



## Rare carnivorous slug rediscovered in KwaZulu-Natal

by D. G. Herbert,  
Natal Museum

A very rare and poorly known slug, Lawrence's Hunter Slug, was found recently in Vryheid Nature Reserve.

At the end of November 1999, I joined a group of biodiversity specialists to undertake a survey of the upper catchment of the Pongola/Bivane river system in northwestern KwaZulu-Natal, for the KZN Nature Conservation Service. There was no accommodation at the study site, so we based ourselves in Vryheid, at the environmental centre of the Vryheid Nature Reserve, on the hill north of the town. One morning Dr Michelle Hamer (University of Natal, Pietermaritzburg, School of Zoology and Botany) found an unusual looking slug crossing a footpath near the environmental centre. Recognising it as a hunter slug, she collected the specimen and brought it to show me. Its appearance was so unusual that I was immediately able to identify it as Lawrence's Hunter Slug (*Chlamydephorus lawrencei*), even though I had never seen this particular species before. Previously, the species was only known from a single specimen collected in the Barberton area, Mpumalanga in 1960. The specimen obtained in Vryheid is therefore an exceptionally interesting find and represents a new record for KwaZulu-Natal. In some respects, however, the find is not altogether surprising since the distributions of a number of other terrestrial molluscs likewise centre on the north-western KwaZulu-Natal, southeastern Mpumalanga region and neighbouring Swaziland.

**continued on page 2**



Lawrence's hunter slug, *Chlamydephorus lawrencei* Forcart, 1963, extended length 65-70mm.

**continued from page 1**

The slug is dark chocolate brown to almost black and is characterised by having six strong rounded ridges running along its body. It was first described in 1963 by the late Dr Lothar Forcart (a Swiss slug specialist) and is named in honour of Dr Reginald F. Lawrence, director of the Natal Museum 1935-48, who collected the original Barberton specimen.

Hunter slugs of this kind belong to the family Chlamydephoridae, a family known only from southern Africa and one of the more remarkable elements of our non-marine molluscan fauna.

There are thought to be about 10 different species in the region, and *C. lawrencei* is one of the least well known. They are predominantly subterranean and, although some of them may be reasonably common in the moister eastern parts of the country, they are seldom seen on account of their secretive habits. As a whole, the group is easy to distinguish from other slugs because the breathing pore, the pneumostome, is located in the middle of the back, towards the hind end of the animal. Other slugs, if they have such a pore, generally have it on the right near the front end of the animal, associated with the saddle-shaped mantle.

The carnivorous habits of these slugs have not been well studied. Some almost certainly feed on earthworms, and their slender shape and small head are no doubt adaptations to crawling down burrows in search of prey. Others may feed on snails and soft-bodied soil invertebrates, but recently I have discovered that one group of hunter slugs has very unusual and quite remarkable feeding habits. These observations have not yet been officially published, so I can't report on them here, but I will do so once the manuscript, which is due to be published shortly, appears in print.

## Are you harbouring alien snails in your garden ?

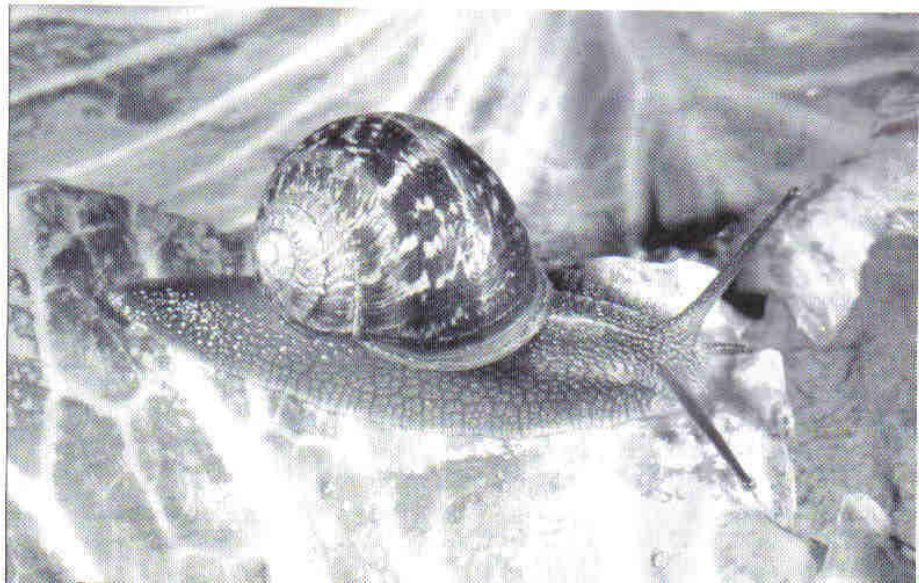
# SNAILIENS!

**The answer to this question is almost certainly - yes. The vast majority of gardens in the country will be home to at least one species of alien snail and Dr Dai Herbert of the Natal Museum is running a project aimed at finding out just how far they have spread throughout southern Africa and what damage they do. To make the project a success, he needs your help. If you would like to participate, contact Dai at the address on the right and he will send you a SNAILIENS pack which contains all the project information and an identification guide.**

**You'll be surprised how many of the common snails that we find in gardens are aliens. The project is particularly suited to children so get your kids or grandchildren busy.**

Contact address: Dr Dai Herbert,  
Natal Museum, P. Bag 9070,  
Pietermaritzburg 3200.  
Tel.: (033) 3451404 Fax.: (033)  
3450561  
E-mail: dherbert@nmsa.org.za

Below. European brown garden snail, *Helix aspersa* Müller, 1774, one of South Africa's most widespread alien snails



# Species species species species SPECIES

I have noticed over the years that collectors of sea shells display a great fascination for the business of taxonomy, and for what makes one kind of mollusc a different species to another. Much of the interest, indeed purpose, of conchology, is focused around the belief that there are a finite number of species, each distinct, and that it should be possible to collect them all, at least in principle.

It is not the place here to go into the 'species' concept itself in any depth, but it is perhaps suffice to say that the old Linnaean concept of species is under unprecedented challenge these days. For example, close examination has shown that in many cases the boundaries within species are rather blurred. Unfortunately, the Twentieth century principles on which species are based, namely reproductive isolation and fidelity, are difficult to test and prove or disprove in the case of molluscs. So, it should be noted that many zoologists are tending towards an approach in which the species are merely the current end points of an ever-branching evolutionary family tree. The position of the organism on the tree is determined by its affinity to related organisms, especially if the affinity can be interpreted in an evolutionary context. This is by no means a new idea, but now perhaps we are seeing the beginnings of one of those paradigm shifts for which Science is well known.

The following article, reproduced here with thanks from the pages of the September 1999 issue of *American Conchologist*<sup>1</sup>, provides a valuable guide to how modern scientists try to identify new species.

*Mike Cortie*

1. Rosenberg, G. Conchatenations, *American Conchologist*, vol.27(3), 1999, pp.20-21.

## CONCHATENATIONS : Mollusk Species in Practice

by Gary Rosenberg

Department of Malacology, The Academy of Natural Sciences of Philadelphia, 1900 Benjamin Franklin Parkway, Philadelphia PA 19103-1195  
[rosenberg@acnatsci.org](mailto:rosenberg@acnatsci.org)

In almost all cases, information is lacking on the genetics, reproductive behavior, or patterns of relationships among populations, so the theoretical concepts usually cannot be applied when defining molluscan species. In practice, morphological species concepts predominate, with species diagnosed on the basis of shape, sculpture, size, pattern, and color. If consistent differences can be found, the specimens in question go into two piles. If they can't, they go into one pile. But how do we get from piles to species? How much difference is enough?

Differences between species can be minuscule. Species of *Crepidula* have different larvae but identical shells. To the naked eye, the plump shells of the Jamaican land snails *Sagda grandis* and *Sagda monteogensis*, both Pilsbry & Brown, 1912, are almost identical. They have a slight, unconvincing difference in spire shape, but under magnification the former has microsculpture like woven fabric that the other lacks. These species can live side by side without intergrades, strong evidence that they are distinct. *Truncatella scalaris* (Michaud, 1830) and *Truncatella clathrus* Lowe, 1832 have been considered synonyms by some authors on the basis of shell morphology, but anatomical study shows clear-cut differences in the female reproductive system.

In the last ten years, studies of limpets, corals, and bryozoans have revealed cases where the smallest identifiable differences correlate to genetic differences. When scientists have sorted these animals by the subtlest



differences in morphology, genetic studies have identified the same groups, which thus seem to represent

### Obituary

Mrs Gail Carcenac joined the Society in June 1989 and was Chairperson of the Durban Group between 1991 and 1995, and contact person thereafter. She concentrated mainly on South African shells and was a very methodical collector who paid great attention to labelling etc. She, with her husband Anthony, was also a keen nature lover and bird watcher. [information supplied by Durban Group]

### Obituary

Richard Carlsson, former Editor of the *Strandloper* and stalwart member of the Society's Council, passed away in February this year. Richard, who reportedly had a great fondness for the Margi-nellidae, produced 86 *Strandloper*s between 1969 and 1978, and together with his wife Thelma, almost single-handedly ran the Society's affairs over more-or-less the same period.

separate, valid species. Does this mean that splitters are right? Should we name everything based on the least of differences? No-not any differences-consistent differences. Differences that work 100% of the time (or at least 99%). Differences likely to stand up when more specimens from new geographic areas, different depths, and different habitats are discovered.

Species are hypotheses. Sometimes the truth of the hypothesis is self-evident. When *Thatcheria mirabilis* Angas, 1877 was first discovered, the only proof one might have sought to establish its novelty was that it was not a fake or a monstrosity. But usually, when considering naming a new species, or attempting to distinguish known species, one should rule out at least nine explanations before concluding that species level differences are a viable hypothesis. These explanations fall into three broad categories: cases in which the differences are not genetic, cases in which they are genetic, but do not correspond to species differences, and cases in which the wrong comparison is being made. (Some examples might correspond to more than one explanation.)

Differences between species must be heritable: they must be characteristics that can be passed down from parent to offspring. If the differences between two supposed species can be explained by non-genetic means, then they are not different species.

There are several such explanations.

1. *Ecophenotypic variation* - the technical term for differences caused by environmental conditions ("eco-" for environment; "pheno-" for appearance). For example, *Puperita pupa* (Linnaeus, 1767) and *Puperita tristis* (d'Orbigny, 1842) are different forms of the same species that live in different salinities. Striped or spotted pattern is determined by the salinity, as shown by transplant experiments (see *American Conchologist*, December 1997, pp. 22-23). Appearance in mollusks can also be affected by diet,

substrate, depth, crowding, growth rate, and presence of predators, parasites or pollution.

2. *Misleading condition*. The condition of a specimen can be misleading in several ways. Many snails make a plug at the base of the protoconch to keep soft parts from being exposed if the protoconch is broken off. The plug itself can be mistaken for the protoconch when the latter is missing, leading one to believe them to be two species differing only in protoconch characteristics. I suspect this is the case with *Odostomia infrasulcata* Saurin, 1959 versus *Odostomia zaleuca* Melvill, 1911. Hermit crabs can modify the columella of shells, and differential erosion can produce unusual patterns of sculpture when it cuts into lower layers of the shell, or reveals different colors. It is also possible for mantle damage to produce a dramatic change in shell sculpture or shape. Shells fraudulently modified can also mislead: *Cochlostyla species 1* and 2 on plate 48 of *Tropical Landshells of the World* are *Cochlostyla rufogaster* (Lesson, 1833) with periostracum removed and pattern added by application of shell-whitening heat.

3. *Non-random samples*. A huge amount of sorting goes on as specimen shells are sold and traded around the world. Once I purchased a lot of more than 100 specimens of the ovulid *Dentiovula takeoi* Cate & Azuma, 1973 from a dealer, thinking I had an excellent sample showing the range of variation of the species-fat, thin, large, small, light red, dark red. Several months later I learned another dealer had visited the supplier in the Philippines first, and had picked out the largest and all the purplish specimens. Collectors of Hawaiian *Achatinella* used to sort the specimens by color pattern, giving the impression that populations were more uniform than they really were, which perhaps accounts for the proliferation of names in the genus. Sorting can also occur naturally, if certain morphologies are more likely to be destroyed by predators or differentially transported by currents.

In many cases, differences between samples or populations presumably do have a genetic basis. I say "presumably" because in very few cases do we know the gene(s) responsible for the appearance of particular characteristics in mollusks. But even though the differences are genetic, they may be population-level or individual differences, not species-level differences.

4. *Clinal variation*. A cline is a gradual change in a species across adjacent populations. The populations at the endpoints of the geographic distribution are different, but the intervening populations have intermediate characteristics. *Argopecten irradians* (Lamarck, 1819) has a cline in rib number, as few as 15 in Massachusetts, as many as 25 in Florida. Sometimes the pattern is more of a crazy-quilt than a regular cline, but if enough specimens are studied, intergradation forestalls attempts to define consistent differences between populations.

5. *Individual variation*. A single mutation might result in pronounced morphological departure from what is typical for a species. Achondroplastic dwarfism and Down's syndrome in humans are two extreme examples. An example in mollusks might be the depressed spine variant of some muricids, such as *Hexaplex cichoreum* (Gmelin, 1791), which was named *Murex depressospinosus* Dunker, 1869, although genetic evidence for this is lacking.

6. *Sexual dimorphism*. There are several cases of the males and females of the same species having been named as separate species. For example *Lambis rugosa* (Sowerby, 1842) is the male of *Lambis chiragra* (Linnaeus, 1758). Male *Tricolia variabilis* (Pease, 1861) are not only smaller than females, but have a broader aperture and radular differences as well. *Phasianella megastoma* and *P. oligomphala*, described by Pilsbry (1895) from a single locality in Japan, are male and female of *Tricolia variabilis*.

The cases above illustrate reasonable comparisons with incorrect conclusions. Species A and candidate species B are compared, and incorrectly found to represent different species. When inappropriate comparisons are made, Species A is ignored, and "Species B" is compared with Species X, or considered so unusual that no comparison is made.

7. *Bad locality data.* Errors in locality data can result in redescribing species from the wrong faunal province. *Engina slootsi* Jong & Coomans, 1988, described from a single specimen from Aruba is actually the Indo-Pacific *Morula biconica* (de Blainville, 1832). Of 83 species Tenison Woods (1877) named in a paper on Tasmanian shells, five were actually common Western Atlantic species: *Ethalia tasmanica* and *Adeorbis picta* (both of which he suspected had bad data) are *Modulus modulus* and *Tegula fasciata*; *Monilea turbinata* is *Tegula ividomaculata*; *Semele warburtoni* is *Codakia orbicularis*; and *Pleurotoma weldiana* is *Fenimorea fucata* (to which he compared it). With specimens from two sources reported from four localities, this is not a single instance of mixed up labels or mis-remembered data. (Another way to get bad locality data is to drop a small shell on the floor and pick up in its place a specimen that previously dropped unnoticed.)

8. *Unexpected context.* Sometimes the locality data is correct, but the specimens are in an unexpected context. Shallow shells transported into deep water have been named as deep-sea species. Land and freshwater shells have been described as marine, perhaps having been washed down rivers into the sea. *Karolus primus* Folin, 1870, described from marine sand from Vera Cruz, Mexico, is the land snail *Cecilioides consobrinus* (d'Orbigny, 1841). *Potamopyrgus antipodarum* (Gray, 1834), a species native to New Zealand, was introduced to Europe where it was named *Hydrobia jenkinsi* E. A. Smith, 1889. A similar error occurs when a species first named as a fos-

sil is renamed when it is discovered living.

9. *Erroneous classification.* Occasionally an author assigns a species to the wrong genus or family, often because of convergent morphology, and once having started down the wrong path, does not realize that the supposed new species has already been named in a different group. Recent examples are *Terebra moolenbeeki* Aubry, 1995, a *Mazatlanina* (Columbellidae); and *Clathurella eversoni* Tippet, 1995, named in Turridae, which is *Nassarina glypta* (Bush, 1885), another columbellid. A similar error occurs when an author is unaware that a species has already been named, which prevents proper comparison.

Mistaking a juvenile shell for an adult is another good way to be misled; sometimes resulting in erection of unnecessary new genera in addition to new species. For example, Pilsbry (1894) named the new genus *Perostylus* for *Cerithium brazieri* Tryon, 1887 and *Perostylus fordianus* Pilsbry, 1894 but both are juveniles of *Syrinx aruanus* (Linnaeus, 1758). *Litiopa effusa* C. B. Adams, 1850 and *Dissentoma prima* Pilsbry, 1945 are larval shells, probably of *Cymatium martinianum* (d'Orbigny, 1845). Unexpected context added to the confusion with *Afrocanidea gemma* Connolly, 1929, described as a new genus and species from the Shimbi Hills of Kenya and compared to an estuarine genus from Asia, but actually the larval shell of the marine *Cymatium muricinum* Röding, 1798. There are even cases of fragments of shells having been mistaken for intact shells: *Capulus shreevei* Conrad, 1869 is the internal projection (apophysis) of the Angel Wing, *Cyrtopleura costata* (Linnaeus, 1758).

How can one guard against these many pit-

falls? In the first four cases, the general answer is to study specimens collected from a broad range of localities and habitats over a period of years. If there are intermediates, you will find them. In the fifth case, even if intermediates are lacking, it might be that no two individuals have the same morphology (e.g., rostrate cowries), so the mutants (or ecophenotypes?) can be recognized as such. In the sixth case, sexual dimorphism, there may also be intermediate specimens, and anatomical studies will rapidly settle the question. In cases of inappropriate comparison, the best safeguard is broad expertise in molluscan systematics. The specialist who focuses on a particular family, fauna, or habitat is more likely to be misled. Another safeguard is the peer review process, both formal and informal. In all cases, it is generally regarded as very undesirable to describe a species from a single specimen.

Don't just look at specimens. Magnify them, draw them, photograph them, observe them in the wild. Try your hand at dissection. Write a comparison to related species-it will force you to hone your observations. Keep a checklist of characters and record absence as well as presence. Rely on pattern more than color, sculpture and shape more than size. Virginia Maes once told me when I was trying to learn how to distinguish two species, "Measure them, count them, play tidily- winks with them, and if there are differences you will find them." Learn the language of variation and let it be your guide.

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## Exhibition on South African Shells at the Sea & Shell Museum in Japan

by Sadao KOSUGE

Institute of Malacology Tokyo,

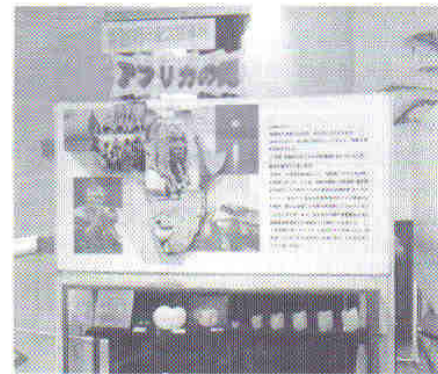
6-36 Midoricho 3 chome, Tanashi City, Tokyo 188, JAPAN



Outside view of the Sea & Shell Museum

The Sea & Shell Museum is situated on the Pacific coast of Honshu, Japan and its actual address is Rikuzen-takata City, Iwate Prefecture, Japan (see map). The Museum was built in July 1994 by the provincial government of Rikuzen-Takata

City and is maintained by the same organization. The Museum is based on the collection of two persons who lived in this district. The first is Mr. Genzo Toba (1872-1946) who had a long time career as a school teacher and who was



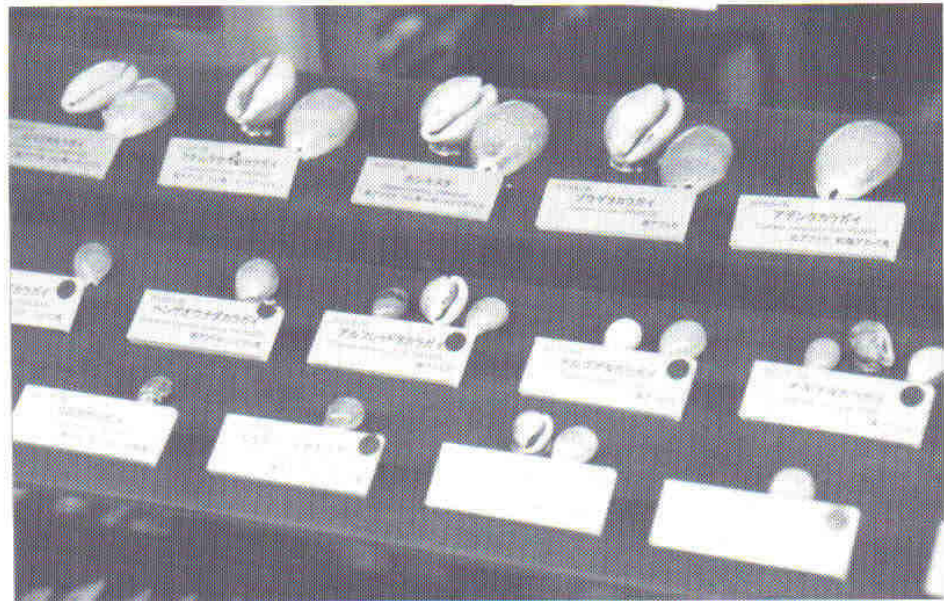
Introduction to the special exhibition



A part of the display of the special exhibition

enthusiastic about natural history. He was also well known as an excellent painter of plants and animals. He eagerly collected shells and was one of the founders of the Malacological Society of Japan, which was established in 1928. He contributed several reports to its journal. The other person was Mr Ranji Tiba (1909-1993) who was the successor of Mr. Toba and who also had a long career in school teaching. He was also enthusiastic about natural history, especially concerning shells from the northern Pacific. He wrote several articles on the Mollusca and reported 40 new species, as well as a series on north Pacific shells (co-authored with me as an Occasional Publication of Institute of Malacology of Tokyo).

Since the establishment of the Museum, it has received many specimens by donation from collectors in Japan, a constant contribution from the local fishermen and from the field trips of the staff. There are now 102 500 catalogue entries. The Museum has prepared a special exhibition every year, such as "Shells from Thailand", "Worldwide Landshells", "Japanese Landshells", and this year they opened a special exhibition "South African Shells".



A display of South African Cypraea

The exhibition is composed of 1) endemic shells of South Africa, 2) South African shells common to the Indo-Pacific fauna (most of them also found from the southern part of Japan), 3) landshells, 4) folk-arts of Africa, and 5) peculiar shells from West Africa. The following mem-

bers of the Conchological Society of Southern Africa (Mrs. Dawn BRINK, Mrs. Gail CARCENAC, Mr. Markus LUSSI, Mrs. Rina MATTHEE, Mrs. Olive MEYER and Mrs. V. van der WALT (alphabetical order)) kindly do-

noted their specimens and some folk-arts of South Africa to this exhibition. Mr. Brian Hayes (Algoa Bay Specimen Shells) and Mr and Mrs Jens & Christa Hemmen (Conchylien Cabinet) assisted to collect the specimens.



Portraits and details of the South African collaborators. Top left - Markus Lussi, middle left - Val van der Walt, bottom left - Olive Meyer, top right - Rina Matthee, middle right - Dawn Brink, bottom right- the late Gail Carcenac.



Sketchbook drawings 1995  
Bekwaadella (near Fort Macquarie, N.S.W.)

# Flotsam

## New journal

The Belgian Malacology Society, publisher of the journals *APEX* and *ARION*, have decided to amalgamate the two into a new prestige journal to be called *NOVAPEX*. The new publication will be simultaneously targeted at amateurs and professionals, and will carry articles of scientific and general interest, as well as some colour plates and society news. We wish Roland Houart, president of the Societe Belge de Malacologie good luck with the new venture. See their advertisement below for more details.

## NOVAPEX

(previously *APEX* and *ARION*)  
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to Malacology

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Subscription (yearly)  
Belgium: 30 EURO  
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## Strandloper back-issues

There is a gold mine of useful information in the many back issues of the Society's newsletter.

**1. Nos. 1 to 170** are in the old-format and are not litho-printed. These issues span the period 1957 to 1974. No back issues are available but photocopies can be produced, on request at a cost of R5 per issue.

**2. Nos. 171 to 260**, spanning 1975 to 1999 were printed in the present format, although generally with fewer than 12 pages. Black & white issues cost R10 per issue while colour issues cost R15 each.

Please note that issues 172, 173 and 225 (colour Conidae) are no longer available as originals, photocopies can be made for you at R5 per issue

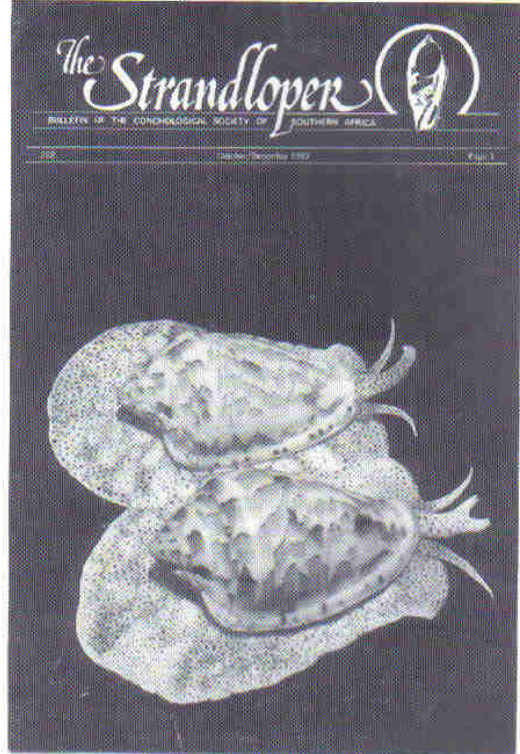
The remaining colour issues are 195 (cones), 206 (Marginellidae), 212 (Cymatiidae), 214 (*Bullia*), 215 (volutes), 222 (Marginellidae & other stuff), 227 (Muricidae), 234 (*Conus natalis* & Patellidae), 238 (*Umbraculum* & other stuff), 242 (scallop), 244 (various), 248 (*Thais*), 250 (*Achatina* & others), 253 (microshells), 254 (*Kilburnalia* & *Haliotis*), and 256 (Cephalaspidea).

### 3. How to order

Please, gentlemen and ladies, the most effective way to order is as follows:

Local orders: Send a request and a cheque payable to the Conchological Society of SA to Mike Cortie, PO Box 1664, Ferndale 2160. I will mail your order immediately and send the cheque on to the Treasurer.

Overseas orders. Send a request and



either a bank draft payable to the Conchological Society of SA, or, at your own risk, cash (hidden!) to the same address.

Requests to send the newsletters first accompanied by an invoice for later payment make for a lot of extra admin!

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## Feedback on Strandloper 260

by Markus Lussi

1. The *Babelomurex* figured on page 2 is *B. diadema* (A. Adams, 1854). Refer article by Dawn Brink in *Strandloper* 258.

2. *Murex cariosa* Wood, 1828, non Linnaeus, 1758, is a homonym; *Cronia fenestrata* Blainville, 1832 is the earliest valid name for the shell figured on page 3. There is a clear picture and description on pages 92-93 (no. 358) of the Steyn and Lussi book.

3. The name *rugosa* applies to a *Drupella*, so *Thais sacellum* (Gmelin, 1791) is the correct name to use for the shell figured on page 3.

## Booklets on Marginellidae & Cystiscidae of South Africa by Markus Lussi & Gerald Smith

The following booklets are now available:

- Cystiscidae part 1 (Genera *Gibberula*, *Persicula* & *Canalispira*)
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- Marginellidae part 1 (Genus *Volvarina*)
- Marginellidae part 2 (Genera *Dentimargo* & *Alaginella*)
- Marginellidae part 3 (Genera *Hydroginella*, *Prunum* & *Hyalina*)

Each booklet is available at a cost of R55 incl. postage to local buyers and US\$ 12 excl. postage to foreign buyers.

Please contact Markus Lussi on 031-5648057 or e-mail [catsrus@mweb.co.za](mailto:catsrus@mweb.co.za) for your order. Alternatively, write to M. Lussi, 15 Longwoods Drive, Durban North, 4051, South Africa.

# Letters

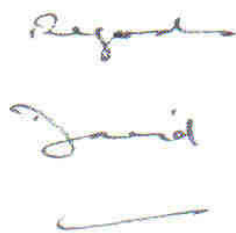
41 Duncan Road  
Sea Point 8005  
5<sup>th</sup> March 2000.

Dear Mike,

An obituary notice in the weekend paper reported the death on February 28th of Richard Carlsson.

I'm sure you know that he was a member of the CSSA Council from somewhere in the mid-1960s, became Treasurer in 1969 when his wife Thelma took over as Secretary, and was also editor of the old monthly newsletter before it was renamed *Strandloper* until he and Thelma retired from the Council in 1980. You will find an appreciation in *Strandloper* 202 of June 1980.

He is survived by Thelma, their sons Andrew and Stephen, and grandchildren.



David Freeman

## Wanted

Mr Roy Aiken wishes to buy a copy of Liltved's book *Cowries and Their Relatives of Southern Africa*. Please contact him at 011-849-2275, or write to 11 Nestadt Street, Rynfield, Benoni 1501.

Mr Rob West, a member of the Australian Malacological Society, wishes to exchange shells with South African collectors. Contact him by email on [robwest@ozemail.com.au](mailto:robwest@ozemail.com.au).



*Januarie 2000* — Mikroskulpe was die onderwerp van 'n skitterende aanbieding deur Kobie du Preez, wat mikroskulpe omskryf het as skulpe kleiner as 5 mm, waarvoor 'n mens 'n vergrootglas of mikroskoop nodig het.

Sy het verduidelik waar 'n mens hierdie skulpies soek, hoe jy dit sorteer en verder behandel en bewaar. Die hoogtepunt was 'n kykie na sulke skulpe: pragtige skyfies wat deur 'n mikroskoop geneem is en wat die vorm, kleur en tekstuur van mikroskulpies wys.

*Februarie* — Hierdie keer was dit klein skulpfamilies, met ander woorde families wat maar 'n enkele of 'n paar spesies aan die Suid-Afrikaanse kus het. Vellies Veldsman het hierdie families gelys en bespreek. Daarna was daar kans om te kyk na die voorbeelde van sulke families wat vyf lede in vertoonlaaie saamgebring het.

Drie nuwe lede is verwelkom.

*Maart* — Die groot nuus is dat ons 'n spesiale projek gaan onderneem. Douw Steyn het gereël dat die vereniging die skulpuitstalling van die akwarium (deel van die Nasionale Dieretuin in Boomstraat, Pretoria) kan gaan opknop.

Die uitstalling is gehuisves in 21 vertoonkaste en is erg verwaarloos. Lede gaan nou 'n proses van restaurasie en herstel begin. Die skulpuitstalling gaan dan ook gebruik word as advertensie vir die Skulpkondevereniging.

Kobie du Preez het weer vir 'n puik aanbieding gesorg. Hierdie keer is die *Columbellidae* beskryf, bespreek en bekyk.

## THREE CHEERS FOR A DREDGING PIPE!

by Johel van der Berg

I know now that Natal's shells are either kaput or else very elusive. This trustworthy statement comes none other than from Johel v.d. Berg, remember her? She of coast roaming fame? (See *Strandlopers* 245 and 246 of 1996 -Ed.)

It all started with that beautiful, straightforward new shell guide by Steyn & Lussi that I received for a birthday present. The very moment I laid eyes on those impeccable photos I was lost. Yes, I simply had to find all of those 'rare' or 'uncommon' Natal beauties mentioned in the book. And why not, seeing that I am a 'master shell collector' (sic).

Hubby was easily enticed (he adores caravanning) and in less than a week we were off, starting with Durban. Why Durban? Because on page 146 three of these extraordinary beauties\* are pinpointed by arrows pointing straight to Durban Bay.

But to find Durban Bay - where I positively believed they would lie scattered within a radius of a few steps - was, for these 'affie-plaasous', quite a problem. So the map was opened abruptly and while anxiously studying it, I noticed Hubby's disagreeing pout growing into an ugly: "And you want me to accompany you as usual. Don't you ever realize the danger of these ----blah blah blah".

Well, the short and the loooong of it was that we started off from the marina trudging southwards through loose sea sand, climbing

\* the mitres *Neocancilla clathrus*, *N. circula* and *Subcancilla flammea*

over occasional boulders, stepping over and past foul smelling debris till at last --- O no, an inlet! No sand, no shells, no hope?

"Ag, OK Hubby, the book does mention the word extinct frequently and maybe Durban Bay as well as its shells, is extinct" I lamely tried to pacify those irritable grunts.

Off to Tugela was our next venture where *Argopecten fultoni* according to Kilburn, are found rather abundantly. Manoeuvring our enormous Gaselle into that tiny Private Park was, to start with, quite embarrassing for this old girl having to guide a hot and bothered Hubby. But I did my part with blushing grace inspired by those beach strewn fultoni's. Which, sad to say, were nowhere in sight after walking for kilometres on end, poking about into any old rubbish disregarded by the tides and hurting my already sore rheumatic knee, just more so. The all-over picture remained : pinkish brown sand strewn with assortments of ordinary small bivalves and here and there limp seaweed.

Still, the hope in my heart remained like a young girl's day-dream bringing a skip in my step and a lilt to my voice! And in that lovely mood off we went to Richards Bay where I found a juvenile *Conus typhon*.

The following morning, a bright sunny Sunday we went beach-combing, first to the north, then the south, me trying hard to avoid Hubby's now-what-next eyes! So I happily suggested : "What about tea at the Marina?". And it was while scanning the beach from there that I saw all those people, hands clasped behind backs,

eyes focusing on their feet, milling around. Looking for what?

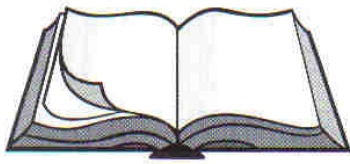
"The dredging pipe unloads on the beach and amongst the rocks and silt lots of shells are to be found" a friendly chap explained to me. Well, I was stunned! Shells for free from the bottom of the ocean provided for you by means of this huge monster pipe? Oh what a feast at last!

For three days my privilege it was to pick and choose, jumping with reborn agility to avoid grinding, rushing water or collisions with overeager neighbours. Hubby even bought me a spade for digging when the waters were spent. Hubby, can you believe it, at last my ally, eagerly parading the line where rushing water met the sea!

And my precious finds include amongst others : *Pterygia scabricula* (a mitre), *Sinum delessertii* (a naticid) , *Siliqua fasciata* (a glossy bivalve), *Lutraria inhacaensis* (large bivalve), *Pteria tortirostris* (same family as *Pinctada*), *Marginella pseudornata*, *Oliva lepida* and *Cypraea oweni* and *stolida*.

But to me the rarest and dearest were a 44 mm *Conus typhon*, penstriped on cream, and a 70 mm *Bufo naria crumena*, sculptured to perfection, given to me by an apple-cheeked child : "Auntie, auntie, this is for you. I found them myself".

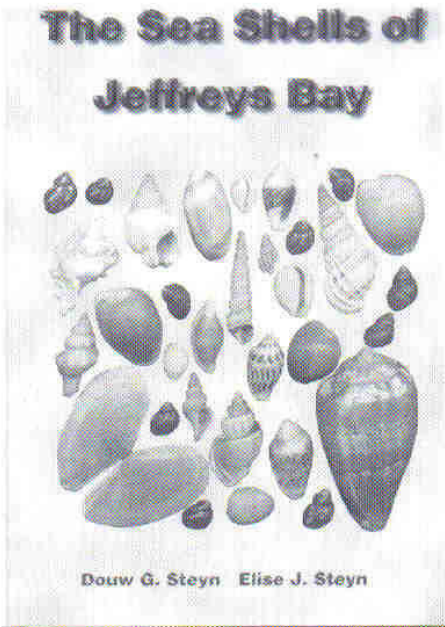
Thank you darling little girl and thank you Natal for your dredging pipe. I know now that Natal needs another introduction. I therefore eagerly withdraw my negativity.



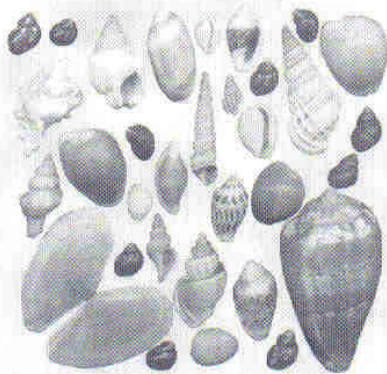
## Book review

### New shell publications from Douw Steyn

reviewed by Mike Cortie



### The Sea Shells of Jeffreys Bay



Douw G. Steyn Elise J. Steyn

### 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. Illustrations are especially welcome. Please send to

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Prof. Douw Steyn, who together with Markus Lussi, recently brought out the magnificent book *Marine Shells of South Africa*, has now followed hard on its heels with two more welcome publications.

The first of these is a small format soft-cover book *The Sea Shells of Jeffreys Bay*, co-authored with his wife Elise. Three hundred and ninety four species are listed and illustrated in colour. This is a stunning total of shells from a single location, and it is further proof, if any were needed, that Jeffreys Bay is one of the top beach-shelling locations in the world. Coverage includes the bivalves and chitons, and the book has a comprehensive index and a good bibliography. There is also an interesting guide to the local Afrikaans common names of these shells. This is welcome because this is a part of our history which is in danger of disappearing as the coastline urbanises.

This is a very reasonably priced book, and may be obtained directly from the publishers for about R65 incl. postage. The colour illustrations are more than adequate, although printed at a somewhat lower quality than those of some of the high-priced overseas books. This book is a very good buy and should not be missed! For more information write to Eldolise

Publishers, PO Box 210, Menlyn Post Point 0063, South Africa, or send a fax to (012)-361-2308.

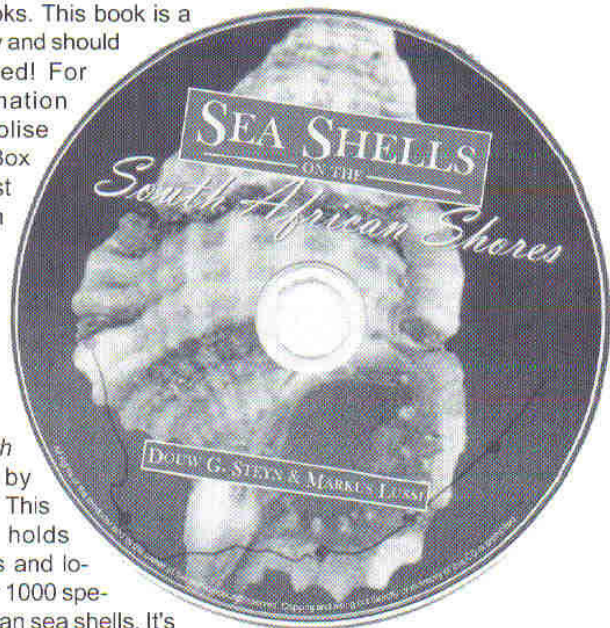
The second publication is a CD-ROM called *Sea Shells on the South African Shores*, by Steyn and Lussi. This useful resource holds colour illustrations and locality data for over 1000 species of South African sea shells. It's

scope excludes micro-shells and non-marine molluscs.

The text includes a description of each species with the scientific name, author and date, the average size that the collector can expect to find on the beach, and a 'rarity factor'. The taxonomic position of the species is also shown through to family, order and class.

A handy search feature allows one to sift through the entries in what is effectively a database. For example, all shells with a particular genus or species name can be readily listed. Provision has been made for assistance in identifying shells by means of this feature and some carefully selected text phrases, but in my experience this works best only when the searcher is very familiar with the language used by the program's authors. On the other hand, a useful feature to restrict shells to be considered to particular parts of the coast line ought to help cut down on irrelevant visual comparisons.

The CD is a very useful resource and well worth owning. It is reasonably priced at somewhat less than R200. Please contact Prof. Steyn at (012)-361-2308 for the latest information regarding availability and ordering.



## Society news

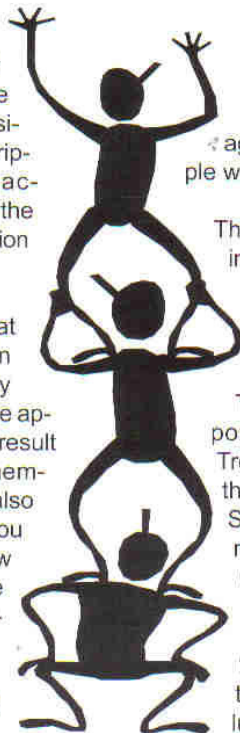
The Management Committee thank all the members who reacted positively and paid their subscription without separate accounts. Thank you also for the donations received in addition to fees.

Pamphlets were placed at the shell museums in Jeffreys Bay and Shelly Beach and a full page article appeared in *Die Beeld*. As a result we have several new members. However, we would also like to appeal to each of you to try to recruit one new member and thereby give us a hundred percent increase.

Welcome to the following new members:

- + Miss Samantha Cochrane from Port Elizabeth,
- + Mr JP Giraud from Atlasville,
- + Mr and Mrs D Slater from New Germany,
- + Mr CJ Tredoux from Rooihuiskraal,
- + Mr E van der Walt from Richards Bay,
- + Mr RE Tregoning from Jeppes-town,
- + Mrs Karin Pretorius from Monumentpark,
- + Dkr. Jan Stolk from Rotterdam in The Netherlands,
- + Mr and Mrs P Robertson from Brackendown,
- + Dr. C Rosche from Hatfield, and
- + Mr E Groenewald from Koekenaap.

To encourage an interest in the sea and especially in Mollusca amongst the budding young scientists in the country, an amount of R100 was donated to the Society to sponsor a cash prize for the best project on the above subject at the National Expo for Young Scientists. This is normally held in Pretoria during October. The Management Committee approved a future R100. Our secretary donated a trophy. Please tell the scholars about this



in your home towns. The Society and its activities will be advertised by the Expo Management amongst all the people who take part in the Expo.

The next Annual General Meeting will be held on the 9<sup>th</sup> of August 2000 at the Bridge Club Hall in 26<sup>th</sup> Street, Menlo Park at 18:00 starting with a finger supper.

The agenda will include a report from the President and Treasurer and a discussion on the issues of Patrons and the Scientific Panel. The financial needs of Society including a review of membership fees and costs of *Strandloper* will also be featured. Finally, there will be a slide show on those most stunning of molluscs, the volutes.

As 9<sup>th</sup> August is a public holiday it will be a good opportunity for members other than those from the Pretoria Group to attend. Why not come along, meet some of the faces behind the names, and make new shelly contacts? Home hospitality can be arranged....just let us know.

You will see from the information panel on the right that Dr. Kilburn has graciously agreed to serve as Patron for the Society. According to Art. 7.5.5 of the Constitution more than one Patron may be elected. The possibility of further individuals or bodies will be considered in future.

Regarding the Scientific Panel, the Management has proposed the following: the different Groups will first identify local members to help with identification. If that does not result in an identification, then problematic species can be sent to Markus Lussi, of Durban. If there is still uncertainty, then he will then contact Dr Kilburn.

After this issue, *Strandloper* will only be sent to members whose dues are paid.

### Conchological Society of Southern Africa Founded 1958

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Correspondence to:  
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South Africa

#### Membership (incl. *Strandloper*)

- ordinary members R75
- overseas (2 years) US\$50
- pensioners&scholars R25

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- Vice-President: Danny Spengler
- Treasurer: Medea Evans
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