

XX  
X  
X THE CONCHOLOGICAL SOCIETY OF SOUTHERN AFRICA X  
X  
XX

CIRCULAR NO. 39

FEBRUARY, 1963  
(Re-printed February, 1976)

PAGE 1.

Edited by Leila Kerr.

MEETING.

The next meeting will be held in the Lecture Room of the S.A. Museum on Tuesday, 19th February, at 8.00 p.m. Mr John Grindley has kindly consented to show us some of his slides of Plankton and give a short commentary. There will also be an interesting film. Members are invited to display any of their recent shell acquisitions and to bring along good specimens for exchange.

XX

MEETING AT THE S.A. MUSEUM. 22.1.1963.

Apologies were received from Miss M. Kempthorne, Mrs N. Prior, J. Grindley and C. Swanefeld.

The following were elected as members of the Society:-

- Mrs M. Searle, Great Brak River, C.P.
- Mr & Mrs E. Pickstone, Capricon, P.O. Simondium.
- Mrs G. Haylett, P.O. Box 205, Lusaka, N. Rhodesia.
- Miss K. Leers, P.O. Box 3531, Cape Town.
- Mrs K. Blackburn, 721 St. Martini Gardens, Queen Victoria St., Cape Town.
- Mrs D. Hawley, 175 Clyde St., Granville, New South Wales, Australia.
- Mr R. Burch. 9349 Greensward Rd., Houston 24, Texas, U.S.A.
- Mrs H. Searle, Sunny Brae, Great Brak River.

Mr Dirck Ackermann kindly lent us his rare Cypraea amphithales, so that members could compare it with the commoner C. edentula which was on view also. The writer brought along her new Japanese shell book "Shells of the Western Pacific in Colour" by Kira, written in English. This is a lovely work.

Mr D. Freeman reported progress on the Index he is preparing for the first 40 Circulars. New members are reminded that back copies of the Circular may be obtained from the Secretary at 10 cents each. Special Publications are 50 cents.

Two good films were shown "The Bird World" and "The S.A. Museum". The latter showed the work behind the scenes at the Museum, and was an eye-opener to many.

XX

EXCHANGE WANTED.

- Mr Franco Sacchetti, Via Trebazio 6, Milano, Italy.
- Mr Yasuhiro Inoue, F-I-Gou-Kausha, Kiuki-Kauku-Keisatsu-Gakko, 1179 Nagasone-cho, Sakai-shi, Osaka-Fu, Japan.

XX

COMMUNITY CARNIVAL.

This year there will again be a Shell Stall. Miss Peggy Kempthorne, the convenor, reports that 800 shells have arrived from Zanzibar. When these have been cleaned and priced, members will have an opportunity to view and purchase. Shells include Lambis lambis, some large Tridacna gigas, a limited number of Turbo marmoratus, very good Cassis cornuta and Harpa conoidalis, Lambis scorpius, L. crocata, Murex brevispina, M. haustellum, M. ramosus, Cypraea tigris, Cassis rufus and Cardium pseudo-lima.

Any saleable shells as donations to charity would be most welcome.

XX

SHELL STORIES.

In this Circular, we commence a series of articles written alternatively by Joan and Leila on Shells and their Stories. If members could add further anecdotes on the Pinna and on subsequent articles, would they please send them in.

XX

GENERAL NOTES.SOUTH AFRICAN TONNIDAE, SUPPLEMENTARY NOTE. By A.C. van Bruggen.

Following my article on South African Tonnidae in Circular No. 37, November, 1962, I have received comments from a few members, for which I am most grateful. The data, however, is not sufficient to assess the distribution of the species in South Africa.

First of all I want to stress that I only translated and adapted extracts from Kilia's book and that it consequently does not reflect my own view on the family. Personally I do not think it is the last word on the Tonnidae - in my opinion some of the interpretations of Kilia's are not readily acceptable and in many respects his information is not complete.

Secondly Tonna perdix (L., 1758) has to be added to the list. It occurs alive from Natal right along the east coast to the Red Sea and is furthermore widely distributed in the Indo-Pacific. Tonna perdix can be easily recognised on account of the many white spots on a brown background, the slender shape and only slightly ventricose body whorl. According to Mr P. Elston it is rather a common species in and around Durban - it was probably first discovered in Natal by J.F. Quekett. As beach shells they are by no means common; The Natal Museum has only two, although Burnup was a prolific collector.

The nomenclature and synonymy of certain species is rather confused and there are still many problems to be solved. To mention only one: The large species from Durban Bay. The Natal Museum has a big shell in passable condition from Durban Bay, received from the Durban Museum in 1919. It has 17 spiral ribs on the body whorl and 5 on the penultimate whorl, length of shell 170 mm. It has been identified as Tonna ampullacea (Phil.), which according to Kilia's is impossible. It looks a bit like Tonna galea (L.), but this is also not very satisfactory.

Another thing is the probable synonymy of Tonna luteostoma (Küster) with Tonna variegata (Lamarck). Both "species" range across the Indo-Pacific to Japan and the specific differences, if any, are small. In case of synonymy Lamarck's name has priority over Küster's.

Furthermore the Natal Museum possesses a number of very small apices or juvenile shells of various species of Tonnidae, mainly from shale on the beaches of Natal. Some of these are under 5 mm. and it is very difficult to assign these to known species

XX

CYPRAEA MARGINALIS, Dillwyn, 1827. by D.H. Kennelly.

This species is certainly rare, and the writer has a record of the few localities from where specimens were obtained. These notes are written for the benefit of our members who may not know of this shell.

The type locality is quoted as Natal by Joyce Allan, and specimens are in the collection of the East London Museum from the Transkei coast (Bashee River and Umtata River), South coast of Natal, and Bazaruto Is. (P.E.Africa). Verdcourt reports this species from three localities on the Kenya coast, and states it to be very rare.

Our well known collector, Dirk Ackermann, had the good fortune to secure a good fresh dead specimen of marginalis at Jeffreys Bay in 1957, and no further specimens have been reported between this locality and the Transkei coast since.

In appearance on the dorsal side, marginalis resembles C.helvola

meridionalis Schilder & Schilder, 1939, but it is slightly larger than the average C.h.meridionalis. Examination of the aperture shows the difference in the teeth at once, and if the aperture is coloured mauve or bluish, you then have a specimen of this rare shell.

(The South African Museum has three specimens of C.marginalis from Scottburgh collected by Burnup. - Editor)

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

SIX Tanks of Molluscs in the Lounge ! by C.M. Connolly.

The first tank holding six gallons of sea-water, has only molluscs in it that feed on pieces of dead fish, i.e. Cymatium, Demoulia, Nassa and Burnupena. Two shrimps and some crabs have also been kept there for three months. The shrimps shed their old skins or shells every month.

The second tank, with three gallons of sea-water, has predators and their living "dinners", Gibbula and Tricolia providing food for Thais castaneus; worms for Afrocominella and Clionella, which in turn are eaten by a fasciolaria lugubris. The latter shell is the only living specimen found by the writer between tides in False Bay.

Then there are four jars, each containing one gallon of sea-water. These have only one specie in each, so any egg-cases appearing in a jar are definitely linked to the parent. Separating the species also simplifies experimenting with different foods when the correct one is not known.

Jar 1 contains Marginella rosea from Millers Point, and some from Kommetjie. These are fed on Gibbula beckeri and Gibbula rosea.

Jar 2 has Vexillum capensis. These have laid six egg-cases on the side of the jar.

Jar 3 contains Pusia patula which have laid twelve egg-cases. The eggs are clearly visible through a 20x glass. After four weeks each case had less eggs but they were larger and the round egg had changed to protoconch shape.

Jar 4 is empty at the moment.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

THE PINNA and his PAL. by Joan Weakley.

There is in the Mediterranean Sea a specie of the Pinna shell that grows up to 27 inches in length. In the past the byssus of this Pinna has been woven into silken objects for a period stretching over about 23 centuries. The byssus is the fibre threads by which the shell is anchored. The rulers of ancient Greece, so we are told, had elegant dresses woven for their wives from these threads, so fine that they had the reputation of being able to be pulled through a finger ring! The thread is usually mixed with silk. In Taranto, in southern Italy, there was still comparatively recently a flourishing industry in the weaving of such materials, and "Tarantine Robes" became very famous.

With these fact, and knowing what the shell looked like from a few broken halves picked up at Still Bay, my knowledge of its occupant ended, that is, until a recent visit to Knysna, along with Gladys Dunningham. Low springtide had exposed a stretch of sand normally under water. Embedded in this sand with half an inch of their sharp-edged valves projecting - to the danger of bare feet - were beds of Pinna squamifera.

But there were also graveyards of dead Pinnas. In the sands were basin-like depressions, and in and around each lay literally hundreds of broken Pinna shells. It was a little boy with a spade who solved the mystery for us. Scraping away the shells he exposed for our viewing what we took to be an Octopus, and sure enough, hidden in each heap lay an "octopus", gorged and replete, to judge by the size of the feast.

When digging up a few Pinna to take home, I realised the strength of those anchor threads. But "Tarantine Robes" from such a mucky-locking byssus! However, later on I was to see specimens of these threads cleaned by Leila Kerr. She had transformed them into a golden brown gloss of silken beauty.

When boiling out the Pinnas, I was puzzled by the presence of a number of little crabs that I had most certainly not collected. Upon arrival in Cape Town there was a letter for me from a friend in Malta. He enclosed a poem about the Pinna and by way of clarification added this explanatory note: "The cuttlefish is the enemy of the Pinna; but she has a friend in her a good price for his lodging". The crab has red eyes and sees sharply. Whenever he observes the foe at hand, he gives a warning which is attended to at once. Dr Walsh, Chaplain to Viscount Strangford when he was British Ambassador at Constantinople some 100-120 years ago says 'The harbour of Smyrna abounds with this large mussel, and also with cuttlefish. I was one day crossing in a boat and as the water was very clear, I saw several at the bottom and some Pinnas opening, while others were closing their shells. As I was curious to examine them, one of the sailors leaped overboard, dived down, and brought up several of the mussels, in every one of which was a little crab. As soon as the Pinna opened its shell, he appeared like a sentinel; and when anything approached he ran in, seemed to warn his friend and the shell closed.'"

And here is part of the poem:

One room contains them, and the partners dwell  
Beneath the cover of one sloping shell;  
.....  
When in the circuit of his gaping shells  
Fish wandering enter; then the bearded guide  
warns the dull mate. and pricks his tender side;  
He knows the hint, nor at the treatment grieves,  
But hugs the advantage, and the pain forgives;  
His closing shell the pinna sudden joins,  
And 'twixt the pressing sides his prey confines;  
Thus fed by mutual aid, the friendly pair  
Divide their gains, and all their plunder share.

According to the above facts, what we glimpsed at Knysna must of course have been Decapods, not Octopods.

I believe Taranto is one of the few places in the Mediterranean where the ebb and flow of the tide is distinctly visible. Today of course all that are made from the byssus are souvenirs for tourists.

From another source I received another little poem. It sympathises with the poor Pinna for being so drab looking, but concludes:

Still thou art of a gem possessed,  
.....  
One true, one rare felicity,  
Is thine - and hearts might envy thee,  
For thou hast found a Friend.

#### Further Notes by Leila

Commenting on Joan's observations at Knysna, the writer found that one of the holes in the lagoon contained an Octopus. Other bivalves besides Pinna were strewn all round.

You may be interested to know how the Pinna makes the byssus. Ordinary mussels have a very soft narrow foot. Along the middle of it is a narrow groove ending at a little gland which exudes a peculiar sticky substance, like liquid glue, which hardens when exposed to air. When the mussel wished to throw out an anchor, it places its foot against a rock and forcing the sticky material along the groove, touches it to the rock where it immediately adheres and hardens. Then by drawing in its foot, the shell spins a long cable known as a byssus. By repeating this process scores of these threads are formed until the shell is so firmly anchored that the heaviest seas will not dislodge it.

Mussels and Pinnas can anchor and wrap themselves to a new position. The muscle reaches his foot out as far as possible in the direction it wishes to move and spins new cables. Then it cuts its old anchor lines, draws in on the new ones and hauls itself forward. This is a very slow process, but as time is no object, it does not matter if the mussel takes a year to move a few inches.

The Pinna's byssus is spun through a sieve-like opening and forms thousands of fine cobwebby threads tangled and interlocked. It usually has a metallic appearance and gleams like burnished brass, silver or gold. Legend has it that the Golden Fleece that lured Jason on his quest was in reality cloth made from the byssus of the Pinna shell.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

MONODONTA AUSTRALIS Deshayes. by D.H. Kennelly.

Those of our members who have collected on the East Coast, will be familiar with this shell.

Although somewhat drab in appearance, M.australis is interesting on account of its limited range.

Investigation by the writer revealed that it occurs on the Natal Coast, through Pondoland, to Umtata River Mouth on the Transkei Coast, and apparently has not been recorded elsewhere.

Collectors who may have found this species at other localities on the Transkei Coast, are requested to send the details to the writer for record.

(For attention please, Mrs Pinkham, Mrs Bobby Richards, and C. Walker)

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

CYPRAEA CAPUTSERPENTIS Linn. by D.H. Kennelly

Although this shell has a very wide range over the Indo-Pacific Region, it may be rated as rare on the South African Coast.

A few specimens have been recorded from the South Coast, Natal, also from Pondoland and Transkei. The last one reported from the Transkei was taken alive in 1961 at Umtata River Mouth by lucky Ginger Wicks.

C.caputserpentis is very rare at Port Elizabeth and Jeffreys Bay, but in December, 1962 two specimens were found at the latter locality, one of which may be seen in the collection at the Beach Hotel.

Members are urged to look for this species, and report results for scientific record of the range.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

CAPE NOTES. by L. Kerr

During this last week, Muizenberg beach has been covered with kelp, thousands of "Blue-bottles", shrimps and large jelly-fish, due to the strong south-east winds we have been having. The writer has collected a fair number of large Patella compressa on the kelp, but not much else. Today, February 8th, the first Argonata argo was found. This was a small one but perfect. The writer is hoping that this early appearance may herald a season comparable with 1958, which was a bumper year as far as the "Paper Nautilus" was concerned.

Clafice Connolly found the largest Patella compressa we have seen. This was at Olifants Bos near Cape Point and measured 134 mm. in length and was 60 mm high. It was found alive.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

SECRETARY.

Mrs L. Kerr,  
Ryde Villa,  
Kenilworth Road,  
Kenilworth.

Phone: 77-5369

TREASURER.

Miss M. Kempthorne,  
3 Alvanley,  
Main Road,  
Kenilworth.

Phone: 77-7138