

PALLIDULA

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COLLECTORS' CLUB**



COVER PAGE

A superb pair of live collected *Neptunea antiqua* (Linnaeus 1758), trawled 30 miles off Penzance in September 2004. The first specimen measures 170.2mm and the second 175.1mm. Now in the collection of John Fisher.

SHELLING IN THE ALGARVE

by Graham Saunders

I first visited the Algarve in 1978, again in 1997 and most recently for a week at the end of May 2004, each time staying in more or less the same place, although it has changed out of recognition. Comparisons are difficult. I did not find one of the unique sites and a couple of formerly abundant species are now hard to find. I suspect that the vast colony of *Conus mediterraneus* Hwass, 1792, which I once saw on a tidal mud flat behind Faro Airport may still exist if one can actually find it, but no trace of the species was seen during recent searches. There are still enough fresh dead examples of *Mesalia brevisalis* (Lamarck, 1822) to demonstrate its continued survival in the area. I suspect both are pocket populations seeded by eggs carried on the feet of wading birds. The habitat is not typical for *Conus mediterraneus* Hwass, 1792, but the species is so variable that these are probably the same. I am less certain about the *Mesalia* as they are smaller and more delicate than the West African population. DNA and life cycle comparison would clarify their status. Debate amongst "experts" is not conclusive. I saw no trace of Littorinidae of any species during the recent visit. Logically, they should be there. I collected (or attempted to collect) in a series of habitats and localities from East of Faro to West Lagos. Methods included scavenging restaurant and fishermen's waste, weed washing, reef flats and drift line at various stages of tide and snorkelling. I checked several fish markets and obtained what I thought was a reasonable sized *Charonia lampas* (Linnaeus, 1758) from a restaurant. The waiter said they could be larger and if I could come back the following morning he was visiting the fish market at 6.30 a.m. I called back the next morning and he had a plastic bag with five *Bolma rugosa* (Linnaeus, 1758) and a 360mm+ *Charonia* which he did not regard as exceptional but the best he could get on that particular day. While this is obviously not a world record, it would seem that the maximum sizes quoted in recent literature are a little pessimistic. It is the largest I have had!



***Charonia lampas* (Linnaeus, 1758)**

Areas visited were:- Olhao (Parque Natural da Ria Formosa) - not a good use of time for a shell collector for two reasons; the shells exist in large quantities but few species and the park is social conscience orientated rather than natural history orientated with features such as paper recycling, local crafts, salt pans and a visitor centre where they are intent on channelling one on set paths through a two hour+ programme. This is the major source of commercial shell fish for the region.

Faro Beach and the lagoon behind it - two totally different environments are ninety metres apart. Notable finds were a very large Gari - looks like intermedia but far too big, on the beach side, and a big *Epitonium clathrum* (Linnaeus, 1758) on the lagoon side. *Osilinus* are common and very variable in colour. Some resemble the West African colour form. There were a few *Gibbula* and a *Jujubinus*. In a restricted area near the bridge I found the *Mesalia* and a selection of other species, mostly crabbed as well as one empty Naticid. During the whole period I saw only one drilled bivalve so I imagine that *Natica* are scarce here.

Quarteira has limited but interesting beached shells including a few live ones such as *Dosina* and *Donax*. It also has commercial and retail fish markets where *Donax*, *Ensis*, *Cerastoderma* and *Tapes* are sold in bulk along with huge quantities of squid. One stall had some clean deep water; *Murex trunculus* Linnaeus, 1758 for sale, no *Bolinus brandaris* (Linnaeus, 1758) this time. *Pecten maximus* (Linnaeus, 1758) and *Pecten jacobaeus* (Linnaeus, 1758) are available but none were more than 6 cm across. I was told that this was the result of long term over-fishing. This seems to be a general problem attributed to Spanish boats which raid the Portuguese waters using illegal nets. The Portuguese are left with the dilemma that if they try to conserve, the Spaniards will just

take more and the locals get nothing! Sardines and Squid still exist in quantity. The latter are lured to the surface at night with lights. At night you see dozens of lights at sea.

Olhos del Agua has inter-tidal reefs and now an expanded boat slip way. There is always one boat that does not get cleaned properly and has interesting debris in the bottom. This time there were lots of *Gibbula magus* (Linnaeus, 1758) and some other offshore trochids. There was also a very beautiful Turrid, possibly *Haederopleura septangularis* (Montagu, 1803) though it is too large and bright coloured for confidence. I dived for weed samples beyond the headland reef and got a representative sample of micro shells. While there are a score or so of species, all were in very small numbers and I was reluctant to devastate large areas of seabed where the probability was that it would not add significant records. In turning huge numbers of stones, I saw only one juvenile Chiton where each stone should have yielded lots of adult individuals.

Lagos: There is a major fishing harbour accessed by a footbridge (pictured to the right) and I am certain that a lot of good material could be collected there. I was socially constrained from visiting it. There were *Charonia* and large *Bolinus* visible in shallows below the promenade.



Portimao: Not visited this time but this was always the best place to get large *Cymbium*, *Ranella* and *Buccinulum* from the mud around fishing boats. Praia Da Ana. At first sight there appears little here apart from fragments and *Nassarius* washed up with coarse sand but at the top of the tide, light material is fresh washed and shows up well against darker wet sand. There were several *Giberula miliaris*, a large but badly worn *Fusiturris undatiruga*, (Bivona, 1832), *Calliostoma*, *Jujubinus*, Trivia, *Doidora*, *Haliotis*, *Laevicardium*, *Modiolus*, *Columbella rustica* (Linnaeus, 1758), *Gibbula* sp., *Clathrus* and *Nassarius*.

I have not yet produced a definitive list of species found. There are too many unresolved taxonomic conflicts to start with and I am also working on an integration of the incompatible taxonomic structures of a number of "fashionable experts". Hoping to achieve something I can work with, without creating even more acrimony and confusion than we already have to live with!



"Whilst on holiday in Belgium last year I visited Ypres Cathedral. It is a very interesting and beautifully restored Cathedral having been almost destroyed in the first World War. Just inside the west door, fixed to a plinth was half of a giant clam *Tridacna gigas* (Linnaeus, 1758) being used as a Holy Water stoop. So I just had to take a picture of it. I know they have been used in other churches for similar purposes but this is the first time I had seen one."

Daphne Howlett

Shelling in Athens and Attica By Linda Young

“Athens? I didn’t even know it was by the sea”. I can hear you saying it now and neither did I until I first came here three years ago. Athens is a coastal city and in fact lies on the edge of the Saronic Gulf. Having lived most of my life in the centre of England, my love of shells and beachcombing was severely limited to holidays in Devon and the Channel Islands until I came here.

On arrival in Greece I was fortunate to find myself on a beach in the Peloponnese the very first weekend. My first ever shell collected here and a perfect specimen was a *Janthina fragilis* – quite a find for me. It was soon followed by two specimens of the beautiful murex *Bolinus brandaris* and *Aporrhais pespelecani*. This spurred me on and later that year back in the province of Attica I sought out the local beaches. Quite by chance I had picked the best time of year – winter! If you are thinking of beachcombing here don’t even think about the months between June and September. Athens empties itself onto the beaches and anything remotely resembling a shell is trampled by thousands of feet.

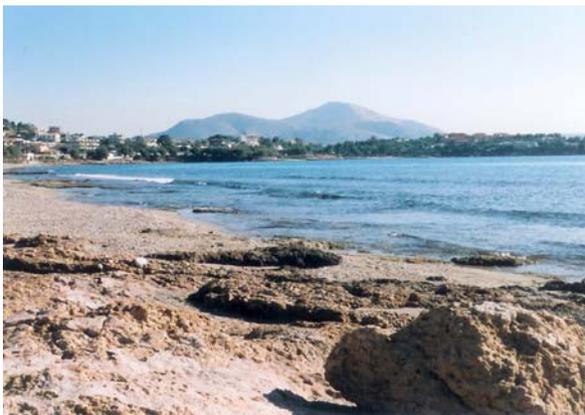


Bolinus brandaris (L., 1758)

The winter months however are a different matter. Most people don’t go near the beach when the temperature is under 25 degrees – positively chilly! For me of course that’s great news, all those beaches to myself. As you may know the Mediterranean doesn’t have a strong tidal flow so there’s not much wave action bringing those treasures ashore. However to my surprise the beaches regularly have a good variety of shells and often in very fine condition.

Arriving at the beach at Varkiza bay during the Christmas holiday I set off in anticipation, leaving my husband in the car watching a local football match. The beach is long and a mixture of sand and stones with rocks at one end. Some of the first finds were the very common species *Columbella rustica* and *Hexaplex trunculus*. *Conus mediterraneus* and *Bulla striata* were also in abundance as well as *Cerithium vulgatum* and *Cerithium rupestre*. Bivalves included beautiful specimens of *Acanthocardia tuberculata*, *Donax semistriatus* and *Venus verrucosa*. Then suddenly among the stones I found a small cowrie – *Luria lurida* – the first I have ever found on a beach and still one of my favourite finds. This was followed by a beautiful *Tellina balaustina* with both valves. After a couple of hours I returned to my husband sitting in the car totally bemused at my delight in the bulging plastic bag! Only mad dogs and Englishwomen go on to the beach in winter! Shelling here was obviously going to be a solitary business!

My next trip was to the small sheltered cove of Lombarda beach. This proved to be less interesting as the water is very calm – like a pond! However I found my first *Cyclope donovani* here – an unusual and attractive Colubrariidae. There were also *Columbella rustica* again in the hundreds. Nothing else of any interest though so not a beach to recommend.



Agios Dimitrios Beach

Further forays offered more delights. I decided to head further along the coastal road toward the ancient site of Sounio with its temple ruins of Posidon and Athena. The beaches are very varied, some sandy, some stony and others with a mixture of everything. Almost all the beaches have areas with rocks too. The long sandy beach at Agios Dimitrios is one of my favourites with many species living there. The attractive *Clanculus corallinus* and *Clanculus cruciatus* are common here. I have also collected *Ocinebrina edwardsii* and *Clanculus jussieui*.

On one visit to this beach I found dozens of *Callista chione*, some of them extremely large. 'Top shells' are common here and two beautiful shells which can be found are *Calliostoma laugieri* and *Jujubinus exasperatus monterosatoi*. The attractive *Coralliophila meyendorffii* is to be found too. Perhaps one of my favourites though is the beautiful Epitoniidae, *Epitonium lamellosum*. They are usually among the Posithonos seaweed which is such a common feature of the beaches in Greece. The lovely *Haliotis tuberculata lamellosa* is quite frequent too. There are also occasionally *Tonna galea* but only the smallest are undamaged being such a fragile shell.

A little further along the road is Kalivia beach. This is my favourite so far. It is sandy but quite narrow. Where the sand ends a flat shelf of rock begins and extends out under the sea. At low tide it is exposed forming very shallow pools where *Littorina neritoides* are common. Here the smaller shells are in abundance – *Tricolia pullus*, *Tricolia speciosa* and *Tricolia tenuis* are found in large numbers. Conspicuous among the small shells is the striking bright green Neritidae *Smaragdia viridis* unusual in colour. Also plentiful are the *Monodonta articulata*, *Monodonta mutabilis* and *Monodonta turbinata*. The *Gibbula* family are well represented here too with *Gibbula albida*, *Gibbula varia*, *Gibbula adansoni* and *Gibbula umbilicarus umbilicarus* being among the most common. I have also managed to collect a few good specimens of the very beautiful *Gibbula ardens* and *Gibbula fanulum* but these are more frequently broken unfortunately. *Buccinum corneum* and *Pisania striata* are present here too. Most of my cowries, all *Luria lurida* have been found at this beach. However my most exciting and recent find are juvenile *Strombus decorus* "raybaudii" the only *Strombus* in European waters. These are not usually present in this area and I am eagerly waiting to find some larger specimens in a few months.



Kalivia Beach



Lurida lurida



Strombus decorus "raybaudii"

It soon came to my notice that most shells here are on the small side with a few exceptions but at the same time they are quite colourful. With my shell collection growing rapidly and storage being a problem I turned my attention to those micro shells lying in the strand line. Kalivia beach is a heaven for the micro shell enthusiast. When the beach is bereft of anything else there is

always a huge variety of micro shells. I now have a large collection of Turridae and Rissooidea. This however created another problem for me – how to identify them? With no shell clubs and little interest in shells generally who could I talk to? Fortunately I found an excellent shell book 'Shells from the Greek Seas' written by a local professor of malachology working at the natural history museum but no other shell books at all! Sadly our hobby is not widely appreciated or catered for in Greece. To cut the story short professor Evi Vardala –Theodorou has been wonderful and I am fortunate to have the opportunity to work in her laboratory once a week with full access to the books, countless specimens and the all important microscope – essential for micro shells of course. It's very slow going though with there being so little literature published for these families. If any club member knows of good books or other sources of information I would be very grateful if they could pass it on to me. As a point of interest, the Goulandri Natural History Museum in Kiffisia (a suburb of Athens) where the laboratory is situated has an excellent collection of local and worldwide shells on display and an enormous store of shells in its possession – well worth a visit.

To get back to the beaches there are two more that I have had time to explore a little further away than Athens. Passing the new Olympic rowing centre at Schinias you arrive at the long sandy beach of Marathonus Bay. Great for swimming, this sheltered bay has also yielded a few specimens although the frequent presence of masses of Posithonos seaweed does make it difficult to find them. A little digging is usually needed. Here there were *Nassarius mutabilis*, *Tonna galea*, *Donax trunculus*, *Tellina distorta*, *Parvicardum exiguum subangulatum* Nordsieck, *Glans trapezia*, *Paphia lucens*, *Jujubinus exasperatus* and a very small *Cyclope donovani*. Probably due to the presence of nearby wetlands and marshes I found a *Theodoxus fluviatilis* as well. A winter visit here would reveal much more I am sure.

Situated close to Athens is the island of Evia having the Aegean sea on one side and the Evian seas on the other. One Easter I spent a few delightful hours on the beach at Almiropotamus, a small village there. At first I didn't expect to find much as the sea was so calm it looked like a lake but after the winter storms the beach was a mass of shells. In fact I found some of the most beautiful bivalves in my collection here. Among them are *Tapes decussatus*, *Venerupis senegalensis*, 1791 and *Paphia lucens*. Also *Caerastoderma glaucum* and *Caerastoderma edule*. The highlight of the day though was an excellent specimen (and still my only one) of *Cirsotrema cochlea*. This very unusual Epitoniidae is quite uncommon. Also attractive and frequent were *Natica hebraea* and *Natica punctata*. A subsequent visit to the beach in the summer found it bereft of shells so obviously winter and spring is the time to go here when shells have collected after the storms.

At present I'm carefully wading through all the Turridae but haven't even started on the Rissosoidea yet. From the Turridae I have identified *Raphitoma linearis*, *Raphitoma concinna*, *Raphitoma tomentosa*, *Raphitoma philberti*, *Crassopleura maravignae*, *Mangelia costulata*, *Mangelia attenuata*, *Mangelia scabrida*, *Mangelia galli*, *Mangelia smithii* and *Mangelia vauquelini*. Also *Bela ornata aticae*, *Bela nebula*, *Bela ginniana* and *Mangeliela caeruleans* but still have several more species of *Raphitoma* and all the rest of the Turridae to work on. Much work lies ahead! The 'shell collecting' season is approaching again as I write this and eagerly await the progress of the Strombidae to become larger specimens while the rest of Greece and her islands still wait tantalizingly to be explored..



Various Epitoniidae



Natica punctata



Tapes decussates

So if you are ever in the Athens area remember it has more to offer than the Acropolis and Bouzouki music. There is plenty of shelling here and the winters are mild – hardly ever below twelve degrees centigrade and usually warmer. You are always near a beach and you won't have any competition for the shells either – except from me of course!

List of shells found and identified to date (October 2004)

Gastropods

<i>Patella caerulea</i> L., 1758	<i>Gibbula umbilicaris umbilicaris</i> (L., 1758)	<i>Pollia scabra</i> Locard, 1886
<i>Patella rustica</i> L., 1758	<i>Bolma rugosa</i> (L., 1767)	<i>Pollia scacchiana</i> (Philippi, 1844)
<i>Patella ulyssioponensis</i> Gmelin, 1791	<i>Homalopoma sanguineum</i> (L., 1758)	<i>Nassarius cuvierii</i> (Payraudeau, 1826)
<i>Smaragdia viridis</i> (L., 1758)	<i>Tricolia pullus</i> (L., 1758)	<i>Nassarius incrassatus</i> (Ström, 1768)
<i>Haliotis tuberculata lamellosa</i> Lamarck, 1822	<i>Tricolia speciosa</i> (von Mühlfeldt, 1824)	<i>Nassarius mutabilis</i> (L., 1758)
<i>Emarginula adriatica</i> O.G.Costa, 1829	<i>Tricolia tenuis</i> (Michaud, 1829)	<i>Nassarius reticulatus</i> (L., 1758)
<i>Emarginula elongata</i> O.G.Costa, 1829	<i>Littorina neritoides</i> (L., 1758)	<i>Cyclope donovani</i> Risso, 1826
<i>Emarginula rosea</i> Bell, 1824	<i>Turitella communis</i> Risso, 1826	<i>Pyrene gervilli gervilli</i> (Payraudeau, 1826)
<i>Emarginula sicula</i> Gray, 1825	<i>Cerithium rupestre</i> Risso, 1826	<i>Columbella rustica</i> (L., 1758)
<i>Emarginula huzardii</i> Payraudeau, 1826	<i>Cerithium vulgatum</i> (Bruguière, 1792)	<i>Mitra cornicula</i> (L., 1758)
<i>Fissurella nubecula</i> (L., 1758)	<i>Bittium reticulatum reticulatum</i> (da Costa, 1788)	<i>Vexillum ebenus</i> (Lamarck, 1811)
<i>Diodora gibberula</i> (Lamarck, 1822)	<i>Aporrhais pespelecani</i> (L., 1758)	<i>Vexillum littorale</i> (Forbes, 1844)
<i>Diodora graeca</i> (L., 1758)	<i>Strombus decorus</i> (Röding, 1798)	<i>Vexillum tricolor</i> (Gmelin, 1790)
<i>Diodora italica</i> (Defrance, 1820)	<i>Luria lurida</i> (L., 1758)	<i>Conus mediteranneus</i> Hwass in Bruguière, 1840
<i>Clanculus corallinus</i> (Gmelin, 1791)	<i>Natica dillwynii</i> Payraudeau, 1826	<i>Raphitoma concinna</i> (Scacchi, 1836)
<i>Clanculus cruciatus</i> (L., 1758)	<i>Natica hebraea</i> (Martyn, 1784)	<i>Raphitoma lavaie</i> (Philippi, 1844)
<i>Clanculus jussieui</i> (Payraudeau, 1826)	<i>Natica punctata</i> (Chemnitz in Karsten, 1789)	<i>Raphitoma linearis</i> (Montagu, 1803)
<i>Calliostoma laugierii</i> (Payraudeau, 1826)	<i>Euspira guillemini</i> (Payraudeau, 1826)	<i>Raphitoma tomentosa</i> (Monterosato, 1890)
<i>Calliostoma zizyphinum</i> (L., 1758)	<i>Payraudeautia intricata</i> (Donovan, 1804)	<i>Raphitoma philberti</i> (Michaud, 1832)
<i>Jujubinus exasperatus</i> (Pennant, 1777)	<i>Tonna galea</i> (L., 1758)	<i>Crassopleura incrassata</i> (Dujardin, 1836)
<i>Jujubinus unidentatus</i> (Philippi, 1844)	<i>Cirsotrema cochlea</i> (G B Sowerby II, 1844)	<i>Mangelia attenuata</i> (Montagu, 1803)
<i>Jujubinus smaragdinus</i> (Monterosato, 1880)	<i>Epitonium commune</i> (Lamarck, 1822)	<i>Mangelia costulata</i> (Blainville, 1829)
<i>Jujubinus striatus</i> (L., 1758)	<i>Epitonium lamellosum</i> (Lamarck, 1822)	<i>Mangelia vauquelini</i> (Payraudeau, 1826)
<i>Monodonta articulata</i> Lamarck, 1822	<i>Epitonium turtoni</i> (Turton, 1819)	<i>Mangelia scabrida</i> (Monterosato, 1890)
<i>Monodonta mutabilis</i> Philippi, 1846	<i>Janthina fragilis</i> Lamarck, 1801	<i>Mangelia smithii</i> (Forbes, 1840)
<i>Monodonta turbinata</i> (von Born, 1778)	<i>Eulima glabra</i> (a Costa, 1778)	<i>Mangelia galli</i> (Bivona, 1838)
<i>Gibbula albida</i> (Gmelin in L., 1791)	<i>Bolinus brandaris</i> (L., 1758)	<i>Bela ornata aticae</i> (Nordsieck)
<i>Gibbula ardens</i> (von Salis, 1793)	<i>Hexaplex trunculus</i> L., 1758	<i>Bela nebula</i> (Montagu, 1803)
<i>Gibbula adansonii</i> (Payraudeau, 1826)	<i>Muricopsis cristata</i> (Brocchi, 1814)	<i>Bela ginniana</i> (Risso, 1826)
<i>Gibbula turbinoides</i> (Deshayes, 1835)	<i>Ocenebrina aciculata</i> (Lamarck, 1822)	<i>Ringicula auriculata</i> (de la Groye, 1811)
<i>Gibbula fanulum</i> (Gmelin, 1791)	<i>Ocenebrina edwardsi</i> (Payraudeau, 1826)	<i>Ringicula buccinaea</i> (Brocchi, 1814)
<i>Gibbula philberti</i> (Récluz, 1843)	<i>Thais haemastoma</i> (L., 1766)	<i>Bulla striata</i> Bruguière, 1789
<i>Gibbula richardi</i> (Payraudeau, 1826)	<i>Coralliophila meyendorffii</i> (Calacara, 1845)	<i>Haminoea navicula</i> (da Costa, 1778)
<i>Gibbula varia</i> (L., 1758)	<i>Buccinulum corneum</i> (L., 1758)	
<i>Gibbula divaricata</i> (L., 1758)	<i>Pisania striata</i> (Gmelin, 1791)	
<i>Gibbula rarilineata</i> (Michaud, 1829)	<i>Engina bicolor</i> (Cantraine, 1835)	
	<i>Pollia dorbignyi</i> (Payraudeau, 1826)	

Bivalves

<i>Arca noae</i> L., 1758	<i>Plagiocardium papillosum</i> (Poli, 1795)	<i>Tellina nitida</i> (Poli, 1791)
<i>Barbatia barbata</i> (L., 1758)	<i>Laevicardium oblongum</i> (Poli, 1795)	<i>Tellina tenuis exigua</i> (Poli, 1791)
<i>Glycymeris glycymeris</i> (L., 1758)	<i>Cerastoderma edule</i> (L., 1758)	<i>Macoma cumana</i> (O G Costa, 1829)
<i>Glycymeris insubrica</i> (Brocchi, 1814)	<i>Cerastoderma glaucum</i> (Poirer, 1789)	<i>Gastrana fragilis</i> (L., 1758)
<i>Mytilus edulis</i> L., 1758	<i>Spisula subtrunca</i> (Da Costa, 1778)	<i>Venus verrucosa</i> (L., 1758)
<i>Musculus costulatus</i> (Risso, 1826)	<i>Mactra glauca</i> (Von Born, 1778)	<i>Chamelea gallina gallina</i> (L., 1758)
<i>Lithophaga lithophaga</i> (L., 1758)	<i>Mactra stultorum</i> (L., 1758)	<i>Clausinella brongniartii</i> (Payraudeau, 1826)
<i>Modiolus adriaticus</i> Lamarck, 1819	<i>Donacilla cornea</i> (Poli, 1795)	<i>Dosinia lupinus</i> (L., 1758)
<i>Modiolus barbatus</i> (L., 1758)	<i>Ensis ensis</i> (L., 1758)	<i>Callista chione</i> (L., 1758)
<i>Pinctatda radiata</i> (Leach, 1814)	<i>Ensis siliqua minor</i> (Chenu, 1843)	<i>Pitar rudis rudis</i> (Poli, 1795)
<i>Aequipecten opercularis</i> (L., 1758)	<i>Donax semistriatus</i> Poli, 1795	<i>Paphia aurea</i> (Gmelin, 1791)
<i>Lima inflata</i> Link, 1807	<i>Donax trunculus</i> L., 1758	<i>Paphia lucens</i> (Locard, 1886)
<i>Lima lima</i> (L., 1758)	<i>Donax venustus</i> Poli, 1795	<i>Paphia rhomboides</i> (Pennant, 1777)
<i>Anodontia fragilis</i> (Philippi, 1836)	<i>Psammobia depressa</i> (Pennant, 1777)	<i>Tapes decussates</i> (L., 1758)
<i>Venericardia antiquata</i> (L., 1758)	<i>Psammobia costulata</i> (Turton, 1822)	<i>Venerupis pullastra</i> (Montagu, 1803)
<i>Glans trapezia</i> (L., 1767)	<i>Solecurtis strigillatus</i> (L., 1758)	<i>Irus irus</i> (L., 1758)
<i>Cardita calyculata</i> (L., 1758)	<i>Tellina balaustina</i> (L., 1758)	<i>Pholas dactylus</i> L., 1758
<i>Acanthocardia tuberculata</i> (L., 1758)	<i>Tellina distorta</i> Poli, 1791	
<i>Parvicardium exiguum</i> (Gmelin in L., 1791)	<i>Tellina planata</i> L., 1758	
<i>Parvicardium exiguum subangulatum</i> (Nordsieck)	<i>Tellina donacina</i> L., 1758	
	<i>Tellina incarnata</i> L., 1758	

THE QUEST

By Brian Hammond

I found a very lovely shell one sunny day in spring
 Which put me on the road to hell to try and name the thing.
 Was it this? Or was it that? Or was it something new?
 I had to face the awful fact, I didn't have a clue.
 I thought this can't be difficult; it must be a simple task.
 There's the Internet and lots of books and experts I can ask.
 I'd begin with the location, the logic seemed quite sound.
 As after all I'd collected it, so I knew where it was found.
 I travelled to the library to find myself a book
 About that country's molluscs so I could take a look.
 Back home I went with book in hand, my quest would soon be done.
 This work contained so many shells, but nothing like my one.
 I naively thought the Internet would be my saving grace
 And in the taxonomic hierarchy my snail would find it's place.
 With Google and the World Wide Web, its anonymity was gone.
 But hours of surfing later I had to admit that I was wrong.
 If you know just what you're searching for it is a simple task.
 But if the thing is nameless then you don't know what to ask.
 The quest seemed to be hopeless, I was feeling very blue
 This time it seemed I'd bitten off a lot more than I could chew.
 I thought perhaps I'd smash the thing or throw it in the bin.
 But it didn't suit my character to let that damn snail win.
 So with my prize clutched in my hand to London I did go,
 To talk to all the experts at the Shell Collectors' Show.
 I spoke to many people from countries far and wide.
 I was confident my little snail would be identified.
 One said it was a Turrid, another said "It's not".
 A third said "Don't be silly it's a Wentletrap you've got".
 I really thought someone would know and I found it rather odd.
 That the only thing they all agreed it was a gastropod.
 I went home no wiser and it seemed a crying shame,
 That a shell as lovely as this might never have a name.
 So what about it's future? What path should I now take?
 It had even been suggested that my shell might be a fake.
 Do I send it to a museum or hide the thing away
 And hope someone will name it on some far distant day?
 No, after all the sleepless nights and pain it's caused to me
 I'll take it back from whence it came and chuck it in the sea!

SHELLING ON BULL ISLAND, SOUTH CAROLINA

By Peter Topley

On a recent business trip to the south eastern US state of South Carolina, I was lucky enough to have some free time and so took the opportunity to visit the Cape Romain National Wildlife Refuge, north of the city of Charleston. This 64,000 acre reserve is billed as South Carolina's "most pristine wilderness". It is an area of saltwater marshes with oyster beds and creeks bounded on the seaward side by a series of barrier islands. The area is home to dolphins, pelicans, herons, egrets and other birds.

I drove out in the early morning to Cape Romain from Charleston, heading for Moores Landing, a long wooden pier stretching out past giant Spanish Moss draped Like Oaks into the calm flat water of Sewee Bay. I noticed that at one end of the car park there was a large trailer, and a sign which stated "Oyster Shell Recycling Drop Off. Oyster shells deposited at this site will be planted to improve oyster reefs and create additional shellfish habitat". In the trailer were piles of dutifully discarded shells of the Eastern Oyster *Crassostrea virginica* along with the some of the familiar clam *Mercenaria mercenaria*. At the end of the pier I boarded the flat bottomed ferry run by Coastal Expeditions which, twice daily from Tuesday to Saturday in season, take visitors out to Bull Island. The ferry had a "finds table", along with some books for identification, amongst which was a copy of the helpful Audubon Field Guide to North American Seashells (Knopf, 2003). On the table I recognised some worn shells of large "whelks" of the genus *Busycon*.

Bull Island is 6 miles long and a nature reserve managed for endangered and threatened species such as the Red Wolf, Wood Stork and the Loggerhead Turtle. The island was owned in the past by a Senator who constructed large ponds for the introduction of wildlife for hunting purposes. The ponds, and many of the descendants of the original alligators, are still there. Footpaths take you through protected maritime forest, which seemed rather overly endowed with its own population of persistent biting flies, but what attracted me was the sandy shore on the eastern seaward side of the island. The island was devastated by Hurricane Hugo in the 1990's and most of the former coastal cypress forest has now gone, but a "ghost" of what this may have been like can be glimpsed at the "Boneyard Beach" (pictured below) where the sea is eroding the land in



the North, and at the same time depositing sand at the south end. As the island gradually “moves South” dead trees become exposed on the beach and die, their dead skeletal trunks and roots standing out dramatically on the shore. The shore is well known for shells and they are generally more available than elsewhere along the coast because the number of visitors is restricted. Collecting in the reserve is however understandably limited to “two small bags of dead shells”.

I began my search for shells in the northern part of the island amongst the dead trees. Lying in a small pool I was amazed to find a large 19cm Knobbed Whelk, *Busycon carica*. Walking to an area with a small inlet I soon found other specimens, including shells of the “Kiener’s Whelk” subspecies *Busycon carica eliceans* with their characteristic swelling around the lower middle of the body whorl, until I had accumulated a small pile. These “whelks” are in the family *Melongenidae*, a small family of 6 genera and approximately 25 species found in tropical and temperate seas: the United States lays claim to 3 of these genera and 11 species including the well known “Florida Crown Conch” *Melongena corona*. Realising I could only take a fraction of them away with me, I sat and sorted out the best ones, whilst watching a nearby group of Black Skimmers (*Rhynchops nigra*) with their long angled beaks fishing on the falling tide, along with the occasional Brown Pelican. Scattered around the shore were the huge valves of *Dinocardium robustum*, the “Giant Atlantic Cockle” and of *Cyrtopleura costata* or “Angel Wing”, the large American mud dwelling Pholad.

By midday the tide was retreating and the temperature had soared to around 90°F. I headed south along the shore at the edge of the water where there were more *B. c. eliceans*, this time living, along with live *Polinices duplicatus* Say, 1822, *Oliva reticularis* Lamarck, 1811 and numerous specimens of *Anadara brasiliana* Lamarck, 1819, the Incongruous Ark, so called because the left valve is larger than the right, washed out of the sand.

Moving to the high tide line there were numerous tests of the flat “Sand Dollar” Echinoderm, whose five fold symmetry has been seen by some to mimic religious symbolism and earn it the alternative name of “Holy Ghost Shell.” Amongst the shells cast up along the high tide line I added two further species of *Busycon* whelks; *B. canaliculatum* and the sinistral *B. contrarium*. Overall I was very pleased with my finds and for the opportunity to visit this wonderful island reserve with its varied wildlife. I recommend a visit if you intend to visit this part of the U.S.A.

Alphabetical list of identified species found:-

<p><i>Anadara brasiliana</i> (Lamarck, 1819) <i>Anatina plicatella</i> (Lamarck, 1818) <i>Anomia simplex</i> (Orbigny, 1842) <i>Atrina serrata</i> (Sowerby, 1825) <i>Busycon canaliculatum</i> (L., 1758) <i>Busycon carica</i> (Gmelin, 1791) <i>Busycon carica eliceans</i> (Montfort, 1810) <i>Busycon contrarium</i> (Conrad, 1840) <i>Crassostrea virginica</i> (Gmelin, 1791) <i>Dinocardium robustum</i> (Lightfoot, 1786) <i>Donax variabilis</i> Say, 1822 <i>Dosinia discus</i> (Reeve, 1850)</p>	<p><i>Mercenaria mercenaria</i> (L., 1758) <i>Modiolus demissus</i> (Dillwyn) <i>Oliva reticularis</i> Lamarck, 1811 <i>Phalium granulatum</i> (Born, 1778) <i>Polinices duplicatus</i> (Say, 1822) <i>Sinum perspectivum</i> (Say, 1831) <i>Solen viridis</i> Say, 1821 <i>Spisula solidissima</i> (Say, 1822) <i>Tagelus plebius</i> (Lightfoot, 1786) <i>Tellina alternata</i> Say, 1822 <i>Terebra dislocata</i> (Say, 1822) <i>Urosalpinx cinerea</i> (Say, 1822)</p>
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Turitella and Weed
 By Graham Saunders

The weed attached to the *Turitella* is not a case of symbiosis but the reason for the animal ending up in trouble on the beach. Once the weed starts growing, the mollusc is subjected to constant drag from water movement and is weakened. Comes a storm and the weed is dragged by the water and the shell is dragged by the weed..

note re J Fisher comments

SHELLING IN WESTERN AUSTRALIA – PART 1

By Carl Ruscoe

I have been collecting shells now for 25 years and I've always wanted to go to Australia to collect but had never got around to it, that is until this June, when I spent 3 weeks there with my father. My father, who I shall refer to as the Padre, lived in Australia when he was a child and had always wanted to go back. Fortunately, I have two cousins in Perth and they were delighted to put us up and this really kept down the cost for us. I spent weeks looking at books to see what shells were available and just couldn't wait to get out there.

On Thursday the 17th of June we flew from Manchester to Perth. The "Growler" our taxi driver, came for me at 6.00am, having already picked up the Padre, and we set off for Manchester. After a long boring 3 hours we boarded the plane. The Singapore airlines plane was fantastic, in the backs of the seats there were video screens and there was a great deal more leg-room than on most planes. The cabin crew were excellent and could not do enough for us. The display on the screens showed our flight path and a strange little white circle just off the flight path and I wondered what this was? The Padre told me that the plane symbol denotes where we are and the circle denotes where we should be! We stopped at Zurich to pick up some Swiss passengers and during the flight England actually played Switzerland in the European championships. The Padre was bracing himself for blows coming from behind us, but fortunately everyone was well behaved. We arrived in Singapore after 15 hours on the plane and it was great to walk around the airport for 2 hours. The airport was like a city in itself, absolutely breathtaking.

We boarded a smaller plane to Perth and arrived there Friday afternoon. The Australians are unbelievably strict about what is coming into their country. They even have Beagles sniffing everyone's luggage. We were greeted by my cousin Jeanette and her husband Roger. We set off South along the main freeway and as we got into the bush there was hardly any traffic at all. After 3 hours we finally got to their house in Dunsborough and we were greeted by kangaroos in their garden! Their house was beautiful and very spacious with 5 acres of land.

Although I had only managed 9 minutes of sleep in 33 hours I was up at the crack of dawn the next morning. I have recently become much more interested in land snails and I had promised to look for some for Derek Howlett. After a brief walk around the grounds and some of the nearby bush I only came up with a few small *Cochlicella*. I think that the habitat was just too dry for them. I then talked my cousin into kindly dropping me off at the local beach which was just a bit too far away to walk. Jeanette, Roger and Padre assisted me in my first 10 minutes of collecting on Meelup beach and actually picked up a few nice specimens, before they left me to it. Meelup beach is a lovely little stretch of sand surrounded by rocks and some nice bivalves can be found here, but I knew I would have to find the rocky inlets to pick up most of the gastropods. I set off on a coastal track to find Castle bay. When I got to Castle bay I worked the small areas of sand between rocks and picked up an amazing diversity of species including *Conus anemone* Lamarck, 1810, *Phasianella australis* (Gmelin, 1791) and *P. ventricosa* Swainson, 1822, *Cymatium exaratum* (Reeve, 1844) and many beautiful Trochids and lots of smaller shells in shell grit including *Rissoina*, *Erato*, *Epitonium*, *Acteocina* and *Triphora*. I walked for some 4 km along the coastline checking all the little sandy bays. They were mostly devoid of people and completely unspoilt. It was paradise. I eventually came to the beach near Dunsborough town centre and in inter-tidal pools there I collected many living specimens of *Cantharidus* and *Phasianotrochus*. Possibly the most beautiful of these was *Phasianotrochus irisidontes* (Quoy & Gaimard, 1834). This species is amazing, it has a nacreous green shell with thin red axial stripes. It was however, getting very dark and I did not know where I was? But when you're getting the gear nothing else matters. Fortunately I borrowed a mobile and I got picked up.

We had a barbecue breakfast on the veranda in the morning and then I was shown to my 'sloppery' where I spent 2 hours cleaning Saturday's catch. We then went to an old lighthouse at Cape Naturaliste (pictured on the right). It was built in 1903 and was one of Australia's first. There was also a souvenir shop there and they had some beautiful posters of all the Australian Flora and Fauna. The Padre had visited the previous day and bought a poster for me with Shells of the South West on it. I bought a poster covered with more than 50 of Australia's Crustaceans. They were all shapes and sizes and all the colours of the rainbow. On the way back we stopped at Bunker bay where I was allowed 5 minutes to search the beach. This quickly turned into 20 minutes as I disappeared into the distance. At one end of the beach there were lots of inter-tidal rocks and heaps of washed-up seaweed. In a small rock pool here I collected a fantastic fresh specimen of *Ranella australasia* (Perry, 1811) and my first *Cypraea reevei* Sowerby, 1832. The Reeve's Cowrie had a slightly rough dorsum but good ventrum and lovely pink terminals. Delighted with my finds I ran back to the car and we headed back for a relaxing evening.



The following morning I managed to film some amazing birds from the veranda including Black-striped Cockatoos and Green Lincoln Parrots. In the mornings out in the bush all you can hear is birds singing, it is just heaven. The Kookaburras sound like chimpanzees and the crows sound absolutely awful and even seem to have an Australian

accent, but the rest of the birds sing beautifully. After breakfast we visited Busselton to see the longest jetty in the southern hemisphere, it is 1.8km long! And is the second longest in the world. I took the opportunity to buy a tide book in Busselton and I couldn't really work it out; I was then told by Jeanette that in WA they only have one tide a day and no one could offer an explanation for this. At Busselton the beach was littered with *Spirula* a small relative of the Octopus but nothing else could be found there on the beach.

Frustrated with the lack of shells at Busselton, I managed to talk Jeanette into dropping me off at Eagle bay near Dunsborough and arranged to get picked up again at nightfall. At Eagle bay (pictured on the right) among inter-tidal rocks were thousands of beached shells but most of these were poor condition and had obviously been battered against the rocks by the tide. There were however many smaller shells to be found of good quality including *Trivia merces* (Iredale, 1924), *Granata imbricata* (Lamarck, 1816), *Siliquaria weldii* (Tenison-Woods, 1876), *Duplicaria crakei* Burch, 1965 and even one juvenile *Syrinx* with its cylindrical apical whorls intact. I was also lucky enough to find another specimen of *Cypraea reevei* Sowerby, 1832 and it was better than the first specimen. I worked my way along the coast past Meelup beach and all the way to Dunsborough town centre picking up as I went. I then rang my cousin for a lift and she thought I was barmy, but I have never been afraid to walk a few miles in search of shells.



On Tuesday we drove to Donnybrook, a small town in the middle of nowhere, to visit Jeanette and Roger's friends Jim and Leslie. They had an amazing place which reminded me of the film 'Crocodile Dundee', it was so Australian. Jim had spent a lot of time out in the bush with some very dangerous animals. He took me down to the Preston river at the bottom of next door's plot, about half a mile away, where I dredged for freshwater snails. The river seemed to be totally devoid of Molluscs. Jim made the day worthwhile though when he kicked over a rotting log to uncover a centipede six inches long, it was purple with yellow legs! I then spotted a ridiculously large ant at about 6cm in length! Jim poked it with a stick and it seemed to square up to him. Jim told me that it was a Bull Ant and it has a sting from it's abdomen 6 times more painful than a Wasp's and it leaves a scar for two years! Apparently the Centipede's sting is even worse, the mind boggles!

We set off for Albany on the South coast early the next morning. This was a 1000km round trip. Our first stop was Gracetown, on the West coast, and here I was allowed to look around the rock pools for a short while but I found very little. Just a couple of weeks after I was there, a young surfer was taken by a Shark at that very spot and his body was found in two halves on the beach! We pressed on and had our lunch at a small town called Augusta where we were fortunate to see Dolphins in their natural habitat in the estuary of the Blackwood river. We had a few more stops in the afternoon including Cape Leuwin lighthouse. At Cape Leuwin you can look out on to two oceans, the Indian and the Southern and here we even saw spouting from Humpback Whales just off the Cape. We



Cape Leuwin lighthouse

eventually arrived in Albany and found our pre-booked B&B. Our B&B was outstanding and there were 3 bedrooms. The owner, Dave, warned us though that he would charge us for the extra room if we used it. I had to use the room because of the Padre's snoring and I thought I could get away with it. However, Dave had used an old James Bond trick, he had placed a hair across the door so he would know if the room had been opened. At 6.30am I walked down to Middleton beach in the dark with high hopes of some good beach collecting. There were thousands of Bivalves washed up but nearly all single valves. It was so frustrating. The only shells worth picking up were huge Bubble shells called *Bulla quoyi* Gray, 1843.

I particularly like Opisthobranchs so I collected as many as I could. After breakfast I asked Dave about cray fishing in the area. Dave told me there were some small fishing vessels at Emu point just a few km away. I was dropped off at Emu point while the others did some sightseeing. The harbour here was more like a marina and all the jettys were locked up anyway so I could not get to the boats. The habitat here though was like a salt-marsh and I suspect the water was slightly brackish as I found many species associated with estuarine mud and brackish water. Amongst the Gastropods found were *Cerithium*, *Cerithidea*, *Haminoea*, *Diala*, *Philine*, *Salinator*, *Polinices*, *Astralium*, *Thalotia*, *Clanculus* and *Gracilispira*. The Bivalves found at Emu point included several species of Venus Clams and two species of Mussel. I also collected some shell grit to process back in the U.K. so I was very satisfied with Emu point. To sort through the shell grit I got help from my collecting partner Dave Charlton who is especially good at sorting through micros. Dave was at a loose end in the evenings up until October, so he was glad to have something to occupy his time.

We set off back to Dunsborough and stopped in the Valley of the giants. The trees here are absolutely enormous and some are 80 metres tall. Some of the trees are also wide enough to stand inside. A local man told me that one tree in particular was home to King George III's feared and hated executioner and that the tree was carved out into

primitive living quarters complete with bed, kitchen and study! The main reason for stopping here was to complete the 'Tree top walk'. This was a long metal walkway 40 metres above the ground! You could even see the forest floor below you through the bars!

On the Friday, after a long trip to Albany, I spent all morning in the sloppery just cleaning shells. After lunch I was dropped off at the beach in Dunsborough town centre. I had found one poor specimen of *Solemya australis* Lamarck, 1818 here and I wanted to collect some good specimens.

I think that these Bivalves are wonderful and seldom offered by dealers. I walked a few hundred yards up the beach until I came to a tidal pool at the top of which were thousands of fresh dead shells including one small but perfect *Solemya australis* Lamarck, 1818, I was delighted. Also among Seaweed were many small Mussels including a few beautiful green *Septifer bilocularis* (L., 1758). Further along the coast towards Eagle bay in beach drift I collected many more shells including *Eulima*, *Bankivia*, *Fusinus*, *Conus*, *Nerita*, *Trachycardium*, *Coralliophila*, *Pyrene* and even a gorgeous little orange turreted species called *Seila crocea* (Angas, 1871). This would be the last collecting I did in the Margaret river area. I had collected about 120 species in all and it was just wonderful to collect in such a lovely part of the world.

The next day was our last day in Dunsborough and I had a lot of packing to do. My cousin, Julie and her husband, Eddie came to stay the night and we had a lovely evening. The next morning we said our goodbyes. Jeanette and Roger had been most kind to us throughout our stay and it was sad to say goodbye to them. We set off for Two rocks just North of Perth and I will tell you all about my stay there in the next Pallidula. Thanks for reading my article. If you are ever planning a trip to WA I would love to hear from you.