

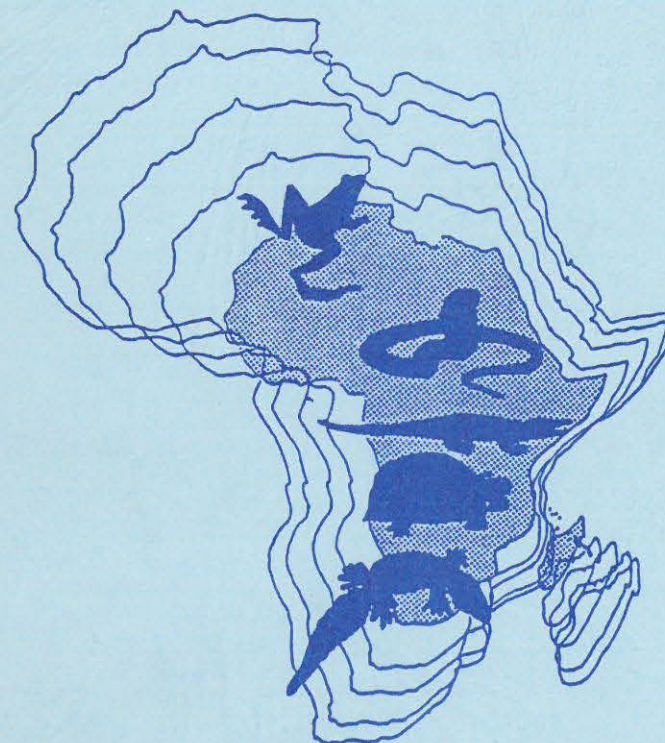
AFRICAN HERP NEWS

NO. 21: JULY 1994

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AFRICAN HERP NEWS

HERPETOLOGICAL ASSOCIATION OF AFRICA
NEWSLETTER

JULY 1994

NO. 21

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 *Journal of the Herpetological Association of Africa* (which publishes review papers, research articles, short communications and book reviews - subject to peer review) and *African Herp News* (HAA Newsletter) which includes short communications, life history notes, geographical distribution notes, venoms and snakebite notes, short book reviews, bibliographies, husbandry hints, announcements and news items.

Editor's note:

Articles will be considered for publication as Short Communications provided they are original and have not been published elsewhere.

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 the author's name and newsletter reference are given.

Typist:

Mrs H. de Villiers, National Museum, Bloemfontein.

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EDITORIAL

A new era has dawned in the evolutionary history of the *Herpetological Association of Africa*. I am of course referring to the new-style journal, changes of which were spelled out in the "New editorial policy for the H.A.A. Journal" notice published in the previous issue of *African Herp News*. Of greatest concern to those members who felt uncertain about the changes are the following: What will happen to Life History, Geographical Distribution and Venoms and Snakebite short notes; and will the journal be lost as a local "outlet" for annotated checklists and short communications not suitable for publication in major journals?

I am please to say that all short notes, annotated checklists and other short communications are welcome in *African Herp News* and I would like to encourage members to continue submitting them for publication. There are few who would not agree that much invaluable information has appeared in the above-mentioned sections over the years. The transfer of these sections to *African Herp News* is necessary so that the journal can become of similar standard and format as other journals already accredited, and has no bearing on the importance of short notes. The term "short note" does not include "short communications", i.e. short research articles, as these are still published in the journal.

For those who have supported the journal, newsletter or both, keep up the good work, and for those who have not, get going and let's improve the quality of our Association's publications.

Good news! Following the suggestion at the last H.A.A. Symposium that the next symposium be held in Kwazulu Natal, Dr Orty Bourquin has put together an organizing committee and made provisional arrangements (see notice in this issue of *African Herp News*). The venue is St Lucia and provisional dates are 30 October to 2 November 1995. This promises to be yet another great H.A.A. symposium.

Lastly, I thank all contributors of articles and news items for this issue of *African Herp News* and look forward to receiving your next contributions.

Mike Bates

Chairman/Newsletter Editor

GENERAL MEETING 1993

In the previous *African Herp News* (December 1993) a notice was published (page 18) regarding the lack of a quorum at the General Meeting during the Third H.A.A. Symposium on African Herpetology held at the Transvaal Museum on 15 October 1993.

Only 27 H.A.A. members were present at the meeting, three less than the quorum of 30 required by the H.A.A. Constitution in order to constitute an official gathering. Members who did not attend the meeting were requested to respond to two questions. Four H.A.A. members responded.

Regarding the first question, on whether or not the following statement be accepted as the H.A.A.'s stance towards nature conservation organizations: "The H.A.A. strongly supports and encourages local involvement in nature conservation issues and collaboration with conservation bodies", 3 of the 4 members agreed to accept this stance.

With regard to the second question, asking whether or not members felt it worthwhile and in the interest of the H.A.A. Journal to apply for accreditation status as an approved journal (see pages 21-23 of *African Herp News* 20), 3 of the 4 members agreed that it was worthwhile to apply.

The four responses mean that 31 members were "involved" in the General Meeting, satisfying the quorum of 30. Both questions asked received a positive response - question 1: total for = 29 (26 at meeting plus 3 by postal vote), total against = 2 (1 at meeting plus 1 by postal vote); question 2: total for = 30 (27 at meeting plus 3 by postal vote), total against = 1 (by postal vote) and the motions are therefore officially accepted.

HERP-INFO

Advertisement rates:

- H.A.A. members: No charge.
- Non-members: R7.50 per 50 words or part thereof. Over 50 words R4.00 per 15 words or part thereof. Any request for information regarding research and studies will be printed free of charge.

Advertisements with payments made payable to the Herpetological Association of Africa should be sent to: Rod Douglas, H.A.A. Herp-Info, National Museum, P.O. Box 266, Bloemfontein 9300, South Africa.

The Editor retains the right to exclude any advertisement from publication. The Editor will presume that any persons placing advertisements and/or responding to advertisements shall be fully aware of any regulations and laws governing the sale of reptiles and amphibians in his/her area, and no correspondence will be entered into

regarding these matters. Neither the Editor nor the H.A.A. shall be held responsible for any legalities or claims arising from advertisements. Requests from foreign countries for African species will not be published.

WANTED

Information on Rinkhals. I am at present involved in a breeding programme on banded Rinkhals (*Hemachatus haemachatus*). Anybody with any information on this species, particularly persons from the areas in which they occur, please contact: Mr T. Dillon, 30012 Hubert Jenkins Road, Bogalusa, LA. 70427, U.S.A.

SUBSCRIPTION PAYMENTS

I have received a number of requests from members asking for an account number into which they may directly transfer fees. This would be convenient to some members, but regrettably I am not prepared to accept fees in this manner as it is almost impossible to determine the payee, and in addition, a minor error in the code would send the money to goodness knows where!

I have recently received \$(dollar) Postal Orders from various parts of the world - in America these seem to be referred to as "Money Orders". Unfortunately the Post Office in South Africa will not honour such documents and I have had to return these to the members involved.

Our bankers suggest that to avoid any confusion the term "money order" as used in our Fees notice on the inside cover of *African Herp News* should be taken to mean: an international money order drawn on a bank.

Frank Farquharson
Hon. Secretary/Treasurer

ERRATA

Bates, M.F. 1993. Identification key to the frogs of the Orange Free State. *African Herp News* 20: 33-36.

Amend couplet 3 (3a and 3b) to read:

- 3a. Tibia length less than half the length from snout-to-vent *and* lower jaw without conspicuous bony cusps..... 4
- b. Tibia length greater than half the length from snout-to-vent *or* lower jaw with conspicuous bony cusps..... 8

Amend couplet 21 as follows:

- 21b. refers to couplet 22 (and not 24).

AN ANNOTATED CHECKLIST OF THE AMPHIBIANS OF LEGALAMEETSE NATURE RESERVE, EASTERN TRANSVAAL

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INTRODUCTION

During April 1992 several Department of Development Aid nature reserves were taken over by the Transvaal Division of Nature Conservation. During a visit to the Legalameetse Nature Reserve (LNR) in December 1993, the first author was requested by the reserve management to assist with the compilation of an amphibian checklist.

STUDY AREA

The LNR covers an area of 18 750 ha, and together with the Wolkberg and Bewaarkloof nature reserves, makes up the Greater Wolkberg Conservation Area of approximately 70 000 hectares (Fig. 1). The reserve is situated approximately 60 km SE of Tzaneen on the northern Transvaal Drakensberg escarpment. It is situated between 720 - 1838 m a.s.l. and falls within the summer rainfall zone, with the majority of rain from November to March. The ten year means for the following three rain stations on the reserve are: The Downs - 938,5 mm, Heights - 1065,7 mm and Schelem - 1005,8 mm. Stalmans (1990) surveyed the vegetation of the reserve and found that Acocks' (1988) veld types no. 8 (North-eastern Mountain Sourveld) and no. 9 (Lowveld Sour Bushveld) are dominant.

MATERIAL AND METHODS

The reserve had experienced good rains and amphibians were abundant. This paper reports on material collected as well as literature records. All material collected was deposited in the herpetological collection of the Port Elizabeth Museum (PEM). Representative samples of all tadpole material was forwarded to Dr A.J.L. Lambiris (Cambridge, U.K.) for identification and deposition in the A.J.L. Lambiris Private Collection. A specimen of *Breviceps s. sylvestris* is deposited in the herpetological collection of the Natural History Museum of Zimbabwe, Bulawayo (NMZB).

Four localities on the reserve were visited:

- Farm: Paris 24°09'32"S, 30°20'02"E (2430Ac)
- Farm: Malta, Ga-Selati River 24°10'08"S, 30°14'57"E (2430Aa)
- Farm: Crags, Ngwabitsi River 24°06'27"S, 30°13'13"E (2430Aa)
- Farm: The Downs, near Kgokgorupe 24°09'10"S, 30°11'54"E (2430Aa)

Nomenclature follows that of Poynton (1964), Passmore & Carruthers (1979), Branch *et al.* (1988) and Jacobsen (1989). Common names are according to Passmore & Carruthers (1979).

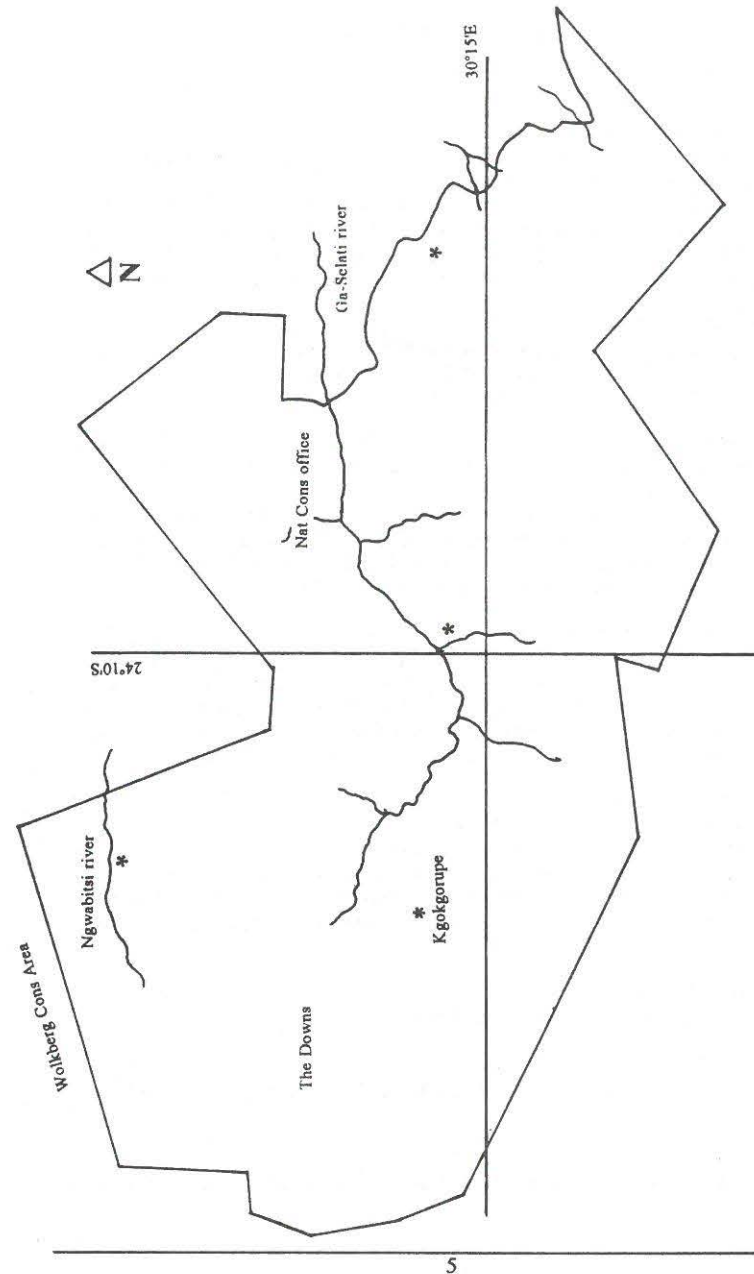


Figure 1: Legalameetse Nature Reserve, Eastern Transvaal, showing localities surveyed.

SYSTEMATIC CHECKLIST

Class: AMPHIBIA

Order: ANURA

Family: PIPIDAE Gray, 1825

XENOPUS LAEVIS LAEVIS (Daudin, 1802)

Common Platanna

Voucher specimens: PEM T009, tadpoles - Farm Paris.

Remarks: Although no adult specimens were collected, frogs were observed on two occasions on the farm Paris. Jacobsen (1989) recorded the species from a quarter-degree unit (2430Ab) adjacent to the reserve. The tropical species *Xenopus muelleri* has not been recorded this far inland in the Transvaal (Jacobsen, 1989).

Family: BUFONIDAE Gray, 1825

BUFO FENOULHETI FENOULHETI Hewitt & Methuen, 1913

Pigmy Toad

Voucher specimens: PEM T011, tadpoles; AJL 3850, tadpoles - Farm Paris.

Remarks: Jacobsen (1989) recorded the species nearby at Woodbush (2430Aa).

BUFO GUTTURALIS Power, 1927

Guttural Toad

Voucher specimens: PEM A2555, PEM T012, tadpoles; AJL 3851, tadpoles - Farm Paris.

Remarks: Jacobsen (1989) also recorded the species in the adjacent quarter-degree unit 2430Ab and throughout most of the Transvaal. The use of *gutturalis* for material previously referred to *regularis* by Poynton (1964) follows Tandy & Keith (1972). This was also accepted by Jacobsen (1989) for Transvaal material.

BUFO MACULATUS Hallowsell, 1854

Flat-backed Toad

Voucher specimens: PEM A2542-43 - Farm Paris; Haffenden Heights (Jacobsen, 1989).

Remarks: Tandy & Keith (1972) treated *B. pusillus* as a synonym of *B. maculatus*, as did Wager (1986), Poynton & Broadley (1988) and Jacobsen (1989). However, Lambiris (1989) revived *B. pusillus* after analysing Zimbabwean material. Tadpoles have been described by Channing (1972b).

BUFO GARMANI Meek, 1897

Olive Toad

Voucher specimen: PEM A2554 - Farm Paris.

Remarks: The taxonomic status of the species is uncertain. Channing (1972a) commented on the variability in colour pattern and other morphological features of *B. garmani*. There appear to be two forms in the Transvaal, but until a more intensive study has been undertaken, all specimens are here treated as *B. garmani* (see Jacobsen, 1989).

BUFO RANGERI Hewitt, 1935

Raucous Toad

Voucher specimens: The Downs (Jacobsen, 1989).

SCHISMADERMA CARENS Smith, 1848

Red Toad

Voucher specimens: PEM A2523-24, adults, PEM T010, tadpoles; AJL 3849, tadpoles - Farm Paris.

Family: MICROHYLIDAE Günther, 1859 "1858" (1843)

BREVICEPS SYLVESTRIS SYLVESTRIS FitzSimons, 1930 Transvaal Forest Rain Frog

Voucher specimens: NMZB 11090 - Kerkbos, Farm The Downs; Farm Malta (Jacobsen, 1989).

Remarks: This is a rare burrowing frog endemic to the Drakensberg escarpment and Wolkberg areas in the Transvaal. It is restricted to moist montane forest where specimens take shelter in constructed hollows under rocks or logs (Jacobsen, 1989).

BREVICEPS ADSPERSUS ADSPERSUS Peters, 1882

Bushveld Rain Frog

Remarks: Numerous specimens were observed consuming termites (flying ants) on a road on the farm Paris during early December 1993; none were collected. Jacobsen (1989) noted differences in paravertebral markings and recommended intensive investigation into the *B. adspersus* complex. Poynton & Broadley (1985a) discussed taxonomic problems associated with *B. adspersus* hybridising with *B. mossambicus*. Lambiris (1989) found that these two species hybridize freely in Zululand and it is difficult to find "pure" *mossambicus*. The species complex is under investigation and several cryptic species may be involved (Minter, pers. comm.).

PHRYNOMANTIS BIFASCIATUS BIFASCIATUS (Smith, 1847) Rubber Banded Frog

Voucher specimens: PEM A2520-21, adults, PEM T009, tadpoles; AJL 3848, tadpoles - Farm Paris.

Remarks: *Phrynomantis* is the earliest available name for this genus, replacing *Phrynomerus* (Dubois, 1988). This has subsequently been followed by Channing & Griffin (1993) as well as Bauer, Branch & Haacke (1993). The LNR record represents an important link in the distribution between eastern and western Transvaal populations. Tadpoles of this species have been described by Van Dijk (1966).

Family: RANIDAE Gray, 1825

PYXICEPHALUS ADSPERSUS EDULIS Peters, 1854

Lowveld Bullfrog

Remarks: During late November 1993 an adult *P. adspersus* was observed on the road near the reserve offices. This sighting is referred to *P. a. edulis*, which occurs east of the escarpment. Confusion exists on the status of this and the typical race, the latter occurring west of the Drakensberg escarpment. It is possible that *edulis* will be elevated to specific status (Channing, pers. comm.).

TOMOPTERNA CRYPTOITIS (Boulenger, 1907)

Tremolo Sand Frog

Remarks: Numerous specimens were observed feeding on termites on roads after rains. Jacobsen (1989) recorded *T. cryptoitis* from Hans Merensky Nature Reserve in an adjacent quarter-degree unit (2430Ab). Difficulty is often experienced in separating the various *Tomopterna* species, and their status is currently being investigated (Channing, pers. comm.). *T. cryptoitis* tadpoles were described by Van Dijk (1977) and Grillitsch, Grillitsch & Splechnta (1988).

PTYCHADENA ANCHIETAE (Bocage, 1867)

Plain Grass Frog

Voucher specimens: PEM A2544-46, 2566 - Farm Paris.

PTYCHADENA OXYRHYNCHUS (Smith, 1849)

Sharp-nosed Grass Frog

Voucher specimens: PEM A2553 - Farm Paris.

Remarks: Distribution in the Transvaal is limited to the lower eastern Lowveld. The Farm Paris specimen represents only the second record for the species on the northern escarpment and is the most inland record for the Transvaal.

PTYCHADENA POROSISSIMA (Steindachner, 1867) Striped Grass Frog
 Voucher specimens: PEM A2557-59 - Farm Paris.
 Remarks: This is only the second locality for *P. porosissima* on the northern escarpment. Jacobsen (1989) recorded the species at Woodbush (2329Dd).

RANA ANGOLENSIS Bocage, 1866 Common River Frog
 Voucher specimens: PEM A2556 - Farm Paris; farms Malta, Heffenden Heights and The Downs (Jacobsen, 1989).

STRONGYLOPUS GRAYII GRAYII (Smith, 1849) Clicking Stream Frog
 Voucher specimens: Farm Malta (Jacobsen, 1989).
 Remarks: Poynton & Broadley (1985b) commented on the possibility of two taxa being included under *Rana g. grayii* and Jacobsen (1989) noted that there appears to be ecological separation between forest and grassland forms.

PHRYNOBATRACHUS MABABIENSIS FitzSimons, 1932 Dwarf Puddle Frog
 Voucher specimens: PEM A2548 - Farm Malta; PEM A2565 - Farm Paris.

PHRYNOBATRACHUS NATALENSIS (Smith, 1849) Snoring Puddle Frog
 Remarks: Jacobsen (1989) recorded the species from an adjacent farm in the same quarter-degree unit as the reserve (2430Ac), as well as at Woodbush (2329Dd).

Family: RHACOPHORIDAE Hoffman, 1932 (1859)
CHIROMANTIS XERAMPHELINA Peters, 1854 Grey Tree Frog
 Voucher specimens: PEM A2522-23 - Farm Paris.
 Remarks: Fairly large numbers were observed constructing nests in late December 1993; up to five males were involved in the process of constructing a single nest.

Family: HYPEROLIIDAE Laurent, 1943
LEPTOPELTIS MOSSAMBICUS Poynton, 1985 Brown-backed Tree Frog
 Voucher specimens: PEM A2526 - Farm Paris.
 Remarks: This is only the second specimen recorded from the escarpment and the most inland record to date.

KASSINA SENEGALENSIS (Dumeril & Bibron, 1841) Bubbling Kassina
 Voucher specimen: PEM A2525, adult, PEM T013, tadpoles; AJL 3852, tadpoles - Farm Paris.
 Remarks: Several specimens were observed in amplexus in a garden pond on 28 December 1993.

HYPEROLIUS MARMORATUS TAENIATUS Peters, 1854 Painted Reed Frog
 Voucher specimens: PEM A2527-28 - Farm Paris.
 Remarks: Several specimens were observed calling in reeds in a garden pond during the period 26-28 December 1993.

HYPEROLIUS PUSILLUS (Cope, 1862) Water Lily Frog
 Voucher specimen: PEM A2547 - Farm Paris.
 Remarks: This is the most inland record and the first for the escarpment.

POSSIBLE ADDITIONS

The following species have been recorded from localities in adjacent quarter-degree units (see Jacobsen, 1989) and are likely to occur in the reserve.

Family: HELEOPHRYNIDAE Noble, 1931
HELEOPHRYNE NATALENSIS Sclater, 1899 Natal Ghost Frog
 Jacobsen (1989) recorded this species from Woodbush (2329Dd).

Family: MICROHYLIDAE Gunther, 1859 "1858" (1843)
BREVICEPS ADSPERSUS PENTHERI Werner, 1899 Bushveld Rain Frog
 Jacobsen (1989) recorded this subspecies from Woodbush (2329Dd).

Family: RANIDAE Gray, 1825
CACOSTERNUM NANUM NANUM Boulenger, 1887 Bronze Caco
 Jacobsen (1989) recorded this species from Woodbush (2329Dd).

Family: HEMISOTIDAE Cope, 1867
HEMISUS MARMORATUS MARMORATUS (Peters, 1854) Mottled Shovel-nosed Frog
 Jacobsen (1989) recorded this species from Gravelotte (2330Dc).

Family: HYPEROLIIDAE Laurent, 1943
LEPTOPELTIS BOCAGII (Gunther, 1864) Bushveld Tree Frog
 Jacobsen (1989) recorded this species from Letsitele (2330Cd). This isolated record needs confirmation. *L. bocagii* is superficially easy to confuse with *L. mossambicus*, although it is apparently a strictly terrestrial form.

DISCUSSION

A total of 24 amphibian species have been recorded within the boundaries of the reserve, with an additional five possibilities.

In the Transvaal there are some 50 conservation areas under management of the Nature Conservation Directorate. Together with the forestry areas under the control of the Department of the Environment and the Kruger National Park, they cover approximately 8.4% of the Transvaal (Greyling & Huntley, 1984). These areas protect approximately 83% of the amphibians recorded in the province, although this figure is likely to be higher as many species are rare and difficult to find.

The presence of a species in a reserve does not mean its survival is assured. Jacobsen (1988) scored the herpetofauna of the Transvaal as rare, endemic or having limited habitat distribution. According to his scoring system, the LNR offers possible protection to six species important to conservation: *Breviceps adspersus pentheri*, *B. s. sylvestris*, *Cacosternum n. nanum*, *Heleophryne natalensis*, *Leptopeltis mossambicus* and *L. bocagii* (Jacobsen, 1988).

The amphibians of the Transvaal are unprotected, except from exportation without a permit under Transvaal Nature Conservation Ordinance 12 of 1983. The only species enjoying some form of protection is the bullfrog, *Pixicephalus adspersus*, which is

covered by the ordinance. The typical race is widespread, but densities are low and populations are vulnerable to habitat destruction, especially at highveld pans. The eastern subspecies *P. a. edulis* is widespread in the Lowveld and its status appears to be secure in the Kruger National Park.

ACKNOWLEDGEMENTS

Dr W.R. Branch (Port Elizabeth Museum, Humewood) confirmed the identifications of adult frogs and commented on the text; Dr A.J.L. Lambiris (Cambridge, U.K.) identified tadpoles and Mr J. van Loggerenberg provided information about the reserve. I also thank my wife Anna for braving the mosquitoes and mud to collect several of these wonderful 'creepy crawlies'.

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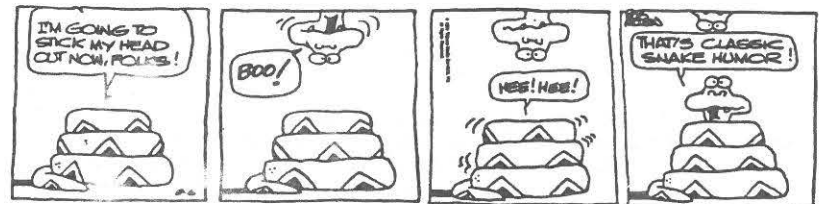
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ANIMAL CRACKERS

by Roger Bollen



REPRODUCTION OF THE EASTERN PALLID SPITTING COBRA *NAJA PALLIDA* BOULENGER, 1896 IN CAPTIVITY

Alan D. Louw

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In May 1985 I obtained a pair of 30-day-old *Naja pallida*. The young snakes measured about 50 cm in length and were light pink in colour with a black band around the neck. They now measure 300 cm in length and are dark red above, pale pink below, with a pinkish-white throat and a faint black band encircling the neck. The female is blind in the left eye, possibly from birth.

The first time I bred these cobras was in August 1989. In January 1990 the female laid 15 eggs under some green moss, but these were unfortunately discovered too late, and were unsuccessfully incubated.

The female was in a box (320 x 300 x 270 mm) fixed to the left corner of the roof in the main cage. The box had a hole 80 mm in diameter and a door which the snake could push open with ease. The female had been in this cage for 12 months, the small box providing shelter and a winter hibernating place.

On 1 August 1992 the male was introduced to the female in a cage measuring 1580 x 620 x 720 (height) mm containing a large branch and some plants. The floor of the cage had a heating pad and was thickly matted with green moss. The male appeared to show immediate interest, jerking his body about and whipping his tail vigorously while searching for the female.

From 1-12 August the female showed no apparent interest in the male. At 17h30 on 13 August she exited the box for the first time, but still showed no sign of mating, despite the male's constant rubbing and jerking movements. At 17h30 on 15 August the male and female were found together in the small box with the door wide open, and careful observation showed that they were *in coitus*. Copulation was in "progress" for 15 days, during which time the snakes spent a considerable amount of time moving about.

A few weeks later the female was removed to a polystyrene cage containing several caves and ledges and painted with Micatex. A few plants were added to give the cage a natural look. The floor had a waterproof carpet and measured 1000 x 580 m x 525 (width) mm. By the beginning of November the female was quite swollen. She consumed two medium sized rats after being removed from the male in the big cage. On 15 November 1992 a lump was noted under the carpet in the left corner of the cage, which proved to be a clutch of 14 smooth, white eggs.

The eggs were transferred to a plastic container measuring 270 x 200 x 100 (height) mm, half-filled with compost. The top of the container was sealed with thin, loose plastic, and it was then placed in a cage with a floor heater peaking at 30°C. Eight of the 14 eggs made contact with the loose plastic and appeared to foul. They were

therefore removed and put in another cage. A section of glass was placed over the remaining unaffected eggs which remained in good condition until hatching:

- Egg 1: 6 February 1993 at 10h50
- Egg 2: 6 February 1993 at 12h12 (hatchling died after 20 min)
- Egg 3: 8 February 1993 at 17h28
- Egg 4: 9 February 1993 at 17h05 (hatchling died soon afterwards)
- Egg 5: 9 February 1993 at 22h05
- Egg 6: 10 February 1993 at 17h50

The four live hatchlings were placed in separate cubicles and kept under observation. All hatchlings grew rapidly, readily consuming pink mice.

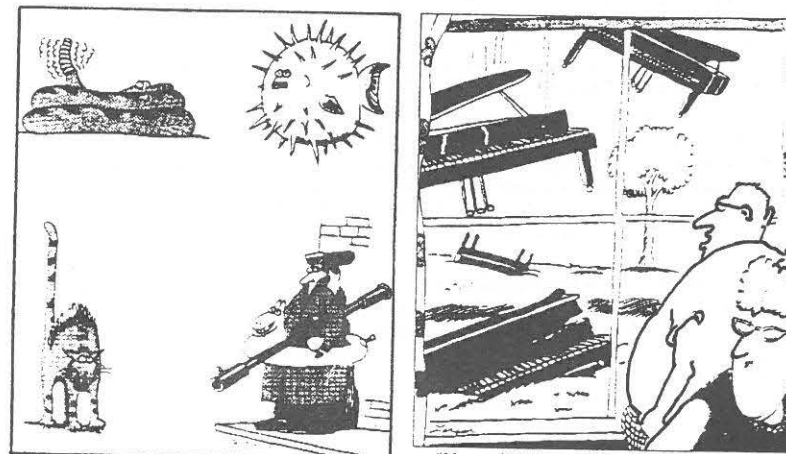
Note: Broadley & Howell (1991) treat *Naja nigricollis pallida* Boulenger (of northern and eastern Africa) and *N. katiensis* Angel as full species.

ACKNOWLEDGEMENTS

I would like to pay tribute to the late Gody Kunzi, and my long-term partner the late John Lougher, without whom my herpetological career would not have been possible.

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How nature says, "Do not touch"

"My word! I'd hate to be caught outside on a day like this!"

SEGS - A SIMPLIFIED EARTH GRID SYSTEM FOR DISTRIBUTION MAPPING

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This paper was prompted by Bates' (1992) article entitled "The grid and locus code method for plotting locality records", published in the December 1992 issue of *African Herp News*.

I disagree with Bates' (1992) statement that the upper boundary of a grid unit is part of that unit. This only adds to the already present confusion. What would the locus code of point latitude 00°00'00"S and longitude 00°00'00"E be, -01-01Dd4? In the example Bates (1992) gives, grid unit 2926Ad4 begins at latitude 29°22'30" and must end at 29°29'59,9--9". A latitude of 29°30'00" is the beginning of, and is part of, a new grid unit.

It will not be often that a field collector with a good map will have the dilemma of not knowing from which grid unit he has made a collection, but it has happened to this author. A small cross drawn on the map marking the position where a sand lizard was found under a rock fell exactly on the 22'30" line. I was tempted to record that a tail and hind legs had been collected in one grid unit and a head and forelimbs in the adjoining unit. The complete specimen was recorded as having been collected in the upper grid unit.

When I first began recording collecting and sighting localities I decided that quarter-degree units covered too large an area and chose to use eighth-degree units. Rather than use the mind-blowing unit labelling system which De Waal (1978) used, a simpler method was adopted. After all, which of us with normal brains is able to comprehend at a glance that grid units 2926Dd4, 2927Cc3, 3026Bb2 and 3027Aa1 have a common point? In my labelling system, the eighth-degree divisions are numbered 0-7 and the relevant division numbers combined with the unit's degree definition. The above four examples become grid units 297/267, 297/270, 300/267 and 300/270. One only has to remember that if the third digit of a number triad is a 7, it will be followed by a 0 in the same position of the next grid unit triad. How much easier it then is to see that a grid unit shares a corner point or boundary with another! The filling in of grid units on a distribution map is greatly simplified.

One wonders why the present confusing grid labelling system, with its quarter- and eighth-degree units, labelled Aa1 to Dd4, was adopted in the first place. It would have been much more logical to have divided a degree into six or ten divisions of 10 or 6 minutes each, numbered 0-5 or 0-9. The above-mentioned four grid units would have been labelled 295/265, 295/270, 300/265 and 300/270, or 299/269, 299/270, 300/269 and 300/270 - easy to understand and easy to follow!

I am experimenting with an even more logical and easier to use system, namely the Simplified Earth Grid System (SEGS), which uses a lol as a unit of grid latitude or longitude definition:

1 lol	=	1/1000 circumference of earth
	=	360/1000 degrees = 21'36" = 40.07588 km along equator
1 decilol (dlol)	=	2'9,6" = 4 km along equator
1 centilol (clol)	=	12,96" = 400 m along equator
1 millilol (mlol)	=	1,296" = 40 m along equator

The present longitude line of 168°30'W is selected as base line in this system as it is the line which passes over the least distance of land. It is close to part of the International Date Line. This longitude line is numbered 0 lol. Longitude line lol numbers increment from west to east to a value of 999, after which base line 0 lol is returned to. The North Pole is taken as base 'line' for latitude and is numbered latitude 0 lol. The South Pole is taken as the upper limit for latitude and is numbered latitude 500 lol.

Most African countries would be covered by 400 to 900 lol grid units, not an unreasonably high number considering the fact that South Africa is at present covered by about 1800 quarter-degree grid units. The Orange Free State, which is at present covered by about 800 eighth-degree grid units, would be covered by about 80 lol grid units, or 8000 decilol grid units. Although 8000 would be a huge number of grid units to plot manually, a computer plotter, or even a standard PC printer, which has a possible page print position matrix of about 10 000, could easily perform the task.

For distribution in smaller areas, for example Cape Town's Table Mountain, centilols could be used to create a grid of units of about 400 x 400 m.

The advantage of SEGS is that any point or area on earth can be defined in simple numeric terms without having to specify degrees, minutes, seconds, and the relevant world hemisphere. For example, Bloemfontein's Railway Station would have the millilol position definition of 330,889/540,904. Compare this with the present system's position definition of S29°07'13" E26°13'34".

Most collectors will probably insist that they are quite happy to continue using the present system, but it is archaic and illogical, and should have been replaced, as have been for the most part, other recording systems using units such as inches, feet, yards, chains and other irrationally related measures, relationships which have been the bane of most people, and school children in particular. Perhaps we herpetologists should lead the way in the use of an improved grid labelling system, with the hope that we do not go into the next millenium having to use a system developed during the Dark Ages - a system which has served us well, but which should now be allowed to fade away gracefully.

As the relationship between the present and the proposed alternative system is simple and mathematical, conversions can easily and quickly be done by computer. Existing maps will continue to be usable, but one would hope that in time, maps showing revised lines of latitude and longitude will become available.

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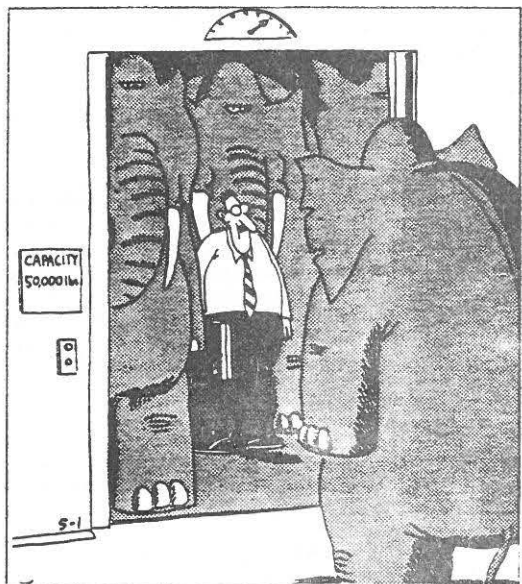
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SHORT NOTES SECTIONS

As noted in the December 1993 issue of *African Herp News* ("New editorial policy for the H.A.A. Journal", pp. 21-23) the following short notes sections of the Journal will now appear in *African Herp News*: Life History, Geographical Distribution, and Venoms and Snakebites. Short notes of this nature should therefore be addressed to: **Mike Bates, Editor: African Herp News, P.O. Box 266, Bloemfontein 9300, South Africa.**

Contributors to the short notes sections are urged to follow the standard format and style explained at the beginning of each section. Pay careful attention to the order in which information is presented and the use of semicolons. Take note that the instructions for presentation of short notes have been slightly modified. Manuscripts which are not presented in the correct style will be returned to authors for corrections.

Note: New South African provinces (i.e. Northern Transvaal, Eastern Transvaal, North-West, PWV, Free State, Kwazulu Natal, Northern Cape, Eastern Cape and Western Cape) should be used.



To Ernie's horror, and the ultimate disaster of all, one more elephant tried to squeeze on.

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 the Snakes and other Reptiles of Southern Africa* for reptiles and Passmore & Carruthers' *South African Frogs* for amphibians, as far as possible); **Keyword** (this should be a single word best describing the topic of the note, i.e. Reproduction, Longevity etc.); the **text** (in brief English with only essential references quoted and in abbreviated form); **Locality** (country, province or state, location, quarter-degree grid unit, and latitude and longitude if available; use metric distances); **Date** (day, month, year); **Collector(s)**; **Place of deposition and accession number** (required if specimens are preserved); Submitted by: **NAME**, address in parentheses.

AMPHIBIA

ANURA
BUFONIDAE
BUFO KAVANGENSIS
Okavango Toad
REPRODUCTION

During a herpetofaunal survey of Hwange National Park in Zimbabwe in December 1993, *Bufo kavangensis* (Poynton & Broadley, 1988) was observed calling at two sites in Kalahari sand. Both breeding sites were in flooded grass plains composed of either short or long grasses, or both. Grasses included *Panicum subalbidum*, *Brachiaria fubata* and *Echinochloa colonum*, all of which have very stout basal stems. Calling occurred from the margin of the water to a depth of 1.3 m. Deeper water was not investigated, but may be inhabited as the above-mentioned grasses were present. Calling frogs clutch grass stems but remain very close to the waterline - not more than 3 cm above the water. The upright to semi-upright calling posture is believed to be unique among African bufonids; and the previously undescribed call is a fairly continuous piercing "BZZZZ BZZZZ", with little emphasis on the "B". The vocal sac is oval. *B. kavangensis* and *Hyperolius marmoratus marginatus* occur in sympatry at Bembesi Vlei, although the two species were spatially divided by the height of their calling sites, except when *H. m. marginatus* are in amplexus. Although many ephemeral pans were investigated, no toads were heard calling in this habitat.

Localities and voucher specimens: ZIMBABWE, Hwange National Park: (1) near Little Somavundla Pan, 3 December 1993, G.S.A. Rasmussen, 1927Aa, NMZB 12862; (2) Bembesi Vlei, 23 December 1993, D.G. Broadley & G.S.A. Rasmussen, 1826Dc, NMZB 13093-98.

Submitted by: **D.G. BROADLEY** and **G.S.A. RASMUSSEN** (Department of Herpetology, Natural History Museum, P.O. Box 240, Bulawayo, Zimbabwe).

REPTILIA

CHELONII

PELOMEDUSIDAE

PELUSIOS NANUS

African Dwarf Hinged Terrapin

REPRODUCTION

An adult female *Pelusios nanus* was collected on 12 July 1991 at Sakeji School, North-western Province, Zambia (11°45'S, 24°19'E; 1124Ab). The specimen was kept in captivity at the Port Elizabeth Snake Park, where it settled down and accepted fish, lean meat and pink mice. On 7 April 1992, 10 months after capture, she laid 5 viable eggs. These were deposited on a ledge with fine gravel and no effort was made to bury them. Egg biometrics were: length, mean 29,3 mm, S.D. 0,72 mm, range 28,3-30,2 mm; width, mean 16,6 mm, S.D. 0,39 mm, range 14,9-16,9 mm; mass, mean 4,24 g, S.D. 0,43 g, range 3,6-4,8 g. Eggs were incubated in moist vermiculite but failed to hatch. On inspection, 67 days after oviposition, one egg contained a perfectly formed but dead embryo with a carapace length of 15,7 mm, carapace width of 11,9 mm and plastron length of 14,2 mm. The yolk was not fully absorbed and weighed 1,4 g, while the terrapin weighed only 1,1 g. All eggs were fertile but contained dead embryos in various stages of decomposition. No other details on reproduction in this species are known. Sperm retention for at least 10 months by the female is indicated in this instance, being the first documented case of sperm retention in an African terrapin. The female died the following month and was deposited in the herpetological collection of the Port Elizabeth Museum (PEM R7248). Her carapace length was 119 mm, plastron length 104,5 mm and mass 259,2 g at the time of death. The excised embryo and one egg were also deposited in the museum collection (PEM R7223). Broadley (1991, *Arnoldia Zimbabwe* 9(37): 519-538) gave a record size of 120 mm for a *P. nanus* specimen from the same locality; the PEM R7248 female is the second largest specimen known.

Acknowledgements: The Brubacher family for their hospitality during our stay in Zambia; Anna Haagner, Matthew and Anne Cowell for assisting with collecting; and W.R. Branch for commenting on the text.

Submitted by: G.V. HAAGNER (Port Elizabeth Museum, P.O. Box 13147, Humewood 6013, South Africa).

SAURIA

SCINCIDAE & LACERTIDAE

MABUYA VARIEGATA PUNCTULATA

Northern Variegated Skink

MABUYA STRIATA SPARSA

Kalahari Striped Skink

MEROLES SUBORBITALIS

Spotted Desert Lizard

AVIAN PREDATION

On 10 December 1991 an adult female Pigmy Falcon (*Polihierax semitorquatus*) was collected at Nossob Restcamp in the Kalahari Gemsbok National Park (25°29'S, 20°31'E; 2520Bc), Northern Cape, South Africa by J.J. Herholdt. Examination of the stomach contents of the bird revealed fragmentary evidence of at least four lizards. Using identification keys and figures in FitzSimons (1943, *Transvaal Mus. Mem.* 1: 1-528), a checklist of the herpetofauna of the Kalahari Gemsbok National Park (Haacke,

1984, Supplement to *Koedoe*: 171-186) and comparative material in the herpetological collection of the National Museum, it was determined that three species were involved. The head of one lizard was identified as that of a *Meroles suborbitalis* (frontonasal in broad contact with rostral); two forelimbs, part of a tail and a few patches of skin similar to that of *M. suborbitalis* were also present. The head of another lizard (tympanic region damaged) together with two sets of hindquarters, both with quinquecarinate dorsal scales and mainly tricarinate subdigital lamellae, indicated the presence of *Mabuya variegata punctulata*. The hindquarters of another lizard were dark brown with small, pale spots, there were tricarinate dorsal scales and mainly unicarinate subdigital lamellae (22 under 4th toe of each foot) and the specimen is referable to *Mabuya striata sparsa* (see Broadley, 1977, *Occ. Pap. natn. Mus. Rhod.* B6(2): 45-79); a third rather damaged head could not be identified with confidence but was similar to that of *M. s. sparsa*. Several unattached *Mabuya* forelimbs were also present. The bird and its stomach contents are preserved in the ornithological collection of the National Museum, Bloemfontein (NMBV 04160). The Pigmy Falcon is known to prey on large insects, small lizards and occasionally small rodents and birds (Maclean, 1993, *Roberts' Birds of Southern Africa*. John Voelcker Bird Book Fund, Cape Town). Pellet analysis has shown that in terms of mass, more than 50% of this bird's diet consists of lizards (Brown *et al.*, 1982, *The Birds of Africa*. Vol. 1. Academic Press, London).

Submitted by: M.F. BATES and D.H. DE SWARDT (National Museum, P.O. Box 266, Bloemfontein 9300, South Africa).

CORDYLIDAE

PLATYSAURUS INTERMEDIUS

Common Flat Lizard

REPRODUCTION

Six male, six female and four juvenile *Platysaurus intermedius* were collected in March 1993 at Pullen Farm in the eastern Transvaal (24°35'S, 31°11'E; 2431Ca). Specimens were housed in groups of three or four in standard 90 cm long aquarium tanks in the Milner Park Animal Unit at the University of the Witwatersrand on a reversed day/night cycle (12L/12D). Room temperature was maintained at 25-28°C. Each tank was fitted with a SUN-GLO lamp to simulate sunlight, while a 40 W light bulb provided a hot-spot at one end of the tank. Oviposition occurred from 6 October to 1 December 1993. All females laid elongate eggs in damp soil under the water dish. Two tanks contained two males and one female. One of these females laid three clutches of two eggs, 24 and 14 days apart respectively, while the other female laid two clutches of two eggs, 43 days apart. A female in a third tank with a single male laid one clutch of two eggs and another single egg, 46 days apart. A fourth tank contained three females and one male. Three clutches of two eggs and two single eggs were laid in total, but it was not possible to determine how many eggs were laid by any particular female. Egg morphometrics: length, mean 16,1 mm, S.D. 0,87 mm, range 14,7-17,2 mm; width, mean 9,1 mm, S.D. 0,49 mm, range 8,4-9,9 mm; mass, mean 0,66 g, S.D. 0,12 g, range 0,4-0,8 g.

Submitted by: L. EGAN (University of the Witwatersrand, P.O. WITS, 2050, South Africa).

SERPENTES

COLUBRIDAE

PSAMMOPHYLAX RHOMBEATUS RHOMBEATUS

Spotted Skaapsteker

REPRODUCTION AND GROOMING

The Port Elizabeth Snake Park maintains a captive group of two male and two female *Psammophylax r. rhombeatus* on permanent display. Courtship, but no confirmed copulation, was observed for a short period from 21-26 October 1993. One female appeared gravid and was removed from display on 11 November. She was placed in a glass tank with a variety of nest sites to test the "guarding" behaviour reported for females of the species. The tank contained a natural hide with moist moss, another without moss and an artificial plastic nest box with moist vermiculite. She was provided with a 60 W spotlight for basking and left to settle. Ecdysis occurred on 15 November, after which a considerable amount of time was spent basking. At this stage the eggs were visible in the lower abdomen. The female was very restless, coming out to bask in the morning, after which she started moving around, "digging" in various spots using her nose and body in a shovelling manner. On 27 November she was seen basking on her side with the bulging eggs upwards, grooming her abdomen with her snout in a zig-zag motion, working systematically down towards the vent. This was repeated for the next 15 min, after which she disappeared into a hiding place. This behaviour was observed on several occasions during the next two days.

On 29 November 1993 the female laid 10 eggs in the artificial nest box. The female and eggs were removed, weighed and measured - eggs: length, mean 29,5 mm, S.D. 1,50 mm, range 27,9-31,7 mm; width, mean 16,5 mm, S.D. 0,56 mm, range 15,3-17,0 mm; mass, mean 4,6 g, S.D. 0,23 g, range 4,2-4,9 g; egg volume, mean 4,36 cm³, S.D. 0,25³ cm, range 4,03-4,74 cm³ (egg volume formula from Douglas, 1992, *S. Afr. J. Wildl. Res.* 20(3): 111-117). Eggs had a total mass of 46,0 g, i.e. 105,7% of the female's post-partum mass. The female measured 638 mm (504 mm SVL + 134 mm tail length) and weighed 43,5 g. Gestation period, calculated from the period when courtship was observed, was 37 days.

Five of the eggs were returned to the nest site in the cage to observe whether the female would return to "guard" the eggs. The remaining eggs were incubated in moist vermiculite at 27°C. The female ignored the eggs, accepting young mice eight days after laying. The artificially incubated eggs hatched on 13 January 1994 after an incubation period of only 46 days. The eggs incubated in the display tank hatched three days later. The hatchlings measured: SVL, mean 126,1 mm, S.D. 5,85 mm, range 117-132 mm; total length, mean 176,8 mm, S.D. 6,19 mm, range 169-181 mm; mass, mean 3,3 g, S.D. 0,39 g, range 2,8-4,3 g. The female was returned to the display cage and the hatchlings released in Baakens Valley, Port Elizabeth.

The eggs reported here are much larger than those reported by Creighton & Haagner (1986, *J. Herpetol. Assoc. Afr.* 32: 35), but fall within the range given by Bates (1985, *J. Herpetol. Assoc. Afr.* 31: 21-22), who found the female coiled around her eggs under a flat shale rock in grassland near Pretoria. An adult female was found coiled around a clutch of eggs under a rock in the King Williams Town district, Eastern Cape (3227Cd). Several dried-out egg shells, presumably from a previous season, were also found under this rock, suggesting that the same or other female skaapstekers had used the nest site previously (Hall, pers. obs.). Broadley (1983, *FitzSimons' Snakes of Southern Africa*,

Delta Books, Johannesburg) noted that 35-42 days is the usual incubation period. Creighton & Haagner (*op. cit.*) recorded an incubation period of 37 days, with no evidence of parental care. Although Broadley (*op. cit.*) refers to the female incubating her eggs, the term "guarding" (Campbell & Quinn, 1975, *J. Herpetol.* 9: 229-233) is a better term describing egg attendance behaviour.

Whether or not the grooming behaviour observed in the gravid female is directly related to her advanced gravidity is unknown. Steehouder (1984, *Literature Serpentinum* 4(3/4): 90-103) reported similar behaviour in captive *Psammophis subtaeniatus sudanensis* and *P. sibilans* which he refers to as "polishing behaviour". The Moroccan psammophine *Malpolon monspessulanus* also grooms itself, especially shortly after sloughing, and often shortly after swallowing prey; these snakes possess a special nasal gland, the secretion of which appears to retard water loss through the skin (Dunson, Dunson & Keith, 1978, *J. Exp. Zool.* 203: 461-473).

Submitted by: R.J. HALL, G.V. HAAGNER and W.R. BRANCH (Port Elizabeth Museum, P.O. Box 13147, Humewood 6013, South Africa).

AMBLYODIPSAS POLYLEPIS POLYLEPIS

Purple-glossed Snake

DIET

At 09h00 on 3 December 1993 a large (about 80 cm long) *Amblyodipsas p. polylepis* was seen approaching and attacking an *Acontias plumbeus* (about 32 cm long) on a path in the Bangazi Trails Camp, Eastern Shores of St Lucia, Zululand (2732Ba). The lizard defended itself by biting the snake several times, but after biting the lizard on the neck and forebody three times, the snake seized its prey by the head and moved backwards under leaf litter on the coastal forest floor flanking the path, pulling the lizard with it. Only the snake's head showed from the leaf litter during the successful swallowing process. The weather was overcast following a rainy night. Broadley (1971, *Occ. Pap. Natn. Mus. Rhod.* B4(33): 651-652) recorded burrowing snakes and terrestrial lizards, but not *Acontias* spp., as prey items of *A. p. polylepis*. Bourquin, Vincent & Hitchins (1971, *The Lammergeyer* 14: 25) recorded *A. plumbeus* as a prey item, but did not provide specific details.

Acknowledgement: A series of colour positive photographs were taken of the event, from which Dr O. Bourquin (Natal Parks Board, Pietermaritzburg) kindly identified the reptiles involved.

Submitted by: P.E. JENNINGS (P.O. Box 13062, Cascades 3202, South Africa).

ELAPIDAE

HEMACHATUS HAEMACHATUS

Rinkhals

DICEPHALISM

On 5 January 1950 an adult female *Hemachatus haemachatus* was killed near Bethlehem in the Orange Free State (28°14'S, 28°18'E; 2828Ac). The carcass was collected and dissected by Dr J.N.W. Loubser who found the female to be gravid. The oviducts and embryos were deposited in the herpetological collection of the Transvaal Museum, Pretoria (TM 22161). There were 19 embryos in the left oviduct and 18 in the right. One embryo was dicephalic. The head was divided at the 4th ventral with the fusion at the 5th upper labial on the right head and the 6th upper labial on the left head; a communal lower jaw was present. The head measured: length - left 10,5 mm, right 8,8 mm; width - left 7,1 mm, right 7,2 mm; embryo mass 2,8 g. It also had a communal anterior body which formed a double U-shape to both sides to split into two separate tails, the left measuring 67 mm and the right 72 mm. The "snakes" could be described as "Siamese twins". Both tails had everted hemipenes. Colour an overall grey-brown with distinct white bands. Dicephalism has been reported for various oviparous South African snake species. Haagner & Van Rhyn (1991, *The Naturalist* 35(3): 3-5) reported dicephalism in *Lamprophis fuliginosus* and *Crotaphopeltis hotamboeia*, while Haagner & Boycott (1993, *J. Herpetol. Assoc. Afr.* 42: 39) recorded a dicephalic hatchling *Lycophidion c. capense* from Swaziland. This appears to be the first report on dicephalism in a viviparous African snake.

Acknowledgements: Mr W.D. Haacke for permission to work on the herpetological collection of the Transvaal Museum, Pretoria; and Ms S. Ritter for assistance.

Submitted by: G.V. HAAGNER (Port Elizabeth Museum, P.O. Box 13147, Humewood 6013, South Africa).

NAJA HAJE ANNULIFERA

Egyptian Cobra

DIET

A non-banded *Naja haje annulifera* was killed at a small river near a dam in wooded miombo grassland in the intensely farmed Karoyi area of Zimbabwe (29°35'E, 16°35'S; 2916Da) on 3 April 1994. Cobras and mambas, together with birds, rodents and other mammals, are common in the area. The cobra was 2,1 m long and in good physical condition. Its stomach contained two Leopard Tortoises (*Geochelone pardalis*), one in an advanced state of decomposition and the other still intact (95 mm long, 70 mm wide). There were no other food items in the stomach. Only one other case of predation by a snake on a chelonian is known to the author - that of a Puff Adder (*Bitis a. arietans*) eating a Leopard Tortoise (*Geochelone pardalis*) (Wilson, 1965, *Puku* 3: 149-170).

Submitted by: C. MACKIE (P.O. Box CY 1409, Causeway, Harare, Zimbabwe).

GEOGRAPHICAL DISTRIBUTION

African Herp News published brief notices of new geographical distributions (preferably at least 100 km from the nearest published record) of reptiles and amphibians on the African continent and adjacent regions, including the Arabian peninsula, Madagascar, and other Indian Ocean islands.

A standard format is to be used, as follows: **SCIENTIFIC NAME**; **Common name** (see Life History Notes); **Locality** (country, province or state, location, quarter-degree grid unit and latitude and longitude if available; use metric distances); **Date** (day, month, year); **Collector(s)**; **Place of deposition and accession number** (required); **Comments** (including data on size, colour and scalation, especially for taxonomically problematic taxa; and nearest published record/s in km; references to be quoted in text); **Submitted by:** NAME, address (in brackets). Observation records are acceptable only in exceptional circumstances (as in the case of large or easily identifiable reptiles, e.g. pythons, tortoises). Records submitted should be based on specimens deposited in a recognised institutional collection (private collection records are discouraged).

AMPHIBIA

ANURA

BUFONIDAE

BUFO LEMARII Boulenger, 1901: Lemar's Toad; Namibia, Caprivi Strip, Shankara (17°58'36"S, 20°30'52"E; 1720Dc); 20 January 1994; W.R. Branch & A. Channing; Port Elizabeth Museum, PEM A2585. Collected on road at night in mopane savanna. Snout-urostyle length 54,3 mm, tibia length 24,7 mm, mass 16,6 g; light brown overall colour with distinct, elongated (13,1 mm) parotid glands; snout pointed with *Rana*-like appearance; dark inter-orbital bars present, not meeting mid-dorsally; pale median stripe from snout to vent. This species remains a rarity in museum collections. It has been recorded from the Zambezi River and Okavango Swamps (Haacke, 1982, *J. Herpetol. Assoc. Afr.* 27: 11-12), and Poynton & Broadley (1988, *Ann. Natal Mus.* 29(2):447-490) listed three localities in Botswana; the species is more widespread in Zambia, Angola and Zaire. Channing & Griffin (1993, *Madoqua* 18(2): 101-116) listed *B. lemarii* as being of likely occurrence in Namibia. The Shankara record confirms its presence within the political boundaries of the country.

Acknowledgements: The Namibian Ministry of Wildlife, Conservation and Tourism for permission to collect in Namibia; Dr M. Griffin for his assistance.

Submitted by: W.R. BRANCH, G.V. HAAGNER (Port Elizabeth Museum, P.O. Box 13147, Humewood 6013, South Africa) and A. CHANNING (Department of Biochemistry, University of the Western Cape, Private Bag X17, Bellville 7535, South Africa).

HYPEROLIIDAE

HYPEROLIUS MARMORATUS MARGINATUS Peters, 1854: Margined Reed Frog; Zimbabwe, Hwange National Park, three localities: (1) Manzimbomvu Pan (1826Cc); 17-18 December 1993; D.G. Broadley and G.S.A. Rasmussen; Natural History Museum

of Zimbabwe, Bulawayo, NMZB 12931-34, 12948-51; (2) Bembesi Pan (1826Dc); 23 December 1993; D.G. Broadley, G.S.A. Rasmussen and R. de Bourbon; NMZB 13100-09; (3) 2,5 km E of Dom Pan (1826Db); 30 December 1993; G.S.A. Rasmussen; NMZB 12774. First records for the Hwange National Park, representing a 250 km WSW range extension from Lusulu, just south of Chizirira National Park (Poynton & Broadley, 1987, *Ann. Natal Mus.* 28(1): 161-229). Frogs from Manzimbomvu Pan called from waterlily pads and other emergent vegetation, while those at Bembesi Pan and near Dom Pan called from grass (*Panicum subalbidum*, *Brachiaria fubata* and *Echinochloa colonum*) in a flooded vlei. The subspecies to the north, *H. m. rhodesianus* Laurent, inhabits *Phragmites* reed-beds along the Matetsi River. No *Hyperolius* were found in the Deka and Lukosi river systems in the north of Hwange National Park, where reedbeds were scarce.

Submitted by: D.G. BROADLEY and G.S.A. RASMUSSEN (Department of Herpetology, Natural History Museum, P.O. Box 240, Bulawayo, Zimbabwe).

REPTILIA

SAURIA

CHAMAELEONIDAE

BRADYPODION SETAROI Raw, 1978: Setaroi's Dwarf Chameleon; South Africa, Kwazulu Natal, Madlangula, Kosi Bay Nature Reserve (26°56'S, 32°50'E; 2632Dd; 28 m a.s.l.); 29 October 1992; R. Kyle; Port Elizabeth Museum, PEM R8498. Large gravid female measuring 119,7 mm (63,5 mm SVL + 56,2 mm tail length); mass 5,6 g; head length 18,5 mm; eye diameter 4,74 mm; 9 prominent conical tubercles along dorsal ridge. Four fertile ova present, two in each oviduct, measuring on average 7,83 x 6,26 mm; much larger litters were reported by Haagner (1989, *Lammergeyer* 40: 42-46) and Haagner & Els (1986, *Lammergeyer* 37: 14-21). Range extension of approx. 35 km and the most northerly record to date. *B. setaroi* has also been collected 4,3 km S of Lake Sibayi (TM 48144) and may be expected to occur in southern Mozambique.

Acknowledgements: The Kwazulu Bureau of Natural Resources for accommodation and permission to collect; and the Kyle family for pleasant hospitality.

Submitted by: G.V. HAAGNER, W.R. BRANCH (Port Elizabeth Museum, P.O. Box 13147, Humewood 6013, South Africa) and R. KYLE (Kosi Bay Nature Reserve, P.O. Box 43, Kwangwanase 3973, South Africa).

SCINCIDAE

MABUYA HOMALOCEPHALA SMITHII (Gray, 1845): Smith's Red-sided Skink; South Africa, Eastern Transvaal, Farm Malta, Legalameetse Nature Reserve, District Letaba 2 (24°10'08"S, 30°14'57"E; 2430Aa); 30 December 1993; G.V. Haagner: Collected under an old drum used as a dustbin at the public picnic site in Acocks' veld type no. 8 - North-eastern Mountain Sourveld (Acocks, 1988, *Mem. Bot. Surv. S. Afr.* 57: 1-146). Adult female with snout-vent length of 58 mm, tail length 12 mm (truncated), mass 6,2 g. Gravid female with 4 ova in right oviduct and 6 in left, measuring on average 3,86 x 3,32 mm. Rostral wider than high; nostril pierced near posterior margin; supranasal elongate; frontonasal broader than long; prefrontal separated by frontal; supraoculars 4; supraciliaries 5; upper labials 7; lower labials 7; subocular bordering lip between 4th and 5th upper labials; mental wide and narrow with concave posterior

margin; midbody scale rows 34. Overall brown colour with six longitudinal stripes extending from behind head to base of tail. This is only the fourth recorded specimen from the Transvaal, only the second from the Transvaal Drakensberg and the first from a protected area. Jacobsen (1989, *A herpetological survey of the Transvaal*, Unpublished Ph.D. thesis, University of Natal, Durban) recorded *M. h. smithii* from Iron Crown, Wolkberg (2429Bb). The colour and description of the Malta specimen is very similar to that described by Jacobsen (*op. cit.*), but the midbody scale row count of 34 is considerably higher than Jacobsen's counts of 29-30. *M. h. smithii* has a seemingly unusual distribution, with scattered populations in the E and NE Transvaal (Jacobsen, *op. cit.*) and NE and SE Orange Free State (De Waal, 1978, *Mem. nas. Mus., Bloemfontein* 1: 1-160), with the main body of distribution in the E and S Cape Province (FitzSimons, 1943, *Mem. Transvaal Mus.* 1: 1-528; Branch, 1990, *J. Herpetol. Assoc. Afr.* 37: 17-44). The taxonomy of *M. homalocephala* is confused and currently under revision (Branch & Broadley, in prep.). Reproductive data on *M. homalocephala* are scanty. The clutch of 10 eggs reported here is considerably larger than the clutches of two and three reported by Haagner, Branch & Hall (1993, *J. Herpetol. Assoc. Afr.* 42: 36). Visser (1975, *Zool. Afr.* 10(2): 215-217) recorded clutches of six eggs for *M. h. homalocephala* females from the western Cape Province.

Acknowledgements: The De Kock family for their hospitality; Dr W.R. Branch for confirming the identification and discussion on the problematic taxonomy.

Submitted by: G.V. HAAGNER (Port Elizabeth Museum, P.O. Box 13147, Humewood 6013, South Africa).

ACONTIAS GRACILICAUDA GRACILICAUDA Essex, 1925: Thin-tailed Legless Skink; South Africa, Natal, Weston Agricultural College (29°11'07"S, 30°02'03"E; 2930Aa), 1390 m a.s.l.; 23 January 1986; G. Lewitt; Transvaal Museum, Pretoria, TM 64710. One adult male; dorsal scales olive, markedly black-edged and infused with grey and black speckles; ventral scales immaculate off-white, subcaudal scales partially to wholly black-edged except near cloaca where black markings disappear. Found in a ploughed field planted to cowpeas on pallid, fine-grained soil in Highland Sourveld Grassland, veld type 44 (Acocks, 1988, *Mem. Bot. Surv. S. Afr.* 57: 1-146) on a NNE facing slope. Lambiris (1993, *Ann. Rep. Lambiris Herp. Coll.* 9(1): 52) recorded *A. g. gracilicauda* (AJL 2550) 1 km N of Leeuwkop Mountain, 24 km SSW of Newcastle (2729Dd). The Western Agricultural College and Leeuwkop localities are the first records for Natal (see Broadley & Greer, 1969, *Arnoldia Rhodesia* 4(26): 18-19; Branch, 1988, *Field Guide to the Snakes and other Reptiles of Southern Africa*, Struik, Cape Town), the nearest other records being Vrede, NE Orange Free State (2729Ac) (De Waal, 1978, *Mem. nas. Mus., Bloemfontein* 11: 1-160) and locus 2730Ad in the SE Transvaal (Jacobsen, 1989, *A herpetological survey of the Transvaal*, Unpublished Ph.D. thesis, University of Natal, Durban). The Weston locality is about 215 km south of the Orange Free State and Transvaal nearest localities.

Submitted by: O. BOURQUIN (Natal Parks Board, P.O. Box 662, Pietermaritzburg 3200, South Africa).

LACERTIDAE

PEDIOPLANIS LINEOCELLATA LINEOCELLATA (Duméril & Bibron, 1839): Spotted Sand Lizard; Zimbabwe, Mashava District, Gaths Mine (2030Ba); 2 February 1994; T.C. Masango; Natural History Museum of Zimbabwe, Bulawayo, NMZB 13219. One hatchling collected at about 10h30 on scrub-covered red soil near asbestos dump; the specimen agrees in colour pattern with juveniles from Botswana, including NMZB-UM 13097 from 15 km SSE of Nata. A grey adult, believed to be of the same species, was seen in the area but was not captured. The Gaths Mine locality represents the first record for Zimbabwe, being 250 km north of the nearest Transvaal records, just south of the Limpopo River (Jacobsen, 1989, *A herpetological survey of the Transvaal*, Unpublished Ph.D. thesis, University of Natal, Durban) and 450 km east of the nearest Botswana records (unpublished data).

Submitted by: **D.G. BROADLEY** and **T.C. MASANGO** (Department of Herpetology, Natural History Museum, P.O. Box 240, Bulawayo, Zimbabwe).

SERPENTES

COLUBRIDAE

AMBLYODIPSAS CONCOLOR (A. Smith, 1849): Natal Purple-glossed Snake; South Africa, Transkei, District Umzimvubu, Mtumbane, second beach south of Port St Johns (31°38'S, 29°34'E; 3129Da; 14 m a.s.l.); 30 December 1989; G.V. Haagner; Transvaal Museum, Pretoria, TM 69016. Young adult male found coiled under a stone in coastal forest at 09h15. Total length 472 mm (402 mm SVL + 70 mm tail length); mass 36,7 g; ventrals 151; subcaudals 27; upper labials 7 (3rd and 4th entering orbit); lower labials 7 (first 4 in contact with anterior chin shields); temporals 0+1+1; anal divided. This remains a poorly known species represented by less than 30 specimens in museum collections. Broadley (1983, *FitzSimons' Snakes of Southern Africa*, Delta Books, Johannesburg) recorded only two localities in Natal, Durban being the most southerly record. The new record extends the known distribution of the species approx. 240 km further south and is the first for the Transkei.

Submitted by: **G.V. HAAGNER** (Port Elizabeth Museum, P.O. Box 13147, Humewood 6013, South Africa).

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VENOMS AND SNAKEBITE

African Herp News publishes brief notes on the venoms, symptoms and treatment of envenomation from snakes of the African continent and adjacent regions, including the Arabian peninsula, Madagascar, and other islands in the Indian Ocean.

Notes should be submitted in abbreviated form, following where possible the format of 'Life History Notes'. The onset of symptoms and treatment should be given from the time of the bite. Circumstances relating to the bite should be listed, but only important details given. Reports containing unusual features or new information will be given preference. Information on bites by the rare venomous species, or those previously considered non-venomous or innocuous, are particularly important.

COMMENTS ON VENOMS AND SNAKEBITE REPORTS

R.S.M. Blaylock

*Group Specialist General Surgeon, Goldfields of South Africa
 Private Bag X2011, Carletonville 2500, South Africa*

I was glad to see another excellent article on Black Mamba envenomation in a recent issue of the H.A.A. Journal (Durrant & Haagner, 1992, *J. Herpetol. Assoc. Afr.* 41: 46). However, I would like to raise a few points:

1. The article by Louw (1967, *S. Afr. Med. J.* 41(45): 1175) concerns two elapid bites, but by no means *proven* Black Mamba bites.
2. Pressure immobilisation as quoted in the recent Black Mamba case (Haagner, 1990, *J. Herpetol. Assoc. Afr.* 37: 59) and a recent Green Mamba case (Patterson & Morgan, 1986, *J. Herpetol. Assoc. Afr.* 31: 14-15) did not show any benefit in comparison to other Black and Green Mamba bites respectively. Early systematic envenomation and times of peak illness were not delayed. Neither was there benefit in the *Naja mossambica* case (Haagner, 1988, *J. Herpetol. Assoc. Afr.* 35: 40). Neurotoxicity does not occur in these cases and bites without any treatment whatsoever may not develop gangrene in spite of the presence of local swelling (and hence envenomation).
3. "This is the largest recorded administration of antivenom for any southern African bite", i.e. 190 ml, is untrue. Amounts of 190 ml (Blaylock, R.S., Lichtman, A.R. & Potgieter, P.D., 1985, *S. Afr. Med. J.* 68: 342-344) and 200 ml (Blaylock, R.S., 1982, *Cent. Afr. J. Med.* 28(1): 1-10) have been recorded.
4. Lastly, I suggest that any poisonous snake bite cases, and not just special ones, be published. There are too few in print to make out the correct natural history of many snake bites whether treated or not.

Editor's Note: Authors of Venoms and Snakebite Reports should take note of Stephen Spawls' suggestions regarding the writing of snake bite case histories (see *African Herp News* 18: 4-6).

FROM THE PRESS:

TORTOISE WITH A DIFFERENCE...

(Vista, 14 January 1994)

Luky Whittle

A white tortoise made its appearance at the Riebeeckstad home of Mrs Karen Oliemans last week, unintentionally causing her a lot of stress.

When she was in her house on Thursday afternoon, she heard the dogs outside, barking their heads off. Wondering what could be amiss, she rushed outside to find one of her dogs holding the white terrestrial reptile of the order Chelonia in its mouth and trying to get a grip on it with its teeth, to the deafening barks of the other canine.

Horrified, Mrs Oliemans rescued the tortoise, locked it into the courtyard after providing it with a lettuce leaf to chomp on and phoned the SPCA but the staff had gone home.

She then phoned the vet and asked him to tell her all about tortoises and how to treat them. He burst out laughing and said he had no idea. At her wits' end, she decided to phone Vista, who, she says, always know everything. A reporter answered her call and became extremely excited at the news, convinced Mrs Oliemans had located a rare albino tortoise which would be a first for the Goldfields.

When Mr Oliemans came home, however, he informed his wife that the tortoise was one of the common or garden variety and that some prankster had painted it white. "I felt such a fool!" she says. Her embarrassment soon gave way to anger when she realised that paint contains lead, a healthy dollop of which, when inhaled through the porous shell of the tortoise, may cause poisoning.

All is well that ends well. Mrs. Oliemans got hold of the SPCA who in turn contacted Nature Conservation.

Confident that the visitor is in good hands, therefore, Mrs Oliemans - and her dogs - are able to sleep again at night.

DAAR WAS 'N SLANG IN DIE PAD

'Besoeker' se kuier kortgeknip

(Vista, 4 February 1994)

Trudie Bona

'n Giftige boomslang, wat in Welkom onder 'n motor beland het, het vermoedelik in 'n vrugtekrat uit warm boomryke gebiede in die Oos-Vrystaat, Natal of Noord-Transvaal na Welkom gekom.

"Dit is al logiese oplossing waaraan ek kan dink," sê mev Rina van den Heever, 'n slangkenner van Welkom. Dié boomslang is eers deur mnr Roelof Byliefeld, wat per ongeluk daaroor gery het, as 'n mamba aangesien, omdat dit grasgroen was.

Mnr Byliefeld sê hy was verlede Donderdagaand van die kafee na sy huis onderweg toe hy in Brutuslaan, Bedelia, oor die slang gery het. Die slang was ongeveer 1,4 meter lank

en het nog geleef toe hy stilgehou het. Mev Van den Heever sê die slang se gif is egter net so gevaarlik as dié van 'n mamba en tas die mens se slymkliere en bloedselle aan. "Swart kolle slaan gewoonlik na 'n paar ure op die vel uit en as dié toestand intree, is dit amper te laat.

"'n Boomslang se skubbe is met swart omlin en die binnekant van sy bek vleeskleurig terwyl die binnekant van 'n mamba se bek swart is. Boomslange is egter nie aggressief nie en sal 'n mens slegs aanval as dit bedreig voel, byvoorbeeld as 'n mens tussen hom en sy nes kom.

"'n Boomslang pik nie, maar moet 'n mens letterlik byt, omdat sy tande agter in sy boonste kaak is," sê sy.

REPTILE FIND MIGHT BE LIZARDS' 'MISSING LINK'

(Sunday Times, 10 July 1994)

Diana Streak

The startling discovery of a previously unknown black lizard in a remote "time capsule" in the Hottentots-Holland Mountains has scientific circles abuzz.

Dr Le Fras Mouton, herpetologist at the University of Stellenbosch and curator of the Ellerman Museum at the Department of zoology, found the primitive 15 cm-long reptile while in the field collecting another species.

"I thought it was just a juvenile of the kind which I had brought back to photograph," he said. "But when I opened the bag here I realised this was something totally different."

The "new" lizard belongs to a family that existed 10-million years ago. Dr Mouton believes it is a "missing link" to pre-historic species. "For lizard-loving people it's very significant, because it provides the missing link in the family tree."

Dr Mouton said the area is like a "filing cabinet" in that small populations of primitive species which have become extinct elsewhere, found refuge there.

"It's like paging backwards through a history book," Dr Mouton said, describing the range of species that have survived in the area, the exact location of which he is keeping a secret: "The greatest danger is other scientists."

The area where he found the lizards - a member of the genus *Pseudocordylus*, or crag lizard, is just half a hectare in extent. Previously unknown snails discovered by colleague Dr Willem Sirgel exist in an area the size of a large room.

The lizards are nearly pitch black except for tiny yellow spots, an adaptation to the lack of sunlight caused by the misty conditions, which enables them to absorb more heat as they are coldblooded.

The lizard is exceptionally small for a crag lizard and Dr Mouton said their reproductive system and particular glands on their skin were just two features that set them apart.

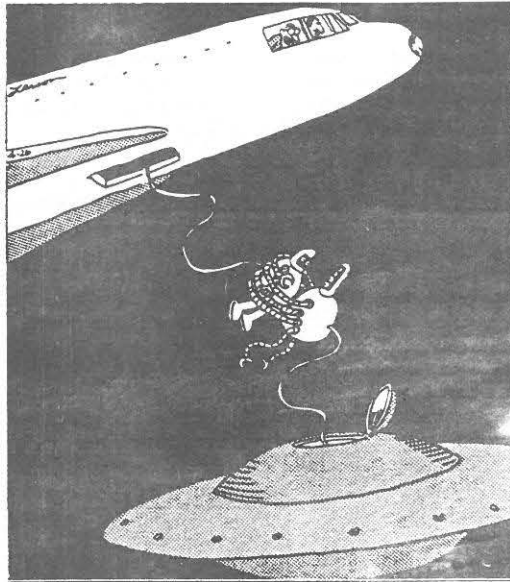
The snails, also a primitive species found nowhere else in the world, are black as well. These species have survived here because mountains provide a refuge in that the animals can move up and down the slope when climatic changes occur over thousands of years, and still remain in the same environment.

Dr Mouton, who had previously discovered two new kinds of gecko, has the honour of naming the lizard - Latin for "the lizard that lives in the clouds".

The discovery has again drawn attention to the unique fauna of the Hottentots-Holland Mountains, but more importantly "to the gap in our knowledge of the fauna in the Western Cape mountains in general," Dr Mouton said.

University researchers believe the present knowledge of lower vertebrates and invertebrates of the Western Cape mountains is so poor that a definite plan should be made to improve the situation.

From a conservation point of view they are deeply concerned about the future of these small, isolated populations, as indiscriminate burning on their natural habitat could easily lead to extinction.



"We've done it! They've linked up! ... Man, Feldman must be freaking out - he even hates spiders."

PAAZAB - A BRIEF DESCRIPTION

Pan African Association of Zoological Gardens, Aquaria and Botanical Gardens, P.O. Box 87692, Houghton 2041, South Africa

The Pan African Association of Zoological Gardens, Aquaria, and Botanical Gardens (PAAZAB) was formed in 1989 and formalized in 1990. It is an Africa-wide voluntary association not for gain, initiated in South Africa.

Its purpose is to "...coordinate, represent and promote the interests of zoos, aquaria and botanical gardens at national and international level". It is a regional member of the World Zoo Organization, otherwise known as the International Union of Directors of Zoological Gardens (IUDZG) and of the Captive Breeding Specialist Group (CBSG) of the World Conservation Union (IUCN). It has also been recognized by the American Association of Zoological Parks and Aquaria (AAZPA), whose 125 North American members hosted between them 105 million visitors in 1991, or one in every three persons in the U.S.A. and Canada. In 1993 PAAZAB was awarded the Chicago Zoological Society's *International Zoological Achievement* award together with prize money of US \$8333.00.

PAAZAB's membership has grown steadily since its launch in 1990. Full membership is limited to permanent establishments open to and administered for the public to provide education, recreation and cultural enjoyment through the exhibition, research, conservation and preservation of animals and plants. Twenty-one institutions from ten African states (Cameroon, Ivory Coast, Madagascar, Malawi, Mocambique, Morocco, Namibia, South Africa, Zaire, Zimbabwe) presently make up PAAZAB's full members. Fourteen associate members and 200 individual members from the U.S.A., Canada, Zaire, Malawi, South Africa, France, Madagascar, Senegal, Tunisia, Algeria and Egypt make up the balance of membership.

Individual membership of PAAZAB is open to any interested person. Annual membership fee is presently R60,00 for members of the public and R35,00 for staff members of institutions which are Full Members of PAAZAB. A PAAZAB Bulletin is produced twice annually and contains news about its members and the zoo/aquaria business in general in Africa.

Full Members of PAAZAB host between them about 10 million visitors annually and employ about 4000 people.

PAAZAB "AFRICAN ZOOHELP" FUND

Humans throughout Africa have been migrating towards towns and cities by their millions. Perhaps as much as 60-70% of sub-Saharan Africa's human population is now urbanized, living under poor and squalid conditions. Civil wars, economic failures and natural disasters have been driving this.

For these tens of millions of Africans, nature and wildlife is irrelevant to their day to day lives. Africa's people of tomorrow have almost no value for it. The only opportunity they have to experience it in their own personal lives is to visit a local, affordable and accessible zoo or aquarium. Such facilities have an enormous and crucial role to play in education and recreation if Africa's rich and special wildlife is to survive its present journey toward marginalisation.

The PAAZAB African ZooHelp fund has been established to enable the provision of training in zoo/aquarium management, marketing and education, and in proper animal care and husbandry, to zoos in Africa. Such training, advice and guidance can be given by the larger and more established zoos/aquaria in Africa, provided the additional funding required for this is available. The focus is not on evacuating zoo animals to other places, but rather to provide on-site training to improve, stabilise and advance local zoos and aquaria so that they can, effectively and ethically, fulfill the above roles. Evacuation is a last resort only.

Your donation, of any amount no matter how small, will be put to wise and responsible use, as indicated above, for the future of nature and wildlife in Africa. Donations should be sent to PAAZAB Zoohelp, P.O. Box 87692, Houghton 2041, South Africa (Tel: [011] 646-2000). Thank you for your support.

FROGLOG

Newsletter of the World Conservation Union (IUCN), Species Survival Commission (SSC), Declining Amphibian Populations Task Force (DAPTF) and Center for Analysis of Environmental Change (CAEC). Available to interested parties upon request.

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Focus

This week we continue our series from the prestigious National Geographic international lifestyle magazine. Each week the Geofacts feature looks at a specific aspect of our world, from wildlife to wars, history to human physiology. Each topic is illustrated with top class graphics and each information-byte presented in an easy-to-read, clean, interesting format. We think teachers and students will find this series invaluable ... and we know the rest of our readers will find it fascinating.

NATIONAL GEOGRAPHIC

GEOFACTS

Why are frogs and toads disappearing?

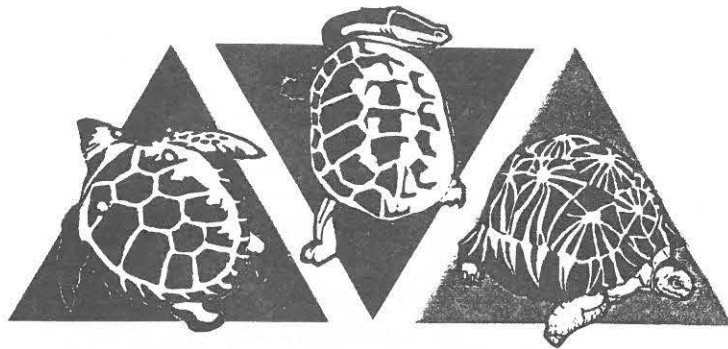
Frogs, toads and other amphibians are vanishing by leaps and bounds from all six continents in which they are found. Drastic die-offs have been reported in at least 25 countries.

Scientists blame human interference with ecosystems for a major part of the mysterious global decline. Whether the phenomenon will continue or populations will eventually rebound is uncertain, according to the U.S.-based Declining Amphibian Populations Task Force.

In some places, embryos are dying; in others, the adults are missing. Costa Rica's golden toads, which mate en masse, have not been spotted since 1989. Australian gastric brooding frogs are extinct.

Leopard-frog numbers are dropping in the Rocky Mountains and in the prairies of the United States and Canada where wetlands are being drained. The western toad in the North American wilderness may be a victim of increased ultraviolet radiation related to ozone depletion.

BILL PITZER / National Geographic News Service
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BIODIVERSITY AND CONSERVATION OF AFRICAN HERPETOFAUNA

You are cordially invited to attend the *Fourth H.A.A. Symposium on African Herpetology*, to be held at St Lucia, Kwazulu Natal, South Africa, from 30 October to 2 November 1995. This will be the first H.A.A. Symposium with an official theme, which includes such topics as taxonomy, genetics, distributions, population sizes, species richness, threats to species/populations, conservation measures and wise use of herpetofaunal resources, but presentations on any aspect of African herpetology are welcome.

St Lucia village is set in the Greater St Lucia Wetland Park, next to the St Lucia estuary. There will be formal sessions, an annual general meeting, social functions, a boat trip on the Lake, and a tour of the Natal Parks Board Crocodile Centre. Arrangements can be made for visits to other Lake stations, or to nearby game reserves such as Hluhluwe, Umfolozi or Mkuzi. Anglers can also use free time to fish in the estuary or the sea.

ACCOMMODATION

Accommodation is available in St Lucia village. Tariffs range from R40,00 to R100,00 (US \$ 12-30) per night.

PAPERS, POSTERS AND SLIDE SHOWS

Presentations should be made in English. Time allowed is 15 minutes, plus 5 minutes for discussion. Please use the Intention Form on page 37 to indicate provisional titles of presentations.

IMPORTANT DATES

Intention Form: Complete and return by 31 December 1994.
Second Announcement and call for Abstracts: February 1995.

ENQUIRIES AND ADDRESS FOR INTENTION FORMS

Dr O. Bourquin
H.A.A. SYMPOSIUM COMMITTEE
Natal Parks Board
P.O. Box 662
Pietermaritzburg
3200
South Africa

Tel. (0331) 471961
Fax. (0331) 471037

Further details regarding the Symposium, including the Second Announcement and Call for Abstracts, will be published in the next issue of *African Herp News*.

FOURTH H.A.A. SYMPOSIUM ON AFRICAN HERPETOLOGY

ST LUCIA

30 OCTOBER TO 2 NOVEMBER 1995

INTENTION FORM

Kindly complete this form and return by 31 December 1994 to:

*Dr O. Bourquin, H.A.A. SYMPOSIUM COMMITTEE, Natal Parks Board,
P.O. Box 662, Pietermaritzburg 3200, South Africa*

Name (and title): _____

Postal address: _____

_____ Code: _____

Tel. (home): (____) _____ work: (____) _____

Fax: (____) _____

- 1) I am interested in attending the following days of the symposium and would like to receive further information (tick appropriate space):
30th _____ 31st _____ 1st _____ 2nd _____
- 2) I will be presenting a PAPER. If yes, please provide provisional title/s.
YES _____ NO _____
- 3) I will be presenting a POSTER. If yes, please provide provisional title/s.
YES _____ NO _____
- 4) I will be presenting a SLIDE SHOW. If yes, please provide provisional title/s.
YES _____ NO _____
- 5) Do you wish us to organise accommodation for you?
YES _____ NO _____
- 6) Will you be going on the boat trip?
YES _____ NO _____
- 7) Do you want information on post-symposium tours?
YES _____ NO _____

PLEASE RETURN BY 31 DECEMBER 1994

HERPETOLOGICAL ASSOCIATION OF AFRICA
ANNUAL FINANCIAL STATEMENTS
28 FEBRUARY 1994

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The annual financial statements set out on pages 1 to 3 were approved on 1 July 1994 and are hereby signed to that effect.


.....
CHAIRMAN


.....
TREASURER

S **SELVAN PILLAY**

Chartered Accountants (S.A.)
incorporating D'ABBADIE & PARTNERS

Our Ref:

Your Ref:

REPORT OF THE AUDITORS TO THE MEMBERS
HERPETOLOGICAL ASSOCIATION OF AFRICA

We have examined the annual financial statements set out on pages 2 and 3. Other than as explained in the following paragraph, our examination included such audit procedures as we considered necessary.

In common with similar organisations, it is not feasible for the association to institute accounting controls over collections from subscriptions and fund-raising projects prior to the initial entry of collection in the accounting records. Accordingly, it was impracticable for us to extend our examination beyond the receipts actually recorded.

Subject to the effect of any adjustment which may have been necessary had it been possible for us to extend our examination of receipts, in our opinion, the Financial Statements fairly present the financial position of the organisation at 28 February 1994 and the results of its operations for the year then ended in accordance with Generally Accepted Accounting Practice.



SELVAN PILLAY
Chartered Accountants (S.A.)
INCORPORATING D'ABBADIE & PARTNERS

DURBAN
1 July 1994

HERPETOLOGICAL ASSOCIATION OF AFRICA
BALANCE SHEET
28 FEBRUARY 1994

	1994	1993
	R	R
FUNDS EMPLOYED		
ACCUMULATED FUND		
Balance at beginning of year	23 343	15 211
Net Surplus for the year	7 809	8 132
	-----	-----
	31 152	23 343
	*****	*****
EMPLOYMENT OF FUNDS		
CURRENT ASSETS		
UBS - Bloemfontein	101	306
UBS - Durban	15 016	10 468
Standard Bank - Bloemfontein	13 870	12 168
Cash on hand	170	168
Volksskas - Durban	1 986	--
	-----	-----
	31 152	23 343
	*****	*****

HERPETOLOGICAL ASSOCIATION OF AFRICA
INCOME STATEMENT
FOR THE YEAR ENDED 28 FEBRUARY 1994

	1994	1993
	R	R
INCOME		
Interest	1 745	2 212
Sales of Journals	330	432
Subscriptions	13 050	8 793
Symposium	10 524	6 000
Donation	--	--
	-----	-----
	25 649	17 498
	*****	*****
EXPENSES		
Audit fees	389	385
Symposium	6 561	--
Journals	3 630	7 015
Newsletters	1 011	1 384
Postage, photocopies and telephone	--	--
	-----	-----
	17 840	9 386
	*****	*****
NET SURPLUS FOR THE YEAR		
	7 809	8 132
	*****	*****

HERPETOLOGICAL ASSOCIATION OF AFRICA
MEMBERSHIP FEES AS AT 1 JANUARY 1994

AFRICAN MEMBERSHIP

ORDINARY MEMBERSHIP

1 year membership R40.00. Submit in Rand or equivalent U.S. Dollar plus 10%.
3 year membership R110.00. Submit in Rand or equivalent U.S. Dollar plus 10%.

SCHOLARS MEMBERSHIP

1 year membership R30.00. Submit in Rand or equivalent U.S. Dollar plus 10%.

OVERSEAS MEMBERSHIP

DOLLAR PAYMENTS

1 year membership \$25.00. Submit in U.S. Dollars by personal cheque or money order.
3 year membership \$70.00. Submit in U.S. Dollars by personal cheque or money order.

RAND PAYMENTS FROM OVERSEAS

1 year membership R80.00. Submit in ZAR or Rand by bankers draft or money order.
3 year membership R220.00. Submit in ZAR or Rand by bankers draft or money order.

Owing to numerous banking problems, members are kindly requested not to submit payments directly to any Building Society or Bank account. All payments must be submitted directly to:

THE SECRETARY/TREASURER
HERPETOLOGICAL ASSOCIATION OF AFRICA
P.O. BOX 20142
DURBAN NORTH
4016 REP. SOUTH AFRICA

PLEASE STATE IN WHICH YEAR YOU REQUIRE MEMBERSHIP TO BEGIN. MEMBERSHIP RUNS FROM 1 JANUARY TO 31 DECEMBER OF ANY YEAR. SHOULD MEMBERSHIP BE TAKEN OUT IN THE LATTER PART OF THE YEAR, YOU WILL RECEIVE ALL JOURNALS AND NEWSLETTERS PERTAINING TO THAT YEAR.