



Afrivoluta pringlei Tomlin 1947

THE STRANDLOPER

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LEILA KERR

The death of Mrs. L. Kerr, President of our Society, came as a sad shock to all who knew and loved her. To her, we Members of the Society, owe a deep and enduring gratitude, not only for inaugurating the Conchological Society of Southern Africa in May 1958, but also for being its driving force and an inspiration to us all. Her tragic death has certainly deprived the Society of a most enthusiastic and hardworking Member, and who had the complete interest of the Society at heart up to the end.

My memory takes me back many years when Leila and I first became friends. At the time she was teaching at Rustenburg School, Rondebosch, and was also a very keen and gifted amateur photographer. We spent much time together during the annual visits of our Circus to the Cape Peninsula, when she enjoyed taking pictures of the animals. Quite often I used to bring up the subject of my shell collecting hobby, and one day she expressed the desire to visit our home in Pretoria to take pictures of shells. I still have copies of those excellent photographs. Shortly after I received a letter from Leila saying that she also had fallen victim to this absorbing and wonderful hobby. She also had the courage to inaugurate the Conchological Society of Southern Africa, when at the time she still had very little knowledge of shells. From its inception Leila was the driving force and soon became an authority of some considerable note. Leila served on the Council of the Society from its inception in May 1958 to the time of her death, as Secretary up to August 1966, as Ordinary Council Member to August, 1971 when she was elected President. During the latter years, when suffering from ill health, she was obliged to release the reins, and leave most of the work to staunch friends and fellow Council Members.

Leila was a quiet and unassuming person, interested in everything around her, had many friends and was loved and respected by all. She was a dedicated school teacher, gifted hobbieist and kind hearted in the extreme. Our warmest sympathies are extended to her husband Bob, devoted twin daughters Libby and Ann, her loving brother Bill and all other relatives.

May she Rest in Peace.

Helen Boswell

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NOTES ON THE FAMILY VOLUTIDAEby D. Aiken.

The family Volutidae dates from the cretaceous period and currently contains 203 species. The distribution is widespread but with many species concentrated around Australasia. Thirty-two species are known from Africa, of which 17 are South African. They are basically sand dwellers and range from the littoral zone to abyssal depths. Their feeding habits vary from a carnivorous diet of other molluscs to scavenging, and they usually smother their prey with their broad foot.

The shell is varied in shape and the animal has a laterally lobed head with sessile eyes and a prominent siphon. An operculum occurs in only 30 species. The family is oviparous, the calcareous egg capsules are roughly spherical and are often found attached to other shells. V.ebraea is reputed to produce eggs the size and texture of a tennis ball. The radula is generally uniserial; that is both laterals and marginals are absent and the central tooth is often tricuspid. A few genera have laterals or rudimentary laterals.

Notes of the species:Genus Volutocorbis Dall 1890

Volutocorbis abyssicola (H. Adams & Reeve 1848). The shells range in size from 50 to 100 mm. and the sculpture is cancellate. There are 5 teleoconch whorls and the columella plaits are variable and numerous. The colour is deep cream to reddish brown and the shells are dredged in 85 to 300 fathoms from Namaqualand to the Agulhas Bank. There is a fully developed dwarf form which is slender and measures 40 to 50 mm.

Volutocorbis boswellae Rehder, 1969. This species varies from 25 to 60 mm. It is an elegant shell with three teleoconch whorls showing axial ribs only and has 9 columella plaits. The colour is yellowish brown and good specimens show rows of darker blotches on the body whorl. It is found at depths from 80 to 300 fathoms from Saldanha Bay to Cape Seal.

Volutocorbis disparilis Rehder, 1969. A recent discovery and looks somewhat like a smaller version of the preceding species but it is different in that each whorl is broader in relation to the height and the shoulder is rounder than in V.boswellae. It is also smaller measuring from 25 to 35 mm. and is a uniform greyish yellow with no darker markings. It is found in the same general area and at the same depths as the last mentioned species. 7 or 8 columella plaits.

Volutocorbis gilchristi (Sowerby, 1902). Also a small shell of 25 to 35 mm. and is readily distinguished by the sunken suture and thickened outer lip. There are 26 axial ribs and no spiral sculpture. It is a pale yellow shell and is often found on carrier shells in depths of 185 to 200 fathoms off Natal. Teleoconch whorls 4. 6 columella plaits.

Volutocorbis lutosa Koch, 1948. Found in the same area as V.abyssicola but only in shallower depths from 20 to 60 fathoms. It is basically cream in colour but is frequently stained from red clay and varies from 50 to 80 mm. in length. Dr. K.H. Barnard thought that this was a variety of V.abyssicola but it is consistently and distinctly different. Teleoconch whorls 5. 3 to 5 columella plaits.

Genus Festilyria Pilsbury & Olsen 1944

Festilyria africana (Reeve, 1856). The size range is 40 to 70 mm./

mm. and even the most beach worn shell can be identified by the almost black callus at the posterior end of the columella. Good specimens are taken from fishes stomachs but shells are also found on beaches from Port Elizabeth to Natal. There are 11 to 13 axial ribs on the body whorl. The colour is red-brown with darker markings. Teleoconch whorls 4. 5 columella plaits.

Festilyria ponsonbyi (E.A. Smith, 1901). Also found in fishes stomachs but rarely on the beach. It is a more beautiful shell than the preceding one with an orange ground colour and 7 spiral bands of a paler orange. Each band has a series of V and L shaped markings. Very good specimens have a dark spot on the point of each axial rib and there is a white callus at the posterior end of the columella. There are 14 axial ribs. Teleoconch whorls 5. 3 columella pleats plus three more obscure posteriorly.

Genus Callipera Gray, 1847.

Callipera bullatiana Weaver & Du Pont, 1967. Is found only on beaches from Still Bay to Port Alfred. The genus was created for this shell on conchological grounds and it is remarkable that no live specimen has been found in 150 years. When the animal is examined we may have to change our family as with Afrivoluta pringlei which was transferred to the Marginellas. The shell is quite plain with a blunt protoconch and is pale brown with a few darker markings. Teleoconch whorls 3. 2 columella plaits.

Genus Neptuneopsis Sowerby, 1898.

Neptuneopsis gilchristi Sowerby, 1898. This is a large shell (150 to 210 mm.). The colour is a dull grey-brown when the periostracum is intact. There is little visible sculpture apart from fine growth lines and the columella has no plaits. The protoconch is distinctly lopsided. Teleoconch whorls 5 or 6. It is found on the Agulhas Bank from 40 to 280 fathoms.

Genus Fusivoluta Von Martens, 1902.

Fusivoluta barnardi Rehder, 1969. A recently named species, it is generally similar to Fusivoluta clarkei but is a larger, smoother shell. The most noticeable difference is in the bulbous protoconch and less pronounced axial ribs. It is believed to occupy a more northerly geographic range off Natal but fishermen are somewhat unreliable in reporting where a shell was trawled or dredged. The shells are dull white to pale yellow depending on their freshness and are found at depths from 120 to 180 fathoms. The length is 80 to 120 mm.

Fusivoluta blaisei (Barnard, 1959). A rare species, three specimens of which are in the South African Museum. The shells were dredged in 105 to 125 fathoms off Cape St. Blaize and vary from 18 to 42 mm. The colour is a uniform salmon-buff and the protoconch is large. Teleoconch whorls 4.

Fusivoluta capensis (Thiele, 1925). Known only from the holo-type in the East Berlin Museum. This specimen was dredged on the Agulhas Bank and is white. The animal is unknown. Teleoconch whorls 6.

Fusivoluta clarkei Rehder, 1969. Similar to F. barnardi but is smaller (70 to 100 mm.) and the ribs give a more angular appearance to the whorls. There are also fewer spiral

lirae/

lirae. The colour is a dull off white when fresh but cleaned shells are pinkish. There are 6 teleoconch whorls compared with 8 on F. barnardi.

Fusivoluta decussata Barnard, 1959. Known only from the holo-type in the South African Museum. It is a juvenile shell 35 mm. long and is chalky-white with a cancellate sculpture. It was dredged in 310 fathoms 15 miles off East London.

Fusivoluta pyrrhostoma (Watson, 1882). Adults are 40 to 90 mm. and are white to pale fawn. The protoconch is distinctive and there are 7 teleoconch whorls. Specimens are dredged off Mossel Bay round the Cape to Saldanha Bay in 40 to 200 fathoms.

Fusivoluta sculpturata (Tomlin, 1945). A rare species and is dredged in 300 fathoms off Cape Point. Specimens vary from 30 to 40 mm. in length. The colour is uniform greyish-white. Teleoconch whorls 6.

References:-

Aiken & Fuller, 1970. The Living Volutes of Africa.

Du Pont & Weaver. The Living Volutes.

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Editor's Note.

Since the above article was prepared for publication it has come to our notice that Mr. R.N. Kilburn has published a paper on this family in which there have been some changes in genera. We hope to be able to publish these changes shortly.

For further information about Volutidae members are referred to Circular No. 104 where there is an article on the radula of Festilyria africana, accompanied by fine line drawings.

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A NOTE ON CONUS EUMITUS TOMLIN

By R.N. Kilburn.

Conus eumitus Tomlin, 1928, is one of the rarest South African cones. Although specimens are probably present in some of the larger private collections, until recently the only examples in the Natal Museum were two worn paratypes, being two of the original shells collected at Scottburgh and Umwalumi by Chas. Alexander and Mrs. Ballendon during the 1920's. In 1968, however, a young textile cone was collected at Ponta Zavora in Mocambique by Master Roy Aiken. Subsequently submitted by his father, Don, for identification, it proved to be a fine specimen of C. eumitus. The specimen was taken alive among sea weed in a tidal pool, and the radula is now in Don's collection. The shell, which measures 26.8 mm. in length, has been very kindly presented to the Natal Museum by Roy. Not only is it officially the first living specimen of C. eumitus to be found, but it represents quite an extension of the known range of the species.

Although the name is frequently misspelt "eumitos" the original citation is eumitus. Tomlin gives the meaning of this name as "having fine threads".

The only species with which C. eumitus can be confused is Conus cholmondeleyi Melvill, 1900. I have never seen an example of that species, but judging by Melvill's description and figure there is a fundamental difference in colour pattern. In C. eumitus the textile-like markings are obsolete, the basic pattern/

pattern consisting only of fairly close-set undulating
In cholmondeleyi the same axial lines are present but they are
markedly more zig-zag and are interwoven to form a fine tent-
pattern. Marsh and Ripplingale's figure (pl.14, fig.5) of the
latter seems to be correctly named.

References:

Tomlin, J.R. le B., 1926. On South African Marine Mollusca, with
descriptions of new species. Ann. Natal Mus. 5: 283-
301, pl. 16.

Melvill, J.C., 1900. A revision of the textile cones, with
description of C.cholmondeleyi, n.sp. J. Conch. 9:
303-311.

Marsh, J.A. & Ripplingale, O.H., 1964. Cone shells of the world.
Jacaranda Press: Brisbane.

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Exchange Wanted:

- Mr. F.K. Turnbull, 83 Wellington St., Mosman Park, 6012
Australia. Wants to exchange Australian shells for Africa
or World wide Cones.
- Mr. B. Lionello, Calle Dogana 422, 30015 Chioggia, (Venezia),
Italy. A collector of Cowries, Cones, Murex, Olives, Mitres,
Volutes and Terebra, wishes to exchange local shells.
- Mr. Eugenio Lanfranco, Via Cavour 6/8, 17100 Savona, Italy. Wants
to exchange Mediterrean for South African shells.

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Change of Address:

Miss E.J. Kriel, 76 Gardendale Crescent, Hillary, Natal.

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New Members:

- Mrs. G.P. Carstens, 3 Gremorne, 35 Beach Rd. Humewood, Port
Elizabeth.
- Mrs. T. du Preez, 60 Worraker St., Newton Park, Port Elizabeth.
- Mrs. G.C. Webber, 242 King Edward Ave., Scottsville,
Pietermaritzburg.
- Mrs. H.N. Brink, P.O. Box 73, Ermelo, Transvaal.
- Miss M.B. Routledge, P.O. Box 306, Johannesburg.

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Around the Groups:

Natal Midland Notes. Mr. Kilburn again held everyone's attention
with his interesting talk on the reproduction of molluscs. We
were told how some varieties produce live shells, while others
eggs in large numbers which hatch from one to two days. A large
variety of shells were handed round for members and visitors to
examine, after which tea was served.

The book "Australian Shells" has arrived and we will all enjoy
reading and gaining knowledge from it.

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Transvaal Notes: Thirty members and visitors were present at the
meeting/

meeting of 18th February. We were privileged to have as our speaker Dr. W. MacNae, Associate Professor of Zoology at the University of the Witwatersrand. Prof. MacNae is probably the pre authority on the biology of the mangrove swamps.

The subject of his address was "Aspects of the Life of Molluscs". He very forefully prefaced his address with the comment, "I do not approve of shell collectors unless each specimen is adequately labeled with the fullest possible information". A collection, he said, no matter how magnificent, could only be a scientific curiosity unless accompanied by adequate data. Having made this point Prof. MacNae proceeded with his address.

He sketched out the hypothetical primeval mollusc and pointed out that this had started off in life with the problem of having the excretory system next to the gills, and therefore being in conflict since the gills required clean water. This problem was solved by various molluscs in different ways, but all attempted to move the gills forward, either to the left or right or above in order to obtain cleaner water. It all added up to the fact that the primeval mollusc was not of a very good design!

Prof. MacNae then went onto deal with sex in the mollusc - in all its complexity! As one example he took the genus Crepidula which has been studied extensively since it is a nuisance in oyster beds. It is well known that sometimes these shells grow one on top of another. In such cases the first one to settle is male until the second one settles on it when it - the first - becomes female. When the third shell settles the middle one becomes hermaphrodite and the top one male. This process may continue with the bottom one remaining female, the top one male and the intermediates hermaphrodite. A more detailed account of hermaphrodites followed.

Lastly Prof. MacNae spoke of collections taken from near the surface and from the bottom of the sea, but said that parts of the African coast in the Indian Ocean were characterized by steep underwater cliffs falling abruptly from the surface and that we know practically nothing of the inhabitants of the cliffs and ledges lying between the surface regions and the ocean floor. We know that the Coelacanth lives on these rocky cliffs - what else is there?

Prof. MacNae was warmly applauded by an appreciative audience and the meeting ended after Mr. Adam had thanked him for his informative and stimulating address.

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Thirty members and visitors attended our March meeting which took place at John Orr's home. Small groups were shown around his laboratory where he has four salt water tanks housing several species of Cypraea, including, C.carneola, C.chinensis, C.felina, C.isabella, C.onyz adusta, C.tigris and C.vitellus, and amongst others a well camouflaged Conus marmoreus. John also has two living coral heads and is himself surprised that these should still be alive as he has had little success with them in the past. We were able to observe the cowries, some with mantle extended, some grazing on the algae covered rocks, and others on the tank sides so that the foot and siphon were fully visible.

Mr. Orr explained that he used natural sea water so that the rocks were populated with marine growth providing natural food for the inhabitants of the tanks. He stressed the importance of strong water circulation and surface aeration and pointed out the problems involved in maintaining tanks at 6000 feet above sea level since the reduction in atmospheric pressure must effect osmosis.

Eddie Ralph closed the meeting by thanking John for demonstrating

what/

what can be done and for his hospitality. John returns to London (via the Far East) in May. We are grateful to him for his interest he has shown in the Society and for the opportunity we in the Transvaal have had, not only of observing his live molluscs, but of seeing his many beautiful colour slides of *Cypraea* which he has shown us from time to time.

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Eastern Cape Notes: Fourteen members attended our meeting on 4th March which was held at the Port Elizabeth Museum. Apologies were received from three members. After welcoming Mrs. Carstens and Mrs. du Preez, two new members, Mrs. Watters said that up till now our meetings had been informal, but as the membership had increased she felt it was now time to elect office bearers. This was agreed and Mrs. Watters was unanimously elected Chairman and Mrs. Farrell was elected Secretary.

Mrs. Watters gave a short talk on Marginellas and various methods of collection were discussed. Mr. Greave brought along a left-handed *Lutea* which Mrs. Watters said she would have photographed. The rest of the afternoon was spent in the identification of specimens.

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Border Notes: Twelve members and two visitors were present at our meeting of 27th February. The Bokomo Album and illustrations were displayed. Orders for plastic boxes were taken. Mrs. Armstrong displayed a book "Cowries of the Seychelles" and asked anyone interested to let her know.

The subject for the day was again Marginella. A wonderful variety of these shells from the various members were displayed, and we all took this opportunity for a classification of our "problem" shells.

Our Chairlady, Adeline Gillmer, said she would like to resign due to pressure of work. A vote of thanks was passed to her for all her hard work so cheerfully done. Mrs. Peggy Faulkner was then unanimously elected Chairlady, Miss Eva Vice-Chairlady and Mrs. Latigan as Secretary.

The Meeting closed at 4.15 p.m., whereafter general discussion ensued while tea was served.

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Minutes of a meeting of the Society held on 28th March, 1972.

All present were welcomed by Professor Mallory. Apologies for absence were recorded from six members.

The meeting stood in silence in memory of Leila Kerr, our President, who passed away earlier in the month.

The minutes of the previous meeting, having been published in Circular No. 138, were taken as read and confirmed.

The sixth talk in the Radio Talk series by Mr. R. Kilburn was read. This talk dealt with "The Venomous Cone Shells".

In reply to a question as to whether two papers by Mr. Kilburn - "Notes on some deep water Volutidae" and "A revision of the littoral Conidae" - were in the Society's library, Mr. Carlsson undertook to obtain copies from the Natal Museum.

Mr. Freeman then proceeded to present his talk for the evening. This was entitled "The colouration and Pattern of Shells". This talk was very interesting. Mr. Freeman had reproduced various patterns on a paper roll pulled through a "screen" box and explained how the

molluscs/

molluscs produce the design of their pattern at the same time as the shell is built.

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Library Notes. Books Reviewed.

No. 27. "Animals without Backbones". 2 volumes by R. Buchsbaum. This introduces the reader to a serious scientific work, easy to read as a natural history book. There are photographs of animals alive and "at home". These two volumes give a comprehensive survey of the invertebrate members of the animal kingdom. Aquarium and laboratory are brought together in an interesting way.

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MEETINGS:

Cape Town: The next meeting of the SOCIETY will be held on Tuesday, 25th April, 1972 in the Lecture Hall of the South African Museum, Queen Victoria Street at 8.15 p.m. The shells for display and discussion will be South African PATELLIDAE. This display is basically for the beginners and a prize will be awarded. Professor Mallory will talk on "The Tides".

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Johannesburg: The next meeting of the TRANSVAAL GROUP will be held on Friday, 21st April, 1972 in the Auditorium of Shell house at 8 p.m. A film will be shown.

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Pietermaritzburg: The next meeting of the NATAL MIDLANDS GROUP will be held on Saturday, 6th May, 1972 in the Natal Museum, Pietermaritzburg at 2.30 p.m. The subject at this meeting will be "General anatomy of molluscs".

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East London: The next meeting of the BORDER GROUP will be held on Sunday, 30th April, 1972 in the Lecture Room of the East London Museum.

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Port Elizabeth: The next meeting of the EASTERN CAPE GROUP will be held on Saturday, 6th May, 1972 in the Port Elizabeth Museum at 1.45 p.m.

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