AFRICAN HERP NEWS

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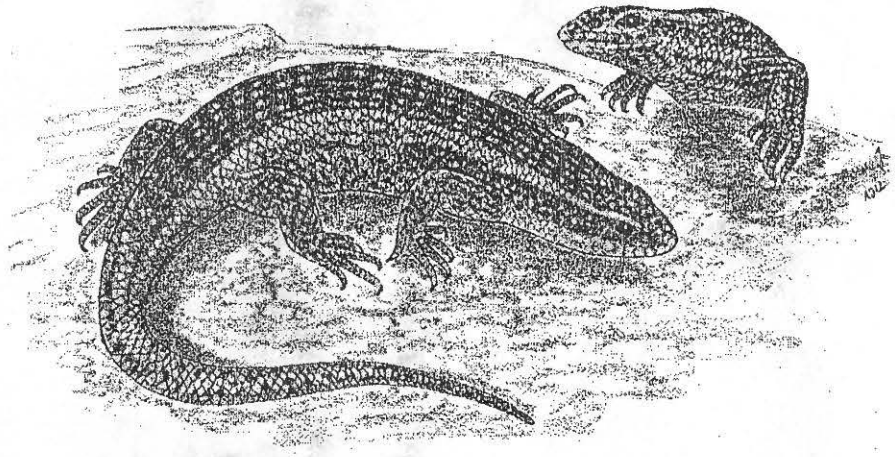
African Herp News

Newsletter of the Herpetological Association of Africa



No. 28 January 1999

HERPETOLOGICAL ASSOCIATION OF AFRICA

FOUNDED 1965

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 newsletter, *African Herp News* (which includes short communications, life history notes, geographical distribution notes, venom and snakebite notes, short book reviews, bibliographies, husbandry hints, announcements and news items).

NEWSLETTER EDITOR'S NOTE:

Articles will be considered for publication provided they are original and have not been published elsewhere.
Articles may be submitted for peer review (at least two reviewers) at the Editor's discretion.
Lists of reviewers will be published in the newsletter from time to time.
Authors are requested to submit long manuscripts on disc or by e-mail in Word 6.0 format.

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

TYPING AND PRODUCTION:
Dr. Angelo Lambiris.

COMMITTEE OF THE HERPETOLOGICAL ASSOCIATION OF AFRICA

EDITORIAL

This edition of the Newsletter introduces some changes to the format which, we hope, will make it easier and more enjoyable to read. While the editor can change the format, content still depends on contributions from members, and it is pleasing to have more articles in this issue from non-professional readers.

The *African Journal of Herpetology* publishes formal research and review articles, and while the *Newsletter* includes shorter notes from that grey area between formal and informal papers (such as the Geographical Distributions section), it is intended to focus more on the activities and interests of our non-professional members. Much valuable information never sees the light of day because it is deemed "unsuitable" for more formal journals, to the great detriment of professional and amateur alike.

I am quite sure that many of our members have a veritable treasury of knowledge to share, and you are urged to submit anything that you feel will be of interest - especially on the natural history side. I am relaxing certain aspects of editorial policy to encourage contributions from our readers who might otherwise feel deterred from putting pen to paper. (Incidentally, contributions may also be submitted via e-mail to lambiris@pixie.udw.ac.za, or on disc, especially for longer articles; in either case, please submit in Word 6.0 or Word 7.0 format if possible.)

The recent purchase of a flat-bed scanner means that it is now possible to import photos directly into the word-processing package, at a considerable saving in production costs.

The fifth H.A.A. Symposium, held at Stellenbosch last September, was a great success (many thanks to Ernst Baard, le Fras Mouton and Alan Channing), and those who were not able to attend will find the articles by Frank Farquharson and Bill Branch invaluable in filling them in on what happened.

I must apologise for the delay in producing this Newsletter, which should have appeared in December 1998; this was due to illness since September.

You will notice that subscriptions have been raised slightly. This was not an easy decision to have to make, but it was necessary and we hope that the new approach to the Newsletter and its production will help justify the increase.

On behalf of the H.A.A. Committee I wish you all well for 1999 and thank you for your support of the Association.

Angelo Lambiris
Newsletter Editor

COVER ILLUSTRATION
Speckled Skink, *Mabuya striata punctatissima* (A. Smith, 1849), occurring through much of the central part of the sub-continent, in rocky or stony grassland areas. Illustration: Angelo Lambiris.

HERPETOLOGICAL ASSOCIATION OF AFRICA: SECRETARY / TREASURER'S REPORT, 1998

The state of membership of the Association as of 10 September 1998 is slightly down from my last report (1994) and is as follows:

African Members	163	(7 new members, 1998)
Overseas Members	124	(10 new members, 1998).

These are now spread over 30 independent countries. Most members seem to draw at least some degree of satisfaction from their membership, as is indicated by their continued loyalty and subscriptions, for which our sincere thanks. However, we should be looking for better support from our non-professional members.

Why are members (particularly African members) so tardy in paying subs? Some members actually hoard the annual statements that I send out, the submit the old ones the following year. Warnings of suspension for late payment are currently being sent out to no less than 30 members, though I must add that three previously suspended members have rejoined this year.

The response to my query concerning e-mail was better than hoped, with 40 members supplying addresses. The Journal on e-mail was a no-no, but a fair percentage of replies was agreeable to getting the Newsletter in this format.

ASSOCIATION'S FINANCES

Since my last report at St. Lucia in 1995, we have had three audited reports, summarised below:

INCOME	**1995**	**1996**	**1997**	**1998**
Interest	2872	4485	6860	6626
Donations	0	3000	0	705
Sales	490	296	1631	1730
Subscriptions	13076	16580	18054	16783
Symposium	0	3269	0	0
TOTALS	16438	27630	26545	25844

EXPENDITURE	**1995**	**1996**	**1997**	**1998**
	8532	15158	14849	39489*
Surplus	7906	12472	11696	-13645*
*Excluding "Proceedings"				469

Please note the following:

Subscriptions	R40	R40	R50	R60
	$25	$25	$25	$25

Our income has remained static over the least three years in spite of increases in the Rand fees as well as a substantial increase in the Rand exchange from the Dollar fees (almost 50%). This stasis is in itself very worrying, but with the rapid increase in expenses - particularly the exorbitant increases in postage - we are in a no-win situation and we will go broke unless we, as the H.A.A., do something about it.

1997 was the Association's bumper year for publications with the belated appearance of the 1993 "Proceedings", but we were forced to dig into reserves.

Your committee members have been paragons in keeping down costs where possible, editors in particular (with only a few threats being offered) and the Association owes no small debt to their voluntary contributions and I don't believe that there can be any cut-backs here.

I don't like to increase fees for no reason, nor do I believe that fees should be arbitrarily raised to cover costs. Members must get value for money or they will just pull out. The current $25 charged for overseas members is, I believe, a reasonable figure but the Rand fees could possibly be raised slightly at the risk of losing our non-professional or amateur members. Remember that we have no club meetings, talks, discussions or excursions to offer.

So what is my answer? I don't know. However, I do believe the Americanism "The Bigger the Better", so my gut feeling is to embark on a membership drive. Increasing our publication run adds only a small proportion to the overall costs - or, as the financiers say, "it's cost effective". So let's get on with it - if you think that the H.A.A. is worthwhile - then YOU go and convince somebody else. You have to play your part - don't leave it all to the committee.

By the way, I need a stand-in next year - any offers?

One last word. I have just had two Eurocheques returned unpaid, from members in Berlin and Frankfurt. Apparently ABSA is unable to process these cheques made out in ZAR. Eurocheques made out in U.S. dollars cannot be processed here as they (Eurocheque) do not have an American representative banker who will take them at face value, and presumably doesn't have a representative in South Africa either!

FRANK FARQUHARSON
H.A.A. Secretary / Treasurer

FIFTH HAA SYMPOSIUM, STELLENBOSCH 14-16 SEPTEMBER 1998

W.R. BRANCH

Department of Herpetology, Port Elizabeth Museum, P.O. Box 13147, Humewood 6013, South Africa

Symposia are not just about presenting scientific papers, posters and prattle. They are much more, and at their best balance stimulating scientific sessions with an active social program. The latter is aimed at giving a far-flung community the opportunity to get together, to talk, and to generally catch up on developments, ideas and gossip. For students it is also a chance to make contacts, to present their theses, and to see their peers - warts, paunches, belches and all. 5HAA-Stellenbosch succeed on all counts.

The meeting was not the biggest HAA meeting, although a healthy total of 71 delegates were registered. This included 10 from overseas (Italy 2, Netherlands 2, Australia 2, UK 1, USA 3). Sadly, the lack of herpetologists from north of the Zambezi was again evident; an absence that continues to diminish the HAA's aim to serve the whole African community. Despite this, however, it was particularly heartening to see the large number of students registered. They comprised more than a third of the total delegates, with 11 from University of the Western Cape, 6 from University of Stellenbosch, 3 from University of Cape Town, 4 from University of the Witwatersrand, and 1 each from University of Natal and University of the Free State. Looking forward, perhaps soon students will arise from the remaining "historically disinterested" universities (e.g. Pretoria, Port Elizabeth, etc.), for the burgeoning student interest bodes well for the future of African Herpetology. Hopefully it will compensate, in part, for the recent loss of herpetology posts in local museums and conservation departments.

The oral presentations and posters were of a uniformly high standard. In fact, the increased use of computer technology in the preparation of slides and posters has become something of an "arms race", with content sometimes secondary to gloss. In multi-authored presentations, university logos and funding agency acknowledgements erode time and space for science. In sad irony, they mirror the problem of doing research.

The research presented reflected the international trend of analysing behavioural and morphological studies within a phylogenetic framework. This was exemplified in the keynote address by Jonathan Losos (Washington University), and in many other presentations. There was an obvious increase in the number of investigations utilizing DNA data, with molecular phylogenies presented for geckos, elapids and diverse frogs (ranids and hyperoliids). Those of us with more grey hair than testosterone will have to brush up on codons, primers, PCR, synapomorphies and cytochrome B to stay in touch, or take solace in our Frank Sinatra records! For students involved in many of these new studies, however, the need to integrate and

test such phylogenies against morphological data sets needs to be reiterated; the "Gospel According to the Codon" may not be infallible.

A signal consequence of the application of molecular techniques is the burgeoning discovery of cryptic species. This is reflected in the rapid increase in species diversity in many groups, particularly geckos and dwarf ranids. South Africa now has the distinction of having one of the richest herpetofaunas on the continent. For lizards it is the richest , with nearly 100 species of geckos alone. Many of these, as well as cordylids and chameleons, have very restricted ranges and many may be of conservation concern. An up-dated Red Data Book for Reptiles and amphibians, re-assessed utilizing modern objective criteria (eg., Mace-Lande), is urgently required.

Cordylids once again dominated ecological and behavioural studies (five of seven papers). It therefore remains an enigma why the lives of skinks and lacertids are viewed as so uninteresting, especially in the light of Alex Fleming's presentation on unique placentation in the giant snake-like skink, *Eumecia anchietae*. There were few studies on snakes, with Johno Webb's paper on fossorial squamates an exception. It shed interesting light on this poorly studied group, in which most anecodotes on biology now appear to have been based more on supposition than data. As was noted on many occasions during the meeting (mostly by "punk" students and disenchanted Australian cricket fans), a presentation on Atractaspid ecology was sadly missed, in a sad case of the African branch failing to match the Antipodian Shine!

Tortoises have belatedly come in for increased attention, with ecological, molecular and reproductive studies presented by researchers from four local universities. With over 25 chelonian species to go around, there is plenty of scope for research. It will be a pity, therefore, if the various interested groups don't talk more to each other to rationalize their research projects and avoid potential conflict. Again, as with lizards, why a preoccupation with certain groups? Testudinids certainly do merit study, but why neglect pelomedusids? Freshwater terrapins are common in wetlands throughout Africa, and yet we still await the first detailed ecological study on any species. Surely the physiology of aestivation in *Pelomedusa* and many *Pelusios* is of interest?

With a surfeit of excellent science, sophisticated presentations, memorable meals, and more-than-palatable Cape wines, this was a meeting to be remembered. I'm sure all those fortunate to attend wish me to re-iterate in print our thanks to: the Local Organising Committee of Ernst Baard, Le Fras Mouton and Alan Channing, for such a successful meeting; to Conference Services, for their efficient organisation; and to the "Winehouse", Stellenbosch, for a truly excellent venue, meal and wines. Geraldine Pieterse and her "Transvaal" colleagues have offered to host the next HAA symposium in Nelspruit. If they can match Stellenbosch (they will be hard pushed to surpass it) it will do wonders for the reputation of South African herpetology and hospitality.

FIFTH H.A.A. SYMPOSIUM, STELLENBOSCH 1998: THE OTHER SIDE

JUNE LAMBIRIS & SHIRLEY-ANNE MATHER

22 Ashley Road, West Riding, Hillcrest 3610, South Africa

Orty Bourquin, Don Broadley, John Visser and Sheila Broadley deep in discussion at the Fifth H.A.A. Symposium dinner at Die Wynhuis, Stellenbosch.

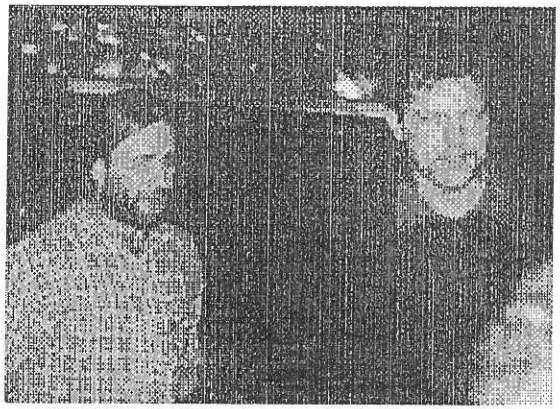
(Photo: June Lambiris)

Frank Farquharson enjoys the bouquet of a rich red wine.

(Photo: June Lambiris)

Bill Branch makes a vigorous point.

(Photo: June Lambiris)



Marius Burger and Mike Bates.

(Photo: June Lambiris)

James Harrison ponders a frog atlas problem.

(Photo: June Lambiris)

While some of us study frogs in bottles, others turn their attention to higher things! June Lambiris samples some of the wines at Bergkelder.

(Photo: Shirley-Anne Mather)

ANNOTATED CHECKLIST OF THE REPTILES ON COUSINE ISLAND, SEYCHELLES

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INTRODUCTION

During field trips made to Cousine Island, Seychelles, during July 1995; March, April, and October to December 1996; and January and February 1997 (OB) and as permanent manager of the Island (PMH) some collections and observations were made of the reptile fauna. This report is the first dealing specifically with the island's reptile fauna, although results of previous work (Cheke, 1984; Frazier, 1984) indicated the presence of four lizard and two sea-turtle species on the island. Nomenclature follows that of Cheke (1984) for the snakes and lizards, Frazier (1984) for the sea-turtles and Bour (1984) for the tortoise.

AREA DESCRIPTION

Cousine Island is one of the granitic ("Inner") Seychelles islands situated at 4°21'41" S and 55°38'44" E. It is about 26 ha in extent and rises to 77 m above sea level. The island is unique in the granitic Seychelles as it is the only island which has no alien mammals on it; one of the three remaining islands with no rats (*Rattus rattus*, *Rattus norwegicus*), and one of the two remaining islands with no mice (*Mus musculus*). Cats (*Felis catus*) were eliminated from the island by 1986. The numbers are not known, but 81 were recorded as having been destroyed in 1984.

The island is well vegetated having primary grassland, herbland, woodland and broadleafed forest components, as well as secondary grassy herbaceous and scrubby vegetation, primarily on a coastal sandstone plateau. There is no permanent natural exposed water, although after rains hollows in granite boulders hold water, as does a drainage line on the coastal plateau. Permanent artificial watering points, put in for introduced giant tortoises and birds, are now present on the coastal plateau with a few on the northern granite hill.

ANNOTATED CHECKLIST

Class: Reptilia
Order: Chelonia
Family: Chelonidae

Chelonia mydas **Green Turtle**

Frazier (1984) estimated the annual number of Green Turtle nests on Cousine to be three, representing one nesting female. The species had not been reported nesting on Cousine from 1992, to December 1994 (Nevill 1995), and no nesting was recorded from 1995.

During August and September, 1996, a Green Turtle nested three times, laying between 84 and 158 eggs (average 116) per clutch. Of these clutches, two were virtually totally destroyed by Dark Ghost Crabs (*Ocypode cordimana*), the third had a 91% hatching success. The seasonal interval between nesting by Green Turtle females is two to three years. If only one female is involved the average number of nests per annum is likely to be only one. The hatching interval (59 to 60 days), clutch sizes, egg and hatchling sizes, and hatching success are within recorded limits.

Frazier (1984) indicated that a mere 30 females were believed to nest in the granitic Seychelles. In view of the virtually uncontrolled turtle poaching in the Seychelles, it is likely that the Cousine female completed one of the few successful nesting attempts in the area.

Eretmochelys imbricata **Hawksbill Turtle**

Frazier (1984) estimated the annual number of Hawksbill Turtle nests on Cousine's 900 m beach to be 20, representing 10 nesting females.

Nesting on Cousine starts as early as July and may continue until February, with peak nesting taking place between October and January.

Detailed results of the breeding seasons are being presented elsewhere; however between 10 and 15 females used the beach of Cousine to nest up to 1996, while the 1996 - 1997 seas on was an exceptionally good one, when at least 36 different females used the nesting beaches.

One of the aims of Cousine Island is to conserve and monitor the sea-turtles. With continuing poaching of the turtles in the Seychelles, every protected area assumes a great importance. The most important nesting area in the granitic Seychelles was considered to be Cousin Island, a protected reserve where 30 to 40 hawksbills nest annually (Frazier 1995). The continuation of protection on Cousine may well result in its becoming an as important as Cousin from the point of view of turtle nesting.

Family: Testudinidae

Dipsochelys elephantina **Aldabra Giant Tortoise**

Before 1800, all giant tortoises were reported as extinct in the Seychelles granitic and coral islands, except on Aldabra. From about 1874, breeding colonies of Aldabra Giant Tortoises were established on Fregate, Cousin, Curieuse, Recife and Marianne, with captive (non-breeding) individuals occurring on Mahé, Praslin and other islands (Bour 1984).

Fifteen captive tortoises were purchased, or were donated, from owners in Mahé, Praslin and Aride. The largest one measures 103.2 cm carapace length by 69.0 cm carapace width by 52.0 cm carapace height (all straight line measurements) and is

reputed to be about 60 years old. All are numbered, using Tippex (a white waterproof correcting fluid) on one of the posterior centrals. The herd was registered with the Seychelles Government during 1996.

A nest was found by accident on 21 May 1996, containing 8 eggs, weighing between 49.8 and 61.8 g. The largest egg was 48.1 x 48.0 mm, and the smallest was 46.1 x 46.0 mm. As with turtle eggs, most of the eggs are slightly ovoid rather than spherical; the most ovoid egg measuring 48.2 x 45.2 mm.

The herd on Cousine represents part (2%) of the 450 penned and 300 free-ranging giant tortoises in the Seychelles (excluding Aldabra) in January 1986 (Gerlach & Canning, undated).

Except for one animal with a shell height to length ratio of 45.6 %, measurements of all the other tortoises indicate that the individuals fall into the shell height over shell length, and shell width over shell length percentages (over 48% and 64% respectively) of Aldabra tortoises (*vide* Bour, 1984).

Order: Squamata
Suborder: Sauria

There are fifteen species of lizards known from the granitic Seychelles, including ten (nine endemic) gecko species, four (three endemic) skinks and one chamaeleon (endemic) (Cheke, 1984).

The skinks on Cousine are probably the most significant predators of invertebrates, the eggs of birds, and on each other, as well as being scavengers on other food sources. While densities on Cousine have not been calculated, the numbers of the Seychelles Skink and Wright's Skink are extremely high. Brooke & Houston (1983) estimated total lizard biomass on Cousin island as 41.29 kg/ha, with *Mabuya* species contributing 39.4 kg/ha. The survival of high densities of *Mabuya* spp. can be correlated with high seabird nesting intensity - specifically Lesser Noddies. It is believed that the densities are much the same on Cousine.

The geckoes are less abundant, although the Bronze Gecko is particularly widespread on the island, and is common in and on buildings.

Collected specimens were housed in the Transvaal Museum and on Cousine Island, and TM prefixed numbers indicate the Transvaal Museum's specimen catalogue number.

Family: Gekkonidae
Phelsuma astriata semicarinata **Stripeless Day Gecko, Liza Ver**

Colour varies from plain bright green to green with pinky red markings on the head and back as described for the subspecies in Henkel & Schmidt (1995). Day Geckos are diurnal and were found on walls of buildings, rocks, and on tree stems and leaves, including *Pandanus*, *Morinda*, *Ficus*, *Calophyllum*, *Pisonia*, bananas and bamboo. Some individuals will forage under electric lights on buildings during the night.

A female (TM 79770) containing two shelled eggs was found on 20 July 1995. The eggs measured 9.1 x 8.1 mm and 10.4 x 7.8 mm, and were probably ready to be laid.

The largest specimen (a female) had a snout-vent length of 52 mm. Three specimens, plus an egg and an embryo, were collected and deposited in the Transvaal Museum (TM 79770, 79772, 79773, and 79797 [egg and embryo]).

Other areas found: St Joseph, D'Arros, Denis, Praslin, Curieuse, Round, La Digue, Felicité, Petit Soeur, Grand Soeur, Marianne, Cousin, Aride. The species is endemic to the granitic Seychelles (Cheke, 1984).

Ailuronyx sechellensis **Bronze Gecko, Manguya or Maguya**

The Bronze Gecko is nocturnal, and found on buildings and boulders and on trunks, branches and leaves of trees, including *Euphorbia*, *Cocos*, *Pandanus*, *Ficus*, *Pisonia*, *Morinda*, banana and lemon. It has also been seen foraging on ground at night. The species feeds readily on insects attracted to lights in houses, except that a very common species of weevil and a pollen beetle (*Ananca* sp.) are usually not eaten.

When exposed to light on pale surfaces this species' markings fade. On dark surfaces, attractive patterns of black or dark brown on grey or light to dark brown are present, with a tendency for the body to have broken lines, and the limbs, tail and head to have dark reticulations.

Single, or more typically, pairs of joined, hardshelled eggs are laid on rough-barked or indented tree-trunks, on the undersides of coconut flower spathes and in buildings - usually in the corners of walls. Clutches have been seen during January, February, March, July, October, November and December. One clutch measured 33 mm long and was ca. 17 mm wide. An embryo (TM 79796) from one of the eggs measured 32.4 + 35.6 mm. The largest animal measured (n = 7) was a male (TM 79766) , with a snout-vent length of 102 mm, and a tail length of 102 mm. Seven collected specimens have been deposited in the Transvaal Museum, all collected from inside buildings at night (TM 79766, 79769, 79789, 79790, 79791, 79792 and 79796).

Other areas found: Mahé, Saint-Anne, Conception, Therese, Fregate, Praslin, La Digue, Felicite, Cousin, Aride (Cheke, 1984).

Bronze Geckos are endemic to the Seychelles, and appear to have been severely influenced by introduced rats. The geckos occur commonly only on rat free islands, and in areas where rats do occur the geckos are more or less confined to forest and secondary forest eg. Praslin, Mahé, and Felicite (Cheke, 1984).

Gehyra mutilata **Mutilating gecko, Liza Disik (in house), Liza Sek (on trees)**

Nocturnal and found occasionally in buildings catching insects around lights; and one was found in a pile of cement building blocks on the edge of Pisonia woodland. Very pale grey to pinky-grey at night, but when not exposed to bright light while on a pale surface, the colour is grey indistinctly speckled and marbled with a darker grey.

The largest animal (TM 79777) had a snout-vent length of 56 mm. Five specimens were collected and deposited in the Transvaal Museum (TM 79774, 79775, 79776, 79777 and 79778).

Other areas found: Aldabra, Farquhar, Mahé, Saint Anne, Cerf, Silhouette,

North, Bird, Fregate, Denise, Praslin, Curieuse, La Digue, Grande Soeur, Coetivy. This species is believed to have been introduced by man and does not occur on islands unoccupied by man. It reached Mauritius from the East Indies by the early 1800's and probably much earlier, and was no doubt brought from there to the Seychelles where it was first recorded in the 1860's (Cheke, 1984).

Urocotyledon inexpectatus **Leaf-toed gecko, Liza sek**

A nocturnal endemic to the Seychelles. One specimen, a female measuring 39.0 mm (snout-vent length) and 41.5 mm (tail length) was found on the trunk of a coconut palm tree near the managers house. The specimen was collected and deposited in the Transvaal Museum (TM 79771). Other individuals have been seen on coconut palms and on granite boulders.

Other Seychelles areas found: Mahé, Silhouette, Fregate, Praslin, Curieuse, La Digue, Felicite, Grand Soeur, Cousin, Aride (Cheke, 1984).

Family: Scincidae

Both *Mabuya* species found on Cousine forage under lights, at least up to 22h00, while *M. wrightii* has also been found foraging in darkness in leaf litter. Both normally sleep during the night, however, on open rock and tree-trunk surfaces, in tree and rock crevices, and one was seen fast asleep in an old cooldrink bottle wedged in the fork of a tree. Both species freely enter and live in buildings, and forage for food ignoring the presence of man to a great extent.

Mabuya sechellensis **Seychelles Skink, Maguya**

The Seychelles Skink is endemic to the Seychelles and very common throughout Cousine Island. Habitats range from closed forest to sand dunes. It climbs up to at least 6 m into trees. Young animals tend to stay in dense cover (eg. grassland, or weedy areas) probably to avoid being eaten by large adults of both *Mabuya* spp., and other predators such as Moorhens and Magpie Robins.

Clutches of 3 to 5 eggs weighing 1.5 to 1.7 g have been found under stones and logs, usually in shaded areas. The smallest egg measured was 18.5 x 13.1 mm, and the largest was 20.5 x 13.2 mm. Two hatchlings (a few hours old) had head and body lengths of 34.2 and 33.8 mm, and tail lengths of 64.8 and 64.2 mm respectively, both weighing about 1 g.

The largest individual (TM 79787) measured was a male with a snout-vent length of 92 mm. Eight specimens were collected and deposited in the Transvaal Museum (TM 79779, 79780, 79782, 79783, 79784, 79785, 79786 and 79787).

Seychelles Skinks feed on a wide range of food items, from fruits such as bananas and coconuts, kitchen leavings including bread, cooked and raw meat and fish, cooked vegetables; invertebrates, juvenile *Mabuya* sp.; fish, squid and faeces dropped by sea birds, the eggs of sea birds; and carcasses of dead animals, including those of giant millipedes.

Mabuya wrightii **Wright's Skink, Maguya**

Endemic to sea bird islands in the Seychelles. Common on Cousine and found in all habitats with *M. sechellensis*. One female (TM 79768) was collected with two unshelled eggs in the right oviduct and three in the left; the eggs were spherical to slightly ovoid in shape, ranging from 12.7 to 15.6 mm greatest diameter. Three shelled eggs uncovered by a grader on 26 July 1995 on the edge of woodland measured 25.2 x 19.2 mm, 24.4 x 19.4 mm and 24.3 x 19.7 mm. One contained a fully developed, active baby (TM 79788) measuring 45.7 mm snout-vent length and 78.8 mm tail length.

Four specimens were collected and were deposited in the Transvaal Museum (TM 79767, 79768, 79781 and 79788).

Other areas found: Fregate, Cousin, Aride.

The largest individual measured was a male with a snout-vent length of 145 mm, the largest female measured (TM 79768) had a snout-vent length of 131 mm.

The largest adult male had all its toes attenuated, with one to two joints missing from each toe. W.D. Haacke (pers. comm.) indicated that some large African skinks he kept in captivity had lost the ends of toes, apparently when skin, instead of being shed, remained on the ends of the toes and presumably caused constriction of the digits leading to losses of joints.

Feeding habits are very similar to those of the Seychelles Skink, but because of its larger size, the Wright's Skink can feed on proportionately larger food and prey items, even attacking and killing large centipedes up to 16 cm long.

Suborder: Serpentes
Family: Typhlopidae

Ramphotyphlops braminus **Brahmin Blind Snake or Flowerpot Snake**

Found under stones and logs in open disturbed areas. The largest one (n = 3) measured 140 mm snout-vent length and 4 mm tail length. This is a parthenogenic species (reproduction without sexual union), and all-female populations only are known throughout the species range, in the Indo-Pacific. The three specimens collected were deposited in the Transvaal Museum (TM 79793, 79794, 79795).

Previous records: None.

Other areas found: Praslin, Mahé, Fregate, la Digue (Nussbaum 1984), Cousine (sight record, 9 April 1996, under log in mangrove swamp, soil wet).

Family: Colubridae
Lycognathophis seychellensis **Seychelles Wolf Snake**

The endemic Seychelles House Snake (*Boaedon geometricus*) and Seychelles Wolf Snake (*Lycognathophis seychellensis*) were previously recorded from four islands - Mahé, Silhouette, Praslin and Fregate (Nussbaum 1984). Although both species were reputed to have been on Cousine prior to 1986, no colubrids were subsequently reported from the Island until October 1996 when a Seychelles Wolf

Snake was captured on the north side of the island. The specimen was a female, believed to be gravid, with a total length of 1299 mm (943 mm head and body length) and a mass of 225 g.

Scalation was as follows: Upper labials 9 right and 10 left; lower labials 9, the sixth being the largest; labials entering orbit 4th, 5th and 7th (left), and 4th, 5th and 6th (right); preoculars 1; postoculars 2, temporals 1 + 2 (left) and 1 + 1 (right) loreal absent; nostril in single nasal. Mid-body scale rows 17 to ventral plate 110 (left side) and 111 (right side), and then reduction to 15 by disappearance of the third lateral scale rows. Ventral plates 194, keeled; subcaudals 96, paired, smooth; anal divided.

The colour pattern was the dark phase as described by Nussbaum (1984). The snake was released in the area where she was captured.

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Poynton's Dainty Frog, *Cacosternum poyntoni* Lambiris, 1988. Known only from the holotype, an adult female from Town Bush Valley, Pietermaritzburg.

Illustration: Angelo Lambiris.

AMATEUR BREEDING OF THE PUFF ADDER, *BITIS ARIETANS*

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I obtained a pair of adult Puff Adders early in May 1997. The snakes settled down in their captive environment with minimal indications of stress. The female commenced feeding immediately, whereas the male rejected food until the end of August, at which point he began feeding very well indeed. The snakes have enjoyed an *ad lib* diet of sub-adult laboratory rats which have been treated with Mirrorcote, an oil based vitamin supplement, as recommended by Dave Morgan of the Transvaal Snake Park. The snakes appear to be quite happy to take their food either dead or alive, and no definite preference has been noticed.

The snakes were treated once with Frontline for the control of external parasites, as recommended by a veterinarian, Dr. D.J.P. Jacobs, and were dosed once with Flagyl for the control of protozoa, and with Panacure for the control of nematodes, as recommended by Dave Morgan. The dosages were prescribed by the local veterinary surgeon, after consultation with Onderstepoort, and administered by injecting them into prey animals and feeding as normal. No side effects were observed following treatment.

Mating was first observed on 11 May 1997, and continued on and off for about a week, after which the male appeared to lose interest in the female.

During the period following copulation, the snakes appeared to favour the cool side of the cage, spending a lot of time in the retreat box, coming out in the early evening and basking on the warm side of the cage. Their cage is supplied with a fluorescent light and a heating pad, and the photoperiod and heat period synchronised, as far as possible, to correspond with natural conditions.

During the months of September and October, the female began to display a significant increase in body size, and began to become increasingly "unfriendly", hissing whenever I came close to the cage or working with the snakes. During this period she continued to eat as usual, having sloughed early in September.

On 9 November she defaecated copiously and had to be removed from the cage so that it could be cleaned. On the evening of 10 November she appeared extremely restless and I assumed that she might be hungry. I offered her a young rat, which she ignored totally. On the morning of 11 November I found 18 baby Puff Adders (apparently 10 male and 8 female - an average sized litter, according to Rose, 1962: 282), most of which had already sloughed with some in still in the process of doing so. One was still-born, along with what appeared to have been three undeveloped (presumably infertile) eggs. This indicates an 82% successful birth rate. This is very pleasing, for Morgan (1990) states: "I should reiterate, however, that these vitamin courses (Beefee, Calsup and FOS powder) utilised at the Transvaal Snake Park ar still very much experimental. *Anecdotal evidence suggest that excessively high levels of vitamins A and D3 may cause stillborn death among ovovivaporous forms, and a high percentage of early embryo death and infertile eggs in oviparous species*" (my italics). I therefore assume that the levels of these vitamins contained in the few drops provided with each meal are not dangerously high.

The neonates were extremely alert, vigorous and aggressive, hissing and striking at anything and everything. They weighed, on average, 20 grams and averaged 20 cm in length - somewhat longer than the 15 - 20 cm observed by Boycott, Bradley & Branch (in Haagner, 1990). There was no evidence of pre-parturition sloughing in the adult female as recorded by Patterson (1991).

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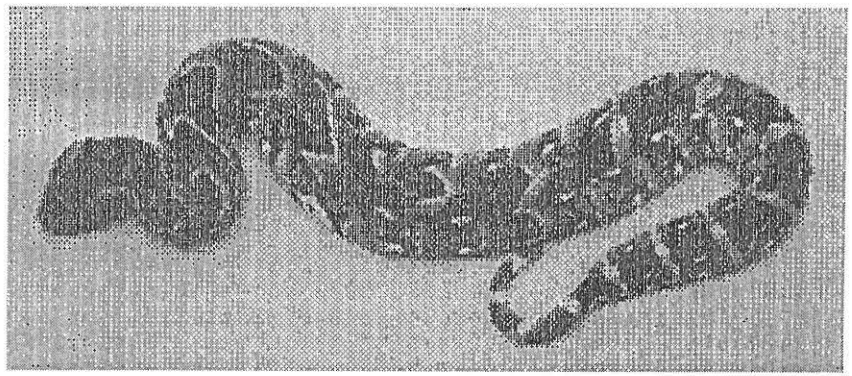

Puff Adder, *Bitis a. arietans* (Merrem, 1820). Subadult from Makaholi, Zimbabwe.

Photo: Gordon Phillips.

THE LEOPARD TORTOISE, *GEOCHELONE PARDALIS*: ONE TAXON OR TWO?

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The taxonomy of the Leopard Tortoise *Geochelone pardalis* has been the subject of disagreement for several decades, and the matter seems still to be unresolved. At present the general trend is to recognise only a single form. To the average tortoise-keeper the matter may seem academic, since morphological differences between the two subspecies are (at least as far as subadults and adults are concerned) very slight indeed.

However, the issue goes far beyond mere technicalities and has important implications for conservation and for animal husbandry. I have frequently had Leopard Tortoises referred to me for treatment where the problem clearly stems from biological differences rather than medical causes.

Geochelone pardalis pardalis was first described by Bell (as *Testudo Pardalis*) in 1828 on the basis of material from the Cape of Good Hope. The vernacular name Bell's Leopard Tortoise is here proposed for those who recognise two subspecies. *Geochelone pardalis babcocki* was described by Loveridge in 1935, on material from Mount Debasien, Uganda. The vernacular name Babcock's Leopard Tortoise is here proposed for this subspecies.

Branch (1998: 30) states that *G. p. pardalis* is distinguished "only by a larger plastral concavity in males, and in larger size", but shows the distribution for only a single taxon on his map. Loveridge & Williams (1957: 229 ff.) give more detailed differences, which may be summarised as follows:

Geochelone pardalis pardalis: Carapace distinctly convex. Carapace height contained in straight carapace length 1.61 - 2.11 times. Vertebral shields of young with a single areolar black spot.

Geochelone pardalis babcocki: Carapace flattened dorsally. Carapace height contained in straight carapace length 2.02 - 2.62 times. Vertebral shields of young with paired black areolar spots.

Many individuals do not conform to these differences, but there has been so much translocation by man that a good deal of hybridisation seems to have been inevitable. Loveridge & Williams' criteria should not be rejected on these grounds alone.

Greig & Burdett (1976: 261) give a distribution map showing the range of *G. p. pardalis* as extending in a rather narrow band along the south-western coast of the subcontinent, from about mid-Namibia down to Cape Town. *G. p. babcocki* is shown as covering the rest of the subcontinent. (There is a considerable overlap in the localities of the two taxa recorded by Greig & Burdett in Namibia, about which they expressed serious reservations, but the data do not show sympatry and there may well be a mosaic distribution pattern.)

If tortoise distribution is considered in a bioclimatic context, a definite pattern emerges. *Geochelone p. pardalis* occurs characteristically in more xeric vegetation than *G. p. babcocki*, being more or less confined to Succulent Karroo, Namaqualand Bush Veld, Coastal Renosterveld, Coastal Fynbos and Fynbos veld types (Acocks 1988). There also seem to be correlations with temperature, though these are more difficult to summarise briefly. In essence, the natural distribution boundary of *G. p. pardalis* seems to correlate quite closely with the 10°C annual range of mean temperature isotherm. Other climatic characterisitcs that seem to show a general, but apparently significant, correlation are summarised below (data from Schulze, 1965):

	G. p. pardalis	***G. p. babcocki***
First frost	1 July	15 June
Last frost	1 August	15 August
Mean annual saturation deficit at 14h00	<15 mb	>15 mb
Diurnal range of saturation deficit	<15 mb	>15 mb
Seasonal rainfall, October - March	<50%	>50%
Mean monthly rainfall as % annual normal		
in July	10-15%	>10%
in December	<5%	5-20%

Taking these points into account, some sense can be made of the frequently observed phenomenon in KwaZulu Natal that some Leopard Tortoises thrive in captivity while others do poorly - the latter do not feed as readily and are inclined to refuse many of the local plant species; they are also much more prone to non-specific respiratory tract problems and to respiratory tract infections. Such discrepancies are particularly noticeable in collections when owners have obtained tortoises from a variety of sources. Much more work needs to be done in elucidating the problem, but these observations seem to indicate that there may well be sound biological grounds for recognising two subspecies.

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A VISIT TO NORTHERN DAMARALAND, NAMIBIA

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A recent visit to my brother D.M. Liebenberg, who runs Etendeka Mountain Camp, was of great interest from the wildlife and particularly the reptilian point of view.

The camp is located in Northern Damaraland, Kunene Province, 10 km north east of Palmwag and 6 km east of the Sesfontein main road, at an average altitude of 1000 metres above sea level. Average rainfall is 100 mm per annum with a peak in late summer, i.e., February to April. The terrain varies from extremely rocky, stony plains to steeply sloping mountains with very sheer krantzes and deep kloofs with no permanent water. Vegetation is sparse, with mainly annual grasses and drought-adapted trees and shrubs on the hills, with stunted Mopane trees (*Colophospermum mopane*) in the valleys. Euphorbia bushes (*Euphorbia hereroensis*) are abundant on the level areas.

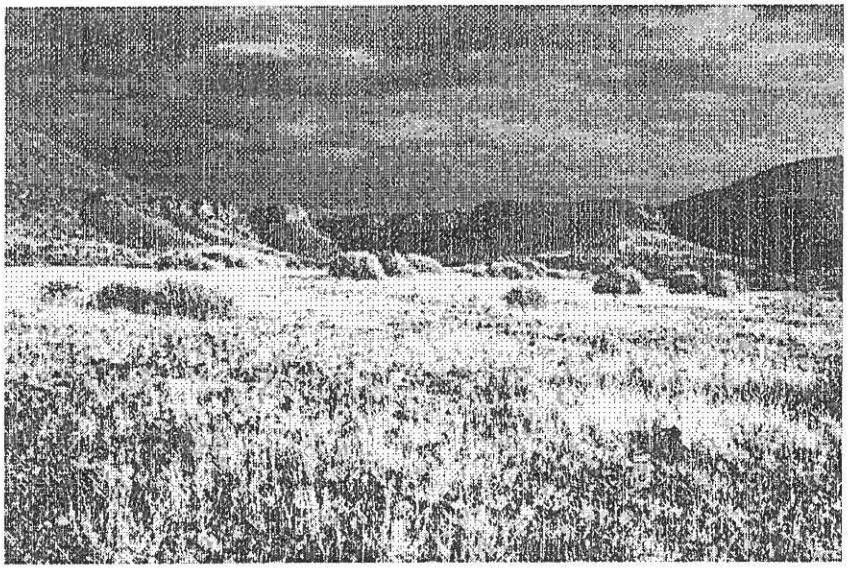


Fig. 1: North East view of plains and hills from Etendeka Camp. (Photo A. Liebenberg.

I stayed at the camp from 18th to 16th March 1998, when the temperature varied from 18°C at night to 36 - 44°C during the day. Eighteen mm of rain fell on the first night, with a further 10 mm over the next few days.

The area is very rich in bird, mammals and reptile species, and I was privileged to see the following reptiles:

Kaokoveld Sand Lizard (*Pedioplanis gaerdesi*)
These were very common, running from rock to rock across the sand during the heat of the day.

Ovambo Skink (*Mabuya binotata*)
These large lizards were seen on Mopane trees, and on the shower tents at the camp.

Western Rock Skink (*Mabuya sulcata*)
These skinks were also common, especially on rocky outcrops.

Variegated Skink (*Mabuya variegata*)
Several tame specimens were present on the outbuildings at the camp.

Western Three-striped Skink (*Mabuya occidentalis*)
One large specimen lives at a popular tourist lookout spot on a rocky hill.

Namib Rock Agama (*Agama planiceps*)
These beautiful animals were common on larger rock outcrops.

Ground Agama (*Agama aculeata aculeata*)
These were frequently seen in pairs in the ground, and on fallen tree trunks under which they hide for protection.

Bibron's Gecko (*Pachydactylus bibronii*)
These geckos were found on tents at the camp.

Boulton's Day Gecko (*Rhoptropus barnardi*)
Seen on smaller rocks than the preous species.

Rock Monitor (*Varanus albigularis*)
Following the alarm calls of some birds, I found a large monitor in the trunk of a hollow Mopane tree.

Marsh Terrapin (*Pelomedusa subrufa*)
I was amazed to find several Marsh Terrapins in rock pools in a steep-sided valley. Four hatchlings were spotted in a pool one metre in diameter, and two subadults were seen in another larger pool.

Leopard Tortoise (*Geochelone pardalis*)

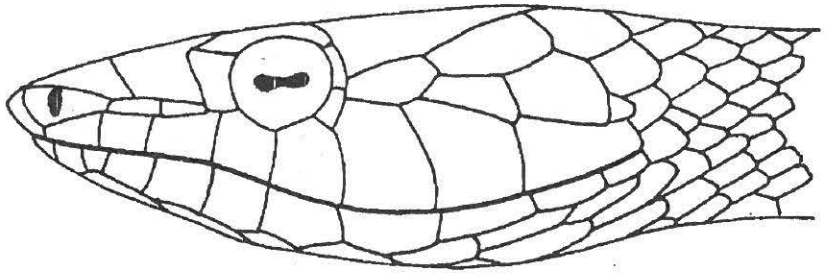
A subadult was found in the den of a porcupine (*Hystrix africaeaustralis*), along with many mammalian bones. Tortoises are reported to be very scarce in the area due to difficulties in moving over the stony ground.

Karoo Sand Snake (*Psammophis notostictus*)

One specimen was seen at close range.

Other snakes which have been seen by experiences people include the Western Barred Spitting Cobra (*Naja nigricollis nigricincta*), which is common; Black Mamba (*Dendroaspis polylepis*); Angolan Dwarf Python (*Python anchietae*), of which eight specimens of this rare animal have been found in the vicinity over the last seven years; and African Rock Python (*Python sebae natalensis*), of which only one has been found in the same period.

There are many more reptiles, as well as amphibians, which were not encountered but which still wait to be discovered on my next visit.



Thelotornis capensis oatesii (Gunther, 1881). Mtorashanga, Zimbabwe.

Illustration: A.J.L. Lambiris

DIETARY REQUIREMENTS OF CAPTIVE HATCHLING NAMAQUALAND SPECKLED PADLOPERS (*HOMOPUS S. SIGNATUS*)

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In a studbook breeding programme, the Namaqualand speckled padloper (*Homopus s. signatus*) has been kept and bred successfully in The Netherlands since October 1995. Some notes on reproduction have been described (Loehr, 1997). Additional information can be found at the internet site of the programme (address above). A detailed report summarising the greater part of information gained is in preparation.

Between October 1995 and July 1997, three adult *Homopus s. signatus* were generally fed three times weekly on a mixture of green leaves (endive, chicory, *Taraxacum*, *Plantago*, *Vicia*, *Bellum*, *Trifolium*, etc.) and fruits (apple, tomato, carrot and cucumber), supplemented with a calcium/vitamin additive (Gistocal; Beaphar BV, Raalte, The Netherlands). Four captive-bred hatchlings present in that period received the same diet, but were fed daily during the first year of their lives. During the period that this mixture was fed, no feeding-related problems were noticed. The mass of the second oldest hatchling dropped considerably between January and March 1996, but this decrease was not accompanied by behavioural and/or external changes and the decrease was reversed spontaneously later on.

From July 1997, the diet of all the tortoises was changed almost exclusively to green leaves, supplemented with a single kind of fruit only once a week, and the calcium/vitamin additive. The amount of fruits fed was gradually further decreased until completely excluded from the diet by the end of April 1998. Recent information with respect to the feeding of tortoises suggested that providing fruits could be unbeneficial, due to the often low Ca/P ratio and fiber content, and the high water and sugar content (among others, McArthur, 1996). Three hatchlings were born in October/November 1997 and therefore first received a daily diet low in fruit content (single kind of fruit once a week) and later the diet without any fruits.

Apart from two of the 1997 hatchlings, the *Homopus* did not show a distinct response to the change in diet. Growth (figure 1) and behaviour proceeded as expected (January-April 1998 coincided with winter climatic conditions in the enclosures [figure 2]). Two of the 1997 hatchlings, however, showed a normal mass increase (compared to the other hatchlings) between the time of hatching and May 1998 (period of diet with low fruit content), and a mass decrease (average 24% of the mass measured in May) after that time (period of diet without fruits) (figure 1). The two tortoises that showed a mass decrease from May 1998 furthermore had their

eyes closed for most of the time, were inactive and often spend the night outside a retreat. Skin sloughing did not proceed in a normal manner, as pieces of old skin remained attached to new skin. All three hatchlings of 1997 were housed together.

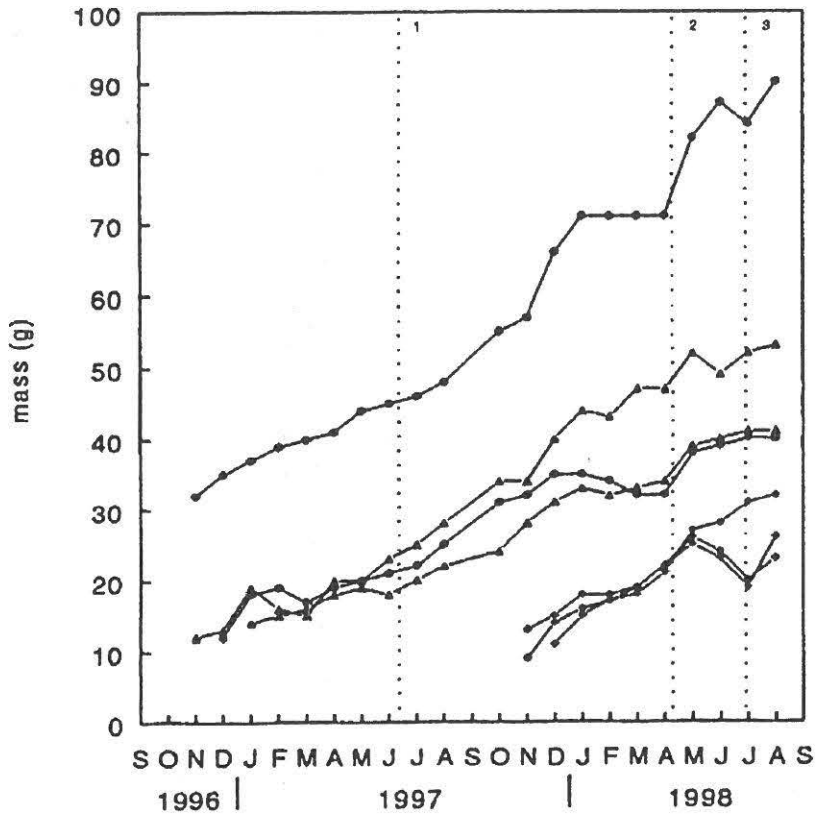

Figure 1: Mass of seven captive born Namaqualand speckled padlopers (*Homopus s. signatus*) between October 1996 and July 1998. Plotted recordings for each specimen start from the 15th of the month after hatching (except for the oldest hatchling, which was born on 27 February 1996).

Lines through similar symbols represent specimens that were housed together. In the enclosure of the two specimens indicated by a line through solid circles, a spot light was absent during winter climatic conditions, in contrast to those of the other hatchlings.

Dotted line 1 represents the time from which the diet with a single kind of fruit once weekly was provided. Dotted line 2 indicates the time from which fruits were excluded from the diet. Dotted line 3 indicates the time from which two of the youngest hatchlings were soaked daily and the diet including fruits was reinstated.

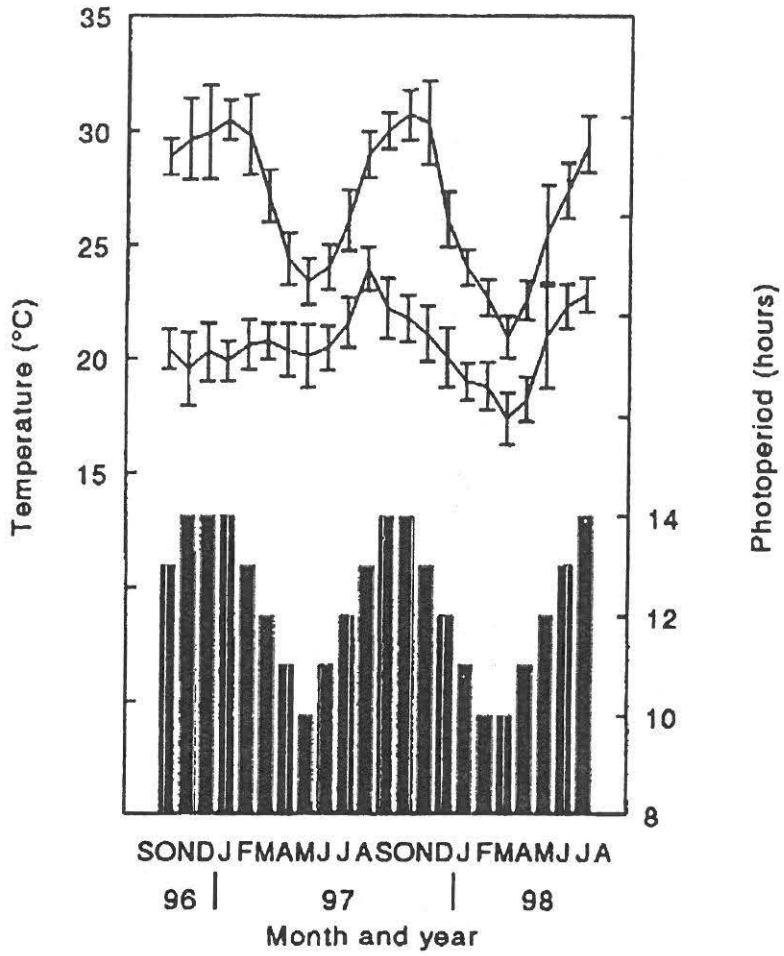

Figure 2: Monthly mean maximum and minimum temperatures (± SE) in a shelter within the enclosure of three adult *Homopus s. signatus*. The temperature in the hatchling enclosures was comparable (except for the temperature in the enclosure of the three youngest hatchlings after June 1998). Bars represent the mean photoperiod in all enclosures.

In order to treat the two hatchlings, day temperatures were initially (from 15 June 1998) raised to 30-32°C and the number of showers per week was decreased from every other day (normally practised during the first year after hatching) to twice weekly. There was no response to this change. Next, from 16 July the hatchlings were soaked every day and the daily diet with the mixture of fruits was reinstated (the other *Homopus s. signatus* were fed three times weekly, with fruits added twice weekly). Day temperatures were kept just above 30°C and the number of showers was increased to every second day again. Following the change in husbandry practises, both hatchlings started to feed eagerly on fruits and became more active. Also the eyes appeared to recover. Mass started to increase immediately (figure 1).

It was concluded that the problems in the hatchlings had been caused by dehydration resulting from the diminished water content of the diet. The third hatchling of 1997 appeared not to be stressed by the changing diet, but in contrast to the other two, was observed licking water drops from stones in the enclosure after showering. The lack of response to the changed diet in the older *Homopus* can be explained in terms of a higher body volume to surface ratio, which prevents dehydration more efficiently. Furthermore, especially the adult specimens are frequently observed drinking from water bowls permanently available in all the enclosures. This kind of behaviour has not been seen in our captive hatchling *Homopus s. signatus*.

It is hypothesised that the diet of wild *Homopus s.signatus* will at least partly consist of succulent leaves with a high water content. Such plants are abundant in the natural habitat of the species (pers. obs.). With respect to the husbandry of hatchlings of the Namaqualand speckled padloper, it is suggested that a water-rich component in the diet is required. Fruits could be used for this purpose, although it remains unclear what the effects of the low Ca/P ratio and fiber content and the high sugar content will be in the long term.

ACKNOWEDGEMENTS

I thank Dr. A. Lambiris for reviewing the manuscript.

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PHOTOPERIOD, TEMPERATURES AND BREEDING IN CAPTIVE NAMAQUALAND SPECKLED PADLOPERS, *HOMOPUS S. SIGNATUS*

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Tortoises of the genus *Homopus* generally do not survive easily in captivity outside their native habitat. Of the specimens obtained from pet shops in the USA, Europe and elsewhere, in past years, very few adults or offspring have survived.

Factors contributing to the poor success in keeping *Homopus* in captivity include lengthy periods between collecting in the wild and releasing in the final enclosure (thus weakening the small tortoises and making them vulnerable for deadly outbursts of internal parasites), and failure to satisfy specialised dietary and other requirements. A contributing factor that is not well documented is the fact that specimens from the southern hemisphere (longest photoperiod and highest temperature in January) will have to adjust to northern hemisphere climatic conditions (longest photoperiod and highest temperature in July). It is common practice among keepers in Europe and the USA to release wild-caught tortoises from southern hemisphere regions into enclosures in which northern hemisphere climatic conditions already prevail.

There appears to be a total lack of published data on the effects of this practice on the well-being of reptiles. Hersche and Gorseman (pers. comm.) found that different species of South African tortoises did not, for unknown reasons, do well in captivity in Switzerland and The Netherlands respectively. The annual cycle of behaviour of the animals showed deviations from what should be expected and survival rates were low. They attributed this to the sudden shift from southern to northern hemisphere climatic conditions. Angulated tortoises (*Chersina angulata*) seemed to deal best with the shift.

In September 1995, four *Homopus s. signatus* were collected in South Africa (permit 331/95) and exported to The Netherlands (CITES permit 281/95C). Climatic conditions in the enclosure initially replicated those prevailing at the locality of capture (southern hemisphere) and were gradually changed to those of the northern hemisphere over a period of 4 years (figure 1). The tortoises responded to this regime by showing activity patterns following the shifting course of the climatic conditions (Loehr, in prep.). The most marked pattern relates to egg-laying, which first started in October 1995, then at the end of July 1996, the end of June 1997, and finally at the beginning of June 1998 (figure 1).

It is hypothesised that difficulties in keeping southern African tortoise species

in captivity in northern hemisphere countries might be partly attributable to the commonly practised method of releasing tortoises into enclosures in which northern hemisphere climatic conditions already prevail. A gradual shift from southern to northern conditions could yield better results. Obviously, there will be difficulty in applying this method to tortoises kept in outdoor enclosures.

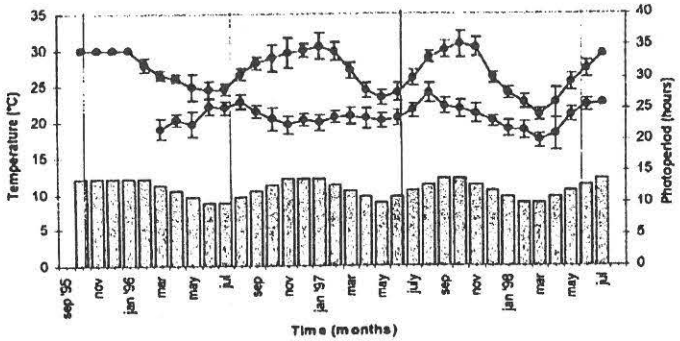
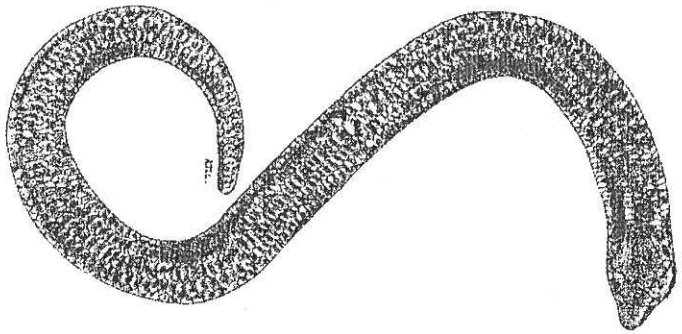


Figure 1: Monthly mean maximum and minimum temperature (±SE) in a hiding place (lines) and photoperiod (bars) in an enclosure with *Homopus s. signatus*. Vertical lines indicate dates on which first eggs of a season have been laid. Temperatures without SE are estimates.

ACKNOWLEDGEMENT

I thank Dr. A. Lambiris for reviewing the manuscript.



Variable Legless Skink, *Acontias poecilus* Bourquin & Lambiris, 1996. A poorly-known species from south-eastern KwaZulu Natal, which has not yet been photographed alive. Illustration of holotype (an adult female) from Leisure Bay, TM 79313. Illustration: Angelo Lambiris

LIFE HISTORY NOTES

African Herp News publishes 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; 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: a complete guide*, 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 or state, location, quarter-degree unit, and latitude and longitude if available; elevation above sea level; use metric units); **Date** (day, month, year); **Collector(s); Place of deposition and museum accession number** (required if specimens are preserved). Submitted by: **NAME,** Address (in parentheses).

New South African Province names must be used.

SAURIA: GEKKONIDAE

LYGODACTYLUS ANGULARIS ANGULARIS
Günther's Dwarf Gecko
REPRODUCTION

On 11 January 1997 a communal egg site of *Lygodactylus angularis angularis* was discovered in an old car wreck in a domestic garden in Chingola, Copperbelt Province, Zambia (12°33'S, 27°52'E; 1227DB). The geckos were common in the garden, and whilst moving the wreck, several were disturbed of which two were collected, preserved and deposited in the herpetological collection of the Port Elizabeth Museum (PEM R12484-85). The soil beneath the wreck also produced one *Leptotyphlops emini* (PEM R12483). The egg site was in damp compost that had collected beneath a mango tree, and contained the remains of at least 23 eggs, as well as 12 intact, partly developed eggs. These measured: length - mean 6.91 mm, SD 0.13 mm, range 6.9 - 7.1 mm; width - mean 5.73 mm, SD 0.12 mm, range 5.5 - 5.9 mm; volume - mean 0.12 cm^3, SD 0.005 cm^3, range 0.1112 - 0.1240 cm^3 (egg volume formula from Douglas, 1992: *S. Afr.J.Wildl.Res.* **20**(3): 111-117). Only one subsequently hatched, the hatchling appearing after only 23 days and measuring 24 (14.2+9.8) mm TL.

A gravid female of the same species was collected on 6 January 1997 in Kitwe, Copperbelt Province, Zambia (12°33'S, 27°52'E; 1227DB) and laid two eggs in the holding bag on 8 January 1997. These failed to hatch after extended exposure to high temperatures at the Chirundu border post. They were preserved (PEM R12507), and

their measurements fell within the parameters reported above. This appear to be the first documented information on reproduction within the taxon. Egg size is very similar to that of other sympatric *Lygodactylus* species (Haagner, 1992: *J. Herpetol. Assoc. Afr.*, **42**: 40).

Communal egg sites in African geckos are not uncommon, and Branch and Haagner (1993: *J. Herpetol. Assoc. Afr.*, **42**: 35) reported on one for *Lygodactylus c. capensis* that contained 136 eggs, and was found in a discarded refrigerator in Port Elizabeth.

Acknowledgements: Dr W.R. Branch for commenting on the text.

Submitted by: **G.V. HAAGNER**, P.O. Box 702, Hoedspruit, 1380.

SERPENTES: COLUBRIDAE

LYCOPHIDION CAPENSE CAPENSE
Cape Wolf Snake
DIET

On 12 January 1998 an adult female *Lycophidion c. capense* was killed on Farm Driehoek 417, District Phalaborwa, Northern Province, South Africa (24°31'S, 30°52'E; 2430DB) whilst constricting an adult *Pachydactylus bibronii*. The snake was found at about 20h00 on the verandah of the farm house where it was coiled around the gecko, which it held by the head. The snake let go of its prey when disturbed and was killed by a single blow to the head. The gecko was already dead, and had lost its tail in the process. The snake measured 508 (456+52) mm and weighed 38.4g, while the gecko had a SVL of 74 mm and weighed 12.8g (without the tail). The prey thus weighed 33.3% of the snakes mass. Both specimens were deposited in the herpetological collection of the Port Elizabeth Museum (snake PEM R13472, gecko PEM R13473).

Records of *Lycophidion* feeding on lizards are numerous, with an apparent preference for skinks, although lacertids and gerrhosaurids have been reported (Branch, 1975: *J. Herpetol.* **10**(1): 1-11). Unusual records include a small *Philothamnus* in a Uganda specimen (Pitman, 1938: *A Guide to the Snakes of Uganda*, Uganda Nat. Hist. Soc. Kampala, pp. xxii+363), and even the eggs of the forest skink *Lygosoma kjimensis* in Tanzania (Loveridge, 1942: *Bull. Mus. Comp. Zool.*, **91**: 237-373). However, this Lowveld record appears to be the first involving gekkonid prey.

Acknowledgements: Dr W.R. Branch for commenting on the text.

Submitted by: **G.V. HAAGNER**, P.O. Box 702, Hoedspruit, 1380, South Africa.

SERPENTES: ELAPIDAE

DENDROASPIS POLYLEPIS
Black Mamba
DIET

On 10 December 1995 a subadult *Dendroaspis polylepis* was killed on the farm Glencoe 210, District Phalaborwa, Northern Province (24°21'S, 30°52'E; 2430BC). The snake was collected and dissected before being deposited in the herpetological collection of the Port Elizabeth Museum (PEM R12499). The snake was a young female (1602 + 431 = 2033 mm, mass 740 g) with 268 ventrals, 119 subcaudals and 25 midbody scale rows. She contained small developing ova, 3 in the right and two in the left oviduct, measuring 8 x 3 mm. The stomach contained a rodent (52 g) which had been swallowed head first. The head was partly digested and the lower gut also contained rodent hair. The rodent's remains were identified as those of a multimammate mouse (*Mastomys natalensis*), and accessioned in the small mammal collection of the Transvaal Museum (TM 45726).

On 12 December 1996 an adult male mamba was found dead on the road at the same locality. It measured 1660 + 444 = 2104 mm and weighed 962g. Scutelation was as follows: ventrals 255, subcaudals 114, midbody scale rows 25. The snake's stomach contained 77g of partly digested domestic rat (*Rattus rattus*), while rodents hairs were found in the lower gut, which also contained a small amount of grain (sorghum and maize), which was probably secondary from the digested rat. The snake's hemipenes were everted, the body skinned and forwarded with the rat to the Transvaal Museum where it was accessioned in the herpetological collection (TM 80559).

It is not surprising to find rodents in the above specimens. Branch, Haagner and Shine (1995, *Herpetol. Nat. Hist.* **3**(2): 171-178) reviewed literature on the diet in *Dendroaspis* and found that both Southern African mamba species feed almost exclusively on warm-blooded prey, with black mambas feeding on a much wider spectrum of rodents. Jacobsen (1982, *A herpetological survey of the Transvaal*, unpublished Ph.D. thesis, University of Natal) reported a multimammate mouse (as *Praomys natalensis*) regurgitated by a newly capture mamba.

Acknowledgements: Dr Chris Chimimba, Transvaal Museum, is thanked for the identification of the rodents, and Dr W.R. Branch for commenting on the text.

Submitted by: **G.V. HAAGNER** (P.O. BOX 702, Hoedspruit, 1380, South Africa; e-mail tamboti@iafrica.com).

PSAMMOBATES TENTORIUS TRIMENI
Tent Tortoise
HATCHLING SIZE

Of all southern African tortoise genera, the genus *Psammobates* is among the least known. Both the limited number of captive specimens and the generally low abundance in the wild are contributing factors to this. Information on breeding ecology is especially scarce.

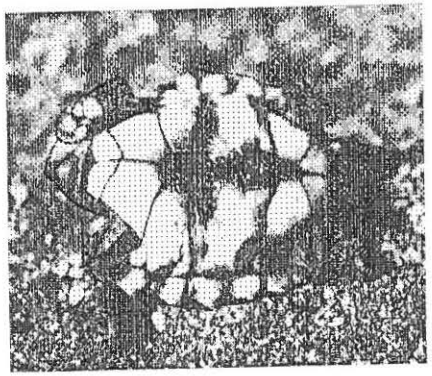
On 21 September 1998, a hatchling *P. tentorius trimeni* (possibly intermediate with *P. t. verroxii*, as an adult intermediate was found in the same area) was shown to me in Aus (Namibia). The measurements of the hatchling were SLC 31.4 mm, SLP 27.5 mm, width 27.3 mm, and height 19.0 mm. The mass was 7 g.

The shell of the tortoise was still soft and the site where the yolk sac had been attached clearly visible (figure 1). Therefore, the age of the specimen was estimated at no more than a few weeks.

Aus had received several millimeters of rain about three weeks before. Considering the extremely low rainfall in the area, hatching had possibly been induced by this precipitation.

Acknowledgement: I thank the Swiegers family of Klein-Aus Vista for allowing me to measure and photograph the tortoise.

Submitted by: **V.J.T. LOEHR** (Studbook Breeding Programme *Homopus*, Nipkowplein 24, 3402 EC IJsselstein, The Netherlands, E-mail loehr@kabelfoon.nl, http://wwwserv.caiw.nl/abs/loehr/public_html/index.htm)



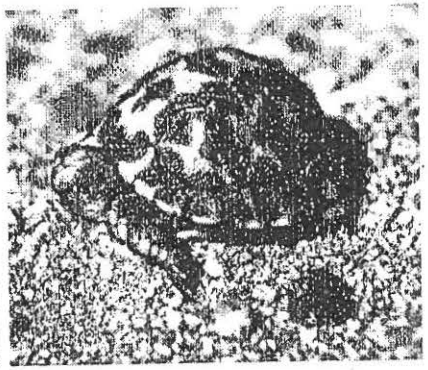


Figure 1: Plastron of hatchling *Psammobates tentorius trimeni* (x *verroxii* ?)

Figure 2: Hatchling *Psammobates tentorius trimeni* (x *verroxii* ?)

(Photos: V.J.T. Loehr)

GEOGRAPHICAL DISTRIBUTION

African Herp News publishes 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.

A standard format is to be used, as follows: **SCIENTIFIC NAME; Common name** (for sources, see Life History Notes); **Locality** (country, province or state, quarter-degree unit, location, and latitude and longitude if available; elevation above sea level; use metric units); **Date** (day, month, year); **Collector(s); Place of deposition and museum accession number** (required); **Comments** (including data on size, colour and taxonomic characters, e.g. scalation, webbing, especially for taxonomically problematic taxa; and nearest published locality record(s) in km; references to be quoted in the text). Submitted by: **NAME**, Address (in parentheses).

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

New South African province names must be used.

SAURIA: VARANIDAE

VARANUS ALBIGULARIS ALBIGULARIS **(Daudin, 1802); Rock Monitor**
South Africa, Eastern Cape Province, Tsitsikama National Park.

During February 1995, rangers reported that a large monitor lizard had been sighted close to the mouth of the Geelhoutbos River on the Otter Trail (34°00'15"S, 23°47'00"E; 3423BB). The site was visited two days later by AR, who photographed the monitor foraging in the intertidal zone. These photographs were forwarded to WRB to confirm the identification of the species, and are deposited in the Port Elizabeth Museum herpetological archives. Spoor on paths in the area suggested that the monitor, which was about 1 metre in length, had been active in the area for sometime. It was not subsequently sighted in the area. On 10 April 1998, ranger Paul London sighted a large monitor in the dune area close to the mouth of the Groot River estuary, near Nature's Valley (33°58'48"S, 23°34'41"E; 3323DC). The species' identity was not confirmed. On the next day, 11 April 1998, ranger Johannes Mapondo also reported the sighting of a monitor swimming in the Groot River estuary. This was positively identified as a rock monitor, approximately 1 metre in length. It is assumed that this was the same individual spotted the previous day, and may also have been the monitor sighted in 1995.

Both species of *Varanus* in southern Africa were previously considered to absent from the southern Cape coastal region. The water monitor (*V. niloticus*) reaches its southern limit in the Gamtoos River system, including the Kouga and Groot Rivers

which drain the Baviaanskloof and Kouga regions (Branch, W.R., 1997: South African Lizards: Varanidae. pp 76-82. In: *Proceedings of the FitzSimons Commemorative Symposium, South African Lizards: 50 years of Progress and 3rd HAA Symposium on African Herpetology* (ed. J. H. van Wyk), Herpetol. Assoc. Africa 227 pp). The rock monitor was previously considered absent from the Cape coastal regions west of the Gamtoos River, and also from the Little Karoo, although reaching Willowmore on the eastern boundary (Branch and Bauer, 1995: Herpetofauna of the Little Karoo, Western Cape, South Africa with notes on life history and taxonomy. *Herpetol. Nat. Hist.* **3(1)**: 47-90). It is probable that the Tsitsikama sightings are of a single vagrant occupying the region, and do not reflect a breeding population. This appears to also be the first documentation of a rock monitor regularly foraging in the intertidal region.

Submitted by: **ANDRE RILEY** (Tsitsikama National Park, Stormsriver, Eastern Cape Province) and **WILLIAM R. BRANCH** (Department of Herpetology, Port Elizabeth Museum, P.O. Box 13147, Humewood 6013, South Africa).

SERPENTES: VIPERIDAE

***BITIS ARIETANS* (Merrem, 1820); Puff Adder**
South Africa, Northern Cape Province. 2916BA. 20 km north of Port Nolloth.

A specimen was found dead on the Alexander Bay road (29°04'30"S, 16°50'00"E; 2916BA) on 25 October 1998, by F. Girard. I cannot give accurate information about its size, because it was very damaged; it was an adult, perhaps 70 or 80 cm long. This specimen confirms the species' presence in coastal desert. A talk with local people confirms also the presence of the species in this area.

This record extends the distribution range westwards. Branch (1988: *Field Guide to the Snakes and Other Reptiles of Southern Africa*) indicates that the species is absent from the desert (Northern Cape, South Africa, and coastal area of Namibia).

Submitted by: **FRANCIS GIRARD** (167 Bd Vincent Auriol, 75103 Paris, France).

OPPOSITE:
Flat Rock Lizard, *Platysaurus intermedius subniger* Broadley, 1962. An adult male, deep in a rock crevice at Bushman's Point, Lake Chivero, 25 km W. of Harare, Zimbabwe.

Photo: Angelo Lambiris

LETTERS

Dear Colleagues!

You probably do not know who I am, but please read this letter. My name is Jaro Pokoradi and I have studied Applied Biology at the University in my country (Slovakia). I have worked with reptiles, mainly three groups - Elapidae, Crotalidae and Viperidae - as a sspecial vet and breeder in the Herpetological and Terraristic Centre, Nitra, since 1990.

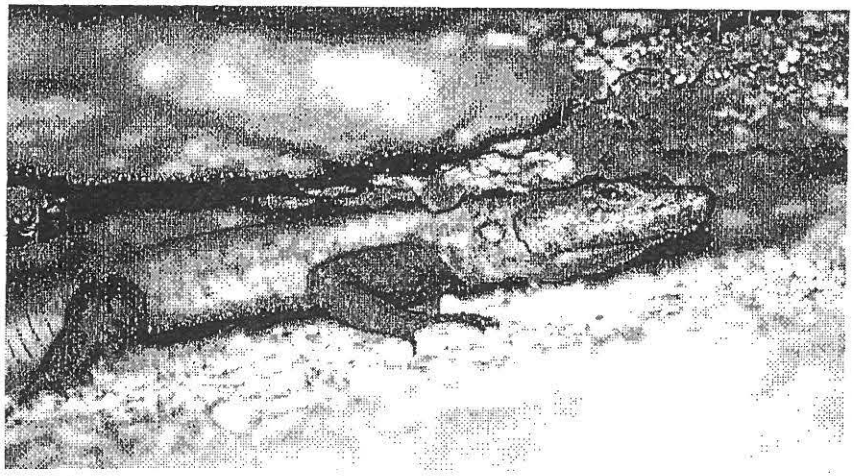
At the moment I am improving my English in England (1 September 97 - 1 September 98). I am sorry that my English is not perfect.

I would like to ask you about snakes that have had their venom glands removed. Somebody has made "big business" with such animals. My opinion is: I am very much against such actions. I believe that the venom is used for more than just getting the prey. Plus, it is just not natural and I also think that it is immoral. I have done everything for their protection and I have used the law and some terraristic magazines in Slovakia.

I would kile to know your opinion about this problem. I am very interested in your opinion, it is too important for me. If you want to help me, please send me a letter with your opinion.

In June I am going to the Slovak Government and I shall try to defend venomous snakes about this activity.

Jaro Pokoradi
Broadwood House, Lady Margaret Road, Sunningdale, Ascot, SL5 9QH, England.



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