

THE CONCHOLOGICAL SOCIETY OF SOUTHERN AFRICA.

CIRCULAR NO. 118.

PAGE 1.

MAY, 1970.

MEETINGS:

The next meeting of the SOCIETY will be held on Tuesday, 26th May, 1970 in the Lecture Hall of the S.A. Museum, at 8.15 p.m. We have invited Professor Brown of the University of Cape Town to give a talk on the Bullia. These will be the shells for display.

The next meeting of the BORDER GROUP will be held on Sunday, 24th May, 1970 in the Lecture Hall of the East London Museum, at 3 p.m.

The NATAL GROUP hold regular meetings in Durban. For details of the next meeting contact Mr. E. Dee.

The TRANSVAAL GROUP hold regular meetings in Johannesburg. For details of the next meeting please contact Mr. A. Jenner.

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Conus spirogloxus (Deshayes) and Conus generalis (Linné) by A. Jenner

In "Cone Shells of the World" by J.A. Marsh and O.H. Rippingdale under the Subgenus Leptoconus (Swainson 1840) on page 57 the following references appear:

"Conus spirogloxus Deshayes. (Fig.16) Conch. Ile de Reunion, page 135, plate XIII, fig. 13-14, 1863. Type locality Reunion.

"A valid species allied to C. generalis, which has a host of locality records; however, the Red Sea appears to be the centre of distribution. A handsome species. Length 3". Periostracum thin, brownish.

"Conus generalis Linné. Syst. Nat., page 1166, 1767. Type locality India Orientali.

"A handsome common species showing considerable pattern variation over its range. The figured specimen was found on Upolo Reef, near Cairns, Queensland. It is believed that such colour varieties were erroneously thought to be C. spirogloxus Deshayes, which has caused some confusion among collectors and the name spirogloxus to fall into disrepute among authorities. Length 3½". Range Indo-Pacific."

During a visit to Port Amelia, Mocambique in September, 1969, I had the good fortune to find, at the same locality, namely, to the east of Uimbe Beach, a live specimen of each of Conus generalis, length 50 mm, and C. spirogloxus, length 48 mm. On my return the animals were removed and given to Mr. D. Aiken, to extract, for comparison and record purposes, the respective radulae. To our joint surprise the radulae were found to be identical. Although the two shells do not differ in shape, their pronounced difference in colour and marking, as well as the minor length variation, would certainly not suggest that they were of the same species.

On the evidence of the radulae further information on spirogloxus was sought and the finding appears to confirm van Nostrand's classification in his "Standard Catalog of Shells", second edition, page 209, that spirogloxus is a young generalis.

This research would appear to refute the statement that C. spirogloxus is a valid species and also to clear the confusion among collectors in respect of C. generalis mentioned above.

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Notes on South African Marginellidae

by C.M. Connolly.

The following is a list of South African Marginella having four strong pleats.

The sizes given are taken from the maximum sizes in my collection, or from references I have for shells that are neither in my nor the Reference Collection. I would appreciate any help with details of the rare or deep water species.

The letter R before the name denotes that these are in the Society's Reference Collection.

R	<u>M.nebulosa</u>	Bolten	living no radula	45 x 25
R	<u>M.ornata</u>	Redfield		30 x 17
R	<u>M.nebulosa intermedia</u>	Sow.		32 x 17 Jeffreys Bay only
	<u>M.lineolata</u>	Sow.	2 living UCT	27 x 16 Cape dredge
R	<u>M.floccata</u>	Sow.	black axial streaks over red flames on body whorl	30 x 18 Transkei
R	<u>M.mosaica</u>	Sow.		27 x 15
	<u>M.bicatenata</u>	Sow.	not seen	22 x 11 ? var. of mosaica
R	<u>M.bairstowi</u>	Sow.	living, no radula	17 x 10
R	<u>M.epipolia</u>	Tom.	living UCT	23 x 13 dead Fish Hoek
	<u>M.brocktoni</u>	Shackleford	not seen	17 x ?
	<u>M.augusta</u>	Thiele	not seen	17 x 6.5
R	<u>M.musica</u>	Hinds	Living, no radula	27 x 13
R	<u>M.capensis</u>	Krauss	living, no radula	14.5 x 6.5
R	<u>M.keenii</u>	Marrat		13 x 7 Gonubie, Jeffreys Bay
R	<u>M.rosea</u>	Lam.	living, no radula	31 x 15 False Bay
R	<u>M.rosea</u>	Lam.	living, no radula	15 x 8 Table Bay dwarfs
R	<u>M.lutea</u>	Sow.	Yellow spiral dots	22 x 12 Jeffreys Bay
R	<u>M.pachista</u>	Tom.		13 x 8 Natal
R	<u>M.piperata</u>	Hinds	living, no radula	20 x 11 Gonubie
	<u>M.piperata</u>		16 varieties from 10 mm to 20 mm	
R	<u>M.lucida</u>	Marrat	no spire, living, radula	8 x 3 Gonubie
R	<u>M.biannulata</u>	Fabr.	living, radula	7.5 x 4
R	<u>M.neglecta</u>	Sow.	High spire, no radula	5 x 2 East London 7 x 3
R	<u>M.zeyheri</u>	Krauss	Good shoulder, radula	5 x 3 Cape dredge
R	<u>M.attractus</u>	Tom.	high spire	7 x 3
R	<u>M.munda</u>	Smith	Thick shell, high spire	7 x 3
	<u>M.adela</u>	Thiele	4 colour bands	7 x 3
	<u>M.electrina</u>	Sow.	colour ? not seen	8 x 4

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Internal Aspect of the Pelecypod Valve

by P.H. Boshoff

Part 1Margins (excluding hinge area)

The anterior and posterior margins together are termed the lateral margins. The lateral margin on the 'lunular' side of the umbo is the anterior one. The valve margin opposite the hinge (or dorsal) margin is the ventral margin. The diverse outlines and shapes of pelecypod shells/.....

shells will be reviewed under 'External Features'. Measurements of length, anterior-posterior diameter or of altitude are usually taken in the plane of the internal aspect. When the two valves are held together in their correct relationship, then it is said that they are held in apposition or are being apposed. If held so that the observer faces the hinge area, lunule above and the escutcheon below the umbo then in some shells one might find the posterior ending of the shell bent to the left (laevo-rotated) or to the right (dextro-rotated) as in Tellina and Macoma.

When a byssus is present, it will form a groove on the margin near the hinge or umbo and this groove is usually anteriorly on or anterior to the hinge. Such a distinct byssal groove is seen in Pteria, Pecten, Pinctada. There may even be a byssal hole as in Anomia, and this hole is always on the righthand valve. If the umbo is situated nearer the anterior end of the dorsal margin, it is said to be ante-posed and retroposed if it is nearer the posterior end as in Donax.

The margins may be 'prolonged' by an overlap of periostracum as in Solenomya and Siliqua, or may have a tubular siphonal guard or prolongation posteriorly, constituted by epidermis of mantle origin and periostracum combined, as in Parapholas. Usually the inner aspect of the edges or margins of most pelecypods are bare and testaceous.

The margins may be smooth and even. They may have features on them, like fine, wavy transverse sulci, as in Pycnodonta, near the hinge (vermiculate markings). The edges may have a vertical series of pigmented transverse markings without surface contour changes or with surface ridging (palisade marking or ridging) as in Chama. There may be pits with nodules to fit them, along the shell margins as in Ostrea cristagalli. These are termed pitted or granulose edges. If the granules are largish, pinhead size or so, they are termed 'monticulate'. Edges are called straight or smooth or simple, all meaning the same. The edge of one valve may overlap the other as in Arca natalensis. An edge may be 'wavy' or 'undulating' or may be so curved and re-curved that it appears folded and so present large tooth-like points, 'plicate' edge as in Tridacna. These plicae may be on a smaller scale and closer set, as in Ostrea rosacea and Plicatula in which instances the edge is called 'serrate'. Serrate edges usually fit exactly but plicate edges are merely a half-fit, the corners of the folds not being occluded by the opposing 'tooth'. The tightest fit is found in Crassostrea cuculata where the hermetic seal is thought to be airtight and part of the animal's existence to be anaerobic.

Internal Space

Across the valve opening (opposite the hinge) the mollusc's soft parts are lodged, contained and protected by a mantle layer which closes off the intervalvular contents. It is folded inwards to form a kind of recess wherein the excretory, gustatory and respiratory organs open or are situated. This space also gives exit to the organs of locomotion and the siphons. The space-volume encompassed by the valves may be able to successfully lodge the animal as in Ostreidae or only partially contain the animal as in Lima. The inner surface or testaceous surface of each valve is lined by an epithelial layer which is able to deposit testaceous or nacreous material, e.g. pearls. Certain structures and organs of the pelecypod leave impressions on the inner testaceous surface, e.g. 1) Adductor muscles which serve to close or appose the valves. The resiliar hinge cushion always forces the valves into a gaping position, therefore, the valve closure is always actively muscular while the gape is always passively elastic. 2) Pallial or mantle attachment. 3) Pedal muscle or byssal muscle scar of attachment (and/or grooves). 4) Siphonal impressions (Pallial sinus).

The intervalvular space is deepened into the umbonal cave in some species and the depth of this recess in Ostrea/Crassostrea can be/.....

can be of taxonomic importance in genus separation. In Septifer the bract or septum spanning or roofing the umbonal cave is one of its diagnostic features. The inner surface of the valve can be slightly roughened or unpolished, as in Phacoides and Semele, or may be smoother as in Lucina, Tivela and Mesodesma, in which instance the finer and more polished degrees of smoothness fall under the description of 'porcellaneous'. If it is very smooth and has a silvery sheen over the surface, it is termed to be nacreous, semi-nacreous or sub-nacreous. The distribution and extent of the nacreous area (when not complete internally) differentiates Atrina from Pinna and also separates the species in Pinna.

(To be continued)

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Marginella epipolia (Tomlin)

by L. Kapp

Two specimens of this species have been collected at Simonstown this year. The first was fresh dead and the second was alive. The live specimen was kept in a tank for two days, but unfortunately it was in a very weak condition when found and as a result did not emerge fully from the shell or move about much. The following observations were, however, made of the animal:

Translucent white in colour on head, siphon and mantle.
Bright white spots, 0.5 mm to 1.5 mm in diameter, on the upper side of the foot, otherwise devoid of any colouring or marking.
Foot almost circular in shape.

The dead specimen measured 23.7 mm in length and the live taken specimen 23.2 mm. Shape and colour much as M. mosaica, white background with deep grey patterns. The pattern is a mixture of dashes running around the body whorl, quite irregular and of varying size, interspersed with zig-zag flashes which proceed to the spire. The shell has a high shoulder and bluntish apex. The live collected specimen has four well spaced pronounced pleats while the other specimen has an extra pleat which has developed between the first and second pleats. The lip and aperture are plain white.

Reference: Dr. K.H. Barnard, Annals of the South African Museum Vol. XLVII, Part IV, Contributions to the knowledge of South African Mollusca Part VI supplement.

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Conservation.

by C.M. Connolly.

Collectors all want good shells and most of us have found a fresh perfect shell left by the tide, which we can proudly exhibit. I have seen cleaned shells that are worse than beachworn shells that have been rolled by the waves and sunbleached between tides.

For the correct identification of a specie, the scientist needs shell together with animal and operculum, BUT,, only of new or rare species.

It is good practice to carry a bottle with a screwtop lid for the new specie one hopes to find. This bottle with sea-water is placed in ice till nearly frozen, then some water removed and formaldehyde added, so that the solution is one in ten parts water with a small amount of Borax added. After two days the preserved specimen can be removed and kept in spirits till it is handed over to the scientist. The label must have the locality (adding the nearest town), date, name of collector, and any ecological data noticed.

After/.....

After years of collecting live specimens it may seem that I am the wrong person to write about conserving our shell-life; but just because of my experience I feel that a few words may prevent others from making the same mistakes. Please do not take all the shells in one area, as it will be many years before a family can get re-established. I know that our molluscs have territories in the same way as other animals do, and only a few good shells should be taken at a time. May I also stress the need to replace rocks and to disturb the breeding grounds as little as possible.

There are conservation laws to protect animals during their breeding seasons. There are also laws to protect some of our molluscs. I strongly urge that we have a closed season to protect all of our molluscs.

Editors Note: This article was originally published in Circular No.81, December 1966. The attention of members is drawn to Government Gazette Extraordinary No. 1427 of 22nd April, 1966 concerning certain regulations to the Sea Fisheries Act of 1940. Extracts concerning the collection of molluscs were published on Page 2 of Circular 104, February, 1969.

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Annual General Meeting.

The Annual General Meeting of the Society will be held on Tuesday, 25th August, 1970, and nominations for the Council, in writing, are hereby called for, to reach the Secretary not later than 25th June, 1970.

The present Council is as follows:

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|----------------|--------------------|------------------------|---------------|
| President | Mr. D.H. Kennelly | | |
| Vice-President | Mr. D. Freeman | | |
| Secretary | Mrs. R.O. Carlsson | | |
| Treasurer | Mr. R.O. Carlsson | | |
| Members | Mrs. C. Connolly | <u>Country Members</u> | |
| | Mrs. M.C. Giles | Border | Mrs. M. Rix |
| | Mrs. L. Kerr | Natal | Mr. E. Dee |
| | Mr. M.C. Giles | Transvaal | Mr. A. Jenner |
| | Mr. L. Kapp | | |

With the exception of the Vice-President and the Secretary, the term of office of all other Council members has expired. Will members please send in their nominations to the Secretary as soon as possible, making sure that your nominee agrees.

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Changes of Address

- Mr. D.S. Wright, 9 Glenwood Way, Pinelands, Cape
- Mrs. D.S. Wright, " " " "
- Mr. A. Kennelly, 990 Schoeman Street, Pretoria, Transvaal
- Miss E. Fitchett, c/o The Standard Bank, P.O. Box 513, Bloemfontein, O.F.S.
- Mrs. S.W. Ainslie, P.O. Box 16, Port St. Johns, Transkei, Cape

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Exchange Wanted.

- Mr. F. Luther, Manager, Cable and Wireless, Box 14, Muscat, Oman, Arabian Gulf. Wishes to contact Cypraea collectors with the idea of exchange. Can offer local cowries as well as Cypraea pulchra and C. teulerei.
- Mrs. G. Steele-Boe, P.O. Umdloti Beach, Natal. Has some estuarine shells, Cerithidea decollata and Pyrazus palustris, she wishes to pass on.

Mr. & Mrs./.....

Mr. & Mrs. P. Dressler, 8035 Gauting, Margareten Str. 1, Germany.
Have many shells from The Pacific, Philippines, Japan and
Australia. Please write sending list of what local shells
can be offered in exchange.

Mr. F.J. Nelson, 1856 Madison St., Ridgewood, N.Y. 11227, U.S.A.
Wants to exchange East Coast United States material for South
African material.

Mr. C.W. Pracht, P.O. Box 296, Herman, Minn. 56248, U.S.A. Can offer
a few shells from Florida Philippines and East African in exchange
for South African shells.

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Minutes of the meeting held at the S.A. Museum : 28th April, 1970.

Mr. Freeman, in the Chair, welcomed members and friends.

Apologies were received from: Mr. and Mrs. Ackermann, Mrs.
Prior, Mrs. Pugsley, Mrs. Gaynham and Bruce Campbell.

The minutes of the previous meeting as published in Circular No.
117 were taken as read and confirmed.

The Chairman reported that Mrs. M. Pinkham of Somerset West had
passed away on 9th April. The Society's condolences has been extended
to Rev. Pinkham and family.

The following members were elected:

Mrs. N.H. Teare, 15 Dina Road, Elma Park, Edenvale, Transvaal.
Mr. F. Casas, Pedro Antonio de Alarcon 24, Barcelona 16, Spain.
Mr. K. Nomoto, 3-3 Tori-Sanchome, Nihonbashi, Chuo-ku, Tokyo, Japan.
Mrs. Y. Clement, P.O. Box 225, Manzini, Swaziland.

The following were proposed as new members:

Mr. R. Ruben Proposed by J. Polack Seconded by P. Ogilvie
Mr. L.S. Margulis Proposed by T. Carlsson Seconded by L. Kerr.

As a number of members will be away during the June school holidays
the meeting for that month will be held on Tuesday 16th.

It was reported that a copy of the new book on World Olives was
now in the Library. Prof. Schilder has presented the Society with a
copy of his paper on Phenacovolva labroguttata, this paper has a
photograph and a sketch of the shell. The text is in German. Mr.
Freeman showed the meeting a copy of the book 'Les Coquillages'. There
are coloured plates of Indo-Pacific, tropical and some S.A. shells with
descriptive text in French.

A number of order forms had been received from the Shell Oil Co.
of New York for their 1971 desk diary. The cost of these diaries is
US\$ 2-50 each. The Secretary has sent a supply of these order forms
to all the Groups. The diaries have to be ordered from America as the
Shell Co. of S.A. will not be getting copies.

It was decided to hold a Field Day at Melkboschstrand on 7th May.

After tea the shells on display were discussed.

Owing to the fact that the projector was out of order we were
unable to screen the film 'The Islanders'.

As the Headquarters tea and meeting expense fund was in very sorry
state it was decided to ask members to bring shells to the June meeting.
These shells would be sold in aid of the Cape Town meeting expenses.

SECRETARY/LIBRARIAN

Mrs. R.O. Carlsson,
18 Tecoma Way,
Pinelands, Cape, Phone: 53-1536

TREASURER/EDITOR

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Pinelands, Cape, Phone: 53-1536