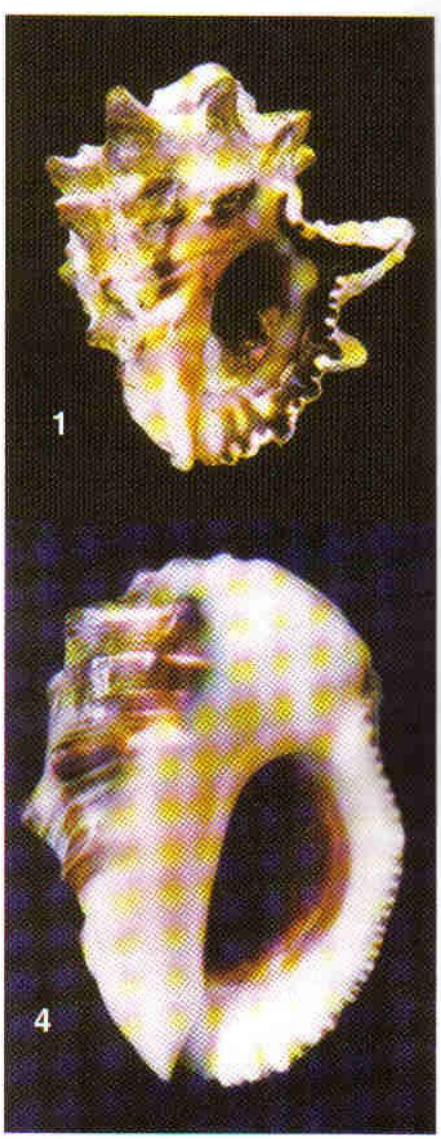
The Strandloper
BULLETIN OF THE CONCHOLOGICAL SOCIETY OF SOUTHERN AFRICA

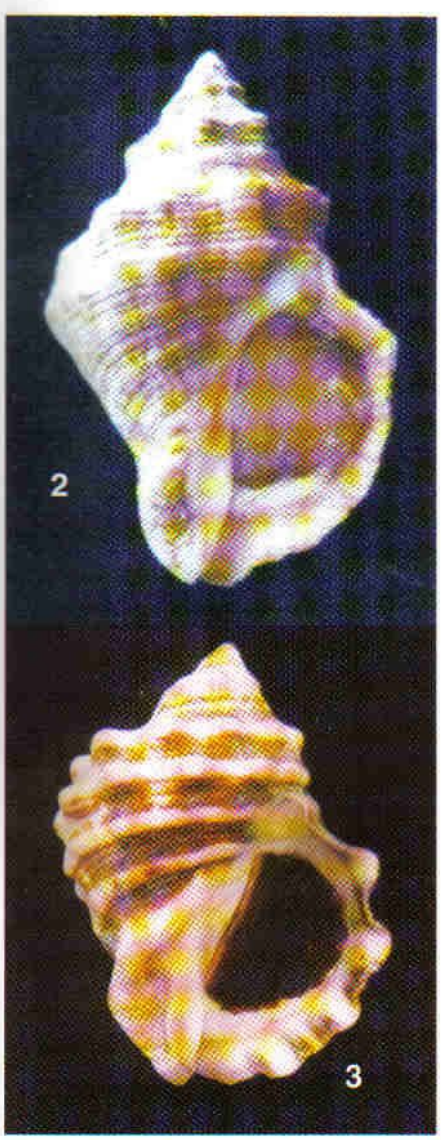
Strandloper 248 December 1996 Page 1

A COLLECTABLE GROUP FOR ALL - *THAIS* AND ALLIED GENERA IN SOUTH AFRICA

by Markus Lussi and Dawn Brink

Members of this group provide opportunities for all shell collectors by being largely shallow-water dwellers. They are normally found in pools amongst intertidal rock outcrops, often in cracks and crevices and sometimes under stones. A few species may be found on sheltered mud-flats in estuaries. They are usually clearly visible to the observant sheller. Good empty specimens frequently wash ashore. Only one species mentioned in this article lives in deep water. Species vary conchologically from warm to cold water zones.





Most shells belonging to this group are thick-walled and are roughly oval in outline. The siphonal canal is normally broad and short while the anal canal is not pronounced, sometimes not present at all. Surface sculpture consists of ribs which may be smooth, nodulose, tuberculate or spinose; aperture is wide and lirate, sometimes denticulate along the inner margin of the labrum; columella almost straight and usually smooth, sometimes concave; fasciole low and rounded; umbilicus closed. Exterior usually various shades of brown, aperture sometimes colourful. All possess a horny operculum.

The molluscs are all predators, de-

vouring other molluscs and barnacles while some of the smaller species may eat worms, gastropod eggs or carrion.

Egg-capsules usually have distinctive shapes and sizes for each species and are mainly produced in clusters. They hatch at the crawling stage. Sexes are separate, the female in some species being larger than the male.

Twenty-two species are dealt with and illustrated in this article. Readers should note that the taxonomy of this family has recently been the subject of some discussion. See, for example, the article by David Freeman in *Strandloper* no.245, pp.5-7.

Sizes in mm given in the description are those of the illustrated specimen.

1. *Thais aculeata* (Deshayes, 1844)
Indo-Pacific to southern Natal/ rare in S. Africa/ 55 mm. Shell biconical, thick-walled, spire moderately high and columella almost straight-sided. Sculptured by spiral rows of prominent sharp nodules, interior of outer lip lirate and exterior with large shoulder nodule. Edge of outer lip black to purplish-brown with white patches.

2. *Thais blanfordi* (Melvill, 1893)
Indian Ocean to Durban Bay/uncommon/31 mm. Shoulder more angular than that of the commoner *Thais tissoti*, with two rows of larger and fewer nodules on the body whorl which are not brown tipped as in *T. tissoti*; there are no sub-sutural spiral cords and the whole surface is covered with spiral threads. Columella straight-sided, interior of outer lip lirate. Pale brownish-orange exterior, orange to cream aperture and columella.

3. *Thais bufo* (Lamarck, 1822)
Indo-Pacific to north-eastern Cape/ common/ 57 mm. Similar to *Purpura panama*, but with more prominent nodules, a more depressed spire and with columella rounded, not concave. Mature shells have a pronounced callus in the parietal region. Surface colour dark brown with yellowish threads, aperture and columella pale flesh to salmon, inner margin of outer lip with dark brown markings.

4. *Thais capensis* (Petit, 1852)
Northern Natal to Cape Agulhas/ common/ 60 mm. Shell with high pointed spire, aperture large and columella concave. Sculpture consists of spiral rows of tubercules, four rows on body whorl with most pronounced tubercules on shoulder. Covered with fine spiral striae between rows of tubercules. Umbilicus present. Surface colour dull brown, grey or cream with yellowish to flesh aperture and columella, brown markings on inner margin of outer lip.

5. *Thais castanea* (Kuster, 1886)
Southern Natal to False Bay/ uncommon/ 15 mm. Shell small, biconical and spire elevated. Sculptured by axial ribs, weaker on body whorl; weak spiral threads on surface; interior of outer lip smooth or lirate. Reddish-brown or white, sometime banded with these colours.

6. *Thais haemastoma* (Linneaus, 1767)
Mediterranean to Namibia, also introduced to Durban Bay although rare and possibly extinct there/ 57 mm. Shell oval , thick-walled with a moderately high spire and a wide aperture. Sculptured by weak spiral threads and one or two rows of blunt nodules on the body whorl, strongest on the shoulder. Interior of outer lip with fine lirae, edge crenulated. Exterior greyish-brown to off-white, aperture and columella deep orange.

7. *Thais lacera* (Born, 1778)
Northern Indian Ocean to Durban Bay/ uncommon/ 40 mm. Shell resembles large Thais blanfordi except that it is broader with one or two rows of prominent blunt spines around shoulder and periphery of body whorl. Siphonal fasciole distinct. Inner margin of outer lip crenulated. Exterior cream with irregular brown axial markings, aperture and columella cream to salmon.

8. *Thais sacellum* (Gmelin, 1791)
Northern Indian Ocean, introduced into Natal/ rare/ 33 mm. Shell similar to *Thais tissoti* but with pronounced wing-like spines along spiral cords. Inner margin of outer lip grooved. Whole surface sculptured by spiral threads. Yellowish-brown with spines and threads tipped with dark brown. Columella and aperture white.

9. *Thais ?savignyi* (Deshayes, 1844).
Indo-Pacific to southern Natal/ uncommon/ 34 mm. Squat ovate shell with blunt, often eroded spire and a distinct anal notch. Sculptured with four spiral rows of angular nodules on body whorl and flattened spiral threads throughout surface of shell, inner margin of outer lip crenulated. Exterior off-white and flecked with blackish-brown, dark brown margin on interior of outer lip. Columella brownish-violet fading to light brown, lower aperture blueish-white. The identity of the South African "*Thais savignyi*" is at present under investigation and it might prove to be a new species.

10. *Thais squamigera* (Deshayes, 1832)
Indo-Pacific to southern Natal/ uncommon/ 30 mm. Shell biconical with moderately high spire. Sculptured by axial ribs and spiral cords throughout the surface of the shell. Columella straight-sided, inner margin of outer lip grooved. Ribs tinged dark brown on a lighter background, interior of labrum and columella tinged with brown.

11. *Thais tissoti* (Petit, 1852)
Northern Indian Ocean to southern Natal/ common/ 30 mm. Shell biconical, thick-walled with sharp spire and distinct anal notch. Sculptured by strong axial cords bearing weak nodules and with few weaker spiral threads between cords. Aperture lirate. Yellowish-brown with darker nodules, aperture and columella flesh.

12. *Thais tuberosa* Röding, 1798.
Indo-Pacific to Natal/ rare/ 55 mm. Shell biconical with a moderately high

spire and a large aperture. Body whorl sculptured with two to three spiral rows of conical tubercules, aperture lirate and columella with two weak folds. Black or brown with dark patches between tubercules, inner margin of outer lip dark brown, remainder of aperture cream with yellow to pale orange lirae, columella cream suffused with purplish-brown.

13. *Thais orbita* (Gmelin, 1791)
Australia, introduced to Natal and eastern Cape/ rare in S. Africa/ 87 mm. Shell oval with convex whorls and moderately high spire. Siphonal fasciole and notch distinct. Sculpture consists of well defined spiral cords of varying thickness. Aperture weakly lirate, inner margin of outer lip crenulated. Exterior light yellowish-brown, columella and aperture white except for yellowish-orange apertural margin.

14. *Purpura panama* (Röding, 1798)
Indian Ocean to north-eastern Cape/ common/ 74 mm. Shell ovate, heavy with moderately raised spire, columella concave, aperture wide with pronounced anal notch. Sculptured by close set flattened spiral threads, with fewer larger spiral cords bearing very blunt nodules. Aperture lirate, margin crenulated. Exterior blackish-brown to dark grey with paler dashes on spiral cords and between spiral threads, inner margin of outer lip dark brown, columella and aperture salmon, lower aperture blueish-white.

15. *Mancinella alouina* (Röding, 1798)
Indo-Pacific to north-eastern Cape/ uncommon/ 42 mm. Shell oval, thick-walled, spire moderately low, suture indistinct, fasciole present and columella concave. Sculptured by four spiral rows of blunt nodules on body whorl, surface of shell covered by spiral threads, aperture lirate. Exterior pale orange-brown, aperture and columella pale orange with dark orange lirae.

16 *Mancinella echinulata* (Lamarck, 1822)
Indo-Pacific to Natal south coast/ uncommon/ 47 mm. Shell very similar to *Mancinella alouina*, but with a more depressed spire and peripheral nodules are less prominent. Edge of outer lip crenulated, aperture with elongated denticles. Exterior colour pale yellowish-brown, margin of aperture and columella yellowish-orange, lower aperture and denticles white.

17. *Mancinella cf. siro* (Kuroda, 1931)
Off Natal, dredged 130 - 300m/ rare/ 29 mm. Shell biconical, spire sharp and moderately high, fasciole distinct. Sculptured by weak axial ribs each with a high pointed nodule at shoulder. Whole shell covered with fine spiral threads, aperture strongly lirate. Exterior colour yellowish-brown, aperture and columella white.

18. *Nucella cingulata* (Linneaus, 1758)
False Bay to Namibia/ common/ 37 mm. Shell roughly ovate, with a high stepped spire, body whorl and aperture large, siphonal fasciole distinct. Sculpture consists of up to six spiral flattened cords and fine spiral threads between the ridges. Interior of outer lip with grooves corresponding to external ridges. Exterior colour grey to dark brown, spiral ridges off-white, aperture brown.

19. *Nucella dubia* (Krauss, 1848)
Southern Natal to Namibia/ uncommon/ 35 mm. Shell variable in shape, aperture large, columella concave. Sculpture consists of weak uneven spiral threads, aperture smooth. Reddish-brown with dark brown dashes alternating with white dashes on spiral threads, aperture and columella chocolate brown.

20. *Nucella dubia* fm. *acutispira* Sowerby, 1921
Eastern Cape/ uncommon/ 22 mm. Smaller, narrower and with a higher spire than the nominate form. Cream with brown spiral cords, aperture and columella brown. Found in more sheltered habitats such as estuaries.

21. *Nucella* sp. (erroneously known as *Nucella scobina* which is a New Zealand species)
Knysna, eastern Cape/ rare/ 15 mm. Shell biconical, with a high stepped spire and a large body whorl. Sculptured by spiral cords with fine spiral threads between cords. Cords extend to edge of outer lip giving a crenulated appearance. Exterior pale brown with darker cords, aperture and columella brown.

22. *Nucella squamosa* (Lamarck, 1816)
North-eastern Cape to Namibia/ common/ 43 mm. Shell oval with convex whorls, spire moderately high, body whorl large, columella concave. Sculpture of spire whorls cancellate, body whorl with sharp spiral cords and fine spiral threads between cords. Brown to tan, aperture and columella white.

23. *Nucella wahlbergi* (Krauss, 1848)
False Bay to north-western Cape/ common/ 37 mm. Shell narrow with a high spire, siphonal canal relatively long. Sculpture consists of spiral threads throughout surface of shell, inner margin of outer lip crenulated. Off-white throughout.

24. *Nucella wahlbergi* fm. *lindaniae* Lorenz, 1991
False Bay, scuba 30 m/ rare/ 34 mm. Shell similar to the nominate form but with wing-like varices regularly spaced throughout shell and spiral cords are not as pronounced. Margin of aperture with elongated denticles. Pale brownish-pink when fresh, fading to white, aperture and columella white.

Acknowledgement
Many thanks to Dr R.N. Kilburn for checking the article.

References
Kilburn,R. and Rippey,E. *Sea Shells of Southern Africa*, Macmillan, Johannesburg. 1982.
Wilson,B.R. *Australian Marine Shells*, Odyssey, Kallaroo. 1994.

See pgs 1, 6, 7, 12 for illustrations!

Flotsam

Mollusc or mollusk?

Many of believe that mollusc is the English spelling and mollusk the American one. However, did you ever wonder how this state of affairs arose? There has been quite a discussion on this topic, most recently on the CONCH-L list on the Internet, now summarized in a article in the September issue of the *American Conchologist*[1]. In brief, the word seemed to have entered the English language around 1780 as 'mollusque'. Both "mollusc" and 'mollusk' made their appearance in England in the 1830's, but 'mollusk' was the preferred usage on both sides of the Atlantic until the second half of the 19th century when British authors such as Sowerby and Darwin started to use 'mollusc'. Obviously 'mollusc' is a logical derivative of the Latin word *mollusca*, but then on the other hand, 'mollusk' could be considered more compatible with the rules of English spelling. However, in either event, the Americans stuck with the k and the English, (and their colonies) gradually switched over to the -c, giving us the current situation.

Reference

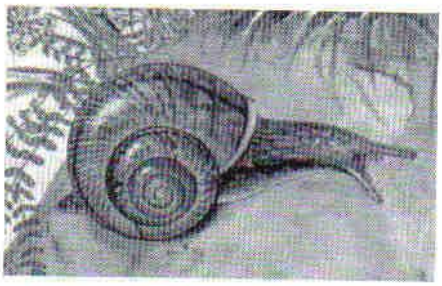
1. Rosenberg,G. Conchatenations, *American Conchologist*, vol.24(3), 1996, pp.15,23.

The next generation..

Many molluscs lay eggs in a "string" of jelly that sticks onto seaweed, collecting sand as an extra protection. This jelly string has a "sell-by" time limit - just long enough to give juvenile crawlers time to develop. For example, a member in the Cape reports that she found what appeared to be *Epitonium* eggs- a string of beads spaced about 4 mm apart. The necklace was stuck on the side of a large black anemone, almost covered with sand. Many *Natica*'s form a collar of spawn. The species at Muizenburg forms a leaf by zigzagging the yellow string with sand. These may be found cemented onto rocks below sand. *Marginella rosea* collects its string using the side of the foot and then covers the section with the eggs with an egg case. these are also cemented onto flat rocks under the sand. If *rosea* are placed in a jar of sea water , then provided they crawl up the sides of the glass, it should be easy to see the egg case-forming gland that only opens once a year during the spawning season.

Acknowledgements

Field notes from Mrs C. Connolly,



Molluscan poetry

from two of South Africa's leading humorous poets:

WINKLES
by Brian Warner

Tremble, tremble, little clam
As you wonder if I am
(Although lately wined and dined)
Molluscophageously inclined.

(from *Dinosaurs End*, Firfield Pamphlet Press, Cape Town 1996)

&

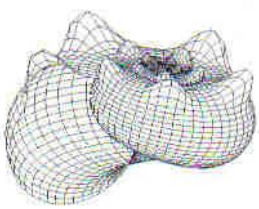
CONJUNCTION
by Gus Ferguson

Me&ering along the str&
(&ante, stepping, sarab&)
Where littorally sea joins l&
I spied, engraved upon the s&
A perfect, snaildrawn ampers&

(from *Carpe Diem*, The Carrefour Press, Cape Town, 1992)

and how about this *haiku* by Brian Warner? (from *Dinosaur's End*)

Shells wound dextrally
And shells wound sinistrally
Are a whorled apart



The *other* side of the Horn

The coastline of Somalia is by all accounts a prolific source of wonderful shells. However, what about the *other* side, landward of the coastline? Details of non-marine shells are usually much harder to come by. Since I have a sort of fondness for non-marine shells I read an article on the subject[1] with interest, and since Somalia is in Africa, some of the salient points might be of interest to members.

Although Somalia is mostly arid, nevertheless at least ninety species of land and freshwater molluscs have been identified there. The geology is generally calcareous, which of course helps. (In fact, since shelled molluscs need plenty of calcium in their diet, searching for land snails in a quartzitic or sandstone region is nearly an exercise in futility.)

Three species of *Achatina*, the large brown shells so frequently found in the damper eastern parts of South Africa, are recorded from southern Somalia, including the familiar *Achatina fulica*. However, most of the other species of land snails reported would be unfamiliar to a collector of African shells, and indeed, many are said to have originated in western Asia rather than in Africa.

The few rivers in Somalia contain typical tropical African fresh water gastropods including species of the operculate genera *Pila* (often seen in aquariums), *and Lanistes* (which is sinistral). The ubiquitous *Melanoides tuberculata* is there too. As many members know, *Pila* and *Lanistes* occur widely in tropical Africa, down to the north-eastern parts of South Africa.

Many members have asked me for information about books in print on African non-marine shells. I regret that there is no single source yet for everything (although Barnard's old book[2] illustrates a diversity of species, including the two examples shown here). The good news is that a booklet on the *freshwater* shells of South Africa has recently been published by Professor Appleton in Natal (see back page of this issue for details). Other information is available in *Strandlopers* 115-11, 203, 205, 208, and 215.

Lanistes

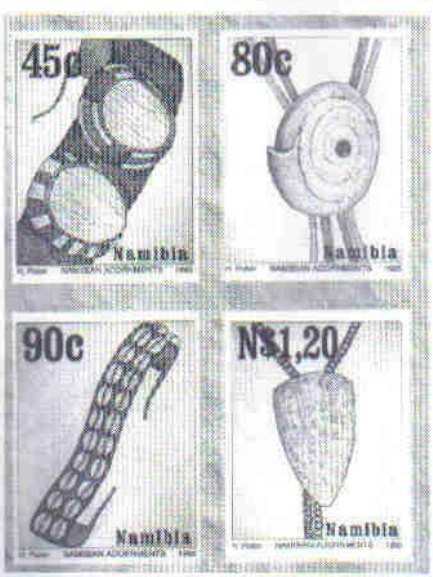
Melanoides tuberculata

Pila

References

1. Goldberg,R.L. Some land snails from Somalia, East Africa, *American Conchologist*, vol.21(1), 1993, pp.10-11.
2. Barnard,K.H. *A Beginner's Guide to South African Shells*, Maskew Miller, Cape Town, 1951.

Shells on stamps

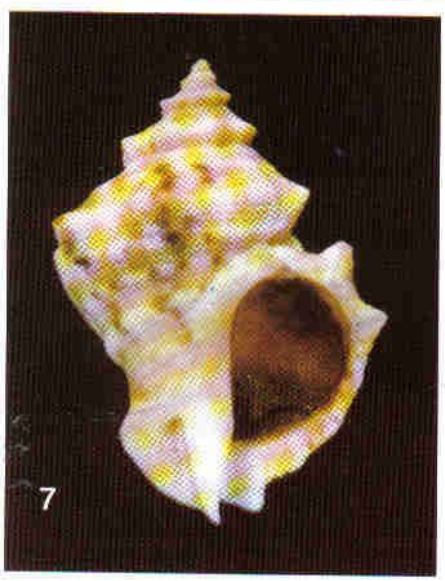


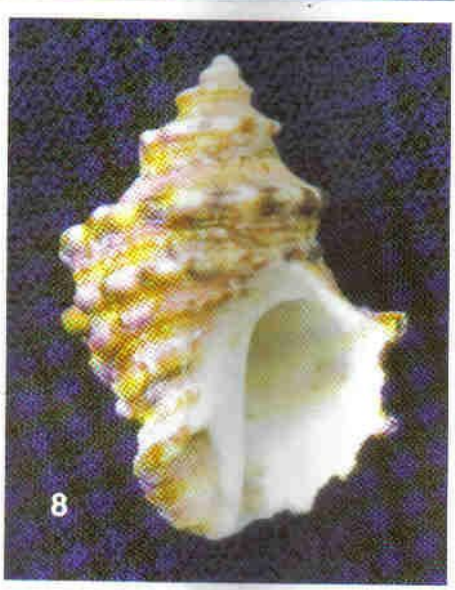
Collectors of stamps with a molluscan theme should look out for three specimens from Namibia, issued in 1995. While the 90c stamp probably shows *Cypraea moneta*, the 80c and $1.20 stamps are said to depict pieces of *Conus betulinus.* Did you think that the shapes in the 45c stamp looked like limpets? No, they are ivory buttons!

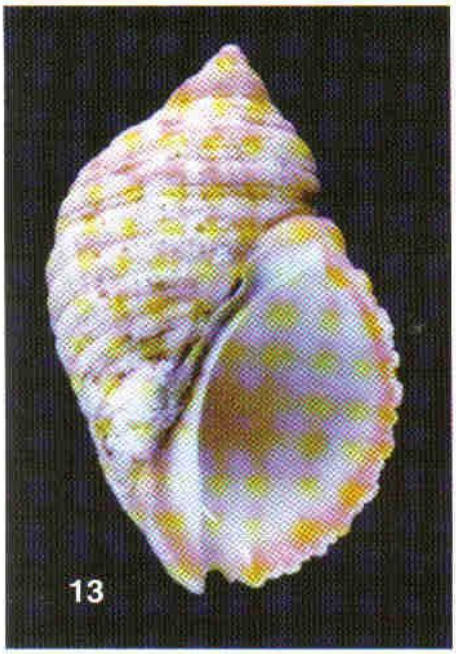
Singapore also has some stunning stamps, one of which shows a *Cypraea tigris.*Other stamps in the series show live corals and other sea life.

Thais and allied genera in South Africa

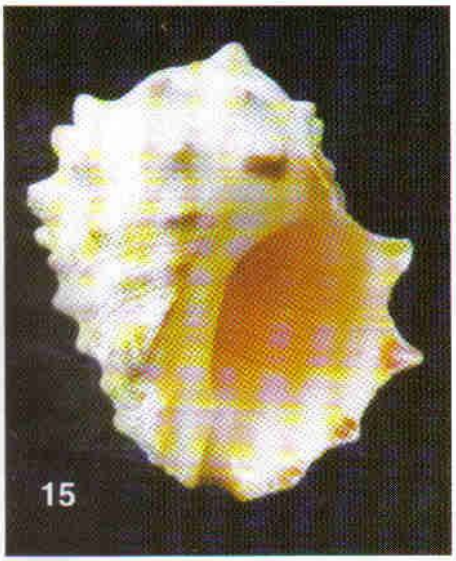
Continued from page 3






13

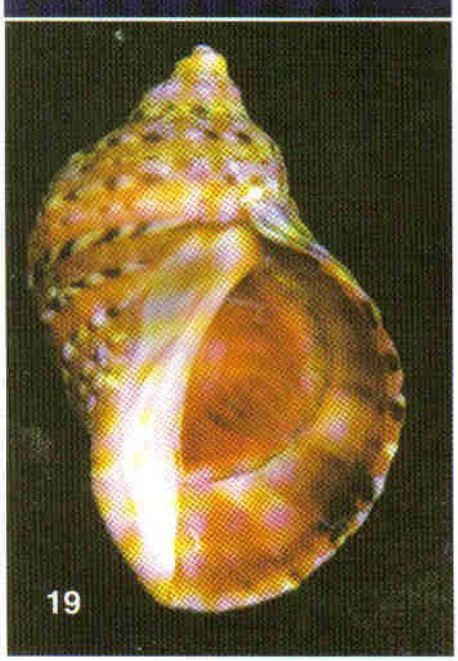

14

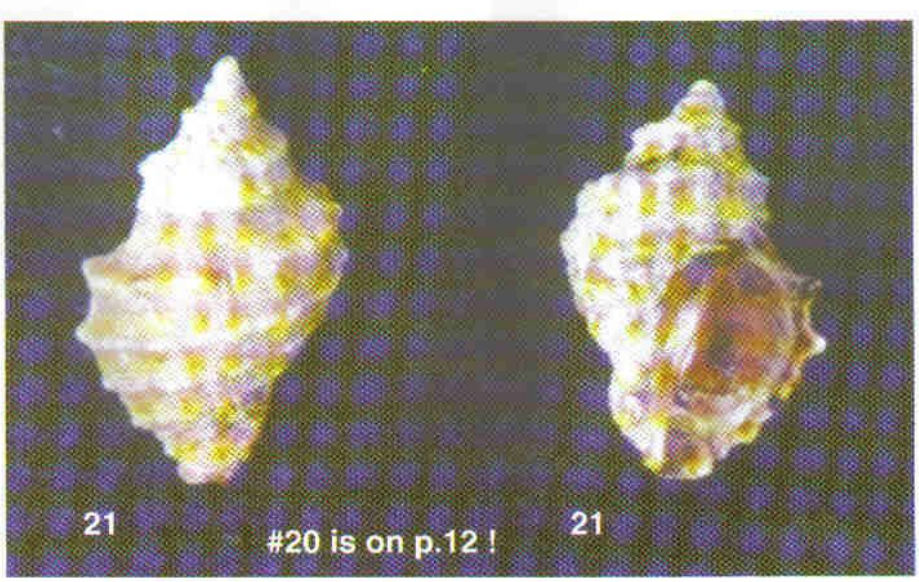

15


16


17


18


19


21 #20 is on p.12 ! 21

A letter received from Professor G. Branch of the Zoology Department, University of Cape Town:

Dear Mike,

Congratulations on maintaining the high standard of *Strandloper*. I would like to respond to an editorial "Looking after the future" in the December 1995 issue. As you point out quite rightly, there are extraordinary anomalies in the regulations controlling the collecting of marine life and in some respects the "little person" is entitled to feel persecuted. There are however, several points that are overlooked; firstly collectors almost inevitably end up collecting those species which are rare or difficult to find, so that although they remove small numbers their impact is disproportionately large. Secondly, I believe it is as important to distinguish between persons who are collecting shells as a hobby and those who are selling shells. In the new fisheries policy that is in the final throes of development an important distinction is made between those who are harvesting for recreation and those who are gathering material for commercial gain. In the future it may be necessary to develop separate regulation which protects known rare species and especially those that are endemic to South Africa. Such protection would guard against collecting most threatened species irrespective of the nature of the collectors.

Best wishes

George Branch, 22nd December 1996

Strandloper

The editor welcomes original articles, news, shelling reports, feedback, advertisements (rates on application) and any other material likely to be of interest to members of the Society. If possible, send articles on a MS-DOS diskette in Word for Windows, WordPerfect,or ASCII format. Photographs and line drawings are especially welcome. Please address correspondence and submissions to

Dr M.B.Cortie,
P.O.Box 1664,
Ferndale, Randburg 2160
South Africa

New species of *Tivela*

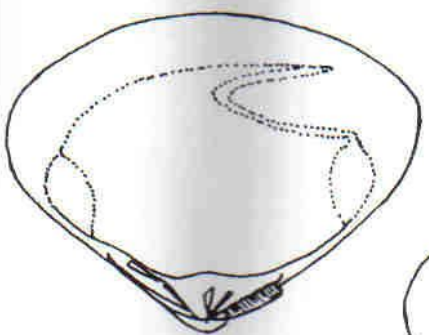
Tivela compressa (Sowerby, 1851) is well known from the southern Cape coastline. However, occasionally single valves of a species of *Tivela* wash up along the Kwazulu-Natal coast, a fact mentioned in the Kilburn and Rippey book[1]. Markus Lussi of Durban has now taken the plunge and, based on a study of nearly two dozen dredged or beached single valves, has given this species a name : *Tivela valae* Lussi, 1996[2]. The species name, *valae* is in honour of member Val van der Walt, of the Kwazulu-Natal south coast. It would certainly be very interesting to find out more about this mollusc by examining the animal. Any members who are lucky enough to discover a living example of *Tivela valae* or *Tivela compressa* in Natal waters should preserve the whole thing in alcohol and contact Drs Kilburn or Herbert at the Natal Museum.

Acknowledgements

Marcus Lussi for the illustrations.

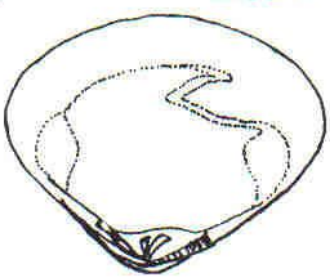
References

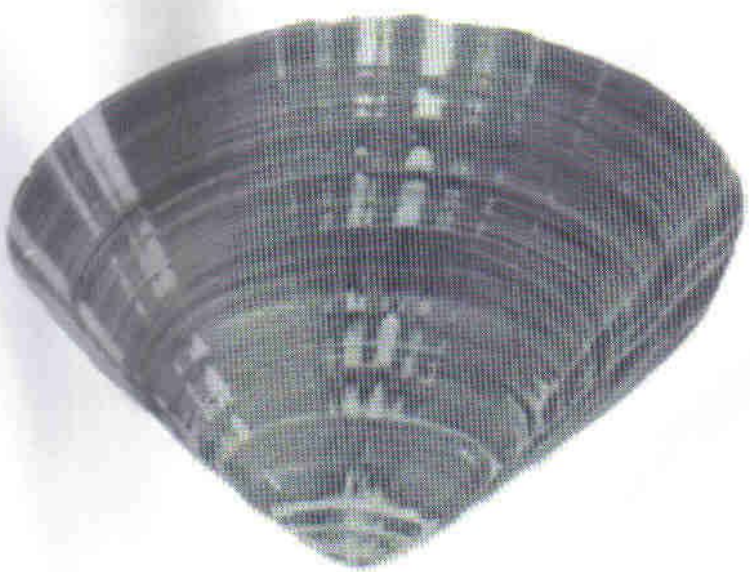
1. Kilburn,R. and Rippey,E. *Sea Shells of Southern Africa*. Macmillan South Africa, 1982.
2. Lussi,M. A new species of *Tivela* Link, 1807 from South Africa (Mollusca, Bivalvia, Veneridae), *La Conchiglia*, No.279, April-June 1996, pp.40-42.



Tivela valae

Tivela compressa





Tivela valae Lussi 1996.

Mysterious *Mitrella*'s: notes on the columbellids *Mitrella apicata* (E.A.Smith, 1899) and *Mitrella albuginosa* (Reeve, 1859).

There appear to be at least fifty South African species in the family Columbellidae and many more worldwide. However, a species that seems difficult to obtain and scarce in collections is *Mitrella apicata* (E.A. Smith, 1899). After Smith described it in 1899 as, amongst other things, having 2 smooth protoconch whorls followed by five normal whorls and measuring about 9.5 by 4 mm, Bartsch in 1915 listed but did not draw the shell, which had been sent to him by Turton. Turton himself did not illustrate the shell as he apparently never found a second specimen. He did mention a 'channelled' suture. However, *Mitrella albuginosa* (Reeve, 1859) also has a tiny gap along the suture, especially if the periostracum has been worn off on the beach.

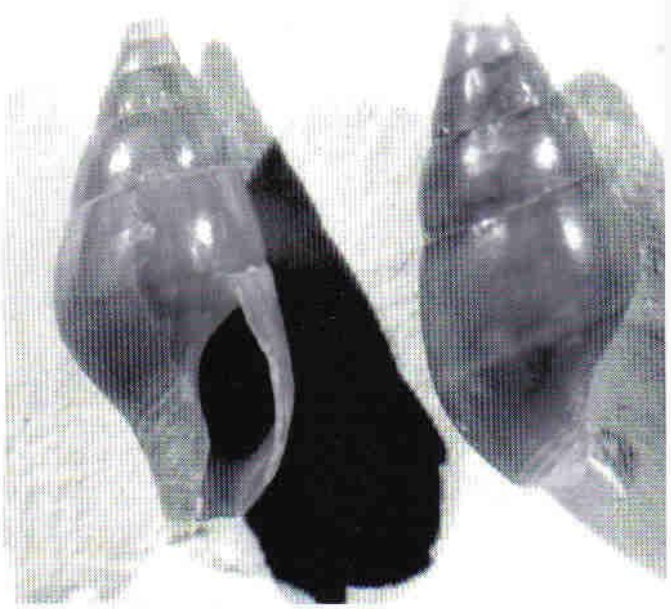
Dr Kilburn mentions that *M. apicata* is narrower than *M. albuginosa*, 'with fine spiral lirae over most of its surface and a distinctive, intricate pattern of dark brown lines on a pale ground', and notes that it is found from Natal to Port Alfred in low tide gullies[1]. Recently, he confirmed to me that the shell of *apicata* is quite noticeably different to that of *albuginosa*, particularly with regard to a darker colour pattern. *Mitrella apicata* is relatively common in Kwazulu-Natal, where *M. albuginosa* is rare, and the reciprocal arrangement seems to apply in the Eastern Cape. Nevertheless, these two species are evidently similar and a careful comparison of the body-parts of live-taken specimens would help clarify their relationship.

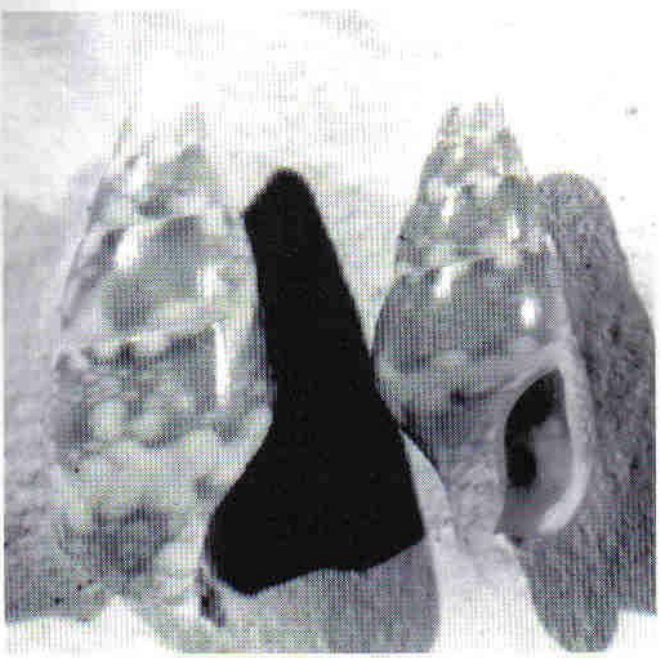
Acknowledgements
Compiled with the assistance of Mrs C. Connolly and Dr R. Kilburn

References

1. Kilburn R. & Rippey,E. *Sea Shells of Southern Africa*, MacMillan South Africa, Johannesburg, 1982.
2. Richards,D. *South African Shells : A Collector's Guide*, Struik, Cape Town, 1981.

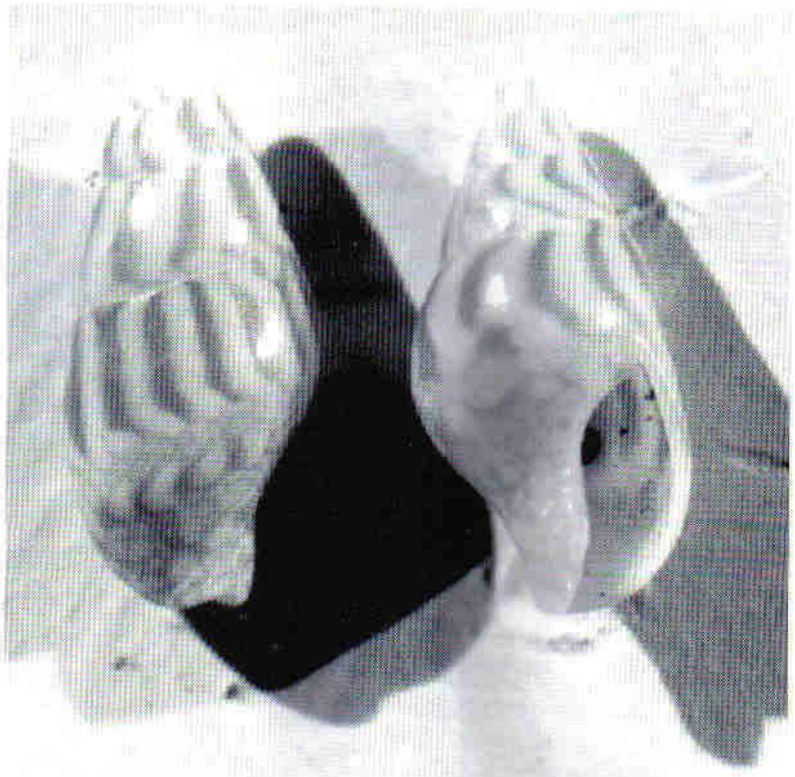
10 mm



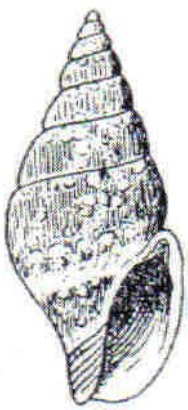


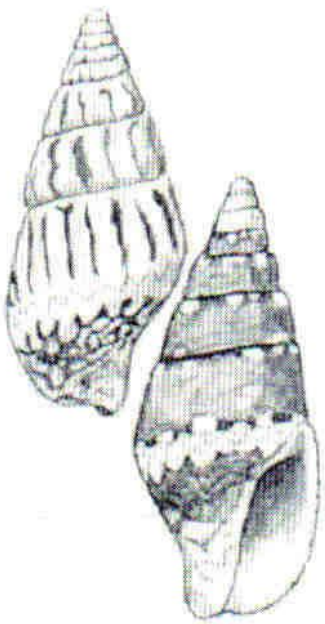
Typical *Mitrella albuginosa* (Reeve, 1859), showing strongly-blotched (top), lightly-blotched (right) and brown (left) variations. These forms appear to intergrade, and were collected between Fish Hoek and the Kei River mouth

Original illustration of *Columbella apicata*, from Smith,E.A., *J. of Conchology*, vol.9(8), October 1899.



Is this also *Mitrella albuginosa*? These axially-striped shells do not seem to intergrade with 'typical' *Mitrella albuginosa*.

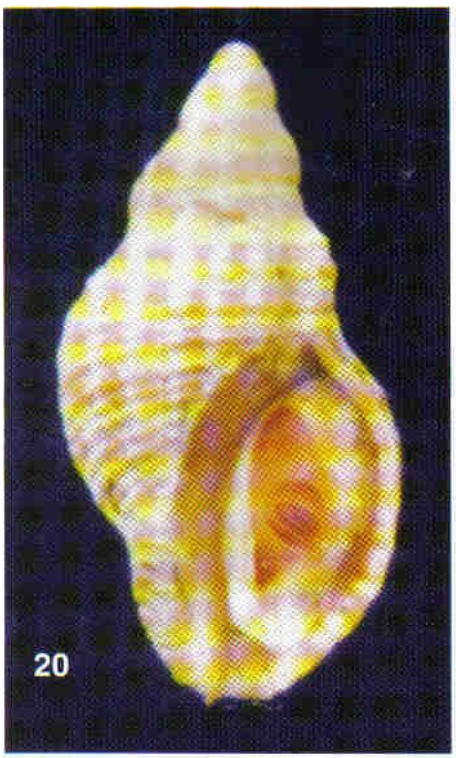




Columbella albuginosa- Top, from Barnard,K.H., *A Beginner's Guide to S.A. Shells*, Maskew Miller, Cape Town, 1951, bottom, from Kilburn R. & Rippey,E[1].

Thais and allied genera in South Africa

Continued from page 7 (#21 is illustrated on pg. 7)



Shell collection for sale

Market value approx. R34000. Asking price R24000. Comprises mainly foreign shells. All families represented. Contact Francois le Jujede de Segrais tel. 031-7655411 after hours.

Exchange wanted

Rick Negus of 3401 Woodland Way, Carlsbad, CA 92008, USA would like to swap with South African collectors.
Email: **megus @cts.com**
Fax: **USA-619-434-3141**

Conchological Society of Southern Africa

Founded 1958

Correspondence to:
7 Jan Booysen Str., Annlin,
PRETORIA 0182, South Africa

Membership (incl. *Strandloper*)
- ordinary members R50
- overseas members US$25
- pensioners&scholars R25

Office bearers
- President: Dr R.N.Kilburn
- Vice-President: Mrs L.v.den Berg
- Director: Dr M.Cortie
- Treasurer: Mr W.P.Kruger:
- Secretary: Mr L.Smith
- Editor:*Strandloper*:Dr M.Cortie

Regional contact names

DURBAN
Mrs A.Carcenac, 6 Highfield Dr. Westville 3630. 031-86-1040

PORT ELIZABETH
Mr B.Hayes, 10 Munro St., Millard Grange, Port Elizabeth 6001 041-33-4521

EAST LONDON
Mr N.Newman, 42 Irvine Rd., Bonnie Doon, East London 5241. 0431-35-2825

PIETERMARITZBURG
Mr K. Borland, 29A Ashmore Rd, Chase Valley Heights, Pietermaritzburg 3201. 0331-69-739

BLOEMFONTEIN
Ds. H van der Walt, 191 Church St.,Oranjesig, Bloemfontein 9301. 051-47-5825

PRETORIA
Mr L.Smith, 7 Jan Booysen Rd, Annlin, Pretoria 0182. 012-57-5543

SOUTHERN NATAL
Mr G.Wallace, PO Box 513, Port Shepstone 4240. 0391-51-100

CAPE TOWN
Mr V.Millard, PO Box 27208, Rhine Rd., Cape Town 8050. 021-61-4613