse starts 30 minutes before the opening "bell." Photo by T. Eichhorst.



Academy of Natural Sciences, Philadelphia, the venue for the 2012 COA convention.

Sacred chank revisited Ken Rose

After the article by Jesse Todd that mentioned and illustrated *Turbinella pyrum* (Linnaeus, 1758), the sacred chank (Conch Shells on Coins and Their Use) in the March 2011 *American Conchologist* (vol. 39, no. 1), we had a follow-up by Harry Lee (Historical notes on a sinistral sacred chank - *Turbinella pyrum*) in the June 2011 issue of *America Conchologist* (vol. 39, no. 2). Luckily, Kenneth D. Rose, a professor at the Center for Functional Anatomy & Evolution, Johns Hopkins University School of Medicine, Baltimore, Maryland, saw these articles and decided to respond with a few notes and photographs of his sacred chank

Ken Rose (who was cited by Harry Lee, (Rose, K. 1974. The religious use of *Turbinella pyrum* (Linnaeus), the Indian Chank. *The Nautilus* 88(1):1-5. Jan.)* has been interested in shells for better than 50 years. As a teenager in the 1960s he was a member of the New Jersey Garden State Shell Club, and can lay claim to two mentors from that time - Bill Old and Tucker Abbott. If those two couldn't get a kid interested in shells, no one could. Ken has collected since that time and made use of numerous overseas paleontological expeditions over the years to also actively collect shells. In the summer of 1971 he was Gary (Geerat) Vermeij's field assistant in West Africa. After reading Harry Lee's article on the sinistral sacred chank, Ken wrote to Harry and sent along some interesting photographs. Harry copied me (the editor) and we are thus able to offer up Ken's words and his incredible shell.

"Really enjoyed your article in the June American Conchologist on Turbinella pyrum and the rarity of sinistral specimens. I was surprised and pleased to see you cite my note in Nautilus, written when I was an undergrad. (Probably it's only citation!) That note was inspired by a course in Hinduism I took upon returning from a year abroad (serving on a paleontological expedition in Egypt and India). A year or two later I wrote to Tucker Abbott about the paper I'd written and he encouraged me to submit it, but asked if I would include mention and a photo of the MCZ sinistral specimen, which was facilitated by Ken Boss and Ruth Turner (I was a grad student at the MCZ at the time).

I enjoyed my time in India (1969) so much that I was determined to get back there somehow. The opportunity to do so emerged a decade ago when an Indian colleague and I agreed to collaborate on a project to search for Paleocene-Eocene mammals (my specialty) in India. With support of National Geographic, we began our search in Rajasthan and continued into Gujarat where we were successful and have an ongoing project, still supported by NGS (hope to return in January). On one of our trips a few years ago, I picked up a beautifully carved *Turbinella pyrum* (9.5 inches) in the Tibetan bazaars in New Delhi. Despite years of experience in bargaining, I was unable to get a significant reduction in pricebut I finally decided that with my love of shells, and Ganesh, I had to have it nonetheless. I have not regretted the purchase." (Ken Rose, Aug 2011)



*Ken Rose's article, The religious use of *Turbinerlla pyrum* (Linnaeus), the Indian Chank, *The Nautilus* 88(1):1-5, Jan. can be seen online at: http://www.archive.org/stream/nautilus88amer#page/n5/mode/2up

