



*THE
CONE
COLLECTOR*

#5 - January 2008



THE CONE COLLECTOR

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On the Cover:

Conus riosi Petuch, 1986 in its natural habitat at 25-30 meters off Bahia State, Brazil. Photo courtesy of Afonso Jório, Guarapari, Brazil.

Note From the Editor

In October, 2006 appeared the first issue of *The Cone Collector*. It was a trial issue, appropriately labelled as issue # 0 and sent to less than thirty collectors. The newsletter was the result of many e-mail conversations between me and my good friend Paul Kersten: since there were always so many issues to discuss, so much news to share, I felt that there was perhaps enough material for a regular bulletin. It was altogether a rather innovative concept and one whose success was not guaranteed.

Fortunately, however, the newsletter was favourably received, responses ranging from tranquil approval to downright enthusiasm. The initial mailing list quickly expanded and currently comprises about one hundred addresses; moreover, the newsletter is placed on line in several of our friends' well-known web sites, which means that many more can find it, read it and download it.

The number of contributors has also grown – just check the contents of the current issue – and others have already promised to contribute to future issues. This, of course, is actually the fundamental test of success, since the newsletter could not survive without contributions from many authors. Everything counts and we can always use articles, comments, questions, photos, etc.

I trust that the current issue, our sixth, will meet with everybody's approval. It is the second to benefit from the graphic skills of our friend André Poremski, which greatly enhance its contents. As before, it includes a vast range of articles and photos of exceptional specimens. Do let us have your opinion, as it really matters.

And since this is the first issue in 2008, I hereby send each and every one of our readers my very best wishes for this new year, hoping for many interesting new finds and acquisitions for our collections!

António Monteiro

Who's Who in Cones: Gabriella Raybaudi Massilia

Here I am, after some gentle pressure from my friend António, to tell you something about myself.

Fifth out of the "Magnificent Seven" – as my father used to call his children and boats –, I was born in Rome, Italy, early in the 50's... (the approximation should be enough for readers) and notwithstanding the shame of the communists here *just* by chance, I still feel very proud to be Italian.

I had a really enjoyable childhood, within a crowded house, plenty of brothers, friends and... animals. In fact, my house in Rome had been transformed into a true zoological park by my dad, so I soon learned to swim among swans and ducks, to climb the trees to study my lessons, defending myself from terrible pheasants, terribly egoist storks and cranes, pigeons and dogs, the real owners of the park. With a father who was a champion in many sports, all of us children were traveling a lot, had more than one adventure, and had to try several sports and to win somewhere to survive in an almost compulsory competition! I survived well enough in underwater fishing, athletics, tennis and skiing.

I became a strong teenager, ready to approach the '68 youngsters' revolution... (right side of course). Great time, great music. At the age of 16, I was a barefoot hippy in Majorca...

Nevertheless, a severe education – guess by whom... – forced me back to a more orthodox life of boring study. After my scientific degree, I have studied Architecture, unfinished because of an early marriage, two children

and working in a fashion job. In the 80's my father called me back to his house and convinced me to abandon any other job because of his new dealing with shells.

It was in that time that I was introduced to this wonderful world of shells. My father specialized in Cowries, but he had collected worldwide and bought many, many shells from any remote place and I was left in a room with a huge collection and a pile of books, urged to learn enough and... soon...



I came across cone shells and I became fascinated by their diversity. The bible at the time was Walls' Cone Shells – a synopsis. An astonishing taxonomic chaos! I began to be really challenged to discover which species was really what and by that time I came across the two monsters of cone shells knowledge and passion: Bob da Motta and Dieter Röckel. Needless to say, I was soon overwhelming them with a tight correspondence, questions and doubts and any possible puzzling determination and I consider both these two great persons as my teachers, not only for their knowledge, but also for their affectionate tutorship in a difficult period of my life.

These were the years when Bob da Motta was working on his generic classification of the Conidae and I was really happy to help him with the publication. Cone shells taxonomy was becoming my illness... I have been traveling to European museums to study the types and visiting many collectors and malacologists. Meanwhile my third baby arrived and I was busy enough with the family, with shell work, and with cone shells study.

Nights after nights, there came also the time of Dieter

Who's Who Continued...

Röckel's book! Seven years in the making, seven! I still remember the publishers asking us not to meet anymore since no further changes could be done... It was a greatly enjoyable time for all of us with our continual exchanges of opinions, specimens, and visits.

Eventually, the RKK Manual finally was printed and indeed much of my beginner's puzzling questions were solved, but alas, I was now affected by a second illness: the cone-shells systematics and therefore evolutionary biology! It was not easy, but I decided at the age of 45 to go to university again. And this time I arrive at an end, with a specialization in Biochemistry and a PhD thesis on the toxins from the *Conus* venom, having had the great honour of working with the number one scientist in the area, Prof. Baldomero Olivera.

Therefore, I now realize, during the last 20 years, my life has been filled with cone-shells, starting with taxonomy, ending with their biology and more recently having also a lot of fun in field work and diving (with Emilio Rolán, Carlos Afonso, Guido Poppe and the Paris Museum teams). I discovered and published some taxa new to science (António... never sorted out the number!) and co-authored some publications with several good friends. I am also grateful for some taxa dedicated to me by my friends. Today I enjoy traveling in warm and wilder regions, and meeting my worldwide friends.

Time goes by, my three children are now grown up men and woman, I risk to become a grandmother soon... but I still have a lot of interests in many different things, and even if tiring much more than once, I still feel great enthusiasm in opening a parcel containing new shells!

Live Taken Specimen of a Rare Species

Coll. Richard Goldberg

We have received the following message from our old friend Richard Goldberg:

I have attached a rather interesting photograph of a 79mm *Conus darkini* Röckel, Korn & Richard, 1992, collected earlier this year. As you can see from the photo, the animal is still alive withdrawn into the shell. The shell was taken from a tangle net set in ± 300 meters of water. I thought the readers of *The Cone Collector* would be interested in seeing the shell in its natural state.



Special Population of *Conus furvus* Reeve, 1843

António Monteiro

In a recent article published in *Neptunea*, Aïcha Ben-Saâd, Adriaan Janssens and Frank Nolf called our attention to a variation of *Conus furvus* Reeve, 1843 found off Cuyo Islands (Palawan Philippines).

It is quite a distinctive form, with large solid shells with smooth whorls ornamented with orange to red broad spiral bands. The authors have been most cautious – which I think is quite commendable – when deciding on the status of this population. As they say, in view of the constancy of its characteristics "it should be obvious to conclude these shells belong to a new taxon". However, *C. furvus* being such a variable species, distributed over the Philippines archipelago, it is only to be expected that local populations differ from one another while intergradation definitely exists.

Nevertheless, further research is clearly needed to clarify the whole problem. And of course what is badly needed (once more) is a good reliable set of criteria to decide upon specific separation. The specimen illustrated here does not have fully reliable locality data, so in order to avoid any mistakes or confusion, I have preferred to go into no details.

Reference:

BEN-SAÂD, AÏCHA, JANSSENS, ADRIAAN & NOLF, FRANK
2007. Another population variant of *Conus furvus* Reeve, 1843 (Mollusca: Gastropoda: Conoidea: Conidae) from the Cuyo Islands (Palawan, Philippines). *Neptunea*, Vol. 6 No. 1.



Conus furvus Reeve, 1843
58 mm, Philippines
(Coll. António Monteiro)



Conus furvus Reeve, 1843
40 mm, Philippines
(Coll. Paul Kersten)

Two Exceptional Specimens

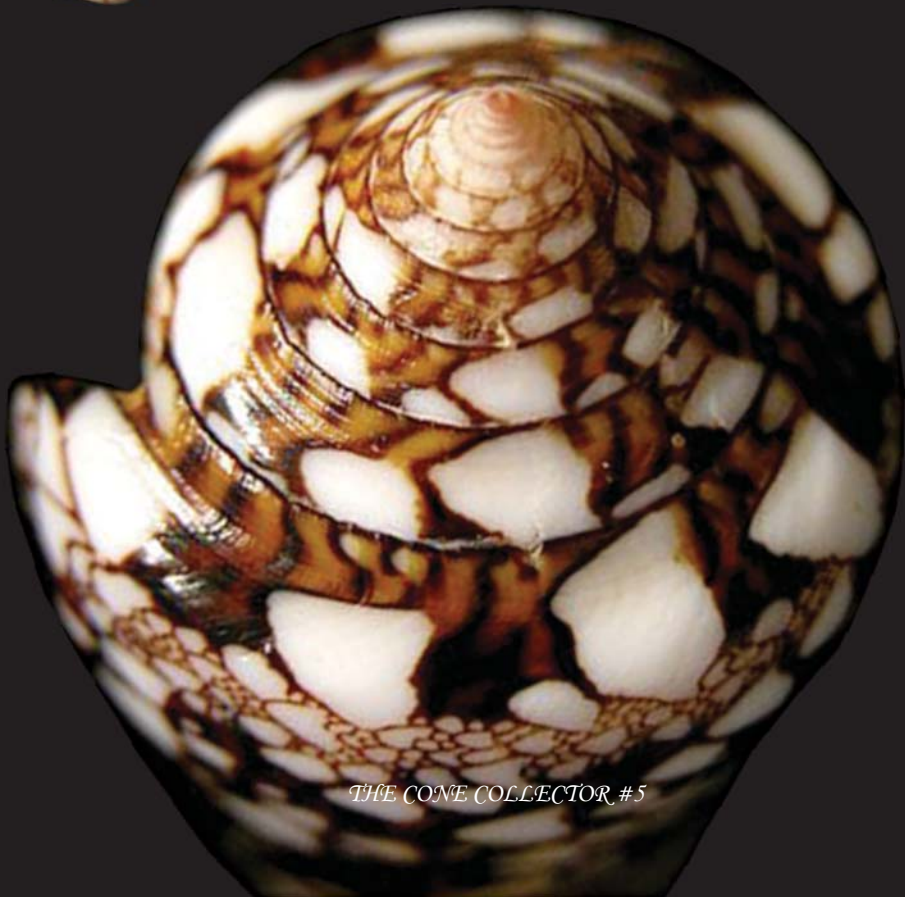
Coll. Shells Passion, Philippe Quiquandon

We have received from our friend Philippe Quiquandon a few photos of two exceptional specimens that have recently come his way, which we are very glad to be able to share with our readers.

The first is an impressive *Conus vexillum* Gmelin, 1791 that was collected last October/November by narguilé divers at Samar Island, in the Philippines. It was found about 35-40 m deep, on sand and is 181.3 mm long, with a maximum diameter of 91.4 mm.

The second one (on the following page) is an outstanding specimen of *Conus ammiralis* Linnaeus, 1758, found earlier in 2007 by narguilé divers at the Island of Bohol. Although unmistakably *C. ammiralis*, the specimen presents a background colour/pattern remindful of many specimens of *C. textile* Linnaeus, 1758. A very special gem, to be sure!





Distribution of *Conus kohni* McLean & Nybakken, 1979

John K. Tucker

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Acknowledgements:

Conus kohni is a poorly understood species from the eastern Pacific. TCC is reprinting an article that appeared in *The Festivus*, volume 39, that discusses the identity and distribution of this species. Carole Hertz, editor of *Festivus*, kindly allowed reprinting the article, for which we are quite thankful. *The Festivus* is the journal of the San Diego Shell Club. *The Festivus* is published monthly except December. Dues are US \$20.00 for USA, Mexico & Canada; US \$30.00 for other addresses via air mail. Membership dues can be sent to:

San Diego Shell Club, Inc.
C/O 3883 Mt. Blackburn Avenue
San Diego, California 92111 USA

Abstract:

Characters that differentiate three superficially similar species of cone shells (*Conus fergusonii*, *C. kohni*, and *C. xanthicus*) are reviewed demonstrating that these three are specifically distinct. Previously the threatened *C. kohni* had been considered an endemic of the Galápagos Islands. Records based on specimens in museum collections are reported that extend the range to México suggesting that the species is more widespread than previously thought.

Introduction:

Some years ago I was able to examine the collections of the Los Angeles County Museum of Natural History (LACM) (Tucker and McLean, 1992). At that time I examined specimens used in the description of *Conus kohni* McLean and Nybakken (1979). I had little doubt that *C. kohni* was a distinct deepwater species of *Conus*. Since that time it seems that some uncertainty about this

species has crept into the literature. Despite the species being one of the few cone shells listed on the IUCN red list of threatened species (IUCN, 2006), Filmer (2000) listed it as a form of *C. xanthicus*. Confusion about the identity of *C. kohni* will not aid in its conservation.

The uncertainty no doubt reflects the confused status of these species prior to the publication of McLean and Nybakken (1979). Nybakken (1970) following Hanna (1963) failed to separate *Conus fergusonii* G. B. Sowerby II, 1873, and *C. xanthicus* Dall, 1910, despite the differences in radular morphology that he observed (Figures AC, herein). He attributed the two sorts of radulae to ontogenetic change. McLean (1971) also followed Hanna (1963) in listing *C. xanthicus* as a synonym of *C. fergusonii*.

Walls (1979, p. 955) recognized that *C. xanthicus* and *C. fergusonii* were "...quite distinct and perhaps not actually related." The description of *C. kohni* appeared the same year that Walls' book was published. Unfortunately no subsequent comprehensive treatment of the Panamic cone shells has been published.

This uncertainty led me to borrow specimens of *Conus kohni* and *C. xanthicus* that I had previously examined at LACM in order to re-examine the problem. The purpose of the present paper is to clarify the identity of *C. kohni* and review the characters that differentiate the species, all of which were first pointed out by McLean and Nybakken (1979). I also extend the range of the species to México.

Materials and Methods:

The specimens examined are in the collections of the Los Angeles County Museum of Natural History (LACM). They included 9 (8 measurable) specimens of *Conus kohni* and 31 specimens of *C. xanthicus*. All specimens had shell length and width measured at the museum with calipers (method of Kohn and Riggs, 1975). Subsequently, a subset of these specimens were reexamined and photographed. I also examined 15 specimens of *C. fergusonii* and three of *C. xanthicus* from my personal collection (JKT) for comparisons. I used analysis of covariance (ANCOVA) to compare dimensions among species with the Bonferroni adjustment selected (SAS, 2000).



Figures 1-6

(1) LACM 1885 *Conus kohni*, 35.3 mm, holotype of *Conus kohni* McLean and Nybakken (1979) from Caleta Tagus, in 18-37 m, Isla Isabela, Galápagos Islands, Ecuador, photograph courtesy H. Chaney, Santa Barbara Museum of Natural History. (2) LACM 788.38 *C. kohni* 43.5 mm, 55 fathoms on coral and shell bottom, southeast of Daphne Major Island, Galápagos Islands, Ecuador 0°27'S, 90°21'50"W January 19, 1938. (3) LACM 35562 *C. kohni* 29.2 mm, Isla Espiritu Santos, Gulf of California. Baja California Sur, México, Leg. Captain Fred Lewis. (identified as *C. xanthicus* on museum label). (4) JKT 2102 *C. fergusonii* 56.3 mm, 200 feet, shrimp boats, Bay of Chiriqui, Panama. (5) LACM 11345 *C. xanthicus* 53.3 mm, 73 m, off La Paz, Gulf of California Sur, México, Leg. Antonio Luna Jan. 1974. Specimen was illustrated by McLean and Nybakken (1979: fig. 15). (6) LACM 35563 *C. xanthicus* 31.0 mm, Guaymas, Sonora, México.

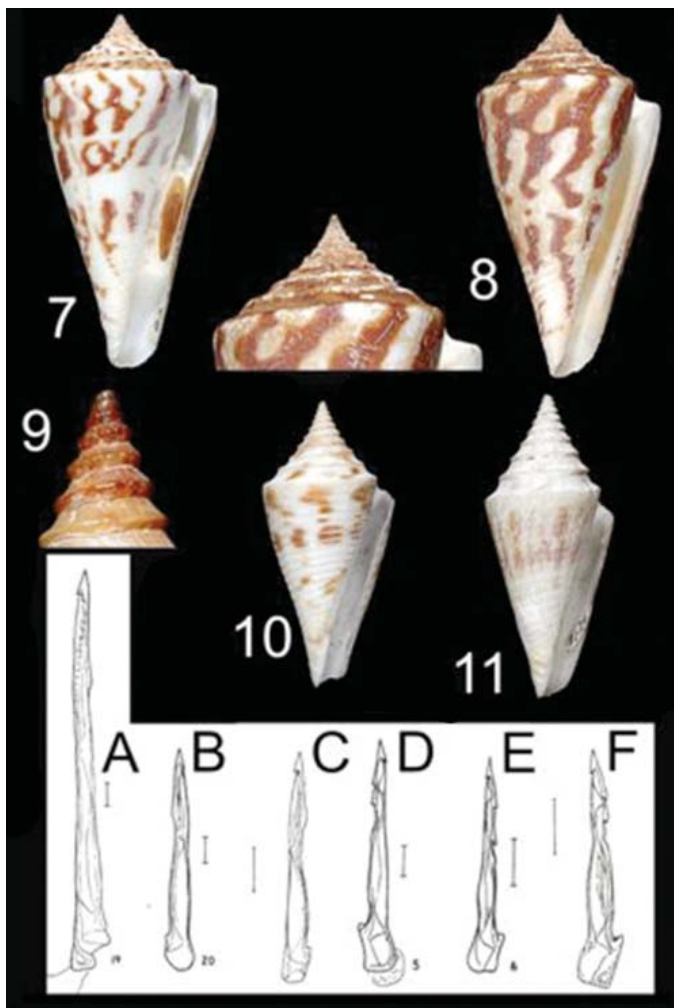
Results and Discussion:

The small sample available did differ statistically in shell dimensions. *Conus fergusonii* has a relatively wide shell once differences in shell length are accounted for. Least squares mean for shell width in *C. fergusonii* was 29.9 mm compared to 20.1 mm for *C. kohni* and 21.9 mm for *C. xanthicus*. Comparison of the mean for *C. fergusonii* to the other two species was statistically significant ($t = -4.19$, $p = 0.0003$ for *C. kohni*; $t = -3.71$, $p = 0.0015$ for *C. xanthicus*). In contrast the means for *C. xanthicus* and *C. kohni* were not different ($t = 1.41$, $p = 0.4888$). The difference reflects the more swollen shoulders typical of *C. fergusonii* (Figure 4).

Although shell dimensions can be shown to differ statistically, this is of little practical use. Other traits are much more important in properly identifying these species. These species do differ in details of the color pattern, in the spire morphology (Figures 2, 4, 5), in the nature of the operculum and periostracum, and in the morphology of the radula. I briefly outline these differences, all of which were all previously listed by McLean and Nybakken (1979).

Juveniles of *Conus fergusonii* have vertical rows of small darker brown spots on top of the orange coloration (Figure 4). These spots are absent in *C. kohni* and *C. xanthicus* (Figures 1-3 and 5, 6, respectively). The spire whorls of *C. kohni* and *C. xanthicus* have color markings on them that are the same shade as the color markings on the body whorl (Figures 2 and 5, respectively). The spire whorls of *C. fergusonii* do not have blotches (Figure 4). Moreover, nodules are markedly well developed and reach at least whorl 9 in *C. fergusonii*. Nodules are barely developed on the spire whorls of *C. kohni* and disappear by whorl 3. They are not much better developed in *C. xanthicus* where they are gone by whorl 6. The spire morphology of *C. kohni* is unique in that the whorl tops are distinctly scalariform and concave in cross section. The earliest three or four whorls have these concave whorl tops set almost perpendicular to the coiling axis (Figure 2). In contrast, the earliest whorls of *C. xanthicus* and *C. fergusonii* form an acute angle with the coiling axis making them appear much less scalariform than in *C. kohni*.

Besides the conchological characters, these species have distinctive periostraca and opercula. *Conus xanthicus* has



Figures 7-11

(7) JKT 22 *Conus emarginatus* 57.7 mm, trawled by shrimpers, Guaymas, Sonora, México. (8) JKT 22 *C. emarginatus* 51.1 mm, trawled by shrimpers, Guaymas, Sonora, México. (9) JKT 33 *C. arcuatus* 28.0 mm, Guaymas, Sonora, México, Trawled, 1972. (10) JKT 3124 *C. arcuatus* 41.6 mm, Guaymas, Sonora, México. (11) JKT 3124 *C. arcuatus* 38.3 mm, Guaymas, Sonora, México.

Figures A-F

Scale bars are 0.1 mm long. Images used with permission. (A) Radular tooth from a juvenile *Conus fergusonii* from Nybakken (1970). (B) Radular tooth of a juvenile "*C. fergusonii*" (= *C. xanthicus*) from Nybakken (1970). (C) Radular tooth of *C. xanthicus* from McLean and Nybakken (1979). (D) Radular tooth of *C. emarginatus* from Nybakken (1970). (E) Radular tooth of *C. arcuatus* from Nybakken (1970). (F) Radular tooth of *C. kohni* from McLean and Nybakken (1979).

a small operculum that is about 2 times longer than it is wide. In contrast, the operculum of *C. kohni* is long and is at least 3 times longer than wide; *C. fergusonii* also has a long operculum that is four or more times as long as it is wide.

The translucent periostracum of *C. xanthicus* is fringed at the shoulder, whereas the periostraca of *C. kohni* and *C. fergusonii* are not fringed. Finally the radular morphology establishes the distinctiveness of *Conus kohni* beyond doubt.

The radular tooth of *C. kohni* has what Nybakken (1970) described as three barbs on the anterior tip of the tooth (Figure F). The tooth does not have serrations. This sort of tooth is shared with *C. emarginatus* (Figures 1, 2, D) and *C. arcuatus* (Figures 3-5, E), in the east Pacific. The morphology is likely ancient and derived from an ancestor with the sort of radula that *C. emersoni* has (Tucker and McLean, 1992). The three-barbed radular type is also found in several Indo-Pacific species such as *C. comatosa* and *C. orbignyi* (Rolán and Raybaudi Massilia, 1994). To underscore the likely ancient origin of the radular type, consider that this sort of tooth also occurs in *C. coromandelicus* (Thiele, 1929), a species of *Conus* that is often incorrectly placed in the genus *Conorbis*. In contrast, the teeth of *Conus xanthicus* (Figures B, C) and those of *C. fergusonii* (Figure A) have a number of advanced traits. Both species have the shaft of the tooth serrated. The serrations terminate in a large cusp that is located inside the tooth.

Although often modified in various ways, this sort of tooth is found in many worldwide cone shells including many species from the east Pacific. Despite being generally similar, the teeth of *C. fergusonii* and *C. xanthicus* do differ. The blade in *C. fergusonii* is much shorter than it is in *C. xanthicus* (Figure A vs. Figures B and C). As is characteristic of many short bladed teeth, the tooth is more elongated in *C. fergusonii* than it is in *C. xanthicus* (compare scale bars in Figure A to those in Figures B and C).

In summary, it is unlikely that any species newly described (in 1979) could be so completely differentiated by its authors from species with similar shells. The similarity in color patterns is due to convergence and likely *Conus kohni* is not even congeneric with the other two

species. The rarity of this species in collections may be a large part of the problem. It was previously known only from the Galápagos Islands and has been considered an endemic there (Kaiser, 1997). However, when I examined the LACM collections, I noted two specimens of *C. kohni* that had been misidentified as *C. xanthicus*. Both confirm the speculation that the species might occur elsewhere in the eastern Pacific (McLean and Nybakken, 1979). One of these Mexican specimens is shown in Figure 3 and the locality data are in the plate caption. The other specimen, which is not shown, is LACM 34-173.2, a specimen of *Conus kohni* that is 23.9 mm long and that was collected at a depth of 64 m, in sand, off Bahia Sulphur, Isla Clarión, Revillagigedo Islands, México, 18°20.1'N, 114°43.8'W, Leg. R/V Velero III, 11 Jan. 1934. These two specimens seem to demonstrate that the species has a fairly wide range in México and likely the east Pacific.

Acknowledgements:

I thank James Nybakken and the American Museum of Natural History for permission to reproduce illustrations from American Museum Novitates. Geerat J. Vermeij and Henry W. Chaney gave me permission to reproduce the images from *The Veliger*. Lindsey Groves was instrumental in arranging loans for material in LACM. James McLean allowed me access to the LACM collections.

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The Most Variable Cone?

António Monteiro

When one thinks of variable cone species, a number of species come readily to mind, including *Conus mercator* Linnaeus, 1758, *C. venulatus* Hwass, 1792, *C. generalis* Linnaeus, 1767, etc. But on such a list one species must always occupy a prominent place: *C. magus* Linnaeus, 1758. The huge variability of *C. magus* is well reflected in the many names introduced to identify different forms of this polymorphic species, such as *assimilis* Adams, 1854, *borneensis* Sowerby, 1866, *carinatus* Swainson, 1822, *cernohorskyi* da Motta, 1983, *circae* Sowerby, 1858, *consul* Boivin, 1864, *frauenfeldi* Crosse, 1865, *fulvobul-latus* da Motta, 1982, *metcalfii* Reeve, 1843, *raphanus* Hwass, 1792, *signifer* Crosse, 1865 or *ustulatus* Reeve, 1843. And before anyone comes forward to correct me, I should add that the status of some of these names is still dubious, some of them being used occasionally as valid species.

We hope that one of these days somebody will do an in-depth study of the whole group, examining the different known populations, not only from a morphological point of view but also through more advanced means, including DNA analysis, so that we will eventually reach a definitive conclusion about species, subspecies or form status for each one. In the meantime, we can do little more than marvel at the different specimens that come our way.

Quite recently, Paul Kersten obtained two very interesting specimens from the Philippines, which we show below, together with a selection of specimens taken in several locations of the Philippines by Rafael Picardal.

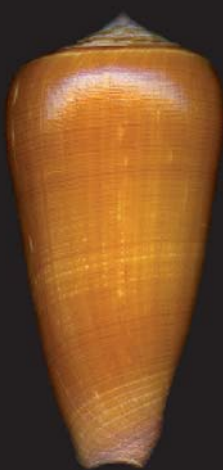
Figures 1-16 *Conus magus* Variations

Fig. 1 & 2 (Coll. Paul Kersten)

Fig. 3-16 (Taken by Rafael Picardal)

- (1) Palawan – 62 mm
- (2) Sulu – 50 mm
- (3) Palawan – 53 mm
- (4) Palawan – 54 mm
- (5) [no data] – 55 mm
- (6) Palawan – 56 mm
- (7) Palawan – 43 mm
- (8) Palawan – 50 mm
- (9) [no data] – 53 mm
- (10) Palawan – 47 mm
- (11) [no data] – 63 mm
- (12) Palawan – 42 mm
- (13) Palawan – 56 mm
- (14) Palawan – 62 mm
- (15) Palawan – 51 mm
- (16) Palawan – 56 mm

Many of our readers will have in their collections outstanding specimens of *C. magus*. Do take the time to send us photos, for inclusion in the next issue of TCC. We will certainly enjoy seeing them!



1a



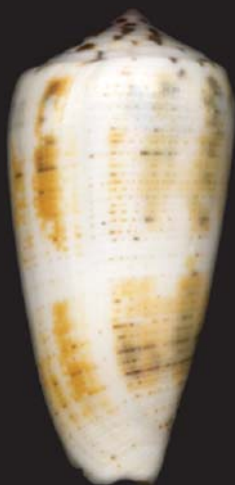
2a



3a



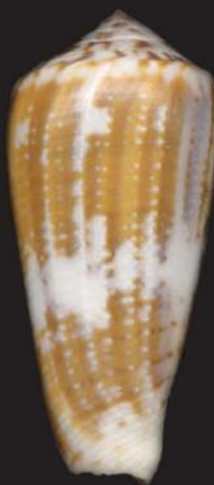
4a



5a



6a



7a



8a



9a



10a



11a



12a



13a



14a



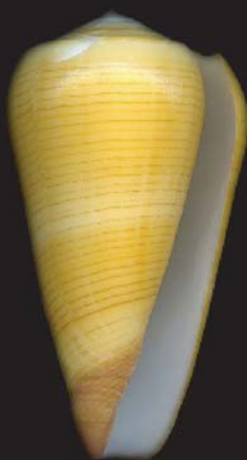
15a



16a



1b



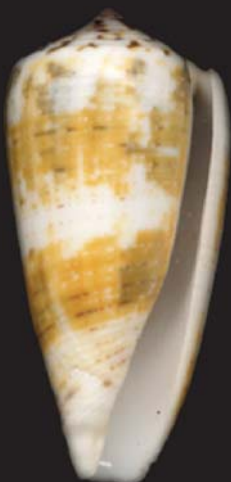
2b



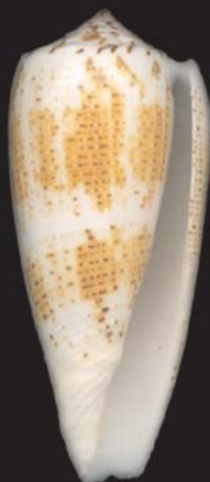
3b



4b



5b



6b



7b



8b



9b



10b



11b



12b



13b



14b



15b



16b

Australis or Anonymous?

Jon Singleton

It was some twenty years ago that I first saw a colour illustration of a small 20 mm *Conus* species with a location of just "Philippines." It had a very dark brown pattern of regular dots and two bands of irregular blotches on a white background. My first thought was it was likely a sub-adult *C. australis*, but I placed it in my book of odd unidentified cones.

Last year I obtained a small unidentified cone just marked as coming from the Philippines which was identical to me species of long ago. A slightly larger specimen at 33.6 mm × 13 mm, but obviously the same species. Unfortunately I do not possess a similar sized *C. australis* for comparison, my smallest being 43 mm × 16 mm. However, my species certainly looked more straight sided, and had a slightly more elevated spiral profile. A look at the body sculpture of fine grooving showed it to be much coarser than the *C. australis*, but possibly that would change during growth. A "one on one" is not sufficient for a good comparison, and amongst a group of similar sized cones, my species could either stand out as differing, or fit in with the accepted variations within a species.



By coincidence, a Philippine website is at present illustrating a very similar cone, under the name of *C. cebuganus*. The *cebuganus* type is of a similar size, though more a pale yellow colour but with a similar pattern. Most cone authorities consider *C. cebuganus* to be a synonym of *C. australis*, and I tend to agree though I have never had a close up look at a *cebuganus*. However, the website specimen is again a very dark brown, and similar to my illustrated specimen.

Reference:

DA MOTTA, A. J.

1982. *C. cebuganus* sp. nov. *Carfel Shell News* 4(3)

2007. de Suduiraut, E. G. (www.eurasiashells.net).

About *Conus aurantius* Hwass, 1792

Frits Fontein

I moved with my wife and two daughters from Pakistan to Curaçao (Netherlands Antilles) in February 1958. It took until mid 1960, before I became interested in sea-shells. At first I had no preferences, but I soon began to concentrate on cones and cowries and in 1963, when I had already gathered quite a stock, I started exchanging with collectors abroad.

It must have been early 1964 when, during a dive at Santa Martha Bay, Curaçao, at a depth of about 3 m, I noticed a boulder of 60 cm² which I turned upside down (I did put it back later). Underneath were many small dead coral pieces, and amidst them a 45 mm cone. I immediately noticed that it was neither *Conus regius* Gmelin, 1791 nor *C. ermineus* Born, 1778 as it had a hardly noticeable periostracum. I took it in my hand, turned it over, looked into the aperture and noticed a flesh coloured animal; however, strange as it may seem, I did not immediately notice a very, very tiny operculum. After examining the cone, which was in excellent condition, I told myself: "This must be the most praised *aurantius*!"

When joy calmed down a bit I thought that the tiny operculum could very well be an indication of a slow mover, so I checked the close vicinity. When turning and reversing stones within a radius of about 20 meters around "my boulder," I had noticed three with what we used to call seaworms. I had been assisting in bringing "seafood" to the CARMABI (Caribbean Marine Biological Institute) where I had seen these worms being paralyzed and then being eaten by *C. regius*.

More importantly, whilst I was checking the surroundings, I collected the second *aurantius*. To make a long story short, after some time I started exchanging these *aurantius* with other collectors (several of whom have shells named after them today).

In an attempt to satisfy the demands of my friends, I exchanged all except the 12 nicest and largest specimens, still in my collection today, the largest one measuring 73.5 mm. As demand was very high and the supply very low, I suggested to a friend to spend a weekend with fam-



67.5 mm



73.5 mm



67.5 mm

Caribbean Corner

André Poremski

ilies at Bonaire to try our luck there. Who knows? So we did and of course we tried our luck at the famous shelling spot called "LAC" bay. However, the result of two days diving was dreadful: nothing new.

On Sunday night we went to the airport to catch our return flight which appeared to be overbooked and the Fontein family (4 persons) stayed behind, waiting for the next flight in 24 hrs. The following morning the family went for a walk. Next to the Kralendijk harbour I saw what looked like a unique diving spot, so I went back to collect my diving outfit and jumped into the Caribbean Sea. After five minutes in the water, I collected my first *Conus* which, for convenience sake, I'll now call *aurantius*.

Several more were found soon afterwards and after two and a half hours I thought it better to go and see the family again. In my mind already a next flight to Bonaire.

Particulars:

1. At Curaçao I never collected *aurantius*, east of Piscadera.
2. The largest *aurantius*, collected by me at Bonaire, was 11 mm smaller than the largest collected at Curaçao.

In 1969 we moved from Curaçao to Kenya where we lived until June 1984. During that period my wife and I spent at least one week per autumn at the coast, to dive into the Indian Ocean for shells, however, I did not exchange when in Kenya.

Back in the Netherlands from 1984 onwards, it was only in 2003 that I coincidentally met an old shell-friend from Curaçao, who introduced me to the Dutch shell world. It took some time before I realized that my largest *aurantius* is really huge, even possibly the World Record. I wonder now if there is a museum or collector who possesses a larger one.

Notes on *Conus stearnsii* Conrad, 1869

After several shelling visits to Florida's southwest coast and the Keys, I have been successful at finding most shallow water *Conus* species (*spurius*, *anabathrum*, *regius*, *mus*, etc.). But, one allegedly "common" species has always eluded me: *Conus stearnsii* Conrad, 1869 (*C. jaspideus stearnsii*). *C. stearnsii* – "The Dusky Cone" – is a small species rarely exceeding 25 mm, with most specimens found between 17 and 23 mm. The species is characterized by its narrow shape, high stepped spire and spiral grooves that begin half way down the body whorl.

C. stearnsii's range seems to be limited to the southwest coast of Florida with most specimens being collected at low tide in muddy sand from the "Pompano Hump" near Goodland, Florida (south of Marco Island). I have visited the area looking specifically for this species, but only returned with worn, dead specimens.

Like other members of the *C. jaspideus* complex, *C. stearnsii* displays a high degree of variability, with color ranging from pale grey to dark mottled brown as seen on the following page. Its color pattern serves as effective camouflage, and I will continue my efforts of finding the species in its natural habitat!

Figures 1-10 *Conus stearnsii* Conrad, 1869

All specimens from the "Pompano Hump," off Goodland, Florida, USA (Coll. A. Poremski).

- (1) 24.1 x 11.3 mm
- (2) 22.8 x 10.7 mm
- (3) 23.6 x 10.5 mm
- (4) 23.1 x 10.2 mm
- (5) 23.3 x 10.2 mm
- (6) 22.5 x 9.9 mm
- (7) 22.9 x 10.6 mm
- (8) 23.4 x 10.7 mm
- (9) 22.3 x 10.2 mm
- (10) 22.5 x 10.7 mm



1a



2a



3a



4a



5a



6a



7a



8a



9a



10a



1b



2b



3b



4b



5b



6b



7b



8b



9b



10b

Snorkeling & Scuba Diving For Shells Part 1: Night Snorkeling In The Grenadines - A Blessing

David Touitou

From 2000 to 2002, I had the great opportunity to live in Martinique, a hot spot for cone shell collectors, although at the time when I arrived on the island, I was only interested in cowries! As only few species could be found locally, I switched my interest to the *Conidae* family, thus becoming a true cone shell collector (albeit one still interested in cowries).

Do you know when does one realize that one prefers cone shells to cowries? Easy: it is when, while snorkeling, one flips over a piece of dead coral and starts looking for what is lying on the sand beneath it first (cowries' hunters will surely look at the coral first). Naturally, after developing an interest in *Conidae*, you directly notice that most Caribbean species are endemic of often quite definite locations and you dream about St Vincent & Grenadines species...

In 2001, with some friends, we planned a sailing trip to Grenadines: 10 persons in whole, only 2 collectors. Of course it was not a shelling trip but I knew that every occasion to snorkel there would be great! I had in mind the strong desire of getting my hands on a specimen of *Conus cedonulli* Linnaeus, 1767 or *Conus dominicanus* Hwass, 1792 during the trip. We snorkeled and did some scuba diving during the daytime and mainly along the rocky shorelines, hence very far from the habitat of those species. I also tried the grass fields, but never found any specimens. Several washed ones were spotted on the beaches nearby, though.

One night, after dinner, while everybody was playing dominoes and having Rhum time, I decided to try some night snorkeling. The water was not all that warm and Leo (the other collector in the party – he has stopped collecting shells years ago) told me that I was wasting my time, since the shells I sought were too rare to be found by snorkeling. Then another member of the team decided to come with me, as it would be his first night swim! We decided to go for a tour around the sailing boat and entered the water with our small flashlights.





The sea bed was 6 to 8 meters deep, made out of coral debris. We started the usual searching dance: go down and have a quick look, back to the surface and down again...all this for roughly one hour. No cone shells were spotted. As we were tired and cold, we decided to get back to the boat, but I thought I would dive just one more time.

When I arrived on the bottom, the flashlight illuminated, a cone shell of rare beauty that was crawling on the sandy bottom! Incredible! I was ever so excited, the pleasure I felt was really unsurpassable! I kept searching around for about 30 more minutes but no other shells were exposed by my light that night.

We came back tired. Leo was still playing dominoes. He asked about our finds. I told him that he was right, impossible to find anything interesting...I made a short pause while he laughed and then I finished my sentence "anything interesting.... except that!" Just imagine the surprised look on his face! I managed to keep the specimen in a plastic container and kept it alive for several months in my aquarium back in Martinique, where I found out that it fed on fire worm (*Hermodyce carunculata*). This *Conus dominicanus* is simply amazing and half of its body shows an interesting bluish colour. You can see it in the accompanying photos.

Size of the specimen: 53.0 mm

(*) – All our readers will certainly enjoy David's site www.seashell-collector.com/articles from its home page the following specialized sections can be reached:

Cones from Polynesia (2004)
Cones from Martinique (2005)
Cones from Seychelles (2005)

Conus queketti E.A. Smith, 1906

What is it?

R. M. (Mike) Filmer

Introduction:

For sometime I have been puzzled about the status of *C. queketti* Smith, 1906. I have three specimens in my own collection and I have been able to study the Holotype in the BMNH. Apart from these four specimens I have not been able to locate or study any other specimens. I am aware that Messrs Guido and Philippe Poppe have or had two specimens in their stock, which were formerly in the Meyer collection and no doubt there are specimens in South African Museums and private collections. Apart from the illustrated figure with the original description I know of no other illustrations of this shell. It is clearly a little known and little studied shell, which has generally been assumed to be a semi adult or juvenile form of *C. imperialis* Linnaeus, 1758. I review herein the data available and the status of *C. queketti*.

Original Description:

Published in Annals of the Natal Museum 1 (1) 1906, page 22, pl. 7, fig. 1:

“Testa parva, elongato-turbinata, supra depressa, coronata, sordide flavescens lineis albis transversis inaequalibus numerosis fusco punctatis ornata, transversim tenuiter sulcata, sulcis confertim et minute punctatis, subaequidistantibus, lineisque incrementi tenuibus striata; spira perpaulum elata, ad apicem mucronata; anfractus 8-9, lente accrescentes, supremi duo (protoconcha) convexi, caeteri angusti, fere plani vel leviter concavi, coronati, striis spiralibus paucis et lineis incrementi curvatis sculpti, ultimus antice oblique sulcatus et fusco tinctus; apertura angusta, alba. Longit. 26 mm. diam. 12.5.

Hab.- Isezela, Natal”. (South Africa).

Holotype in BMNH (25.7 x 12.7 mm).

This is a very distinct species and not comparable with any of the known forms. Of the transverse white lines

dotted with brown about a dozen are conspicuous to the naked eye, but the narrower intervening ones are hardly visible except with the aid of a lens. The spire, which is very little raised, is whitish, streaked and spotted irregularly with brown. The apex is peculiar, consisting of two convoluted whorls which rise as a sort of mamilla above the rest.

References to *C. queketti*:

A) Walls in Cone Shells, 1979. p. 575 simply states “*C. queketti* has long been considered a synonym of *C. imperialis*” and he does not illustrate it.

B) Millard & Freeman in The Strandloper no. 195, 1979 in *Conidae of South Africa* list but do not illustrate *C. imperialis* as an Indo-Pacific species recorded from South Africa but whether this is *C. queketti* or the normal *C. imperialis* is not mentioned.

C) Kilburn & Rippey in *Sea Shells of Southern Africa* 1982 do not mention or illustrate *C. imperialis* or *C. queketti*.

D) Liltved & Millard in The Strandloper no. 225, 1989 in *Conidae of South Africa* list but do not illustrate *C. imperialis* and include *C. queketti* as a synonym. It is not stated whether both forms occur in South Africa or only *queketti*.

E) Röckel, Kohn & Korn in *Manual of the Living Conidae* 1995, p. 49 state “*C. queketti* (a subadult specimen)” of *C. imperialis* and do not illustrate it.

F) Steyn & Lussi in *Offshore Shells of Southern Africa* 2006, p. 226, no. 628 lists, describes and illustrates the normal *C. imperialis* as occurring uncommonly in Southern KwaZulu Natal in 0 – 30 meters, size 54 mm. He does not mention *C. queketti*.

Specimens Studied:

A) From South Africa.

1) Isezela, Natal 25.7 x 12.7 mm. Habitat not mentioned Holotype in BMNH London.

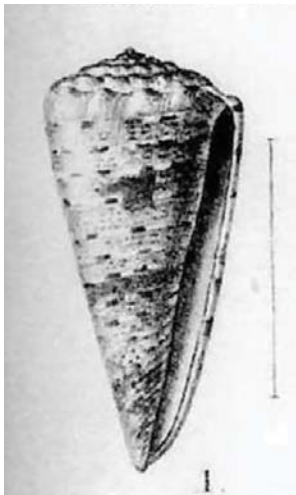
2) Park Rynie KwaZulu, Natal 28.6 x 15.2 mm. (Fig 1). Habitat in sand, 35 meters by diver. Coll. Author. 41.6 x 20.6 mm. (Fig 2). & 33.0 x 15.9 mm. (Fig 3). Habitat on reef, 40 meters by diver. Coll. Author (ex collection Meyer).



C. queketti Smith, 1906
Holotype (BMNH)

B) There are no specimens of *C. queketti* in the BMNH (London), (except the Holotype) and there are no specimens of *C. imperialis* or any of its forms from South Africa in the BMNH collections. There are no specimens of *C. queketti* in the ZMUA (Amsterdam), (R.G. Moolenbeek advises). No specimens of *Conus queketti* are listed in MNHN (Paris), (G. Richard in "Revision des Conidae" 1990). Also no specimens of *C. imperialis* were listed therein from South Africa.

Remarks:

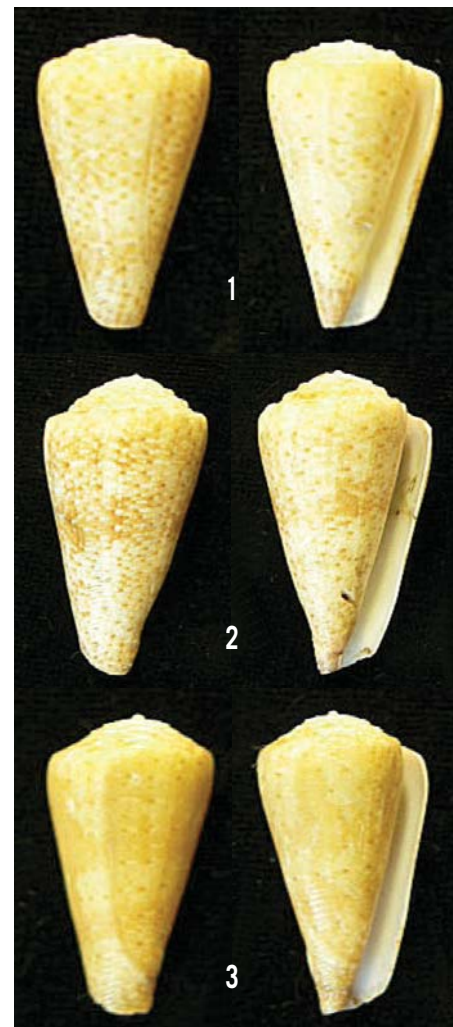


The Holotype, which is a very poor, dead taken, specimen with a heavily broken lip, does not resemble the illustration in the original description Plate VII, fig. 1.

The former is representative of the shell known today as *C. imperialis* form *queketti* while the latter appears to be representative of the normal *C. imperialis*. The holotype is exactly the same dimensions

as those given in the original description and displays the two convoluted spire whorls mentioned therein. Whether the illustration is an artists impression of what the shell might have looked like, if live taken and in good condition or whether it is an illustration of another unmentioned specimen is unknown. If the latter, was the illustrated specimen part of the type material or not, was it the same form as *queketti*? Or was it the standard *C. imperialis*? And finally, where was it from? The answers must remain mysteries.

The shell is somewhat elongate and has very straight sides. There are regular low and close set spiral cords covering the whole body whorl. The ground colour is ivory-white and is covered with milk chocolate triangular flecks which are arranged in spiral lines the fleck are



separated occasionally by white bars. There are irregular pale brown blotches which form two vague spiral bands at the mid body whorl and on the basal half. In some specimens these blotches are axially extended.

The spire is dome shaped with irregular raised whorls, the last three of which are significantly raised and contain rounded nodules. The apex is nipple-like and the early whorls are beaded. There are no spiral grooves or cords on the spire whorls. The aperture is very pale bluish-white with a faint browning at the base and the lip is thin and straight. The periostracum and operculum are unknown to this author.

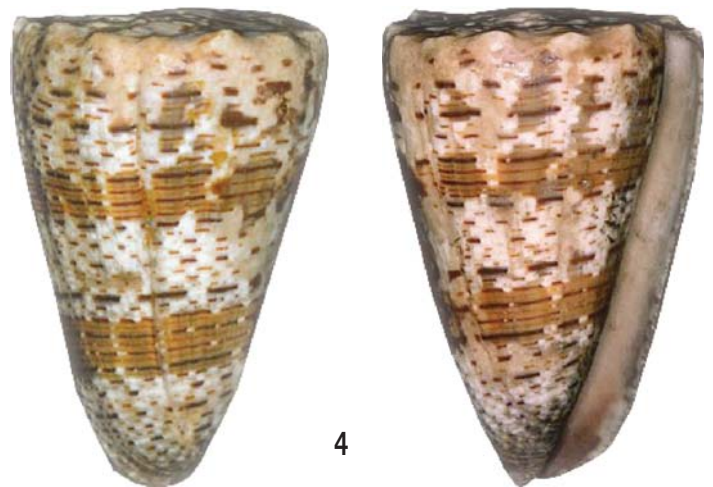
As far as is known the forma *fuscatus* does not occur in South Africa but does occur on off shore islands and as far South as Mozambique. Weinkauff (1873) reported *C. fuscatus* from South Africa but this is probably erroneous. A number of dealers and collectors have informed me that they do not know of any specimens of *C. imperialis* taken off the South African coast. Authors of articles about cones in South Africa, in publications such as the *Strandloper* have never listed it either. However in the new book *Offshore Shells of Southern Africa* Steyn 2006 reports the normal form of *imperialis* as occurring off Southern KwaZulu Natal (p. 226). In this book Steyn does not mention *C. queketti* at all.

C. queketti appears to be a rather rare shell generally found dead. It very rarely appears on the market and is not, to the best of my knowledge, found in museum collections outside South Africa.

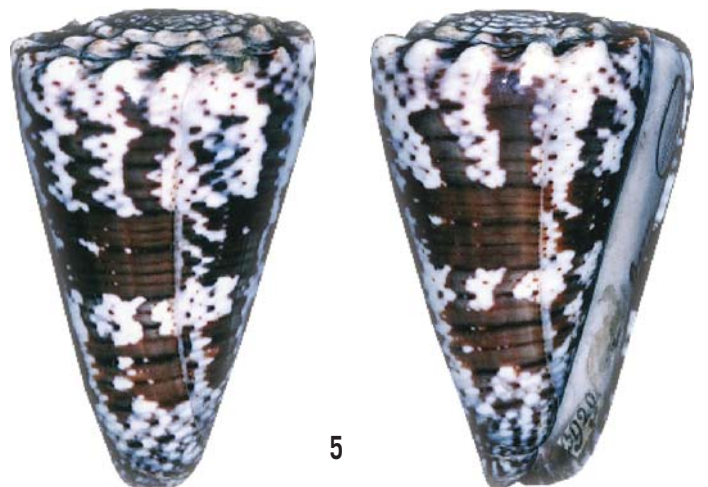
C. queketti does not grow to the size of *C. imperialis* and it is a lighter weight shell. It is more slender than most *imperialis* and it never has the strong tubercles on the shoulder, which are usually present on *C. imperialis*. *C. queketti* has, like *imperialis*, a white base colour but quite unlike *imperialis* it always has an overall beige to pale brown colour. It does not possess the usual two strong olive to brown bands on the body whorl and the thin spiral bands of brown and white dots and dashes are hardly evident.

C. queketti does not closely resemble *C. imperialis* Linnaeus, 1758 (Fig 4) or any of its direct synonyms namely *C. flavescens* Barros E Cunha, 1933 and *C. compactus*

Wils, 1970. Nor does it closely resemble the synonyms of *C. imperialis* forma *fuscatus* Born, 1778. (Figs 4); *C. coronaducalis* Röding, 1798; *C. regius* Röding, 1798 (non Gemlin); *C. viridulus* Lamarck, 1810; *C. nigrescens* Barros E Cunha, 1933 (non Sowerby); *C. dautzenbergi* Fenaux, 1942 and *C. douvillei*; Fenaux, 1942 (non Crossman & Pissaro). The form *fuscatus* is the most commonly found *imperialis* on the East coast of Africa and the off shore islands.



C. imperialis Linnaeus, 1758
Lectotype 65 x 37 mm.
(in Linnean Society London)



C. fuscatus Born, 1778
Lectotype 53 x 31 mm
(in Naturhistorisches
Museum Vienna)

Conclusions:

There are grounds for concluding that *C. queketti* is a valid species in that it differs considerably from *C. imperialis* and many will hold this view. However two other well known Indo-Pacific species of *Conus* – *C. pennanceus* Born, 1778 and *C. biliosus* Röding, 1798 have South African forms rather different from the standard forms, respectively *C. lobri* Kilburn, 1972 and *C. meyeri* Walls, 1979 but most authors now consider these to be only forms. These examples suggest that at the end of the range in South Africa some Indo-Pacific cones have unusual forms. Therefore, based on the information available at this time, I believe that *C. queketti* is only a form of *C. imperialis*.

Why Are Some Cone Shells So Often Eroded?

António Monteiro

Some time ago, Paul Kersten raised an interesting question: why is it that so many specimens of *Conus miruchae* Röckel, Rolán & Monteiro, 1980 are badly eroded, especially on the ventral side?

Naturally, part of the explanation lies on the rough habitat where specimens are to be found. Nevertheless, the question having been put to our friend Carlos Afonso, who is quite experienced in shell collecting in the Cape Verde Islands, he was able to add some very interesting comments that we would like to share with everybody. Here is what Carlos had to say:

Most of the Cape Verde Cones are particularly hard to get in gem condition. Even so, it is true that some species can be obtained with better quality than others! Regarding *C. miruchae* and its usually awful shell condition, this is mainly due to the habitat where it is found, in very bad ocean conditions and very strong currents and mostly living in exposed areas of black volcanic rocks. These intertidal areas are hit by extreme heat, especially during the summer period. The bad ocean conditions but most importantly

the direct sunlight and the exposed way of life of *miruchae* are responsible for the bad quality shells. But all that still does not explain why its shells have nice dorsal but very bad ventral sides. The explanation for this goes back again to the direct sunlight the shell gets during the summer period, which corrodes the shell. But wouldn't corrosion caused by sunlight be expected on dorsal part of the shell? The answer is yes. So the question remains, why do shells show bad ventral sides?

The reason for this is that the growth period of Cape Verde Cones, starts from late summer and goes on after this period. As the shell grows, the corroded dorsum will eventually be replaced by a fresh layer. By February to April/May, most Cones have already formed new shell layers and where once a corroded dorsum existed, a nice fresh layer will be found. This process will be continuously repeated in the following year or years. Now, it happens that most Cape Verde Cones currently available are collected between April and July, which is why most collectors only know *C. miruchae* with nice dorsum and bad ventral side. Should one collect them during the summer period, just as I have, it would of course be the other way round.

Anyway, having collected *C. miruchae* in different seasons, I must stress that gem shells are extremely difficult to get. One can get gem shells up to 7-9mm but for the larger ones, say 10mm up, that is almost impossible.

Carlos Afonso

Australian Corner

Jon F. Singleton

Cone News from Australia - 12

Any Votes for *blainvillii*?

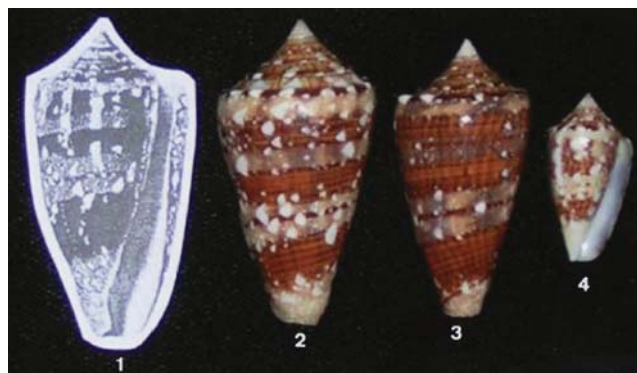
The 1995 Cone Manual introduced the *Conus pseudocedonulli* Blainville, 1818 name for the Indian Ocean cone which has a similar colour and pattern to the well known *C. ammiralis* Linnaeus, 1758 a species which inhabits the Western Pacific. While there is certainly no dispute that *C. pseudocedonulli* is one of the many *C. ammiralis* forms, there are a few collectors who consider it incorrect to use this name for the Indian Ocean cone. The Indian Ocean cone had an identity crisis for many years, often being marketed as *C. archithalassus* Hwass, 1792 but now generally accepted to be the pustulated form of *C. ammiralis*. It was around the mid 1980's that the *C. blainvillii* Vignard, 1829 name started to gain acceptance for the Indian Ocean cone. The late A. J. da Motta was a believer in the *C. blainvillii* name, and published a well illustrated article promoting his thoughts.

The choice of name would seem to depend on whether these two cones are the same, or separate species. Many identifications are made by a researcher studying the old literature, making a decision, and publishing his findings, and generally accepted by most collectors. *C. ammiralis* along with many of the forms are well figured, but the *pseudocedonulli* is not, and no type exists. *C. blainvillii* is illustrated by Vignard, though again sadly no type exists. So the decision to either split or lump these cones must be the shell shape and sculpture. The typical specimens of both are a good match in shape, and both are smooth bodied. The major difference is that *C. blainvillii* has very prominent white-tipped pointed nodules around the shoulder and spiral whorls.

This sculptural aspect surely makes it a separate species from *C. ammiralis*. In general *C. blainvillii* is smaller than *C. ammiralis* which can attain a length of 100 mm. The lectotype representative is 63 mm in length, and large for the species. However, the old Walls Cone Shells illustrates a specimen from Mauritius (as *C. ammiralis*)

stated to be 64.6 mm. He also shows a Reunion specimen on which the sharp nodules can be seen with clarity.

The range of *C. blainvillii* extends across the whole of the Indian Ocean, though East African specimens seem to be rare. It is well known from Mauritius, Reunion and the Seychelles, and most specimens on the market are usually from Thailand. A Thai specimen was also named by da Motta as *C. hereditarius* in 1987, but considered by most to be a synonym. A pustulated form of *C. blainvillii* is also known from Thailand. *C. blainvillii* also occurs in Western Australian waters. I was fortunate in finding a small sub-adult specimen in 15 metres depth off the Scott Reef, in the far northwest of the State.



Figures 1-4

(1) Type illustration, (2) a 40 mm Thai specimen, (3) a 36 mm Reunion, (4) an Australian sub-adult cone.

References:

- WALLS, J. G.
1979. *Cone Shells – a synopsis of the living Conidae*.
- RÖCKEL, D., KORN, W. & KOHN, A. J.
1995. *Manual of the Living Conidae*.

Cone News from Australia - 13

Just White or Albino?

With the exception of naturally all-white cone species, most collectors possess some white specimens of cones that normally have other colours in their pattern. We

often refer to these as being albinistic, but are they truly an albino? My conchological glossary defines “albino” as “lacking normal pigmentation, unnaturally white”. It does not make any distinction between the shell and the living animal. So should a true albino cone possess an animal which is considerably paler than the normal colouration?

The natural ability of the living animal to reflect its colours in the pattern on the shell is further complicated by many all-white shells that are formed by a black animal. An example of this within Australian waters is *Conus thevenardensis* da Motta, 1987 which also has a thick, black periostracum. I have only been able to study one species which occurs in sufficient numbers.

There is a colony of all-white and partial-white *C. victoriae* Reeve, 1843 found at Cape Missiessy which is a small promontory at the northern end of the Eighty Mile Beach, W. Australia. Here I have observed that some, but not all, animals within all-white *victoriae* are sometimes paler than usual.

In Australian waters, *C. victoriae* and *anemone* are two species which show great variation in colour and pattern, ranging from white to near all-black. There are several other similar species in the Indo-Pacific such as *C. amadis*, *magus*, *furvus* and *spectrum* to name a few. The *C. spectrum* is also common to Australia, but I have not sighted an all-white specimen.

An all-white specimen occasionally occurs in a species which has minimal variation from their normal colours and patterns. These are much rarer, and a few I possess are *C. araneosus*, *lynceus*, *malaccanus* and *nobilis*, and many collectors will likely have other species. Mine were obtained prior to the activities of the “Cebu Doctor”, and today collectors are wary about white specimens of unusual species.

The occurrence of whites within the Atlantic Ocean seems less common. *C. mindanus* and *spurius* show much variation, and the odd all-white specimens are known. The *C. puncticulatus* form *columba* occurs commonly in a white form, though the great majority have the odd brown marking. *C. mappa granarius* also produces the odd rare white form. The W. African side of the Atlantic

has many varied colourful species, but I can recall only seeing two white forms in *C. cloveri* and *ateralbus*.



The illustrated specimens are all Australian, and range in length from 45 mm to 49 mm. The only self-collected one is the *C. trigonus*, a live taken intertidal specimen having a normal coloured animal. The *C. rufimaculosus* was obtained directly from a trawler with a frozen animal intact. Again it appeared normal compared with two other frozen normal specimens. The *C. pertusus* was a fresh dead diver-collected cone, seemingly all-white, though just the faintest hint of two pinkish bands can be seen under a strong light.

Conus cordigera vs *C. nobilis*

António Monteiro

Conus cordigera was described by Sowerby II in 1866 but for a long time it was considered a synonym of *C. nobilis* Linnaeus, 1758. Recently, however, different authors have considered it a separate species.

Our friend Rafael Picardal is wondering about the morphological features that enable us to distinguish one species from the other.

Röckel, Korn & Kohn, in their *Manual of the Living Conidae*, consider *C. cordigera* as a valid species and this is what they have to say about it:

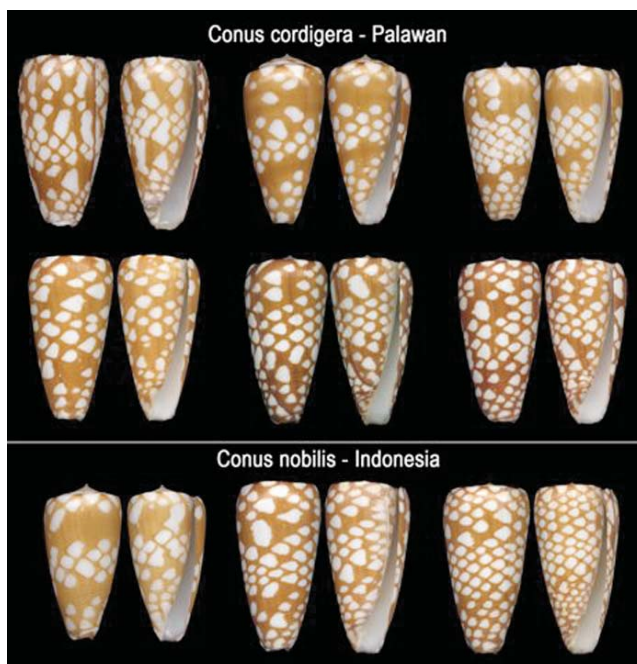
"*C. cordigera* closely resembles *C. nobilis*. The latter species differs mainly in its non-tuberculate early and carinate later post-nuclear whorls, and its coarse alternating brown and white spiral lines within the larger solid brown areas of its last whorl"

The geographical ranges for both species are distinct although overlapping: *C. nobilis* is said to come from "Andaman and Nicobar Islands, Sri Lanka, Sumatra and Java

no N. Timor Sea", whereas *C. cordigera* is from "Palawan and Sulu Archipelago (Philippines) to N. Timor Sea and Java (E. Indonesia)". From this we infer that the two species in fact live sympatrically in S. E. Indonesia.

That would of course mean that specimens from Sri Lanka do N. W. Indonesia would certainly be *C. nobilis*, whereas specimens collected in the Northern Philippines would have to be *C. cordigera*, but that hardly sounds like a reliable criterion and in any case it does not help in the zone of S. E. Indonesia.

I would venture to say that the status of the taxon *C. cordigera* is still not entirely clear. Any further views on this matter?



Reference:

RÖCKEL, DIETER, KORN, WERNER & KOHN, ALAN J.
1995. *Manual of the Living Conidae*. Verlag Christa Hemmen.

Recently Described Species

Since the last issue of TCC, one new species and one new subspecies have been published in *Visaya*, vol. 2, No. 2 (November, 2007). We are of course referring to:

Conus beatrix Tenorio, Poppe & Tagaro, 2007

Conus reclusianus simanoki Tenorio, Poppe & Tagaro, 2007

Figures 1-3 *C. beatrix*

- (1) Aliguay Is. , P.I.***
- (2) Aliguay Is. , P.I. – 21.1 x 9.0 mm (paratype 10)*
- (3) Aliguay Is. , P.I. – 17.8 x 7.7 mm (paratype 11)*

Figures 4 -5 *C. reclusianus simanoki*

- (4) Burma/Thailand border – 75.8 mm**
- (5) 72.2 mm (paratype 7)*

*Coll. Manuel J. Tenorio

**Ex-Coll. Philippe Quiquandon

***Coll. Paul Kersten



1a



2a



3a



1b



2b



3b



4a



5a



4b



5b

The Golden *Nocturnus*

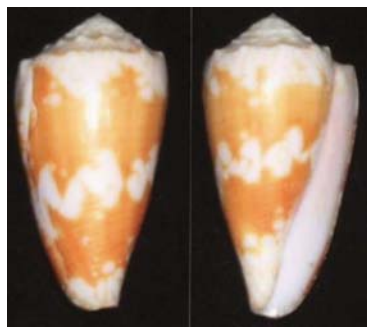
Jon Singleton

Fairly early in my cone collecting, one of my favourite groups was the *C. marmoreus* Linnaeus, 1758 complex. I was soon able to show an impressive display, but lacked one species, namely *Conus nocturnus* Hwass, 1792. This species never seemed to be offered on the shell market, despite being not uncommon in older collections made in the late 19th century.

I was fortunate in obtaining my first *C. nocturnus* at a shell auction in the 1960's. Luckily for me it went under the hammer as a *C. bandanus*, so a bargain for me. This was a smooth bodied 53 mm specimen, but came without any location data. It was not until 20 years later, I decided to give this cone a re-clean, and in the process flushed out a soggy bit of paper which was never visible within the aperture. A careful unfolding and the faint writing read "Moluccas, 1898."

Around the same period I was given some photographs of cones held in the Geneva Museum. Amongst these was a yellow and white *C. nocturnus*. The cone looked a little worn, but I did not believe a normal black coloured shell could fade to a yellow. However, I had seen a few shells which had been buried in black volcanic sand and which and undergone a colour change after some years.

In 1999, an expedition to the Irian Jaya region of Indonesia by a group of divers returned with several specimens of *C. nocturnus* collected at various locations. These were a mix of the smooth black and the pustulated "*deburghiae*" form. There was also just one odd golden coloured specimen. This was a dead collected shell, but looking quite fresh and with a glossy aperture. I was fortunate in obtaining this cone, a medium sized specimen 46.6mm × 23.9mm. It was found at a depth of 15 metres off Kri Island, a tiny islet off the south coast of Pulau Waigeo.



Fossil *Conus* from Castell'Arquato (Piacenza)

Giancarlo Paganelli

When in November 1970 I made a trip to the gullies of Rio Stramonte I was not aware that I had found the first specimens, though fossil, of my future *Conus* collection and that some years later I would become a devote collector of that Family of Gastropods.

The territory around the small town of Castell'Arquato (Piacenza province, Italy) is constituted of sediments of geological beds dating between 3.5 and 2.5 mya, medium-upper Pliocene, called Piacenzian by the Swiss geologist Karl Mayer-Eymar, 1858.

At the beginning of Pliocene, about 5 mya, when the continuity between the Mediterranean Sea and the Atlantic Ocean was established, the waters came to flow again into the Po basin and unusually warm climatic conditions for this latitude were fixed. Many molluscs settled in the gulf of Castell'Arquato and were covered by clayey deposits.

In these gully lands, Protected Natural Reserve since 1995, many fossil *Conus* species as *Conus antidiluvianus* Bruguière, 1792, *Conus brocchii* Bronn, 1828, *Conus canaliculatus* Brocchi, 1814, *Conus pelagicus* Brocchi, 1814, *Conus ponderosus* Brocchi, 1814, *Conus pyrula* Brocchi, 1814, *Conus striatulus* Brocchi, 1814, *Conus virginalis* Brocchi, 1814 are found.

During that trip I collected some specimens of *C. antidiluvianus*, *C. brocchii*, *C. canaliculatus* and only one *C. virginalis*.

References:

BROCCHI, G. B.

1814. Conchiologia fossile subapenniana. II.

CAPROTTI, E.

1976. *Malacofauna dello stratotipo piacentiano (Pliocene di Castell'Arquato)*.

ROSSI RONCHETTI, C., 1955. *I tipi della "Conchiologia fossile subapennina" di G. B. Brocchi. II. Gastropodi, Scafopodi*.



Conus antidiluvianus Bruguière, 1792 – 67.7 mm



Conus antidiluvianus Bruguière, 1792 – 61.1 mm



Conus brocchii Bronn, 1828 – 39.8 mm



Conus brocchii Bronn, 1828 – 25.9 mm



Conus canaliculatus Brocchi, 1814 – 27.7 mm



Conus virginalis Brocchi, 1814 – 36.1 mm

Conus kawamurai Habe, 1962 An Extinct Species?

António Monteiro

Conus kawamurai Habe, 1962 is a relatively poorly known species, of which apparently no live specimens have ever been collected; dead collected specimens, on the other hand, are not too uncommon from an area around South Japan.



Naturally, the fact that no live taken specimens are known does not mean that none will turn up any day. As

Manuel Jimenez Tenorio has pointed out, many species of molluscs have been named from empty shells, with no information about living animal and yet, years or even centuries later, many such species have been captured alive.

Nevertheless, in a recent paper, Yoshida & Nobuhara, after referring to numerous dead shells having been collected in shallow waters "around Amami to Okinawa Islands," report on the conclusions of their study that involved measuring the age of a specimen from off Itoman City,

Okinawa-jima. With the use of a Tandetron accelerator mass spectrometer, at the Dating and Materials Research Center, Nagoya University, that particular specimen was found to be several hundred years old.

To the authors, this would suggest that the local population of *C. kawamurai* "disappeared from the Amami and Okinawa Islands" between the 16th and the 19th century.

Reference:

SHIGEO, YOSHIDA & TAKAMI, NOBUHARA 1997. *Leptoconus kawamurai* Habe, 1962 (Gastropoda: Conidae) is a living or extinct species?, in *Summaries of Researches using AMS at Nagoya University*, Vol. 8 (19970300), pp. 152-157.

Letters to the Editor

From Jacek Glanc:

Dear Antonio... this is Jacek Glanc from Poland. Thank you for TCC # 4... but in "COLLECTION WEBSITES" my address is wrong! My website "CONCHA" address is www.musze.concha.pl The address in TCC # 4 (www.musze.net.pl/conidae.html) is actually the address for Krzysztof Kuźniar's website...

The Editor replies:

Sorry about the mistake, Jacek! We stand corrected!

From John Tucker:

I bet you are going to get a lot of these but nonetheless, there is a specimen of *Conus granulatus* (very nice live collected one) that measures 59.5 mm long and 26.6 mm wide in the University of Florida collections (UF 33557). Label said "South Florida". This one is not 61 mm but certainly close to that. I examined and measured the shell at UF in 1980's. So Yes Julian there really is a Santa Cone.

The shell shown on page 31 of TCC 4 looks like a *Conus ochroleucus tmetus* Tomlin, 1937 (see RKK page 115, pl. 18, figs. 18-20).

Also could you please get authors to provide plate captions with identities, sizes, and collecting data for all the specimens? The plates in the Poremski paper on *archetypus* would be much more useful if we know the sizes and localities for all the specimens.

The Editor replies:

Thanks for your comments, John. And I am sure our authors will take good notice of your suggestion.

From Mike Filmer:

May I add something regarding the Hwass plates? Many people assume that they were produced by Hwass or Bruguière but in fact they were produced by Lamarck in 1798 and placed in Bruguière's *Tableau Encyclopedique et Methodique des Trois Regnes de la Nature*.

The Editor replies:

Thanks Mike!



NEW SCOTTISH SHELL SHOW

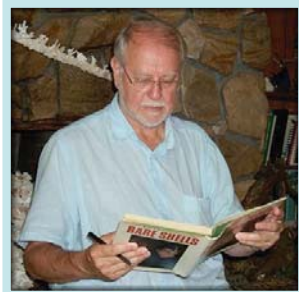
Fairmilehead Parish
Church

Fairmilehead, Lothianburn
Edinburgh

29th March 2008

9.00 – 16.00

Talk by world renowned conchologist
S Peter Dance entitled



***“My Journey Through the
Shell World.”***

Will take place at 14.30

**Come along and see wonderful displays of shells
from across the world.**

**Talk to enthusiasts and browse among the sales
tables.**

Also join us on the Sunday for a “shelling trip”