January, 2000 Feature articles Index
(All items new this month)

Happy New Century

NOTE: This section is on line in both HTML and Acrobat versions. In the Acrobat version, the only links that are effective are those in a red box (Links to the General Index). It is recommended that Acrobat users select Bookmarks using an icon on the upper left. This will give you links to each article or species presented. Viewing at 150 or 200% magnification is recommended for a closer view of the photos. Normally use the hand icon for moving around a page and the left/right arrows on the icon strip at the top of the page to change pages.

Go to General Index

Small Shells of the Classic Turridae from Taiwan

Part 10 Oenoptotinae Species

By **Chen-Kwoh Chang ***

* 1373 Phelps Ave. # 8
San Jose CA 95117
Email: ckchang@mail.netzero.net

Species 119. *Guraleus pictus*

(Adams & Angas, 1863)

This fusiform specimen is 8 x 4.1 mm colored buff to light violet. It has 5 teleoconch whorls, angled at the periphery and with a concave to straight shoulder. The protoconch has 3+ smooth, convex, buff whorls with light violet on the top. There are 11 distant, angulate ribs on the penultimate whorl. There are numerous spiral threads. The aperture is ovate and has a short, sinuous anterior canal dorsally notched. The outer lip is thin with many external spiral cords crossing the edge. The sinus is shallow and broad on shoulder slope. This is the Type species of Genus Guraleus and is the most variable species living in shallow water on the reef.

Species 120. *Guraleus fascinus* Hedley, 1922

This fusiform shell is 4.1 x 1.6 mm is yellow with white spiral bands on the body whorl to orange on the spire with a white peripheral band on rib tops. There are 6 teleoconch whorls, angled at the shoulder. It has broad ribs stronger at the center and obsolete at both sutures. There are about 12 ribs on the penultimate whorl with minute spiral threads. The first teleoconch whorl has many more fine, curved, axial ribs with an abrupt change at the second whorl. The protoconch has 3 pink, convex, smooth whorls yellow on the top on the last whorl. The aperture is narrowly ovate with the anterior canal short and without a dorsal notch. The outer lip is thin with faint threads across the edge. The sinus is broadly shallow.

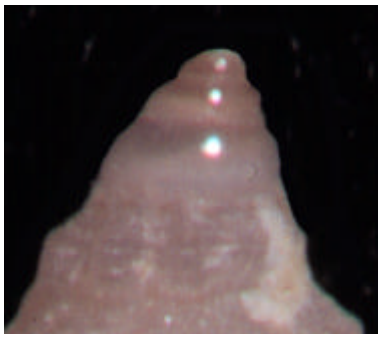


Fig. 119 *Guraleus pictus*
(Adams & Angas, 1863) 8 mm from Dahli, N.Taiwan.

Fig. 120 *Guraleus fascinus* Hedley, 1922
4.2 mm from North Taiwan.

Species 121. *Guraleus stephenensis* Hedley, 1922

This white or pale-yellow, fusiform shell is 7 x 2.5 mm with a spire about 1.2 times the aperture length. It has a narrow body whorl and a short anterior canal without a dorsal notch. Its protoconch is broadly conical with 2-1/2 convex, smooth whorls colored as the teleoconch. Adult sculpture has axial ribs crossed by fine threads. There are 7 ribs on the penultimate whorl. The aperture is narrow. The outer lip is thin and the sinus is a broad shallow excavation occupying most of shoulder slope.

Species 122. *Macteola anomala* (Angas, 1880)

This broadly biconic shell is 4.7 x 2.5 mm and has 4 angled teleoconch whorls. The protoconch has 2+ smooth pink whorls. There are stout, strong axial ribs with 7 - 8 ribs on the penultimate whorl. Surface is covered with spiral threads. The aperture is narrow, the canal is short and outer lip is thin. The sinus is broadly shallow. It is buff or pale pink and yellow in color with interrupted red-brown lines below the base periphery. This is the type species of Genus Macteola. Its ventral view has also been shown as Fig 11 of part 4 of this series.

Fig. 121
Guraleus stephenensis
Hedley, 1922
7 mm from North Taiwan

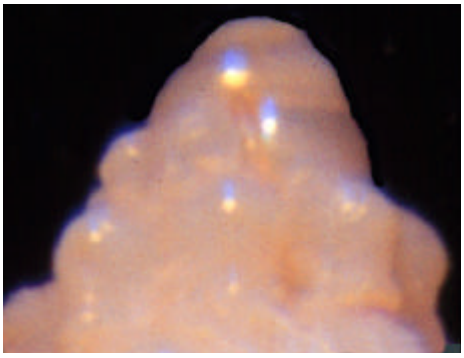


Fig. 122. *Macteola anomala* (Angas, 1880)
4.7 mm from Lutao, Taiwan

Species 123. *Macteola segesta* (Chenu, 1850)
This species, looks like *M.anomala* (Angas) in shape but (a) its protoconch is paucispiral of 1+ smooth whorls; (b) it has more ribs (about 10 ribs on the penultimate whorl); and (c) its color is white with more spiral, interrupted, reddish-brown lines on the base. This specimen is 5 x 2.8 mm.

Species 124. *Macteola interrupta* (Reeve, 1846)
This ovate-biconic shell is 6.7 x 2.4 mm with 4 - 5 angulate teleoconch whorls with convex subsutural sulcus [Groove]. The shoulder is concave. It has strong, stout ribs overridden by spiral threads. There are about 12 ribs on the penultimate whorl. The outer lip is thin and the sinus is shallow. It is white in color ornamented with fine interrupted brown lines subsuturally and on the base. There is no dorsal notch.

Fig. 123 *Macteola segesta* (Chenu, 1850)
5 mm from Lutao, Taiwan

Fig. 124 *Macteola interrupta* (Reeve, 1846)
6.7 mm from Lutao,Taiwan

Species 125. *Macteola theskela* (Melvill & Standen, 1889)

This 4 x 1.5 mm species looks like *M. interrupta* (Reeve) but has (a) less ribs , (9 on the penultimate whorl); (b) stronger nodes on ribs; (c) is more creamy in color with a single wider, interrupted reddish brown line above the suture on each of the last two whorls; and (d) it is relatively wider and has a more concave base. There is no dorsal notch.

Species 126. *Macteola* sp. A

This specimen is 4.4 x 2.5 mm and is broadly ovate-biconic with 4 teloconch whorls. The protoconch is paucispiral with 2+ pink, convex whorls. It has stout ribs (10 - 11 to the penultimate whorl) overridden by spiral cords. The aperture is moderately narrow with the columella angled. The canal ia short but extended sinuously on the columella side. The canal is truncated but has no dorsal notch. The outer lip is thin and the sinus is wide and shallow. The shell is white to light violet in color with a prominent reddish-brown band at the suture and 2 bands on the base.

Fig. 125 *Macteola theskela* (Melvill & Standen, 1889)
4 mm from Lutao, Taiwan.

Fig. 126 *Macteola* sp. A
4.4 mm from Lutao.

Species 127. *Pseudoetrema fortilirata* (E.A. Smith, 1879)

Ocher in color with a very tall, slender spire this specimen is 8 x 2.7 mm. It has rounded axial ribs and spiral cords (8 ribs and 3 cords on the penultimate whorl) and an undulate subsutural cord. The aperture is small and ovate. The outer lip is thin and the sinus is deep and "U"-shaped. It is operculate according Habe (1964), but I don't think it is desirable to place it in Mangeliinae as Powell (1966) did.

Species 128. *Benthomangelia trophonoidea* (Schepman, 1913)

This fusiform shell is 9 x 3.7 mm has a tall spire and tapers from the body-whorl to a moderately long anterior canal. The shell wall is thin. There are 5 medially angulate teloconch whorls. It has narrowly crested oblique axial ribs with prominent tubercles at the shoulder. Ribs become obsolete at both sutures. From the angulation downward, the ribs are crossed by flat-topped spirals with a node at the intersections. The aperture is long and narrow. The outer lip is thin and the sinus is shallow and located on the shoulder slope. The shell colour is white. Radulae are of toxoglossate type and were figured by Thiele (1929-1935). It occurs in Flores Sea and Ceram Sea at about 800 meters but this specimen was found off Bahdutze, North Taiwan at an unknown depth.

Fig. 127 *Pseudoetrema fortilirata* (E.A. Smith, 1879)
8 mm from Lutao, Taiwan..

Fig.128 *Benthomangelia trophonoidea* (Schepman, 1913)
9 mm from Bahdutze, N.Taiwan..

Classification History

Oenopota Moerch to Subfamily *Oenopotinae* Bogdanov

Oenopota Moerch, 1852 included shells that are dully longitudinally ribbed with outer lip, thin and sinus, small from Northern European, Northern Pacific and Arctic Seas.
Iredale, 1918 separated Genus *Propebel*a from *Oenopota*.
Bartsch, 1941 split *Oenopota* into Genera *Turritoma, Turritomella, Nodotoma, Funitoma, Cestoma, Granotoma, Nematoma, Curtitiom,Venustoma* and *Canetoma*.
Powell, 1951 added Genera *Belalora* and *Lorabela*.
Bogdanov, 1987 proposed subfamily *Oenopotinae* to group these genera.

Bouchet & Waren's 1980 p. 67 Opinion

"Having examined Bartsch's type material in USNM and also having some experience of the variation of arctic species of *Oenopota*, we cannot accept any of the genera proposed by Bartsch (1941). We are also convinced that if Powell had seen such species as *O. tenuicostata, O. declivis* and *O. pyramidalis* which show all transitions from sinuate to non-sinuate outer lip, even within the species, he would never have proposed his genera. Bouchet & Waren (1980) used Genus *Oenopota* only for the above mentioned genera.

Taylor et al's Opinion

Species of the group previously treated as *Mangelinae*, were isolated as a subfamily primarily on the basis of the presence of an operculum and a spirally sculptured protoconch. by Bogdanov, 1987. None of these features are presently considered as being of subfamilial importance (p. 161, 1995).

Sculpture on Protoconch (Nordsieck, 1977)

Nordsieck (1977) listed 56 species of *Oenopota* from European Seas. He described spirally sculptured protoconchs only for *O. bolomera* (Locard) and *O. kobelti* (Verkruzen) and smooth protoconchs for 4 species but gave no protoconch descriptions for others. Hence, "spirally sculptured protoconch" is not a good key feature for separating these subfamilies.

Treatment in My Collection

I have two questions about the two main diagnosis (Bogdanov,1987). One is how to treat the operculate Genera *Neoguraleus, Pseudoetrema* and *Liracraea* etc of *Mangeliinae* (Powell, 1966)? The other is how to treat Genera *Notocytharella, Saccharoturris, Acmaturris, Bela* (Gray), *Liracraea, Paraclathurella* and *Apispiralia* etc of *Mangeliinae* (Powell, 1966) whose protoconchs are spirally sculptured? Bogdanov (1987) had not considered the relationship of his *Oenopotinae* with other related subfamilies.

"Labrum, thin**"** is used as a key feature of *Oenopotinae* in my collection. Taiwanese genera, *Macteola, Guraleus, Pseudoetrema Benthomangelia* etc are included here for the extension of subfamily *Oenopotinae*. Thus, Mangeliinae will keep those, non-operculate genera having a reinforced outer lip only moving from Mangeliinae those genera having the outer lip thin (with or without opercula) to *Oenopotinae*.

Diagnosis of Oenopotinae

1 Elongate-ovate to fusiform with a tall spire, 4.7 - 25.5 mm.
2 Thin shell with thin labrum.
3 Sinus, shallow or inconspicuous.
4 Sculpture of predominant axial ribs.
5 Operculum, present, vestigial or absent.
6 Radula of Toxoglossate type with weak basal membrane, marginal teeth with solid base and hollow shaft, tooth cavity opening laterally between the shaft and the base.

Key to Genera of Subfamily *Oenopotinae* from Taiwan

1	Operculate	2
	Non-operculate	4
2	Shell, slender with a tall spire and a small aperture	***Pseudoetrema***
	Shell, ovate-fusiform with aperture 1/3-1/2 shell length	3
3	Shell, glossy without periostracum; protoconch, fenestrate,	***Neoguraleus***
	Shell, dull with periostracum; protoconch, spirally corded or smooth	*Oenopota*
4	Shell, broadly biconic, stoutly ribbed	***Macteola***
	Shell, fusiform longitudinally ribbed	5
5	Canal, short	***Guraleus***
	Canal, moderately long; tubercules at shoulder	*Benthomangelia*

Genera of Oenopotinae cited

Genus .	**Type species .**
Acmaturris Wooding,1928	*Acmaturris comparata* Woodring, 1928
Apispiralia Laseron, 1954	*Clathurella albocincta* Angas, 1871
Bela H.& A Adams,1858	*Murex turricula* (Montagu, 1803)
Synonym of *Oenopota* Moerch	
Bela Gray, 1847	*Murex nebula* Montagu, 1803
Belalora Powell, 1951	*Belalora thielei* Powell, 1951
Synonym of *Oenopota* Moerch	
Benthomangelia Thiele,1925	*Surcula trophonoidea* Schepman, 1913
Canetoma Bartsch, 1941	*Canetoma tersa* Bartsch, 1941
Synonym of *Oenopota* Moerch	
Cestoma Baratsch, 1941	*Funitoma eurybia* Bartsch, 1941
Synonym of *Oenopota* Moerch	
Clathromangelia Monterosato, 1884	*Pleruotoma granum* Philippi, 1844
Curtitoma Bartsch, 1941	*Curtitoma* Bartsch, 1941
Synonmym of *Oenopota* Moerch	
Diptychophlia Berry, 1964	*Clavatula occata* Hinds, 1844

Genus	**Type species**
Funitoma Bartsch, 1941	*Funitoma ar*eta Bartsch, 1941
Synonym of *Oenopota* Moerch	
Granotoma Baratsch, 1941	*Bela krausei* Dall, 1886
Synonym of *Oenopota* Moerch	
Guraleus Hedley, 1918	*Mangelia picta* Adams & Angas, 1864
Liracraea Odhner, 1924	*Clathurella epentroma* Murdoch, 1905
Lorabela Powell, 1951	*Bela pelseneri* Strebel, 1908
Synonym of *Oenopota* Moerch	
Macteola Hedley, 1918	*Purpura ano*mala Angas, 1877
Nematoma Bartsch, 1941	*Nematoma hokkaidoensis* Bartsch, 1941
Synonym of *Oenopota* Moerch	
Neoguraleus Powell, 1939	*Drillia sinclairi* Gillies, 1882
Nodotoma Bartsch, 1941	*Pleurotoma impressa* Moerch, 1869
Synonym of *Oenopota* Moerch	
Notocytharella Hertlein & Strong, 1955	*Cytharella niobe* Dall, 1919
Oenopota Moerch, 1852	*Fusus pleurotomarius* Couthouy, 1838
Paraclathurella Boettger, 1895	*Pleurotoma gracilenta* Reeve, 1843
Propebela Iredale, 1918	*Murex turricula* (Montagu, 1803)
Synonym of *Oenopota* Moerch	
Pseudoetrema Oyama, 1953	*Drillia fortilirata* E.A.Smith, 1897
Saccharoturris Woodring, 1928	*Mangelia consentanea* Guppy, 1896
Turritoma Bartsch,1941	*Turritoma exquisita* Bartsch, 1941
Synonym of *Oenopota* Moerch	
Turritomella Bartsch, 1941	A new name for *Turitoma* Bartsch, 1941
Synonym of *Oenopota* Moerch	
Venustoma Bartsch, 1941	*Venustoma harucoa* Bartsch, 1941
Synonium of *Oenopota* Moerch	

Reference

Bouchet,P & Waren,A,1980 Revision of the N.E.Atlantic Bathyal and Abyssal Turridae The Journal of Molluscan Studies, Supplement 8 pp. 66-75

Cernohorsky,W.O. 1978 Tropical Pacific Marine Shells, p.157 & pl. 56

Habe, T., 1964 Shells of the Western Pacific Vol. II p.119 & pl. 38-8

Hedley, C.A., 1922 A Revision of the Australian Turridae Records of Australian Museum, 13(6): 314 - 324 & Figures .141, 149,153 & 156

Laseron, C. F., 1954 The New Wales Turridae Rec Australian Mus. 23 (1) : pl. 7

Nordsieck,,F., 1977 The Turridae of the European Seas La Piramide per La Conchiglia pp.19-27 and pls B38 - 75

Oyama, K., 1957 The Molluscan Shell, 1957-1961 Macteola, Citharella. Guraleus

Powell, A.W.B,1966 The Molluscan Families Speightiidae and Turridae Bulletin of Auckland Institute and Museum No.5 pp. 104-112

Taylor, J.D.,Kantor,Y.I & Sysoev,A.V.1995 Foregut Anatomy, feeding mechanisms, relationships & Classification of the Conoidea Bull. Nat. Hist. Mus. Lond. (Zool) 59(2): 161

Thiele, J., 1925-1929 Handbook of Systematic Malacology Pt. I (Loricata: Gastropoda, Prosobranchia) translated by Smithsonian Institute Libraries, 1992 p.565

A History of the Hawaiian Malacological Society
By J. M. Ostergaard

Recently, long-time HMS member, Ingeborg (Inky) Shields moved to an apartment from the house that she and her husband, Thomas Shields, had occupied for many years in the Nuuanu Valley area. This required sorting out things that collected over the years, to make the new space suffice. In the items re-found was the following hand written letter to Tom Shields, the then (and many times later) president of the HMS. The letter included a history of the HMS by Mr. Ostergaard.

45 Laurel Ave.
Atherton, Calif.
January 17, 1955

Dear Mr. Shields.

You will find herewith enclosed the long-delayed historical report of The Hawaiian Malacological Society covering the time from my election as Historian, Oct. 4, 1950, till my departure for California, June 5, 1954.

I have to apologize to you and the Shell Club, not only for my tardiness in submitting this report, but also for the many omissions and brief and sketchy accounts of the transactions of the Society.

It will be a pleasure to me to be of future service from time to time and it might not be long before I again can be with you for a period of time.

Wishing you and Mrs. Shields my warmest Aloha and success in the new year, I remain,

Sincerely yours,

J.M. Ostergaard

==========

A Partial History
Of the
Hawaiian Malacological Society
By J. M. Ostergaard, Historian

At a meeting on Wed., Oct 4, 1950, at the Kahalo home of Bessie Arnold, the following officers of the society were elected for the year beginning Nov. 1, 1950:

Charles A. Allen: President
Thomas R. Shields: Vice President
Evelyn Gage: Secretary
Elizabeth Carey: Treasurer
Jens M. Ostergaard: Historian

The first meeting of the Society was held Wed., Nov.1 at its usual meeting place,-- in the Board Room of the Bd of Pub. Parks & Recreation, King St. at Kapiolani Blvd.

Attendance was 24, including a number of visitors.

Mr. Allen showed how minute shells can be adequately displayed by being mounted on cardboard, using dark cardboard for light colored shells, and *vice versa*..

Four large and fine *Cypraea tigris*, one with the animal still in it were shown by boys who had collected them from about 30 feet of water off Ala Moana.

A young man among the visitors who had spent 18 months on The Great Barrier Reef of Australia, brought a box of small Cypraea that he had collected there. These were as follows: *annulus* Linn., *caurica* Linn., *erosa* Linn., *eronnes* Linn., *felina* Gmel., *interrupta* Gmel., *lutea* Gmel.,

moneta Linn., *staphylaea* Linn..

The president made a proposal that someone be appointed to check up on names of shells and revisions in taxonomy.

A resolution was carried to purchase three blankets for the table.

==========

The Second Meeting of The Society, Dec/ 6. '50

This was a cool and windy evening with a sprinkle of rain. There were present 34 including members and visitors.

Mr. Arneman was delegated to buy blankets for the tables.

An elaborately made Santa Claus with features made of shells and a red-and-green-painted *Charonia tritonis* held in his left hand was brought by Mrs Bromley.

Mr. Allen brought a tree with shells suspended from its branches and with cotton representing snow and containing a scattering of shells, surrounding the trunk.

Shell presents in Christmas wrapping were drawn according to number by those present. Mrs. Spencer Tinker drew a specimen of *Clava obeliscus* Bruguiere that I had found on Kokohead beach and included as my present. I drew a fine specimen of *Conus Hammatus* D.B. & R. dredged from 150 feet off Honolulu Harbor by Mr. Allen.

==========

The Third Meeting of The Society, Jan. 3, '51

Twenty members and guests were present. No business.

Mitra was the discussion, and Mr. Allen showed a large number of local species thrown on the screen from actual specimens. And some fine specimens of *Melo didema* were shown by one of the members.

New blankets had been bought and were used for the tables.

A question arose as to the status of *Mitra mitra* Linn. and *Mitra episcopalis* Linn.; also *Cypraea cruentata* Gmel. And *Cypraea chinensis* Gmel. I offered to check up on the synonymy

==========

The Fourth Meeting of the Society, Feb. 7,'51

Owing to my absence at this meeting, I shall be able to report on such information only, as has been communicated to me.

A talk on *Pecten* was given by George Campbell. Similarly, Charles A. Allen gave a talk on *Trivia* and *Tornia;* and, in addition, he informed The Society members of a dredging on Ala Moana, near the Honolulu Iron Works which yielded fine specimens of *Conus quercinus* and other gastropods, in good state of preservation.

==========

The Fifth meeting of the Society, March 7, '51

There were present 24 members and visitors.

The time was devoted to displays and identification of foreign shells, and to the showing of a movie by Mr. Allen of under-water shooting of fish and the behavior of eels and octopuses in their natural habitat.

It was proposed for the next meeting to study the genus *Nerita*.

Mr. Allen suggested that a representative collection of Hawaiian shells be set up for public display in order to gain prestige for The Society and to be of service to the public.

==========

The Sixth meeting of the Society, April 4, '51

There were present 26 members and three visitors.

The family *Neritidae* was discussed and a large and interesting series of species of *Neri*ta, both local and foreign were displayed.

Mr. Allen described a hand dredge to be used in shallow water and operated by one person.

Examples of minute species of Hawaiian marine gastropods were shown. These constituted the genera *Phasinella* and *Alcyna* **[now a subgenus of *Thalotia* Gray, 1840 *Trochidae*]**—one species of each to show the generic distinctions.

==========

The Seventh meeting of the Society, May 2, '51

Present at the meeting were 26 persons, members and visitors. Allen, the president, was absent; so, also was the vice-president.

Since there was no response to a suggestion that some other member officiate as president for the evening, business transactions were set aside, with the exception that the minutes of the preceding meeting were read.

Mrs. Cassidy displayed and demonstrated the use of a hand dredge which she had made and which appeared to be both substantial and practical.

Mr. Ostergaard gave a talk on some of the shells – particularly on Cypraea—that were brought by members.

==========

The Eighth meeting of the Society, June 6, '51

Present at the meeting were 28 persons—27 members and one visitor. President Allen was again absent. Evelyn Gage read the minutes.

A resolution was adopted that the Society finance the printing of letter heading on stationary to be used by the secretary for official correspondence.

Mr. Ostergaard gave a talk on the local characters of *Cypraea moneta, caputserpentis, helvola,* and *carneola*. He also told about spawning and development of some of the local marine gastropods.

At the introduction of his talk he thanked the members of the Society for their fine tribute paid him, in a letter from the Secretary, upon the fiftieth anniversary of his arrival in Hawaii.

==========

The Ninth meeting of the Society, March 7, '51

Nineteen members were present, and plans were made for a collecting trip by night at Ala Moana Reef. A meeting to decide when it was to be held between Aug 1 and 5.

Mr. Allen showed colored slides of Cypraea greatly magnified.

==========

A historical record of the Society for the following three months has been lost.

==========

On Wednesday evening, Nov. 7, 1951, a turkey dinner was given at Kewalo Inn and the 10th anniversary of the Society was observed with 30 members present.

Officers elected for the coming year were as follows:

Thomas R. Shields: President
L. Dow Strader: Vice-President
Evelyn Gage: Secretary
Mabell Roth & Ray Summers: Treasurers
Jens M. Ostergaard Historian

Outgoing president, Mr. Charles Allen recalled how the Society during the war was inactivated, but active since April, 1946.

The new president gave an outline of the ensuing year's program, proposing field trips, instruction periods for members and young shell collectors, further studies in nomenclature and identification, and a long-range program of the distribution of species around the Hawaiian Islands.

==========

December 5, 1951

The Society met with 35 members and visitors present. Among the latter were Mr. And

Mrs. Crawford from Florida, who were accepted as honorary members during their stay in Hawaii, till June, 1952.

This was our Christmas meeting, and each member brought a shell with data and wrapped in Christmas paper to constitute a present to each member.

Mrs. Bromley brought an interestingly decorated shell-Christmas tree.

==========

January 5, 1952

At this meeting Ray Summers presented for topics: "Characteristics of Cowries in the Pacific".

Spencer Tinker gave a preview of his shell book.

==========

February 6, 1952

There were present at this meeting 53 members including some visitors—the largest number on record.

It is gratifying to find so enthusiastic a response to the doings of the Society which is the best evidence of its success.

L. Dow Strader gave a talk on the "Anatomy of Mollusks", in which he included all the classes for comparison, using models to clarify his talk and colored illustrations made by himself.

He covered a very large and difficult subject in a limited space of time with the certainty of leaving the impression on all that this phylum of animals is by no means composed of organisms of simple organizations.

==========

March 5, 1952

There were 75 members and visitors present.

Of chief interest was a lecture given by the Danish writer, Hakon Mielche, on the oceanographic research done by the Danish naval vessel, *Galathea*, which is at this port at the end of March for a four-day stay.

Spencer Tinker showed half-tone movies of marine invertebrates.

President Thomas Shields suggested that identification of shells should be made in outside time, and not at the meetings; and that those who had shells for identification should then hand them to the experts among the members, who could identify them and return them at the following meeting. This was agreed upon by the members.

==========

April 2, 1952

There were about 44 members present.

Acting Director of the B.P. Bishop Museum, Edwin Bryan, gave a talk in which he pointed out the value of aiding school children in the study of shells, by being able to give them access to collections.

It was also advocated to obtain a stall at the coming 49th State Fair, May 16, to display a shell collection to represent what can be found in Hawaii, and to bring before the public the activity of this Society.

All, apparently, were in favor, but J. M. Ostergaard opposed.

==========

Tuesday Night, April 8

A special meeting was held to discuss plans for the fair.

Allen was appointed Chairman for the Committee.

About 24 members were present.

==========

May 7, 1952

About 49 members including a few visitors were present.

Plans were made for the fair exhibit.

The exhibit of shells by the Society at the 49th State Fair proved to be a great attraction and the means of getting additional members to join the Societyl

The Fair was from the 16 of May to the 25.

The expense to the Society of the exhibition was $191.00

==========

June 4, 1952

There were about 65 members and visitors present, including four new members.

Mr. Ray Summers showed a large series of colored slides of shells, nearly all Hawaiian.

==========

July 2, 1952

At this meeting there were present 50 members and visitors.

Dr. Brock of The Fish and Game Commission gave a talk on New Caledonia from where he had recently returned to attend a convention. His talk was accompanied with some colored views of New Caledonian and Fijian landscapes.

A picnic was planned for Sat., July 19, to the windward side of Oahu.

Note: Dr. Brock stated that New Caledonia has a barrier reef of about 15 to 30 miles from shore.

==========

August 6, 1952

There were 63 members and visitors present.

Mr. Summers showed a number of colored slides of shells—particularly of *Cypraea* and *Conus.*

==========

September 3, 1952

About 63 mmbers and visitors were present.

Movies were shown by Mr. Gilbert Ortiz of "The Birth of Sharks" and of spear-fishing. The shark pictures were taken at Molokai of large hammerheads.

Wild pig hunting on Hawaii was also shown.

==========

September 24, 1952

On the above given date the Malacological Society had the pleasure of having as guest Dr. Joseph P.E. Morrison, Curator of Mollusca at the Smithsonian Institution, Washington. He was on his way back to Washington, after having devoted three months to zoological research on Raroia Atoll in the Tuamotu Islands. This atoll happened to be the one on which Kon-Tiki landed on its drift from Peru.

A dinner was given for Dr. Morrison at 6 o'clock, at The Fishermen's Wharf, Kewalo, for 14 members and guests, after which Dr. Morrison gave an interesting talk on his explorations and discoveries in the molluscan world.

He made a topographical comparison between the Tuamotu atoll and that of Bikini, on which he had previously carried out a zoological assignment.

Of outstanding interest were the methods he pointed out by means of which an approximation of the rate of growth of marine shells might be obtained. Also of great interest were the characters that a keen mind like his was able to discern between closely related species. He also pointed out the geographical range of a number of Indo-Pacific marine species.

==========

Annual Dinner of the Society

Wednesday Evening, November 5.

Dinner was given to 60 members at the Queen's Surf. There was an installation of officers for the coming year and complimentary send-offs given to the outgoing officers by our retiring

President, Mr. Shields, who also commented on the growth of the Society during the past year, the year starting with 47 members and ending with 105.

Excellent photo-chrome views of the Islands were shown.

==========

January 7, 1953

About 50 members were present.

Mr. Karl Greene led a discussion on cones accompanied by colored slides. He pointed out some characters whereby distinction could be made between *Conus sumatrensis* and *C. vexillum* in the anterior canal extremities. This was pointed out by Dr. Morrison of the Smithsonian Institute. It appears that both species occur in Hawaii. I personally have been unaware of any such difference as could amount to a specific distinction. His point is, I believe, worthy of study.

==========

February 4, 1953

About 56 members and visitors were present, six of them being visitors.

Plans were made to find another room for our meetings, the one we have being too small for the great increase in members. It was decided to try out a room offered us by the Hawaiian Sugar Planters' Association.

A discussion was led by J. M. Ostergaard on the Cypraea, of which the B.P. Bishop Museum made us a fine demonstration loan.

The geological history and development of some of the local species were commented on. Of particular interest was the determination of which species were indigenous to Hawaii.

The conclusions arrived at were naturally based on information available of the species that were known to have been found in the living state in Hawaii.

==========

March 4, 1953

The meeting was held in Agee Hall of the H. S.P.A. where there was adequate facility with sufficient room and chairs for a large audience.

Mr. Yoshio Kondo of the B.P. Bishop Museum gave a talk on the control of the African snail, *Achatina fulica T*er. A demonstration of snails showed stages of growth and other features.

Mr. Kondo gave also a talk on a scientific expedition into some of the Japanese (formerly) mandate islands of the West Pacific, in which he and Mrs. Kondo participated. This talk was illustrated by colored movies.

Among the large attendance of members were five visitors, notable among whom was Miss Ruth E. Coats of San Diego, who is an active member of the American Malacological Club, and in Hawaii on a visit.

==========

April 1, 1953

More than 50 members were present and the evening was devoted to displays and identification of shells.

Mr. Ostergaard was presented with a box, presumably containing shells, but which had a fine boiled sea-lobster of a mainland species. This was intended as an April Fool Joke.

==========

May 6, 1953

There were more than 50 members present and three or four visitors.

A decision was made not to have a show at the coming Territorial Fair in June.

A discussion of the genus Cassis was made with displays of *Cassis cornuta*.

==========

June 3, 1953

About 60 members were present and four or five visitors.

A farewell was extended to Miss Parker and Mr. Ostergaard.

Spencer Tinker demonstrated by colored slides and lectures the genus *Ostrea* (oysters).

==========

During the following three months I was absent, so not able to continue the record of the Society.

==========

October 7, 1953

About 30 persons were present, including three or four visitors.

New officers elected for the coming year were as follows:

Mrs. C.D. Rea President
Frank P. Farm, Jr. Vice-president
Guy A. Murray Recording Secretary
Spencer W. Tinker Corresponding Sect.
John Obata Treasurer
Jens M. Ostergaard Historian

Speaker for the evening was J.M. Ostergaard, who told about his recent trip to the mainland.

==========

November 3, 1953

The annual Dinner with installation of officers was had at the Queen's Surf. About one half of the members were present.

The sad news of the passing of Mr. Wray Harris on the 17th of Dec. was a shock to all.

==========

December 9, 1953

The Christmas meeting was held in the Liliukalani Territorial Bldg., Miller St. There was a good attendance.

Mrs. Bromley brought a Christmas tree and shell presents were drawn by members. Everybody had a good time.

==========

February 3, 1954

The first meeting of the year was on Feb. 3, the January meeting having been canceled owing to a lecture on protein molecules delivered by Dr. Paulin at the University of Hawaii which the members of the Society desired to attend.

Mr. Ostergaard gave a talk on the "Taxonomy of the Cypraea". There were present 41 members and visitors.

==========

March 3, 1954

This meeting was attended by 31 members. Mr. W. C. Ross, who was to give a talk on Conus gloriamaris was ill, and a talk instead was given by Mr. Karl Greene on sinistral Pliocene cones of Florida.

A fine display of local cones was shown by Mr. Weaver.

Colored lantern slides of Molokai were shown by Mr. Walter Bayer.

A decision was made to accept Dr. Robert W. Hiatts' invitation to visit the Marine Biology Station on Coconut Island March 27.

==========

April 7, 1954

The Society met at Agee Hall, 1527 Keeaumoku St. and Mrs. Irma Rodenhouse presented "A Parade of Washington Beaches" and a very fine film of "Seashore Oddities".

==========

May 5, 1954

At this meeting Mr. W. C. Ross told us about one of the rarest and most highly prized shells: *Conus gloriamaris*. He stated that altogether about 17 specimens were known, and with descriptions and illustrations he clarified his

presentation of this rare and beautiful shell.

Since his talk on Conus gloriamaris did not consume the full time allowed him, he filled in the remainder with a talk on "Ocean Waves", a subject quite appropriate in its relation to marine shells. He defined various kinds of waves and the causes of their formation.

==========

June 2, 1954

The Society met in the New Aquarium at Waikiki, where a room was set apart for its future service.

Dr. C. H. Edmondson of the B. P. Bishop Museum gave an illustrated talk on "The Shipworm" (Teredo), of which several species in the Islands are known. He pointed out their great destruction to wharfs and pilings and the means whereby they best seemed to be combated.

A farewell was extended to Mr. J.M. Ostergaard, Honary Member of the Society, upon his departure for the mainland.

Leis were placed around his neck by Mrs. Jean Bromley. One was a flower lei, another was a silver lei, which was made of 20 bright silver dollars covered with celephane in fold, green, or red, and the two ends of the lei tied together with dollar bills. In addition, Mrs. Bromley dropped a beautiful *Cypraea mauritiana* into his coat pocket.

The silver lei he has kept intact, and the Cypraea is occupying an honor place in his shell cabinet, and in his heart as well as a tender feeling and a warm Aloha for the Hawaiian Malacological Society.

A Profile of A Marking-ink Scrimshaw

By: Brian C. K. Dy*

* 1175 A. Mabini St.
Ermita, Manila, Philippines

In the minds of the producers/traders of cultured pearls and the shellcrafts – and collectively the buyers and consumers of their products - the *Pinctada. maxima* (Jameson 190l) is probably the most illustrious and valuable species of seashells. The reasons are pretty obvious: it's the mother of the reputable South Sea Pearls (Notice it's bestowed with the sole ownership of the title **MOP** [**M**other **O**f **P**earls]). It's also the raw material for the sparklingly polished MOP plates, spoons, forks, knives and lots of other shellcraft products. Also known as the gold-Lip Pearl Oysters, the *Pinctada. Maxima's* captivating luster has overshadowed the glimmer of the rest of the seashells.

As we are now fast entering another epoch in human history and in recognizing the oyster's long and continuous contribution to the wellbeing of mankind, this writer would like to introduce a new feather to the cap of the distinguished **MOP** by sharing with our dear friends, readers, conchologists, *et al* an inscriptive and distinctive method of crafting artistic **MOP** polished plates. It would be called MIS (Marking Ink Scrimshaw).

Take a cue from the polished plate in the above picture. First, there are three calligraphic Chinese characters for "Huang", "Jin" and **"**Wan" from top to bottom. These **l**iterally translate as: Yellow, Gold and Ten thousands. The three form an acronym which cleverly combine the three words into one: "Thousands of Yellow Gold" which is inscribed on the plate surface. Then a fine line is engraved all along the edges of the characters. After this the red colored ink is applied within the engraved lines. Marker-pen ink is the best choice for this purpose. Aside from being easy to acquire and apply, the red marking ink reflects and enhances the luminous qualities of the nacre. The coloring would, even glitter under normal daylight! And the color, surprisingly, will stay fast for an indefinite duration of time. Color fading rarely happens**.**

Mother Of Pearl Plate with Chinese characters for "Thousands of Gold".

Of course, any other marking ink color or combinations of colors can be tested and tried, depending on ones personal tastes and the kind of designs (calligraphy, figures, symbols, emblems, logo, etc.) engraved on the plates by individual persons whose virtuosity and prowess are much needed. Since this marking ink can be erased by rubbing off with household alcohol on cotton ball, an alternative method can also be utilized by doing away with the engraving processes, wherein the original design would no longer be fixed and retained. So there's flexibility including replacing, retouching or, retracing, the coloring of characters. The designs can be permanent or not.

The marking ink, plus the **MOP** plates and artistry are the main factors for accomplishing versatile **MIS**. Various designs of scripted words such as for best wishes, greetings, and other dedications should be included. All these products would be conceived as specialty shellcraft, as well as a most memorable personalized gift-giving idea.

Incidentally, the words “Huang Jin Wan” are sometimes illustrated in printed new years greeting cards. (Wish to become the winner of yellow gold, anyone?) Its gold-inspired messages could generally be interpreted as simply "Prosperity” Thus, A Prosperous New Year!

Hopefully this article would reach our beloved editor and he can publish it before the count down stages of the New Millennium begins. Maybe some persons would be able to make good use of this craft in the related celebration of the event. Until then, wishing you all A Merry Christmas and A Prosperous New Millennium Year!!

Brian C. K. Dy

Mytilid Bivalves Trap Muricids

By Wesley Thorsson

So Ishida & Keiji Iwasaki in Venus(Jap. Jour. Malac.) Vol 58, No 2. (1999) reported observations of Mytilids attaching byssal threads to potential Muricid predators, and turning them over, thereby incapacitating the Muricids..

To those who view bivalves as sedentary, helpless molluscs, this may come as a surprise. In the past this would have surprised me, but experience with photographing bivalves has brought my attention to the versatility of some bivalves, not all of which are firmly attached to strata by cement or byssus. *Arca* always seemed to be the most sedentary of all molluscs to me, but on several occasions, I brought one back to my photo aquarium and observed them traveling around the aquarium at about the same speed as gastropods. I was also amazed to note that an *Arca* was able to complete byssal attachment to the aquarium wall in several minutes when done roaming around the aquarium. When seen on the side of a rock or cliff, Arca take a stance opposite to what I considered normal. The byssus attaches the mollusc with the ventral side toward the strata, the shell often fitting into a notch matching the shell. This could prevent exposure of the mollusc shell margins to predators. These molluscs are quite sensitive to changes in light. When you pass nearby, the shell very rapidly snaps back into its crevice leaving only the hinge area exposed. To circulate water and feed, the mollusc moves the shell outward from the rock exposing the siphons.

In field observations Ishida & Iwasaki observed mussels with byssal attachments to 10 of 108 Muricids in a mussel bed during two months in Shirahama, Japan (33°42’N, 135° 21’E). The Muricids were trapped and immobolized for over 30 hours. The observations involved mytilid *Hormomya mutabilis* in a 24 m^2 area at 30 to 90 cm below mean tide level. Previously, only three species in the *Mytilinae*, *Mytilus edulis* (Linne), *Choromytilus meridionalis* (Krauss), and *Mytilus galloprovincialis* (Lamarck) had been reported trapping predators.

It would be interesting to hear of other observations of this trapping behavior by bivalves [It was mentioned briefly in IHSN February, 1999 Month section page 14 by Aaron Baldwin.]

Rockers & Wallers Part 3 of 3

By Helmut Nisters *

*Innsbruck, Austria
Email: www.helix@ibk.netwing.at
Home Page: www.netwing.at/nisters/

Following are Images of a variety of land-shells, arranged by habitat. (In systematic order within the groups). The size given is the largest dimension of a typical specimen This is the last group to be illustrated. Other groups were illustrated in IHSN in November and December, 1999.

Group B: Typically found in more open habitats and in forests of differing density that have rocks or groups of rocks. These molluscs are found under old wood, under and between stones, and in leaf mould.

Acicula lineata 3.75mm

Truncatellina monodon 2.3mm

Orcula dolium dolium

Orcula gularis 6.5mm

Pupilla triplicata 2.75mm

Merdigera obscura

Cochlodina orthostoma 11.5mm

Vitrea crystallina 2.5mm

Petasina unidentata 7.5mm

Helmut Nisters contact details (work and home).
Natural History Department of the Tiroler Landesmuseum Ferdinandeum Innsbruck,
Malacological Collection,
Feldstr. 11a,
A-6020 Innsbruck, Austria, Europe.
Phone: 0043 512 58 72 86 37.

Helmut Nisters
Franz-Fischer-Str. 46
A-6020 Innsbruck, Austria, Europe
Phone and Fax: 0043 512 57 32 14
E-mail: www.helix@ibk.netwing.at
URL: www.netwing.at/nisters/

Digital image capture details: Images taken by David Walker of shells supplied and identified by Helmut Nisters. Smaller shell images taken
with Panasonic CL350 video camera with 50mm Nikon SLR lens and extension tubes. Largest shells taken with Fuji DX-10 digital camera in
10cm macro mode.

Photography of Molluscan Animals And File Names for Molluscan Graphics

And .

By Wesley Thorsson

I have somewhat over 20,000 photographs of molluscs, with most featuring the animals. Additionally, there are photos of the shell in several views and of details such as ventral view, side view, Apex, Proto-conch, Operculum, etc. Photos of the shell are essential when studying the animals of shelled molluscs as the identification of the species is normally dependent upon the shell. Without positive ID, what use is a photo of a molluscan animal? Of course, this is especially important if you are trying to establish the utility of animal characteristics in taxonomy when you encounter two specimens with shells that indicate they are the same species, but the animals are too different to be the same species.

In my photography, I always maintain a reasonably detailed log of each photo. Each reel of film is given a unique reel number, (sequential with date and time) and each frame is given a frame number. Therefore, picture 534-21 is the 21st frame of reel 534 of a photo taken in Hawaii. When I am on trips to other areas, each area is assigned a unique letter or two that precedes the reel number. Picture G032-15 is the 15th frame of the 32nd reel taken on Guam & Yap.

Till recent years, my photograph prints of molluscs in Hawaii were maintained in loose-leaf albums with a set of binders for each family. Photos were mounted on 8.5 x 11 inch paper (using photo corners) with two pages in a plastic sheet protector. Three 4 x 5 inch photo prints could be mounted on each page. At first, I typed labels for each photo on a word processor and I cut out the printed labels and glued the labels next to the photos. Then I progressed to typing three labels on a pages with the labels spaced appropriately for my layout of photos and then mounting the photo prints next to the labels. The process used for the last 2.5 years changed to scanning the photo prints into the computer and placing the graphics and labels in the desired positions on each page. This process has several advantages. Only the desired feature on a photo is selected for the graphic to stress characteristics that I want to describe. This results in graphics of many shapes, which are easily accommodated in this system. The albums hold many more species per album due to decreased bulk compared to when the actual prints were used.

When on trips outside Hawaii, my albums would not include more than 150 species per trip, and all photos were included in one album set, arranged in standard taxonomic order within the album set. Over time, these variously prepared area albums led to 10 sets of albums with a species you were looking for occurring in any of the album sets. This made it difficult to compare animals of the same species from different areas with any speed. Obviously, it was time to accumulate all photos of a species in one place. Those photos that had already been scanned could be easily moved from backup disks such as Jazz, Zip or CD-ROMs to my hard disk to file folders for each family. It sounds easier than it is in practice, as in a number of albums, my graphics were identified only by the photo print ID (Reel and frame numbers). This makes it difficult to access only a desired photo of one species. It was time to standardize on a graphics file name system.

For each photo, you would like the file name to include several pieces of basic information:
1. The photo ID number so that the negative and print can be found.
2. The species name
3. The area in which it was collected (eg. Hawaii, Guam, Kosrae, etc.)
4. The primary characteristic of the mollusc involved in the photo.

It is also very desirable that you know which specimen is involved in each photo. All photos of a specimen should appear in a consecutive series in the graphic files.

The following file name standards are now being used to accommodate these desires:

Species name, followed by specimen ID, followed by view ID.

This involves a relatively long file name, which should be as short as possible but give the desired information. Windows, fortunately accommodates long file names, but you run into problems making CDs if the file names are too long. Abbreviations of view details holds down the file name length. An initial for the genus will suffice for the species name.

Since a computer sorts file names in a very strict order, from left to right, numbers used should have leading zeros if less than the maximum number envisioned in your system. I don't see reel 1000 coming up in my future so I use three digits for the reel number and two digits for the frame number. I supply the area information by preceding the reel number by the area letter(s). To ensure that the primary photo for a specimen is listed first, I use two spaces after it rather than one space as in secondary photos. To differentiate the specimen primary photo from other photos of the specimen, I place in square brackets. As examples are probably most easily understood, I will give a list of file names I used for one species. As fewer reels are used on a trip I use 2 digits for reels outside Hawaii.

M mitra [078-03] Ventral The primary photo for Hawaii specimen
078-03.
M mitra [078-03] 074-12 Side of foot An aquarium photo reel is earlier than 078
M mitra [078-03] 074-13 Siphon
M mitra [078-03] 078-04 Side Side view of 078-02 specimen shell photo
M mitra [078-03] 078-05 Apex Apex of 078-03 shell photo
M mitra [243-09] Ventral The primary photo for Hawaii specimen
243-09.
M mitra [243-09] 239-17 Probos Eye Proboscis and eye photo of 243-09
M mitra [243-09] 243-10 Aper Aperture view of specimen 243-09
M mitra [243-09] 243-10 Proto Protoconch of 243-09
M mitra [243-09] 243-11 Sculpt Sculpture of 243-09
M mitra [V65-03] Ventral The primary photo for Vanuatu specimen
Taken on return to Honolulu
M mitra [V65-03] V25-03 Side of foot Aquarium photo taken in Vanuatu.

M mitra [V65-03] V25-05 Tent ped Eye stalk Aquarium photo of Tentacle & Eye
M mitra [V65-03] V65-04 Spire tip Spire tip of V65-03
In practice, more views of a specimen and more animal photos than shown in the examples are filed

In the description of the view for a specimen, the Windows file name system does not allow use of punctuation. I use Capitals to indicate a new multi-word character.

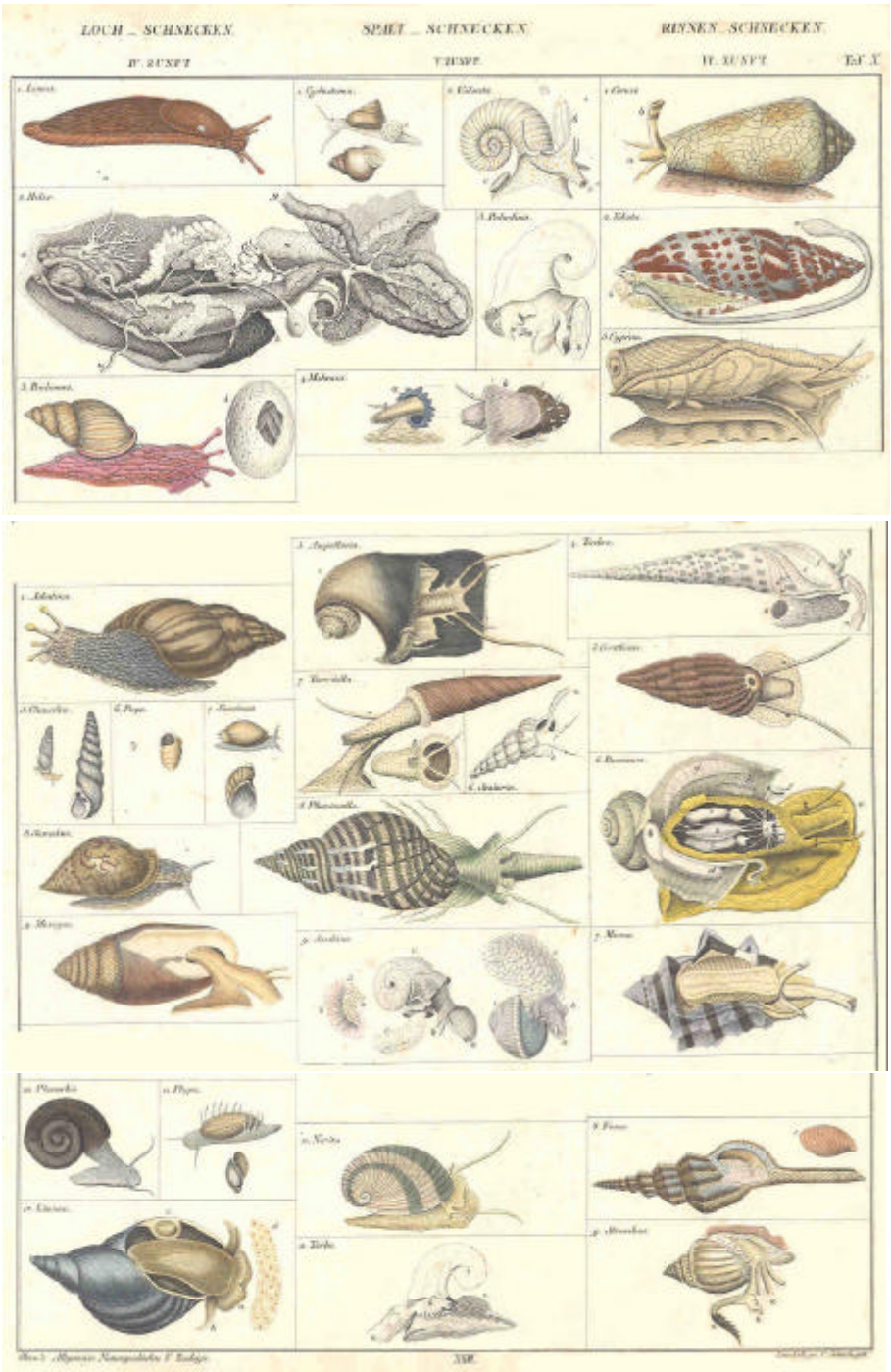
It sounds complicated, but it works well for me, giving me all specimens of a species from each area in sequence and it allows me to find a desired view of an animal from several areas without too much searching..

When you are going to so much work to scan photos and file the graphics, backup to several places such as Jazz disks is vital. I know, as I lost a drive after doing a lot of scanning without backup. To make backup simpler, I divide my hard drive up into 1 Gigabyte primary folders such as A to C, M to Q, etc. This ensures that my Jazz disks can hold all the files for these folders. When a hard drive folder exceeds 1 GB, I divide it into two folders and do the same to the back up disks. To insure that I actually do the backup frequently, and easily, I scan photos to a temporary file, and about each hour or so, move all these temporary files to primary and backup drives and disks. Graphics take up a lot of Jazz disks.

Color plates from old Conchology Books

Knowing my interest in molluscan animals, my son-in-law Christian Boblenz sent me a number of plates that he had seen for sale in Germany. Similar plates were for sale along the river bank in Paris at a number of stands. It seems a shame to cut up academically valuable scientific books to sell only the plates, but apparently, more money is obtained this way than by selling the books.

It seemed fitting to start the new year with one of these plates in IHSN. The plate was too large for my scanner, so I scanned it in three parts as shown below. Best viewing is at 200% magnification.



Correction to Part 9:
"Borsoniinae & Mitromorphiinae Species" by Chen-Kwoh Chang

This part 9 of the series of articles on Small Shells of the Classic *Turridae* from Taiwan contained an error in the Classification History on page 8 of the December, 1999 IHSN Issue, Features Section. Will those who have printed or saved that Acrobat file, please make the following corrections:

Delete the paragraph:
McLean (1971) included in *Borsoniinae*, Tropical West American Genera *Mitrolumna, Mitromorpha, Cymakra* and *Diptychophlia* that lack a deep "U"-shaped sinus and have the characteristics of the shallow water subfamily *Mitroluminae,*

Substitute the following paragraph:
McLean (1971) included in *Borsoniinae*, Tropical West American Genera *Mitrolumna, Mitromorpha, Cymakra* and *Diptychophlia* that lack a deep "U"-shaped sinus and are characteristic of shallow water **as** subfamily *Mitroluminae*.

Not including the bold "as" changed the meaning of the paragraph.