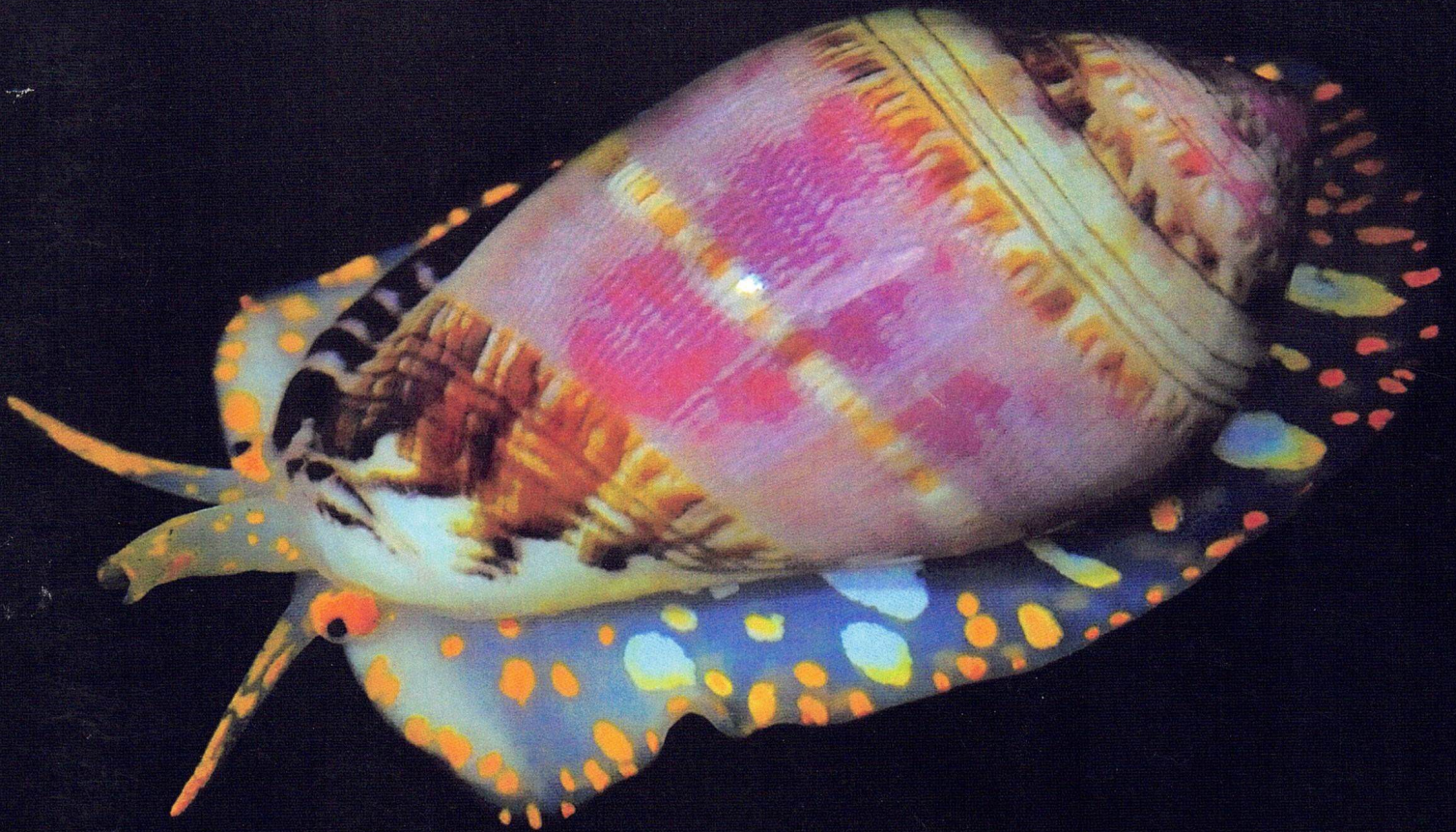


# THE Festivus

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**A new cowrie from NW Australia**

***Haliotis papulata* in the Indo-West Pacific**

**A new *Scaphella* from Yucatan, Mexico**

**Fossil cowries, *Amphidromus*, and more**

Quarterly Publication of the San Diego Shell Club



## **Eighteen Months in Martinique**

David Touitou  
20 Rue De La Gypiere  
83790 Pignans, France  
[pharma.collo@gmail.com](mailto:pharma.collo@gmail.com)

I had the chance to live eighteen months on the French island of Martinique. I was 25 years old and I was just finishing my doctorate in pharmacy. I decided to do a long military service in order to get a job in the islands. I arrived there as a collector of cowries in 2000. My late friend Roger Rault, my mentor at the time, had often shown me his collection of cones and pushed me to collect the cones for their great variability. In spite, of that I was at the time still crazy of cowries. I started to explore the south of Martinique because I lived in Anse à l'Âne. I would always remember my first snorkle. I did not have a car when I arrived and my host took me to Anses d'Arlets, a cute little beach open to the open sea. There is a pontoon and on the right a group of rocks about ten meters from the beach. I had little time and started exploring this small rocky area. This is where I found my first cowrie *Luria cinerea* (Gmelin, 1791)! A freshly dead and virtually black shell, amazing! So different from the ones I was given, gray in color. As you can imagine, the dark color fades with time. But it's amazing to see such a difference between a fresh shell and a specimen taken out of the water for several years.

In Martinique, *Luria cinerea* and *Luria cinerea brasiliensis* (Lorenz, 2002) are common species that live during the day in the crevices of the rocks but also in large gray sponges from the first meters. I was lucky to find hundreds of specimens of all sizes dead and in excellent condition, especially near the lairs of octopus. Of course, there is also the *Naria acicularis* (Gmelin, 1791), which is also common and shares the habitat of the previous two. On the other hand, it is much harder to harvest the other two species of cowries: *Macrocypraea zebra* (Linnaeus, 1758) and *Propustularia surinamensis* (G. Perry, 1811). I found only one dead *Macrocypraea zebra* in excellent condition and of good size at Anse Dufour. It is dark in color and is a real gem. For the story, I found it shortly before my departure during one of my last launches. I took it as a farewell gift from the island (or possibly I found it because Martinique was happy that a collector is leaving ...). Regarding *Propustularia surinamensis*, I found several dead specimens scuba diving but it is my diving partner Fabien Goutal who, during a dive to the north from the beach, who found our only living specimen ... and what a magnificent specimen! A sustained color! For the story, Chris Meyer contacted us to find out if we still had the living specimen (following the publication of my article on my website [www.seashell-collector.com](http://www.seashell-collector.com)) and to send him a sample for DNA analysis. Fabien had already returned to France and tapping on his shell, managed to get some powder that he sent to Chris who managed to accomplish the unthinkable: the molecular analysis on this sample powder!

Very quickly I started to come across cones - even though I did not really know where to look for them at the start. For images of the cone species discussed below see Figures 1 through 5 at the end of this article. It was an unknown land for me. The first specimens I was able to observe were *Stephanoconus regius* (Gmelin, 1791) and *Gladiocomus mus* (Hwass in Bruguière, 1792), both living in shallow water, hidden in the crevices of the rock and under or around the pieces of dead coral and rocks. Next, I came across *Dauciconus daucus* (Hwass in Bruguière, 1792) which is easier to find at



10-20 m hidden among the algae in which it is camouflaged with wonder because of its algal-like tuffed periostracum. Of course on the Atlantic coast I collected the small cones such as *Perplexiconus puncticulatus columba* (Hwass in Bruguière, 1792) found dead on the beach during our weekend bivouacs without really looking for living specimens. It must be said that when we start collecting cones, we are not necessarily attracted by the smaller species. Quickly, I was intrigued by a small brown cone that I always found dead and which was often misidentified as *Gradiconus burryae* (Clench, 1942). I also noticed the error in this cone's identification, and at the time, I contacted several specialists including Edward Petuch to correct this anomaly. I am very happy that many years later this species was finally described: *Poremskiconus colombi* (Monnier & Limpalaër, 2012).

When I started scuba diving there, too late I must admit, I came across a multitude of new incredible species: *Dauciconus boui* (da Motta, 1988), dead and alive, *Dauciconus norai* (da Motta & G. Raybaudi Massilia, 1992) dead, *Dauciconus jacquescolombi* (Monnier & Limpalaër, 2016) two dead specimens, *Chelyconus ermineus* (Born, 1778) also dead, *Atlanticonus granulatus* (Linnaeus, 1758) dead, and *Jaspidiconus mindanus* (Hwass in Bruguière, 1792) alive and dead. I have never seen a single specimen of *Lindaconus spurius* (Gmelin, 1791) either alive or dead. For many months I searched for all the local variations of *Stephanoconus regius* (the King's cone) because I quickly fell in love with this cone species which has what seems to be a thousand colors and patterns! Forgetting in passing to go diving in a club and visit more important finds. This allowed me to harvest many specimens of all sizes, some of which are unique shells! I present you photographs of some of these specimens in the figures at the end of this article. We can distinguish several main variations that seem to result from diet. Indeed, there are species that feed on fireworms which are quite common in Martinique. These worms can be of several colors and it is possible that it is this characteristic that causes so many variations in *S. regius*. In fact, we can classify the King's cones in several categories:

- Light cones whose shell is dominated by white and sometimes pink;
- Dark cones whose shell is dominated by dark brown or black;
- The yellow cones called "*citrinus*";
- The orange cones also called "*citrinus*";
- The light brown cones also called "*citrinus*";
- The blue cones.

Of course, there are also many intermediate variations that have for example a face "*citrinus*" and a non-face "*citrinus*".

I had a second "love at first sight" feeling much later when I found my first *Dauciconus boui* because, once again, this cone has such delicate patterns and its variable colors. Even though it is possible to find this cone as shallow as ten meters, it generally occurs at deeper depths. Its small size, strong



encrustation, and tuffed periostracum make this a difficult species to spot. In addition to coming across the living species, I have found very beautiful dead specimens several times. It appears that this species is restricted to the south of the island.

Since living in Martinique I traveled to Venezuela but I have never found cones, only a huge representative of the family Ranelidae, a pretty yellow volute, and some cowries including a "sick" *cinera* and dwarf *zebra*. It must be said that we swam only one afternoon!

I was able to spend a few days in Guadeloupe and Dominica, but I found nothing more than in Martinique.

On the other hand, the two excursions to the Grenadines were extraordinary, both in the scenery and the shells that I found there. Although I left with non-collector friends, I was able to find time to swim at each stopover of our boat. The first time, I was able to find my first *Tenorioconus dominicanus* (Hwass in Bruguière, 1792) during a night free dive just when I was going to give up! I went out with a colleague who wanted to try to swim at night, we only had a lamp for two, the water was cool and there was about 6-8 meters of water. Of course it was exhausting. It was necessary to go down and then scour the bottom in search of a possible cone. After an hour, my energy was spent. What a surprise when I held my breath as my light beam illuminated this majestic cone!

During the second cruise, I would have the chance to collect three of these cones at night. Each of these cones are beautiful specimens of very good size. It is in this respect sad to see small immature specimens of these cones at the shell shows for sale that are sold cheaply. I tell you frankly, it is shameful to over collect specimens of these majestic cones in this way as it destroys their populations! Let them grow! During this expedition I also found three *ermineus* cones including a freak specimen, *pseudaurantius* cones, and a dead *granulatus* cone. One thing is certain, a passage through the Caribbean zone does not leave you without memories! It was eighteen months filled with unforgettable discoveries in environments where endemism is very strong and the sea is not very dangerous. I hope I can return one day!

<https://www.seashell-collector.com/>

<https://www.youtube.com/SeashellsMineralsChannel>

<https://www.facebook.com/seashell.channel>

[https://www.instagram.com/seashell\\_channel/](https://www.instagram.com/seashell_channel/)





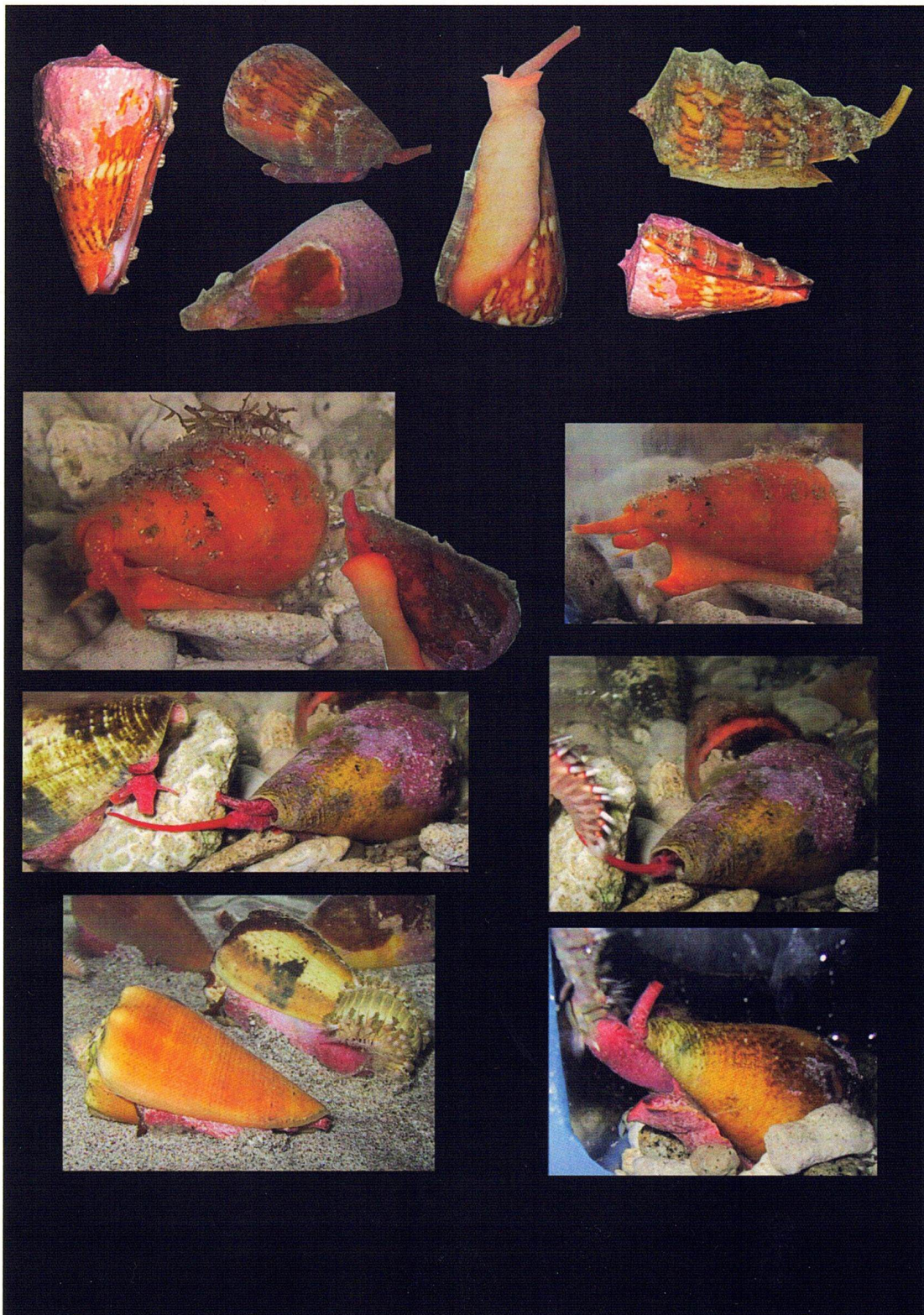
**Plate 1.** Top row: *Dauciconus boui* (da Motta, 1988) 33.5 mm, 33.3 mm, 30.5 mm, 27.4 mm; Second row: *D. boui* 30.7 mm, 30.1 mm, 31.4 mm, 33.7 mm; Third row: *Dauciconus daucus* (Hwass in Bruguière, 1792) 28.9 mm, 33.0 mm, 32.3 mm, 35.8 mm; Fourth row: *D. daucus* 45.4 mm, 50.2 mm, and *Gladioconus mus* (Hwass in Bruguière, 1792) 40.3 mm; Fifth row: *D. daucus* 46.5 mm, and *M. mus* 44.5 mm, 36.2 mm (upper) and 36.8 mm (lower).





**Plate 2.** Top row: *Tenorioconus insularis* (Gmelin, 1791) feeding on a fireworm, and *Chelyconus ermineus* (Born, 1778) 65.8 mm; Second row: *T. insularis* and *Stephanoconus regius* (Gmelin, 1791) feeding on a fireworm, *T. dominicanus* (Hwass in Bruguière, 1792) 52.5 mm and *T. insularis* 53.0 mm; Third row: Live *T. insularis* and *T. insularis* 50.2 mm and 50.0 mm; Fourth row: Live *T. insularis* and *S. regius*, *T. dominicanus* 49.1 mm and *C. ermineus* (far right with periostracum) 76.0 mm; Fifth row: *Tenorioconus pseudaurantius* (Vink, D.L.N. & R. von Cosel, 1985) 21.9 mm and 18.0 mm, and *Atlanticonus granulatus* (Linnaeus, 1758) 42.4 mm (beached).





**Plate 3.** Top row: *Dauciconus boui* (da Motta, 1988) red and yellow; Second row: *Dauciconus daucus* (Hwass in Bruguière, 1792); Third row: *Stephaniconus regius* (Gmelin, 1791); Fourth row: *S. regius*.





**Plate 4.** Top row: *Attenuiconus attenuatus* (Reeve, 1843) 18.9 mm and 19.9 mm, and *Poremskiconus colombi* (Monnier & Limpalaër, 2012) 18.6 mm and 19.8 mm; Second row: *P. colombi* 26.4 mm, and *Dauciconus daucus* (Hwass in Bruguière, 1792) 24.0 mm and 30.4 mm; Third row: *Jaspidiconus mindanus* (Hwass in Bruguière, 1792) 25.9 mm, 25.5 mm, and 26.4 mm; Fourth row: *Chelyconus ermineus* (Born, 1778) 40.0 mm and 61.2 mm, and *Atlanticonus granulatus* (Linnaeus, 1758) 30.0 mm; Fifth row: *Dauciconus norai* (da Motta & G. Raybaudi Massilia, 1992) 38.3 mm and 36.6 mm, and *A. granulatus* 28.2 mm.





**Plate 5.** Top row: *Stephanoconus regius* (Gmelin, 1791) 41.0 mm, 37.5 mm, and 41.4 mm; Second row: *S. regius* 40.0 mm, 46.2 mm, and 44.3 mm; Third row: *S. regius* 57.2 mm, 52.4 mm, and 41.7 mm; Fourth row: *S. regius* 59.3 mm, 48.1 mm, and 47.7 mm; Fifth row: *S. regius* 36.6 mm, and *Dauciconus jacquescolombi* (Monnier & Limpalaër, 2016) 33.9 mm and 36.9 mm.