

Strandloper 272-273

September & December 2003 (2003/04 no. 2 & 3)

Page 1



# Conchological Society of Southern Africa

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Ed.

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25 February 2004

Dear Subscribers,

I apologize sincerely for the delay in publishing this combined September 2003/December 2003 issue. There was only one member that phoned me regularly to complain, sorry brother.

The picture next to this letter is a photograph of my current 'office' ... and I think you will have mercy on me now! We have an inverter in the 4x4 trailer, and I have to park my little Landy close by to connect the cables. The 12V from the car is then inverted to 220V to run my computer... but alas... the battery only runs for a small while and then it is flat.

We have been waiting for five months now for Eskom to provide us with power. They have come out now to do their evaluations and have marked the areas where the poles will be planted. In which year I can only guess. Telkom is another story... our neighbours waited for more than a year for their telephones to be installed. Brothers and sisters - we live in Africa! My uncle in town let me use his line to download my e-mail when I'm in town.

BUT - I am settling down now, I can move into my house by the end of this week and my time is now my own again... Yours again ... to produce a new-look Strandloper with lots and lots of shell information.

A very big thank you to all our contributors, without you the Strandloper would have been empty.

Please send your articles DIRECTLY to the editor, just one request - please phone in advance if you want to send big graphics files so that I can make arrangements. Huge files are easier to send on a CD to my postal address.

Please note my new postal address:

The Editor P.O. Box 8760 Nelspruit 1206 South Africa.

Tel. 082 3726790



# Shell Illustrations – The easy way

- Alwyn & Johan Marais

For centuries the only means of accurately illustrating shells for publication was to have them drawn by an artist. This had obvious disadvantages since the splendour of shells could in most cases only be expressed in black and white. There was also great flexibility in the drawing techniques used by different artists that made identification from line drawings very difficult. These drawings were later largely replaced by black and white photography that also had its limitations. Black and white photographs were only replaced by colour photography in the last few decades. The taking, developing and publishing of such images were costly processes and were usually only considered by serious conchologist. Recent advances in digital camera and digital scanning technology have made it much more affordable for the everyday shell collector to create high-quality photographic images of the shells in his collection.

Although digital cameras have greatly improved in image quality over recent years, they are still reasonably expensive and images of small shells are very difficult, if not impossible to make. However, flat bed scanners have improved drastically in image quality and come at a price affordable to the average shell collector. The flatbed scanner also solves the complex lighting problems often experienced when using a digital camera. The photographs in this article have been scanned using four different scanners to indicate the differences in quality as well as the limitations that can be expected from a flatbed scanner. The scanners used were the Epson Perfection 3170 Photo at 3200 x 6400dpi, CanoScan 5000F at 2400 x 4800dpi, Scanmagic 1200 UB Plus at 600 x 1200 dpi and a Primax 4800 Direct at 300 x 600dpi. The most important aspect to look for when selecting a scanner is the scanning resolution. The scanning resolution is the number of dots per inch (dpi) that can be scanned. The higher the dpi setting on a scanner, the smaller the shell that can be scanned. For example, on a 2400dpi scanner a reasonable picture of a 12mm shell can be created, while a 6400dpi scanner will create a good image of a 3mm shell. Not only can a smaller shell be scanned on a high-resolution scanner, but the colour and shell texture is also clearer and better defined than on larger shells.

Most shells in collections are usually larger than 12mm and a 2400dpi scanner has more than sufficient resolution to create good quality images. Although shells of different shapes can be scanned, scanners do have some limitations. These include the scanning of high-profiled shells like some members of the Muricidae and very large shells like Charonia lampas and Cypraeacassis rufa. A problem often encountered in macro photography or when photographing through a microscope, is the limited depth

of field attained on the image. In some respects scanners obtain a better depth of field than conventional cameras, even with larger shells. Depth of field is only a problem when the shell is very bulbous and the depth exceeds 3-4 cm. Even in such cases a reasonably good image can be obtained despite a slightly limited depth of field.

Photo-imaging software have developed in pace with the developments in hardware components and many good quality software solutions are available at reasonable prices. This software will enhance the images made on the scanner. Some packages like *Adobe Elements*® are distributed free with the purchase of leading brand scanners. This is an exceptionally good software manipulation package and well worth using. There are several others also available like *CorelDraw®*, *Adobe PhotoShop®* and *MS PhotoDraw®*.

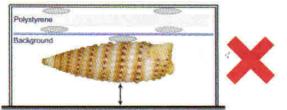
The scanning of shells involves the following steps:

- Preparing the shell for scanning
- Scanning the shell to an initial image file
- Manipulating and enhancing the scanned image
- Saving the image

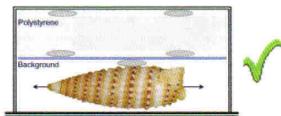
Preparing the shell for scanning is probably the most important aspect of the whole process, as it will determine the quality and usability of the initial image file. If an image file is produced that requires a lot of manipulation during later stages of the process, it will complicate the procedure unnecessarily and the resulting image file will not be of an acceptable standard. There are several good techniques to simplify this part of the procedure.

- Boxes of different sizes are prepared in which shells can be affixed before scanning. The most important consideration is the depth of the box. If the box with the shell is inverted onto the glass top of the scanner, the shell must be as close to the glass as possible. We utilize a large variety of box sizes to accommodate shells of different shapes and sizes. Alternatively, a box can be designed of which the depth can be adjusted by attaching polystyrene blocks of different thickness to the inside bottom of the box by means of *Prestik*. By positioning the shell as close to the glass top as possible, both the focus and the depth of field will be optimised.
- Make sure the shell axis is horizontal to the glass top. If the shell is not securely attached to the background the weight of the shell will make it sag down onto the scanner glass top. This will result in a shell image that is out of proportion to its actual

shell.



Scanner glass top



Scanner glass top



Scanner glass top

- When looking down from the top onto the scanner surface, make sure that the shell is placed in a vertical position on the scan area. This will ensure that the image scanned will be in an upright position on the computer screen. Although the shell can be rotated at a later stage, it is advisable to get it as straight as possible before scanning the shell.
- It is important to select the correct background colour for the shell. There are two aspects to consider. The first is the colour of the shell. If the shell is very dark, a lighter background colour that will make the image editing easier, is recommended. When the shell colour is light, a darker background should be selected. The second is to select a colour that is close to the background colour that will be used during the image-editing phase. During the editing phase the shell will be separated from the background and placed onto a digital background. This ensures that the background is 100% uniform in colour and texture. Unfortunately, during this process a fine border will remain around the shell. By selecting a background colour close to the final background colour, the halo effect of the retained border around the shell

will be eliminated. We have found that bright colours like greens or reds do not work well, as the coloured halo effect does not blend in well during the final background selection.

- During the selection of the background colour, the type of background material used should also be considered. We have found that a uniform coloured cardboard works the best. Cardboard with texture or patters should not be used, as this will make the image manipulation more difficult. Cloth or velvet is seldom suitable as a background since it does not provide sufficient support and stability to the shell hanging in the inverted box during scanning.
- Lining the sidewalls of the box with white paper will improve overall lighting and will result in a better quality image.
  - Small shells are often placed directly onto the glass for scanning. This may in some cases be difficult to do because of their shape. It may also be impractical to mount the shell in a box in order to position them correctly. We have used four wooden spatulas and a knitting needle for scanning small shells, with much success. Two spatulas are placed on top of each other onto the scanner glass top. A knife is used to carve a small indentation into the top spatula. Two similar spatulas are placed onto the scanner about 15cm from the first pair. The shell is attached to the middle of the knitting needle with a small piece of Prestik. The needle is then suspended just above the scanner glass top by placing the needle in the indentations on the spatula stacks. The shell can now be adjusted to the required position by rotating the needle. To eliminate the coloured halo effect, make sure that the knitting needle is cream in colour and not brightly coloured.



When scanning shells, leave the lid in an open position and do not close the lid on your shells.

Make sure that the glass top is clear of dust and fingerprints. When scanning small shells these marks may be enlarged several times and may influence the image quality. They are difficult to remove during the image manipulation phase and should be avoided at this early stage. Shells that have been oiled before scanning do not readily stick to Prestik. Pressing the Prestik repeatedly against the shell easily solves this problem. Kneading the Prestik during this process will allow it to absorb some of the oil and to stick more readily to the shell. When handling the shell or turning the box upside down to place it on the scanner glass top. make sure that the shell does not come loose and fall onto the glass. Special care should be taken when dealing with heavy shells or shells with long spines as they may break during a fall and can also damage the scanner glass top. Rather use too much Prestik than too little, even if the Prestik protrudes past the shell. The Prestik will be removed during the image manipulation phase.

# Scanning the shells

Activate the scanner software and select the preview scan option. Most scanner software has the option to zoom in on an object. Select an area around the shell and zoom in. After displaying the enlarged view, select the scan area around the shell with only a small margin between the shell and the border of the scan area. This will ensure optimal use of the scan area and does not waste disk space unnecessarily by saving excessive background area. On high resolution this may save several megabytes in file size and will make the manipulation of the image easier as well as faster. Although it is possible to enlarge the image during the software manipulation phase, it is advisable to use the zoom function at this stage to enlarge the shell in relation to the total scanned area. Enlarging the shell afterwards will result in a considerable loss of image clarity. Selecting the correct dpi setting is also very important. The smaller the shell the higher the resolution setting, and vice versa. By selecting a high scan resolution on a large shell will create a massive image file that will give you no added benefit. On large shells a scan resolution of 300 - 400dpi will be sufficient to produce a good quality image. With shells smaller than 10mm it is advisable to select a resolution equal to the scanner maximum. Most scanner software programs enable you to select a scan resolution higher than the scanner maximum. Selecting a higher scan resolution (dpi setting) than the scanner is able to scan will create a larger image file, but the image quality will be no better than the image created at the maximum scanner resolution.

When scanning shiny shells like the Cypraeidae, the scanner will create a bright line across the shell. This is caused by the scanner light reflecting off the shell's surface.

Unfortunately there is not much that can be done to correct this.



It is seldom required to make any brightness or colour adjustments during the scanning phase. If the scan image is too dark it is possible to adjust the brightness slightly, but care should be taken not to over adjust at this stage. The image manipulation software is more suitable to make these adjustments and will give a better end result. Save the scanned image on the computer hard drive. It is possible to save the image in different formats and to a large extent this will depend on personal preference. The smallest file size can be obtained by saving the file in .jpg file format. Although there is a slight loss in image quality because of the compression method used, this is negligible in the final product. Size would also be the deciding factor if the intension is to publish the file on the Internet or distribute it by e-mail.

# Manipulating and enhancing the scanned image

Image manipulation is achieved by using a good photo editing application. The photographs in this article have been manipulated using Microsoft PhotoDraw® Ver 2.0 because of its ease of use. It is a simple yet extremely powerful application to use and allows the user to create professionally looking images in a few minutes. The image manipulation phase is probably the most rewarding part of the process as a rough scanned image can be manipulated and enhanced into a beautiful shell image. All scanned images can be digitally enhanced in order to define shell colour and sculptural features more clearly and also to remove any unwanted dust marks. Care should be taken not to change the actual colours and features in such a way as to mislead the viewer. During the enhancement process we normally make three adjustments that will improve the image quite dramatically. In most instances both the brightness and then the contrast are increased by 10%. However, with white shells we often decrease the contrast by 10%. This will ensure a more accurate image by emphasizing any texture that may be visible on the shell surface. The final adjustment is a 15% increase of the *Blur* and *Sharpen* selection. Selecting a value higher than 15% will result in an over adjustment which will affect the image quality negatively. It is advisable not to adjust the colour hue or colour tint. This can very easily result in a colour-distorted image.

If necessary, the image is rotated after it has been digitally enhanced. Make sure the shell axis is in the vertical position. Most software applications will allow rotation of the image in single degree increments. Use this feature to rotate the image into a vertical position. In most instances the top and bottom views of the shell will be placed next to each other on a background. By placing the shells next to each other a balanced view of the shell will be ensured. In some instances the addition of other angles of the shell to the image may be required. This is frequently done with cowries to display the lateral profile. This image would then be rotated into a horizontal position in order to display correctly.

At this stage a decision has to be made whether to retain the scanned background or whether to replace the background with a digital image. If the image is going to be used for identification purposes only, it is sufficient to leave the shell on the scanned background. The edges are simply cropped squarely with only a small margin of background around the shell to create a neat picture. On the other hand, if the image is going to be used for publication, it is recommended to replace the background with a digital background that will give a perfectly uniform colour with no distracting features. This is achieved by selecting the crop out feature. Some software applications, like MS PhotoDraw®, have an automatic edge finder utility which makes the cutting out of the shell much quicker and easier. With other applications the cutting line needs to be indicated manually. The shell edge is enlarged, using the zoom function. Move right round the shell and select the shell edge. Remember to cut off any Prestik that may be visible around the shell edges. At completion, the shell image alone will be copied to a new picture. The same procedure is followed with the other views of the scanned shell. The different shell views will then have to be combined onto a single image. One of the cut out images that has been created is selected and the background resized to accommodate the other cut out views as well. Make sure only the background or canvas size is resized and not the shell image as well. The other views are selected one by one and pasted into the resized image. Make sure that the shell images are of equal size. Should there be a difference in shell image size, the individual images are selected and resize as required. The shell images are placed in position and the background is resized with only a small margin around the shell images. The shell images will now be arranged on a white background. The option to format the background is then selected and a background colour is chosen. In most cases a black background will display the



Shells formatted with no background colour can be quite attractive.



Choosing a colour too close to the shell colour can cause the shell to get "lost" in the background.



Too bright a colour distracts the attention from the shell to the background.



A black background in most cases displays the shell the best.



Twotone backgrounds can create a 3D appearance that could highlight the shell.



Adding shadows and other special affects can also make for interesting images.

best, but where applicable a pastel colour can be selected that will compliment the shell without attracting attention to the background. If the image is to be used in a publication, select the same background colour for all the images. It may be advisable to add the shell name, location and size in text onto the photo. This is easily done by placing a text label at the top of the image. The required text is then typed in. In most cases the text is positioned in the center below the shell images. The image or canvas is resized to

allow space below the shell images. Make sure the text colour, font and font size selected will display the text clearly on the background colour.

It may be required to hide a dust mark or scratch that has not been noticed during the scanning process. This is achieved in the following manner. Zoom in on the dust mark so that it is clearly visible on the screen. Select the paint tools submenu from the application menu. Select a paintbrush with soft edges and a paint width that is slightly wider than the dust mark. The correct colour to fill the mark is also chosen. Select the eyedropper from the paint tools menu and click on an area adjacent to the mark. The paintbrush is then set for the colour closest to the mark. Do not try to correct the mark with one paint stroke but rather use several smaller strokes to colour in the total area. Carefully paint the mark close to the area where you clicked the eyedropper. If the whole length of the mark is bordered by a uniform colour, the same paint colour can be used for the whole mark. However, if there are colour differences along the length of the dust mark or scratch. the eyedropper procedure should be repeated several times to ensure a realistic image correction. When complete, zoom out and view the image at normal size to ensure that the correction is not easily visible.

# Saving the image

Before the image is saved to disk, ensure that the picture size is not too large. Most software packages will zoom the picture automatically into the visible screen area and it might not be noticed that the picture is actually 30+cm in width. This will unnecessarily waste disk space and also make the picture slower to load for other applications. The picture should be resized to about 12-15cm in width. This will result in a sufficiently large picture with a small and manageable file size. The image is saved to disk and given a logical name. We have used the following naming convention that simplified the retrieving of images, with great success. This format also ensures that related shells are placed together in the directory listing. The first three characters of the genus name are followed by a low line character "\_" followed by the complete species name. In some cases we have added the shell length to the name as well, especially in the case of small shells and cowries intended for sale. This makes it easy to recall the shell length should it be required. Examples are as follows:

> Cyp\_capensis.jpg Cyp\_capensis\_23mm.jpg Cyp\_castanea\_latebrosa.jpg Mar\_piperata\_12mm.jpg Fic\_subintermedia\_104mm.jpg

Make sure the image is saved in .jpg format as some software applications will save the image in a native format that may not be accessible to other people. Most

applications have a wide variety of formats to choose from. In this regard the .jpg or .Jpeg formats are ideal for the home and Internet user as file encryption ensures a small file size without visible image quality loss. If the image is to be printed or published it is recommended that you select a .tif format, as most publishers will require this format.

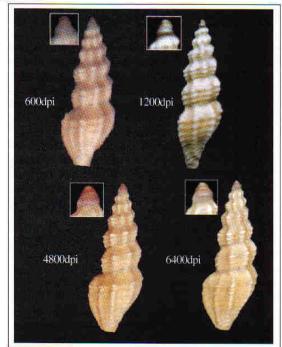
## Evaluation

The following shells have been used in this comparison:

Lienardia siren Smith, 1904 8mm Haliotis queketti Smith, 1910 23mm Ficus subintermedia (d'Orbigny, 1852) 85mm

The shells vary greatly in length, depth, colour and pattern. The images shown below have been processed as described above, including the software manipulation phase. The most obvious difference between scanners is in the brightness of the image, with the older scanner models producing considerably darker images than the newer models. During the improvement of scanners many of the more complex lighting issues were corrected and resulted in better and brighter images. Attempts to correct the lighting on the older models result in colour distortion of the final image, as can be seen in the 1200dpi scan below.

The 8mm Lienardia siren is too small for the 600dpi model scanner and is probably the smallest shell one would be able to scan successfully with a 1200dpi scanner. This size shell presents no problem for the two higher resolution scanners.



In the first image one can easily see the distortion created by the low resolution. The image seems to be out of focus. The same shell at 1200 dpi is slightly better, but the best results are obtained with the two high-resolution scans. The shell is large enough to show very little difference between the two high-resolution scans. The enlarged protoconchs demonstrate the loss of detail when lowering the resolution.

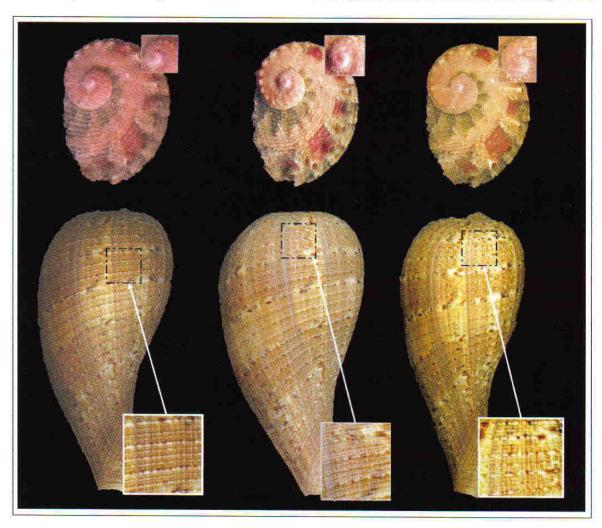
The 23mm Haliotis queketti, on the other hand, is a reasonably large shell to scan. Even on the 600dpi scanner a good image can be obtained. There is very little difference in image quality on the 1200dpi and larger scanners, apart from an improvement in the colour. One of the major advantages of a higher resolution scanner is a better-defined outer edge of the image, making the cutting out process easier and more accurate. On lower resolution images the outer edge is less defined and more jagged than on the higher resolution scans. This can be clearly seen in the images below.

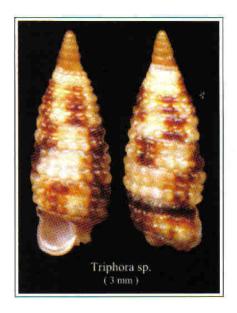
The Ficus subintermedia was chosen not only for its size but also for the round shape and height of the shell. This is a difficult shape to scan due to depth of field distortion on the outer edges. Quite evident is the difference in brightness between the different models with the higher resolution scanners tending to produce a brighter image on larger shells than the older lower resolution scanners.

Apart from a slightly better lighting and definition of the shell edges, there is very little difference in the quality of the images at the different resolutions.

# Summary

Digital images can easily be sent by Internet or via e-mail. This enables the shell collector to share interesting finds with colleagues or shell discussion groups on Internet, or to have his shells identified by specialists worldwide. By sending images via e-mail instead of sending the actual shells by post, eliminates the risk of shell damage or loss





of specimens in the post. Since the scanning procedure does not involve film development or printing, high-quality images of shells for book or journal illustrations can be produced at almost no cost. After the initial purchase of the equipment, only time is required to prepare the images.

I trust that you will now have both the confidence and the knowledge to create your own shell images. This is a highly rewarding side of shell collecting and affords the collector more time to examine and admire the true beauty of our rich shell heritage.

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# Cypraeovula capensis profundorum Seccombe, 2003



Cypraeovula capensis (Gray, 1828) has a distribution range extending from Jeffreys Bay to central Kwazulu-Natal, and occurs at depths ranging from 15-20m in Algoa Bay to depths exceeding 100m in Kwazulu-Natal. Shells of *C. capensis* are easily distinguishable from other members of the Cypraeidae by their characteristic transverse ridges. Typical *C. capensis* is pale violaceous-brown to fawn, with the base paler in colour. Shells are elongate (not inflated), ranging in size from 26-33mm, with length to height ratios exceeding 2. They also vary in the degree of dorsal blotching, most having extensive dark blotches.

Occasionally dwarf specimens (19mm) of typical *C. capensis* are found. Furthermore, a form of *C. capensis* characterised by its dark purple/lilac colour when fresh, occurs in shallow water off East London and has been described as *C. capensis* fm. *gonubiensis*. Crayfish pots in deep water in Algoa Bay sometimes yield a more ovate form of *C. capensis*, locally known as *C. capensis "sphaerica"*. Specimens of a population of large *C. capensis* (exceeding 40mm) that are generally paler in colour than typical *C. capensis* have also been collected by trawlers and crayfishermen in deep water in the Algoa Bay area. In recent years, several specimens of yet another distinct *C. capensis* have been dredged in 100m of water off the



- Johan & Alwyn Marais

northeastern coast of South Africa, from East London to Mbotyi in the Transkei. These specimens appear to represent a homogeneous, sustainable population, and have recently been described as a new subspecies, *C. capensis profundorum* Seccombe, 2003.

C. capensis profundorum on average ranges from 21-24mm in length. The dorsum is inflated and heavily ribbed. The ground colour is apricot, through beige to pale lilac. Most shells are without a dorsal blotch, but some have small brown blotches in the middle of the dorsum. Occasionally specimens have faint brown spots distributed over the entire dorsum. The base and labrum are usually the same colour as, or sometimes darker than the dorsum. The new subspecies can be distinguished from the typical C. capensis by its smaller size, the absence of, or reduced dorsal pattern, the background colour and the length to height ratio, which is less than 1.9.



Cypraeovula capensis profundorum Seccombe, 2003 compared to Cypraeovula capensis (Gray, 1828)

## References

1. Seccombe, A. 2003. A new subspecies of Cypraeovula capensis occurring off the coast of the Eastern Cape, South Africa. Pallidula ISSN 0140-2471 Vol 33 No 2 Oct 03

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# Skulpuitstappie na Hluleka

# 20-24 Maart 2003

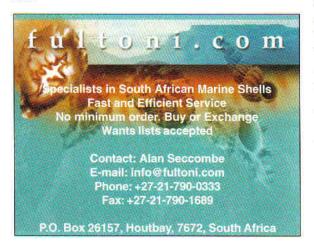
# Deur Renata Kruyswijk

'n Onuitwisbare klomp herinneringe is vasgelê tydens ons skulptoer na Hluleka! Vroegmôre het ons in reënweer vertrek na ons bestemming. Die ruitveërs het nooit ophou werk nie. Hoe sal ons ooit vergeet dat die vliegtuig waarmee ek en Gretha veronderstel was om in Umtata te land, weens 'n kragonderbreking wel in Oos Londen geland het . Dit het ons dag aansienlik bemoeilik en tyd wat ons langs die strand wou deurbring, is spandeer deur ryery van bakboord na stuurboord .

Uiteindelik het ons die stryd moes opgee, die huurmotor terug gegee en het die res van die groep ons opgelaai in Umtata. Dankie mense, ons waardeer nog steeds jul moeite. Uiteindelik het ons ge-arriveer waar ons wou wees... al was dit nou in gietende reën, deur dergelike slote en gladde modderpoele. Ons lang dag is beloon met 'n salige nagrus waartydens ons kragte kon herwin vir al die pret wat gewag het.

Vrolike sonskyn het ons Vrydagoggend begroet! Glo my, dit was n seën, alhoewel ons verseker steeds skulpe sou gaan soek het ingeval van reënweer. Die natuurskoon en omgewing was pragtig en dit het gevoel asof ons op 'n eiland was. Uiteindelik kon ons fokus op skulpe en is almal met groot opgewondenheid strand toe!

Elkeen het in 'n droom van sy eie begin wandel... Kort-kort is uitroepe gehoor van opgewondenheid wanneer 'n nuwe skulp gevind is. Die vreugde daarvan om dit dan te wys aan die wat daar naby was en by die kenners meer daaroor te leer, was 'n bonus vir ons wat nuwelinge is. Ai, hoe kry julle dit reg om al die genus- en spesie name so goed te ken?





From Left to Right: Danny Spengler, Alwyn Marais, Gretha Uys, Lana & Bill Kruger, Marina & Kobie du Preez, Johan Marais, Renata Kruyswijk.

Tydens ons "brunch" etes was ons rûe alreeds seer van al die buk, optel en swaardra aan ons fondse, maar dit was het einde niet! Trots het elkeen sy skulpe gewys, inligting is oorgedra en geselsies is gemaak so tussen die etery deur. Na ete het ons ten spyte van seer lywe weer koers gekies strand toe. Rotse, poele en elke moontlike plek is ywerig ondersoek. 'n Heerlike braaivleis het ons dag afgerond.

Kobie, Danny en Alwyn het in die middernagtelike ure 'n soektog onderneem om die naglewe te bespeur wat skulplewe betref. Ons het die aanbod liefs van die hand gewys oor die seer bene en die volgende dag net grootoog gestaar na Danny se reuse, volmaakte *Charonia lampas pustulata*.

Gewapen met sonroom, water, energiestafies en hoede het ons Saterdagoggend na Presleybaai gery met die Land Rovers. Die stukkende paaie na al die reën het gesorg vir verskeie stamperige dele en diep waterpoele waardeur die bestuurders baljaar het. Ons het al laggend deur die hobbels saam gebons en selfs dit geniet.

In diè wêreld beskou beeste, boerbokke en varke die paaie as beddens en moes ons gedurig tot stilstand kom om hulle 'n kans te gee om die pad te verlaat sodat ons verder kon ry! Na 'n ses kilometer staptog het ons by 'n nuwe strand 'n vrugbare optelsessie beleef, waartydens ek dit

veral geniet het om swem-swem met klere en al in die gety poele nuwe spesies te ontdek.

Onwillig moes ons na twee ure terug en dit land-langs oor die styltes. Marina, Gretha, Kobie en ek was die agterosse en het by die eindpunt waar ons die ander ontmoet het die lekkerste swem in die see ooit beleef.

Lana en Bill het ons trakteer met pannekoeke wat bommelakiesie-slaan lekker was die aand. Dit was nou 'n behoorlike "birds of a feather flock together" of altans: Opgaarders van skulpe en slakke versamel en konkel kopstukke. Daar het ons tot laatnag gekuier.

Sondagoggend was ons vir oulaas strand toe - die keer het ons ure spandeer in 'n mikroskulp skatkis gebied. Kuierkuier het ons op ons pense gelê en uitsoek na hartelus. Kratte en sakke is volgelaai om later tuis deeglik te inspekteer.'n Waatlemoenfees op die strand het ons besoek op 'n hoogtepunt afgesluit. Dit was maar swaar om te begin pak want die naweek was idilies en kon beslis langer gewees het. Vir oulaas het ons ons verwonder aan die groen en pienk Xhosa-huisies wat op die heuwels uitgesprei is, kinders wat padlangs met bakhande staan en vra vir: "sweeeeeeets!"

(Hoe kan ons vergeet van die swart varkies wat met kiertsregop krulstertjies orals ronddrentel soos stofsuiers?)

Hierdie uitstappie was 'n reuse sukses en ek sien beslis uit na die volgende een in Mosambiek in 2004! Al tien van ons wat saam was, het uitstekend oor die weg gekom en het funksioneer soos 'n familie.

> \* Mrs. Renata Kruyswijk 135 Marketstr., Fairlane, 2195, South Africa

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Some of the Pretoria Group's members went on a shelling trip to Hluleka on the Transkei Coast during March 2003.

The author, Renata and friend Gretha decided to travel by air to Umtata, while the remainder of the group went by

It has been raining quite heavily in the region and their plans to rent a car were decided by the weather - they needed a 4x4 or at least a bakkie to get to Hluleka. How convenient of cell phones - the group could be contacted to meet them at the airport and their day were saved ...

A sunshine day greeted them the next day - a day of expectations for finding new shells!

Kobie, Danny and Alwyn went on a night shelling trip and Danny found a huge nearly perfect Charonia lampas pustulata.

The group went to Presleysbay on Saturday. The cows, goats and pigs are using the road to sleep on, and were a constant reason to come to a halt. The group had to walk about six kilometres over steep hills to the shelling

They had pancakes for supper and had a great time well into the night.

On Sunday they went to the beach for the last time - to find that micro-shell grit has washed up during the night. A last feast of watermelon on the beach and it was time to start packing.

The green and pink Xhosa houses on the hills will be remembered, the children begging for sweets - and the ever-present vacuum cleaners - the little black pigs with their upright curly tails...

Renata saw the outing as a huge success and she is looking forward to an outing to Mozambique in 2004.



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Lourens Johannes Smith (universally known as Laurie) is no longer with us and the world is poorer for that fact. We offer our sincere condolences to those who miss him most: his wife Barbara, their children, grandchildren and other members of the family.

This farewell is a tribute to a truly remarkable man. He was born on a dairy farm near Stellenbosch, passed his matric at the Paul Roos Gimnasium in Stellenbosch and completed his BSc degree at the University of Stellenbosch.

During his career he was Extension and Publication Officer for the Department of Agriculture and Curator of Education for the National Zoological Gardens in Pretoria.

He was a member of the following organisations:

Friends of the Zoo Conchological Society of SA -Professional Scientist (Pr. Sci. Nat.) Botanical Society of SA Honorary Ranger for the National Parks Board Rapportryers van SA Dutch Reformed Church

This gives an indication of his widespread interest in a great number of things, especially those relating to nature. Being a deeply religious man, he was an elder in the church for most of his adult life. He was also the Superintendent of the Sunday school for many years.

# IN MEMORIAM

# Farewell to Laurie Smith

- By Bill Krüger

Laurie was a very keen gardener and he preferred to do his own gardening. In their garden there was a wonderful collection of a variety of colours of irises and clivias as well as other outstanding lilies, foxgloves, snap-dragons, cycads and even a birdbath where the activities of the garden birds could be watched from inside the lounge. In the hothouse he cared for and pampered magnificent orchids, mainly cymbidiums.

He was a lover of classical music and loved to listen to operas sung by famous artists. The day before his death he expressed the wish to listen again to his wife playing the organ.

By nature he had an inclination (or was it an urge?) to collect. His collection of elephant ornaments -large to tiny-was a particular love, whether they were made of wood, ivory or other materials. Because of his ever-present desire to acquire knowledge his collection of worthwhile books was something to be seen. And then, of course, there was his shell collection. Shortly before his demise he had meticulously worked through his total collection and checked that all the required information was there and that it was correct.

At the meetings of the Pretoria Group of the CSSA (of which he was Chairman for 25 years) he gave several talks on specific shells usually accompanied by the relevant slides, and he wrote various articles for the Strandloper. He was Vice President of the Society for a number of years and later became the Secretary.

He was a well-known co-worker on various programmes of the SABC viz 'Maats in die Natuur' (10 years), 'Hoe verklaar jy dit?' (16 years), '50/50 Veldfokus' and 'Hoe weet jy dit' on Radio Pretoria. On account of his widespread knowledge of animal

behaviour, birds, plants, peculiarities in nature, he was a very popular speaker at camps of the Land Service Organisation as well as 'Die Voortrekkers' where he could keep large groups of children quiet and spellbound for long periods. His talks/ slide lectures in the evenings at the Skukuza Camp in the Kruger National Game Park often drew large crowds. He also started a night stay-over at the Transvaal Museum, which became very popular, where youngsters were enlightened on the sounds and calls of several birds and introduced to insects, rocks and minerals, mammals and reptiles and prehistoric beings.

During his lifetime Laurie had a setback with heart trouble and his doctor forced him to slow down. Not being able to sit down idly, he started doing needlework in the form of embroidery (even as delicate as needlepoint) and knitting, of which several specimens could be seen in his home.

After his latest illness he started making a study of the Bible and eventually wrote a book "Die Bybel se Omgewing" in which he wrote about the people and their clothing, recipes for the food they ate, the plants, the animals, the environment and much more.

It will be difficult to forget that Laurie tried to get you not only to see, but to observe - not only to listen, but to hear -and above all to think. Here was a man who during his sojourn on earth had really made an impact and at his departure a whole library of knowledge and know-how had burnt down. Shell people shall certainly miss him.

Bill Krüger 11 van der Schyff Street ANNLIN 0182 South Africa

# THE SEEM-MRIFT OF SOUTH AFRICA

- JOHN MUJR

This classic work, published in 1937 and neither matched nor surpassed to this day, is being reprinted in a limited edition. It will be a facsimile of the original, with a short biography and an index of plant names with current equivalents.

This work is far more than merely an account of the drift-seeds which wash up on South African shores, often after long sea journeys from the tropics. It deals with drift seeds collected on different beaches in South Africa, but also elsewhere in Africa and even Asia. It assesses the factors which enable these seeds to travel the oceans and survive, including suitable sea currents, buyancy, the ability to survive lengthy immersion in salt water, and the capability to germinate and establish at or directly above the high water mark which is a very hostile habitat for many plant species. It is also an account of South Africa's littoral flora, including species of which the seeds land in the ocean and get washed up on the shore without relying on this method of dispersal. It contains photographs of the commonest drift-seeds, as well as some of the shore plants bearing drift-seeds.

There is a Soft-cover as well as an Special Hard-cover subscribers' edition. The names of all subscribers whose names and cheques are received before 20 January 2004, will appear in the Special Hard-cover edition (please supply initials, surnames and state or province clearly).

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# Cominella elongata, Dunker 1857

# Deepwater colour forms

- By Mike Els

This is a species well known to most South African shell area and expect to find them. They remain an incidental collectors and can be commonly found beached along our find, with mature good specimens being relatively area of the Western Cape. As usual of course, really good turtoni Bartsch 1915, from a similar habitat, but almost quality, mature (i.e. thick-lipped) specimen of this common "cleaner" with less erosion. species remains a welcome reward for any collector after several hours of backbreaking rock lifting! Cominella elongata Commercial fishing boats operating off the Algoa Bay area from the East London area are usually grey in colour with have collected a variety of stunning colour forms of C. small, scattered brown markings. Specimens from shallow elongata, which, although illustrated in overseas publications, water in Algoa Bay are very different, having a more tan have not been well illustrated locally, which is the main ground colour with stronger brown markings. Towards Cape intention of this article- to show all South African collectors Agulhas they become variable and I find differentiation from some of the less often seen colour forms and species, which C. capensis in this region sometimes difficult.

As are most members of the Family Buccinidae, these shells are essentially scavengers, which probably accounts for the The deep-water forms vary in size, shape, sculpture and egg capsules that are attached to rocks.

down to as far as most amateurs are willing to go (~40m),



White form. Size: xmm

coastline from the western Transkei to the Cape Agulhas uncommon. Diving has the added advantage of yielding C. quality beach specimens are very hard to come by and always from sub tidal reef areas (5m and deeper), with very although diligent searching at low tide under rocks in an rare specimens sometimes a surprise at low Spring tide. area with a fairly sandy substrate will yield live specimens, These are more brightly colored than C. elongata, usually these are frequently eroded and not worth collecting. A orange and/or brown, as well as being smoother and

> are living close to, or beyond, the horizon when we are collecting on the beach.

specimens, which are taken in deep water rock lobster traps most strikingly, in colour. Mature size varies from 18-50mm where they are attracted by the fish bait intended for the +, shape from elongate to fairly squat and inflated, sculpture crustaceans. The young shells emerge fully developed from on the latest whorls from smooth to axially ribbed or spirally corded, with a variety of intergrades between the above. Color forms include pure yellow, pure white, dark orange, pinky-SCUBA divers encounter the species from shallow water tan, light and dark brown, brown and white banded as well as brown and yellow banded. The pure colour forms and but they occur sporadically and the diver cannot select an banded colour forms are the least common, with quality mature specimens very hard to obtain. Even in deep water, the species varies between different reef areas with the various forms usually only found when certain areas are fished at different times of the year. The specimens illustrated were collected from south-west of Cape St Francis to west of Port Alfred at depths of 100m to well over 200m on reef areas by commercial rock lobster boats fishing for Palinurus gilchristi Stebbing 1900. I look forward to seeing yet more beautiful forms from the areas outside the above range .Even our cool-water South African shells are often variable, sometimes colorful and always interesting!

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# Saastar Strandhuis

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# THE COILING DIRECTIONS OF GASTROPODS

# - Rina Matthee

# The potential coiling direction of shells

Potentially and actually, snails coil 4 (not 2) main ways, regardless of world hemispheres and ecological factors.

Two shells from the South African coast will be illustrated where hyperstrophy occur.

# **FAMILY TURBINIDAE**

Genus Turbo

Species cidaris natalensis Krauss, 1848

Genus Turbo

Species coronatus Gmelin, 1791

# **Dextral and Sinistrals**

Dextrality (right-handedness) is commonest, and sinistrality (left-handedness) much less frequent. In rare instances freak sinistral shells can occur in normally dextral species.

Ambidextrality (the common co-occurrence of both forms), though, exists in a few land-snails species.

The terms dextral and sinistral are best defined with regard to the asymmetric anatomy of a gastropod, not its right-handedly or left-handedly coiled shell, if it has one. (Even a shell-less land slug can be sinistral.) A left-handed shell can contain an anatomically dextral animal, and the coiling direction of a larva can differ from that of the adult growing from it. (Robert Robertson)



Viewed apically, dextral shells coil clockwise, and sinistral ones counterclockwise. Viewed with the spire up and the aperture facing forward, the aperture is on the right (dextral)

or to the left (sinistral).

If a spiral operculum is present then viewed externally its whorls coil counterclockwise if the snail is dextral and clockwise if it is sinistral. True (anatomical) sinistrality entails a mirror-image reversal of not only the shell and operculum but of the asymmetrical animal inside.

# Orthostrophy and Hyperstrophy

Orthostrophy and Hyperstrophy apply implicitly only to shelled animals.



Left: Normal dextral Turbo coronatus

Nodular spire visible with the aperture to the right

Top: Abnormal hyperstrophy *Turbo coronatus* (Slightly juvenile)

Smooth spire facing down. Coarse nodules just visible on base.

Live collected on rocks Isipingo Beach Kwazulu-Natal.

# Orthostrophy (usual coiling).

Orthostrophy is the term used when a snail's shell spirals down the axis around which it revolves.

Some right-handed animals occupy left-handed shells and

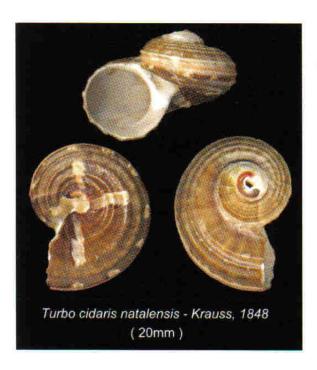


are misleadingly called sinistral, e.g. our *Triphora* species.

# Hyperstrophy (unusual coiling)

The shell does not always spiral around the axis in the same direction, the whorls can also spiral up the axis. This is Hyperstrophy (unusual coiling). The original base of the shell (the animal's left side) becomes a new "spire" and the original spire becomes a "base".

Turbo cidaris natalensis was also collected at Xora by Geoff Wallace. If any of the readers have come across this phenomena in this Family, or other Families, please let us know.



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- 2. Douw G. Steyn & Markus Lussi. Marine Shells of South Africa
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- 4. Alwyn Marais Visual material preparation

Top: Normal dextral Turbo cidaris natalensis

The spire with the colour pattern is clearly visible with the aperture on the right.

Bottom: Abnormal hyperstrophy Turbo cidaris natalensis

Spire facing down, no colour pattern present. The colour pattern is clearly visible on the base. Dead beach collected at Xora in Eastern Cape South Africa.

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Visit the web page of the British Shell Club for an interesting article on sinistral shells:

http://www.britishshellclub.org.uk/pages/articles/sini

AN INSIGHT INTO COLLECTING SINISTRAL SHELLS by Carl Ruscoe

Paragraph from article:

"Jeffreys Bay in South Africa is a well known site for sinistral freaks, for some reason. Occasionally a sinistral cowrie gets washed ashore and even in poor beached condition it will fetch well over £1000. Also, species of the families Marginellidae and Olividae produce sinistral freaks on this beach "

The magnificient Harry Lee collection of sinistral shells can be seen on the Jacksonville website: http://www.jaxshells.org/reverse.htm

- Editor

