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A medley of "red cones"... *C. granulatus* and *C. kulkulcan* collected at 25-40 feet on reefs off Sandy Bay, Roatan Island, Honduras. Photo courtesy of Randy Allamand.

Note from the editor

It is always a renewed pleasure to put together another issue of *The Cone Collector*. Thanks to many contributors, we have managed so far to stick to the set schedule – André's efforts are greatly to be praised, because he really does a great graphic job from the raw material I send him – and, I hope, to present in each issue a wide array of articles that may interest our many readers. Remember we aim to present something for everybody, from beginners in the ways of Cone collecting to advanced collectors and even professional malacologists!

In the following pages you will find the most recent news concerning new publications, new taxa, rare species, interesting or outstanding findings, and many other articles on every aspect of the study and collection of Cones (and their relationship to Mankind), as well as the ever popular section "Who's Who in Cones" that helps to get to know one another better!

You will also find a number of comments, additions and corrections to our previous issue. Keep them coming! These comments are always extremely useful to everybody. Don't forget that *The Cone Collector* is a good place to ask any questions you may have concerning the identification of any doubtful specimens in your collections, as everybody is always willing to express an opinion.

I will end with the (admittedly rather loose) translation of part of the Introduction to a book by Bento Morganti on medals and coins, entitled *Nummismalogia* published in Lisbon in 1737:

"If you do not care for the style, and the method, that I use, you will have to be patient, because I cannot know your thought; but if by reading this you find any errors (as you may well find) I will be greatly obliged to you if you alert me to them, so that by correcting them your taste will be more satisfied." (*)

(*) – In rather archaic Portuguese, here is the original version: "Se não te agradar o estylo, e o methodo, que sigo, terás paciência, porque naõ posso saber o teu genio; mas se lendo encontrares alguns erros, (como pode suceder, que encontres) ficar-tehey em grande obrigação se delles me advertires, para que emendando-os fique o teu gosto mais satisfeito"

Bento Morganti in *Nummismalogia*, ou breve compilação de algumas medalhas dos Emperadores romanos, de ouro, prata, e cobre, que estão no Museo de Lourenço Morganti [Of. de Joseph António da Sylva Lisboa, 1737]

A.M.

Who's Who in Cones: Alexander Medvedev

In spite of the fact that my native city is called "the port of the five seas", I saw the big water only when I was of conscious age. The underwater world of Sri Lanka, Maldives and Egypt became a real discovery for me, but this will come later.

I was born in 1954 in Moscow, Russia. Biology was not my favorite subject for a long time. I loved animals, I had an aquarium and I walked my parent's poodle.

My childhood and youth were filled up with sport, outdoor games and later theatre. I got my graduate degree in one of the best Moscow theatre schools.

My first personal encounter with Nature happened in 1986 when I was hired as a manager of Moscow's famous Durov animal theatre. There was not much interest in shells at the place, but the laws of Nature we experience on our own backs. For some time I concentrated on penguin health, tiger feeding, porcupine escape and elephants on tour. The vivid memories from that time still entertain me.

Later, a new turn in my career brought

me to work for the USSR Society of Theatre Professionals. For a long time this society had a good standing in Europe and elsewhere and the job gave me the chance to see the outside world. The organization went into decline in 1991 together with the namesake country. Through the rubble of the iron curtain we saw the shoots of new opportunities. From then on we could do our own business and most importantly travel for pure leisure.

Probably it was my wife Margarita who initiated my interest for collecting sea shells. She is a landscape architect and she is attracted by the variety of shells forms and colors. From our trips she has been always bringing sophisticated *Haliotidae*, *Turbinidae*, *Strombidae* and *Muricidae*.

In 2001 we went together to Thailand, where we spent several days on Phuket Island, which was where I seriously began to consider collecting shells. There we met Jitrakorn Simanok and other shell collectors and dealers

> and also dived. This trip started my interest in Cones. When I wrapped the shells in toilet paper to take back to Moscow, I felt myself a collector for the first time. All my subsequent trips are more or less related to Cones.

> My daughter helped me to place the first Internet orders; she wrote letters in English to foreign dealers and sorted out the correspondence and bills. I had to manage later on my own since she could not help me all the time. As you know on the auctions the fate of the bid is decided in a matter of seconds. So my English vocabulary grew alongside my Cone collection.

> Collecting opened a new dimension of life for me. In fact, not only one dimension but the whole new multi-

dimensional world! History, geography, biology, photography became part of my life now.

Most importantly, thanks to Cones I discovered the community of amazing enthusiasts who are united by the same passion even though they live in different parts of the world.

Dear friends, I am a novice amongst you. And it is a great honor for me to personally know several of you, especially António Monteiro, Dr.Thach, NN, Guido T.Poppe, Car-



los M.L. Afonso. I value those relations a lot. My special thanks to Paul H. Kersten who corrected my mistakes with incredible patience.

I am sincerely happy that the images from my web site attracted attention of the prominent collectors and appear in electronic indexes. It is my humble contribution in our common cause.

Moscow is a port of five seas only in theory, practically we are landlocked. Nevertheless there are true shell fans in Moscow and other parts of Russia who are dedicated collectors, researchers and scientists. Altogether we are the Russian shell club.

Caribbean Corner: André Poremski

Mindanus from Provo

In August I was fortunate to travel to the Turks & Caicos Islands with my wife and father. Although it wasn't necessarily a "shell trip" per se, I did manage to do some night snorkeling off the leeward side of Provicialis Island.

Provo is an incredible place, crystal waters, the softest, whitest sand I have ever seen, and some pretty nice shells! On one particular night snorkel, we found small plots of turtle grass interwoven with patch reef at a depth of 10ft. It was within these small grassy areas where we found an interesting cone, most certainly a member of the *Conus mindanus* complex. Specimens averaged 16 mm in size (length) and varied in color/pattern from near-white with small tan flecks to a richer mottled pattern of rust brown over a cream background with datches connected by spiral lines.

There seems to be a never-ending palette of local varieties of *C. mindanus* cones and I will continue to enjoy figuring new populations here in TCC!

Caption

- Fig 1 C. mindanus Provincialis, 16.4 mm
- Fig 2 C. mindanus Provincialis, 16.3 mm
- Fig 3 C. mindanus Provincialis, 16.4 mm
- Fig 4 C. mindanus Provincialis, 15.7 mm
- Fig 5 C. mindanus Provincialis, 15.5 mm



Some West Atlantic Cones António Monteiro

The Cone populations from the Western Atlantic Ocean – and in the particular from the Caribbean Sea – are still relatively poorly known. A large number of species has been described from the area (mainly the Caribbean and Brasil), especially in recent years, but we still lack a proper revision of the available taxa that will enable us to get a global picture and end up with a clear idea of the valid species present and their relationships.

Naturally, every bit of information is always useful and we have recently got from Randy Allamand a few photos of live animals [thanks to Paul Kersten for establishing the contact with Randy], which we have the pleasure of sharing with our readers.

- Photo 1 *Conus arangoi* Sarasua, 1977, from Cay Sal Bank, Bahamas
- Photo 2 *Conus granulatus* Linnaeus, 1758, from Cay Sal Bank, Bahamas
- Photo 3 *Conus kulkulcan* Petuch, 1980, from Roatan, Honduras. 31.4 mm



An Interesting Puzzle from Somalia

Gavin Malcolm

Recently, I received a small 30mm brown cone which was collected by some fishermen operating offshore from Somalia and selling their catch in Djibouti. It was a very good match to a specimen of *C. balteatus* from the Mascarene Ridge illustrated on Plate 6 fig. 33 in the *Manual of the Living Conidae* (Röckel et. al., 1995). Some informal discussion with Mike Filmer suggested that it might be *C. anosyensis* which was described recently from southeast Madagascar (Bozzetti, 2008).

Partial description of the section on colour of *C. anosyensis* in the original Italian description:

"Colore grigio-lilla uniforme sull'ultimo giro, presenti sporiadiche macchiette bianche puntiformi irregolarmente distribuite prevalentemente sulla metà anteriore, rampa subsuterale degli ultimi 4 giri de teleoconca e spalla dell'ultimo giro ricoperte da macchie marroni allungate alternate da macchiette bianche, protoconca e primi giri de teleoconca bianchi, interno della bocca e labbro interno lila-azzurro, presente una banda verticale violetta sulla parete interna del labbro sesterno, periostraco marrone, opaco."

Approximate translation to English:

Color a uniform grey-lilac on the last whorl, present on the body are sporadic white spots mainly distributed on the anterior portion of the shell, subsutural ramps on the last four whorls are covered with long brown spots alternating with white ones, protoconch and early whorls of the teleoconch are white, inside the aperture and lip is lilac-blue, presenting a vertical band of violet on the inner wall near the lip, the periostracum is brown, opaque.

This description was puzzling since the picture of the holotype in the original description showed a brown shell. Luigi Bozzetti stated the colour was lilac grey and he chose only to compare the shell to *C. carnalis* Sowerby III, 1879 from the Atlantic.

The 30mm holotype of *C. anosyensis* (Fig. 1) is distinguished by its slender shape, small scattered white spots on a grey-lilac body whorl, a violet aperture and a brown and white patterned spire. It has a pink protoconch although the description suggests that the protoconch is white. The picture of the Holotype (Fig. 1) deposited in MNHN, shows it has developed the grey-lilac tones.

The specimen C. sp (Fig. 2) from my collection was obtained from the fishermen operating off Somalia. It is a very good match to the type of C. anosyensis despite being found much further north. Other specimens in the same batch of shells (Figs. 3-7) from the fishermen are informative.

The specimen in Fig. 7 has nodules on the shoulder similar to *Conus balteatus* Sowerby I, 1833. Figs. 5-7 illustrate an increasing breakdown of the brown colour, which is replaced by lines and blue/violet areas. Note the reddish protoconch on all specimens.

Close examination of my brown specimens shows that there is a very shiny thin surface layer of opaque brown, almost like nail varnish, which may indeed be an unusual periostracum or a thin layer of nacre. Below this brown layer, there is a lilac grey ground colour.

My brown specimens also match a specimen illustrated in the *Manual of the Living Conidae* (Röckel et. al., 1995), plate 6, Fig. 33 as *C. balteatus*. The plate 6 illustrates a shell from the Mascarene Ridge in the Indian Ocean (about half way between the Madagascar type locality of *C. anosyensis* and Somalia). This specimen stands out as different from the other specimens figured on the same plate. It is more elongate with smoother rounded shoulders when compared to the other specimens of *C. balteatus* illustrated on that plate.

Fig. 8 is a specimen of *C. balteatus* from Mozambique. Note a weak white band at the shoulder of the lightcoloured *C. sp.* from offshore Somalia has developed (Fig. 7) a feature found on many specimens of *C. balteatus*.

In addition to the other characteristics linking *C. ano-syensis* to *C. balteatus*, the protoconch of *C. balteatus* is pink – just like that of the *C. anosyensis* Holotype and the Somalia cones.

The set of 6 Somali specimens appear to intergrade in shape and colour pattern between *C. anosyensis* and specimens of *C. balteatus* as illustrated in *Living Conidae*. We should therefore perhaps consider *C. anosyensis* to be a synonym and an extreme form of *C. balteatus*.

However, the Type specimens and Type representations of the names associated with *C. balteatus* as synonyms (Figs. 9-13) do not provide any obvious match.

In summary, my Somali specimens match the Holotype *C. anosyensis* and also seem to match the two specimens listed as *C. balteatus* Plate 6 Figs. 28 & 33 in the *Manual of Living Conidae*. However, these RKK illustrated specimens are significantly different from any of the types of *C. balteatus* and its synonyms, so they may well be specimens of *C. anosyensis*.

In addition, I tested the Somali specimens against *Conus rattus* Hwass, 1792. The Type figures of *C. rattus* and its synonyms all have a much broader form at the shoulders and a colour pattern with middle and shoulder bands. The Holotype of *Conus semivelatus* Sowerby III, 1857 (Fig. 16) from the Red Sea area and a modern specimen in the Ed Heiman collection of a specimen of Red Sea *C. rattus* (Fig. 17) illustrate well the broad shoulder and colour pattern. The brown colour of fresh shells is thought to fade to lilac grey with time.

None of the specimens of *C. rattus* inspected in several collections had a pinkish red protoconch. The middle, lighter-coloured band of *C. rattus* is missing on all the Somali specimens.

The correct identity of the Somali specimens remains a matter of some judgement... However, I think that I will label my specimens as *Conus anosyensis*.

My thanks to Pierrot Vachon, a keen collector based in Djibouti for the shells and to Bill Fenzan, Mike Filmer and Ed Heiman for their pictures and constructive suggestions.

References

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Conus anosyensis (Gastropoda: Prosobranchia: Conidae) nuova specie dal Madagascar Sud-Orientale., *Malacologia Mostra Mondiale*. Vol. 58, pp. 14-15.

Röckel, D., Korn, W., & Kohn, A. J. 1995.

Manual of the Living Conidae. Hemmen, Wiesbaden, 517 pp.

Figures

- Fig. 1 C. anosyensis Bozzetti, 2008 (Holotype)
- Fig. 2 *C. sp.*, Offshore Somalia, col. G. Malcolm
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- Fig. 8 C. balteatus, Mozambique
- Fig. 9 C. balteatus (Type Fig.)
- Fig. 10 *C. pigmentatus concolor* Barros E Cunha, 1933 (Holotype)
- Fig. 11 C. moussoni Crosse, 1865 (Holotype)
- Fig. 12 *C. pigmentatus* Adams & Reeve, 1848 (Holotype)
- Fig. 13 Possible Lectotype of C. balteatus, ANSP
- Fig. 14 *C. balteatus*, Madagascar, similar to *C. cernicus*, col. G. Malcolm
- Fig. 15 C. cernicus Adams, 1869 (Type Fig.)
- Fig. 10 *Conus semivelatus* Sowerby III, 1857, Red Sea (Holotype)
- Fig. 16 *C. rattus* Hwass, 1792, Red Sea, col. Ed Heiman



Conus milneedwardsi From South Africa

Conus milneedwardsi Jousseaume, 1894 is a well-known and most spectacular species occurring in the Indian Ocean. Once very rare indeed, it has recently been collected in some numbers along the Mozambique coast, as well as in India.

Manuel Tenorio & António Monteiro, in their recent monograph on South African cones, included in the series *A Conchological Iconography*, edited by Guido Poppe, listed the species as one of the non-endemics occurring in the South African region (North Natal).

Recently, our friend Jon Singleton obtained one from a number of live specimens dredged by Felix Lorenz about 7 kilometres North of Pt. Shepstone, and 5 kilometres off the coast, from a depth of 100 metres.

Jon kindly decided to share a photo with all of us.



Little Stranger Jon Singleton

This specimen I obtained from an old collection, with the location being off Balut Island, Philippines.

The early whorls have some encrustation, so possibly a shallow water cone rather than a tangle net specimen.

The main body whorl looks smooth, but has old lip lines faintly discernible, all being about 5 mm apart. Spiral whorls slightly concave, with three fine parallel grooves.

This cone seems to have had a hard life, and there are four healed breaks on the final whorl. A few light brown markings which could possibly form a broken mid-body band.



Some thoughts on *Conus saecularis* Jon Singleton

Conus saecularis was named and described by J.C. Melvill in 1898, within a publication entitled *Memoirs & Proceedings of the Manchester Literary Philosophical Society*, Vol. 48. The species is represented by a Syntype in the BMNH, size 29 × 12 mm, and three further syntypes in the NMWC. Two of these syntypes, illustrated within the *Cone Manual*, appear to be dead collected and slightly eroded specimens without any colour or pattern. The type locality is stated to be the Malcomb Inlet, Persian Gulf, from a depth of around 90 metres.

I have not been fortunate in seeing this original publication, so do not know if there were any detailed drawings showing the location. The "Malcomb Inlet" is not marked on any modern maps, nor in any atlas I have checked back to a 1960 edition. I can only assume the name was of local early European origin and has since been replaced with a National Arabic name.

The Seashells of Eastern Arabia has an extensive list of Arabic/English names, but again "Malcomb Inlet" is not listed. This book also illustrates a Syntype but with the location of Gulf of Oman, and the *Cone Manual* indicates a small region on the northern side of the Gulf of Oman as a region where *C. saecularis* occurs, and likely just for the type material. However, to me the Gulf of Oman is not part of the Persian Gulf, though possibly it may have been regarded so a century ago. Certainly there is no doubt that the *C. saecularis* syntypes are Eastern Arabian.

The fact that the Eastern Arabia book only shows a syntype of *C. saecularis*, is an indication that the authors did not have a specimen in good condition to illustrate. For myself, I have not heard of any modern records of this cone from the Eastern Arabia region. Possibly one of our *TCC* readers may have some knowledge of a recent discovery.

Modern collecting has proven *C. saecularis* stretches across the northern Indian Ocean and into the Western Pacific. The *Cone Manual* shows the extensive range, but Australia is not included, as to my knowledge it had not been discovered at the time of publication.

The first specimens surfaced in Australian waters in the late 1990's. At present it has only been found in Queensland waters, around several Barrier Reef locations from the Torres Straits, and south to off Mackay. I have sighted about ten specimens, most live-taken and good sized, from 30 to 38 mm in length. Most were privately trawled from between 40 to 80 metres depth, and two were collected with scuba from just 30 metres. It is interesting to note that the Australian specimens are being found in far shallower water than at other W. Pacific locations.



The two illustrated specimens are both Australian. The one on the left is a 32 mm cone from the Lodestone Reef, and the one on the right a 31 mm specimen from the Hunt Reef.

References

1995. *Manual of the Living Conidae*, D. Röckel, W. Korn & A. Kohn

1995. *Seashells of Eastern Arabia*, A. Bosch, S. Dance, R. Moolenbeek & P. Oliver

Australian Corner: Jon F. Singleton

Conus exiguus - 36

Another of the well known New Caledonia cone species is also known from Queensland waters. It is certainly rare, but odd specimens have been turning up since the late 1960's. I do not know of any coastal finds, all seem to be from the Great Barrier Reef, from the Swain Reefs to east of Cairns. From the few I have sighted, none were the conventional brown or black and white as seen on most New Caledonian specimens.



The larger greyish specimen (Fig. 1) came from the unnamed reef east of Cairns, and the smaller brown and beige specimen (Fig. 2) is from the Swain Reefs.

Conus gabelishi - 37

The story of the cone which eventually became known to us as *C. gabelishi*, dates back to the early 1900's. A specimen is held within the Australian Museum Sydney, which is stated to be from South Australian waters, but the discovery and other details have been lost in time.

In the late 1960's and early 70's the West Australian Museum carried out several research expeditions from the western coast of the State. At several locations between Bunbury and Geraldton a few small unidentified cones surfaced in the dredge operating at a depth of 150 metres. The museum had some 10 specimens ranging from dead and faded to live-taken. A specimen was sent overseas to a cone authority, who identified it as a *C. infrenatus*, an endemic South African species.

The late 1970's saw a new fishing industry commence which was based at Albany, on the southern coast of W.A. The vessels operated in deep water within the western half of the Great Australian Bight, and a by-product was many fine shells which became available to collectors. Sadly the venture proved uneconomical, and the industry stopped after two seasons.

A few small Australian *infrenatus*-like cones had been found amongst the shell harvest, which were sent overseas for study. These were eventually named *Conus gabelishi* by da Motta & Ninomiya in 1982. The Holotype size 35.5×19.3 mm was deposited in the NSMT, and sadly neither of the paratypes came to Australia. The authors of the published paper appear to have done little research into the species, and their only stated location was the type locality.

The South Australian locality for the old Sydney specimen seems to be confirmed. Trawlers working out of Port Lincoln, S.A., landed two dead, eroded specimens of *C. gabelishi* in the 1990's, though the exact location is uncertain.

The decline of local fishing industries has meant *C. gabelishi* is no longer available to collectors. The only specimen I have knowledge of being found in the 21st century was dredged off Albany by a research vessel, and went into the W.A. Museum collection.



Figures

Figs. 1-3 – *C. gabelishi*, 25-30 mm Fig. 1 – Western G.A.B. Fig. 2 – Western G.A.B. Fig. 3 – Jurien Bay

Reference

1982. *Publ. Ocas. Soc. Port. Malac.*, No. 1, da Motta & Ninomiya, description of *C. gabelishi*

Conus crocatus - 37

Conus crocatus is one of many wide ranging species of *Conus* which are rarely found in Australian waters.

The largest specimen of which I have any knowledge, is a 75 mm *crocatus* found off the Briadhurst Reef, some 100 kilometres off Townsville, Queensland. This cone was collected over 30 years ago, and sadly the present whereabouts is unknown.

I only possess two specimens, one a large 61×30 mm (Fig. 1) found alive within the Swain Reefs complex. A far-from-gem specimen which shows a lot of erosion on the ventral side. My other, a small 33×14 mm (Fig. 2) was trawled east of Cape York. Other than these, I have only seen three others in local collections.

C. crocatus has also been found off the N.W. of Western Australia. Two live specimens were trawled off the Hibernia Reef from 40 metres. I was fortunate in obtaining the smaller specimen, $39 \times 18 \text{ mm}$ (Fig. 3).

There have been many deeper water research expeditions around the Australian coast in recent years. However all usually work at depths of 100 metres and below, so no *crocatus* have surfaced. this indicates the depth habitat of *crocatus* is well within range of normal scuba operations.



Conus biliosus - 38

Conus parvulus is a well-known species and common along the northern Queensland coast. Nearly all Australian shell books use the *parvulus* name, and it still is in use by some dealers. However the 1995 *Cone Manual* placed *parvulus* as a synonym of *C. biliosus*, and now most local collectors are in agreement.

The Queensland *C. biliosus* are usually slightly darker in colour than Indian Ocean specimens, and also have a dark to near black anterior marking. A rather unique population of *biliosus* I have only seen from Cape Tribulation has some extra dark brown to black markings on the main body whorl. These are mainly seen in older collections, as the Cape is also famous for its "bouncing rocks", so is now a National Park.

Although a common species in northern Queensland, it is ultra rare from West Australia. I know of only one specimen. I was given a bag of shells collected at Cape Talbot, a remote locality on the far N.W. coast. Amongst was a sub-adult *C. biliosus*, the paler greyish form, size 32 \times 17 mm (Fig. 4).

The three illustrated Queensland specimens range in length from 47 to 53 mm. Figs. 1 & 2 are the standard form, and Fig. 3 the Cape Tribulation form.



Conus legatus - 39

Despite the *Cone Manual* stating that *C. legatus* is absent from Australia, I can assure collectors that it is not an uncommon species off the N.W. coast of Western Australia.

C. legatus is found around several of the offshore islands and reefs, usually from around 10 to 15 metres depth. I collected several on my first visit to the region in 1984, and have sighted several others collected in later expeditions. All I have seen are the standard pale pink and tented form, none possessing the glossy mahogany-coloured patches seen from the Central Indian Ocean.

Over in Queensland waters, *C. legatus* remains a rarely collected species, and only three small sub-adults sighted.

The illustrated specimens are a 44×20 mm cone from the Scott Reef, W.A. (Fig. 1), a 30×14 mm from the Hibernia Reef, W.A. (Fig. 2), and a 30×12 mm Queensland specimen from the Swain Reefs (Fig. 3).

Reference

1995. *Manual of the Living Conidae*, D. Röckel, W. Korn & A. Kohn



Conus stercusmuscarum - 40

Conus stercusmuscarum is a species which seems to have avoided me during my wanderings, and I have only ever self-collected one specimen, on a trip to the Montebello Islands which are about 80 kilometres off the N.W. coast of Western Australia.

Without doubt it still is today a rarely collected species from Australian waters. The only other W.A. locations known to me are Cartier and Cassini Islands, also off the N.W. coast.

Likewise over in Queensland waters *C. stercusmuscarum* is seldom collected. The few known locations are well scattered along the Barrier Reef, and I have only obtained two specimens, and seen few others.

The illustrated adult specimens range in size from 50 to 52 mm. Fig. 1 from the Montebello Is., Fig. 2 Cartier Is., and Fig. 3 Lizard Island, Queensland. Fig. 4 is a sub-adult 37×19 mm from the Gould Reef, Queensland.



Conus generalis - 41

The Keppel Bay Shell Club opened their own Shell Museum in Yeppoon just two years ago. It is situated alongside the local Tourist Office, so is blessed with a lot of visitors, especially during the tourist season.

Many shells are donated to the museum to be sold to interested tourists, including a lot of just "showy" specimens at 50 cents apiece.

I was doing some behind the scenes work when I noticed a large cone among some miscellaneous shells awaiting room in the sales basket. So home it went with me back to West Australia as payment for work done!

The cone was an old *C. generalis*, exceptionally large at 100×49 mm, despite having lost 2-3 mm off the protoconch whorls. the main body whorl is covered with very distinctive old lip lines about 5 mm apart.

I can only assume this came from an old collection, and likely from Queensland waters. I guess a lot of collectors would pick it up, laugh, and then chuck it back in the junk shells box. However to me, this oldie has "character", and for its size alone is worthy of a place in my cabinet.



An Unusual C. Thalassiarchus

Our friend Paul Kersten has just acquired two unusual specimens of *Conus thalassiarchus* Sowerby, 1833. They were supplied by the well-known malacologist Emmanuel Guillot de Suduiraut and come from an apparently recently discovered population in Palawan. They seem to remain relatively small (about 40-60 mm). The darkest one actually has some pattern, but in normal day light and without magnification it seems totally black, except for a small strip along the lip.

This most remarkable dark form is shown in Figure 1, the two remaining figures showing other variations of the same species, for comparison.



Cone Shells and Human Culture

Ashley Chadwick & Toto Olivera

Dept. of Biology, University of Utah

Our research group is interested in Conus venoms and how each venom component acts on its physiological target. We initiated an outreach program for elementary, middle and high school students that uses cone shells for a multidisciplinary scientific experimental module combining chemistry and taxonomy. As one facet of this outreach, we are preparing both printed literature and web-based materials, an aspect of which is how Conus has been used by different cultures. What follows is what we have gleaned from a quick survey of the literature. Because Conus collectors are probably aware of novel cultural aspects that involve cones, we encourage readers of the Cone Collector to provide input on additional connections between cone shells and human culture. Please send by email any materials or photographs to the following address: olivera@biology.utah.edu

It is believed that cone shells have been used by humans as beads for perhaps 100,000 years (Conniff, 2009; Hayes, 1964). The archeological site of Uruk, in Mesopotamia (present-day Iraq), is widely believed to be the first human urban settlement. One discovery at Uruk was a necklace adorned with cone shells, direct evidence for the use of cone shells as beads in the earliest cities. (Fig. 1) Given their beautiful shell patterns, variable size, and sturdy composition, this is no surprise. Rubbing off the earliest spire whorls makes stringing a cone shell relatively easy.

Cone shells have continued to be used as jewelry throughout history. Today, the use of cone snails as jewelry stretches from mountain tribes in the Philippines (Fig 2.), to Hawaii (pukka shells) and many cultures in Africa. Cone shells have also been used as bracelets. In Figure 3, shell and glass artifacts recovered from Philippine burial sites are shown. These have been dated from the 10th Century to the beginning of the Spanish Colonial period in the 16th Century. The photo shows three shell bracelets and one glass bracelet; the glass was imported from China. The largest shell bracelet was probably carved out of the giant clam, *Tridacna gigas*, but the other two were made by taking a large cone shell, cutting a section across the widest part of the shell near the spire, and coring out all but the largest whorl. The bracelet on the extreme right is made from the shell of *Conus leopardus*, while the bracelet on the left, which is presumably for a child, is made from *Conus litteratus*. Although cone shells were used for bracelets throughout the Philippines in the pre-Spanish period, the practice no longer occurs today.

An archaeological dig in Arizona in the late 1800s found three *Conus* species (*Conus fergusoni, Conus princeps, Conus regularis*) in prehistoric graves. These shells were often used as rattles in ceremonies of Indian tribes and were also found tied to garments of the deceased. At a burial site at the Ridge Ruin in Arizona, a skeleton has an abundance of *Conus* tinklers, *Conus* shell chimes (see Fewkes, 1896; McGregor, 1943; Bayman, 1996).

Cone shells have been used as money in the past; while the use of shells, especially cowries, was very widespread, cone shells were specifically used in a few cultures. *Conus litteratus* is still cut into discs by certain tribes in New Guinea and used as money today. Figure 4 shows currency from New Guinea that has been strung to wear on a necklace made from tiny *Nassarius* shells. Carved cone shells were used as currency in the deserts of Mauritania up to the 16th-17th century. Figure 5 is a picture of such carved shells (from *Conus pulcher byssinus*) etched for currency in Mauritania. In the High Atlas Mountains of Morocco, old cone shells once used as currency are now mounted in leather as treasured decorative objects (Fig. 6).

Cone shells have been used by various cultures to signify status. This is well documented in an article on *Conus Shell Disc Ornaments* (Vibangwa) in Africa by J. R. Harding. Harding elaborates on the extent that cone shells were used in tribal ceremonies in Central and East Africa. And as late as 1958, Chief A. S. Fundikira wore cone shells on a headband during his oath for Legislative Council. In a subsequent article, *A Note on the Conus* *Shell Disc Ornament in Swaziland*, Harding documents that a shell disc was worn by a woman to signify her status as a witchdoctor. In the Himba tribe of Namibia, cone shells imported from East Africa are used to designate a woman's marital status (Fig 7).

Art history documents how Dutch painters in the 17th century showcased cone snails. Rembrandt's *The Shell* from 1650 is a black and white etching of *Conus marmoreus* (Fig. 8). Balthasar van der Ast often used cone snails in his still lifes, and one painting from Frans Francken the Younger titled *Art Room* has a *Conus marmoreus* in the foreground.

Although the shells of cone snails are widely used for cultural purposes, in certain Pacific Islands, some *Conus* species are used as food. In the central Philippines, *Conus magus, Conus radiatus* and *Conus furvus* can be bought with other live marine snails in coastal village markets. A preferred way of cooking the cone snails is in coconut milk with garlic, onions, peppers and other spices. It yields a very tasty broth.

There appear to be a wide range of applications of cone snails in human culture stretching from the decorative to the culinary. The increasing interest in *Conus* in the scientific world for the biomedical potential of cone snail venoms is only the latest in a long connection between humans and cone snails.

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Acknowledgment

All photographs except Figs. 6 and 7 were prepared by Kerry Matz.



Figure 1: A necklace of cone shells from Uruk, Mesopotamia. The species include *Conus ebraeus* and *Conus parvatus*; *Conus ebraeus* does not occur in the Persian Gulf, so the shells were presumably imported from an Indian Ocean site to present-day Iraq over 5000 years ago.



Figure 2: A *Conus* neckband from the Bontoc people in the Philippines. They live in a remote mountainous region in Northern Luzon.



Figure 3: Glass and shell bracelets excavated from Philippine burial sites from the 10th-16th Century. The three shell bracelets are from left to right, a bracelet for a baby made from *Conus litteratus*; a large shell bracelet probably carved from *Tridacna gigas* and (rightmost) a shell bracelet made from *Conus leopardus*. The blue glass bracelet was imported from China; it is made from the same glass as the Chinese figurine also recovered from a burial site. These burial sites contain an abundance of ceramics and pottery, and more rarely metal objects, including Chinese coins that can be precisely dated.



Figure 4: A *Conus litteratus* shell cut into a disc and used as currency from New Guinea.



Figure 5: Etched cone shells used as currency in Mauritania from the 14th-17th centuries. The *Conus* species involved in most cases was likely *Conus pulcher byssinus*. The shell pattern can be discerned in the example on the top row, center.



Figure 6: Jewelry of *Conus* trinkets strung on a leather band from Berber Tribes in the High Atlas Mountains. The shells are highly polished, and were used earlier as currency. Cones & Human Culture continued...



Figure 7: A woman of the Himba tribe in norther Namibia adorned with a cone shell (*Conus leopardus*) necklace signifying her marital status (Photograph courtesy of Dietrich Mebs).



Figure 8: Conus marmoreus by Rembrandt title The Shell (1650).

Conus cakobaui from the Southern Philippines?

Baldomero Olivera

Moolenbeek, Röckel and Bouchet recently described and illustrated the diverse forms of *Conus* collected from deeper waters off Fiji (Moolenbeek et al., 2008). In that article, a notable new species, *Conus cakobaui*, assigned to the "*Profundiconus* complex", was named after Cakobau, who in 1871 unified the Fiji Islands under his rule. In Fiji and Tonga, specimens of *Conus cakobaui* referred to in the original description were obtained at collection stations between 400-699 meters in depth. The authors note that the species has a paucispiral protoconch, suggesting a non-planktotrophic lifestyle.

In recent years, a series of cone shell specimens from Balut Island in the Southern Philippines, examples of which are shown in Figure 1, have been offered by commercial dealers as *Conus darkini*. Although the specimens look superficially like *Conus darkini*, I suggest that these may be conspecific with *Conus cakobaui*. Several features of the Balut Island specimens make this assignment more compelling than the prior interpretation that these were either a small variety (or juvenile specimens) of *Conus darkini*.

In the description of *Conus cakobaui*, the new species was compared to Conus darkini, which "differs by its larger adult size (50-87mm) and its protoconch of about 3.5 whorls, indicating a planktotrophic larval development". As shown in the Figure, there is considerable variation in the pattern of Conus cakobaui specimens from the Philippines. However, all of these consistently differ from typical Conus darkini, with the most diagnostic feature being the paucispiral protoconch illustrated in Figure 2. Conus cakobaui is a smaller species than Conus darkini, although the Philippine specimens examined were larger (33-37mm) than the type series from Fiji used in the original description. The shell of *Conus cakobaui* appears to be thinner and more translucent. The tubercles on the early spire whorls (see Figure 2) and the regular pattern of brown blotches on a white background on the spire are characteristic of Conus cakobaui.

Thus, Balut Island in the Southern Philippines may be a

relatively productive source for *Conus cakobaui*. If these specimens are indeed *Conus cakobaui*, then the species probably occurs over a wide range of the Central Pacific, at the minimum from Tonga and Fiji on the east, to Balut Island in the northwest. Deep-water collecting in the areas in between might be expected to yield this species in the future. Examples of the form that we suggest are Philippine specimens of *Conus cakobaui* were recently figured in the book by G. T. Poppe as *Conus darkini*; it seems that three of the specimens shown in Plate 616 of the Poppe book are likely *Conus cakobaui* (specimens 2, 3 and 5; specimen 4 is an example of the true *Conus darkini*).

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Philippine Marine Mollusks (Vol. 2): ConchBooks, pp. 642-643.

Conus cakobaui continued...



Figs. 1-6: *Conus cakobaui* from Balut Island, Southern Philippines. Note the variation in shell pattern, but the closely similar size of all the specimens.



Figs. 7 & 8: Protoconch and early teleoconch whorls of *Conus cakobaui*. The top figure shows the protoconch of the specimen on the top row, middle, Figure 2.; the lower figure shows the protoconch of the specimen on the top row, extreme left, Fig. 3. The bar is 1 mm; note the distinctive nodules, and the brown stain around the peripheral area in the early teleoconch whorls, a characteristic feature of this species.

New Taxa

As always, new taxa have been published since our last issue. Scanning the literature, we were able to find the following:

Conus roberti Richard, 2009

Described in Ann. Soc. Sci. nat. Charente-Maritime, 2009,9(9) : 921-928 (Georges Richard, "Conus roberti spec. nov., (Mollusca, Gastropoda, Conidae) de Guadeloupe, Antilles Françaises et le groupe «Fusiconus» dans la province caraïbéenne")

The new species was dredged off Guadeloupe, from a depth of about 300 metres and is compared with *C. macgintyi*, *C. mazei*, *C. pacei* and *C. rainesae*. These taxa are tentatively joined under the name *Fusiconus*, together with some farther but similar other actual and fossil congeners.

Conus moluccensis vappereaui Monteiro, 2009

Described in *Visaya* Vol. II, No. 5 (Aug, 2009) (António Monteiro, "A new subspecies of *Conus moluccensis* Küster, 1838 (*Mollusca: Gastropoda*) from Tahiti")

The new subspecies is described from specimens found in Tahiti and compared with the different variations known of *C. moluccensis moluccensis* and *C. moluccensis marielae*.

Finally, an article about a supposedly unknown population from the Cape Verde Islands (Jean-Paul Duboc & Sabine Pineau, "Cap Vert: Le cône sans nom de São Nicolau") was published in *Xenophora* No. 127.

It should be pointed out that the population in question has in fact been known for many years (it was present in Röckel, Rolán & Monteiro, Cone Shells from Cape Verde Islands – a difficult puzzle (1980), as "*Conus cuneolus* form L") and it was considered as a distinct valid species by Manuel Tenorio, Carlos Afonso and Emilio Rolán, who described it in *Vita Malacologica* 6: 1-10 (December, 2008) as *Conus kersteni* Tenorio, Afonso & Rolán, 2008.



Conus moluccensis vappereaui Monteiro, 2009 Holotype 47.7 mm (left) and Paratype 1 47 mm (right)

A Rare Cone from Fiji

António Monteiro

Our friend Philippe Quiquandon has sent in some photos of a very rare (and recently described) cone found in the area from Fiji Islands to Suva.

It is in fact *Conus gigasulcatus* Moolenbeek, Röckel & Bouchet, 2008 and this specimen is the current World Record Size at a staggering 90.6 mm.

I am sure that this is a specimen that any of us would like to have in our collections!





The Search for Darley Dale (and *The Glory of the Sea*)

In a recent issue of *American Conchologist* (Vol. 37, No. 2, June 2009), Kathleen Cecala published a short note entitled "The Search for Darley Dale (and *The Glory of the Sea*)".

Our friend Bill Fenzan, having read it, promptly secured permission from both the author, Kathleen, and the editor of *American Conchologist*, Tom Eichhorst, to reprint her article in The Cone Collector. Here it is:

The Search for Darley Dale (and

The Glory of the Sea) Kathleen Cecala

I've always been a bookworm, as well as an avid shell-collector. I not only enjoy collecting cowries and cones, but old shell-collecting books as well: the mustier, the better! I don't think I will ever break down and buy a Kindle, but the Internet has definitely become my friend. Not only can I track down old books, I recently had the odd pleasure of reading a rare, nearly unobtainable book, famous in conchological history, entirely on-line.

I'm writing a book myself, on the lore and legend of the cone shell, and the great *Conus gloriamaris* plays a hefty role in it. In my research, I kept coming across references to a book

titled *The Glory of the Sea* by Darley Dale. It was supposedly a novel, with *Conus gloriamaris* at its core. *Google Books* offers a citation for it, but absolutely no text. The same happened on *Amazon.com*, Alibris, and all the oth-

er used-books sites. Published in 1887, it seemed to have completely vanished—except for its name and author. 'Darley Dale,' I did manage to learn, was a pen name, for a prolific and very religious British author named Francesca Maria Steele. I was able to track down other books she had written, none that I was really interested in, and no Glory of the Sea.

Both Dr. R. Tucker Abbott and S. Peter Dance had mentioned this work in various books they had written. Mr. Dance gives a description in his book on the history of shell collecting. So I contacted Mr. Dance and asked

him about it. He told me (via e-mail) that only three copies of the book had ever passed through his hands, and it was indeed quite rare, even in Britain. I despaired of ever finding it, but then I decided to try one more tack: I did a nationwide library search, to see where in the United States a copy might possible turn up.

And alas, one lone copy turned up—at the University of Florida, of all places. The book was part of their special Baldwin Library collection of vintage children's books. Much of this collection had been digitalized and was available on-line. But *The Glory of the Sea*, unfortunately, was not.

Would I now have to plan a

flight down to Florida? I wrote a plaintive note to the library, asking how I could access the book without springing for airfare. To my delight, I received a reply from a Laurie Taylor, who informed me that *Glory of the Sea*



would be digitalized at once—seemingly, just because I asked for it! Just a few weeks later, I had the bright-blue and gold cover of the old book up on my computer screen; and read the whole thing in one sitting. Well, it's not *War and Peace*, just a thin little mystery-romance centered on the alleged theft of a *Conus gloriamaris*, with a lot of lecturing about shells and shell-collecting thrown in. But it is extremely charming, and offers an intriguing look at the shell collecting hobby in the late 19th century.

And you can read it, too. It's over 200 pages, but very quick to read. It comes complete with the cute illustrations of *C*. *gloriamaris* and other shells, plus a table listing common British shells. Just type this into your browser, exactly as it appears: *www.uflib.ufl.edu/ufdc/?b=UF00091700*. And see if you can guess how the stolen *C. gloriamaris* is found before the end of the book.

* * *

I suppose that many of our readers will not be familiar with the contents of this book, which is rare indeed, as Kathleen explains above, quoting Peter Dance, a well known authority on such matters.

I did download it – without any problems – from the address given in her article and I believe that a summary of the plot will perhaps be useful:

Summary

On her death, Mrs. Crabbe leaves invalid Poppy Merton her precious shell collection with a secret proviso: should Poppy keep the collection and add at least twenty specimens to it, by the time she is twenty-one, she will inherit also the old lady's considerable fortune.

Not knowing of such possibilities, the girl's first reaction upon hearing that she is to get nothing but shells is to sell them. Her friend Arthur immediately advertises the sale in the newspapers, whereas her other friend Luke Thorne – who is knowledgeable on these conchological matters - would prefer to wait for the arrival of the collection before making any decisions. Arthur's advertisements quickly elicit some interest.

The collection is then delivered to the Merton's home and it proves to be very large and valuable. Much information on rarity, provenance, size and other aspects of many different species – including the origins of their names – are conveyed to the reader as the contents of the collection are described. Among other rarities (for the period, of course) reigns supreme a specimen of *Conus gloriamaris* – only twelve specimens known in the world, according to the narrator – which is kept in a secret drawer in one of the cabinets.

As a note of interest to us, the Cone section of Poppy's inherited collection is described in the following terms: "We have the Field of the Cloth of Gold here, sir, and a lovely thing it is; no brocade made by human hands can equal the exquisite design on that shell; and here is the Imperialis. See the elaborate painting of these yellow and brown bands, and the number of lovely shades used in the work; others have markings like Greek and Hebrew letters, and others are marked with dots, veins, clouds, stripes, bands; every king of decoration seems to be employed. There are over three hundred species of Conus, and there are two hundred species in this collection. Here is one, Cedo Nulli, you would not get for less than seven or eight pounds. They come chiefly from Asia, but they are abundant in all tropical seas, and I believe are generally found in the holes of rocks and caves".

Upon seeing the shells, Poppy decides not to sell them after all, to everybody's (but her father's) great surprise. Luke is also greatly pleased to be asked to give her lessons in conchology. As can be expected, Luke's lectures are transcribed in dialogue form, for the benefit of readers.

All Hell breaks loose when at the end of one of his tutorials Poppy asks Luke to take the gloriamaris out of the secret drawer – she instructs him as to how to get it open – and he finds the drawer empty. The girl's younger brothers are suspected but deny any involvement; suspicion then falls on the man that delivered the collection to the house and showed it to them in the first place. Mr. Merton having got in touch with his solicitor, a Mr. Dobson arrives on the following morning to investigate. Graham, who is to go away soon, is now the main suspect. All along, of course, the reader is informed in full of the contents of Luke's conchological lessons for Poppy – in fact, most of the book's pages are taken up with a sort of conchological manual.

A few months pass and still no news of the missing gloriamaris, as young Luke carries on with Poppy's – and the reader's – instruction on all matters conchological. It is perhaps appropriate to transcribe here the lecture on Cones:

"...we will go on to the Cones. They all have this much in common: the shell is inversely conical, the mouth long and narrow, the outer lip notched, and the operculum very small. The animal has a snout-like head, with eyes on the tentacles; the tentacles themselves are far apart; the foot is oblong, the tongue armed with prickles.

I should not care to handle them if the animal were alive, with a prickly tongue and a tendency to bite.

I think only one species, Anticus, bites; they all prey on other sea-animals, though, and if you wanted to catch one you would have to handle it, for they are generally found in holes of rocks or coral reefs. They are all tropical, except a few species which inhabit the Mediterranean."

"Are they all very rare?"

"Oh, no; but many species are, like Gloria maris, Cedo nulli, Field of the Cloth of Gold, Imperialis, &c.; but there are 269 species, many of which are very abundant in tropical seas as far south as the Cape. They are fond of warm pools, but are also found in deep water; they move slowly. There is one rather curious fact about the shell which I must ask you to take for granted, unless you will let me make a section of one of your Cones."

"No, thank you. I have to take so many of your facts for granted that I don't think I shall hesitate to accept this. What is it?"

"Merely that the inner whorls are very much thinner than the outer one. It is supposed that the animal has reduced these walls (I don't wish to make a pun, but it is unavoidable) by absorbing some of their thickness, either to give itself more room, or to reduce the weight of the shell."

The whole family soon gets involved in shell collecting and even Poppy's two younger brothers, Robert and Edwards, go to the nearby beach to look for specimens and eventually get caught by the rising tide, fortunately without too much peril to themselves, but greatly worrying their parents and sister. In the meantime, we are casually informed that Mr. Merton suffers from fits of sleep walking.

Months pass, summer comes and goes, with still no news of the *gloriamaris*. On the other hand, Luke's tender feelings for Poppy are explicitly brought before us, even though he must postpone any proposal until he is ordained, which he hopes to achieve in the near future.

Back into the scene comes Dobson, who had learned from one of the servants that Merton is a somnambulist, which of course leads the detective to suspect him of having gotten hold of the precious shell in his sleep – as I am sure any of us would have considered after having been given that particular piece of information. The house is thoroughly searched once more, but still the missing treasure is not found.

Some time later, the family and Luke are gathered in the house to welcome back Poppy and her mother, after a relatively long stay in London to see the girl's doctor. Poppy's health and her back condition are now much improved and she is again able to sit upright, to everybody's great joy. In particular, this huge improvement meant that she was now able to go shell-hunting with Luke and her brothers.

Months became years and eventually Luke got engaged to Poppy, although any marriage prospects were postponed until after her twenty-first birthday. No one but her father is aware of the fortune she will come into then. As the date approaches, Mr. Merton asks her daughter for a list of the specimens she has added to her collection since coming into possession of it, which he must take to his solicitor. The loss of the *gloriamaris* may eventually cause her to loose her inheritance, if it is found that proper attention was not given to the collection as it initially stood.

However, in a most theatrical turn of events, only a couple of days before the girl's birthday, Mr. Merton suffers a new episode of sleepwalking. His wife decides not to wake him up, but to follow him instead, witnessing her husband go to the shell cabinet's secret drawer, take out a Paper Nautilus that had been store there and range it in a despatch-box in his office. In the morning, Mrs. Merton asks him – who has no recollection of his actions – to check his despatch-box and sure enough inside it there is not only the freshly "stolen" Argonauta shell, but also the much sought after *Conus gloriamaris*, to the general applause of the entire family!

And all being well that ends well, Poppy came into her twenty thousand pounds inheritance and married Luke. They must perforce have lived happily ever after, even though we are not informed of such details.

* * *

The book appears to have been less than well known even over seventy years ago, since the famous malacologist British John Read le Brockton Tomlin (1864-1954) prepared one of his "Book Notes" about it, which he read to the Malacological Society of London on the 3rd April and 8th may, 1936. The full text of this particular note ("Note 3") is published in the *Proceedings of the Malacological Society of London* (the publication continued as the *Journal of Molluscan Studies*). In this note, Tomlin explains that he found a copy of the book on a secondhand stall.

Commenting on the contents of the book, Tomlin underlines two interesting points: "Sowerby's name is mentioned more than once. A tradition is cited which I have never seen alluded to elsewhere, that the children of Israel subsisted to some extent on snails in their journeyings through the desert; such a diet is, however, not permissible under the Mosaic Law."

He also notices that the theme of somnambulism may have been suggested to the author by previous best selling popular novels such as Henry Cockton's Sylvester Sound, the *Somnambulist* (1844) and *The Life and Adventures of Valentine Vox, the Ventriloquist* (1848).

The Glory of the Sea is mainly a concise conchological compendium, meticulously describing many groups of Molluscs (and even of other organisms now known to belong to other groups) and in certain parts with a special emphasis on local species, of which there is a table in the end, listing the "Principal British Shells". The usual dryness of such compendia is then mitigated by the tenuous plot of the disappearance of the extremely valuable specimen of *Conus gloriamaris*.

Tomlin also ascertained that "Darley Dale", the author's name, is in fact a pseudonym explaining that "the publishers were the Religious Tract Society, and they give me the date as 1887, but are unable to furnish any further information beyond the fact that the same author wrote three other books for them, viz. *The Jersey Boys*, 1878, *The Great Auk's Eggs*, 1886, and *Swallowtails and Skippers*, 1886."

He did a little more research in the author's identity, and even got in touch with members of her family. This is what Tomlin tells us on the subject: "Darley Dalea name adopted as one guessed from the Derbyshire valley-was Miss Fanny Maria Steele, a descendant of Sir Richard Steele, of Taller and Spectator fame. Her grandfather was a doctor of Stoke Ferry and her father, Robert Peter Steele, was secretary of the Royal Exchange Assurance Corporation. Miss Steele was born on 21st April, 1818. When her father retired in 1875 the family moved to Jersey and, on his death nine years later, to Minchinhampton and subsequently to Stroud, Gloucester. She died at Stroud on 2nd August, 1931, and was buried at Woodchester. She wrote many novels and children's hooks and — after becoming a Roman Catholic in 1887- several serious, religious works. Serials by her will be found in the Argosy and the Girls' Own Paper, and a three-volume novel called the Game of Life won her a £100 prize offered by some publisher."

He ends his note with a few remarks concerning the species *Conus gloriamaris*.

So, here we have a delightful late 19th century book presenting a wealth of conchological information in a light and entertaining way. The addition of the mystery of the disappearance of the then ultra-rare Cone changes it from a mere text book into what we might be described as a conchological thriller! Often charming in its naïveness that allows one to forgive a few obvious factual errors, and a delightful portrait of an era gone by – and of a typically British living style in that age – *The Glory of the Sea* makes a very pleasant reading. A copy of the original edition would certainly constitute a very precious addition to any conchological library.

Acknowledgements

Thanks to Bill Fenzan for calling our attention to this publication and to Kathleen Cecala and Tom Eichhorst for the permission to reprint the article that appeared in the *American Conchologist*. Thanks also to Gavin Malcolm and to Manuel António Malaquias for their help in locating and getting the text of Tomlin's note.

Downloadable Rarities! António Monteiro

Besides their obvious scientific value, old 18th or 19th century books on shells often are true works of art that would grace any collector's library, should he be lucky enough to find copies for sale and wealthy enough to be able to afford them, since the rarest one may achieve rather prohibitive values!

Nowadays, however, we have an option that must be counted as second best: many of the aforementioned rarities are available in the Internet and can even be downloaded free of charge!

Recently, another important work for Cone collectors has become available in that way from the Internet Archive: the 1866 Cone section of George Brettingham Sowerby's *Thesaurus Conchyliorum* (or Monograph of genera of shells). It can be found through the following links:

www.archive.org/details/thesaurusconchyl31866sowe (text)

www.archive.org/details/thesaurusconchylp31866sowe (plates)



A Mystery Cone António Monteiro

We have received the accompanying photo from Donald Moody. The specimen in the picture was taken from the East China Sea, at a depth of 180 metres.

Donald comments that at first glance it looks a bit like *Conus eximius* Reeve, 1849, but "both the body shape and the higher spire appear quite different".

Still in Donald's own words: "the item I found to be comparable was *C. rarimaculatus* Sowerby, 1870 (Holotype) in the British Museum and illustrated by Röckel et. al. as a questionable species in one of his latter plates in his cone book. The general locality is right and the size and look appears close".

Your editor did check the photos of the syntype of *C. ra-rimaculatus* as figured in Röckel et al, but I am not at all sure that the shell in the photo belongs to the same species, mainly because of the texture, which (judging from the photos) appears to be much smoother and shiny in the syntype of *rarimaculatus* than in Donald's shell; at the same time, his specimen seems to be frankly broader than the syntype of *rarimaculatus*.

As always, our readers' opinions will be most welcome!



Comments on TCC #11

From Gonçalo Rosa

Gonçalo points out that on Page 15, fig. 1, instead of "South Africa" it should be "South Australia". But I guess nobody was fooled by that one...

From Giancarlo Paganelli

An omission has crept into Giancarlo's article "Shell repair in Conus" (page 55):

For some reason, the captions for the photos got lost. Here they are now:

Specimen on the left: *Conus floridulus* 19.2 mm Specimen on the right: *Conus muriculatus* 24.4 mm

Thanks, Giancarlo!

From John Tucker

John has forwarded the following comments, very useful as always:

I think that Eason's top specimens from Cable Beach are what most collectors would call *Purpuriconus jucundus* (G. B. Sowerby III, 1887), which is a close relative of *P. sphacelatus* (G. B. Sowerby II, 1833). Greenish colored specimens like these were described as *P. abbotti* by Clench, 1942. All of these are related to *P. cardinalis* and all may be synonyms of that species.

The other shell from Puerto Rico, I think, is a juvenile *Chelyconus ermineus* but it is hard to tell from the photograph.

Sorry about the use of generic names other than *Conus* but if there is a valid available name I plan to use them. You know why of course. Feel free to convert my generic nomenclature to *Conus* if

you think that would help.

By the way I agree with Jon Singleton that there is little chance that *reductaspiralis* and *nielsenae* are conspecific. Certainly no one has produced any evidence that they are subspecies of a single polytypic species.

For his unknown specimen, I think I would have to go with *mucronatus* despite the shape. It rather looks like RKK, pl. 46, fig. 28.

From Robert Eason

Robert pointed out a rather silly mistake in the note asking for identification of his specimens:

...the pictures were reversed from the descriptions as the bottom shell is from the Bahamas and the top one is from Puerto Rico which I thought is in the cardinalis group.

From Mike Filmer

Mike had the following to say about our latest issue:

As always edition 11 is another great piece of work [Thanks, Mike! Ed.]. I have some comments for you:

- Page 7 Little Stranger (Jon Singleton) is C. mucronatus I have identical specimens from the Philippines – it may be linked to C. segondensis Fenzan, 2008 or to C. sutanorcum Moolenbeek, Roeckel & Bouchet, 2008 both of which are closely connected to C. mucronatus. The dark protoconch is often found on cone shells and comes I think from the nature of the habitat.
- Page 10 C. anemone (John Tucker) C. compressus sus Sowerby has frequently been used incorrectly for the South Australian high spired form of C. anemone. However the holotype in the BMNH

is a small light weight fusiform shell found only in the area of the Abrolhos Islands Western Australia and in my opinion a valid species quite distinct from *C. anemone*. None of the figures shows the true *C. compressus*.

- 3) Page 45 The Status of an Australian Cone (Jon Singleton) he is quite right in stating the C. reductaspiralis is a valid species not connected to C. nielsenae – Its status was altered to "A valid species" by Coomans and Filmer in 1985 in Studies on Conidae (Mollusca, Gastropoda) 3. Systematics and Distribution of some Australian Species including two new Taxa. Beaufortia Vol.35, no.1 (April 16th 1985) page 5.
- Page 52 *The Amethyst Blotch in Queensland* (Jon Singleton) – It would be interesting to know who was the author who studied the *C. planorbis* complex and where was it published.
- 5) Pages 56-63 *Conidae in the Philippine Marine Mollusks Volume II* (Guido Poppe) I found Guido's explanation of the objectives and immense amount of work put into this project absolutely fascinating – perhaps some of it could have appeared in the introduction to the book. I am not happy about his comments on the following:
- A) Page 57 The use of forms frequently disguised as valid under the rules of the ICZN. I have no objection to the use of "forms" to indicate differences within species but I believe it should be written in parenthesis and not italicized e.g *C. furvus* Reeve, 1843 (form *aegrotus* Reeve, 1849). This would take the "form" out of confusion within the official nomenclature. I also reject the introduction of so called form names which appear without explanation or description e.g. *C. pennaceus* form "melbae" ??
- B) Page 58 I look forward greatly to the publica-

tion of habitat data in Visaya.

- C) Page 58 I am surprised at the suggestion that data given in Springsteen & Leobrera and RKK are very vague and most often untrustful – it would have been better to give a few examples to support this statement – of course there are errors in both these publications as indeed there are in Guido's publication – no work of this nature can be perfect because of the ever changing development and evolution of species.
- 6) Page 59 I look forward to hearing from Gabriella on specific cases.
- 7) Page 62-63 I am surprised but happy to learn that over collecting is non-existent in the Philippines .

Comments from Bill Fenzan

Bill was able to add to Mike's comment 4) above:

I think I have the answer on Mike's item d) concerning the author who studied *Conus planorbis* and related taxa. The late José M. Lauer published a series of articles in the magazine World Shells. I believe these are what Jon had in mind. These articles are found in the issues listed below:

World Shells #4 (March 1993), pp. 23-26; World Shells #5 (June 1993), pp. 54-57; World Shells #6 (September 1993), pp. 34-39; World Shells #7 (December 1993), pp. 38-41; World Shells #8 (March 1994), pp. 48-53; World Shells #9 (June 1994), pp. 42-45; World Shells #10 (September 1994), pp. 58-61; and World Shells #11 (December 1994), pp. 14-19. This series is quite good, as are many of the other articles in *World Shells*. In this series of issues there is also a set of articles on the many names attributed to *Conus magus* Linneaus, 1758 by Bob da Motta. I wish there were a way to make issues of shell magazines available for download on the internet. Many new collectors do not even know about this magazine, and many institutions do not have this periodical in their libraries.

From Paul Kersten

Paul agrees with others on the identification of one specimen:

I am not an expert on these Caribbean cones and never seen juveniles of this species before but I believe the second little cone on page 3 of TCC could be a juvenile *Conus ermineus / testudinarius*.

