



*THE
CONE
COLLECTOR*

#4 - October 2007



THE CONE COLLECTOR

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On the Cover:

Conus curassaviensis Hwass,
1792 in its natural habitat off
Aruba. Photo taken by Afonso
Jório of Guarapari, Brazil.

Note From the Editor

It is with great pleasure that I send everybody the latest issue of TCC.

I wish to thank everybody that sent in kind words about our previous issues and especially those who have contributed with comments, photos, articles, etc. for the current one.

While everybody apparently agrees that it is a good idea to have a newsletter exclusively dedicated to collectors of Cones, I must always stress that it cannot be done without help from everyone and while it is always great to hear from the “regulars”, it will also be a pleasure to get contributions from others, so please do not hesitate to send along your thoughts, photos, comments, questions, anything that will fit into the scope of our publication.

As you will have already noticed, the graphic design of TCC is now greatly improved, thanks to the efforts of our good friend André Poremski and his wife Kelly McCarthy. I am sure that everybody joins me heartily in congratulating André and Kelly on their work. Well done!

So, without further ado, let's carry on with the Cones!

Who's Who in Cones: Dieter Röckel

I was born on the 3rd March, 1922 in Eberbach, a small old town near Heidelberg, Germany, surrounded by huge forests and mountains, by the river Neckar.

Having studied Law, I got a position as a judge but found out that I really wanted something different and soon began a career as head of the legal department of the pharmaceutical company E. Merk, in Darmstadt.

Having retired in 1986, after 37 years with them, I left Darmstadt and returned with my wife Else to romantic Eberbach, where we live happily in our old house.

I "discovered" shells around 1970, when I was fascinated by a black spiny shell spotted in the window of an arts and crafts shop. I bought that shell and was told that it came from tropical seas. The following summer, I happened to come across another shop in the Netherlands, full of sea shells with fantastic shapes. I eagerly acquired a lot of those treasures, thus beginning a rapidly expanding shell collection.

At the time, an Italian friend of mine, Sergio Narici, a chemist also working in Darmstadt and a collector of fossil shells from the Appenine Mountains, subscribed to Hawaiian Shell News, which led me to subscribe too, subsequently becoming a good friend of Elmer Leehman, the Editor, whose grandfather was a German emigrant. Because my English was rather poor, Elmer helped me to prepare the many articles that got published in the following years. I loved all shells, including land snails, and soon had a self-collected collection of German *Clausiliidae*, enriched with numerous rare specimens from Japan and other countries, obtained through exchange.

One day, noticing that the house was packed full of shells of all kinds and sizes, Else strongly recommended

that I should concentrate on a single group of seashells. She was obviously right! I then decided to specialize in *Conidae*. All other shells were donated to the Stuttgart Museum, with the exception of the *Clausiliids*, which went to the Coburg Museum.

I had extensive correspondence with practically all Cone collectors in the world and visited them whenever possible as well as all museums possessing type speci-

mens of *Conus*. I also had the pleasure of welcoming at home many great names of Malacology, including Alan Kohn, Bob da Motta, Mike Filmer, Renate Skinner, Sukhadwala, Phairot Lenavat, Thora Whitehead, Georges Markens, Igor Bondarev, Gabriella Raybaudi, among others.

More and more I specialized in Cones and I did try to identify unknown taxa, which led me to describe a total of 55 new species, either alone or with co-authors. On the occasion of my 80th birthday, Klaus Groh and Jürgen Jungbluth,

in a publication of the Deutsche Malac. Gesellschaft, counted a total of 128 articles under my name.

Finding the necessary time after having retired to Eberbach, as explained above, I began working on the long time planned book on *Conidae*. Naturally, being a jurist, I welcomed and actually needed the help of professional zoologists. My friend Werner Korn (Natur-Museum Coburg) was willing to cooperate at once and a few years later I was proud to enlist Alan Kohn as an additional author (his contribution – adequate use of scientific English language, systematic procedure, precise determination of used terms, etc. – was most important).

The first – and for the collectors most interesting – part, concerning the Pacific area, was published in 1995 thanks to the help and advice of Klaus Groh. Unfortu-



nately, though, the work could not be completed. It is my hope that somebody someday will be encouraged to bring light on the Western Atlantic *Conus* fauna!

For roughly 15 years now, my collection is housed at the Staatliche Museum für Naturkunde, in Stuttgart, together with the collections of Bob da Motta and Werner Korn.

I have certainly lost contact with recent literature, but sincerely hope that the contribution of my generation of Cone collectors and describers will not be forgotten. Currently, I am interested in the history of this part of Germany. I wrote a really nice book on the last wolf in our area (1866) and the history of floods of our Neckar River, as well as other topics of local importance.

Cone Collecting – A Man's Job?

António Monteiro

I suppose it is safe to say that among shell collectors – not only Cone collectors, but in fact collectors of all kinds of shells – there are more men than women and indeed, more than once I have heard remarks about the men/women ratio in the world of shell collecting. Even among the about 120 names in our mailing list, there is a single woman, namely my good friend and well-known collector-dealer-researcher Gabriella Raybaudi Massilia!

This is a point that I have often discussed with several collector friends and it is perhaps curious to raise it here.

If one thinks of famous malacologists and shell collectors, how many women turn up? Besides Gabriella, the names that spring to mind are probably those of Helen Boswell, Emily Vokes and A. Myra Keen, among the most famous; I did correspond with many other ladies along the years, of course, and must make a point of mentioning in this context my good friends Anne G. Wilson (from South Africa) and Verna Johnson (from New Zealand), both unfortunately deceased. But if one were to make a list of well-known masculine collectors, several dozens would undoubtedly be forthcoming!

Famous malacologists of the past (I am thinking of the likes of Reeve, Kiener, the Sowerbys, Tryon, Pilsbry, Duclos, etc.) were all men but that need not surprise us. In the 18th or 19th centuries, the general social organization in Europe determined that most women did not have the independence of means or the benefit of a proper education that would allow them to pursue any inclinations they might have had for collecting shells. We do not find many women shell collectors – Margaret Cavendish Bentinck, Duchess of Portland (1715-1785) being an obvious famous exception – just like we do not find many women doctors or women mathematicians or whatever!

On the other hand, I think that the same phenomenon extends to other fields of collection, the women/men ratio appearing to be equally small among collectors of such varied objects as stamps, coins, bank notes, insects, etc. So, can we really state that collecting in itself is chiefly a man's occupation? And if that is in fact true, why is it so?

The social reasons already mentioned above and related to the organization of the Western civilization do explain part of it: the woman traditionally had a lot on her hands, caring for the house and the children, which in principle did not leave her much time for other activities; moreover, women were perhaps more concerned with the subsistence of their family, which probably suggests that she would be more inclined to save efforts and money rather than spending them in what are, after all, superfluous objects, like shells or stamps.

But I (as well as other friends with whom I have discussed the subject) believe that there is perhaps a deeper reason: I see collecting as a kind of sublimation of the ancestral hunting!! We go after shells or stamps or coins because we no longer need to hunt animals to eat and we keep the specimens we do find as trophies, just like prehistoric hunters kept the teeth or the skins of wild beasts (or even the scalps of their enemies). Now, hunting is typically a masculine endeavour (in the human race at least), because men are usually stronger than women, if for no other reason. This could explain why collecting is apparently a man's thing.

Comments, anyone?

An Exceptional Specimen

Conus aulicus f. graciosus
da Motta & Blöcher in da Motta, 1982

Coll. Shells Passion, Philippe Quiquandon

We have already invited all our readers to submit photos of exceptional specimens from their collections and in this issue we are proud to present a truly outstanding one, thanks to the efforts of our friend Philippe Quiquandon: you will find below a magnificent albino specimen of *Conus aulicus* Linnaeus, 1758, forma *graciosus* da Motta & Blöcher in da Motta, 1982!

As is well known, *C. graciosus* is usually considered a localized dwarf form of *C. aulicus*, from Madagascar. The illustrated specimen was collected to the south of Tulear, about 100 km from Itampoolo, in 2004. Only a very limited number of albino specimens are known. This specimen was examined under ultraviolet light and found to be a genuine albino, not a “doctored” specimen.

Views of *Conus aulicus f. graciosus*,
albino specimen 44,9 mm:



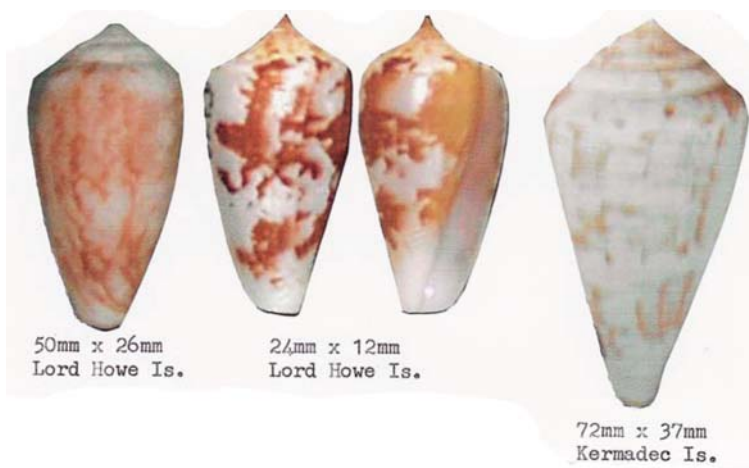
Australian Corner

Jon F. Singleton

Cone News from Australia - 8

Range of *Conus anemone*

Conus anemone Lamarck, 1810 has long been regarded as an endemic species within Australian waters. It is believed to either lack a free-swimming veliger stage, or have a very short one, so unlikely to be found any great distance from the mainland coast. The Tasmanian colonies are understandable, as the Bass Straits waters are very recent in geological time. Certainly this species would not be expected around any of the Australian Territorial Islands. Yet surprisingly there are two confirmed recordings of *C. anemone* being collected at Lord Howe Island, situated some 600 kilometres off the mainland coast, and separated by deep water.



The first was a long dead and eroded shell found on a local beach by Barbara Collins, a well known shell identity from Cairns. A second sub-adult specimen was collected by the Perth diver/dealer Hugh Morrison at a depth of 20 metres off Noddy Island, in the northern end of Lord Howe Island. This specimen was dead, but still had the periostracum intact.

There is also a third possibility with an odd cone trawled off the Kermadec Islands, and which looks like it could fit amongst the *C. anemone* complex. This cone

was illustrated within a Rossiniana magazine, a New Caledonian publication which ceased in the 1990's. I did try to obtain further details, but without success, and the whereabouts of this specimen are unknown.

Cone News from Australia - 9

Extant or Extinct?

In 1990, three new species of *Conus* were named by Röckel & Korn with type localities off the Queensland coast, Australia. One of these, *Conus colmani*, remains an enigma to collectors, the big unanswered question being, is *C. colmani* a living species, or are all the many specimens known just dead collected shells from a now extinct species?

C. colmani seems to be rather restricted in the known range, with the type locality being near 50 kilometres S. E. of the southern end of the Swain Reefs complex. Another locality is the Archer Shoal which is 30 kilometres south of the Swain Reefs. Specimens are brought up by deep water prawning vessels which work many regions around these reefs, with byproduct like shells all being stowed together in a large container, and precise locations unreliable.

I have been fortunate in sighting a vast quantity of this deep water material, including several hundred specimens of *C. colmani* over a lengthy period of 15 years. As yet, I have not been able to ascertain that this species has ever surfaced with the living animal intact.



The condition of these dead specimens are very similar, with the majority showing good pattern and colour after cleaning, and many still with a good gloss within the aperture. Naturally a few will have eroded badly, but these seem to be in the minority. Many are covered with “tube-worm” castings, but remove fairly easily without marking the shell body. It seems likely that these cones are buried in a soft silty seabed which may slow down the natural decay of a dead shell.

Cone News from Australia - 10

Lacking the Limelight

Conus minnamurra is an endemic Australian cone which for some reason rarely receives much publicity, and very little has been written about this cone over the years. Named by Garrard in 1961, the type, a 25.5 mm × 13.5 mm cone, was trawled from a depth of 120 metres east of Sydney, N. S. W. Just over ten years later I sighted three specimens of *minnamurra* again landed by a local fishing boat working off Sydney, and I was fortunate in obtaining a specimen for my collection. All up I have only seen about ten specimens from N. S. W. localities, and a few of those were long dead and faded.

During the 1970's a very few *minnamurra* were trawled from 160 metres off Cape Moreton, but I was unaware of these finds until sighting a few in Queensland collections many years later. These specimens were the same shape and pattern as the N. S. W. specimens.

In the early 1990's a deep water prawner operating around the southern end of the Swain Reefs at 200 metres depth, discovered another population of *C. minnamurra*. These were much larger in size with the longest exceeding 40 mm, and were more bulbous in shape. The boat worked the area for a couple of seasons, and a small supply of cones became available to collectors. When the boat moved to new fishing ground, the supply quickly dried up. Very likely the area will be fished again and a few more *minnamurra* become available to



collectors. The Swain Reefs cover a massive region, and fishing spots can be left for years to recover. However, the N. S. W. *minnamurra* will likely remain ultra rare, as the local fishing industries have declined.

Since naming, the first colour illustration of this cone was likely within the 1974 Cone Shells of the World and the artist gave an excellent drawing of *C. minnamurra*. It was less fortunate within the 1979 Cone Shells, where of the four cones shown as *minnamurra* only one rather worn specimen was genuine.

The 1995 Cone Manual only illustrated the two Queensland locations, but sadly the specimens on that page are unnaturally elongated, and the text possibly the shortest of all the species covered in the book.

The illustrated specimens show in fig. 1 a Swain Reefs specimen 38.6 mm × 22.2 mm. Fig. 2 is an unusually patterned specimen size 27.4 mm × 17 mm from off Cape Moreton. Fig. 3 a 24.4 mm × 15.2 mm cone from near the type locality N. S. W.

References

- 1974. J. A. Marsh & O. H. Rippingale, *Cone Shells of the World*
- 1979. J. G. Walls, *Cone Shells – a synopsis of the living Conidae*
- 1995. D. Röckel, W. Korn & A. J. Kohn, *Manual of the Living Conidae*



A Family Trip to the Maldive Islands...

Searching for *Conus pennaceus ganensis*

Text & photos, Armando Verdasca

English version, António Monteiro

Expectation was high, especially with the children! My oldest daughter would soon be 11 and had traveled by air long before, she might even have forgotten all about it already, but her younger sister, who will be 7 within a month, was very anxious indeed and she practically did not sleep at all, waiting for the day of departure.

For us parents, it was merely one more trip, except for the fact that destination being in the tropics gave us some worries about the kids' health. Such worries were compensated by the thought of a well earned rest together after one year's work, often the entire family remaining in Portugal while I worked in Northern Africa. We also intended the children to have some compensation for their good scholar results. There are things that one cannot learn from books, and the experience of a long trip can be as enlightening as any school book!

So, we left Lisbon's airport on the 20th July, about two p.m., after two long hours of check-in formalities. The first stop and change of planes would be in Munich, Germany, then in Doha, Qatar – where we arrived the next morning – to finally arrive at Malé, the capital of the Republic of Maldives, around 3 p.m. on that same day.

However, to reach the hotel, located about 30 miles northeast of Malé, in Malé Atoll, the only one in the island of Meerufenfushi, we would still have to face a one hour board ride, after about 14 hours of air travel and an equivalent total of time waiting in airports! It had been a tiresome trip, as expected, but the children had in fact behaved themselves! Once on the island, evening was approaching but that did not stop us from noticing the turquoise blue that surrounded the inlet covered with beaches of white sand, formed by sediments from the coral barrier. On the center of the small island – no more than one kilometre long and 500 metres wide – there was a dense forest of palm trees, just like we had seen in the brochures supplied by the travel agency a few months earlier.



We had arrived in paradise!

A welcoming cocktail was served and we hurried to inspect our rooms. Would they be like the Land Village we had seen in the same brochure? We soon confirmed that they were and we were quite joyful.

On the same night, after a comforting shower, I went to the beach. The water was warm, the waves tiny, but heavy clouds announced the possibility of rain. We knew that we would be taking some chances with the weather. After all, it was not summer over there, it was in fact the rainy season. But I was confident that after the storm good weather would follow; my ancestors, the Portuguese navigators, had thought as much when they sailed the same waters for the first time, more than five centuries ago! And knowing the Indian Ocean well, after having lived for about 4 years in Mozambique, I also tended to believe in sheer luck. It turned out that I was right there, because the weather was just fine, with a spot of light rain now and then, which was actually a good thing to bring down the temperature that could be rather unpleasant, conjugated with high levels of humidity.

Still before dinner, I visited the diving school, to learn of the next day's outings, time tables, diving spots and groups formed. Anyone who knows me knows that I usually do not undertake such a long trip without secur-

ing some degree of autonomy, which means that I carry with me my full diving gear, including 6 to 8 kilograms of lead weights, flippers, diving suit, two lanterns, diving computer, buoy, knife, two masks, etc. For obvious reasons I do not carry the gas cylinder with me, though!

I soon learned that I would be able to dive with nitrox, which meant longer diving times. That is handy if one is to go diving with a party and still has to look for shells... without the others noticing. It is well known that some people will collect anything, whereas it is of paramount importance to have time to choose what one picks up, bringing up only adult specimens in good shape, without growth scars or parasites or broken lips, and especially to leave the ones that are found with eggs.

Only afterwards did I join the girls for dinner. It would be a "business dinner" and a tough one: three women on one side, not divers, only there to relax, and I alone on the other side, crazy about shells! I knew I could not overdo it and that in the next day there would be room for a single dive after lunch. Dinner was excellent and the diving arrangements – including scuba diving and free diving – were easily settled. That was the family deal and we were all trying hard to comply.

Since I was the only one scuba diving, I really had two tasks assigned: to get some underwater photos for the family album, showing submarine landscapes with lots

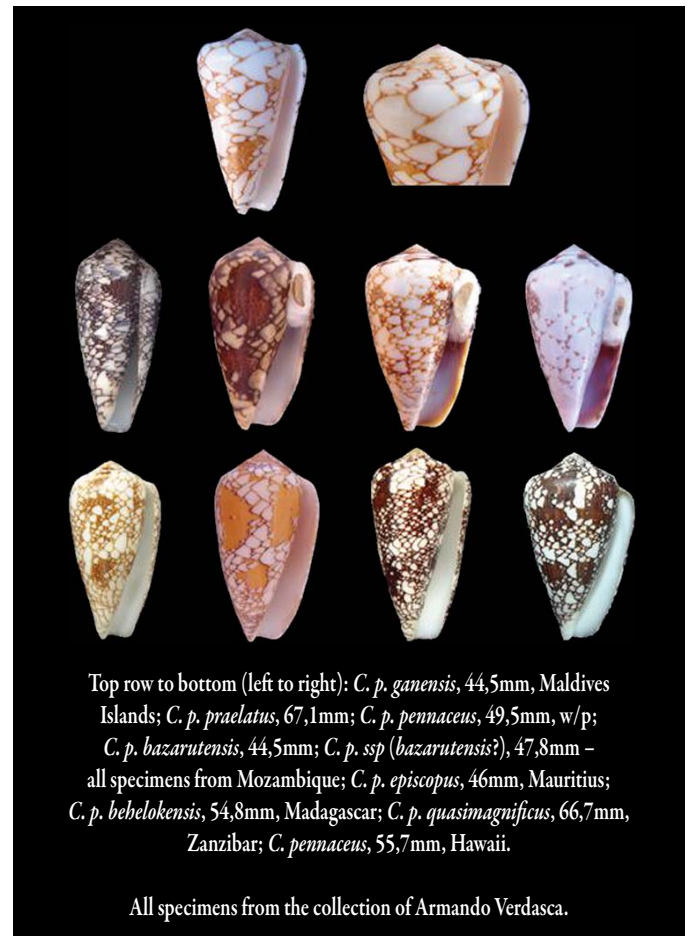
of corals and colourful fishes, and to pick up shells, namely Cones, which are a true passion of yours truly. The “shell-bug” has indeed infected me long ago and, as everybody will know, this is the kind of infection that will lead one all over the world. I had already visited Mozambique, Angola, the Cape Verde Islands, Mexico, Martinique and Papua New Guinea before coming to the Maldives. And I do have a very special liking for the so-called *pennaceus* group of the Indo-Pacific region – I must confess that I keep more than 400 specimens in my collection – but still had not had the opportunity of obtaining nice specimens of the subspecies *Conus pennaceus ganensis* Delsaerd, 1988, unique to the area!

As a matter of fact, I had specimens of *C. pennaceus ganensis* offered to buy, but most of them were of inferior quality and the prices asked were considerably beyond what I considered fair. So, I had decided to wait, knowing that the Maldives Islands could constitute a nice holiday destination for the whole family – the children could safely accompany us – and with some luck I could find a specimen or merely find it for sale at some local shop.

The form *ganensis* of *C. pennaceus* is treated by D., Korn, W. & Kohn, A. J., 1995 as a mere synonym of *C. pennaceus* Born, 1778, as in fact are all other known forms, except for *C. madagascariensis* Sowerby, 1858 and *C. echo* Lauer, 1988. Personally, I prefer to treat all of those forms as subspecies, as in Mayr, 1979. Some will even consider that they have long ago evolved into separate species, since many of them live in very specific habitats, far away from each other, and differences in shell morphology and sculpture, patterns and reproductive habits clearly distinguish them from the lectotype associated with the taxon *Conus pennaceus* Born, 1778

Subspecies *ganensis* is found throughout the Maldives archipelago. The first specimens studied actually came from the island of Gan – hence the name – which is the largest in the Addu Atoll, in the southernmost tip of the archipelago. It also occurs further north, in the geographically near Laccadive Islands, off India’s Southwest coast.

This subspecies is distinguished by its small to medium size, reaching a maximum size of 60 mm; it has a low



spire, slightly bell shaped, and a very angulated shoulder, the last whorl being conical, with straight sides. The pattern consists of medium-sized to large triangles or “tents,” light to dark brown or brick colored, on a white background. On the following plate we present a comparison of the shell morphology in several subspecies of *C. pennaceus*, which easily allows us to separate this subspecies from all others.

My main purpose, of course, was to be lucky enough to find at least one fine living specimen, whether scuba or free diving. I simply had to find its habitat! Most *pennaceus* subspecies can be found intertidally, on the inside of the coral reef, in protected zones, down to depths of usually no more than half a dozen meters. Normally one should look for coral sand bottoms, the animals being hidden during the day under rocks or coral slabs, or buried in the crevices between slabs. It is quite unusual to find specimens crawling around during the day without cover.

Now, diving among a bunch of tourists that will keep

still for some ten minutes photographing a single nudibranch or endlessly watching a moray eel guarding its cave is not compatible with looking for shells: the guide will readily want to find out why we are looking at some place where “there is nothing to see,” just as if he was almighty Neptune, lord of the oceans! One does not even dare to turn over a rock or a coral slab, as that would be out of bounds indeed!

Moreover, the dives that I made with such groups were mainly down walls, with only the deep blue beneath my feet. This is of course the kind of dive that gives me greatest pleasure, especially if there is some sea current that allows us to see a lot of a submarine hill in a short period of time. Nevertheless, the same dives are far from ideal company for shell collecting – except for the capture of some *Ovulids* that can be found on gorgonians – and certainly not to look for pennaceus!

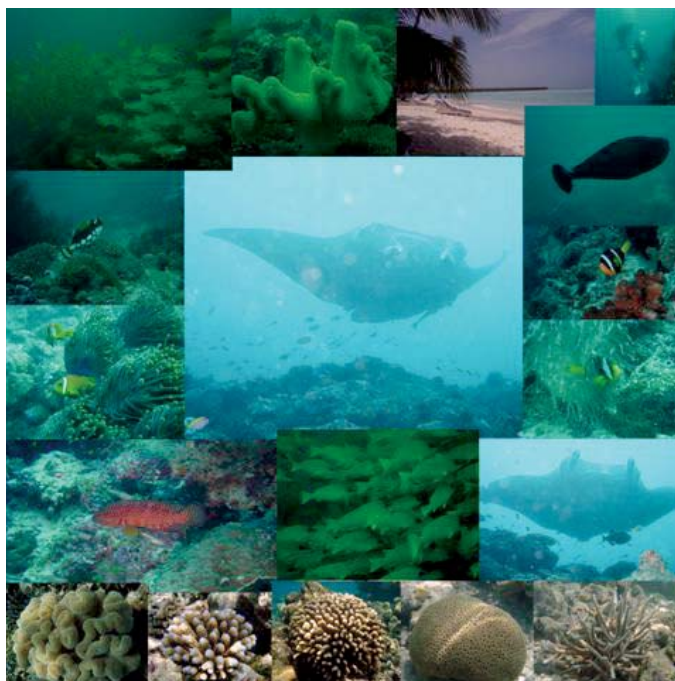
No better luck snorkelling: the habitat was wrong, so the cones could not hang around there. Moreover, the reefs around the island where we were staying were in such bad shape that almost no shells were to be found at all! We were told that this was the result of the December 2005 tsunami, from which the reefs had not yet recuperated. All the same I did manage to catch a few species of *Conus*, including *C. arenatus*, *balteatus*, *catus*, *distans*, *frigidus*, *lividus*, *litoglyphus*, *miles*, *miliaris*, *moreleti*, *parvatus*, *rattus*, *sanguinolentus*, *sponsalis nanus*, *terebra*, *tessulatus*, *varius*, *vexillum*, and *virgo*. The next plate shows some of the nicest exquisite finds in a play of patterns and colours.



A kind of puzzle with various photos of shells, many of them obtained in their natural habitats, will be found next.



In the meantime, I made the best of my diving, especially when I had the opportunity of diving in the Manta Point. This site is on the outer reef wall beyond Lankanfushi Island (between Malé Island and Meerufenfushi Island), where the reef crests at fifteen meters, then slopes down to an edge, which plunges about 2000 metres. As its name suggests, the site is well-known for the presence of manta rays. They meet there at “cleaning areas,” where tiny fish inhabiting the large mounds of star coral come out to remove parasites from their skins and gills. If small groups of divers keep low and about ten meters away, these giant spectres from the deep do not seem to mind their presence. Whale sharks, the largest fish in the world, can also be seen at this point, but I was not lucky enough to spot any; like the manta rays, they only come to feed between July and October – sometimes November – when there is a rich upwelling of plankton. As a result, the water is not so clear, adding a ghostly aspect to the slow movements of the gigantic and mysterious creatures coming from the deep. In the following plate I have included some photos, again in a puzzle arrangement, showing a fantastic manta ray in the centre, being cleaned of parasites and others photos with fishes, corals and nice submarine places that I also found while doing scuba dive.



resigned to a hard life. On the way – we walked all the time, as it is in fact a small town – I told our guide that I was a shell collector and wanted him to take me to some souvenir shop where I could try to find the eagerly wanted *C. pennaceus ganensis*. He immediately agreed to take me to a few shops where I could get loads of shells, but I was not so sure that he really knew what he was talking about and in fact I doubted that we would find any shells at all, even commercial grade ones.

The first shop we visited was in fact disappointing. Nothing of interest could be found! There were some cones present, namely *Conus zonatus*, but all dead collected, actually beach specimens with broken lips and eroded spires, a sorry sight. All the same I did select a few decorative specimens, but the owner of the shop was probably so used to ask the tourists huge prices for anything that he asked me what would amount to a small lottery premium for my selection; since there were no cones involved, I did not even have the patience to haggle, which left him quite disappointed.

Next, we went into a small market: on one side there was fruit and we bought some very tasty coconut rolls, whereas on the opposite side there were spices and what not. Among some shells, I could spot a few cowries, murexes, helmets and cones. But once again the whole lot was quite disappointing: the only specimen worthy of any note was a *Conus gubernator leehmani* but in such bad shape that I didn't even care to ask the price. We still had one last souvenir shop to visit and it was getting time to catch the boat that would take us back to the airport.

As soon as I entered that one last shop, with several shelves full of shells, I spotted a single but perfect specimen of *C. pennaceus ganensis* that I had searched so fiercely! I could not believe my eyes! It was unbelievable that among so many damaged shells, unsuitable for a collection, such a nice specimen would be found. But there it was, waiting for me!

I directly asked the shop owner if he had any further specimens similar to that one. He answered affirmatively and was soon showing me several *C. textile* and *canonicus*, plus a piece of what had once been a *C. omaria*. But not another *ganensis*! I explained that I was

Our vacations were swiftly coming to an end without having managed to catch a single specimen of *C. pennaceus ganensis*. I was sad, of course, but not totally downhearted. After all, the entire family had enjoyed our stay greatly and that of course was good enough. A week in paradise had brought us to the going back day, so we hurried to pack while I took my shells from the alcohol and placed them in hermetic boxes, so that their odor – and we are all painfully aware of how decomposing animals stink – would not single me out in the crowd. Up on the boat to Malé and travelling 30 miles south, back to the airport where we recovered our tickets – yes, the Maldivian authorities will keep your air tickets from the moment of your arrival – and, since we still had some free time before catching the plane back to Doha, we decided to hire a guide that would show us around the capital, Malé, located 2 or 3 miles to the Southwest, in a different island facing the airport. One would almost be tempted to say that in the Maldives they have an island for everything, including one just to build the airport.

A short trip of about 15 minutes in a small boat took us to Malé, a very crowded town, Indian style. We saw some monuments, including the mosque (most of the population follows the Islamic faith), the presidential palace and a few ministries, built in the British colonial style, and also the fish and vegetables market. Whoever is familiar with such markets in Africa will find there the usual fuss, colorfulness, smells and joy of people

in fact a shell collector and that I was looking for that particular species, which he immediately classified as a great rarity... With a keen sense of business and hoping to make a rather large profit, he even sent an employee to go to every conceivable nearby place to look for what I wanted.

The entire family waited for some time and I kept looking at my watch, because the hour to catch the last boat that would allow us to make our check-in on time was rapidly approaching. Meanwhile, I did choose a few small cowries, nice quality and interesting for future exchanges.

At long last, the servant came back...empty-handed! I would have to make do with that one superb specimen, but I wondered how much it would cost me! I asked about the price – the owner took the opportunity to underline its great rarity – and after some calculations he asked 1000 Maldivian Rufiyaa, almost 80 US dollars.

I was not really surprised by such high value, as I understood that he intended to negotiate and also to benefit from my manifest interest and hurry to get back to the airport. I had strategically placed two bills in my pocket, one 5, the other 20 dollars, so I pulled them out and said: “My dear sir, this is all I have. If it is not enough, I must thank you for your time but I cannot afford more!”

In a perfect Indian style, the owner said he could make

some discount; he could even let me have the cowries for free, since they were common, but such a great rarity had to cost more! I knew I could not leave without the cone, but I was not ready to give in on the price. So I insisted that we did have a boat to catch and showed the whole family out of the shop, upon which, fearing he would lose a grand total of 25 dollars for the shell, he finally accepted the deal and let me have the cowries as gifts anyway.

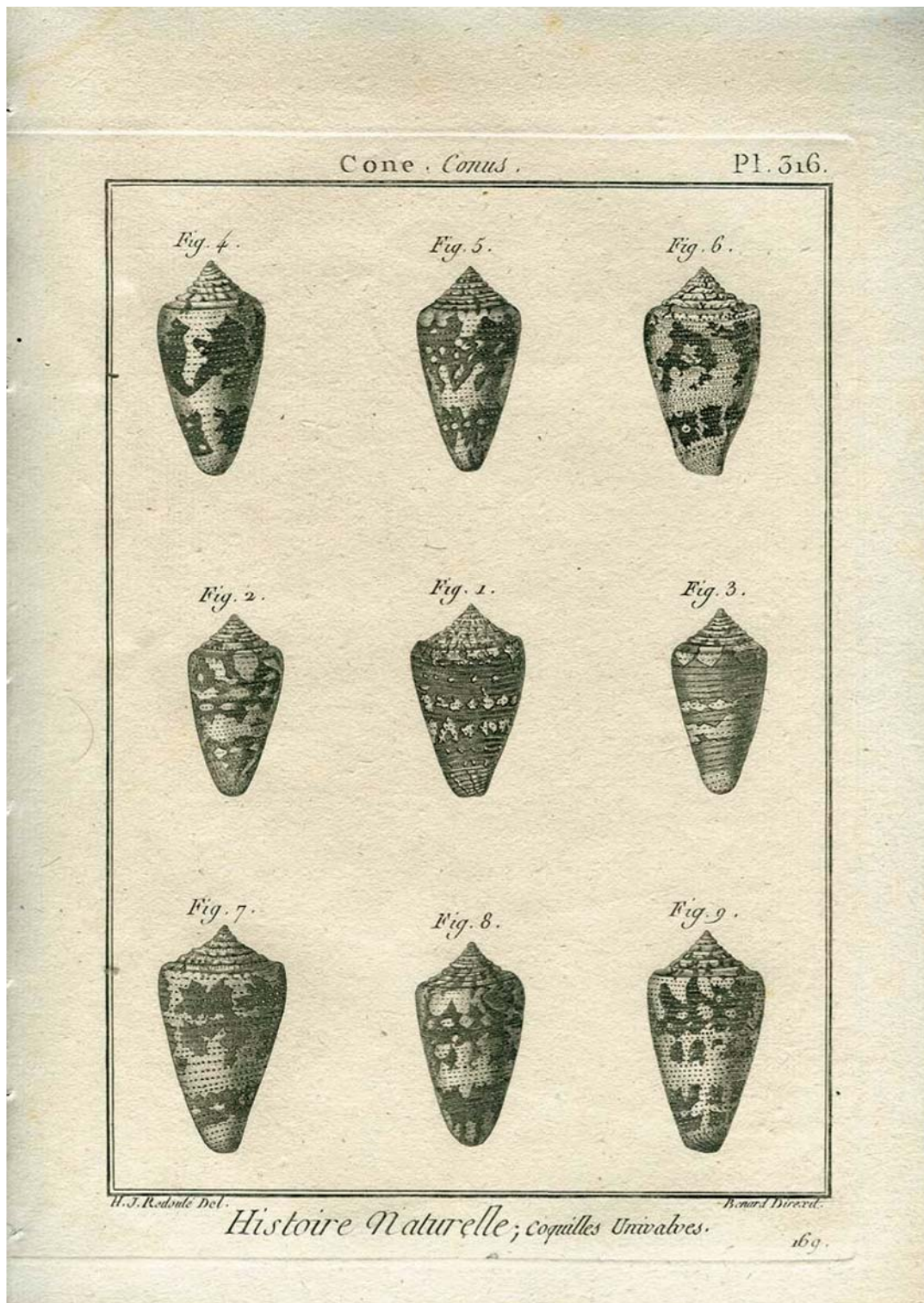
We went away as I hurried to wrap the precious *ganensis* carefully in a piece of newspaper. All the way, my daughters and their mother laughed as I imagined my prize specimen being given a place of honor in my collection.

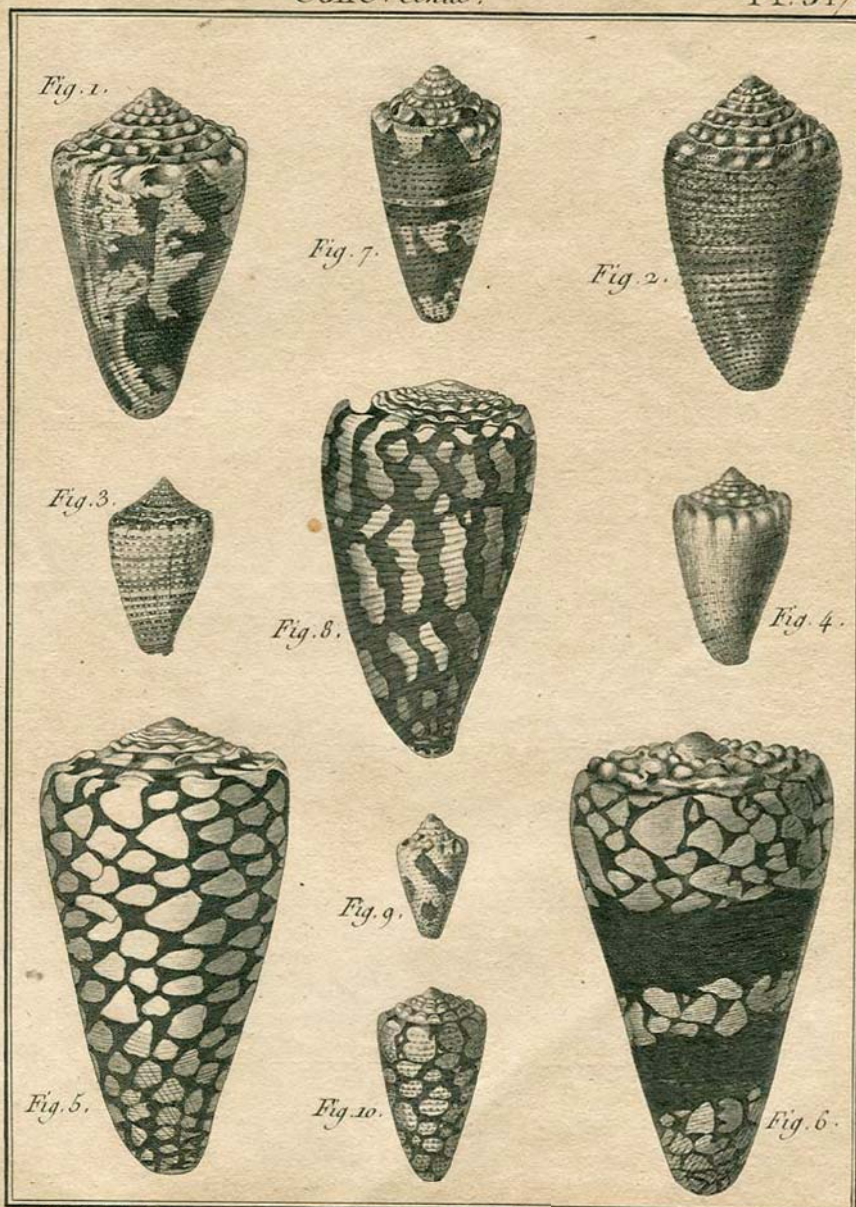
Here it is at last (dimensions 44.5 × 25 mm):



The Works of Hwass (Continued)

In issue # 0 of TCC, we included plate 315 from Hwass's 1792 monograph included in the *Encyclopédie Méthodique*. In the present one we proudly present three more (316, 317 and 318). Enjoy!



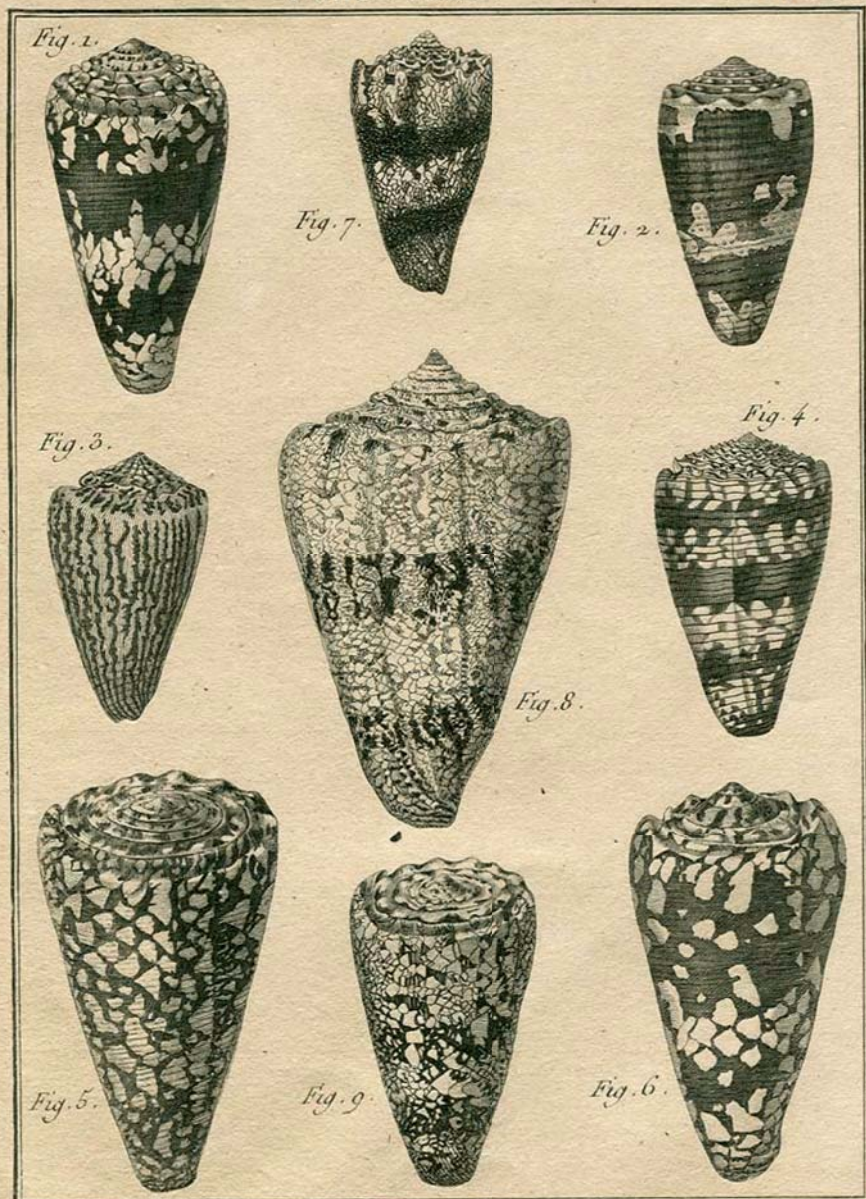


H. J. R. Del.

Histoire Naturelle; coquilles Univalves.

Benard Dircet.

172.



H. J. Westwood Del.

Benard Durend.

Histoire Naturelle; coquilles Univalves.

Caribbean Corner

André Poremski

Bahia's Variable *Archetypus* Cones

During October 2005, I was fortunate to travel with my wife to Espírito Santo State, Brazil, to visit our good friends and dive partners Afonso Jorio and Luis Couto. Together we planned a trip that took us northward by minibus along the coast of Bahia State...on the hunt for *Conus*. Not only was this trip one of our most memorable, we also managed to return home with a delightful selection of self-collected shells – including a wonderful set of brightly colored *Conus baiano* Coltro, 2004. Our *C. baiano* were collected on an offshore reef near the fishing village of Alcobaça. From a local diver there, we also acquired the similar *Conus bertarollae* Costa & Simone, 1997 collected in the same general area on a neighboring reef, and *Conus cargilei* Coltro, 2004, taken from deeper water about 100 km to the north of Alcobaça.

All three populations (which do not overlap) are part of what is referred to as the *Conus archetypus* complex – a group of shells that range from southern Brazil to at least as far north as Martinique and are known for their high degree of variability in color, pattern, and shape within and among populations. This variability has led to a great deal of confusion as to how closely each population is related to one another. Although *C. baiano*, *bertarollae*, and *cargilei* have each been described as separate species, these taxa have been lumped together by some collectors and dealers under *archetypus* as subspecies or local variations.

Each population shares the same rocky reef habitat - with a depth range of shallow (1 meter) to moderately deep water (about 35 m) and can be found during the day resting on coarse sand under rocks blanketed with thick algae. The live animal of *C. baiano* and *bertarollae* are bright red (*C. cargilei* unknown to me) and all have a periostracum that is thin, translucent, and tufted near the shoulder and mid-body.

Now more on each population.

After examining numerous specimens of *Conus bertarollae* with lengths ranging from 12 to 24 mm, I have noted that *bertarollae* has the narrowest range of variability in color/pattern of the three, with background color ranging from red to pastel orange (most specimens are scarlet red when fresh collected, and their color fades rapidly with exposure to daylight). The spire pattern never has dark markings and the body whorl never has the thin spiral lines found on all *C. baiano* and *C. cargilei*.

The broader *Conus baiano* is usually an unmistakable bright red with a wonderful allotment of clouded patterns around the shoulder and mid-body with thin dotted spiral lines embroidered throughout the entire length of the body whorl. *C. baiano* also has what I enjoy calling its "cryptic form" - the color is a mauve brown with faint purple in the aperture. This color form is quite rare, and I have only seen a handful of examples out of the 100+ *baiano* that have reached the market. Nevertheless, they can be found on the same reef as the vivid red ones. This population also displays a generous degree of variation in body proportions, with some specimens broad and stocky with a low spire, while others of the same general size being narrower with taller spires. I have seen specimens reach 32 mm, and I would not be surprised to see a specimen surpass 35 mm.

Conus cargilei seems to have the broadest variability out of the group with colors ranging from almost solid black, especially found in younger specimens, to olive, rust, and, rarely, yellow. The most frequent color is chocolate brown, often containing clouded patterning on the shoulder and mid-body. Aperture color is pink to bluish purple. An easy way to distinguish *cargilei* from the others is that it is the most slender of the three with the sharpest shoulder angle. I have noted three distinct populations of *cargilei* (including a recent finding of all solid black specimens currently labeled *C. species*). This beautiful group of *Conus* can also attain the largest size of the three - topping 36 mm.

Enjoy the plates!



22,4



22,0



23,0



24,4



23,9



25,2



22,3



22,9



22,1



22,4



22,0



23,0



24,4



23,9



25,2



22,3



22,9



22,1



21,6



29,8



27,0



27,3



27,9



30,3



25,7



27,6



29,1



21,6



29,8



27,0



27,3



27,9



30,3



25,7



27,6



29,1



25,5



27,4



24,4



27,2



30,3



23,8



29,3



26,1



30,0



25,5



27,4



24,4



27,2



30,3



23,8



29,3



26,1



30,0

The T.C. Mystery

Armando Verdasca, António Monteiro
& Mike Filmer

Back in 1978, T. C. Lan described a new species of Cone from deep Taiwanese waters. The holotype, which was collected near Tiao-yu-tai Island, north-west of Taiwan, at a depth of about 120 metres, is deposited in the Taiwan Museum of Geological Science, Taipei, Taiwan; it measures 113×60.8 mm and has the registration number TMGS-Rmo 7807. The new species was given the name *Conus* (*Rhizoconus*) *tisii* Lan, 1978. It is understood that the specific name is in fact a phonetic rendition of the authors initials "T.C."



C. tisii Lan, 1978 – paratype, Coll.
Bob da Motta, Staatliche Museum für
Naturkunde, Stuttgart, Germany
(154×75 mm) Photo: R. M. Filmer

The holotype of *C. tisii* appears to be temporarily unavailable, due to extensive rebuilding in the Taipei Museum where it is housed, but it is figured on Plate 17 in T. C. Lan's Rare Shells of Taiwan in Color; the third author personally examined the only paratype – also illustrated on the same plate – which was in the Lan collection, then in the Bitler collection, then in the da Motta collection, and currently in the Staatliche Museum für Naturkunde, Stuttgart (da Motta collection). It is a solid heavy shell with two broken bands of dark brown to black at the centre and half way between the centre and the base. Like the holotype, the paratype is also a very dead taken specimen in very poor condition.



C. tisii Lan, 1978 (146.1×75 mm)
Peng-hu sea, Taiwan Strait, N24, E119
Coll. Hsu Ping Chuan



C. tisii Lan, 1978, Balut Island,
Philippines (148×77 mm)
Coll. António Monteiro

C. tisi is described (see also Röckel et al) as having a large, solid shell, with an adapically convex outline which changes to straight (right side) or concave (left side) below. The shoulder is more or less rounded and the spire is low to moderately high. The first 5-6 postnuclear whorls are tuberculate and the teleoconch sutural ramps are flat, with 2 increasing to 7-9 spiral grooves. The last whorl has numerous spiral ribs at the base, followed by spiral striae to the shoulder.



C. tisi Lan, 1978
155 mm – detail of spire

The ground colour is white to pale violet, whereas the last whorl presents two darker violet spiral bands bearing brown axial blotches; adult specimens also have irregular brown spots and axial streaks. Shoulder edge with brown spots, aperture white to light purple. The periostracum is light brown, thin and translucent to rather thick and opaque (Röckel et al).

In the description, *C. tisi* is compared with *C. pergrandis* Iredale, 1937, from which it is separated by its more conical last whorl, generally lower and domed spire, and in its light purple ground colour; on the other hand, subadult *C. pergrandis* have pronounced spiral sculpture on the last whorl, absent in subadult *C. tisi*.

Recently, *C. tisi* has been found in several locations in an area ranging from Taiwan to New Caledonia, including the Philippines and New Guinea, always in deep water: 120 to 400 metres. Nevertheless, Huang Shih-yih (pers. comm.) informs us – from Taiwanese sources – that *C. tisi* is predominantly found off Northeast Taiwan, although specimens have also been found off West Taiwan, for instance at Penhue Island, and also in South Taiwan, South China sea.



C. tisi Lan, 1978
Left: World Record Size – 155 mm
(Balut Island, South Philippines, caught
at a depth of about 400 metres)
Right: 154 × 75 mm
Coll. Shell Passion, Philippe Quiquandon
Photo: R. M. Filmer



There was, however, one question that begged to be answered, concerning specimens coming from the Philippines, namely from Balut Island, off Davao in Mindanao Province, southern Philippines. As a matter of fact, several specimens labelled "*C. tisi*" have appeared on the market, usually smaller – often much smaller – than the holotype. These specimens are handled as subadult *C. tisi*. Nevertheless, there are several differences between these specimens and typical *C. tisi*, including its holotype and paratype.



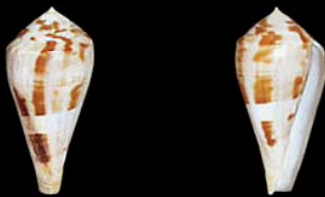
Subadult *C. tisi* Lan, 1978 from Balut Island, Philippines (115.3 × 51.5 mm)
Coll. Armando Verdasca

Most noticeably, these so called subadult *C. tisi* are much more slender than the full grown specimens, with a somewhat different shoulder and a much higher spire. They are also much lighter in weight. These features would perhaps not be too surprising in young specimens, although some of these are very large but some doubt could remain about their proper identification, so we tried to make the appropriate comparisons, in order to make up our minds.



From a collector's point of view, *C. tisi* remains extremely rare, hence quite expensive! One should probably not expect to pay less than US \$2,000.00 for a decent specimen and prices of up to and above US \$3,500.00 for a top class one are not unheard of.





"Subadult *C. tisii* Lan, 1978" from Balut Island, Philippines (72 × 32 mm) with periostracum
Coll. R. M. Filmer



C. kinoshitai Kuroda, 1956 (Image: Paul Kersten)



C. kinoshitai Kuroda from Bohol, Balicasag Island, Philippines (67.6 × 29.7)



C. kinoshitai Kuroda form *caliginosus* Shikama, 1979 from Bohol Straits, off Tubignon, Bohl, Philippines (61.9 × 26.1 mm)

The general profile of these south Philippines subadult specimens is somewhat remindful of *C. kinoshitai* Kuroda, 1956, even if in the original description of *C. tisii* (as well as in Röckel et al) no mention of *C. kinoshitai* was made.

However, these subadult *C. tisii* are lighter in weight and much larger than *C. kinoshitai* (we know of no *kinoshitai* reaching 115 mm and up...). The pattern is also quite distinct and, more importantly, the specimens under discussion have a very fine and smooth periostracum whereas *C. kinoshitai* has a tufted periostracum (according to Röckel et al: "Periostracum olive, thin and translucent, with widely spaced or irregularly set tufted spiral ridges on last whorl; adapical ridges usually more closely set and sometimes obsolete, shoulder strongly or weakly tufted"). The protoconch of *C. tisii* (markedly conical, pointy, light cream or brownish coloured) also differs from that of *C. kinoshitai* (elevated, cylindrical and not pointy, flesh coloured). The spire of *C. tisii* is low to moderately high, of sigmoid outline, first postnuclear whorls domed, whereas that of *C. kinoshitai* has a straight to slightly convex outline (Röckel et al).

About the sculpture of the teleoconch, we also find significant differences; always quoting from Röckel et al, we find, about *C. tisii*, "[...] teleoconch sutural ramps flat, with 2 increasing to 7-9 spiral grooves. Last whorl with numerous closely set spiral ribs at base, followed by spiral striae to shoulder" and for *C. kinoshitai* "[...] teleoconch sutural ramps almost flat, with 2- 4 increasing to 5-9 variably spaced spiral grooves; latest ramps usually with additional spiral striae. Basal third or sometimes half of last whorl with weak to pronounced, variably spaced spiral ribs occasionally grading to ribbons posteriorly". Finally, the striae on the columella are stronger and more spaced in *C. kinoshitai* than in *C. tisii*. All of these features clearly allow us to separate *C. kinoshitai* from young specimens of *C. tisii*.

So, we conclude that *C. tisii* presents a strong allometry: fully mature specimens are quite heavy and stout, with a rounded wide shoulder and a moderately low spire, whereas younger shells have a straighter shoulder and last whorl, are much lighter and generally have a higher spire. However, the sigmoid profile of the spire is



Subadult *C. tisi* Lan, 1978, Balut Island,
Philippines (66.5 × 33.4 mm)
Coll. Shell Passion, Philippe Quiquandon



"Subadult *C. tisi* Lan, 1978" from Sarangani
Strait, Philippines (114.5 × 52 mm)
Coll. Shell Passion, Philippe Quiquandon

normally present in both adult and subadult specimens, as is the slight depression dividing the teleoconch, between the end of the spire and the shoulder (even if the depression is much less accentuated in adults).

We would of course welcome any comments or suggestions and also pictures of specimens from other localities.

Acknowledgements

We thank Huang Shih-yih, Philippe Quiquandon, Alan Kohn, and Manuel Jimenez Tenorio for their valuable information, comments, and permission to use photos to illustrate this article.

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- Röckel, D., Korn, W. & Kohn, A. J., 1995. *Manual of the living Conidae*. Vol. 1. Indo-Pacific region. – 517 pp., Wiesbaden (Verlag Christa Hemmen)
- <http://biology.burke.washington.edu/conus/gallery/index.php>

Cones on the Web

Nowadays the Internet is rapidly becoming the major source of information about everything one may want to look for. Paul Kersten has compiled a list of interesting sites relating to Cones. It should be noticed that *THE CONE COLLECTOR* is put online in several of these sites (and also, thanks to a suggestion from Alexander Medvedev in two Russian sites: first, the site of Leonid Trofimov, from St. Petersburg, actually dedicated to Cowries, but we are thankful to Leonid for kindly having found room for us at seashellsnord.narod.ru/linksCONIDAE.html; and secondly at the forum www.capricornica.ru/forum/index.php?showtopic=105).

Please let us know if any other important sites are missing from this list and we will gladly update it in our next issue.

ONLINE RESOURCES

The site of Dr. Alan Kohn

Great all-round site for information & photos of Conidae type specimens.

biology.burke.washington.edu/conus/index.php

Paul Kersten & Ross Mayhew's Checklist

Images & Taxonomy of the World's Living Conidae - Species, Subspecies, Varieties & Forms.

www.schnr-specimen-shells.com/ConidaeChecklist.html

The site of Eddie Hardy

Partly illustrated catalogue of gastropods with references to books.

www.gastropods.com

The part that concerns with Cones is fairly well developed:

www.gastropods.com/Taxon_pages/Family_CONIDAE_CONINAE.html

The site of Dr. Bruce Livett

Information on cone shells and their toxins.

<http://grimwade.biochem.unimelb.edu.au/cone>

The commercial site of Guido Poppe

A part of it dedicated to Conidae.

www.conchology.be/en/cyberconchology/newcyber/byspecies.php?family=CONIDAE#f

The site of Dr. David Touthou

Information on cone shells and other sea shells.

Very nice articles on conidae.

www.seashell-collector.com

www.live-seashells.com

The site of the Malacological Society of Brazil

With pictures of cones from this country.

www.conchasbrasil.org.br/english/conchology/especies.asp?family=CONIDAE

The site of Alan Secombe, Brian Hayes, and Emilio Power

The endemic cones of South Africa.

pw1.netcom.com/~ejpower/sacone/conepgsaH.htm

The Capricornia site.

Cones of Western Australia.

seashellsofnsww.org.au/Conidae/Pages/Conidae_plate_1.htm

The site of Emmanuel Guillot de Suduiraut.

Cones from the Philippines.

www.eurasiashells.net/fam_conidae.html

COLLECTION WEBSITES

The site of Giancarlo Paganelli

www.coneshell.net

The site of Alexander Medvedev

www.coneshells-am.ru/eng/index.php

The site of André Poremski

www.poremski.com

The site of Loïc Limpalaer

perso.orange.fr/loic.limpalaer/Taurus/taurus.htm

The site of Bruno Mahé

perso.orange.fr/zonatus/index.html

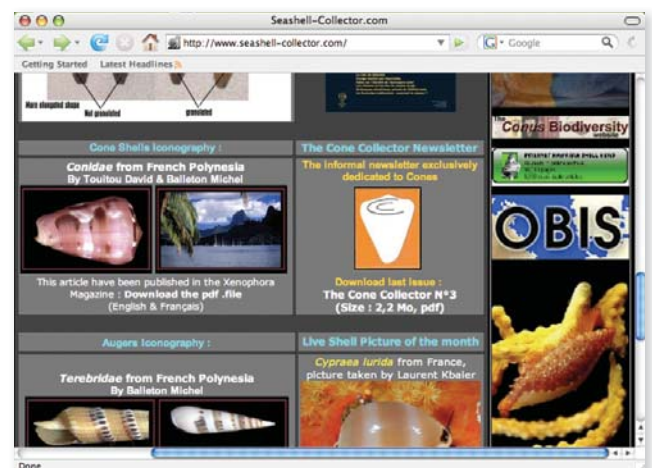
The site of Jacek Glanc

www.musze.net.pl/conidae.html

TCC Online

We are all proud of the success met by The Cone Collector. After production and distribution of the trial issue # 0 to a restricted number of friends, we have received many requests from collectors all over the world wishing to receive future issues. New subscribers still get in touch every once in a while, so that our mailing list currently includes about 120 addresses!

Moreover, our newsletter will certainly reach many other collectors, since several of our friends kindly welcomed it to their Internet sites.



TCC on *Seashell-Collector.com*

Cone Currents

Exceptionally Large

Conus ventricosus Gmelin, 1791

Conus ventricosus Gmelin, 1791 is a well-known and extremely variable Mediterranean species. Recently, we have seen photos of two exceptionally large specimens, collected off South Italy. Their owner, Andrea Corso has kindly allowed us to share them with all our readers. The specimen on the left is 68 mm long and comes from Messina, while the one on the right is from Lampedusa and measures 70 mm.



Large as they obviously are, these are still not the maximum sizes for the species! Rumours concerning the existence of a 75 mm specimen have circulated and legends about even considerably bigger specimens have also been heard!

We would of course be interested in confirming the existence of such king-sized specimens and will welcome to our pages any information on the subject.

In the meantime, our friend Aldo Brancato sent us an interesting gallery of various colours and patterns found in Italian populations of *C. ventricosus*. We are happy to share these photos with all of our readers.

Collection Areas:



Adjacent PLATE:

- A 65 mm – Pantelleria, -15 m, fresh dead
- B 21 mm – Faro (Messina), -1 m, alive under rock
- C 47 mm – Ognina (Siracusa), -5 m, alive under rock
- D 42 mm – Ognina (Siracusa), -4 m, alive under rock
- E 38 mm – Ognina (Siracusa), -2 m, alive under rock
- F 57 mm – Ognina (Siracusa), -5 m, dead
- G 45 mm – Ognina (Siracusa), -8 m, alive under rock
- H 20 mm – Ognina (Siracusa), -2 m, dead
- I 47 mm – Ognina (Siracusa), -2 m, dead



C



D



G



I



B



H



F



E



A



What Am I?

What's in a name?

That which we call a rose

By any other name would smell as sweet.

W. Shakespeare, Romeo and Juliet (II, ii, 1-2)



An elusive *Conus* from the Philippines

Giancarlo Paganelli

I have recently acquired this specimen, 39.7 mm, from Jolo Island, Sulu Sea, Philippines.

Shell moderate solid ($RW = 0.17$), conical ($RD = 0.56$, $PMD = 0.84$) with straight sides, slightly convex at basal third, adapically convex. Shoulder subangulate. Spire of moderate height, outline straight. Sutural ramps flat. Last whorl with weak spiral ribs at base and finer elevations above.

Ground color solid brown with interrupted dark spiral lines and dots. Two faint bands are visible at centre and at base. Postnuclear sutural ramps of yellowish salmon color; late sutural ramps matching the color of the last whorl with radial yellowish streaks. Protoconch pink. Aperture bluish white with a collabral brown margin.

Many features of this specimen drive to *C. magus* but I'm not certain of that.

The last word is to the readers of
THE CONE COLLECTOR.



Mystery Shell from Remote Trinidad

André Poremski

A few months ago I received an interesting shell that was collected dead in shallow water off the coast of Trinidad Island, Brazil. Trinidad, an island created by a volcanic formation 680 miles east of Espirito Santo State, is, understandably, not the easiest place to acquire a shell of any kind, much less a *Conus*. This specimen fits well with what is to be expected of a shell that lived in such extreme geographic isolation. I have been unable to place an i.d. with confidence.

Shell heavy, medium sized, shape broadly conical with straight sides to adapically concave base. Shoulder sharply angulate with sutural ramp mildly concave. Spire low with flamed pattern on shoulder and mid-body band. Background white with burnt sienna overlay.

At first glance this specimen resembles *C. riosi*, however the shape and weight does not match any *riosi* I have compared with. In fact, this shell appears to be closer to *C. archetypus* - however very large one at 50,2 mm length. Any suggestions?



An Unusually Large *Conus granulatus* Linnaeus, 1758

Julian Joseph

Conus granulatus Linnaeus, 1758, also known as the “Glory of the Atlantic” is one of the rarer Caribbean Conidae, about which I have been able to find out rather little. Live taken specimens are extremely hard to come by, but dead-collected shells of widely varying quality are somewhat more common. A subspecies, *Conus granulatus espinosai* Sarasúa, 1977, has been described from Marianao, Havana Province, Cuba.

I found my specimen of *Conus granulatus* (see photos) in a basket of shells in an art-and-craft shop in England more than 40 years ago. It is dead collected, with a rough lip, but it is nevertheless a very nice shell. In the same basket was a large subfossil *Cypraea zebra* and a *Voluta musica* form *carneolata*, both of which I also bought and are still in my collection. It was the first cone I acquired – not, I imagine, a species many cone collectors began their collection with, at the age of 10!

My *granulatus* is about 47.3mm in length. I understand that most are less than 40mm, though according to Walls’ Synopsis of the Living Conidae, the species can reach 61mm. I have never seen or heard of a specimen anywhere near 47mm in length, let alone 61mm, and would very much like to know how large it really does get.

This article is based on an item I submitted to Pallidula, the Newsletter of the British Shell Collectors’ Club, for publication in September 2007.



Letters to the Editor

Dear Antonio,

I have a couple comments on ID's. As a lumper, I have no troubles at all with the shells that Paul shows on page 28. They are all *Conus stramineus* to me.

Also the shell on page 29 “the pebble” is a *Conus catus*. Paul shared this image with me sometime ago. At that time we thought that the shell was 105 mm long not 45 mm. At 45 mm, *C. catus* is an obvious ID.

John Tucker

Dear John,

While I am more on the “lumper” side of the fence than on the “splitter” area, I still have some trouble putting all of Paul’s specimens as *C. stramineus*. But I do feel (and I believe you do too) that the problem lies not in the identification of actual specimens, in fact it lies on the very concept of “species”.

I totally agree that “the pebble” is a *C. catus*. I have said as much to Giancarlo. While it was supposed to be 105 mm, such an ID could not be put forward and the thing was a bit weird. Anyway, it just didn’t look like a 105 mm shell. Now that the size is right, identification is more or less straightforward.

But it is a curious specimen found in a curious place, so I thought it was worth publishing. Curiously enough, no one but you came up with an answer yet.

Thanks again for your comments.

António Monteiro
TCC Editor