

Diving for Ships and Shells in the Red Sea

By TETTA RICHERT

The invitation read: "You are invited to a party for scuba divers only. Meet at LAX [Los Angeles International Airport] October 24th [1985] and board a KLM flight to Cairo by way of Amsterdam at 3:50 p.m. Two nights in Cairo and then on to Sharm-el-Sheikh to board the *Lady Jenny V* for eight days of diving in the Red Sea."

Twila Bratcher of Los Angeles, world authority on the Terebridae, was hostess to 12 friends on a trip that was sheer fantasy.

The flight to Cairo by way of Amsterdam was uneventful. There we boarded another plane for Sharm-el-Sheikh, near the tip of the Sinai Peninsula. Flying over the Gulf of Suez (see map), we saw no sign of life, human or plant. But the clear water beneath us was alive with coral. Brilliant reefs fringed the shorelines for the nearly 200 miles to Ras Muhammad.

Lady Jenny V, 95 feet long and built in Hitler Germany as a river and oceanographic boat, now is under the British flag and doing a diving charter business along the Red Sea and Gulf of Aqaba shores of the Sinai Peninsula and across the Strait of Tiran to Saudi Arabian waters. The skipper, Jeramy McWilliams, and a three-girl, one-man crew cooked meals, kept the stainless steel air tanks pumped up to 3,000 pounds, and generally took very good care of all of us. I don't recall what we ate, except freshly baked "home"-made bread and a huge fish served whole like a suckling pig — with a lime in its mouth!

The staterooms aboard *Lady Jenny V* were air conditioned. Another unexpected amenity was a well-equipped photographic darkroom. Here Captain McWilliams processed our film so we could have nightly slide shows of what we had seen by day.

The portion of the Red Sea in which we dived was between Egypt and Saudi Arabia. We were surrounded by desert without a sign of life. The diving was spectacular. Everything we had heard and read about the area was true. Colors ranged from the deepest blue of the transparent sea teeming with undersea life to blazing sunrises and sunsets that turned the Red Sea truly red.

Typically, we were up at dawn, under a sky shot with pink and blue. One morning, even before breakfast, we dived on the wreck of an old Egyptian cotton ship lying with its stern in 100 feet of water. We explored the interior a bit (it was full of marine



The gang with an ancient amphora.

Photo: Perrault

life) and ended up at the broken bow in 40 feet. Fish were everywhere. Three natty looking snappers — yellow with bright blue spots — caught Andy Butler's eye.

Kirstie Kaiser (who had distinguished herself at our first meeting by presenting each of us with hand-crafted personal identification tags for our luggage) got her reward when she found a fine *Spondylus* sp. attached to the wreck.

Later we dived the famed Ras Muhammad drop-off. The sheer wall plunges 1,000 feet or more,

teeming with underwater life.

"The large predator fish were in a feeding pattern," Andy noted in his log. "I saw a golden *ulua* (jack) and a school of golden goatfish. There were angelfish I had never seen before, with a blue face, black mask, and longitudinal yellow, magenta and blue stripes. And an odd cleaner fish — half silver, half orange — with a prominent forked tail. I felt that I had made the quintessential Red Sea dive."

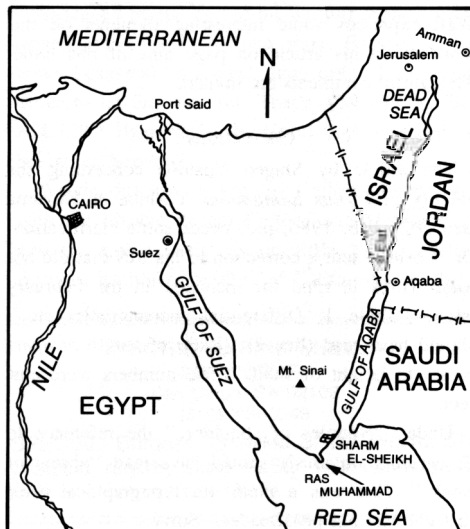
In addition to the occasional fish familiar to us from Hawaiian waters, we saw many that were new. One giant angelfish — blue with a yellow splotch on its gill plate — must have weighed 20 pounds, and there were frequent large spectacular groupers.

A couple of large, very friendly groupers sat under the *Lady Jenny V* while at anchor, waiting for after-meal handouts.

We dived on several wrecks — one ancient one with very little left but some burned timbers and little pieces of broken pottery. We gathered pieces of burned timber from beneath the sand and put them in Zip-Loc bags of seawater. They later were sent to Australia for carbon dating.

Another area we called the Museum had many large *amphorae* scattered on the bottom, all in good condition but secured to the bottom by coral growth. Close by was a cave through which we could swim. Hundreds of little glassy sweeper fishes guarding the exit moved only slightly to let us out.

We were asked to limit what we took from the sea bed, and we were generally pretty selective in our collecting. Twila, our hostess, and her sister,



REEFCOMBING

Management of the affairs of the Hawaiian Malacological Society is vested in the Board of Directors, sixteen elected or appointed senior members headed by the president of the Society. They meet once a month to deal with both the trivia of management (who should pick up mail?) and the vital (must we increase dues next year?). Discussions often are long and heated.

An important qualification for being on the Board is regular attendance. This has inhibited the Society from appointing several outstanding members of Hawaii's scientific community to the Board.

"Nine members provide the quorum," President Wes Thorsson pointed out at the January meeting. "It isn't unusual for two or three members to be away from Hawaii on the meeting date. If others fail to show up, we may not be able to conduct business."

In January the Directors agreed to establish a new category of Honorary Directors. These men and women are invited to attend meetings whenever convenient and, even more important, to be available as advisors. Their presence or absence at meetings will not count toward the quorum.

Ellis R. Cross, three times president of the Society and former Editor-in-Chief of *Hawaiian Shell News*, and Bruce Carlson, curator of the Waikiki Aquarium, already have accepted. Others being invited include Dr. Edwin Creutz, former director of the B.P. Museum on Honolulu.

Christmas Presence

Everyone knows there are two Christmas Islands. One is in the Central Pacific, about 1,200 miles south of Hawaii. The second is in the Indian Ocean some 300 miles south of Jakarta, Indonesia. Actually, they were named for different Christmases — the first by Captain Cook in 1777, the latter by unidentified navigators about 1650.

The following paragraphs deal with the Indian Ocean Christmas Island.

The Australian Museum not long ago received a number of shells, brought together over several years by a diver-collector while living on the island. Included was a specimen of *Cypraea ventriculus* Lamarck, a species supposedly restricted to Eastern Polynesia, some 7,000 kilometers away.

Phil Colman of the Australian Museum queried the donor about this. Was he sure it came from the right Christmas Island? He responded that not only was the locality correct but that he also had found the same species on Cocos (Keeling) Islands, another 600 miles farther southwest. He sent a specimen to the Museum.

The habitat was said to be in four meters of water, in crevices and holes in sea cliffs from which they emerge at night. The area is exposed to heavy surf and seldom safe to collect, he added. Less than half the specimens gathered are suitable for collections, being much subject to growth scars and chipping.

We turn now to cone shells. In 1979 Jerry Walls described *Conus musicus parvatus* as the Indian Ocean form of the common and variable Indo-Pacific *C. musicus* Hwass in Bruguere. Both forms, however, now are said to occur in Christmas Island. This suggests to Colman that they should be recognized as distinct species. Habitat is the same for both.

A couple of other remarkable range extensions are indicated by the Christmas Island finds. *Haliotis*

planata Sowerby has been generally regarded as a Southwestern Pacific species; several specimens turned up in the Christmas Island lot. And *Conus barthelemyi* Bernardi, which in the past has been known only from the western Indian Ocean. Colman speculates that it may soon turn up at the northern end of Western Australia waters.

"All in all, this Christmas Island collection has been an important addition to the Australian Museum's research collections," Colman concluded in his report to *Australian Shell News*.

Dr. Rehder Honored

Long-time HMS member Dr. Harald Rehder, Zoologist Emeritus at the National Museum of Natural History — Smithsonian Institution in Washington, D.C., was unanimously elected Honorary Life President of the American Malacological Union at the AMU's 1985 annual meeting in Rhode Island. World renowned for his collaborative and cooperative efforts with other malacologists, Dr. Rehder, a charter member of the AMU, served as its president in 1941. He joined the staff of the Smithsonian in 1932. His particular interest has been the marine molluscs of Polynesia. He is a frequent visitor to Hawaii.

A Home for Holotypes

If you are a steady reader of *Hawaiian Shell News*, you will remember that a couple of years ago the Australian Malacological Society voiced its unhappiness at the long-standing practice of non-Australian malacologists to deposit holotypes of Australian species in overseas museums (sometimes in private collections). The AMS recommended that primary types be retained in Australia.

The U.S. Council of Systematic Malacologists subsequently voted to accept that recommendation. The action is not binding on individuals, of course, but it recognizes that Australian scientists have a legitimate complaint.

The danger, if you wish to call it that, is that the policy will spread. Should shells described from Somalia, for instance, be retained in Mogadiscio? For that matter, would Hawaii be justified in hanging on to the holotype of *Cypraea burgesi*? Art Weil expresses some interesting thoughts on this tendency in his article on page nine of this issue. Thoughtful comments are invited.

Corrections

The article by Shigeo Yoshida concerning the validity of *Conus hamamotoi* Yoshida & Koyama (see *HSN* Feb. 1986, p.5) needs some clarification. Dr. Yoshida sent a correction to his MS that did not reach HMS in time for inclusion in the February issue. "Table 1: Differential characteristics etc." should have read (line 2) "Ratio of length of *operculum* to height of shell." The numbers were correct.

Under "Nodules of shoulder," the reference to *C. sazanka* obviously should have read "absent or weak." That was a plain old typographical error that got past our proofreaders. Sorry.

Hawaiian Shell News

ISSN 0017-8624

Editor Emeritus	E. R. CROSS
Editor	STUART LILICO
Associate Editors	ELMER LEEHMAN, OLIVE SCHOENBERG
Science Advisor	DR. E. ALISON KAY
Science Consultant	W. O. CERNOHORSKY
Editorial Staff	LYMAN HIGA, WALTER SAGE, DOROTHY WENOT
Editorial Assistants	GEORGE CAMPBELL, BUNNIE COOK, DR. CARL CHRISTENSEN
Corresponding Editors	MARGE BRADNER, DONALD DAN, FR. AL LOPEZ S.J., HENK K. MIENIS, PETER van PEL, AURORA RICHARDS, THORA WHITEHEAD
Index Editor	RAY MCKINSEY

HAWAIIAN MALACOLOGICAL SOCIETY

(Founded in 1941)

P. O. Box 10391	Honolulu, Hawaii 96816
President	WESLEY THORSSON
Vice President	STAN JAZWINSKI
Treasurer	BARBARA KUEMPER
Recording Sec'y	LYN SWEETAPPLE
Corresponding Sec'y	DOROTHY WENOT
Office Manager	HELYN MALOUFF

Directors

DR. TOM BURCH	DR. CARL CHRISTENSEN
WILLIAM ERNST	STUART LILICO
RAY MCKINSEY	KIRK MILLER
OLIVE SCHOENBERG	CHRIS TAKAHASHI

The Society meets the first Wednesday of each month at the First United Methodist Church, Beretania & Victoria Streets, in Honolulu.

VISITORS WELCOME!

Hawaiian Shell News is issued free to members of the Society. Postage rates have been computed and added to membership dues. Individual copies of any issue may be obtained, free of charge, by qualified individuals for bona fide research projects.

Members outside the United States are asked to pay with a bank cheque (not a draft) payable to HMS on a U.S. bank. (Be sure your name and address appear on the cheque.)

HMS DUES FOR 1986

First Class delivery of HSN in U.S.,	
Canada and Mexico (Recommended)	\$21.00
By Bulk Mail to U.S. Zip Code	
addresses	\$16.50
Delivery by Air Mail (Recommended)	
to Caribbean and Central America (1 week)	\$27.00
to Europe, Med. Africa and	
S. America (2 weeks)	\$29.50
to Pacific, Asia, Africa (2 weeks)	\$32.50
Delivery by Letter Mail (5 to 10 weeks)	\$23.00
Delivery as Printed Matter	
(8 to 30 weeks)	\$22.00
Associate membership (HMS card	
but no HSN)	\$1.00
Articles of interest to shell collectors are solicited. Contents are not copyrighted. Reproduction, with credit to HSN, is invited.	

The opinions expressed in signed articles in *Hawaiian Shell News* are those of the authors and do not necessarily represent policies of the Hawaiian Malacological Society.

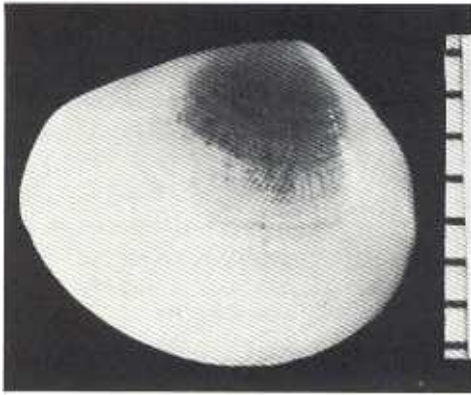
Advertisements are accepted at the rate of US \$20.00 per column-inch/issue, payable in advance. Discounts are offered for six and twelve insertions.

Typesetting, composition and printing of *Hawaiian Shell News* is done by Fisher Printing Co., Honolulu.

WELCOME TO HAWAII!!

HMS members visiting Hawaii are invited to contact the Society while in Honolulu. Please keep in mind, however, that the Society office is open irregularly, and that it does not have a telephone. Society officers are listed individually in the telephone book. If in doubt, ask the Waikiki Aquarium or the Bishop Museum for names. Better still, write to the Society in advance. The Museum's Karl Greene Shell Room has a good display of both Hawaiian and Indo-Pacific species.

GO MICRO, YOUNG MAN!



Strigilla cicercula (Philipi)

By AL LOPEZ, S.J.*

MANAGUA — One of the less explored but more promising areas in conchology is the world of the micro shell. Its inhabitants are only 10 mm long or less when fully grown, but they make up in colour and sculpture what they lack in stature. They are easy to collect and fun to sort, but a real challenge to identify.

I became aware of this fascinating Lilliputian kingdom many years ago on a shelling trip to San Miguel Island, in the Philippines. While resting on a mound of rough sand, my feet in the water, idly running the sand through my fingers, I thought it felt rather peculiar. Looking closely, I discovered it wasn't sand but tiny shells I was handling.

Since then I have been "hooked" on micros. They have offered me some of the most gratifying and rewarding hours spent working with shells.

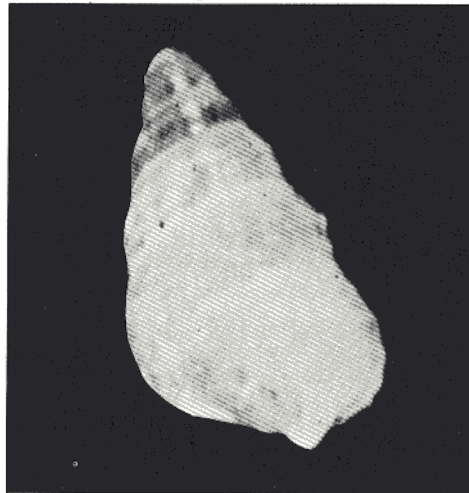
Collecting samples is simplicity itself. All you have to do is rake some sand into a plastic bag with a label that gives you locality, date and any other pertinent information. But you don't know what you've got until you get home and put it under the microscope.

Not all sand is equally productive. The right kind is from areas where waves and currents amass shells and other drift. These are the places you would go to when looking for shells. Skim and keep the top layer off the sand surface. Most minute shells will be found there since they are lighter than the stone, coral and large shells and have a tendency to "float" on top. Take about half a pound of the sand and mark the bag well.

A quick inspection of the sand will tell you what you can expect from it. If the proportion of shell fragments is about 50 per cent of the contents, you have good material.

When you get home, if the sand is wet, spread it on a newspaper to dry. When the sand grains and fragments no longer stick to each other, you are ready to collect your micros.

A microscope is needed or you will miss the smallest specimens. In any case, you must have a



Turveria encopendema Berry All Photos: T. Burch

microscope to examine even the largest micros later on to classify them. The best for this work has a wide field and not too much magnification. The one I use has two settings, one at X15, which is fine for searching the sand, and the other at X30, often needed to observe minute detail in a specimen under study.

The sand is best placed in a very thin layer on a Petrie dish. This allows you to move the sample about. Use good illumination.

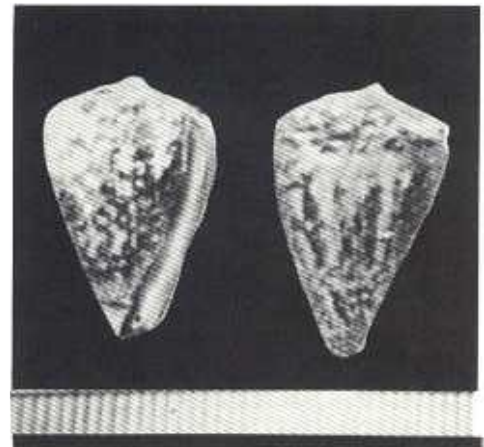
Some instruments have a light under the plate where the objects are placed. This can be useful to view the inner structure of the micros, most of which have such a thin shell that they are almost transparent. The effect is as if you were looking through X-rays.

It helps to bring out their colours if you moisten your finger with a drop of mineral oil and rub it gently into the micros as you cradle them in your hand. Now place them under the microscope with good illumination and you are ready for the show. The first time I saw *Anachis pygmaea* in all its splendour, showing off its sculpture and colours in the glare of the footlights, I jumped up and gave the tiny artist a standing ovation.

You will also need forceps (tweezers) to pick out the specimens. Watchmakers' forceps or the long kind used by stamp collectors are just right for this job. Use them to transfer the micros to a small plastic box until you have finished combing the sand, then at the end you can use the box itself to move the specimens under the microscope.

Identifying micros is not easy. True, some are well known, but even the figures in manuals are generally poor because of the smallness of the shells. Such is the case with the genus *Parvanachis* (Columbellidae) some species of which are only 3 mm long. But most micros are never described, much less illustrated.

In the Panamic province where I live, there are hundreds of species among the families Vitrinellidae, Rissoinidae, Pyramidellidae and others. They are all listed in Keen (1971), who even shows a few



Conus nux Broderip

Scales in mm.

figures, but the collector is warned that a microscope is necessary for identification and so no description is given. However, Keen does give very complete references to monographs and other publications where one can find descriptions and figures.

One of the latest contributions in this field has been that of Tom Rice (no date). He undertook to illustrate the holotypes of minute gastropods listed but not figured by Keen. Unfortunately he was not able to finish his work. The *Festivus* also publishes descriptions and illustrations of Southern California micros, and recently printed an article by Eve Gill (1985) on juvenile molluscs of Southern California.

Another source of minute shells is grunge obtained from dredging. Occasionally this material is advertised for sale in HSN for those who have no boat or dredge. It is usually very productive.

Other less evident sources are echinoderms, sea-stars, sand dollars and even holothuria or sea-cucumbers. These creatures carry on them and sometimes within themselves, very small molluscan commensals. Years ago I used to collect micros from between the suckers of sea-stars. A few weeks ago I found a sand dollar with ten tiny, shiny eulimids clinging to its bristles. Coelenterates, corals and sea anemones are also well known hosts to epitoniids and Coralliophilidae. Clumps of seaweed,

(Cont'd on Next Page)



*University of Central America, P.O. Box A-90, Managua, Nicaragua

alive in the water or dead and dry on the beach, often have tiny shells sticking to them.

Scarcely two months ago I stumbled on a similar source: tufts of *Mytilus* byssus. I found three bunches of dead *Mytilus* entwined together by their byssus strands. It was evident many wee shells were enmeshed by the sticky filaments. I took them home where I patiently cut loose and disengaged the little prisoners. Under the microscope there came to light shells I had never seen before.

To give just one example: In the Panamic province the genus *Strigilla* (Tellinidae) is represented by seven species. Over the years I had been able to find only four: *S. chroma*, *S. cicercula*, *S. dichotoma* and *S. disjuncta* but never a sign of the other three. Now, all of a sudden, I had about ten loose valves of the missing three species, gathered for me by the obliging *Mytilus*. They were *S. ervilia*, *S. interrupta* and *S. serrata*, all about 6 mm long. The fact that these for me seldom-seen shells were all concentrated in such a strange ecological niche, doubtless carries a lesson with it, perhaps an important one. Unfortunately, I have been unable to interpret the message.

Sometimes you can get your micros to perform under the microscope. One day I brought back a 10 mm long *Conus nux*, smallest of the Panamic Conidae, and placed it in a dish of water under the microscope. After a while it spread its brilliant crimson foot and moved smoothly across the field of vision. Then I noticed a tiny *Odostomia* riding on the cone's back. As I watched, it extended a long thin proboscis and sank the tip into the body of the cone, apparently to take a snack from its body fluids. There was absolutely no flinching or reaction of any kind on the part of the host as it continued its stately glide across the dish.

Fascinated by the show, I watched a few minutes until the *Odostomia* finished its lunch, got off the cone and moved on across the dish. Imagine my amazement when first one and then another minute copepod-like creature emerged from the *Odostomia's* mantle cavity and scuttled off. I could not help remembering the proverbial rats abandoning a sinking ship. Talk about double trouble among free-loaders!

One of the very convenient things about collecting micros is most of the work is done at home. You waste no precious time in the field, and you can store up sand samples to work on during rainy days. If you have gone shelling to some Enchanted Island and brought back with you a bag or two of productive sand, you can continue shelling in your island paradise even when you are home months later, sitting in a comfortable chair.

I know. I do it all the time.

LITERATURE CITED

- GILL, Eve. 1985. "Comments on Some Juvenile Southern Californian Molluscs." *The Festivus* (XVII:3), March 1985, San Diego, CA.
- KEEN, A. Myra. 1971. *SEA SHELLS OF TROPICAL WEST AMERICA*. 2nd ed. Stanford University Press, 1064 pp. illust.
- RICE, Tom (no date). *THE MINUTE GASTROPODS OF THE PANAMIC (PACIFIC) PROVINCE*. Of Sea and Shore Publication No. 10, Port Gamble, WA.

Here's a Fresh Way to Refresh *Cypraea*

By MARJORIE HAYES

WASHINGTON — People have tried many tricks to restore the beauty of older *Cypraea* in their collections. We all know that they do fade after a while. Bright light is hard on them, but even resting in a dark drawer will dim their freshness.

We were told the sad tale of a *C. teramachii* that the collector kept wrapped and stored in a refrigerator. Before his death he had willed his shells to a big museum and when the collection was curated, the museum workers found a note telling of the location of the rare shell.

Quickly, the heirs were contacted. Too late. Everything in the fridge had been thrown out, first thing!

The only satisfaction anyone got was the knowl-

All's Well That Ends With 12 *Cypraea talpa*

PORT MORESBY — Five dedicated members of the Niugini Shell Club assembled at the Taurama Barracks one morning in August and proceeded to the main beach which looks out towards Lion Island.

The cars were parked inside the fenced property of an elderly local couple at the end of the road. The two were quite happy with the gift of two *kina* for keeping an eye on both cars. Payment for someone locally or taking your own house staff to look after vehicles is recommended in this area. Only two days previously, parked at another nearby beach whilst shelling, Neil Fleming had two windows of his car smashed and valuables taken.

The tide was 0.3, so the group decided to work its way from the right-hand end of the main beach, past the mangroves, to the end of the headland. The water being too shallow for snorkeling inside the reef, Neil and Ian tried their luck in the deeper water just outside the reef. The southeast chop was rough, however, and no shells were found.

Returning to the exposed mudflats and rocks at the end of the headland, they found that the women had been successful in turning rocks. Diane bagged two *Tun* shells (both live) and Chris and Heather collected nine varieties of cones between them. Textile cones were plentiful and some good specimens were collected.

Probably the find of the day was whilst returning to the cars across the still-exposed mudflats. A small area contained some scattered rocks which, when turned, produced 12 *Cypraea talpa* of varying sizes. The find was most unexpected and, with the refreshments that followed, finished off a pleasant and successful day's shelling.

Ian Maze in the Niugini Shell Club bulletin



Gary Gordon writes that he is still collecting and trading shells, with his main interest now in *Nerita*. "I had to trade off some of my others and begin to concentrate," he adds. "Three rooms full of shells is just too much."

His address is 112 Tina Drive, Warner Robins, GA 31093.

edge that the deceased collector knew something about keeping his shells pretty.

Preserving a shell in mineral oil is recommended at times. But that's messy. A Filipino friend, however, showed me the ultimate treatment. And it costs nothing!

We bought a pretty rare shell from him a couple of years ago and were surprised at its packing. The shell had been wrapped in a wet cotton cloth and sealed in a plastic box. As he unwrapped it for us, our friend said we must wait a few minutes for it to dry. When it did, the pattern jumped out. It looked like it was fresh from the sea.

What he had done, our friend explained, was to submerge the shell overnight in plain tap water. Then, for the long journey to New York and Washington, he had put on the cotton wraps to keep it damp.

The treatment, he assured us, not only restores the beauty, freshness and luster of the shell, but it lasts for up to two weeks and can be repeated many times without harm. I tried it once on a pair of cowries. The result was remarkable. Encouraged, I used it next on a 12-year-old golden cowry. Voila! Perfection again!

Adapted from the National Capital Shell Club's quarterly Newsletter.

House of Quality and Service



Dealer in Fine and Rare Specimen Shells of Superior Quality

The very best shells, at the very best prices

WRITE FOR FREE PRICE LIST
SHELLS BOUGHT,
SOLD AND TRADED

1575 NORTH 118th STREET
WAUWATOSA, WI 53226 U.S.A.

LARGEST MAIL ORDER
SEASHELL DEALER IN THE U.S.A.

Rescuing a Fine Old Collection from Obscurity

By JOHN ROBINSON*

DUNFERMLINE, SCOTLAND — Some years ago, while on holiday in my home town of Darlington in the northeastern portion of England, I decided to browse around the local museum. In the course of my visit, I struck up a conversation with one of the guides, a friendly old chap who mentioned the existence of "an enormous collection of shells, several hundred thousand in number, that hadn't been on display since being donated to the museum in 1941."

I took this with a pinch of salt. Perhaps a certain amount of local pride and wishful thinking had multiplied the size of the collection.

Anyway, for one reason and another, it wasn't until several years later that I approached the Curator of the Museum, Allan Suddes, to ask if I might see the vast collection I'd been told about. We arranged a mutually agreeable date.

This is how my association with the Lucas Collection began. What follows is a brief synopsis of what I have been able to learn about Bernard R. Lucas, his books and, of course, his beloved shells.

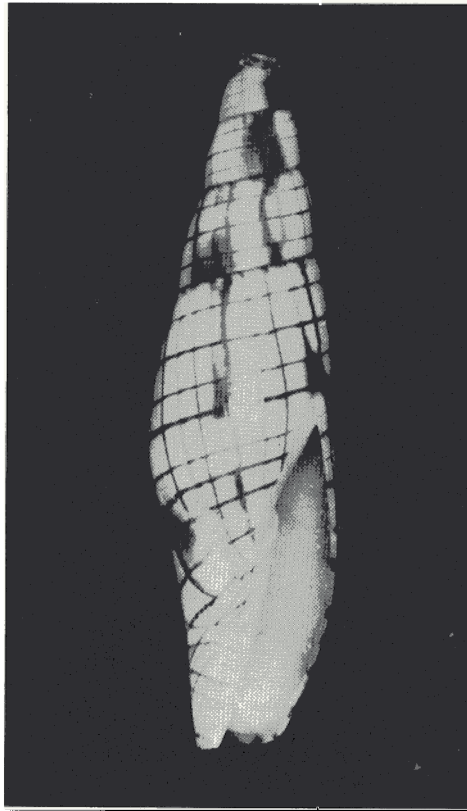
Bernard R. Lucas was born in Paris in 1864, the son of a Chesterfield (England) silk merchant. For most of his adult life he worked for a chemical firm, Brunner-Monde (now part of the giant Imperial Chemical Industries). He traveled widely for the company, visiting the United States, Canada, Australia and New Zealand. He did this for about 40 years prior to his retirement to Darlington in 1929.

During his long career as a shell collector, Lucas was a life member of the Conchological Society, which he joined in 1898; a member of the Malacological Society and a fellow of the Geological Society. Among his many correspondents were J.C. Melvill, J. Kidson-Taylor, the Rev. L.J. Shackleford (all of Great Britain) and Fred L. Button of California — all very well-known collectors of that period.

Lucas is known to have purchased shells from Sowerby & Fulton of Kew, London and Y. Hirase of Japan.

Upon his death in 1941, Lucas' entire collection was bequeathed to the town of Darlington.

*5 Blackwood Green, Pitreavie Castle, Dunfermline, Fife, Scotland.



Mitra dondani

HMS member J.C. Martin's miter from Reunion island figured in HSN February 1986, p. 12 was *Mitra dondani* Cernohorsky, 1985. The author reports that the description appeared in the *Records of the Auckland (N.Z.) Institute & Museum* (22):56, figs. 19-24.

Photo: Martin

The collection, I discovered, consists of 12 main cabinets, 282 drawers and 94 assorted boxes and smaller units scattered throughout the Darlington Museum. At a conservative estimate, the collection contains about 130,000 shells, a considerable percentage of which are fresh-water species, his main interest.

In the collection were shells acquired from other collectors of the day, notably Layard, Crosse, Hadfield, Townsend and Shackleford. There is also a boxed series of Miocene molluscs, mainly French, with full data, and a marine fossil collection. The

data are not as good for the marine material as for the land and fresh-water molluscs.

Lucas' personal library, which went to the museum with the shells, included 46 books, 158 reprints, five manuscripts and good runs of periodicals and associated texts dealing with malacology.

Among the books I observed the following:

- G.B. Sowerby (1832) *Shells, The Conchological Illustrations*;
- L.C. Kiener (no date) *Species Generale et Iconographie des Coquille Vivantes*, 5 Volumes;
- P.J. Chedeville (1900) *Liste Generale et Synonymique des Fossiles Tertiaires du Bassin de Paris*;
- L. Reeve (no date) *Conchologia Iconica: Mitra and Pleurotoma*;
- W. L. Binney (1865 - 9) *Land and Freshwater Shells of North America*, 3 Volumes;
- William Turton (1822) *Conchylia Insularum Britannicarum*;
- J. B. Gassies (1863) *Fauna Conchyliologique Terrestre et Fauna Lacustre de la Nouvelle = Caledonie*.

The limited time available to examine the Lucas material dictated the species I could examine. Consequently, I chose to look at the Conidae, the Cypraeidae and the Volutidae.

I noted 124 *Conus* species. Among them was a superb specimen of *C. adamsonii* Broderip. I also saw good *C. aurantius* Hwass, and *C. cuvieri* Crosse.

The Cypraeidae collection included 138 species. To name a few, there were four *C. aurantium* Gmelin, *C. cumingii* Sowerby and *C. rashleighana* Melvill.

Surely the most surprising find was a *C. nivosa* Broderip among a box of *C. vitellus* Linne, seemingly unnoticed by Lucas. What pleasure it would have given him to know that he possessed what would have been at that time one of the rarest shells in the world.

I found 58 species of volute, notably *V. guntheri* Smith, *V. irvinae* E.A. Smith, *V. ponsonbyi* E.A. Smith, *V. roadnightae* McCoy and *V. rossiniana* Bernardi, plus two *V. thatcheri* McCoy — not in very good condition but readily identifiable.

Obviously, with today's collecting techniques — scuba, etc. — many of Lucas' shells are not hard to get hold of now. In the days when the collection was being established, however, the list included quite a few rarities.

When I began to realize the importance of the Lucas collection *in toto*, I suggested to Allan Suddes, the curator, that he contact the British Museum (Natural History) in London to see if it could take the collection under its wing. This he did. As a result, in due course the entire bequest (except for a small collection of beetles of local interest) will be transported to London.

I rather envy the people of B.M. (N.H.) for their task of restoring and cataloguing a collection of that quality and quantity, one that very likely hadn't seen the light of day since it was deposited in the Darlington Museum archives nearly half a century ago.



THE WORLD'S MOST COMPLETE OFFERING OF SHELLS FROM THE PANAMIC PROVINCE

The Panamic Province includes the Pacific side of tropical America from west Mexico to Ecuador

1986 CATALOG

36 pages of rarely offered shells
send \$1 (refundable on first order)

TO: **PANAMIC SPECIMEN SHELLS**
3846 E. HIGHLAND • PHOENIX, ARIZONA 85018 USA

NEWS OF NEW SPECIES

THREE FROM WEST AFRICA

By WALTER SAGE

West Africa is the home of several interesting molluscs described in recent months and not previously reported in "News of New Species."

Writing in *La Conchiglia* 16(184-185):12, 1984, G. Biraghi described two new Mitridae from Gabon, West Africa. *Ziba ougoouensis*, 31 mm, has an elongate-fusiform shell with 9½ whorls and sculpture of strong spiral cords. The sutural cord is stronger, thus effecting a carinated shoulder; color is yellowish white.

This new species is compared to *Cancilla carinata* Swainson, 1824, from which it differs in the carinated shoulder, stronger spiral sculpture and lighter color.

Mitra (Mitra) gabonensis, to 31 mm, has a solid, inflated, elongate-fusiform shell with 6 whorls, and sculpture of weak spiral cords becoming faint spiral striae on the body whorl, crossed by equally faint axial growth lines. White with tan markings, this new species is compared to *M. cornicula* (Linne, 1758), from which it differs in being heavier and larger, in having a narrower aperture, and in the presence of spiral cording.

Publicacoes Occasionais da Sociedade Portuguesa de Malacologia 3, 1984 carried a description by Burnay and Fernandes of a new species of Naticidae from the west coast of Africa. *Eunaticina africana*, to 13.5 mm, found off Luanda, Angola, is the first record of this genus from the eastern Atlantic. The shell is dirty white with three convex whorls; sculpture consists of 30-35 shallow spiral grooves. Other characters include a thin lip, deep umbilicus, smooth, shining columellar callus, thin yellowish periostracum, and horny operculum.

This new species is compared to *E. papilla* (Gmelin, 1791), which differs in its Indo-Pacific geographical range and morphological details, and to *E. lineana* (Recluz, 1843), which differs in its south-east African range, shell characters, and radular details.

Writing in *La Conchiglia* 16(184-185):13, 1984, Biraghi introduced the form name *chini* for a variation of *Homalocantha melanamathos* found near Pointe Noire, Congo having a smaller shell, shorter spire and siphonal canal, more numerous and longer spines, and occurring in shallower water.

This is a good opportunity to remind readers and prospective authors that under the existing ICZN code, names introduced as forms or variations have no taxonomic status. Thus this new variant is better mentioned as the "long-spined form" of *H. melanamathos*.

Preliminary to publication of his *Illustrated Catalogue of Latiaxis and its Related Groups*, Dr. Sadao Kosuge published in his *Bulletin of the Institute of Malacology*, Tokyo 2(3):45-57, July, 1985, the following new taxa:

Hirtomurex nakamurai, to 35.3 mm, Tosa Bay, Japan

H. oyamai, to 37.6 mm, Tosa Bay

Mipus matsumotoi, to 39.5 mm, Tosa Bay

M. sugitanii, to 29.7 mm, Tosa Bay

M. intermedius, to 36.0 mm, Bohol, Philippines

M. miyukiae, to 28.7 mm, Kii Peninsula, Japan

M. hotei, to 38.4 mm, Punta Engaño, Philippines

M. ovoidea, to 45.6 mm, Bohol

Babelomurex purus, to 26.7 mm, South China Sea

B. memimarumai, to 37.2 mm, South China Sea

B. yumimarumai, to 31.5 mm, Punta Engaño

B. (Echinolatiaxis) centimanus, to 23.7 mm, South China Sea

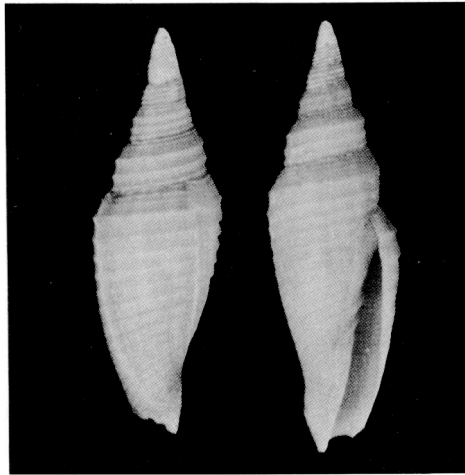
B. (E.) squalida, to 26.0 mm, Punta Engaño

B. (Lamellatiaxis) miyokoae, to 30.3 mm, Bohol

Coralliophila flava, to 16.2 mm, Punta Engaño

C. infantula, to 15.2 mm, Punta Engaño

C. mitraeforma, to 30.9 mm, Punta Engaño

*Ziba ougoouensis*

C. ohmurai, to 14.3 mm, Izu Peninsula, Japan. Kosuge also proposed the replacement name *Coralliophila tokioi* for the preoccupied *C. fusiformis* Shikama, 1971 (not *C. fusiformis* Dall, 1889).

In *The Veliger* 26(3), January 1984, Dr. James McLean of Los Angeles describes eight new archaeogastropods from the northeastern Pacific. *Anatoma baxteri* [Scissurellidae], to 2.3mm in diameter, Cook Inlet, Alaska, is low-spined, fragile, translucent grayish white. It is the only eastern Pacific *Anatoma* with axial sculpture much stronger than spiral sculpture. This new species differs from *A. lamellata* (A. Adams, 1862) in its smaller size and lenticular rather than high-turbinate profile.

Puncturella rothi, [Fissurellidae], 15mm, Humboldt County, California, has a relatively thin shell, with basal outline elongate oval and nearly parallel, distinctly compressed sides. *P. rothi* differs from *P. galeata* (Gould, 1846) in its smaller size, more parallel sides, stronger beaded sculpture, and deeper habitat, and from *Cranopsis decorata* (Cowan & McLean, 1968) in lacking the anterior seam in the shell and the split mantle roof of *Cranopsis*.

Margarites hickmanae [Trochidae], 12mm in diameter, Bering Sea, Alaska, has a cream shell with a thin, pale brown, shiny periostracum, and is sculptured with fine, microscopic incised lines. The species is distinctive in possessing seven pairs of lateral teeth in the radula. Similar species lack spiral sculpture and have fewer pairs of lateral teeth.

Calliostoma titanium [Trochidae], 32mm in height, Santa Catalina Islands, California, has a sturdy white shell with iridescent pink and green interior, sculptured with finely beaded cords, but is nearly smooth on the third and fourth whorls. This new species is similar to *C. platinum* Dall, 1890, from which it differs in having a sturdier shell, a subsutural tabulation, and numerous fine spiral cords on the final whorl, and to *C. bernardi* (see following), which is smaller and has pronounced spiral sculpture at all growth stages.

Calliostoma bernardi [Trochidae], to 26.5mm, Santa Catalina Island, California, also has a sturdy white shell with iridescent pink and green interior, but the entire shell is spirally sculptured. Closest to *C. titanium*, new species; differences are given above under that species.

Lirularia discors [Trochidae], Baja California to Pacific Grove, California, 4.3mm in height, is variegated brown and cream with strong spiral cords and axial sculpture limited to fine growth lines. This new species is compared to *L. succincta* (Carpenter, 1864), which has weaker spiral cords, a less angulate base, and a uniform gray color.

Halistylus geneoani [Trochidae], 6mm, Baja California Sur Mexico, has a sturdy high-spire with spiral cords of varying strength; color white, yellow, or tan. This new species is compared to *H. pupoides* (Carpenter, 1864), which has a more rounded profile, different spiral cords, and a more deeply impressed suture in the early whorls.

Homalopoma draperi [Turbinidae], 5.8mm, Santa Catalina Island, California, has a relatively low spire, pink color, a deeply impressed suture, with spiral cords of varying strength. The new species is compared to *H. grippi* (Dall, 1911), *H. luridum* (Dall, 1885), and *H. paucicostatum* (Dall, 1871), which differ in spire height, prominence of spiral cords, and basal callus.



La Jolla Cave and Shell Shop
1325 Coast Boulevard
La Jolla, California 92037
(714) 454-6080

**SPECIMEN SHELLS
DECORATOR SHELLS
CORAL
JEWELRY**

NO LISTS
REQUESTS ACCEPTED

VISIT OUR CAVE

WORLDWIDE SPECIMEN SHELLS

Your ONE STOP Marine & Land
Shell Connection / Wide Variety
of Select Quality Specimens -
"Knowledgeable & Courteous Service"
Write for Free Illustrated List


Richard Goldberg / WorldWide Specimen Shells
P.O. Box 137, Fresh Meadows, N.Y. 11365 U.S.A.



S. JAZWINSKI
777 Kapiolani Blvd. #3313
Honolulu, Hawaii 96813
Specializing in
rare to common Gem quality HAWAIIAN Specimens.
Several hundred species of *Cypraea*, *Conus*, *Murex*,
Strombus, *Pecten*, *Turris*, *Terebra*, *Mitra*, and more,
currently available.

THE SEA

305 N. Harbor Blvd. San Pedro, CA 90731
(213) 831-1694 — 7 days.
When in Los Angeles Harbor visit
the largest and most complete
museumlike shell shop in California.
Specimens-importer — No lists



SHELLS and CORALS



THE SHELL GALLERY

77 UNION STREET
NEWTON CENTRE, MASSACHUSETTS 02159
(617) 244-7018

PHILLIP R. CRANDALL
1800 Parkside Terrace, Kitanakagusuku
Okinawa, Japan 901-23


GEM *Cypraea teramachii*, *kuroharai*, *midwayensis*,
armeniaca, *rosselli*, *artuffeli*; *Conus vicweei*, *aurisiacus*, *excelsus*, *bengalensis*, *Pl. beyrichii*, *salmiana*
& *rumphii*, and other rare Japanese & Indo-Pacific shells.
FREE LIST. 15 years of personalized service.
FREE POSTAGE — SATISFACTION GUARANTEED.



LEONARD C. HILL
6713 S.W. 113th Place
Miami, Florida 33173

FINE QUALITY WORLD WIDE SHELLS
FREE LISTS! Specialties - Cones, Murex & Miters

When in Los Angeles visit



Tidepool Gallery

FINE SHELLS AND FINE ART
We do not publish a list but we will answer specific
requests for Rare Shells — our speciality.
22762 Pacific Coast Hwy., Malibu, CA 90265

AFTER A YEAR, SANIBEL'S 'THING' GETS A NAME

SANIBEL, FL — During last year's Sanibel Shell Count, Gerri Bean, a member of the Sanibel-Captiva Shell Club, found a large piece of bone which she brought back to be identified. None of the club's experts had the foggiest notion what "The Thing" was.

A club field trip to the University of Miami department of marine sciences was scheduled for shortly afterward, so Alice Anders offered to hand carry it and ask the scientists to name it. The consensus there was that it was the inner ear bone of a large whale but, as the head of the marine mammal section was out of the city at the time, they wanted to wait for his opinion.

A couple of months later a letter came from the University of Miami. Dr. Dan Odell, the marine mammalogist, thought The Thing was too large to be the inner ear bone of a whale and actually doubted that it was a bone at all. Rather, he saw it as a calcium carbonate encrustation of some sort. He suggested sending it to the Smithsonian Institution in Washington for a decision.

"If you find out what it really is," concluded Dr. Odell, "please let me know. My scientists will not let me rest until the issue is decided."

Off it went to Washington. Dr. Raymond Rye, of the U.S. Museum of Natural History's department of paleontology, wrote back, asking for details on where and when The Thing was found.

The fuller explanation from Sanibel read as follows:

"The specimen was found on the Gulf of Mexico side of Sanibel Island on January 18, 1985 . . . between the low tide and high tide marks on the beach among shells and flotsam . . . It is difficult to determine [whether] it is coral or bone and what is the purpose of the many canals or tubes running through it."

Within a month there was a reply from Dr. Rye.

"First of all," he reported, "we scratched [The Thing] to determine its hardness. Calcium, thought to be present by Dr. Odell, can be scratched with a steel blade. Your specimen was not affected."

"Next we applied some dilute hydrochloric acid. Calcium carbonate will effervesce in the presence of HCl. Again nothing."

"By this time we had ruled out invertebrates and were about to rule out an organic origin altogether. The final test was to burn the object. Plastic would melt, but this stuff didn't. Rather, it smelled like scorched hair — definitely organic. You will notice that it still stinks."

"Our resident authorities on sharks [now] say it is part of a shark brain case, particularly a portion of the otic capsule. The wrap-around tubes are semi-circular canals. Not enough of the original brain case remains for us to determine whether it is from the right or left side . . . It is from a recently dead shark, rather than a fossilized one."

"The specimen is composed of calcified cartilage, as all shark skeletons are. This explains why it didn't fizz in HCl. No carbonate ions are bound to the calcium as they would be in calcium carbonate."

"In our opinion, [The Thing] came from a rather large shark. But from these meager remains we are at a loss to tell which species."

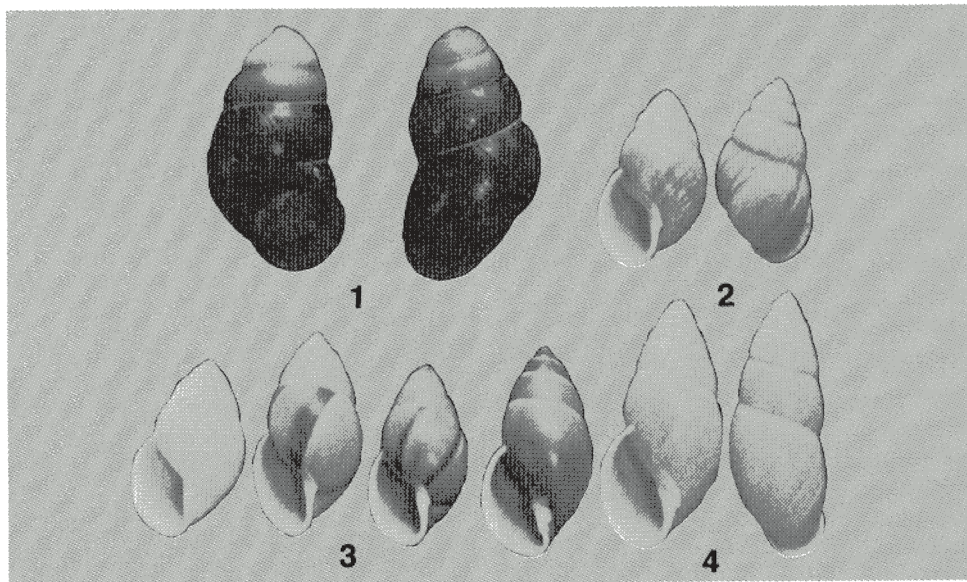
"To our knowledge, only two people in the world could possibly identify the kind of shark for you — Dr. Leonard Compagno of Rhodes University [Cape Town] and Dr. Guido Dingerkus of the department of ichthyology, American Museum of Natural History in New York City."

Back in Sanibel, people are wondering what this year's Shell Count will turn up.

From the *Junonia* Newsletter of the Sanibel-Captiva Shell Club

PHILIPPINE LAND SNAILS:

Mindanao and the Sulu Archipelago



1. *Helicostyla (Cochlostyla) satyrus* Broderip.

The top whorls are yellowish light brown, the intermediate whorls medium brown, and the final whorl is shiny red brown. The thin, flaring lip and the small white columella are edged with shiny brown, and the aperture is blue white within. 50-55 mm. *H. (C.) satyrus* is known principally from Palawan; however, this large form is from north-central Mindanao. The snail is found on trees and large plants, in foothills just above the sprawling Del Monte pineapple plantations, near Cagayan de Oro, Misamis Oriental.

2. *Amphidromus chloris* Reeve (Zamboanga form). The spire and top whorls are white, with the intermediate whorls showing traces of yellow and the final whorl a light yellow or sometimes light green. The color of the final whorl is extremely streaky and not at all solid. The aperture is elongate and oval, and the lip, callus and aperture interior are shiny white. White banding is sometimes found at the apex and between the upper whorls. 40-45 mm. On trees and plants in hilly regions around the city of Zamboanga, in southern Mindanao.

3. *Amphidromus maculiferus* (Sowerby) form *buluanensis* (Bartsch). The shells of this complex range from near pure white to dark brown, with many shades of yellow and brown between. This species is characterized by the presence of radial streaks on the final whorls, which vary in color from shell to shell. Generally, brown streaks are found on yellow shells, and vice versa, with translucent white streaks on the white shells. The slightly expanded outer lip and the slightly depressed columella are white, and the aperture usually reflects the color of the final whorl. 37-47 mm. On trees and large rain-forest plants in hills and low-lying mountain regions around Lake Buluan, Cotabato Province, in south-central Mindanao.

4. *Amphidromus chloris* Reeve (Sulu form). Very similar to the Zamboanga variant, but with significant differences. The Sulu form is much larger (54-58 mm), and more heavily colored with dark yellow, which is also found on the intermediate whorls. In addition, the white banding between the upper whorls and at the apex is much more pronounced. Found on large tropical plants and on the smooth trunks of coconut trees, at reported heights up to 3-4 meters. In hills and comparatively flat lands on Tonquil island, Sulu Sea.

By JAMES L. BARNETT*

The large Philippine island of Mindanao and the pendant Sulu archipelago stretching southward toward the Malaysian island of Kalimantan (Borneo) represent the southernmost territorial extension of Philippine sovereignty.

Mindanao itself, with a land area about equal to that of the State of Indiana or of Portugal, is extremely mountainous. In fact, it has the highest peak in the Republic — Mt. Apo, some 9,700 feet. The island has a satisfactory chain of coastal roads, but travel in the interior is most difficult. The island is largely undeveloped, with many still very primitive areas.

The hundreds of islands forming the Sulu chain are low, hilly and covered with tropical rain forests. The chief producers of land snails are Jolo, Basilan, Tonquil and Tawi-Tawi. The climate is comparatively mild. Despite a long rainy season, the annual typhoons which batter the Visayan islands

and Luzon several hundred miles to the north have little effect on Mindanao-Sulu.

Both Mindanao and Sulu presently are beset by dissident and separatist movements. Mindanao has both religious and political rivalries, mainly concentrated in the mountainous interior. The religious aspects of this conflict have spilled over into Sulu. As a consequence, what land snails are presently available come from the populated coastal areas. The more desirable shells from the hills are almost impossible to come by.

The southernmost Sulu islands are close to North Borneo and the terrestrials of the two regions are strikingly similar. This is especially true of the genus *Amphidromus*. It is likely that early Malayan colonists from Borneo, when they settled in the Sulu islands, brought land snails with them. Thriving in Sulu, they eventually found their way to the Mindanao mainland.

Several representative species of the region from my personal collection are figured above.

*225 Upper Session Road, Baguio City 0201, Phil.

DIVING FOR SHIPS (Cont'd from Page 1)



Dave with *Lambis truncata sebae*. Photo: Perrault

Billee Dilworth, did a lot of sand fanning and found some lovely things.

Among the shells reported found were: *Epitonium ulu* Pilsbry, 1921, an unusual range as it was described from Hawaii; *Strombus fasciatus* Born (endemic to the area); *Terebra insalli* Bratcher &

Burch, 1967 (endemic); *T. consobrina* Deshayes, 1857; *Lambis truncata sebae* (Kiener, 1843); *Murex* cf. *tribulus* Linne, 1758 (a large specimen); *Fusinus polygonoides* Lamarck, 1822; *Mitra bovei* Kiener, 1833; *M. fissurata* (Lamarck, 1811); *Neocancilla granatina* (Lamarck, 1811); *Conus musicus parvatus* Walls, 1979 (usually an Indo-West Pacific species); *C. acutangulus* Lamarck, 1810; *C. generalis maldivus* Hwass in Brug., 1792; *C. namocanus* Hwass in Brug., 1792; *C. taeniatus* Hwass in Brug., 1792, and beautiful little serrated *Mirapectin rastellum* (Lamarck, 1819).

The first three shells listed above are not included in Doreen Sharabati's *Red Sea Shells*, our best reference book.

"Our people saw some large tritons but didn't collect any," Twila pointed out later. Andy Butler found a big *Conus vexillum*. *Terebra affinis* Gray, some very large, were abundant.

Every airport through which we passed had armed guards standing around everywhere, but our only anxious moment was when we were at sea. An Egyptian patrol boat sped into view to tell the captain we were anchored too close to the shore. It turned out that the real reason for the visit was that the captain of the patrol boat had a tooth ache. I gave up my double-strength painkiller happily. The Egyptians then left us to our diving.

We were a congenial group — Kirstie Kaiser from Los Angeles and her friend Kathy MacMorran from Phoenix, Dave Mulliner of Los Angeles, who has done the color photography for Twila's soon-to-be-published book on the Terebridae; Bob Yin of La Jolla, a good diver and a great photographer; Henry Chaney and his mother Barbara from Santa Barbara; Billee Dilworth and Bob Brown from La Jolla; Viola Perrault from Sun City, AZ; Jorge Zorrilla of La Jolla, who took care of our earaches and

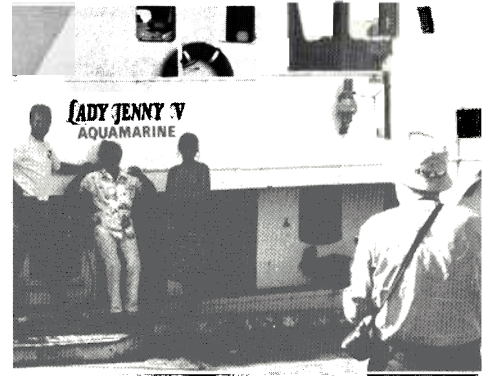


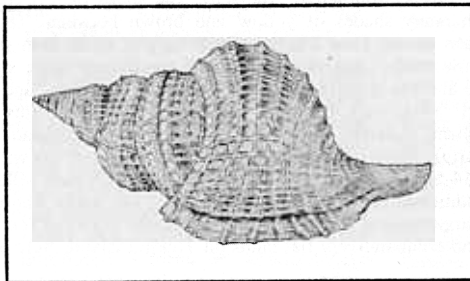
Photo: Butler

checked out our diving abilities; and Anderson Butler and Tetta Richert from Hawaii.

Everyone was careful in diving, watching our diving tables, the time and our decompression meters religiously. Only one or two dives in the whole excursion were to depths over 100 feet.

The last night aboard *Lady Jenny V*, we toasted Twila with our single bottle of champagne. It was inadequate to express our gratitude. So were the words with which we tried to express the thrill and enjoyment of such an adventure.

Hawaiian Shell News accepts worldwide shell dealers' advertising in good faith, assuming that they will deal fairly with their customers. Inclusion of advertising in HSN, however, does not imply an endorsement of the advertiser. If you are in doubt, investigate first.



The Abbey Specimen Shells

SPECIALIZED SERVICE IS OUR SPECIALTY

**THE VERY HIGHEST QUALITY SPECIMENS
AT THE VERY BEST OF PRICES**

**LARGEST SELECTION IN THE COUNTRY OF UNCOMMON
TO EXTREMELY RARE SPECIES ALWAYS IN STOCK.**

Illustrated monthly lists on request.

Species we have handled recently: *Conus excelsus*, *hirasei* world record, *lohri*, *pergrandis*, *Cypraea bernardi*, *fultoni*, *haddnighatae*, *iutsui*, *leucodon*, *lisetae*, *midwayensis*, *Latiaxis teramachii*, *Morum macdonaldi*, *teramachii*, *Murex anomaliae*, *peledi*, *oliverae*, *concaopterus*, *Phalium adcocki*, *sinuosum*, *Voluta beui*, *knoxii*, *lutea*, *pescalia*, and many many more.

Send want list for that hard-to-get rarity.

BUY-SELL-TRADE

P.O. BOX 3010
SANTA BARBARA, CA 93130
(805) 963-3228

SHELLS FOR SALE

THE CONNOISSEUR
of seashells

36 PAGES ALL IN COLOUR

It contains: Specialized cowries catalogue, Specialized Mediterranean catalogue, 200 offers of rarest world shells and much more. Sample copy (air) 5\$. Annual subscr. (by air) 42.00.

GEMME del MARE S.R.L.

P. O. BOX 561
(00187) ROMA (ITALY)

Cable: SEAGEMS ROMA Ph: (39-6) 50.30.744



Displays At Most
Shell Shows

DONALD DAN
QUALITY SPECIMEN SHELLS

2s649 Ave. Normandy East • Oak Brook, IL 60521
(312) 963-7551 Inquiries Welcome — No Lists

WEST COAST CURIO CO.

1940 Maple Ave., Costa Mesa, Calif. 92627

"13 miles south of Disneyland". Longest established shell dealer in the U.S.A. More than 3,000 species stocked regularly. No lists — No mail order. Buy or browse — you're always welcome!

COME IN AND SEE US

TOM SHEPHERD

Dealer in Marine Specimen Shells. Buy Sell Exchange
2222 Beech Street
Virginia Beach, Va. 23451

Derry's

SHELL SHELTER

WORLD WIDE SHELLS
Specimen Quality

P. O. Box 3519, Fullerton, CA 92634

FROM COMMON TO ULTRA RARE

TELEPHONE: 714-992-1030 "CABLE DERSHELL"

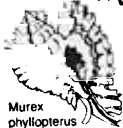


PHILLIP W. CLOVER
Conchologist
P. O. Box 339
Glen Ellen, CA 95442

Dealing in worldwide seashells since 1960. Specializing in *latiaxis*, *murex*, *morum*, *marginella*, *mitra*, *conus*, *cypraea*, *voluta*, *cancellaria* and out-of-print sea shell books. Free price lists.

Mal de Mer Enterprises

P. O. Box 482, Dept. H
West Hempstead, NY 11552, USA
Outstanding quality and personal service on worldwide specimen shells. Rarities are our specialty. Free price list on request.
Tel. (516) 481-0456



SALE:

Diver's own, large, fine, collection
5,000 shells, unusual forms — colors —
Kwaj, Wake, Guam, Samoa —
worldwide. Write — family lists.

KOKKO
750 Amana, Apt. 1103 Honolulu, HI 96814

Should Museums Sell Their Shells?

By **ART WEIL***

CINCINNATI — In 1610 Galileo first observed the moons of Jupiter through his telescope. Five years later, he faced the Inquisition for suggesting that perhaps some truth lay outside accepted Doctrine. That's about the situation one faces today in challenging the sacred precepts of our museums.

In Galileo's day, few people rushed to support him in his heresy. After all, the church by definition knew what was right. Interestingly, in the nearly four centuries since then, the church has been supplanted by the museum as guardian of ultimate truths. Galileo is probably up there saying, "I told you so."

Mostly, our museums do a good job. They are great at saving and cataloging things — and displaying them from time to time. Normally swamped by accessions (a great deal of it thrust into their reluctant hands by collectors now embarrassed for space) and habitually short of money for trained staff to curate it, they nevertheless have created a system of which Western civilization can be proud.

Frankly, however (Galileo, here I come), I have two criticisms. Big ones.

Item one: American inheritance laws operate to make museums the recipients of a tremendous load of collectible material. Often the only way heirs can afford to inherit an estate is to give part of it to a museum — any museum. This is welcome as long as it is cash or easily convertible property. But frequently it is Aunt Clothilda's collection of Victorian teacups that is fingered for presentation.

The truth is that, unless the bequest includes a handsome sum for housing and display, the museum can do little with its acquisition except squirrel it away. The material leaves the land of collectors and enters a basement.

It's not so bad if the museum has a curator versed in what you are donating — say, shells. But how many museums have such curators? He or she is more likely to be someone with a degree in butterflies or oriental art or colonial history. Goodby, shells.

As long as the collection was in the hands of amateurs, it could move about informally and be examined. If you want to borrow my volutes, I'll send them to you by UPS, delivery charges collect.

Museums must play by different rules. You have to have Scientific Standing (or the cachet of a potential benefactor) to gain entrance even to examine museum material. Have plenty of bona fides, come during business hours, know what you are looking for ("I'm sure it's somewhere here in the basement. Try that box over there."), be out by 5 o'clock and don't forget to turn out the lights.

The situation is faintly ridiculous. Museums need not (and some do not) accept material unless it strengthens existing collections. And a condition of

*5662 Delhi Pike, Cincinnati, OH 45238

acceptance should be the right to sell or exchange items.

SELL? Yes, sell. Museums are full of collectable material they will never use and that collectors would love to have. They ought to be able to turn into money collectibles they don't know how to use.

Item Two: This has to do initially with shells, but it probably applies to fish, beetles, plants, birds and the rest, as well. It seems to me that the biggest stumbling block to really good non-professional scientific study of shells is that practically every museum in the world has at least one holotype.

Now, museums are the place for holotypes. But need they be so scattered? Personal inspection of the cowries, for example, requires travel to Washington, New York, London, Paris, Geneva, Berlin, Amsterdam, Cape Town, three cities in Australia, at least four in Japan and, unless my memory fails me, back to Los Angeles. There are probably other places.

Wouldn't it be nice if we could see all the *Conus* holotypes in one place, all the *Cypraea* in another, and all the *Strombus* in a third?

Such a sensible arrangement would allow prospective shell namers to compare their new finds with the originals, all in one place, and keep them from making fools of themselves.

It really wouldn't make much difference which museum had which group. The cones could be in London, the *Murex* in Tokyo and the *Fusinus* in Tyler, Texas, for all I care. But we would know where they ALL were. Today, they are all over the place.

Someday, we are going to have to get organized!

Norm Paschell and I are trying to write a book on the epitioids. Estimates of the number of wentle-trap species range from 200 to more than 3,000. To examine the types of all of them, we will need almost unlimited funds and endless time — and we still cannot be sure that further material we need to see isn't hidden away somewhere.

We already know that, when we finally publish, someone is going to ask why we never considered the great material on the genus in the Lumpur Museum at Dingbat University.

Zoos have set up an animal register. Couldn't our Society take the lead in creating a shell register? The first step would be to list the depository of every holotype. (Let's start with the cowries; they are pretty well known.)

After creating such a register, the next step would be to urge museums to "lend" all their *Conus* holotypes to, say, the British Museum (Natural History) and perhaps the *Terebra* to the Los Angeles County Museum. After that, it should be easier to get the other families together.

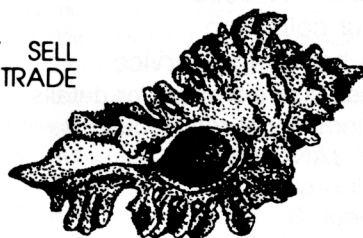
However grudgingly accepted, scientists would find life simpler with such an agreement. But the first beneficiaries almost certainly would be us amateurs, who then could find all the wentletraps in one place and have a slightly easier path to fame and bankruptcy.



EDWARD T. SCHELLING



BUY SELL
TRADE



Worldwide Specimen Shells
Marine Freshwater Fossils
I.S.G.S. Standards
Personalized Service
Free Monthly Price List
Shelling with Schelling

P. O. Box 68

Shalimar, Florida 32579 U.S.A.

(904) 244-5646

Shelling Secrets Titillate Members At Feb. Meeting

Honolulu member Chris Takahashi almost revealed some of his secret shelling spots in a slide-talk before the February meeting of the Society. Most of his remarks dealt, however, with the characteristics of local shells and their habitats.

In a community with several skilled shell photographers, Takahashi has earned a reputation for taking excellent, live-animal pictures. Several already have appeared in *Hawaiian Shell News*. He showed members many more of equally high quality.

1986 Budget Adopted

A budget for 1986 based on anticipated receipts of \$49,250 and expenses of \$50,970 was presented to the HMS Board of Directors at its first meeting of the year by President Wes Thorsson and Treasurer Barbara Kuemper. The figures were accepted as a working basis for the year.

Membership was predicted to decline by 5 per cent in 1986, continuing a trend of the past four years. Dues are expected to total \$30,600.

Other major income predictions are \$10,000 from advertising in *Hawaiian Shell News*, \$4,300 in interest on Society assets, and \$2,000 from an auction of shells later in 1986.

The biggest expenses in the budget are \$23,500 for printing *HSN*, approximately \$10,000 for mailing costs (assuming postage rates remain unchanged), \$4,200 for office rent, \$4,000 for salary, and \$1,400 for taxes.

The awards and scholarship program is expected to receive \$2,200. Half of this will come from the existing scholarship fund and the remainder from auction proceeds.

"As always, the slowly mounting cost of printing *Hawaiian Shell News* and recent sharp increases in postage rates are big concerns," Thorsson remarked. "Understandably, our overseas members have been hurt by the expensive dollar. However, with the recent fall in the exchange rate, we may see a reversal of our membership decline."

SEND IN YOUR RENEWAL!

All HMS memberships expire at the end of the calendar year. Send your renewal at once. Re-member — No dues, no *HSN*.



Photo: Hoeblich

Ancilla (Eburna) glabrata (Linne) is a not-uncommon find on sand in shallow water off the lower Caribbean. A color photo of the live animal is unusual, however. HMS member Pierre Hoeblich of Ciudad Guayana, Venezuela took the one above.

He found the shell in the coastal waters of north-western Venezuela, the home of *Cypraea mus* Linne, in October 1984. He did not report the length of this specimen, which runs from 3 to 7 cm — two to three inches. The known range of the species includes the Caribbean shores of both Venezuela and adjoining Colombia.

Bearing the popular name Golden Ancilla, specimens range in color from light yellow to dark orange. The shell is distinctly glossy. Columella and callus are white.

Ancilla flavida Lamarck is a synonym, according to R. Tucker Abbott.

S.L.

SHELLETTERS

MORTSEL, BELGIUM

Please inform HMS members that my request for new names of volutes (see *HSN* August 1985, p.5) was a fantastic success. When I got back from a trip to Norway, more than 40 letters had arrived, together with about 200 photographs of interesting specimens of the Volutidae.

Please thank all our members for their assistance, and inform them that photos of living specimens still are highly desirable. They can make the forthcoming book much more attractive.

Guido Poppe

AUCKLAND, N.Z.

I corresponded with Hans Turner concerning the identity of *Mitra tayloriana* Sowerby (see *HSN* Feb. 1986, p.3). Having examined the type of this species myself, I agree with Turner's conclusion that *tayloriana* is the juvenile stage of *Vexillum taeniatum* (Lamarck) and certainly is not a synonym as Sally Kaicher states.

I pointed out to Turner, however, that he wrongly used the expression "holotype" when the remaining specimen in the BM (NH) is only the "extant illustrated syntype" (which I will appropriately designate as the lectotype in my revision of the family). Turner acknowledged the error but thought that he would not be in time to make the corrections in his manuscript for *HSN*.

You can put a P.S. from me at the end of Turner's article: "To Turner's synonymy for *Vexillum taeniatum* (Lamarck) should be added *Vexillum gloriosum* Noodt, 1819 and *Mitra fasciata* Dall, 1905."

Walter O. Cernohorsky

ESTORIL, PORTUGAL

During, let us say, the past ten years, we have been rather disturbed here in Europe with the high density of errors published in *HSN* that remained without correction. Only when you do not publish can one avoid errors, but sometimes a correction sent to you remains unpublished.

Your editors seem to favor boring, space-consuming descriptions of trips where almost nothing happened instead of publishing the corrections members mail to you.

The reason for this was a mystery for years, but now the situation is clearing up. These letters are lost.

Thus we have an addendum to Murphy's Law: [articles containing] errors are taken into account; letters with corrections are lost.

Sometimes the excerpts that you publish are such that the meaning of a letter is lost or crudely changed. Nevertheless, everything is completely clear now. The "Selective Loss of Texts Law" [applies]: The meaningful parts are always, unfortunately, lost in the mail, but not the remainder.

Ildio A.V. Felix-Alves

N. MYRTLE BEACH, NC

The cowry illustrated in figure 2 of John Orr's article in *HSN* Jan. 1986 is *Cypraea caputviperae* K. Martin, 1899 from the Miocene of Java. Martin's original figures show very clearly the peculiar recess on the inner lip mentioned by Orr.

The cowry in figure 1 presents a problem as the aperture is evidently worn away. It is probably *C. junghuhni* K. Martin, 1899. The left-hand shell in figure 3 appears to be a worn specimen of *Pyrula madjalengkensis* K. Martin, 1895. *Pyrula* is, of course, not the proper placement in modern systematics, but I am not sure of the correct generic placement. It belongs in the Melongenidae.

As stated by Orr, the right-hand figure in figure 3 is a *Turritella*, but I doubt if it is specifically identifiable.

I hope that *HSN* will publish more illustrations of Indo-Pacific Tertiary molluscs.

Richard E. Petit

A NEW WAY TO BUY AND SELL SHELLS

Convert your extra shells into \$\$\$\$

Add new shells to your collection

through our low commission brokerage service

Send stamped, self-addressed business size envelope for details and list. Overseas please send 2 international reply coupons.

DOROTHY & ROBERT JANOWSKY

First American Shell Brokers

P.O. Box 482, Dept. B

West Hempstead, NY 11552

THE GREEK CONNECTION:

JUNO LIVES ON IN SHELL NAMES

By LYN SWEETAPPLE

Everyone knows Juno. She was goddess of home and hearth, the protector of marriages, consort of Jupiter, and daughter of Saturn, predecessor of Jupiter as No. 1 in Greek mythology.

We call her Juno, as the Romans did. Hera to the Greeks, she represents a character who goes far back into the dawn of religious beliefs. By whatever name, her vanity is said to have been partly responsible for the Trojan War.

Actually, she was Jupiter's sister as well as his wife and a pretty jealous character. She gave poor Jupiter a hard time.

Nowadays we don't believe in the old myths, but we nevertheless have named one of Florida's most beautiful shells — *Scaphella junonia* Lamarck — for Juno. She also is remembered in a subgenus of small bivalves (subsequently lost in synonymy), and in *Semele junonia* Verrill, a Panamic bivalve.

Juno's personality and place in the Olympian hierarchy can be confusing. She is often equated with Lucina, the Roman goddess of childbirth, and with Astarte, the Phoenician symbol of fertility who in turn goes way back to early Hebrew and Mesopotamian days. Shells bear the names of all of them.

The derivation of the superfamily Lucinacea, the family Lucinidae, the genera *Lucina* and *Lucinoma*, and the subgenus *Lucinisca* is pretty obvious. Several other names, including *Conus lucidus* Wood, may be traceable to Lucina, too.

As for Astarte, we can recognize her easily in the bivalve family Astartidae and the cold-water genus *Astarte*, and not quite so quickly in the obscure brown gem shell of Florida, *Parastarte triquetra* (Conrad).

To go back a couple of paragraphs, Semele was the mother of Dionysius (known to the Romans as Bacchus). His father was Zeus (Jupiter), so you can understand why Juno didn't much care for Semele. The name shows up in the Semelidae and the genus *Semele*, a group of North American clams resembling the tellins.

Iris is remembered as the messenger of Juno who came and went from Mount Olympus over the rainbow. (In some versions, Iris herself was the rainbow.) Shells named for her include *Haliotis iris*, *Tellina iris* and *Laturus iris* — all notably brightly colored.

I will close this recital of Juno and her friends (and rivals) with the story of Callista, a sweet, lovable nymph with whom Jupiter was stepping out while Juno wasn't looking. Always one to believe the worst of her husband, Juno turned Callista into a bear.

The jeers of her erstwhile friends and the barking of the village dogs drove Callista into the woods where she lived for many years. Eventually, her

FROM FLORIDA'S PITS



Photo: Schoenberg

Dr. Edward Dunlap of Rhinebeck, NY carried out a little private safari a year ago to the Macasphalt Company's Newburn quarry outside Sarasota, FL — "an incredibly rich concentrated fossil shell deposit," as he described it (see HSN Sept. 1985, "Collecting With Hand Rake and Hard Hat.")

On a recent visit to Hawaii, Dr. Dunlap left several sample fossils with HSN Associate Editor Olive Schoenberg, who made the three photos shown above and at the right.

Identities of the shells remain obscure. There were numerous guesses, but no HSN staff members were willing to be quoted. HMS members are invited to offer their opinions.

Ms. Schoenberg adds the assurance that the cone actually is sinistral.

(and Jupiter's) son, hunting in the forest, encountered Callista. The bear stretched out her arms to him and was promptly slain.

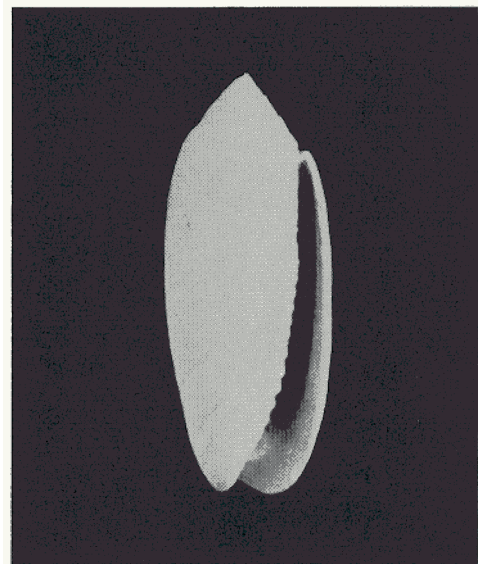
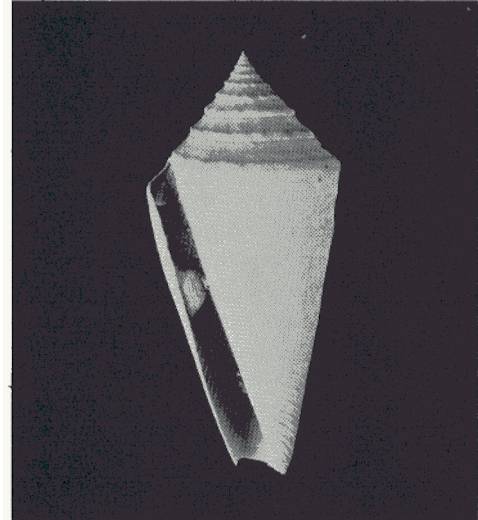
Saddened by the fate of his old girl friend, Jupiter turned mother and son into stars. Enraged at this honor bestowed on a rival, Juno ordered the oceans never to let the stars set. That's why the Big Bear and Little Bear circle the North Star but never go below the horizon.

We do our part in keeping Callista's name alive with the bivalve genera *Callista* and *Macrocallista* and the rather insignificant little *Thyca callista* Berry, a hitchhiker on Gulf of California starfish.

PISOR'S MARINE SHELLS

646 N. 30th St.
San Diego, CA 92102
(619) 234-0249

SPECIAL: Burgess' *Cowries of the World*, \$75 postpaid, registry extra. ALSO: Wholesale specimens and commercial shells.



Captain Nemo's Shells

The superman of all shell collectors is to be found Jules Verne's 1870 novel, *Twenty Thousand Leagues Under the Sea*. As the uncontested master of inner space, Captain Nemo was able to furnish his submarine, *Nautilus*, with an outstanding collection of shells and pearls. His involuntary guest during the long voyage of *Nautilus*, Professor Aronnax (himself a specialist on marine life), was impressed when confronted with Nemo's collections.

The novel shows that Jules Verne had read extensively on underwater life, about which he wrote in an expert and realistic manner.

There is no complete Swedish translation of the novel. Translators have a tendency to cut corners, especially in the treatment of scientific passages such as those about Nemo's shells. Such passages are in fact essential to the realistic style of this extraordinary and innovative science-fiction.

Claes Wahloo in *Neptune's Cabinet*. G. Eriksson, ed. Lund, Sweden: Kulturen.

Dr. A. Myra Keen 1906-1986

American malacology lost another of its giants with the death on 4 January of Dr. A. Myra Keen, professor emerita of paleontology and malacology at Leland Stanford University. She was 80.

Dr. Keen retired from active work with shells two years ago and moved to Santa Rosa, CA. She entered a convalescent hospital there last summer.

During her more than half a century on the Stanford faculty, Dr. Keen firmly established her position as the foremost expert on the marine shells of the U.S. West Coast and as one of the leading malacologists of the world. She was principal author of the section on bivalves in Vols. 1, 2 and 3 of the encyclopedic *Treatise of Invertebrate Paleontology*, and author of *Sea Shells of Tropical West America*, originally published in 1958 and revised and greatly expanded in 1971.

Dr. Keen also wrote innumerable scientific papers. Probably her last publication was an account for *Hawaiian Shell News* (see HSN July 1984) of her meeting with the Emperor of Japan during his 1975 visit to the United States. At his invitation, she lectured on the relationships of the molluscs of Japan and those of northwestern America.

A sometime member of the Hawaiian Malacological Society, the American Malacological Union, the Western Society of Malacologists and several other U.S. shell groups, Dr. Keen also was often consulted by International Commission on Zoological Nomenclature (ICZN) in London.

"Friends rightly worry whether it is possible in our time to live lives of disciplined simplicity," observed a memorial minute from the Palo Alto Friends Meeting. "Myra Keen's all-too-short life among us testified to the fact that those possibilities remain achievable, if not often achieved: her example remains a challenge to all of us."

Dr. Keen was both a researcher and a teacher of real stature. Ellen J. Moore of the U.S. Geological Survey in Menlo Park, CA, a friend and colleague of long-standing, recalled an anecdote of her teaching days.

"I was teaching an advanced paleontology course in which I demonstrated to students the proper way of wrapping shells for shipping," Dr. Keen told Ms. Moore. "I would pass out assorted shells to the students for them to wrap. Then I would climb on a chair and tell them the story of the [British] station agent who was asked by a young man if his trunk would survive the trip to London.

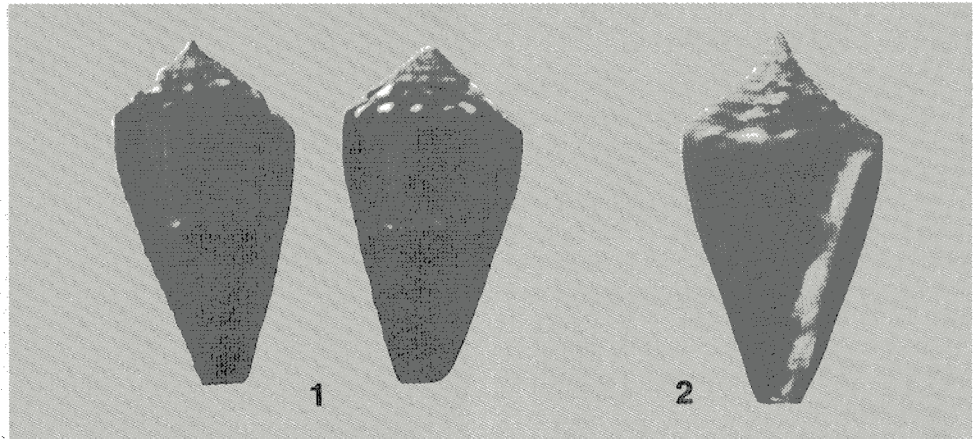
"The agent first threw the trunk off the platform and said, 'That's what it will get in Edinburgh.' He threw it down a second time and explained, 'That's what it'll get in Glasgow.' Finally he dropped it a third time on behalf of London.

"The trunk fell apart. The agent said to the young man, 'I don't think it will make it.'

"Then I'd start throwing the students' packages. That was one course they remembered."

Happiness Is . . .

OUTPERFORMING YOUR TEACHER



By CARL SAHLBERG*

NOBLESVILLE, IN — Being both a cone enthusiast and a scuba diver, I am always thrilled when I come upon an underwater treasure. I have learned, however, that it takes some experience to find good specimen shells, what with their unique camouflage and ability to hide.

Even if you are aware of their location, it can be a real challenge to find a particular species. So why is it that so few shellers are willing to tell where and how to find a particular shell?

I dive off the east coast of Florida on a regular basis with Tom Honker of Delray Beach (see also HSN Sept. 1984, p.5). Tom shared some of his personal collecting spots with me and taught me how to look for shells.

To this day, however, I cannot keep up with him in his ability to find real gems. Even though I know where those *Conus granulatus* come from, it took me three years to get my own specimen of the Glory of the Atlantic cone. Only once did I outshine Tom and that brings us to the photos above.

During a diving visit to the Bahamas with Tom and three other fellow HMS members — Moe Goudzwaard, and Wayne and Donna Harland — I found the two *Conus kulkulcan* Petuch (Fig. 1) on successive days. Both were in about 25 feet of water under coral heads on the ocean side of Turtle Rock, a small island.

There is some discussion of the exact taxonomic status of *C. kulkulkan*. Until more information is available about this little cone, I prefer to call it *C. cardinalis* forma *kulkulkan* Petuch.

Finding the second shell, *C. caribbaeus* Clench (Fig. 2), was a real treat, as no one expected anything on that dive. Since the ocean was quite rough, with a good current running, we were unable to make the night dive we had planned on the ocean side of Turtle Rock. Instead, we moved our boat around to the lee of the island and anchored for the night. The water was only about 10 feet deep and

the bottom was covered with sea grass, but we decided to try a night dive there, anyhow.

We found the bottom almost littered with milk conches, *Strombus costatus* Gmelin, and an occasional queen conch, *S. gigas* Linne, but not much else. Then a brilliant yellow creature slowly crawled in front of my dive light. It stood out in that expanse of green weed and dark silt like a daffodil in a field of crabgrass! My week of diving had been made.

I was ecstatic at having added three gem self-collected rare cones to my cabinet. I must add that I could not help some extra feeling of smugness. Tom was unable to find either species that trip.

One of the earliest members of the Hawaiian Malacological Society, and in many ways the most widely known, Elizabeth "Ibby" Harrison died on 25 February at her home in Honolulu. Death was from complications of cancer and extended treatment to control it. She was 66.

Mrs. Harrison, her husband Arch and their eldest daughter Betsy (now Mrs. Wayne H. Gagne) joined the Society in 1955. Over the years she assumed many of the managerial tasks, serving as corresponding secretary at a time when that job involved work done today by half a dozen people. Never a phlegmatic person, Ibby several times resigned from HMS in protest at something but always came back to help with the next project.

Two years ago, the Directors of the Society voted to name Mrs. Harrison an Honorary Member, the first person in many years to be thus recognized. Less than a week before her death, Ibby remarked a bit impatiently to the editor of HSN. "I still don't see why you did it."

Ibby's many pen pals around the world will join local members of HMS in mourning the passing of a remarkable and well-loved friend, and in extending condolences to Arch and three Harrison daughters.

S.L.

*101-D Shoreline Court, Noblesville, IN 46060