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X THE CONCHOLOGICAL SOCIETY OF SOUTHERN AFRICA X
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Edited by Leila Kerr.

MEETING.

Our first meeting of the year will be at the S.A. Museum on Tuesday, 18th February at 8.15 p.m. We hope to have a speaker and films. The shell family for display will be Strombidae (Barnard p.91). As there are many beautiful foreign members of this family, we expect a good display. Latest finds during the holidays may also be brought.

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BORDER MEETING.

Will all Border Members please note that the third gathering will be held at the Hotel Florence, Kei Mouth, on the long weekend - 4th to 6th April. As on previous occasions, non-member friends interested in shells, will be very welcome, also Juniors.

A reminder by post will be issued by the Convenor to all members later on.

D.H. Kennelly.

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GENERAL NOTES.

The Genus Oliva in South African Waters. By R.N. Kilburn.

I was rather distressed to find the publication in a recent circular of a rough key to the genus Oliva prepared several years ago by myself and passed on the Mr. D.H. Kennelly for his personal use only. This key was never intended for publication. It was compiled mainly from the insufficient literature then available, and made no pretext to being accurate or complete. In fact it is full of errors and omissions, and allows no margin for the considerable variation that occurs among individuals in many species of Oliva.

Subsequent investigations have produced a very different picture of the South African olives. I would therefore like to give a general discussion of the South African records, and a much revised key. The key already given should be ignored.

A glance through published records will reveal the following names.

Oliva caerulea Röd. (formerly episcopalis Lam.)

Oliva truncata Marrat

Oliva bulbosa Röd.

Oliva elegans Marrat

Oliva scitula Marrat

Oliva dactyliola Duclou

Oliva ispidula/....

Oliva ispidula L.
Oliva paxillus Rve.
Oliva pictus Rve.
Olivella capensis (Sow.)
Olivella nana (Lam.)

Out of this list no less than six names may be expunged without any qualms.

- (1) Olivella capensis (Sow.) "Cape of Good Hope". No members of the genus Olivella are known to inhabit South African waters, nor can the original locality be accepted without confirmation, for in the days of Kiener, Reeve and Sowerby records were often based on hearsay or mere guesswork (it will be sufficient to mention the enormous collection of Hugh Cuming, which did not contain a single label). George W. Tryon (Manual of Conchology p.68) regarded capensis as a synonym of the Central American anazora (Duclos), with the comment, "... can only be separated by its doubtful locality." Tryon is notorious as a "lumper", but a comparison of actual specimens would certainly be of interest.

W.H. Turton informs us that Farquhar found it at Port Alfred. His shell was probably a juvenile scitula. The Farquhar collection is preserved in the Albany Museum, but is unfortunately packed away at the moment.

At all events there seems little likelihood that we will be able to add Olivella capensis to our fauna list.

- (2) Olivella nana (Lam.) can be disposed of more cursorily. Tryon himself is to blame for this record, for he quotes the following localities, for this species: "Gabon, West Africa; So. Africa; Madagascar." No authority for the S.A. record is given, and the distribution cited can hardly be taken seriously. On Tryon's word alone, this West African species cannot be regarded as an inhabitant of our waters.
- (3) Oliva truncata Marrat. Marrat's figure (Thes. Conch. fig. 41) shows a shell of the Central American - Caribbean angulata - fusiformis - spicata complex. Tryon treated it as a synonym of araneosa (= spicata Röd.) var juliettae Duclos, with the comment, "..... said to come from the Cape of Good Hope. I believe this habitat to be erroneous; moreover a specimen received from Mr. Marrat is undoubtedly a young Juliettae." Nothing has been heard of truncata since, and may it rest in peace.
- (4) Oliva caerulea Röd. Bairstow's record from Port Elizabeth is quite inadmissible, and as the species does not occur on the Natal coast (shells in the Durban Museum from the notorious Casey collection can be ignored), nor even, as far as can be ascertained, in Delagoa Bay, it cannot be considered a South African inhabitant.
- (5) Oliva picta Rve. Specimens identified by E.A. Smith (who officially recorded the species) are in the Natal Museum, leg. H.C. Burnup. They are merely immature scitula Marrat. Incidentally as the type of picta is also a juvenile shell, even records from other localities must be treated with suspicion, as immature Oliva are often very difficult to distinguish from one another.
- (6) Oliva dactyliola Duclos. This species may also be deleted from South African checklists. The Pondoland shells so named by G.B. Sowerby are simply faded scitula (actual specimens in the Transvaal Museum, leg. Mrs. A. Filmer). And as Sowerby also identified

the South/.....

the South African Museum shells listed by Dr. Barnard (1959 p.60), one may presume them to be conspecific; nevertheless it would be interesting to know the colour of the aperture in the living example cited.

True dactyliola differs from scitula in a number of small, but important characters; for example, the anterior half of the columella lip is only slightly convex, instead of strongly so as in scitula, the fasciole (the spiral callous band resulting from the progressive filling in of the anterior canal as the shell is enlarged) is prominently stained with chestnut, and the external colouration is made up of a fine network of undulating dark olive-brown lines, instead of flecks and dots of that colour. The aperture in dactyliola is always pure white; in scitula it is violet when fresh, but apparently soon fades to bluish white or white; Sowerby was evidently misled by this phenomenon. However, it must be admitted that the writer has seen scitula with pallid apertures, which appeared to be relatively fresh, and possibly occasional individuals may be so afflicted while still alive. Our skindivers are the only ones who take scitula alive, and their observations on this aspect would be of great value.

Thus, of the eleven recorded species, five may be reasonably accepted as inhabitants of our waters.

Oliva bulbosa Röd. A very prolific Indo-Pacific species, which occurs occasionally as far south as Durban, although it is rather uncommon in our waters. Bairstow's Port Elizabeth record is unacceptable, and one might well query Turton's Port Alfred specimen -- it was received "from a friend".

The shell is unmistakable. Although exceedingly variable in colour and markings, the ovate shape and a peculiar feature of the columella callus (which has earned for it the subgenus Carmione all to itself); examination of the external surface of the columella callus, where it spreads over the base of the body whorl, just anterior to the middle, will reveal a strong slanting transverse ridge, usually brown-tinted, and set well away from the series of weak pleats which line the lip of the columella; just anterior to it is a second much weaker fold. The aperture is pure white.

Little can be traced on the habits of any of the Natal olives. However a small colony of bulbosa was once found in the surf on a sandy beach near Bolito Bay (North coast of Natal) by Mr. P. Elston of Durban.

Oliva elegans Lam. The rarest of the Natal Oliva, a single specimen of which was collected at Durban by the late H.C. Burnup. The writer has it from Delagoa Bay, where it is apparently not uncommon. It is superficially similar to the previous, but is a little less ventricosa, lacks the twin columella folds, and shows a faint, but very characteristic buff tinge to the base of the columella. There is also a prominent posterior canal, produced partly by the presence of an erect flange-like callous deposit (raised to the level of the tip of the spire) on the extreme posteriormost end of the columella wall. Externally the colour is pale olive yellow, with wavy longitudinal lines and specks of olive brown; the aperture is bluish white.

Oliva scitula Marrat. A common Natal and Pondoland shell, although the southernmost limits of its range need investigation. In this species, external colouration is quite constant (see key); it is the colour of the aperture which presents difficulty (see discussion under dactyliola). The outline of the columella is distinctive among South African Oliva, and is well shown in Barnard's "Beginner's Guide", plate IV, fig.6 (although I have never seen an example in which the posterior canal callus is quite as prominent as is shown).

Oliva ispidula L. Although typically distinguished by an elevated spire and a chocolate aperture, Natal examples frequently have abnormally (?) low spires, and the aperture has a distinct purplish tint; such

examples/....

examples may in fact be confused with scitula by the unwary. External colouration is exceedingly variable.

The species reaches Durban. Sowerby reported it from "Knyena", a locality which cannot possibly be correct; the P.E. Museum copy of Sowerby's Marine Shells of South Africa contains a marginal note attributing this record to the late Jas. Crawford, who, sad to relate, was every bit as unreliable as Bairstow.

In Natal ispidula occurs occasionally in large colonies in sand-pockets just offshore. Specimens are very rarely found on the beach. In Indian waters the mole crab (Hippa sp.) is said to figure prominently in its diet.

Oliva paxillus Rve. An uncommon species which now and then turns up on the beach at Durban or on the South Coast. A worn shell was found at Umzamba, just below the Natal-Pondoland border, by the writer, so it should also be sought further down the Wild Coast.

O. paxillus can be at once distinguished by the biconic shape. In colour it is predominantly ivory white, but faint fawn markings are usually present.

I have a note (? authority) to the effect that the well-known Hawaiian Oliva sandwichensis Pease, is synonymous with this species.

In conclusion it is hoped that the following key will be of use to collectors.

- (1) Outer face of columella callus with a strong isolated transverse pleat just anterior to midline, and a second feeble fold just anterior to this; shape very bulbous bulbosa
Columella without pleats as described (2)
- (2) Shape biconic with a very high, broadly conical spire (approximately $\frac{1}{2}$ x length of outer lip), and a markedly conic body whorl; rarely, if ever, exceeds 15-20 mm in length..... paxillus
Shape ovate-cylindrical, spire low to moderate, never more than $\frac{1}{4}$ x length of outer lip; attain an adult size of 25-35 mm. in our waters (3)
- (3) Posterior canal raised to tip of spire through the presence of an erect callus on the end of the columella (in line with the shoulder); base of columella tinged with buff, aperture bluish white..... elegans
Posterior canal not conspicuously elevated, posterior callus deposit not erect; columella pure white throughout; aperture violet, dark brown or white..... (4)
- (4) Profile of posterior half of columella lip slightly concave, that of anterior half convex, sometimes markedly so; spire prominently concave-sided (coeloconic); with a colour pattern of numerous brown dots and flecks, on a pale olive or yellowish-brown ground, and an interrupted spiral brown band below shoulder, and usually another around middle; aperture deep violet to white..... scitula
Profile of columella lip very gently convex throughout, spire only slightly concave-sided; colour pattern never as above; aperture chocolate to purple brown..... ispidula

Specimens of all the above species are in the writer's collection. However very little work has been done on the soft parts of the Olives, and knowledge of the colouration of the animal, and nature of the radula are greatly to be desired. The writer would welcome freshly preserved specimens of the South African species.

The following/....

The following are the works referred to in the above article:

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| Barnard K.H. | 1951 | <u>Beginner's Guide to South African Shells.</u> |
| Barnard K.H. | 1959 | <u>Ann. S. Afr. Mus.</u> Vol. XLV Pt. I, p. 60. |
| Marrat | 1871 | In Sowerby's <u>Thes. Conch.</u> Part 30. |
| Reeve L. | 1850 | <u>Conch. Icon.</u> |
| Sowerby G.B. | 1892 | <u>Marine Shells of South Africa</u> p.16. |
| Sowerby G.B. | 1897 | ----- do ----- , Appendix, p. 7. |
| Tryon G.W. | 1883 | <u>Manual of Conchology</u> Vol. V. |
| Turton W.H. | 1932 | <u>Marine Shells of Port Alfred</u> pp. 31 and 289. |

Conus aurora, Lamarck. (Still Bay, W.Prov. to Natal)
Conus natalis, Sowerby. (Port Alfred to P.E. Africa) } By D.H. Kennelly.

The writer has been investigating the above for some time, with a view to ascertaining the approximate maximum size attained by these two species.

The largest examples of C. aurora in the East London Museum, range from 55 to 70 m.m., all collected at Jeffreys Bay. The Museum is indebted to collector - Ginger Wicks of Uitenhage - for some of these large specimens.

From the East London area to Natal, all specimens of aurora seen to date, are much smaller, and information as to size is now needed from the Transkei, Pondoland and Natal coasts in addition to the East London area.

The largest specimen seen of C. natalis measures 45 m.m., and was collected by the writer at Bonza Bay. As this species ranges to Portuguese East Africa, further information as to the size in other localities is now needed.

On many occasions requests for information have been made in issues of our Circular, without any result. It is hoped that this time some of our members will endeavour to assist.

Please communicate any data to a Circular, but also please remember that the locality data must be accurate.

South Pacific Islands. By Les Cock.

Fiji and Tahiti are names that conjure up in the minds of most people pictures of exotic islands, Hulu dances and beautiful girls. Shell collectors have in mind quite naturally thoughts of the great variety of shells found in the coral seas around these islands.

In the course of a sea trip last year, we had the pleasure of making a call at both of these islands and seeing some of their beauty. The hills rising almost from the water's edge, with the rugged mountains covered with thick bush in the background, the lovely Flame trees and beautiful flowers of many hues, and the stately Palms, which when viewed from the ship, together made a picture that would make an artist get out his brushes and paints. Surrounding the islands are coral reefs and within these reefs the calm blue waters of the Pacific.

Normally/....

Normally a glass bottomed boat takes visitors out over these coral reefs to view some of the under-sea beauty, but unfortunately this was ^{out} of commission at the time, so we were unable to participate in what was to be one of the highlights of the visit.

The Fiji group consists of some 300 islands of which about 80 are inhabited. Amongst the listed items exported is trochus shell and this will give some idea of the vast amount of shell available.

As sight-seeing took up the best part of the time we were on the Island, there was very little time for collecting. However by sacrificing a certain drive we were able to spend quite a while at the native open market in Suva, the chief town and port of call for shipping. Here in open stalls on the street front were displayed for sale various curios peculiar to the island, such as grass skirts, native drums, wooden outrigger boats, models of the craft used on the lagoons etc. To us however the most interesting feature of the stalls was the vast supply and variety of shells offered for sale.

What could not fail to attract attention were the large Clam shells -- Tridacna gigas -- ranging from 2 to 3 feet in size. Incidentally these were also seen being used as flower pots in some gardens.

We heard afterwards from one of the stewards on the ship, that on a previous voyage he had purchased one of these shells, on getting permission to leave it on deck, and taken it back to England.

Amongst others of the larger species of shells were large Trumpet shells -- Charonia tritonia Linn., Nautilus pompilius L., Lambis lambis L. and others of the same family, together with a fine selection of the beautiful shells of the Strombus family.

The range of Cypraea was extensive and all in fine fresh condition. The Golden Cowrie Cypraea aurantium Mart. was not on show at the market, but one of the stall-holders had a specimen which he was prepared to show by appointment to prospective buyers. We did not see it but a friend from Kenya, a Cowrie collector, was interested but said the price asked was too high.

Tahiti, one of the French Oceanic Islands, known perhaps better because of its association with the Mutiny on the Bounty, has frequently been called the "Pearl of the Pacific". The capital is Papeete, a town often referred to in stories of the island and in particular, reference is often made to that world famous landmark there - "Quinn's Bar".

Shells did not seem to be quite so prolific, and there is no open market as at Fiji, but there were however a couple of dealers with quite a large range of shells of the island.

Before closing, it would not be out of place to make mention of a very fine collection of shells seen at Balboa at the entrance to the Panama Canal on the Pacific coast. Our steward friend took us along with him as he had seen it on previous visits, and was going to make some purchases.

The ship only docked about 9 at night, and although it must have been 10 P.M. by the time we arrived on our unexpected visit, we were made most welcome by our American hosts. Here we saw the shells of the vast locality they covered in their collecting, made more extensive because the whole family - wife, husband and son - were all skin divers, and also being situated where they were, were able to collect on both the Caribbean and Pacific coasts. It was well past midnight before we made our way back to the ship after spending a most pleasant few hours, and having also gained some more knowledge of this most interesting hobby of ours.

BIVALVES

By Mary Lou Wapenaar.

Both sandy beach and rocky shore
Aspects devoid of bivalves wore,
But seek below the surface bare -
I always find a bivalve there.

The Mytilids the rocks obscure,
Their species being a pointer sure
For warm or cold; the Ostreidae
Form eastward many a colony.

Beneath a rock or at its side
Thecalia and Lasaea hide;
And boring into rocky face
The Gastrochaenids channels trace.

Bright bubbles where the breakers fall
Show burrows where the Donax crawl -
Where strong waves dash on sandy shore
They live - and more, and more, and more!

But estuaries the finest yield -
For bivalves far the richest field,
Great Pinna, splendid, rises bright
When spade is turned - a glorious sight.

Though they are rare above, I find
That bivalves all, of every kind,
Their siphons restlessly unfurled,
Are numerous in the underworld.

Haliotis midae, Linn. and Haliotis midae elatior, Pilsbry, 1890.

By D.H. Kennelly.

An article was published in Circular No. 7 (May 1959) detailing the information available to the writer at that date.

Now, five years later, some further information has accumulated, and the writer has also been able to study specimens of these shells held in the East London Museum, together with examples in the collections of several members.

All the specimens examined have been collected alive.

The type locality for Pilsbry's variety elatior is given as Cape of Good Hope - a very indefinite designation.

This locality may be a reference to the Cape of that name on the Peninsula, or be applied to any locality between Table Bay and East London. In 1890 the present Cape Province of South Africa constituted what was then the Colony of the Cape of Good Hope.

A well known collector in the U.S.A., Mr. R.R. Talmadge, Field Associate of the Californian Academy of Science, has made a special study of world wide Haliotidae, and writes as follows:-

"In Philadelphia I saw the three examples of Pilsbry's variety elatior. Some people who have seen these, called them "Beach shells", and Pilsbry himself made no mention as to whether they were taken alive or not. The shells are a bit deeper than the present day H.midae, the sculpturing is eroded away, and they have a caste or patina which I associate with Midden specimens".

It appears/.....

