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The HAA is dedicated to the study and conservation of African reptiles and amphibians. Membership is open to anyone with an interest in the African herpetofauna. Members receive the Association's journal, *African Journal of Herpetology*, which publishes review papers, research articles, short communications and book reviews – subject to peer review) and *African Herp News*, the Newsletter (which includes short communications, life history notes, geographical distribution notes, herpetological survey reports, venom and snakebite notes, short book reviews, bibliographies, husbandry hints, announcements and news items).

NEWSLETTER EDITOR'S NOTE

Articles shall be considered for publication provided that they are original and have not been published elsewhere. Articles will be submitted for peer review at the Editor's discretion. Authors are requested to submit long manuscripts by e-mail or on disc in Word 6.0 or 7.0, or Windows XP format. Shorter articles may be submitted may be submitted as typescripts.

The views and opinions expressed in articles are not necessarily those of the Editor.

Articles and news items appearing in *African Herp News* may be reprinted, provided that the author's name and full Newsletter reference are given.

COVER PHOTO

Guttural Toad, *Bufo gutturalis* Power, 1927. Photo: Angelo Lambiris

EDITORIAL

With this third issue of the newsletter for 2006, readers will be interested to learn that a majority of the Committee voted to retain the title *African Herp News*. The newsletter has changed dramatically in scope, content and format since its first appearance in the early 1980's, reflecting the enormous developments in African herpetology over the last two and a half decades. As a member of the original Herpetological Association of Rhodesia, founded by Donald Broadley, and as a founder member of the Herpetological Association of Africa, I can look back with great pleasure to those early days—and with even greater pleasure, not unmixed with pride, to the new generation of herpetologists in whose hands the future of this exciting discipline lies. I think that it would not be untrue to say that the foundations of modern African herpetology rest principally on the shoulders of two giants—Donald Broadley for reptiles, and John Poynton for amphibians—and that Bill Branch has done more than most to continue that tradition.

To all those members who have submitted articles to this year's issues of the Newsletter I offer sincere thanks, and hope that such enthusiasm bodes well for the future.

Angelo Lambiris
Editor.

CORRECTION TO AFRICAN HERP NEWS No. 40:

The caption to the photograph for Bill Branch's article on "*Varanus albigularis*: Diet" should read "*Varanus albigularis* with three *Chersina* .." not "*Varanus niloticus* ..." The error was editorial, not Dr. Branch's, and I apologise for the slip.

NOTES ON THE BIOLOGY OF THE NATAL PURPLE-GLOSSED SNAKE, *AMBLYODIPSAS CONCOLOR* A. SMITH, 1849, IN CAPTIVITY.

Darren William PIETERSEN and Errol William PIETERSEN

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INTRODUCTION

Amblyodipsas concolor is a rare fossorial species that is restricted to the eastern regions of South Africa and is known to occur in moist, well-wooded areas and forests from as far south as Durban and Hluhluwe to the Woodbush area in the North (Broadley, 1983; Jacobsen, 1989).

A single specimen was collected at Penryn College (Mpumalanga Province; 2530BD; Boschrand 283JT, 9 km north of Nelspruit; 25°24'30"S, 30°58'17"E), on 26 November 2001. The snake was collected on a well-vegetated, south-facing slope in mixed woodland. The soil was comprised of a deep humic layer (up to ca. 500mm deep) overlying decomposing granite. The bedrock ranged in depth from being fully exposed to approximately 1m below the surface.

The nearest localities at which other specimens have been recorded are Phaben pump station (Kruger National Park, 2531AA), Graskop (2430DD) and Schoemanskloof (2530AD) (Jacobsen, 1989). This record is 120km south of both the Phaben and Graskop records, and 70km east of the Schoemanskloof record

The snake was housed in a plastic terrarium measuring 590 mm x 380 mm x 220 mm. It was kept in captivity for 240 days during which scale counts and various observations on behaviour, habitat preferences and feeding were made. Unfortunately the snake died during a period of hot weather and has subsequently been deposited in the Transvaal Museum collection (accession number TM 84634).

SIZE AND COLOUR

The specimen measured SVL 635mm and TL 730mm. This indicated a tail to body ratio of 6.68, consistent with that recorded by Broadley (1983) for females of this species, and confirmed by the absence of hemipenes.

The anterior part of the tongue of this glossy black snake is white, and the posterior part of the tongue is pink as described by Bourquin (1970).

LEPIDOSIS

Upper labials 7, of which the 5th is the largest; lower labials 7, of which the 5th is also the largest; 17 scales at midbody; ventrals 156. subcaudals 33. Anal scale divided. This corresponds to that typical for the species (Broadley, 1983).

BEHAVIOUR

Although the snake was docile and made no attempts to bite on being captured, it was very powerful and difficult to restrain. The only defence displayed was to whip the anterior part of the body from side to side, behaviour similar to that exhibited by *Atractaspis bibronii*. The snake produced a secretion from the cloaca, with a smell resembling that of Bugweed (*Solanum mauritianum*) on one occasion while it was being handled, and it also hissed on a few occasions.

A loss of pigmentation to a light shade of grey was observed on one occasion following myiasis, presumably due to Tumbu Fly larvae (the eggs of which were probably introduced via the substrate), as well as on exposure to bright light (Figure 2). It is believed that this state is caused by stress, and has also been observed in *Acontias plumbeus* individuals (Pietersen *et al., in prep.*) and *Feylinia currori* specimens from Brazzaville, Republic of Congo (Jackson, 2002).

The snake was seen to be most active from 18h00 until 05h00, which is consistent with observations made by Bourquin (1970).

HABITAT PREFERENCES

Experiments were done to determine the moisture preferences of this species, in which leaves were used as a substrate. The front half of the drawer was kept moist and the back half dry. Temperature measurements and position of the snake were checked on an hourly basis for a minimum of two days (from 07h00 until 23h00; 50 hours in total). The front half was then kept dry and the back part moist, to ascertain whether the snake did not react to light intensity rather than the substrate. The experiments were also done on days with different weather conditions to see whether these did not affect its movements. These experiments indicated that the snake spent 80% (n = 40 hours) of its time in the moist section of the cage and 14% (n = 7 hours) of its time in the dry section of the cage. The remaining 6% (n = 3 hours) of the time, the snake was found in both substrates. These results also indicated that it did not depend on temperature or weather conditions, as these ratios remained relatively constant for all weather and temperature conditions. They also indicated that the snake did not react to light intensity, as the amount of time spent in the moist substrate remained constant, regardless of whether this was in the anterior (86.7%, n = 13) or the posterior (79.4%, n = 27) section of the cage.

In order to assess the use of different substrates in a similar way, half of the cage was lined with moist grass cuttings and the other half was lined with moist leaves. The position of the grass and leaves was rotated on a daily basis to ascertain whether the light intensity did not affect the movements of the snake. The position of the snake was checked on an hourly basis for a minimum of two days (07h00 to 23h00, a total of 50 hours). There was no significant difference between the amount of time spent in the grass (30%, n = 15 hours), the leaves (34%, n = 17 hours) or in both substrates (36%, n = 18 hours). Again it is unlikely that light intensity played a role in the location of the specimen within the cage.

FOOD AND FEEDING

While in captivity the snake was offered a *Breviceps adspersus* and a *Bufo maculatus*, both of which were refused. It was then offered a laboratory mouse, which was also refused. It readily took *Acontias plumbeus* juveniles and also ate an adult *Trachylepis striata* and two juvenile *Lamprophis capense*, but refused two juvenile *Dasypeltis scabra* and a *Scelotes bidigittatus*. The latter was probably refused due to its small size, as juvenile *Amblyodipsas concolor* have been recorded eating *Scelotes mossambicus* (Bourquin *et al.*, 1971). From these observations as well as from previously recorded food items (Bourquin *et al.*, 1971; Douglas, 1982) it would appear that this species feeds exclusively on other reptiles, with perhaps a preference for smooth scaled-species. This is supported by the refusal of two amphibian species and a lack of any other published records of this species feeding on amphibians. Rough-scaled *Dasypeltis scabra* and laboratory mice were also refused when offered as food, the latter even after a year of starvation (Douglas, 1982).

The fossorial genera *Acontias* and *Rhinotyphlops* may comprise a large part of this species' diet where the prey items and *Amblyodipsas* occur sympatrically, as they share the same habitat requirements and are often fairly numerous.

The way in which the snake feeds was observed on numerous occasions. The prey is secured by biting a part of the body and holding it. A number of loose coils are also thrown around the prey at this stage. As the prey weakens, presumably as it succumbs to the venom, the *Amblyodipsas* releases its hold and re-secures the prey by biting and holding it behind the head. This behaviour was constant for all the observations. The snake then proceeds to swallow the prey whole, always head first. The period taken from that the prey has been bitten for the first time until the prey has been swallowed varies according to the size of the prey. In one instance a 380mm long *Acontias plumbeus* was fed to the snake, which immediately bit the prey on the body and two minutes later had secured the prey behind the head. From the moment of the first strike a vicious fight erupted. The lizard thrashed about, throwing the snake around the terrarium, and even bit and held on to the *Amblyodipsas* numerous times; the lizard was also heard squealing on a number of occasions. Through all this the *Amblyodipsas* just hung on and waited for the *Acontias* to be subdued from a combination of exhaustion and the effects of the venom. The *Acontias* ceased to move 27 minutes after the initial bite, by which time the snake had already swallowed a third of it. The time taken from the first strike until the prey had been completely swallowed was 39 minutes.

On another occasion, a 200 mm long *Acontias plumbeus* was fed as prey. In this instance the *Acontias* died within nine minutes of first being bitten. The time elapsed from the first strike until the prey had been completely swallowed was 24 minutes.

MORTALITY

The snake apparently died as a result of heat stress on an extraordinarily hot day (ca. 45°C). This specimen and an *Amblyodipsas polylepis* (TM 84470) that was being housed in close proximity were the only two casualties, even though there were other

nocturnal and diurnal terrestrial species being housed in the immediate environment, including an *Acontias plumbeus*. This indicates that Purple-glossed Snakes may be particularly sensitive to high temperatures and may explain why they are predominantly nocturnal and tend to favour forested (and consequently cooler) habitats. This may also explain why they are most active after rain (*pers. obs.*), as this would cool the surroundings and would also be the time when their prey species are most abundant and most likely to be on the surface, increasing the likelihood of finding prey.

CONCLUSION

All the literature cited states that this species prefers moist, well-wooded or forested areas (Bourquin, 1970; Broadley, 1983; Jacobsen, 1989; Branch, 1998). Despite this, the current individual was collected on a well-vegetated slope in the Lowveld region of South Africa, indicating that its habitat requirements may not be as specialised as is currently believed. It would also appear as if this is a predominantly nocturnal species, only surfacing during the day after heavy rain showers, presumably due to the cooler weather and an increased abundance of prey species. It also confirms that this species is fossorial, coming to the surface only in search of food, which consists exclusively of other reptiles.

In view of this species' habitat preferences, it may be threatened by exotic plantations. Furthermore, the distribution of this species appears to greatly mirror the areas favoured for afforestation, especially in the Mpumalanga and Limpopo Provinces. The afforestation of this species' preferred habitat may be threatening this species in these areas due to habitat loss, and mirrors the sentiments expressed by Jacobsen (1989).

ACKNOWLEDGEMENTS

The authors would like to thank Dr Niels Jacobsen for valuable comments on an earlier draft of this manuscript, as well as for supplying valuable reference material. The Northern Flagship Institute (formerly the Transvaal Museum) is also thanked for supplying the authors with copies of earlier reference works relating to *Amblyodipsas concolor*.

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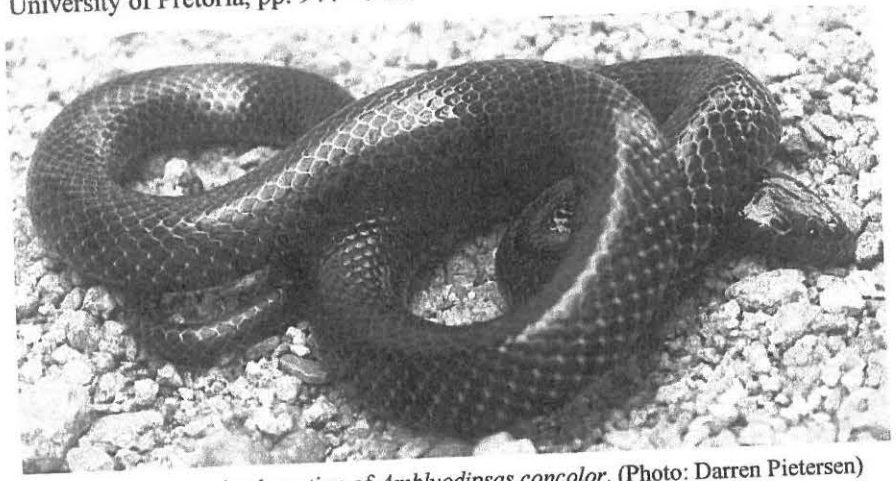

Figure 1. Normal colouration of *Amblyodipsas concolor*. (Photo: Darren Pietersen)

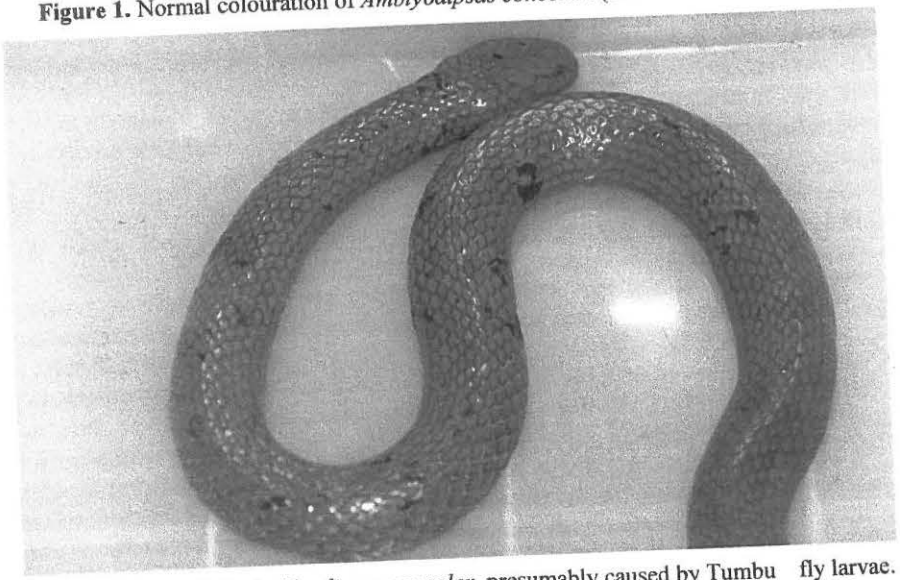

Figure 2. Myiasis in *Amblyodipsas concolor*, presumably caused by Tumbu fly larvae. Also note the unusual pale colouration that resulted. (Photo: Darren Pietersen)

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SKIN GRAFTING IN THE SURGICAL REPAIR OF HEAD INJURIES IN THE FLAP-NECKED CHAMAELEON, *CHAMAELEO QUILENSIS* BOCAGE, 1866

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INTRODUCTION

The senior author not infrequently receives chamaeleons presenting with serious head injuries requiring surgical treatment. Such injuries commonly include mandibular fractures, often with avulsion of gum tissues to a greater or lesser extent; these are repaired by standard orthopaedic and plastic reconstructive techniques. Less frequently the patient presents with extensive loss of soft tissue requiring grafts to repair the defects. We describe here one such case in which several graft techniques were required in a single case.

CASE HISTORY

An adult female Flap-necked Chamaeleon, *Chamaeleo quilensis* Bocage, 1866, was referred to the senior author for emergency surgery on 28 August 2004. She was conscious but somewhat shocked and rather weak. On examination, there was a large rhomboid defect involving the anterior half of the mandible, which was also fractured at the symphysis. The skin had been avulsed, together with gum tissue over the rostral third of the mandible on both sides. The wound was caked with dirt and dried blood, and some of the underlying muscles were damaged (Figure 1). The injury appeared to be more than 24 hours old. Although the wound was heavily contaminated, there was no evidence of active infection.

SURGICAL PROCEDURE

The chameleon was stabilised with a slow infusion of Half-strength Darrow's Solution with 5% Dextrose to counteract shock and to restore fluid and electrolyte balance, and given pre-operative antibiotic cover with Benzyl Penicillin. Anaesthesia was induced with Ketamine Hydrochloride (20 mg/kg intramuscularly); breathing was spontaneous and unassisted throughout, and there was no airway maintenance, although endotracheal tubes and facilities for assisted ventilation were at hand if required.

Wound toiletry and wound excision were carried out, using standard techniques, and the mandibular fracture was united by means of a figure-8 transfixion ligature of 4-0 polyglycolic acid suture material. We have found this to be a very effective means of managing such fractures, which are not uncommon in head injuries to small lizards. Damage to the throat muscles was less extensive than originally anticipated, and repair was done without difficulties or complications. At this point we were faced with a substantial loss of gum tissue on the proximal portions of the mandibles, and a very large skin defect that could not be closed by simple suture (Figure 2).

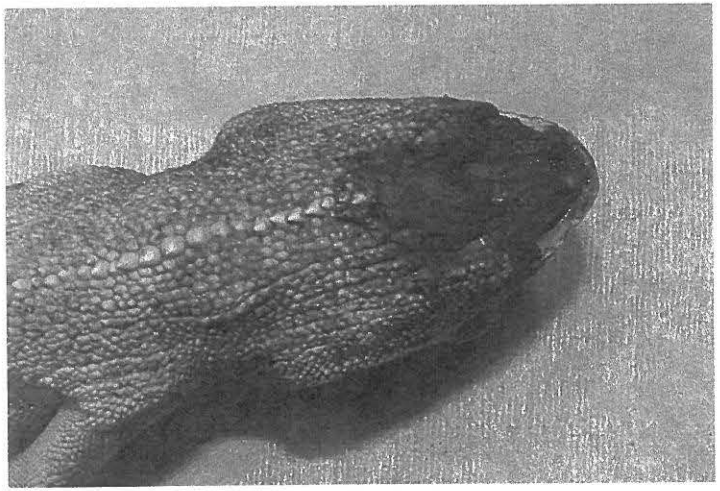


Figure 1: *Chamaeleo quilensis*, showing extent of injuries on admission.

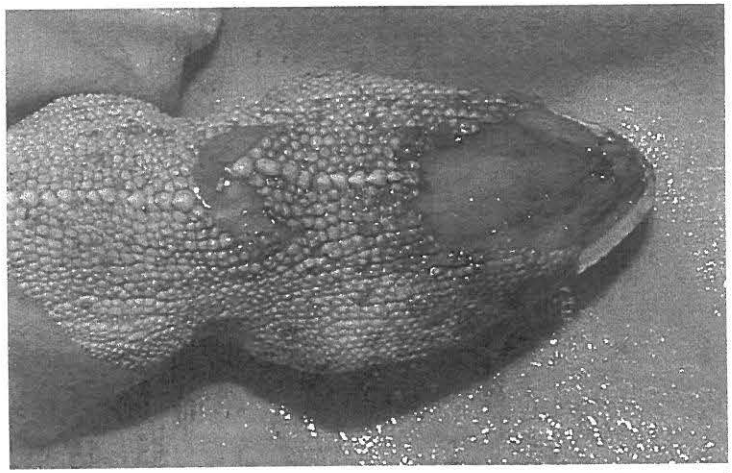


Figure 2: The defect after wound excision, and repair of throat muscle damage and mandibular fracture. The incision for the first V-Y plasty is to the left of the defect.

Reconstruction of the lost gums was considered at this point, but deferred because it was not possible to advance suitable tissue to the mandibles without undue tension. It was therefore decided to proceed with the first stages of closing the skin defect. Careful examination of the skin allowed the pattern of the principal vascular supply to the gular area to be established – this was necessary to determine the exact placing of the V-incision (Figure 2) needed to advance the skin by means of a V-Y plasty without compromising circulation.

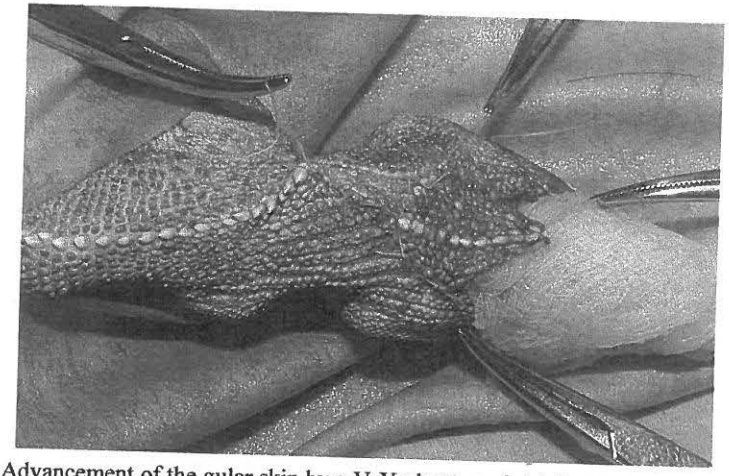


Figure 3: Advancement of the gular skin by a V-Y plasty, maintaining a good vascular supply to the mobilized portion.

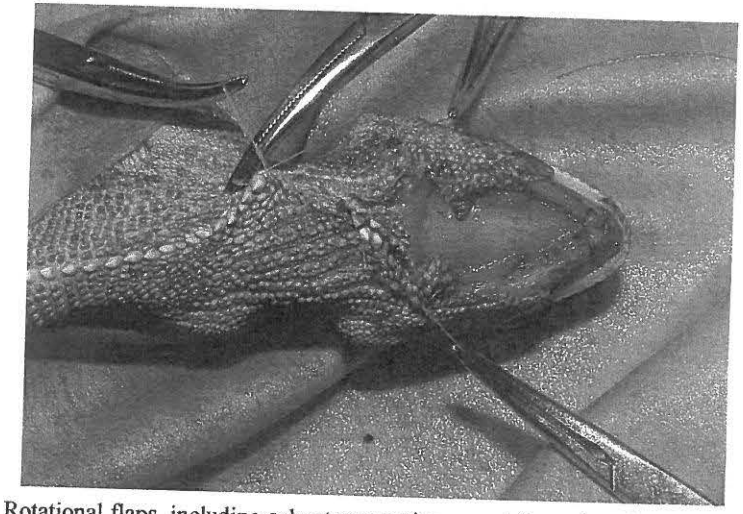
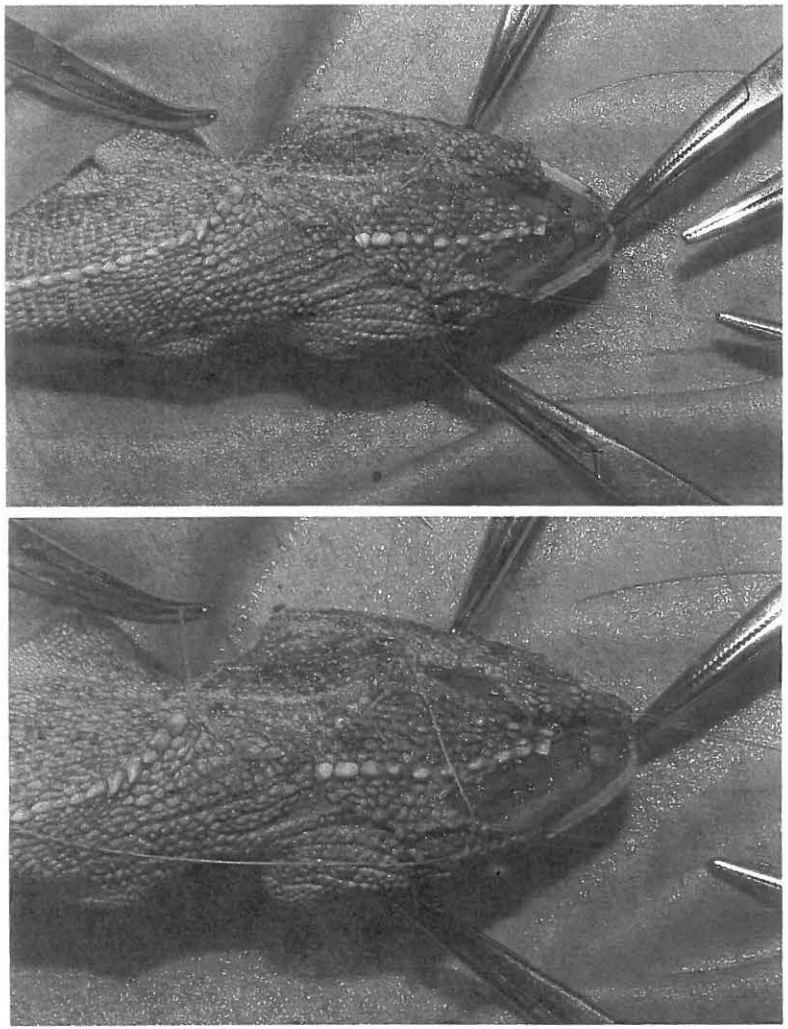


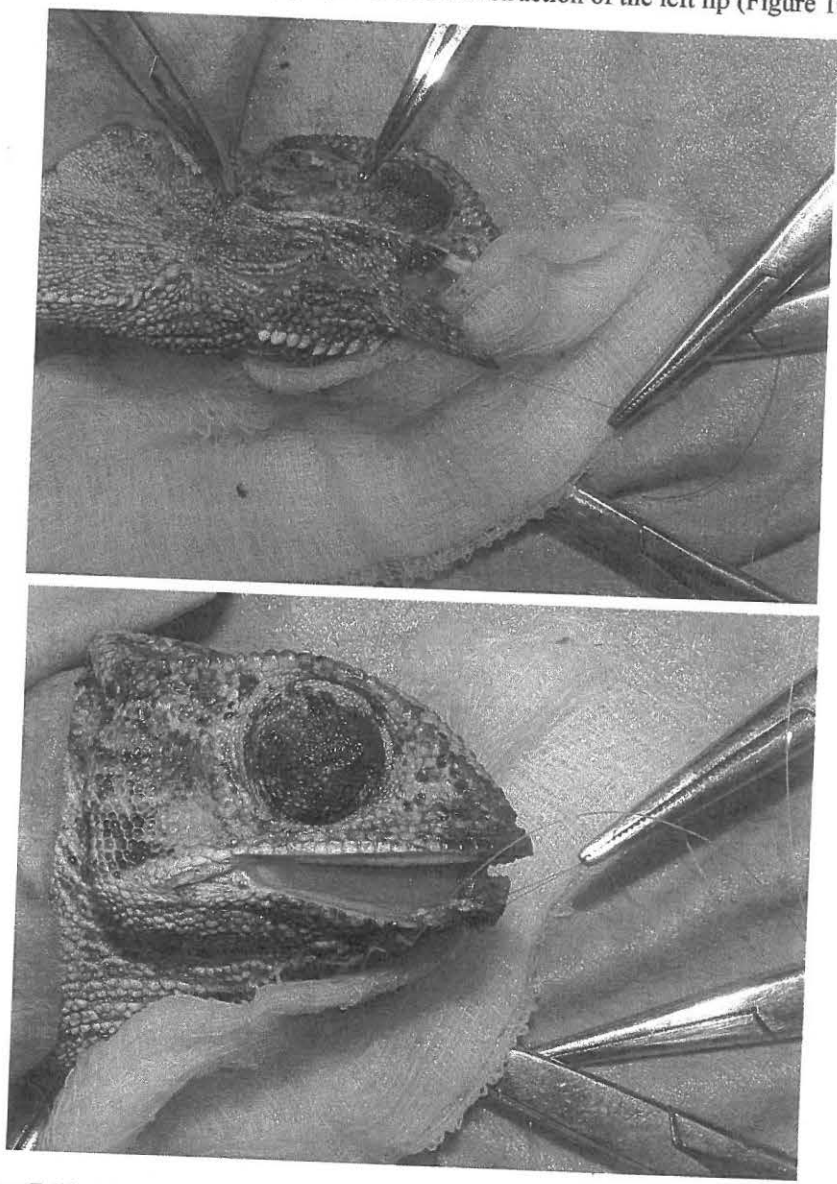
Figure 4: Rotational flaps, including subcutaneous tissues, cut from the primary advancement flap, as a first step to reconstructing the gums.

Once the skin flap had been advanced sufficiently (Figure 3) and the initial inci- closed with 6-0 Vicryl interrupted sutures, further rotational flaps could be fash-ed from the primary advancement flap (Figure 4), incorporating vascular subcuta-us tissues that could be used to reconstruct the gums. From here, the subcutaneous ues were sutured directly to periosteum (or to bone, in places where the perio-um had been lost) using 8-0 Vicryl sutures. Although this required some care, there e no problems with this step in the process (Figures 5 and 6). A new lip could



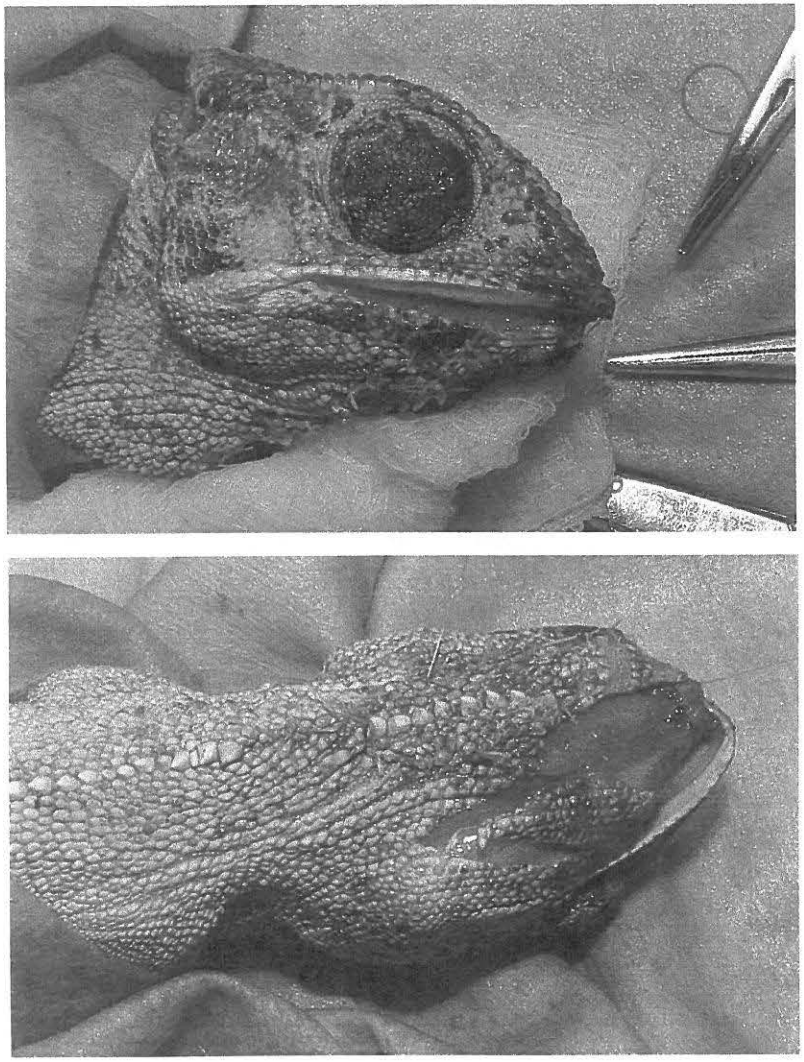
igures 5 (above) and 6 (below): Advancement of rotational flaps prior to reconstruction of e gums.

then be fashioned upon the reconstructed gum of the right mandible (Figures 7—9), and a further rotational flap prepared for reconstruction of the left lip (Figure 10).



Figures 7 (above) and 8 (below): Further steps in the reconstruction of the right gum and lip. Subcutaneous soft tissue has been mobilized and sutured to the periosteum, and a new lip fash-ioned from the skin flap.

Reconstruction of the left lip was a rather more difficult procedure, because it was fficult to mobilize sufficient skin and subcutaneous tissues without the risk of seri-ısly compromising the vascular supply. Sufficient well vascularised subcutaneous ;sue could be mobilized and sutured to the periosteum to reconstruct the gum satis-



igure 9 (above): Reconstruction of right gum and lip completed.
igure 10 (below): Second rotational flap cut for further skin closure and preparation for gum :construction. Note the denuded mandible.

factorily, but there was not enough skin to close the defect completely or to reconstruct the left lip entirely (Figure 11).

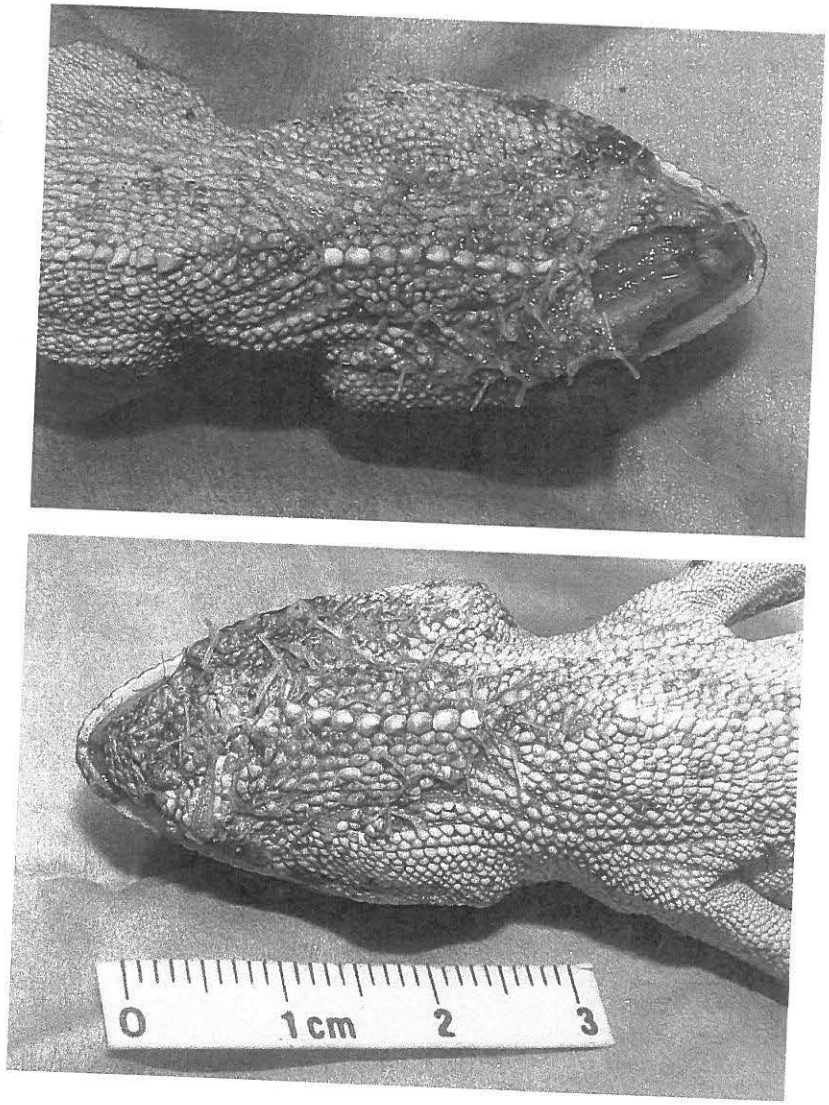


Figure 11 (above): Reconstruction of gum (subcutaneous tissue sutured to periosteum) prior to reconstruction of lip.
Figure 12 (below): Left lip reconstructed by means of a full-thickness free graft from the flank.

A full-thickness free skin graft was therefore taken from the left flank and used to reconstruct the left lip and to close the remaining gular defect (Figure 12). This was probably the most potentially hazardous step, for this was the only non-pedicled graft in the whole procedure and the risk of failure of the graft to take was considered very high. A further complication was that the final steps in the skin closure had to be completed with 5-0 Vicryl, a much coarser suture than ideally required, since all the 7-0 sutures then available had been used in earlier stages of the operation. However, the graft took satisfactorily with no complications.

The patient was maintained on a Darrow's/Dextrose drip post-operatively, together with antibiotic cover (Ampicillin i/m once daily for four days). After recovery from anaesthesia she was fed on Vamine with Glucose, a product intended for intravenous nutrition, but administered orally in this case by means of a fine feeding tube, until she was ready to feed by herself. Recovery was rapid and uncomplicated, and her ability to catch and ingest food was unimpaired.

REMARKS

While head injuries in chamaeleons do not appear to be infrequent, they usually involve little more than fractures of the jaws (usually the mandible) and damage to the lips and gums. Such injuries are generally amenable to surgical repair and post-operative complications are rare. Trauma involving such extensive loss of skin and underlying soft tissues appears to be much rarer, at least in those chamaeleons surviving long enough to be referred for treatment. This case has therefore been described in some detail as an indication of what can be done in the way of reconstructive surgery, in the hope that such procedures might be judged useful especially where some of our rarer or more threatened species might be concerned.

ACKNOWLEDGEMENTS

We are grateful to the numerous people who donate the often very expensive consumables required for microsurgical procedures, which makes such work possible. We are also grateful to Mrs. Gill de Bruin, who has established a chamaeleon sanctuary in Hillcrest, and who has done so much in the way of nursing chamaeleons post-operatively.

NATURAL HISTORY NOTES

AMPHIBIA: ANURA

RANIDAE

***Pyxicephalus adspersus* Tschudi, 1838**
Giant Bullfrog

ALBINO TADPOLE

On the 12th December 2006 we visited the Hoffanhein Lodge, 30km north of Pretoria (South Africa; Gauteng; 25°34'38"S, 28°15'15"E, 1191m a.s.l.) to observe Giant Bullfrog (*Pyxicephalus adspersus*) behaviour. While we were watching a school of bullfrog tadpoles we observed a white tadpole surrounded by hundreds of normal black ones.

We were able to catch the albino. It was at Gosner stage 26 (Gosner, K.L. 1960: A simplified table for staging Anuran embryos and larvae with notes on identification. *Herpetologica*, **16**: 183-190). We took some photographs of it (Figure 1) and tried to rear it with other bullfrog tadpoles. Unfortunately it disappeared from the pond in it had been kept. Quite a few of the normally coloured bullfrog tadpoles reached metamorphosis.

In the standard literature on southern African amphibians there is no mention of albino Giant Bullfrog tadpoles (Channing, A., 2001: *Amphibians of Central and Southern Africa*, Protea Bookhouse, Pretoria, p.470; Minter, L.R., Burger, M, Harrison, J.A., Braack,H.H., Bishop, P.J., and Kloepfer, D. (eds.), 2004: *Atlas and Red Data Book of the Frogs of South Africa, Lesotho and Swaziland.* SI/MAB Series #9. Smithsonian Institution, Washington, D.C., p.360). Dr. W.R. Branch of Bayworld, Port Elizabeth, informs us (*pers. comm.*) that this is the first time he has been made aware of this phenomenon.

Submitted by
JACO VAN WYK & Dr PAUL OBERHOLSTER, P.O. Box 25085, Monument Park, Pretoria 0105, South Africa. E-Mail:jcpvanwyk@absamail.co.za.).

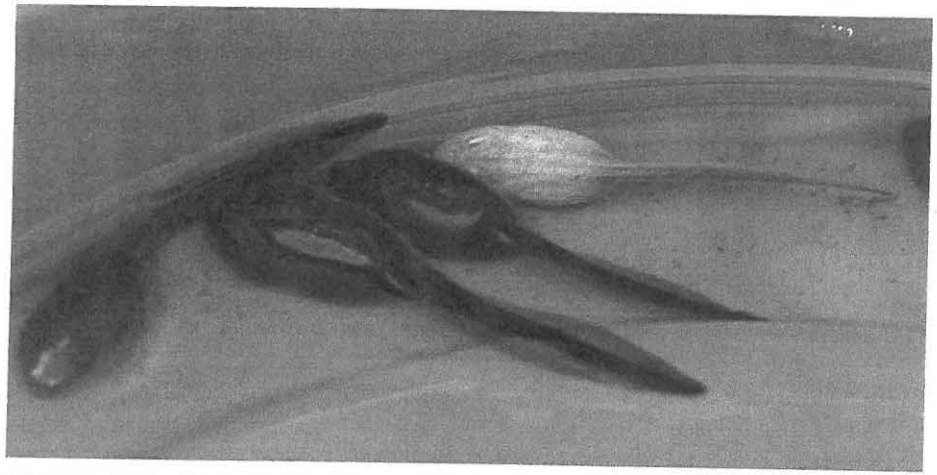


Figure 1. Albino *Pyxicephalus adspersus* tadpole, with normally pigmented siblings. (Photo: Jaco van Wyk.)

RHACOPHORIDAE

***Chiromantis xerampelina* (Peters, 1854)**
Southern Foam-nest Frog

NESTING BEHAVIOUR

In July 2004, a Telkom team cleared Red-billed Buffalo Weaver (*Bubalornis niger*) nests from communication towers near Hoedspruit at three locations (South Africa; Mpumalanga — Off Beat Safaris: 24°14'49"S, 30°59'22"E, 2430BB; Tshukudu Lodge: 24°16'32"S, 30°53'39"E, 2430BD; Epsom: 24°16'33"S, 30°53'39"E, 2430BD). Red-billed Buffalo Weavers build large communal nests of twigs and branches with nest chambers lined with grass, leaves and roots (G.L. Maclean. 1993. *Roberts' Birds of Southern Africa* - Sixth Edition. John Voelcker Bird Book Fund, Cape Town). Elize Osmers accompanied the team to the first site (Off Beat Safaris) on the 28th of July 2004. On knocking the nests to the ground, it was found that Southern Foam-nest Frogs (*Chiromantis xerampelina*) had established themselves within some of the nest chambers. Telkom officials later noted that frogs had been found at both other localities but were unable to conclusively confirm the frog species concerned.

Submitted by:
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REPTILIA: CHELONIA

TESTUDINIDAE

***Psammobates oculiferus* (Kuhl, 1820)**
Serrated or Kalahari Tent Tortoise

LYING-UP PLACES

Psammobates oculiferus is poorly known despite its wide distribution in southern Africa (Branch, W.R., 1998: *Field Guide to Snakes and Other Reptiles of Southern Africa*. Struik Publishers, Cape Town). Its range includes the northern three quarters of Namibia as far south as Mariental, but excludes the arid western Namib Desert region (Griffin, M., 2003: *Annotated Checklist and Provisional National Conservation Status of Namibian Reptiles*. Namibia Scientific Society, Windhoek, Namibia.). Research conducted on three individuals (1♀ & 2♂) from the Windhoek area, central Namibia has resulted in the following information regarding lying-up placed selected.

Lying-up places included 8 species of trees or shrubs, 6 grasses, 1 herb, as well as overhanging rocks (5 occasions) and open space (2 occasions). Shrubs and trees (44.4%) were more frequently selected as lying-up places compared to grasses (38.9%), rocks or open space (11.1%) and herbs (5.6%). Thorny shrubs/trees (42.3%) were selected above grasses (36.5%), rocks (9.6%), non-thorny shrubs or herbs (7.7%) and open space (3.9%). Species most often selected as lying-up places were *Acacia erioloba* (15.4%), *Acacia mellifera* (11.5%) and the grass *Anthephora pubescens* (9.6%). Grasses most frequently selected as lying-up place are the perennial, dense tuft forming, *Anthephora pubescens* (26.3%), *Eragrostis nindensis* (21%) and *Cenchrus ciliaris* (15.8%). No annuals were used as lying-up places. The use of thorny species and dense tuft forming grasses could possibly add to the defense of the tortoises or provide more shade, thus also used for thermoregulation.

Positioning of the carapace (i.e. orientation of the posterior) when moving into a lying-up place is mainly towards the east (easterly direction – E/NE/SE) (38.2%) followed by a southerly orientation (S/SE/SW) (30.9%). Orientation of the carapace towards the east assists basking, by raising the temperature to the optimum required for foraging whilst in a secure lying-up place. It is thus suggested that selecting a lying-up place and positioning the carapace does not occur randomly.

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REPTILIA: SQUAMATA; SERPENTES

COLUBRIDAE

***Philothamnus natalensis occidentalis* (Broadley, 1966)**
Eastern Green Snake

MORPHOLOGY AND SIZE

On 29 November 2005, a large adult female *Philothamnus natalensis occidentalis* was captured on Mariepskop Mountain while I was surveying the mountain fauna and flora with Rebecca Stirnemann and Zara Shaikh from Global Vision International. She was found resting on a low shrub in montane forest, on a misty morning, on the farm Magalieskop 421KT, which is part of the Mariepskop State Forest (South Africa; Limpopo Province; 24°34' 14"S, 30°51'44"E, 2430DB, at an altitude of 1520m a.s.l.) A complete scale count and measurements were taken before she was released at the site of capture.

Lepidosis: Upper labials 9, the 4th and 5th entering orbit; lower labials 10, with the first four pairs in contact with the anterior chin shields. The nostril is pierced along the suture between the 2 nasals. The internasals are in broad contact with each other behind the rostral. One preocular and two postoculars are present. Temporal formula 1+1. The anal scale is divided. Ventrals laterally keeled, 175. Subcaudals smooth and paired, 119. Dorsal scales smooth, in 15 rows at midbody.

Size: Measurements were made to the nearest mm using an 8m measuring tape. Measurements are: SVL 863mm, TL 1222mm. This considerably exceeds the previous record for a female, namely 766mm SVL (Branch 1998).

Acknowledgements

I would like to thank Rebecca Stirnemann and Zara Shaikh from Global Vision International for their hospitality, and under whose permit the snake was captured.

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***Dispholidus typus typus* (A. Smith, 1829)**
African Tree Snake/Boomslang

SIZE

A very large female African Tree Snake was shot on the farm Rondepan (622LS) in Limpopo, South Africa on the 1st February 2005 under the impression that it was a

black mamba. The locality is approximately 15km north-west of Polokwane in the direction of Dendron (23°43'59"S, 29°24'17"E; 2329CD).

The snake had been shot through two parts of the body. In one place, the snake was almost completely cut in half and only connected by the ventral skin.

The snake was laid out in such a way that the ventral scales in the damaged areas were spaced in the same manner as the neighbouring scales. Measurements were taken along the midline of the ventral scales and, in view of the damage to the animal, were taken conservatively. The snake measured 1928mm (1440mm SVL + 488mm VTL). This exceeds the previous maximum SVL of 1290mm recorded by Branch (Branch, W.R., 1998: *Field Guide to Snakes and Other Reptiles of Southern Africa.* Struik, Cape Town) by 150mm.

The snake has been deposited in the Port Elizabeth Museum (PEM R17141), bearing the field number 'VTE-21'.

Acknowledgements:

Thanks to Kobus Venter for access to the Farm Rondepan, and to Bill Branch for commenting on the text.

Submitted by:
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***Psammophis crucifer* (Daudin, 1803)**
Cross-marked Sand Snake

BEHAVIOUR

It is well known that *Duberria lutrix* when threatened will roll up tightly into a spiral with the head concealed. *Prosymna* spp. are likewise known to coil and uncoil when disturbed, but neither of these behaviour patterns is known in the genus *Psammophis* (Branch, W.R., 1998: *Field Guide to Snakes and Other Reptiles of Southern Africa.* Struik, Cape Town; Marais, J., 2004: *A Complete Guide to the Snakes of Southern Africa*, Struik, Cape Town).

On 22 June 2005 a *Psammophis crucifer* was found basking between rocks, at 10h45, on the farm Minwater, Paardebond, Volmoed, Western Cape, South Africa (3322CA), 33° 42' 43''S, 22° 02' 21''E. On first approach the snake started coiling up its body, with the head well protected within the coils (Fig. 1). After five minutes it started uncoiling (Fig. 2).

On a second approach to photograph it, the snake started feigning death by completely turning on its back (Fig. 3). After a while the snake turned the right way up again, and slithered away between the rocks. At the time of observation the temperature was recorded as 26°C.

Acknowledgments
Special thanks to Louise Jordaan for his assistance and allowing me to work on his conservancy.

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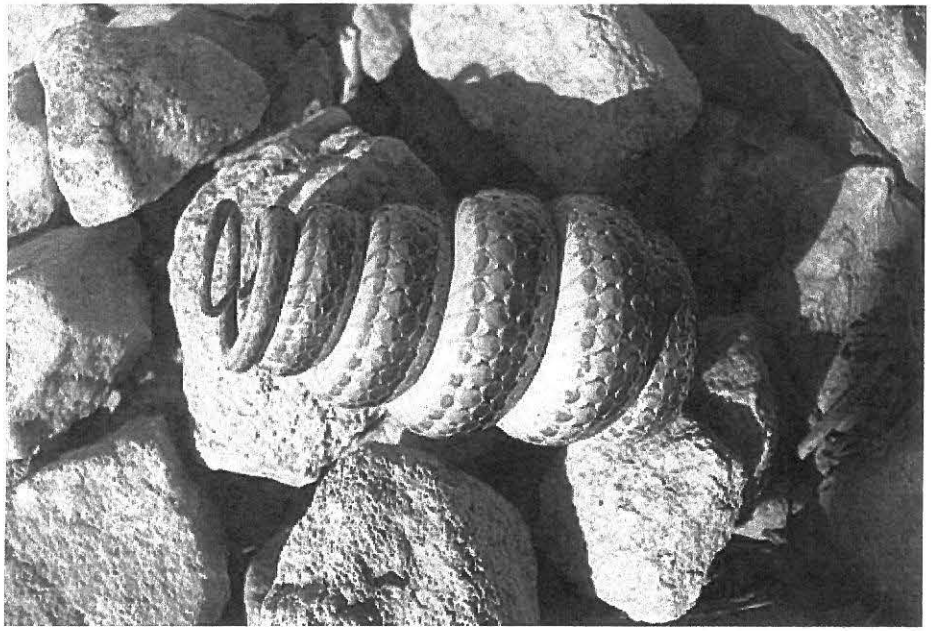

Figure 1

Figure 1 (above) and Figure 2 (opposite, top). *Psammophis crucifer* coiled up.
Figure 3 (opposite, below). *Psammophis crucifer* feigning death. (Photos: Johannes Els.)

Figure 2

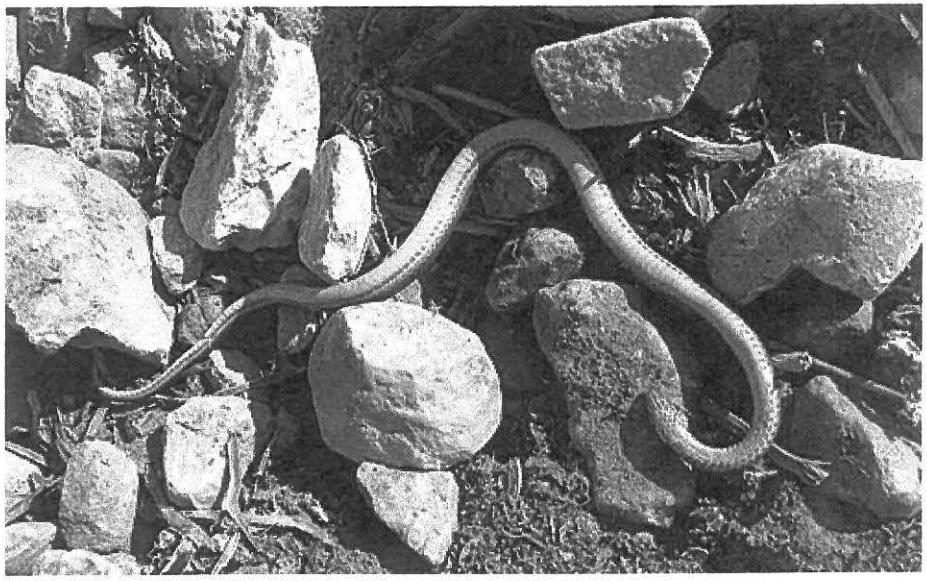

Figure 3

ATRACTASPIDIDAE

***Atractaspis bibronii* A. Smith, 1849**
Stiletto Snake

BEHAVIOUR AND FEEDING

Once upon a time when your erstwhile Secretary/Treasurer was a young man studying for his Honours Degree at Natal University in Pietermaritzburg, there was a fellow postgraduate from Wits by the name of Malcolm Lyall-Watson – subsequently Dr. Lyall Watson, the author.

Malcolm had been given the project of elucidating the spitting mechanism of *Naja mossambica,* the spitting cobra.

The specimen, if I remember correctly, was a young one of about 35cms in length and was kept in a glass aquarium in the Honours Laboratory where it spat gloriously against the glass as was required.

Malcolm's project was almost completed when a live *Atractaspis bibronii* (Stiletto Snake), about 25 – 30 cm long, was brought into the Department. Knowing that *Naja* were partial to other snakes the latter was introduced to the aquarium as a long awaited meal for the cobra.

On being introduced into the aquarium the *Atractaspis* followed the trail of the cobra, which moved away from the newcomer. *Atractaspis* was not deterred but followed the same trail as though they were both on a set of rails, eventually catching up with the cobra. *Atractaspis* then, moving faster than the cobra, climbed on the cobra's back and was thrown off a couple of times but it persisted, eventually covering almost two-thirds of the length of the cobra whereupon it "pecked" – stabbing down with it head, mouth closed but with a fang protruding past the side of the laterally displaced lower jaw. It was of course thrown off, but repeated the manoeuvre a number of times before the cobra slowed and succumbed to the lethal injections in the vicinity if its heart. Once the cobra had stilled the *Atractaspis* proceeded to the head end, whereupon it casually ingested the larger snake.

Malcolm was hardly overjoyed with this state of affairs, but luckily he had material and notes enough to complete his project to the satisfaction of the Professor, Dr S. F. Bush.

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VIPERIDAE

***Bitis rubida* Branch, 1997**
Red Adder

SIDE-WINDING BEHAVIOUR

At 11h00 on the 14 May 2006 a male Red Adder, *Bitis rubida*, was found basking on the side of a gravel road in the Swartberg Mountains, Western Cape Province, South Africa. On touching its tail, the snake immediately began to side-wind across the road. This behaviour was unexpected, and the snake showed remarkable efficiency in moving at a walking pace, throwing body loops forwards and off the surface of the ground in the classic manner; just as effectively as the more well known side-winding adders such as *B. peringueyi*, *B. schneideri*, and some *Echis* spp. (Figure 1.)

The little adder, which measured 25cm total length, repeated the behaviour several times. Furthermore, it was moved into a sandy spot within the fynbos, whereupon again it began to side-wind, until reaching more rocky substrate when it adopted the more familiar lateral undulatory mode of locomotion.

It has been stated in the literature that *B. rubida* never sidewinds (Branch, 1999: Dwarf Adders of the *Bitis cornuta-inornata* complex (Serpentes: Viperidae) in Southern Africa. *Kaupia.* **8:** 39-63. Mallow et al 2003: *True Vipers, Natural History and Toxinology of Old World Vipers*. Krieger Publishing, Malabar, Florida; Marais, 2004: *Complete Guide to the Snakes of Southern Africa*. Struik Publishers, Cape Town). Indeed, it is perhaps surprising behaviour for a snake which inhabits rocky habitat. This behaviour could also be attributed to a threat response when the snake is unduly alarmed in a way similar to that shown for the Horned Adder, *Bitis caudalis* (Hoffman, L., 1988: Note on the ecology of the Horned Adder *Bitis caudalis* from Gobabeb, Namib-Naukluft Park. *Journ. Herpetol. Ass. Afr.* **35:** 33-4).

However, it may be that side-winding behaviour is inherent in a number of snake species. During hot weather at DeHoop Nature Reserve, two other species, an adult Puff Adder, *Bitis arietans*, and an adult Skaapsteker, *Psammophylax rhombeatus*, were seen to side-wind across a tar road, moving very effectively and fast (*pers. obs*).

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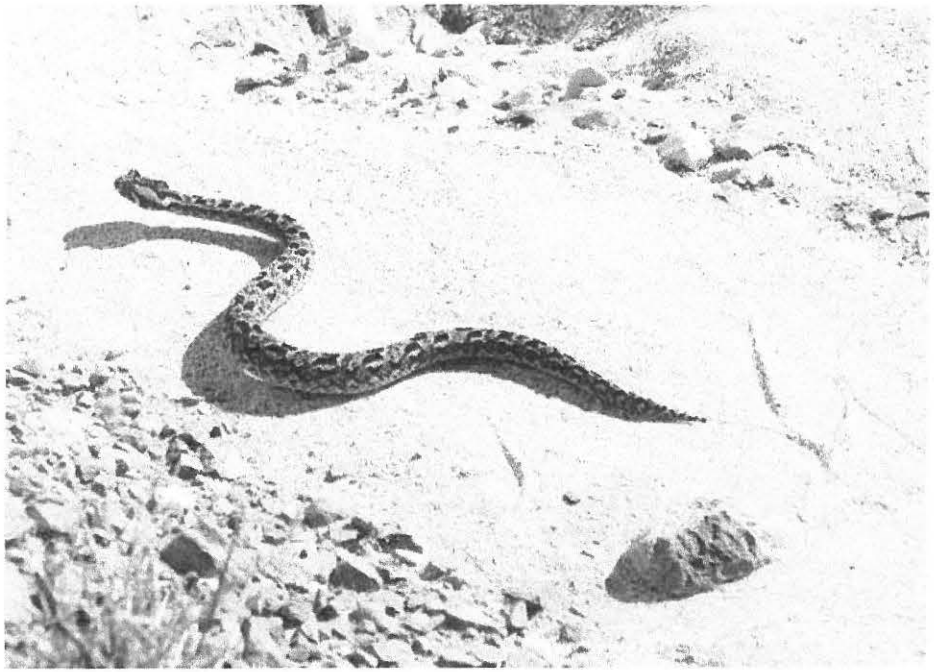

Figure 1. *Bitis rubida* side-winding. (Photo: Tony Phelps)

***Bitis rubida* Branch, 1997**
Red Adder

DIET/ MORPHOLOGY

The natural diet of *Bitis rubida* is poorly known. Information on the species' diet in the literature (Branch, W.R., 1997: A new adder (*Bitis*; Viperidae) from the Western Cape Province, South Africa. *S. Afr. J. Zool.*, **32**(2): 37-42; Branch, W.R., 1999: Dwarf adders of the *Bitis cornuta-inornata* complex (Serpentes: Viperidae) in South Africa. *Kaupia* **8:** 39-63) mention only broadly that they prey on geckos, skinks, agamas and lacertids, which form part of their diet, but do not mention specific prey species.

On 18 October 2004 an immature female was observed at 09h55 catching a *Pedioplanis burchelli* (Lacertidae), from an ambush position in the Swartberg Mountain, Western Cape, South Africa (3322AC), at an altitude of 1360m above sea level. (The exact location has been withheld because of the sensitive nature of the site.)

It was found on an open rock surface. At the time of observation the air temperature was recorded as 22°C. In this mountain fynbos habitat it was found, during the study, that *Pedioplanis burchelli* and *Pachydactylus geitjie* formed the most dominant lizard species and which can be concluded as forming a significant part of *Bitis rubida* diet in this habitat. The *B. rubida* specimen (Field No. SBR001) had a total length of 253mm (snout-vent length 235 mm); a head width of 22.5 mm; and weighed 15.5g. Scale counts: Dorsals at mid-body 25; ventrals 137; subcaudals 22.

Acknowledgments

We would like to thank the Swartberg Nature Reserve unit of CapeNature for their support.

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Spotted Shovel-nose Frog *Hemisus guttatus* (Photo: Angelo Lambiris)

GEOGRAPHICAL DISTRIBUTION

REPTILIA: SQUAMATA; SERPENTES

COLUBRIDAE

***Amblyodipsas ventrimaculata* (Roux, 1907)**
Kalahari Purple-glossed Snake

A Kalahari purple-glossed snake was collected on a road-cruise in Limpopo Province, South Africa, at 19h49 on 24 November 2004. The locality is 28km from Vaalwater on the Lephalale (Ellisras) road (24°06'22"S, 28°00'03"E; 2428AA).

This record represents a range extension in the order of 270 km from the previous southern- and eastern-most distribution record from Botswana, "20km NW of Molepolole, on Molepolole-Letlhakeng road" (Spawls & de Graaf 1989: New snake records for Botswana, southern Africa, *Herpetological Review* **20(1)**: 14-15). It is the first record of this species in South Africa.

The specimen was deposited in the Port Elizabeth Museum (PEM R17142), bearing the field number VTE-12. The snake had a black vertebral stripe, 3 scales wide, flanked on either side by 2 bright yellow stripes, each 2 scales wide. The belly was white to translucent with the tail graduating from white at the base to lemon yellow at the tip. Biometrics taken were as follows: Snout-vent length 272mm; tail length 30mm; total length 302mm; mass 4.5g; ventrals 178; anal scale divided; subcaudals 24 (divided); scale anomaly – sub-caudal 15 consists of 2 fused subcaudals; 15 dorsal scale rows at mid-body; upper labials 5; lower labials 5, the first three in contact with the chin shields.

Acknowledgements:
Thanks to Donald Broadley, Steve Spawls and Bill Branch for their kind assistance.

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INSTRUCTIONS TO AUTHORS

Contributions (preferably in Word 6.0, 7.0 or Windows XP) submitted in an incorrect style (see guide-lines below) will be returned to the authors.

ARTICLES

African Herp News publishes longer contributions of general interest that would not be presented as either Natural History Notes or Geographical Distributions.

A standard format is to be used, as follows: **TITLE** (capitals, bold, centred); **AUTHOR(S)**[1,2] (bold, centred); Author's address(es) (use superscripts with authors' names and addresses if more than one author); **HEADINGS** (bold, centred) and **SUBHEADINGS** (bold, aligned left) as required; **REFERENCES**, following the formats given below:

BRANCH, W.R., 1998: *Field Guide to the Snakes and Other Reptiles of Southern Africa*. Third edition. Struik, Cape Town.

BROADLEY, D.G. 1994: The genus *Scelotes* Fitzinger (Reptilia: Scincidae) in Mozambique, Swaziland and Natal, South Africa. *Ann. Natal Mus.*, **35**: 237-259.

COOK, C.L., & MINTER, L.R., 2004: *Pyxicephalus adspersus* Peters, 1854. pp. 303-305, *in* Minter, L.R., Burger, M., Harrison, J.A., Braack, H.H., Bishop, P.J., and Kloepfer, D. (eds.), *Atlas and Red Data Book of the Frogs of South Africa, Lesotho and Swaziland*. SI/MAB Series #9. Smithsonian Institution, Washington, DC.

NATURAL HISTORY NOTES

Brief notes concerning the biology of the herpetofauna of the African continent and adjacent regions, including the Arabian peninsula, Madagascar, and other islands in the Indian ocean.

A standard format is to be used, as follows: **Scientific name** (including author citation); **Common name** (using Bill Branch's *Field Guide to Snakes and Other Reptiles of Southern Africa*, third edn. 1998, for reptiles; and Passmore & Carruthers' *South African Frogs*, 1995, for amphibians as far as possible): **KEYWORD** (this should be one or two words best describing the topic of the note, e.g. Reproduction, Avian predation, etc.); the **Text** (in concise English with only essential references quoted and in abbreviated form); **Locality** (Country; Province; quarter-degree locus; location; latitude and longitude if available; elevation above sea level); **Date** (day, month, year); **Collector(s); Place of deposition and museum accession number** (required if specimens are preserved). Submitted by: **NAME**, Address.

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Brief notes of new geographical distributions (preferably at least 100 km from

the nearest published record) of amphibians and reptiles on the African continent and adjacent regions, including the Arabian peninsula, Madagascar, and other islands in the Indian Ocean.

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Records submitted should be based on specimens deposited in a recognised collection.

HERPETOLOGICAL SURVEYS

The *Bulletin* publishes sparsely annotated species lists resulting from local surveys of amphibians and reptiles on the African continent and adjacent regions, including the Arabian peninsula, Madagascar, and other islands in the Indian Ocean. The area surveyed may be of any size but should be a defined geographic unit of especial relevance to the herpetological community. For example, surveys could address declared or proposed conservation reserves, poorly explored areas, biogeographically important localities or administrative zones. The relevance of survey results should be judged by the extent that these records fill distributional gaps or synthesise current knowledge.

Survey results should be presented in the following format: **SURVEY AREA**; **Survey Locality** (country, province or state, location, quarter-degree units, or bounding latitude and longitude); **Dates** (day, month, year); **Statement of relevance**; and **SPECIES LIST**, in tabular form comprising ***Scientific name*** (including author citation), **Location / Habitat**; **Evidence** (including registration numbers and location of vouchers); and **Comments** (where required). The note should end with a **SUMMARY** statement. Submitted by: **NAME**, Address.

As far as possible survey records should be based on accessible and verifiable evidence (specimens deposited in public collections, photos submitted illustrating diagnostic features, call recordings and sonograms, or DNA sequences accessioned into international databases).

PHOTOGRAPHS AND FIGURES

Photographs and figures should be submitted as separate JPEG files, and not embedded in the text. The name of the photographer should be given, if not the author or senior author of the article.

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