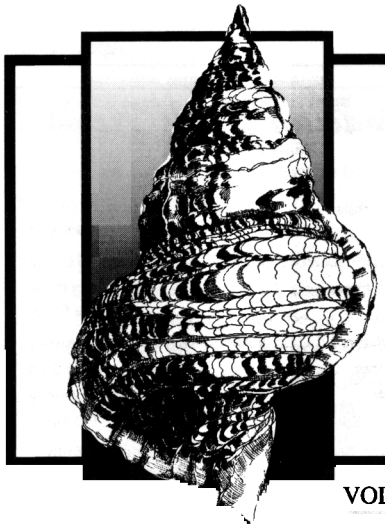


HAWAIIAN SHELL NEWS

AN EDUCATIONAL PUBLICATION OF THE HAWAIIAN MALACOLOGICAL SOCIETY

VOL. XLI NO. 4 APRIL, 1993 NEW SERIES 400

The Conus Concolor Story:

A Tragicomedy of Taxonomic Acrobatics

By A. J. da Motta*

It all began when Sowerby I (1833) illustrated in **Conchological Illustrations** pt 28, f 20, (also reproduced in **Thesaurus Conchylorium** vol 3, p 4, pl 4 (190) f 83) ***Conus unicolor***, a shell which resembles ***C. moreleti*** (fig 1). Next, Tomlin (1937) listed another "***C. unicolor***" Sowerby (1834), illustrated in **Conchological Illustrations** pt 54, f 59 (not ***C. unicolor***, pt 28, f 20) as being renamed ***C. concolor*** (large list), which is

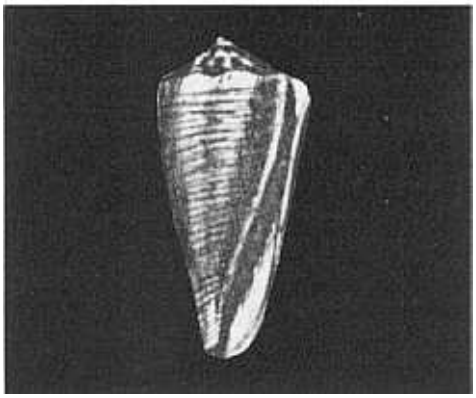


Fig 1. ***Conus unicolor*** Sowerby I, 1833.

a differently shaped turgid shell, colored a solid light brown (fig 2). Tomlin added that Kiener, (1845) p 246, erroneously identified this with "***C. adansonii*** Lam." Coomans, et al (1985) 48:254) remarked that the whereabouts of this second shell is unknown, but reproduced it in **Concholocigal Illustrations** pt 54. f 59 as the type figure of ***C. concolor***, giving its dimensions as 42 x 24mm, without revealing the source of the information. This they identified as a color form of ***C. hyaena***.

However, Sowerby II (1866), in **Thesaurus Conchylorium**. III, pl 9, f 206, illustrated ***Conus concolor*** as a turbinate, low, concave-spired shell and described it (p 35, sp 307) as having an affinity with ***C. fasciatus***, which bears little

*13A Edif. Ka Vo, 30 Praca Lobo de Avila, Macua.

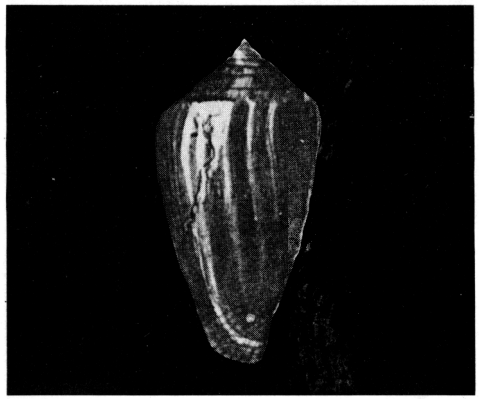


Fig 2. ***Conus concolor*** Sowerby I, 1834 according to Tomlin (1937)

resemblance to the original illustration (see fig. 3). Looking at this figure may help explain why Walls (1979) p 237 illustrated a solid olive-brown, turbinate shell (fig 4) with blue aperture, which he compared with ***C. gilvus*** as most similar in general appearance.

Walls (1979) gave ***Conus concolor*** a Western Pacific range from the Philippines to New Hebrides. I followed next (1983) with a description of ***C. halli*** as a shell with a convexly conic spire, subangulate shoulder, rounded at its edges, and found in Pasir Putih, Java. Although I compared this new species primarily with ***C. hyaena***, I was so impressed with the many unusual varietal forms of this highly polychromatic population, that I thought it was desirable to describe six of its colored forms separately. One of these, Paratype No. 3, is solid dark brown color with some barely visible spiral lines somewhat resembling ***C. concolor*** (per Walls). Another, Paratype No. 4, could pass as ***C. gilvus***. Both are in the Museum d'Histoire Natural, Geneva.

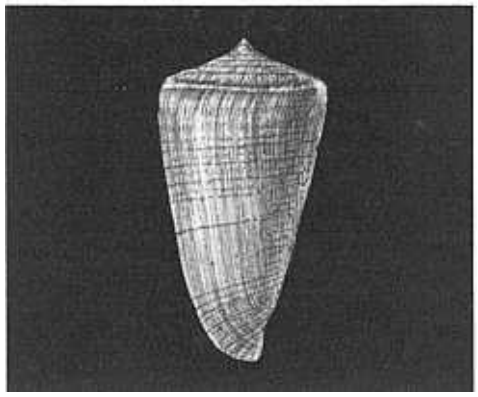


Fig 3. ***Conus concolor*** Sowerby I, 1841 according to Sowerby II,

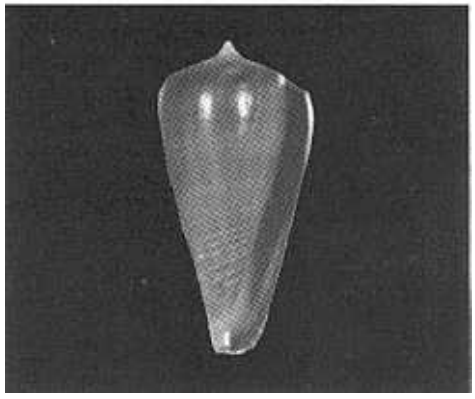


Fig 4. ***Conus concolor*** Sowerby I, 1834 according to Walls, 1979 who has it as Sowerby i, in Sowerby ii, 1834, large list. Nomen novum for ***C. unicolor*** Sowerby i, 1834.

Notwithstanding the extraordinary color variability, the animals in life were all consistently the same and described as: "the sole of the animal's foot is the color of smoked glass with fine longitudinal etchings; the foot, slightly fleshier and mottled in places; the upper surface of the foot tapers off into a dull whitish body; proboscis is flesh-colored with hairlike bands; the eye stalks, pale amber darkening towards the tip; siphon under- side being white, the upper,

(Cont'd on Page 11)

HSN regrets the uneven quality of the reproductions of shell illustrations with this article. Several original hand-drawn figures had to undergo substantial enlargement.

REEFCOMBING

THE HMS TRITON AWARD

Three veteran members of the Hawaiian Malacological Society, including the individual generally regarded as having initiated its actual organization 50 years ago, received engraved glass plaques at the March meeting of the Society, designating them 1992 Triton Award winners. They were Lyman Higa, **HSN's** long-time "Recent Finds" editor (left in photo), Charter Member Charles A. "Chuck" Allen, whose "Allen papers" evolved into today's **HSN,** and Wesley Thorsson, the Society's resident electronic and computer mastermind, veteran scuba diver, shell-dredge operator and holder of most HMS offices in the past 30 years.

The three were among five initial awardees named at the Society's fiftieth-anniversary party last December, but who were not present to receive their plaques.

Presentation was delayed further when, in the post-party clean-up, their awards were mislaid. Just as mysteriously — and embarrassingly — the plaques were discovered in mid-February right where they should have been.

Another member, Dr C. M. "Pat" Burgess also received his plaque at a low-key presentation at his home and the final recipient, Evelyn Gage Gerisch, the first editor of **Hawaiian Shell News** in the 1950's, was scheduled to come to Honolulu for the Society's April meeting for the presentation. Anyhow, congratulations Pat, Lyman, Chuck and Wes!

TWILA BRATCHER'S PROGRESS

Terebra specialist Twila Bratcher of Los Angeles is making a slow recovery from the serious injuries she received from a fall in her Hollywood home early this year (**HSN** March 1993, p.2). After being hospitalized for nearly two months, according to word received by her Honolulu friends, in early March Twila was able to return to her home. She remains invalided, however, and contact with friends is mainly by telephone.

That "sputnick urchin" figured in **HSN** Feb. 1993, p.9 wasn't identified correctly. It was ***Chondrocidaris gigantea*** (A. Agassiz, 1863), the rough-spined sea urchin. Thanks to the members who set the editor straight.

Building the Education Fund

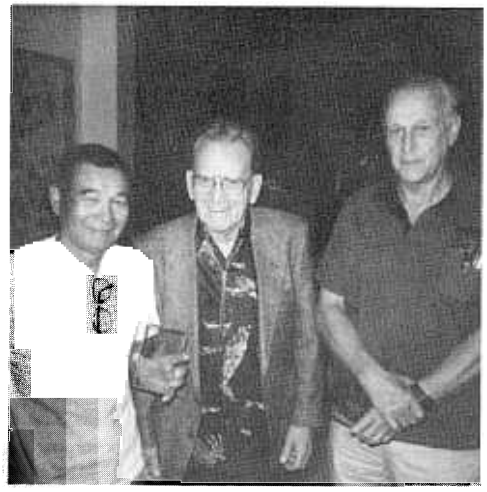
The Hawaiian Malacological Society is recognized by the U.S. Internal Revenue Service as a non-profit educational organization. Contributions in cash or in kind to the HMS Education Fund or to support **Hawaiian Shell News** may be deductible on U.S. income tax returns.

JOHN AND CHERYL TO FLY AWAY

In time, all good things must end. The U.S.Air Force is about to end the Hawaii assignment of John and Cheryl Jacobs who for nearly five years have been pillars of the Hawaiian Malacological Society's operations.

Cheryl has been office manager since 1989. John has been a Society Director most of that time. Both have been active volunteers at HMS functions ranging from beach clean-up parties to shell shows and auctions.

The Jacobs's new assignment is to Eglin Air Force Base, near Fort Walton Beach, Florida. They will be leaving Hawaii in mid-July. We hate to see them go.



Lyman Higa, Chuck Allen and Wes Thorsson.

WESTERN SOCIETY OF MALACOLOGISTS

A symposium on contemporary research on Mollusca and another on malacofauna of western Mexico will be features of the twenty-sixth annual meeting of the Western Society of Malacologists at La Jolla, California opening on 27 June. A special poster session will deal with photography of molluscs.

The traditional concluding banquet includes a "sure-to-be-entertaining presentation" by Dr. Barry Wilson of Western Australia, author of an important new book on Australian gastropods.

There will be a shell auction and reprint sale, plus a round of social events.

Dr. Dick Oyler and his family of Boise, Idaho plan some travel to American Samoa, Western Samoa, the Cook Islands and Tonga this year.

"I would like to communicate with HMS members regarding recommended shelling areas in those groups," he writes. "Also, what shell fauna can I expect?"

His address is 11136 W. Hickory Park Drive, Boise, ID 83704, or phone (208) 327-0438.

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Hawaiian Shell News does not intentionally carry original descriptions of species or genera, and does not wish to be cited as authority for new taxa.

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"Dear Friend in the Sandwich Islands:"

An 1847 letter from upstate New York documents early appreciation of Hawaii's unique seashells

By E.R. Cross*

Mary Oliphant of Auburn, New York on November 13, 1847 addressed a letter to "Dear Friend" in the Sandwich Islands. I purchased the original of her letter at a 1980 auction of Hawaiiana and have tried ever since to learn for whom it was intended. To this day I am not sure.

The letter probably was directed to one of the "up-state" New York missionaries stationed in Hawaii at that time, apparently a friend of the Baldwins, the Booths, a Mr. Tinker and other New England Protestant church figures prominent in Hawaii's history of the past 200 years.

Mary makes it clear that Hawaiian shells were just as much in demand then as they are today.

The letter is long and rambling, not all of it dealing with shells, coral and other collectibles. So, before we share Mary Oliphant's most interesting thoughts of 150 years ago, let me set the stage for her worries, her faith, and her hopes.

Auburn, New York State, was (and still is) a small agricultural-industrial community at the northern end of Owasco Lake, about 30 miles from Syracuse. Eighteen forty-seven was a boom year, before the "bust" and panic of 1857. Middle America was becoming the granary of the world, with newly constructed high-speed railroads carrying wheat from the Midwest to the East Coast ports. Bigger and faster trains followed newly laid rails stretching rapidly toward the golden west. From New York, ever bigger "packets," swift clipper ships, and smaller cargo rigs carried freight and passengers at record speeds to California, China, India — and to the Sandwich Islands, an 80-day dash via Cape Horn in the fastest of the new clipper ships. One writer of the day classified Americans as "a speed-mad, money-drunk mob."

Why send missionaries to Hawaii? One wonders.

Whatever the reasons, the earliest recognized missionaries were Americans from New England, dour Calvinists all of them, who landed at Kailua Bay on the Big Island of Hawaii from the brig *Thaddeus* on April 4, 1820. Very soon, one suspects, they were picking up shells on the beaches.

By 1847, the time of Mary's letter, 84 men and 100 women, divided into 12 "companies" or missions, were carrying on their work in Hawaii. Among them were 52 ordained ministers, 14 teachers, eight physicians, five printers, three secular agents, one book binder and one farmer.

*P.O. Box 1267, Port Angeles, WA 98362.

Among them also, obviously, were some dedicated collectors of coral, shells, lava and other Hawaiian objects of interest.

Now back to Mary Oliphant in Auburn on November 13, 1847. As we will see, Mary had some good days and some bad ones, too.

"I have received all the kind letters sent me, which are highly prized," she started. "The day Mr. Baldwin from your Islands brought us the last (August 7 this year [1847]), a Mrs. Booth was here from Branchport [New York]. I showed her the letters and others from missionary friends. She took them with her on a little excursion and returned in a week. She told me she was a first cousin of Mr. Baldwin. She was much like him. She said she had written you that the mission won't send her shells."

Later in the letter Mary returned to the subject of shells.

"Should you send a box to us, it might be well to send her [Mrs. Booth?] a present in it," Mary wrote. "I do hope you may be able to send us one, for almost nothing of this sort is sent now and these things are just as much thought of as they have been. The coral is more esteemed than the lava. We know you have not many shells there now."

[Still later] "I was greatly delighted to see your cousin as she was also able to hear from you. She is acquainted, she told me, with Mrs. Baldwin as several have returned to the Islands. Mr. Tinker made us some calls last winter."

I wonder what Mary thought the Sandwich Islands (as Hawaii was then known) were like. I am sure she never visited us. Anyhow, she was worried.

"From those I see from the Islands, I should not think you lost too much in personal appearance as we had supposed."

A little later, about children raised in Hawaii: "As far as I can see those from the Islands are as intellectual, as modest and as refined as others, and much more so than many."

Catholicism was spreading in Hawaii at that time, as in many other parts of the world, and Mary — obviously a strong Calvinist — was worried.

"Religion seems to be all that anyone must desire in this world," she stated, ending her letter with the lugubrious assurance: "Your friend and companion in tribulations. (signed) Mary Oliphant."

That wasn't quite all Mary wanted — or needed. She wrote several postscripts. In fact, every margin, wherever there was space, had a P.S.

In the first, dated November 27, some two weeks after the letter was started, Mary wrote: "And if you have any shells we think much of them." After three more P.S.s and apparently just before she mailed the letter, still dated November 27, she concluded: "The box will now be sent in a few days. I wish you would let our friends send us lava, coral and shells, we prefer the last."

AM I BORING YOU?

By Scott Johnson*

KWAJALEIN — In the accompanying photo, a young ***Naquetia triquetra*** perches on the shell of a ***Mirapecten rastellum.*** Is the muricid a borer? There was no evidence of a hole bored in the bivalve when the ***Naquetia*** was removed.

Although ***Mirapecten rastellum*** is not often found alive here at Kwajalein, empty single valves are not uncommon. Rarely, however, do they have drill holes. Possibly the more active pectens are able to swim away when approached by a molluscan predator. They certainly are capable of swimming away from a diver. Several times I have scanned ahead with my light while on a night dive and have caught glimpses of pectens swimming to evade the approaching light.

The pectens seem to have been eaten by something more agile than another mollusc, something that can catch and crush them. Many freshly crushed valves still have a fragment of the other valve attached at the hinge. SOMETHING apparently broke in to get a scallop dinner. But what?

Any ideas?

*Box 325, APO AP 96555.

Naquetia triquetra perched atop a ***Mirapecten rastellum.***

WHAT'S THAT HIDING IN THE SAND?

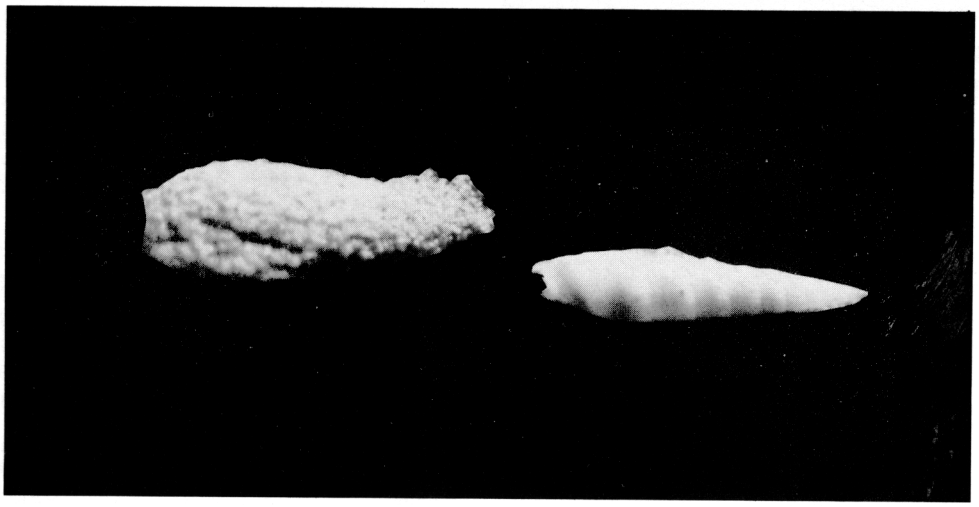


Photo: Schoenberg-Dole

The tide at Broome, Western Australia has an extreme rise-and-fall range of approximately 30 feet. (Compare that with Honolulu harbor's extreme range of about three feet). A few years ago I had the remarkable experience of standing on the shore there and watching the surf line draw back until it disappeared over the horizon.

As we walked seaward behind the rapidly falling tide, the sand was still damp. Soon, however, as the Indian Ocean sun beat down on it, the sand dried and began to crack. A few intertidal creatures appeared.

I poked along the vast beach, looking for mollusc trails and small creatures such as olives and *Terebra* to photograph. I saw an occasional hole and a few little lumps of sand, but nothing worth stopping to snap. Soon, however, there were more lumps, then many lumps, plus an occasional lonely little terebrid. Curiosity finally got the best of me.

I touched one of the lumps of sand. Dry sand flaked off, revealing a very alive ***Terebra rufopunctata.*** I tried another lump, and another. The same thing happened.

How about the "naked" ***T. rufopunctata?*** I followed one across the sand. Sure enough, it spat out some "juice" that made its shell sticky. Sand adhered as it plowed along and soon it was completely covered. Another lump was born.

I didn't wait for that Australian tide to sweep back across the flat beach. Presumably, though, it released those beautiful little ***Terebra*** from their sandy wrap to enjoy another day.

Olive Schoenberg-Dole

SLIM PICKINGS IN FLORIDA'S CALICO SCALLOPS

TALLAHASSEE — Since 1970, Florida's calico scallop, ***Argopecten gibbus*** (Linne, 1758), has had its ups and downs. Of the estimated 400-plus scallop species, ***A. gibbus*** was once one of the three most common varieties found in the market. In 1984 a harvest of 39.3 million pounds was valued at $75 million, a record.

Since then, the industry has been forced to shut down due to a lack of scallops. This unpredictable fluctuation has created hardship for processing plants, fishermen and industry workers, according to the Jacksonville (FL) Shell Club's **Shell-o-Gram.**

Biologists have been collecting production and reproductive data on the calico scallop since the mid-1980s. Florida Sea Grant researchers Norman Blake and Kendall Carder are using remote sensing techniques to predict scallop availability for commercial harvest. Satellite imagery gives water temperature, chlorophyll content and other reproduction-linked information.

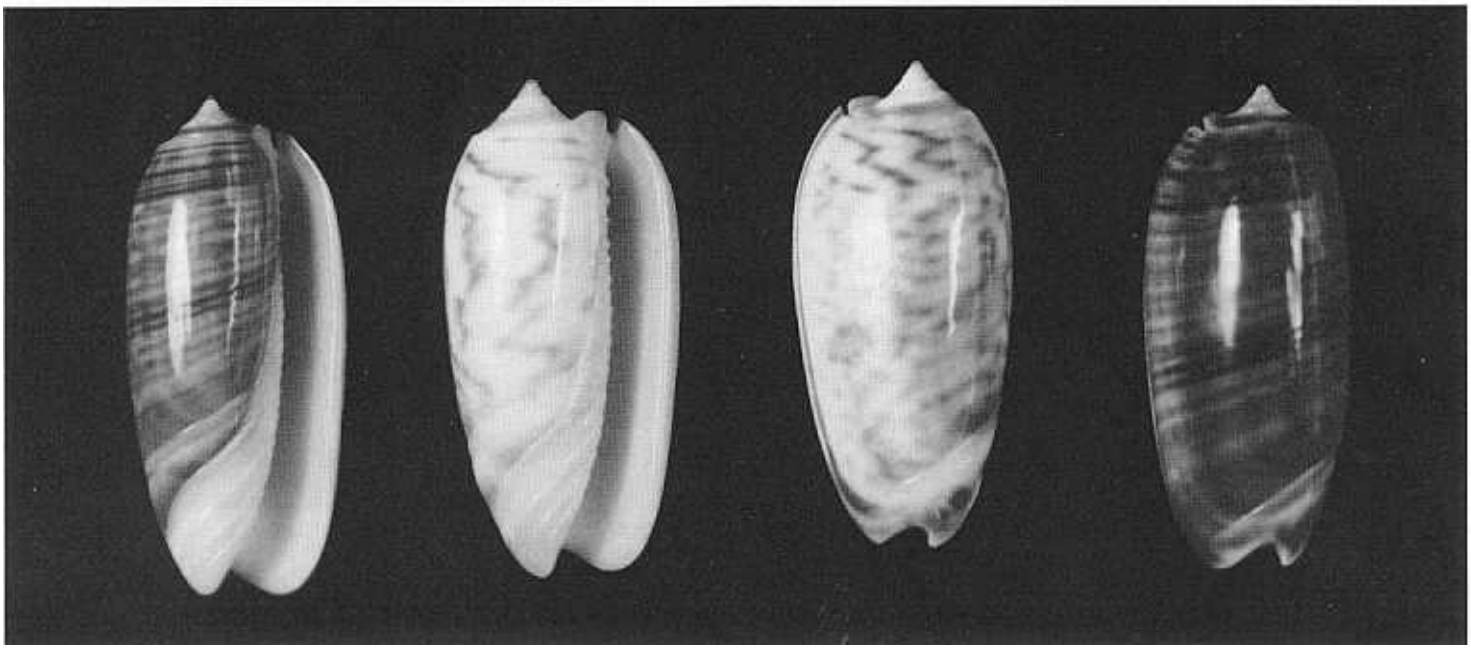
Overall, the research indicates a relationship among such characteristics as temperature, Gulf Stream position, and the reproductive cycle of the calico scallop. Landward movement of the Gulf Stream brings colder nutrient-rich water which induces spawning and produces more scallops.

Spawning for the calico scallop typically occurs twice a year, once between March and June and a second time usually between July and December. Without a successful autumn spawn, the number of scallops that die during the winter may leave too small a population to support a commercial fishery.

In December 1988 scallopers began to find large numbers of dead scallops in their catches. Within a month, mortality was close to 100 percent. Examination showed that a parasitic Haplosporidian of unknown species had taken over the digestive tract of the scallops and virtually starved them to death.

Blake's research was cut short by high mortality on the Canaveral scallop beds in January, 1989.

Oliva rubrolabiata, a Melanesian Jewel



Oliva rubrolabiata Fischer, 1902 is found in both pale (center) and normal forms in Vanuatu.

By Mike Hart*

When Ron van Prehn, skipper of the yacht Bakaal, was shipwrecked off Hui Island in the Torres group of Northern Vanuatu in 1983, shell collecting was probably the last thing on his mind. But when, two years later, he nursed his crippled yacht back to New Zealand by way of the Torres, Banks and southern Solomon islands, he brought with him an extensive knowledge of local olive shells, as well as a considerable collection. A professional photographer, Ron was able to capture on film many of his unusual experiences, as well as stunning scenery and the people of the remote Banks and Torres islands.

*32 Oakland Avenue, Papatoetoe, Auckland, N.Z.

The some eighty isles of Vanuatu ("Our Land") are strung like a Y across the South Pacific between 12 and 21 degrees south and 166 to 171 degrees east — a stretch of 800 kilometers (500 miles). Port Vila, the capital, is on the central island of Efate. Its nearest neighbors are Fiji 800 km to the east, the Solomon group the same distance to the northwest, and New Caledonia 400 km to the southwest. The Torres group, most northerly of the Vanuatu chain, is 100 km from Santa Cruz Island, southernmost of the Solomons.

The considerable distance of the latter islands from Port Vila and the fragmented geography mean that the northernmost islands are visited infrequently except by copra boats, a few inter-island traders and an occasional yacht en route to or from the Solomons.

Some of the the Banks Islands were seen by the Quiros expedition in 1608. (There is uncertainty as to how many islands Quiros and his company actually saw.) Capt. James Cook's survey of the New Hebrides (today's Vanuatu) missed them and they were not named as a group until 1789 when Capt. William Bligh honored Captain Cook's botanist, Sir Joseph Banks. The largest islands are Gaua (Santa Maria) and Vanua Lava, both volcanic in origin.

The Torres Islands didn't get on the charts until 1860 when Capt. J. Erskine, commanding HMS *Havannah*, named them for Quiros' second-in-command. Today, the ten larger and several small islands of the Banks and Torres groups form a single administrative district of Vanuatu.

If modern Vanuatu is notable for anything beyond its recent political history, it is as the home of two sought-after shells. The first, ***Oliva rubrolabiata*** H. Fischer, 1902, is apparently endemic to Vanuatu. The second, ***Cypraea catholicorum*** Schilder & Schilder, 1938, has a slightly wider West Pacific range.

Oliva rubrolabiata is restricted to the southern Solomons, Vanuatu and nearby New Caledonia, according to Petuch and Sargent's **Atlas of the Living Olive Shells of the World** (1986). Its size is relatively constant at about 40 mm. A typical dorsum is dark gray with reddish overtones and numerous black spiral bands. The lip and the columella are bright orange; the aperture interior is paler.

Petuch and Sargent describe a separate lighter-color form with a higher spire than the type and a paler pattern. In the shells brought back to New Zealand by Ron van Prehn were intergrades of dark and light forms, although the paler specimens were extremely uncommon. Appreciable differences in spire heights did not appear to be related to colors.

Oliva rubrolabiata, with its limited range and obvious beauty, is much sought after by serious collectors, many of whom consider it to be the rarest of the olives. Petuch and Sargent, however, regarded it as "relatively common in its range." In van Prehn's experience, the shell is relatively common only in one very small area. Other areas within its apparent range had no shells at all, he reported.

Most specimens were brought in by children of the village of Vetu Boso on Vanua Lava in the Banks group. They free dived for them in five to 10 meters of water from canoes off their village. The fact that ***O. rubrolabiata*** are found only on black volcanic sand further limits their distribution since most of the Torres islands and many

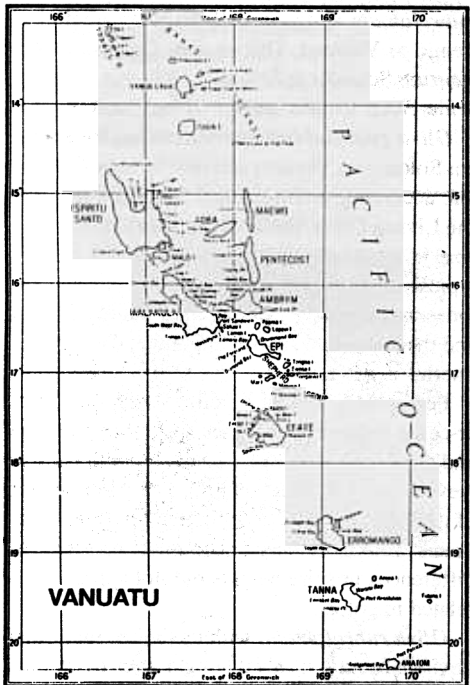
in the Banks group have white sand beaches. They are not found intertidally.

The animals are active at night, presumably feeding. They remain at least partly buried in the sand by day.

Van Prehn reports that ***O. tricolour*** Lamarck, 1811, ***O. vidua*** Röding, 1798, and ***O. carneola*** Gmelin, 1791 in all color forms were found.

Two years is a long time to be stranded in the Torres Islands. During his stay van Prehn was able to visit many villages in northern Vanuatu and the southern Solomons, where shells play an important part in the local culture and traditions. Consequently, he had a good opportunity to note where species are found. The olivids are generally widespread, he learned, but ***O. rubrolabiata*** was not evident in most areas. Nowhere in the southern Solomons did he come upon live specimens, seeming to confirm the theory that ***O. rubrolabiata*** exists only in scattered pockets within its supposed range.

In summary, it seems reasonable to say that, although ***O. rubrolabiata*** occurs in reasonable numbers, it is confined to a few isolated islands of central Melanesia. Its status as a Very Special Shell is justified.



WELCOME TO HAWAII

Overseas members of the Hawaiian Malacological Society who plan to visit Hawaii are encouraged to inform the Corresponding Secretary of the Society in advance. Meetings are on the first Wednesday of each month. Visitors are welcome. The Society office is open irregularly and has no telephone, so that last-minute contact usually requires reaching individual members at home. The Waikiki Aquarium and the Malacology Department of the Bishop Museum can furnish names.

Shell divers of Vetu Boso Village on Vanua Lava island in the Banks group. Photos from Hart

Wanted: the very rare book **Zoology of New York,** by James E.de Kay, 1843-1844, Part V, Mollusca, pp.217 and 40 hand-colored pl, and Part VI Crustacea, 70 pp. and 13 hand-colored plates. Folio. In exchange, cone shells from the Caribbean .

For more information, write: Peter Reichert, Goetzbachweg 14, 6920 Sinsheim, Germany.

* * * * * *

Another new HMS member is Jose Ramon Gutierrez Sanchez of Malaga, Spain. He is interested in exchanging worldwide and Mediterranean shells, whether common or rare. He has a great many Mediterranean specimens, he adds. The full address is % Juan Cortes Cortes 2/7oF, 29010 Malaga, Spain.

SHELLETTERS

ATLANTA, GA

I need help with my collection of Hawaiian ***Cypraea*** and **Conus!** If any members could please write to me with lists or other information on these two families, I would be very appreciative.

Dorrance Lee Davis R.N.,
145 15th St. #824
Atlanta, GA 30361

Note: The most complete list is in **Hawaiian Marine Shells, Reef and Shore Fauna of Hawaii Section 4: Mollusca** (1979), by E. Alison Kay. Bishop Museum Press, Honolulu. A more recent and somewhat handier volume for the beginner is **Shells of Hawai'i,** by E. Alison Kay and Olive Schoenberg-Dole (1991). University of Hawaii Press.

Publication Notices:

THE CHITONS OF PUERTO RICO (Los Quitones de Puerto Rico; Guia Para la Identificacion de Organismos Marinos de Puerto Rico) by Cedar I. Garcia Rios., University of Puerto Rico Sea Grant Program. UPR-E1-33. 1988. 46 pages, in Spanish. Ten pages of black-and-white illustrations. Price not stated.

As the title reflects, Los Quitones de Puerto Rico is about chitons (***quitones*** in Spanish) of the island Commonwealth of Puerto Rico. The illustrations consist of two hand-drawn pages and eight pages of photographs. The bibliography starts with R. Tucker Abbott's **American Seashells** (1954), and concludes with G.T.Watters' article from **The Nautilus** 95(4) (1981). This little book could be quite useful for identifying Caribbean chitons. The glossary offers plain-language explanations of technical terms. Even those not fluent in Spanish could benefit from this informative publication.

Copies may be obtained by calling or writing Centro de Educacion Marina Sea Grant, Estacion Postal CUH, Recinto Universitario de Humacao, Humacao, Puerto Rico 00661. Tel. (809) 850-0710

Liz Kane

Copies of **Schriften zur Malakozoologie,** a relatively new shell publication that is still little known outside Europe, reached Hawaii recently. It is published by Haus der Natur — Cismar (Malakologisches Museum) of Gromitz-Clamar, Germany with Dr. Vollrath Weise in charge.

Issue No.5 includes papers dealing with a new species of Helicidae from the Canary Islands, a number of ***Cypraea*** revisions proposed by Felix Lorenz (see "Cowries: The Old, the New, and the Synonyms," **HSN** October 1992, p.3), and studies of fossil molluscs. There is a useful list of new books, mostly published in Europe, dealing with malacology.

The address is Hinter dem Kloster 42, D-W-2433 Gromitz-Cismar, Germany.

WEIL'S CONCHYLORUM INSTRUCTORUM XII: Trading

By Arthur Weil*

Basically, there are three ways to acquire seashells: collect them yourself, buy them, and trade for them. Other less basic ways are inheriting them, stealing them, making a list for Santa Claus, and raising them in your own aquarium. This time we'll talk about trades.

Trading probably has more pitfalls than buying. People tend to over-estimate the value of what they offer and underestimate what YOU have.

I never trade. What I do is, I give and I get.

When you try to match values closely, no one is ever happy. And a bad trade is not worth losing a friend over. If you're the kind who decides that you are sending out $30 worth of shells and you darned well want not a penny less than that in exchange, don't do it.

Just give and get.

Collect a conservative supply of local whatevers. I live 700 miles from the nearest beach. But nearby streams have some beautiful bivalves found nowhere else. They are not rare shells, but people in Australia or Hawaii can't get them. Dealers generally don't list them. So I use them to trade for whatever they have in Australia or Hawaii. I haven't the slightest idea of their value.

Any place you live has local mollusks. Some are on trees, some in streams, some on beaches. What is common to you may be rare for someone else.

My field is Epitoniidae (wentletraps). Of the known species, I have a pretty good assortment. Some are rare. But of the ones I don't have, some are common in their own area, so common that dealers won't bother with them. I still need someone to go to the beach, pick up a few, and send them in exchange for my bivalves, my autographed picture, or my wife.

If you're going to trade one specific shell for another specific shell, throw the price list out the window. Otherwise, you're just going to brood about who got the best of the trade. A shell's value is really not a number but what it means to you.

If you're in a club, one thing you can do is have a trade night. Everyone brings his extras and things he'd like to get rid of. Remember the traders' maxim: one man's junk is another man's treasure. Everyone goes home happy. If you trade through the mail, either know who you're trading with or approach the trade with the idea that even if you get nothing, you could afford the loss. Funny thing is: when people trade, they usually want to make sure the trading partner is happy. Most of us value our reputations higher than the trade. We tend to slip in something extra. We want people to like us. The occasional bad buy gets known and spoken about.

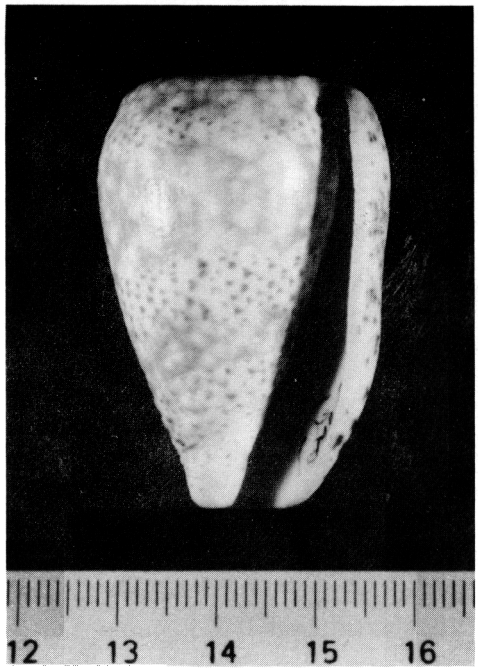
Just to give you an idea of how dealing and trading get interspersed, a few years ago I bought a group of mixed shells from the Philippines. Among them was a map cowry with some really strange markings on it. I took it to a shell show and showed it to Donald Dan, who knows shells and has a reputation Abe Lincoln would have admired. He said the magic words: "Wanna trade?" I got a ***Conus dusaveli*** for the cowry. I was happy. Dan had a customer for my shell so he was happy. I'm still happy. That's a good trade.

In its way, trading shells is like trading baseball cards: three Sparky Andersons for one Johnny Bench. Try to tell the other guy what you have and what you "might" be in the market for. Get him to make the offer.

On another level, shells get to be part of the family. With some you would just hate to part. In my case, my will clearly divides my money and property — with one exception. I've decided to take my shell collection with me. Given eternity, I might just complete my Eps and the book about them.

*5662 Delhi Pike, Cincinnati, OH 45238

Conus adamsonii in New Caledonia



Queensland Museum specimen of *Conus adamsonii* from New Caledonia.

By Darryl Potter*

BRISBANE — The Queensland Museum's malacology department specialises in land snails and bivalves. It is not noted for an extensive collection of marine gastropods. It does, however, contain the occasional rare shell. As luck would have it, there is one specimen of ***Conus adamsonii*** Broderip, 1836 (see **HSN** December 1991 and August 1992). Interestingly, it falls just outside the distribution and normal size range as quoted by Mike Hart (1992).

Unfortunately, I had missed Hart's earlier article which, he had hoped, would stimulate comment from collectors and malacologists on the distribution, size, shape, etc. of this handsome but relatively rare species.

The Queensland Museum specimen came originally from the Baker collection via the Colliver collection. The locality, New Caledonia, is recorded in Baker's original catalogue. The lilac-patterned shell is 48 mm in height, which may be unusual for specimens from the western Pacific. According to Hart (1992), most specimens are between 30 and 45 mm except for those from the Marquesas which tend to range from 42 to 51 mm.

Estival (1981) does not record ***C. adamsonii*** from New Caledonia. Walls (1978) previously said it was "definitely recorded" from the Great Barrier Reef and "also extending" to New Caledonia. The Barrier Reef record is termed doubtful by Marsh and Rippingdale (1974).

There seems to be little reason, however, to doubt its occurrence in New Caledonia. This is a small range extension, considering that it is recorded from the Society, Tuamotu, Marquesas, Tubuai, Cook and Solomon Islands and American Samoa. These islands represent a vast region of the central and western Pacific and the species is rarely found in any case.

*Queensland Museum, Brisbane, Australia.

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Marsh, J.A. & Rippingdale, O.H. (1974). **Cone Shells of the World.** Jacaranda Press; Brisbane.

Walls, J.G. (1978). **Cone shells: a synopsis of the living Conidae.** T.F.H. Publications: New Jersey, U.S.A.

museum

This is the logo of the Queensland Museum that should have run on Page 2 of the March issue. Sorry! Human error.

Members outside the United States are asked to pay membership dues and other charges with a bank cheque (not a draft) payable to HMS on a U.S. bank and bearing a "transit enrouting and account number" or with an International Postal Money Order. Be sure your name and address appear on the cheque or money order.

Photo: Keith Coburn

*Colorful **vintas** line the shore of the Sulu Sea at Zamboanga, in the southern Philippines. With their characteristic "awning-stripe" sails, slender hull and outrigger, these crafts are able to run away from an ordinary power boat in a steady wind.*

***Vinta** crews without equipment collect all manner of marine life from depths down to a hundred feet or more. In slightly larger craft, they can handle tangle nets and other deeper-water gear.*

*Shell wholesalers from Manila and Cebu take most of the valuable shells brought into Zamboanga, but the **vinta** skipper usually keeps a small stock on hand in case a visitor asks what he caught today. The photo is from a hotel window.*

LAW SOUGHT TO CURB PALEONTOLOGY

All collecting of fossils on public lands in the United States would be illegal under a bill introduced in the Senate last year by Sen. Max Baucus of Montana. Senate Bill 1307 awaits action by the Senate before being transmitted to the House of Representatives.

"Public lands" include the National Park System (more than 80 million acres), national forests, defense installations, seashores and many rivers.

Such a law would "create an intolerable restriction on fossil collecting, affecting those of us here in Hawaii who study fossil specimens along with our marine shells," points out HMS member John Jacobs. "The present wording of the Baucus bill does not differentiate between bona fide scientific study and casual gathering of fossils."

The attempt to "protect" fossils apparently is a result of discovery on an Indian reservation in Montana of an almost complete skeleton of an extinct ***Tyrannosaurus rex,*** for which the owner of the ranch was paid $5,000. It subsequently was confiscated by federal marshals. Now several groups claim ownership, amid estimates that the prize is worth up to $20 million.

"Too many Americans confuse paleontology with archeology," comments the newsletter of the Paleontological Research Institute at Ithaca, NY. "Education of the public about the difference between fossils and artifacts is a must."

Speaking of Books

THE RETURN OF BEAUTIFUL SHELLS

THE CLASSIC SHELLS OF THE WORLD. Written and published by T.C. Lan. Taipei. 1993. 224 pp. More than 200 color plates, index by families, 8 pp of comments on shells illustrated.

Until about 250 years ago, when Linneaus began systematizing species, shells were cherished for their beauty. Scientific interest has increased through the years, however, and in recent decades this has made collecting beautiful shells somehow indecent.

The best evidence of this shift of view perhaps has been the paucity of new books showing seashells as things of beauty. Where were the successors to **The Shell: Five Hundred Million Years of Inspired Design,** by Hugh and Marguerite Stix and Tucker Abbott (1968), for example? The field has been dominated by monographs on molluscan families or shells of a certain region (often well illustrated, granted, but far from beautiful).

The drought appears to have been broken by the recent release of two coffee-table volumes. The first, **The Classic Shells of the World** by dealer T.C. Lan of Taiwan, is unabashedly gorgeous, with lavish color, a good selection of beautiful specimens and a minimum of technical data, all on large-format ($11\frac{1}{2}$ by 13 inch) pages. The subjects come from the collections of Lan himself and about a dozen notable "beautiful shell" people around the world whom he acknowledges in his foreword.

T.C. Lan is a frequent visitor to the United States, Australia, Southeast Asia and Japan. He was in Honolulu last year to participate in the Hawaiian Malacological Society's semicentennial shell show and auction. At that time he spoke enthusiastically (and with complete justice, as the finished product shows) about his soon-to-appear book. It is a volume you can show skeptical friends when they ask why you collect shells.

The review copy contained no indication of price or where to order copies.

The current revival of "beautiful-shell" books seems to have been inspired — or at least anticipated — by the revised and enlarged edition of **World Seashells of Rarity and Beauty** that appeared late in 1991 (see Walter Sage's review, **HSN** Feb. 1993, p.8). Based on the famous collection of Ryosuke Kawamura of Japan, it, too, is a dazzling display, with perhaps a greater emphasis on rarity than in the Lan work.

About a decade ago Ryosuke Kawamura donated his fabulous private collection (at that time, the largest and finest in Japan) to the National Science Museum in Tokyo. Subsequently, the museum and the Malacological Society of Japan cosponsored an exhibition in 1983 that attracted the late emperor, himself a marine biologist and a shell collector. The first edition of **World Seashells** was published at that time.

At age 95, Kawamura continues (at last reports) to add shells to make his donated collection "more comprehensive." His enthusiasm inspired three of Japan's most respected malacologists, Dr. Akihiko Matsukuma, Dr. Takashi Okutani and Dr. Tadashige Habe, to revise and enlarge the first edition.

In their foreword to the new edition, the three scientists offer a thought for all who enjoy the beauty of even common shells:

> "Shells have attracted interest and admiration from olden times because of their color and elaborate shape and sculpture. Books illustrating beautiful shells and offering scientific identifications have been published in both the West and the Orient for the past century . . . But some species that once were rare have become common today. Collecting has been intensified even into remote lands and to great depths. And, at the same time, many once common species are becoming rare because of habitat destruction, whether by natural disaster or by human pollution. Therefore this volume focuses on the beauty of shells, rather than on rarity or commonness."

Distribution of **World Seashells of Rarity and Beauty** is handled by Takashell Co. Inc., P.O. Box 14, Kashiwara, Osaka 582, Japan. Some shell clubs may enjoy discounts.

The color reproduction and binding of both the above volumes are excellent. They can be displayed with pride.

S.L.

THE EDGE OF THE FOSSIL SEA, by Dr. Edward J. Petuch. 1992. Sanibel Island, FL: Bailey-Matthews Shell Museum. 80 pp. incl. foreword, index, bibliography, lists of shells by area, numerous black & white illus. $12.95.

Many readers will feel that the author's artwork is the highlight of Dr. Ed Petuch's extended essay on the history of the fossil pits long exploited by Florida landowners, builders and shell collectors. Petuch's representations of the once-living molluscs and other marine life of southern Florida's middle Pleistocene reefs and shallow seas are excellent. Petuch obviously is well acquainted with the period into which he is generously introducing us.

This enlightening book reveals Pleistocene Florida as having been a living, vibrant place, fuller of now-extinct molluscs than we can easily imagine today. Most of it is now buried beneath concrete and asphalt, but fossils remain available to resourceful scientists and shell collectors. Obviously, Petuch qualifies for both designations.

Publication of this attractive soft-cover volume — the Bailey-Matthews Shell Museum's second — was supported by a grant from Albert and Mary Bridell of Sanibel. Copies are available from the Shell Museum postage free.

SIPUT DAN KERANG INDONESIA (Indonesian Shells), by Bunjamin Dharma. 1988. Jakarta. PT. Sarana Graha. 111 pages, 35 full-page color plates.

Although written in Indonesian, this book is not as daunting as the title suggests. The text — chapter titles include "Klassifikasi" and "Biologi" — takes up only the first 30 pages. It is illustrated with reasonably self-explanatory charts and drawings. The color plates that fill the rest of the book are lovely, and the shells are identified by their Latin names. Descriptions are in English as well as Indonesian. The photographs alone make this book worth perusing.

Available from Jl. Tawakal VI/12 A, Jakarta 11440, Indonesia. Phone 593435.

Liz Kane

AFLOAT AND ASHORE IN THE MARQUESAS

HMS vice president and program committee chair Betsy Harrison Gagne scheduled herself as speaker at the Society's February meeting to give a substantial turnout of members a vicarious cruise through the Marquesas Islands in the South Pacific.

The Marquesas, an isolated group of mostly "high" islands at the northeastern extremity of French Polynesia, have flora, fauna and human problems that sounded familiar to the visitors from Hawaii. In fact, archeologists conjecture that Hawaii originally was settled by voyagers from the Marquesas some 1,500 years ago.

The waters around the Marquesas are cooler than Hawaii's and consequently have never supported fringing coral reefs, Betsy explained. The sea floor drops quickly. Of volcanic origin, the mountains are cut by deep, steep valleys where her party found **ohia-lehua** trees with characteristic red flowers and lobelias dangling precariously from cliff faces, reminiscent of the Koolau Range behind Honolulu.

The islands of Nuku-Hiva (site of the principal airport), Eiao and Fatu-Hiva are plagued by feral sheep ("wooly maggots," Betsy termed them). The islands, however, still support many endemic plants, insects and land snails that are being severely impacted by introduced plants such as pine trees and Lucaena, along with goats, horses, sheep and pigs disturbing the vegetation cover.

The dichotomy of Eiao Island and Hatutaa, barely visible on the horizon, is stark, commented Betsy. On Eiao, sheep have grazed the land bare to the red soil. When it rains "the island bleeds," she said. But foreign herbivores have never been introduced to Hatutaa. The island is green with native vegetation. Booby birds and an endemic ground-nesting dove nest safely.

Additional travel included visits to Ua-Pou, with its high spires, her favorite, and to Hiva-Oa, the burial place of artist Paul Gauguin.

The Marquesas cruise was no vacation jaunt, said Betsy in her opening remarks. It was a plant-and-insect-collecting expedition for the Bernice P. Bishop Museum of Honolulu, assisted by a generous yacht owner-skipper, Ed Carus of Honolulu. Several Hawaii scientists volunteered their services, along with French workers from the Fatu Hiva Biological Expedition, which was in the field at the same time.

And the shells? Plant and insect collecting left little time for them, she said. She did manage one ocean dip to find a ***Chicoreus steeriae, Cypraea cassis rufa*** and a ***Lambis crocata pilsbryi*** (a giant endemic form). And she trod a Nuku-Hiva beach composed almost entirely of cerithiids and tiny ***Heliacus variengatus.***

Dwayne Minton

UNDERWATER IN RUSSIA

An unexpected but welcome guest at the March meeting of the Society was Valeri B. Darkin, a marine biologist and scuba diving instructor from Vladivostock in the Russian Far East. His American itinerary includes several U.S. coastal communities.

In response to members' questions, he told of his (and his associates') efforts to conduct a life-aboard diveboat-charter service in Peter the Great Bay, off the Sea of Japan. The operators appear to be independent of the Russian government.

In a cruise out of Vladivostok lasting five to 12 days, Darkin explained, at least 20 mostly steep-sided offshore islands and three wrecks are within reach, plus "wall diving" to 130 feet. Water temperatures in summer range from 60 to 70 degrees Fahrenheit (15 to 20 C), and there is little tidal current.

His organization operates two dive boats. The larger is a 96-foot former ocean-going rescue craft, custom rerigged for diving and with accommodation for up to 12 persons. Photos shown by Darkin of dive boats and underwater life were very impressive.

SL

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CYPRAEA FULTONI for sale. 73 mm. Gem condition, outstanding colour. See **HSN** April 1992. Colour photos available. First offer of U.S. $3,000 o.n.o. secures this magnificent shell. Elizabeth Kinloch, 16, Scottish Firs, Foãnhope, Hereford HR1 4NW, England.

SHELLS FOR SALE

Taxonomic Acrobatics

(Cont'd from Page 1)

progressively darkening almost to black towards the tip."

However, soon after, I was able to obtain a copy of Kohn's (1978) **The Conidae (Mollusca: Gastropoda) of India** and also had an opportunity to examine the holotype of ***C. hyaena***, in the Museum d'Histoire Natural, Geneva. This led to further in-depth research, detailed in a 1985 paper, which provided irrefutable evidence that: (a) ***C. hyaena*** does not occur in India and the species mistaken for it is ***C. mutabilis*** Reeve, 1844; (b) the holotype of ***C. halli*** matches that of ***C. hyaena*** so closely, the Java population should be correctly changed to that of being the original ***hyaena***; ***halli*** to become a synonym thereof. The conclusion that ***mutabilis*** cannot possibly be ***hyaena*** is substantiated by its much wider shoulders and noticeably constricting body-whorl towards its basal end; its consistent brown pattern of longitudinal flammules without any of the many variations seen in ***C. halli*** (now ***C. hyaena***), and the different animal in life, described by Kohn as: "sole of foot grayish brown, streaked with dark gray; sides of foot also grayish brown, but more brown than [the] sole. Dorsum of siphon black distally, lighter proximally; sides black at tip, gray proximally. Tentacles opaque white with gray dorsal streak."

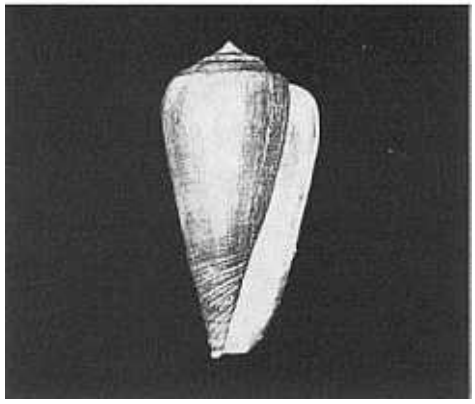

Fig 5. Lectotype of ***Conus unicolor*** Sowerby I, 1841 according to Rôckel & Korn (1992).

As the position stood at this point, one was surely entitled to consider that: (a) there are established differences between the two populations and the one in India is indubitably ***Conus mutabilis***; the other in Java, ***C. hyaena***; (b) the two are distinct and separate species, congeneric but not conspecific, and (c) the population in the west Pacific treated by Walls (1979) is a still unrecognized new species.

Table 1. **Comparisons of Soft Part Characters**

	C.h. hyaena Bombay (ex ***mutabilis***)	Java (ex-***halli***)	***C.h. concolor*** Solomon Is./ Papua New Guinea (ex-Walls ***concolor***)
Operculum			
-length	10 mm	7 mm	5mm
-length-ratio OP/shell	0.1859	0.150	0.110
-shape	elongate, paddle shape	stout, paddle shape	oval
Radular tooth			
-length in mm	0.53-0.70	0.68-0.71	0.48-0.50
-length-ratio RT/shell	0.010-0.013	0.014-0.015	0.011
-ratio of max. adapical diameter	0.0075	0.080	0.100
-number of denticles	32 - 37	22 - 26	27 - 29

Or, so it seemed!

A few weeks ago, Gabriella Raybaudi sent me a copy of **Acta Conchyliorum** # 3, 1992, which carried an article, co-authored by Rôckel and Korn, proclaiming that "discovery of the specimen on which the original illustration in **C.I.** pt 54, f 59 [fig 2 herein] had most probably been based (Kohn, pers. comm., 1991) suggested a revision of the hypothesis . . ." that ***C. concolor*** is a distinct species (or a color form of ***C. hyaena***). The authors then declared that the new status should henceforth be ***Conus hyaena concolor*** Sowerby I, 1841!

She suggested that if I agreed with her views, I write an article to express specifically her main concern that the revision of a taxon, which she considers a *nomen dubium*, should not have been completed and published in such a hasty and irregular manner and the Rôckel & Korn should not have designated a different lectotype (fig 5) without providing any relevant data of its actual source, except to mention that it was still "in preparation by Kohn," and, additionally, that it even differs in shape and size from the original lectotype figure!

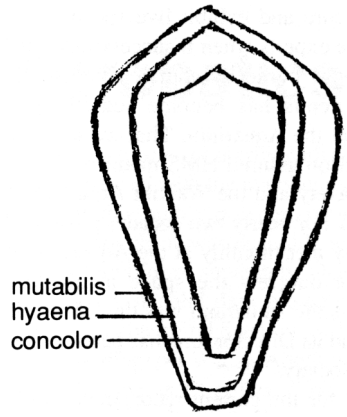

Fig 6. Outlines of ***Conus mutabilis, C. hyaena*** and ***C. concolor***

Since all of their arguments rest on the character-comparison of three completely separate populations, we reproduce the data they furnished for the readers review (table 1).

Missing was any comparison on coloration of the shell or of the animals in life which Kohn and I gave previously. In any event, after perusal of the data, what will appear to be most astonishing to the reader is that all three populations, with the first two claimed to be totally conspecific, actually have *nothing* in common! Most surprising of all is that the morphometric measurements, the prime purpose of which is to prove positive similarity because of conspecific relationship, are all unmatchable! Perhaps a configuration of the three populations (table 2) will show why the numbers are irreconcilable.

Lately, there has been a spate of published articles serving no purpose other than to demote the status of already established valid species to subspecific level. The biological significance of such taxonomic revisions was not explained. Therefore, in addition to G. Raybaudi's protest, one well may ask: if distinct zoogeographical populations which are allopatric, with clearly visible differences in shell shape, shell pattern, its maximum population shell size, animal coloration in life, radula, operculum and lastly, but not the least, morphometry, can still be regarded as conspecific, then what indeed is there left to qualify a distinct species?

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Table 2 ***Shell Morphometry***

	C.h. hyaena India	Java	***C.h. concolor*** Solomon Is./ Papua New Guinea
L	40 - 73 mm	39 - 50.2 mm	40 - 57 mm
RW g/mm	0.17 - 0.53	0.15 - 0.26	0.15 - 0.35
RD	0.61 - 0.71	0.55 - 0.67	0.56 - 0.62
PMD	0.78 - 0.86	0.79 - 0.88	0.81 - 0.89
RSH	0.09 - 0.18	0.11 - 0.14	0.08 - 0.12

WHAT'S NEW AT THE WAIKIKI AQUARIUM? Everything!

By Dwayne Minton

Honolulu's Waikiki Aquarium, third oldest in the United States, is undergoing a $3.3 million renovation that will make it an "aquarium for the twenty-first century," according to Dr. Bruce Carlson, its Director and a Counselor of the Hawaiian Malacological Society. He discussed the ongoing changes and future plans for the Aquarium at the March HMS meeting.

The Waikiki Aquarium has been a world leader in study of the nautilus. It was among the first to secure and exhibit live specimens, and startled the experts when it successfully hatched nautilus eggs borne by captive animals. Since then the genus has become something of a specialty at the Aquarium. That work will continue, Carlson assured HMS members.

The Society and the Waikiki Aquarium have strong ties. For nearly two decades prior to 1972 the Society met monthly at the Aquarium, until attendance outgrew the space available. For many years the Aquarium was the HMS official address and its Director long has been associated with the Society.

Money for the current reconstruction comes from a 1988 appropriation by the Hawaii State Legislature and from private fund-raising efforts by the Aquarium itself and its friends.

The interior of the main aquarium building has been gutted. The four public galleries await new carpeting, aquarium facades, and modern interactive labels. Gallery One is focused on marine communities of the South Pacific because, explained Carlson, "that's where our Hawaiian fauna came from." Staghorn corals are being cultivated for life in a "typical South Pacific reef."

Gallery Two will showcase Hawaiian reef and shore communities as a comparison with the South Pacific habitat in Gallery One.

The diversity of marine life is to be displayed in Gallery Three. It will feature sea creatures with specialized adaptations such as sea horses, angler fishes and harlequin shrimps. Another feature is a new 40,000-gallon shark tank, featuring Hawaiian species.

Outside, the Hawaiian monk seal pool is being extensively renovated, with new coconut trees and rocks on its border. For visitors, an underwater window is in the plans. Regrettably, Carlson admitted, some 90-year-old palms had to be sacrificed. They are being replaced by younger— and safer— trees. Nearby, a small garden of native Hawaiian plants already is prospering.

Despite the extensive physical changes, the Aquarium will not change its mission, Carlson assured the Society.

"Education is still our primary purpose," he said. "It is important to know the world that you live in and its animals."

Tom Kelly photo courtesy Waikiki Aquarium

Demolition of the Waikiki Aquarium's old shark tank has been completed; the new "Hunters of the Reef" display taking its place will be four times larger. The photo looks out from what used to be the behind-the-scene staff work area. Construction of the new exhibit will be under way by mid-April.

As one important step in fulfilling the education mission, state-of-the-art audio-video equipment has been installed in the Sea Visions Theater. The Aquarium's volunteer guide staff is being expanded. The latter for several years have been supervising the Edge of the Reef exhibit where reef organisms can be examined close— and even handled.

"We will continue to fund the Blue Water Marine Program [of the Hawaii school system] for high school students," Carlson emphasizes, "as well as our popular Mahimahi (*dorado,* or dolphin fish) 'nursery'. And, hopefully, we will produce more award-winning educational films for BBC, PBS and NGS Explorer.

"When will the renovation be completed?

"The contracts call for the last workmen to be out of here by the end of July 1993. A few weeks after that, look for completely new, first-class exhibits with more interactive displays and advanced technology to help visitors to see and learn."

If you would like to help by becoming an Exhibit Sponsor, contact Dr. Bruce Carlson, Waikiki Aquarium, Honolulu, HI 96815 or phone (808) 923-9741 for details.

I'M GLAD YOU ASKED THAT

I notice **Hawaiian Shell News** frequently uses the spelling ***mollusc***, but at other times it's ***mollusk***. What is the difference? O.S.

Essentially, the choice between ***mollus***c and ***mollusk*** is a matter of taste or personal preference. Most dictionaries are equivocal on the spelling. On the **HSN** editor's desk, **Webster's Ninth New Collegiate Dictionary** lists "***mollusk*** or ***mollusc***." In its Explanatory Notes, **Webster** says that when the main entry is followed by the word *or*, then another spelling, the two spellings are equal variants; "Both are standard, and either may be used according to personal preference." The **Random House Dictionary of the English Language** similarly lists ***mollusk*** first, then "also ***mollusc***," a "common variant spelling."

On the other hand, the **Manual of Style** prepared by the U.S. Government Printing Office in Washington, D.C. lists ***mollusk*** only. This means that all U.S. Government docuements — and anything dependent on government money — will be spelled with a *k* — and no arguments, please.

H.W. Fowler's **Dictionary of Modern English Usage** second edition has no reference to ***mollusc/mollusk***. Follett's **Modern American Usage** is equally silent.

Hawaiian Shell News, however, has an ironclad rule for its writers: use whichever form you prefer. Either is acceptable, subject to the unpredictable whims of the editor. He prefers ***mollusc*** himself. S.L.