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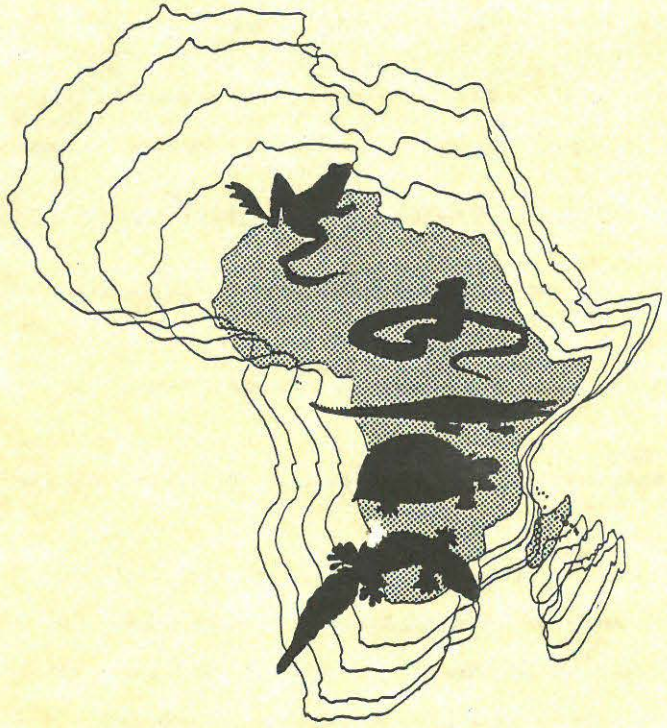
AFRICAN HERP NEWS

HERPETOLOGICAL ASSOCIATION OF AFRICA

NEWSLETTER



AUGUST 1990 NO. 13

AFRICAN HERP NEWS

NO. 13 AUG 1990

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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 technical articles- subject to peer review, notes, book reviews and bibliographies) and *African Herp News* (HAA Newsletter), which includes news items, husbandry hints, announcements, etc).

The closing date for the recent HAA Committee Election was 30 April 1990, but due to a tie in votes, this date was extended to 2 May. Only 14% of the membership (paid-up African members (persons) completed and returned their ballot papers. Votes were independently counted by the Electoral Officer and two persons not affiliated with the HAA, namely Mrs G. Bester and Ms E.A. de Villiers, both at the National Museum, Bloemfontein. All counts corresponded. The new Committee became functional in May 1990.

COMMITTEE OF THE HERPETOLOGICAL ASSOCIATION OF AFRICA

Chairman and Newsletter Editor
M.F. Bates, Herpetology Department, National Museum, P.O. Box 266, Bloemfontein, 9300.

Secretary and Treasurer
R.M. Douglas, Herpetology Department, National Museum, P.O. Box 266, Bloemfontein, 9300.

Journal Editor
W.R. Branch, Curator of Herpetology, Port Elizabeth Museum, P.O. Box 13147, Humewood, 6013.

Additional Committee Members
N.H.G. Jacobsen, Nature Conservation Division, P. Bag X209, Pretoria, 0001.

V.C. Carruthers, Windover Mountain Reserve, P.O. Box 368, Rivonia, 2128.

E.H.W. Baard, Jonkershoek Nature Conservation Station, Stellenbosch, 7600.

O. Bourquin, Natal Parks Board, P.O. Box 622, Pietermaritzburg, 3200.

Co-opted Journal Subeditor
R.C. Boycott, Malolotja Nature Reserve, P.O. Box 1797, Mbabane, Swaziland.

Honorary Life Members: Prof. J.C. Poynton, Dr Carl Gans, Dr D.G. Broadley.

EDITORIAL

I would like to start by thanking our past Chairman Johan Marais and his Committee for their hard work and dedication. During their term (1987-90), four Journals and three Newsletters were produced, and the Husbandry '88 Symposium was held at Delta Park. It is perhaps appropriate here to acknowledge the dedication of Bill Branch (Journal Editor since 1983) and Rod Douglas (Secretary and Treasurer since 1985).

As Chairman, I feel that my prime objective at this stage is to ensure that the *Journal* and *Newsletter* appear more frequently. At an HAA Committee meeting held on 4th August 1990 in Bloemfontein, a number of important decisions were made regarding the frequency and quality of HAA publications. Members can now look forward to receiving three Newsletters and two Journals per year for the 1990-92 period. I must point out, however, that the success of the Journal in particular, depends on the number and quality of contributions sent for publication. The quality of the Journal has improved enormously since the HAA was founded in 1965, and will continue to do so if herpetologists use it more regularly.

Members will be pleased to know that the *Proceedings of the Reptile Husbandry Symposium* (Delta Park, 1988) will be published in HAA Journal no. 38 and posted later this year. Dr Branch has prepared Journal no. 39, to be sent to members early next year. The next Newsletter will be posted in Nov/Dec.

More good news! The second *HAA Symposium on African Herpetology* will take place at the University of the Orange Free State in Bloemfontein from 8-11 April 1991 (see announcement on page 3). This is our second major Symposium and I sincerely hope that members will take this somewhat infrequent opportunity to be seen and heard.

African Herp News will be published tri-annually. Please do not hesitate to submit articles, notes or newspaper clippings (with the name of the paper, date and page) for inclusion. Hope you like the new format.

Mike Bates
Chairman/Newsletter Editor

ARREARS MEMBERSHIP FEES

After one membership renewal reminder and one account having being sent to H.A.A. members this year, many members are still more than a year in arrears with their membership fees.

Owing to financial pressures on publishing (H.A.A. Journal #37 has just been printed; #38 is in the final stages of editing and will be a glossy issue; #39 is ready for printing after #38; Newsletter #14 is being set at present and there is already almost enough material for #15), the time has again come to consolidate the H.A.A. Membership files. **All file members will receive Newsletter #13 but only those Overseas members who are paid up to the end of 1989 and African members who are paid up for 1990 will receive Journal #38 and future Journals and Newsletters.**

The generous H.A.A. policy of continuing to supply all publications to members who are not fully paid up, and in the hopes that they will some day settle their membership, puts a severe burden on the Association finances. Matters have now reached a stage where at a Committee Meeting held on the 4 August 1990, the Committee approved that **members falling more than 18 months behind with membership fees will not receive further Journals or Newsletters. Late payments (after 18 months) will constitute a rejoining of the Association and members will have to pay a rejoining fee of R10,00 (African Members) or $8,00 (Overseas Members).** Consideration will be given to overseas members for postal delays.

A ploy of some persons, is to not pay membership for two or three years (while still receiving publications), have their names removed from the files and then after a short period, reapply for membership, thus basically having had two or three years free membership. A list is kept of all previous members and the Committee has approved that such members will also **pay a rejoining fee of R10,00 (African members) or $8,00 (Overseas members).**

I will be the first to admit that errors may occur when typing in the accounts. Please do not be offended and upset but make a note of the mistake and return your account, whereupon it will receive immediate attention and mistakes rectified.

Rod Douglas
Hon. Secretary/Treasurer

SECOND HAA SYMPOSIUM ON AFRICAN HERPETOLOGY

C R SWART BUILDING
UNIVERSITY OF THE ORANGE FREE STATE
BLOEMFONTEIN

8-11 APRIL 1991

You are cordially invited to attend the second major symposium of the *Herpetological Association of Africa*, to be held in Bloemfontein. The first HAA Symposium (Stellenbosch 1987), which was attended by over 70 delegates, was a great success and 42 posters and papers were presented. Once again, there is no restrictive theme, and presentations on any aspect of *African herpetology* are welcome.

ACCOMMODATION

Block bookings will be made at the UOFS hostels as well as Unitas Herberg.

PAPERS AND POSTERS

You are invited to present a paper and/or poster. Please indicate your preference on the enclosed Intention Form and provide a *provisional title* if applicable.

IMPORTANT DATES

Please return the Intention Form before 31 October 1990.
Second announcement and call for abstracts - November 1990.
Final announcement and registration form - January 1991.
Final date for return of abstracts - 15 February 1991.

ENQUIRIES AND ADDRESS FOR INTENTION FORMS

HAA Symposium Organizer
Mike Bates
P.O. Box 266
Bloemfontein
9300, Republic of South Africa
Tel. (051) 479609

HAA Symposium Committee
Mike Bates, Rod Douglas and Alex Flemming
National Museum
P.O. Box 266
Bloemfontein, 9300

OBITUARY: Dr Vincent Atherstone Wager (1904-1989)

Dr Vincent A. Wager was born in Pietermaritzburg in 1904 and passed away on October 29th 1989, just a few days short of his 86th birthday. The HAA has lost a good friend in his passing.

Although Dr Wager was by training a plant pathologist, graduating from the Transvaal University College and completing his Doctorate at Wits, he was a stalwart of the old school which believed that a degree in the natural sciences meant that the graduate ought to know at least something in any and every aspect of natural history! As a true naturalist, therefore, he applied himself not only to the study of things around him but also in passing on to others the information he had gleaned. He published regularly in the popular press and took an active part in the Radio series "Looking at Nature". He became an ardent conservationist and was a founder member of the old "Natal Society" which later became the Natal Branch of the Wildlife Society in the running of which he took an active part. Through the Wildlife Society he published two booklets of herpetological interest- *The Frogs of South Africa* and *The Life of the Chameleon.* He also wrote and illustrated the book - *The Frogs of South Africa (1965),* which he revised as *Frogs of South Africa: their fascinating life stories* in *1986.*

He was a dedicated photographer who used this medium both as a means of recording data as well as disseminating information. Apart from innumerable colour slides, many of which were made up as shows with commentaries on magnetic tape (e.g. *Frogs of South Africa*), Dr Wager also experimented with both 8mm and 16mm movie film, producing, amongst others, two documentaries on chameleons - *Quite Harmless* and *The Life of a Chameleon.*
(A number of these have been made into videos - VHS format)

Some years ago he very generously offered The University of Durban Westville his slide and movie shows for copying onto video - waiving all copyrights and royalties provided the copies were used free for educational purposes. Twenty-one of these shows were copied for use in the Anthropology, Botany and Zoology Departments.

For a person with such an eye for nature, it is indeed sad to recall that Dr Wager suffered progressive blindness in his declining years. However, he remembered with pleasure the *Natal Branch of the H.A.A.* outing to Croc World and being shown around by Tony Pooley.

Dr Wager was associated with the Department of Agricultural and Technical Services for 39 years.

He is survived by his wife, Beth, and to her we offer our condolences and remembrances of a fine scientist and amateur herpetologist.

Submitted by: F.L. Farquharson, University of Durban Westville.

A REVISED CONSTITUTION FOR THE HERPETOLOGICAL ASSOCIATION OF AFRICA

Rod Douglas

National Museum, P.O. Box 266
Bloemfontein, 9300

A brief history:

The original Herpetological Association of Africa constitution was drawn up with the establishment of the H.A.A. in 1965 by Dr. Donald Broadley. However, given that the original constitution has remained unchanged over the last 30 years, it is hardly surprising that it has become outdated. This is perhaps particularly so in view of factors such as an Elected Committee, the concept of Branches and the holding of Symposia where Association matters can be discussed amongst members.

The necessity of revising the constitution was noted by Dr. Alan Channing (past Journal Editor) in 1980. Using the original constitution as a base, he made a gallant effort to kindle interest in a revised and updated constitution (*J. Herp. Assoc. Africa.* 22:1-2). In a later issue of the Journal Dr. Channing was to note that "only a few constructive comments were illicited from the latest attempt".

Mr. Attie van Wyk (past Chairman) confidently took up the cudgel again in *H.A.A. Newsletter* **5**:1 (where a history is given) and at the H.A.A. Symposium at Pietermaritzburg in 1985. At this time Mr. van Wyk stated that "the revision of the constitution is long overdue". He also referred to revision attempts as "another still-born baby of mother H.A.A.", and after being confronted with the same inertia that had confronted Dr. Channing, left office without being able to finalize the matter.

The present situation precipitating a revision of the constitution commenced in November 1987 when the Trustees of the late Dr. R.H. Lawrence (deceased October 1987; Obituary, *H.A.A. Newsletter* **12**:7-8) advised the H.A.A. that Dr. Lawrence had bequeathed the amount of R10,000.00 to the H.A.A. Matters were brought to a head in May 1988 when the Trustees of the estate requested, on behalf of the Master of the Supreme Court, documentation exempting the H.A.A. from tax on estate duty and donations. The H.A.A. did not posses neccessary documentation and with the payment of tax on the bequeathal facing the H.A.A., it was decided in June 1988 to apply for this exemption from the Commissioner of Inland Revenue. One of the stipulated requirements for obtaining exemption was a copy of the H.A.A. Constitution to be approved by the Commissioner of Inland Revenue. A further request for exemption certificates was received from the Trustees in September 1988.

During Sèptember/October a revised draft constitution was drawn up by myself and a copy sent to all Committee Members for comment. At the same time, in appreciation of Dr. Lawrence's bequeathal, the Secretary/Treasurer requested the H.A.A. Committee to approve Life Membership for his two sons, of which only one took advantage of the offer. Resulting comments from those Committee members who made the effort to reply were incorporated into the revised draft which was submitted to the Commissioner of Inland Revenue in November 1988. A cheque for the bequeathed amount was received in October 1988, with the distasteful prospect of a follow-up letter from the Receiver of Revenue claiming his share. In January 1989, the revised draft constitution was returned by the Commissioner with certain amendments and clauses to be included for acceptance by him. These changes were incorporated, and in February the constitution was finally accepted and the H.A.A. exempted from taxes on estate duty, investments and donations. Final binding copies were sent to all Committee members.

Unfortunately, due to the circumstances, H.A.A. members did not have the opportunity to participate directly in the revised constitution at the time, but will have the opportunity at the next H.A.A. Symposium (details of which will be found elsewhere in this Newsletter). **All persons who are fully paid-up Ordinary African Members and African Life members are cordially invited to submit to the Secretary in writing, any such amendments they may want to discuss, for inclusion in an agenda to be presented at the next Symposium. Amendments may be submitted now (preferably) or not later than 60 days before the date of the next Symposium. A copy of amendments received will be presented to all those attending the Symposium in the form of an agenda which will be strictly adhered to. No late amendments will be considered.**

A number of minor points for clarification have become apparent and you will be asked to vote on these and others at the Symposium. This is the only chance that Association members have to discuss and finalize such matters, so your co-operation is of particular importance. Please note clause 15.3 which reads; "Any amendments to this constitution will be submitted to the Commissioner of Inland Revenue, Pretoria, by the Committee" for approval.

It was decided by the presiding Committee at the time that the money from Dr. Lawrence's bequeathal would be kept separate from the general H.A.A. funds, and that it would not be used for the general day to day running of the Association, but only for extra-ordinary expenses approved by the Committee.

The revised and accepted constitution as approved by the Commissioner of Inland Revenue is presented below in its entirety.

CONSTITUTION OF THE

HERPETOLOGICAL ASSOCIATION OF AFRICA

(EST. 1965)

1. NAME

The name of the Association shall be -

HERPETOLOGICAL ASSOCIATION OF AFRICA

hereinafter referred to as the **Association**.

2. OFFICIAL MOUTHPIECE

The mouthpiece of the Association shall be the **JOURNAL OF THE HERPETOLOGICAL ASSOCIATION OF AFRICA (ISSN 0441-6651)** and the **H.A.A. NEWSLETTER (ISSN 0257-7054)**.

3. TERMINOLOGY

The term HERPETOLOGICAL, HERPETOFAUNA and HERPETOLOGY shall cover all reptiles, including snakes, lizards, tortoises, crocodiles etc. and all amphibians including frogs, toads etc.

4. AIMS, OBJECTIVES AND POLICY

4.1 GENERAL

4.1.1 The Association is a totally non-profit organisation dedicated to the study of reptiles and amphibians and in particular those of Africa.

4.1.2 To encourage the study of all aspects of herpetology both in nature and in captivity.

4.1.3 To foster a responsible and enlightened attitude towards all reptiles and amphibians amongst the public and Members of the Association.

4.1.4 To collect and exchange, *inter alia*, through the medium of the Association Journal and Newsletter, information on all aspects of the zoogeography, ecology and behaviour of the herpetofauna of Africa. To encourage the publication of this information in both scientific journals and popular literature.

4.1.5 To collate, publish and make available information of educational value to Association Members and the public at large, both inside and outside the Republic of South Africa.

4.1.6 The keeping of venomous and/or dangerous snakes by persons younger than 18 years of age and/or novices shall not be condoned or encouraged by the Association.

4.1.7 To raise money by means of membership fees, lectures, exhibitions, donations and publication of the Association's mouthpiece or in such a manner as the Association shall think fit for the purpose of furthering the aims and objectives of the Association.

4.1.8 To enter into formal or informal relationships with any other body with related aims, should such relationships further the aims of the Association.

4.1.9 To do all things which are incidental or conducive to the attainment of the above aims and objectives.

4.2 CONSERVATION POLICY

4.2.1 To encourage the protection and conservation of all species of herpetofauna and nature in general.

4.2.2 The Association shall co-operate and assist Public and Private Nature Conservation bodies wherever possible and the duly elected Committee shall at all times strive to maintain open channels of communication between the Association and these bodies.

4.2.3 Members issued with permits by the Public (Official) Nature Conservation bodies shall be responsible to both the Nature Conservation body and the Association for their actions and shall not bring the Association into disrepute with such bodies.

4.2.4 The Association will not encourage the keeping of private wet or other preserved collections by its Members and will encourage its Members to donate all dead specimens of South African herpetofauna to a legally recognised natural science or natural history institute which maintains such a collection.

5. MEMBERSHIP

The Association shall consist of the following classes of membership:

Honorary Life Members
Ordinary Members
Student Members (Africa only)

5.1 Honorary Life Membership

It shall be competent for the General Meeting, or by postal vote, provided written nomination and motivation are received by the Committee at least 60 days in

advance, to elect any person whose services to the Association and/or the field of Herpetology have been such as to merit this distinction. Such membership shall carry full privileges and shall be awarded only in exceptional circumstances.

5.2 Ordinary Membership

Ordinary Membership of the Association is open to any person who supports the aims and objectives of the Association and is open to all persons world-wide. Privileges associated to this class of membership shall be divided into two classes.

5.2.a African Membership: Members shall have full voting rights, full privileges and shall be entitled to one copy of each issue of the Journal and Newsletter.

5.2.b Overseas Membership: Members shall have full privileges but shall not be allowed to vote or to hold office unless co-opted by the committee. Membership fees may be determined independently of other categories and/or classes. Members shall be entitled to one copy of each issue of the Journal and Newsletter.

5.3 Student Membership

Any person under the age of 18 years who is a recognised student (proof may be required) who supports the aims and objectives of the Association may become a Student Member.
Student Members will be allowed all privileges of the Association except that they shall not hold office or be allowed to vote. Student Members shall receive one copy of the Journal and Newsletter. This category shall only apply to applicants from Africa.

5.4 Application for Membership

Application for membership of the Association must be made on the prescribed application form and must bear the signature of the applicant. A copy of the Constitution shall be given to each new Member and the signed application form shall be taken as proof that the applicant has read, understood and accepted the conditions and implications applicable to membership.

6. MEMBERSHIP FEES

Membership fees will be due and payable on the 1st January of each year and fees shall be determined from time to time by the Committee as set out under Section 15.3.

7. ENTRANCE FEE

An Association entrance fee may be determined by the Committee and shall then be payable by all new Members on joining the Association and members who have fallen more than 15 months behind with membership fees.

8. TERMINATION OF MEMBERSHIP

8.1 Any Member who has failed to pay his/her subscription by the 31st March in any year will immediately cease to be a Member of the Association and must re-apply for membership on the prescribed application form and pay the prevailing entrance fee.

8.2 Any Member who attempts to use the Association for personal financial gain, or who attempts to misappropriate the funds or assets of the Association shall have his/her membership terminated.

8.3 Any Member shall for gross misconduct have his/her membership terminated. The power of expulsion shall be vested in the Committee.

8.4 On termination of membership, no pro-rata refund of subscriptions shall be paid to any Member.

9. COMMITTEE

The Committee shall be composed of the following elected Members: -

Chairman
Secretary
Treasurer
Journal Editor
Newsletter Editor
A maximum of four Additional Members

9.1 The position and composition of Committee Members may be combined in any way in which the elected Committee may feel to be beneficial to the Association, but may not exceed nine (9) permanent members excluding Branch-appointed representatives.

9.2 The Chairman shall be elected every two years and shall hold office for two years. He shall be elected at a General Meeting or by postal vote if no meeting is to be held at the time of the intended election. The Chairman may not hold office for more than six consecutive years. In his absence, any other Member of the Committee may be elected Chairman for the duration of the Chairman's absence.

9.3 The Secretary, Treasurer, Journal Editor, Newsletter Editor and Additional Members as required, shall be elected to hold office for a period of two years and shall be eligible for re-election.

9.4 The Committee will have the right to allocate specific portfolios to Additional Members.

9.5 The Committee shall have the power to co-opt as Members of the Committee any person or persons deemed to have a special knowledge of any subject as and when required. Such co-opted Members shall not have a vote.

9.6 The Committee may appoint Sub-committees.

9.7 The Chairman shall have a deliberative as well as a casting vote.

9.8 If any Member of the Committee does not or is unable to complete his/her term of office, the Committee shall have the power to fill the vacancy by Co-option for the remaining term of office.

9.9 A record of Committee and other meetings shall be kept by the Secretary in the form of minutes. These shall be presented by the Secretary to the Committee or Members at the following Committee or other meeting and a Proposer, Seconder and approval by a show of hands called for.

9.10 The Committee, in addition to the powers and authority bestowed upon it by this Constitution or otherwise expressly conferred on it, may exercise all such powers and do all such acts as may be of benefit for the proper running, management and existence of the Association and its Members.

10. ASSOCIATION BRANCHES

10.1 Branches may be formed within the Association in order to co-ordinate the activities of members within their own district or area.

10.2 All Members of an Association Branch must be fully paid-up Members of the Association and shall have full rights under this Constitution.

10.3 Branches shall be liable for the collecting and forwarding of all monies due to the Association as well as updated membership lists of Branch Members.

10.4 Branches shall be totally self-supporting and shall elect their own Committees.

10.5 One Member from each Branch, normally the Branch Chairman, may be elected by the Branch Members to stand on the H.A.A. Committee in order to represent the Branch's interests, views and opinions.

10.6 A Branch shall have no separate voting powers except that the duly elected representative to the Association Committee shall have one vote on that Committee.

10.7 This constitution shall be totally binding in all ways on any Branch and its Members formed under section 10.

11. MEETINGS

11.1 General Meetings

Annual General Meetings and/or other General Meetings may be held at the discretion of the Committee or when the situation allows, this owing to the wide distribution of members.

11.2 Special Meetings

Special and/or Extraordinary Meetings may not be called for by members, owing to the wide distribution of members.

11.3 Committee Meetings

Committee Meetings will only be held when the opportunity presents itself or at the discretion of the Committee, this owing to the wide distribution of Committee Members. Notwithstanding the above, all matters affecting the Association shall have the majority approval of the Committee by either the postal or telecommunications medium.

11.4 Owing to the circumstances presented above, members shall have the right to communicate any dissatisfaction, proposed changes to the constitution etc. directly to the Chairman who will take it upon himself to ensure that the matter is communicated to all the other Committee Members and/or Members and that the matter is resolved by a majority decision.

12. FRANCHISE

Only African Honorary Life Members, African Life Members, and African Ordinary Members over the age of 18 years and in good standing have voting rights.

13. QUORUM

13.1 At any General Meeting a quorum shall be 40 Members or two thirds of Full Membership.

13.2 At a Committee Meeting a quorum shall be half the full Committee plus one.

14. FINANCES

14.1 The financial year of the Association shall be from 1st March up to and including 28th February of the following year.

14.2 A copy of the audited yearly balance sheet will be sent to all Members for inspection by Members.

14.3 Upon recommendation by the Committee, Membership fees, Entrance fees and any other charges shall be determined by the Association.

14.4 Honorary Life Members are excluded from paying subscriptions.

14.5 Subscriptions shall be due on the 1st of January of each and every year. Paragraph 9.1 shall be evoked if subscriptions are not paid by the end of the three month period of grace.

14.6 All monies paid by any Member of the Association and donations to the Association shall be kept in a savings account, current account or any other investment that the Committee deems appropriate for the benefit of the Association and its Members.

14.7 Any single expenditure of over three-hundred Rand (R300.00) shall have Committee approval.

14.8 No profits or gains accrued by the Association in whatever manner will be distributed to any person/persons and the funds of the Association will be utilized soley for investment or for the objectives for which the Association was established.

15. AMENDMENT OF THE CONSTITUTION

15.1 Any proposed amendments to the Constitution may only be considered at a General Meeting, or under 11.4 above.

15.2 Notice of any such amendments to the Constitution must reach the Committee at least 60 days prior to such a meeting, or such a proposal being put forward to African Members by post.

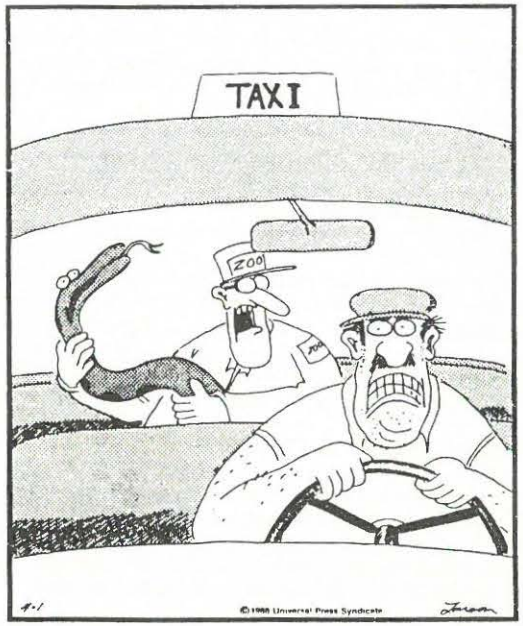
15.3 Any amendments to this constitution will be submitted to the Commissioner of Inland Revenue, Department of Finance, Pretoria, by the Committee.

16. DISSOLUTION OF THE ASSOCIATION

Upon dissolution of the Association, the Committee shall distribute all assets of the Association to a Nature Conservation Organisation, Museum or any other applicable natural science, natural history or research institution/s directly involved with the herpetofauna of the African continent. The Committee may stipulate or suggest how the donated money should be spent.

Original: D.G. Broadley, 1965.
Revised and amended: R.M. Douglas, 1988

Note:
1. Subject to amendment, "Section 15.3" in paragraph 6 should become "Section 14.3".
2. Subject to amendment, "Paragraph 9.1" in paragraph 14.5 should become "Paragraph 8.1".
3. Constitutions have already been sent to persons applying for membership.



"For God's sake, hurry, driver! ... She's dropping babies all over the place!"

INSTITUTIONAL NEWS

HERPETOLOGY DEPARTMENT NATIONAL MUSEUM, BLOEMFONTEIN

The Herpetology Department at the National Museum houses a collection of 6220 reptiles and 4690 amphibians, most of which were collected in the Orange Free Sate. The collection is curated by A.F. Flemming, M.F. Bates, R.M. Douglas and S.T. Mosala. Alex Flemming joined the Department as Natural Scientist in January 1990. Although the vacancy for Natural Scientist existed for almost two years, research assistants Mike Bates and Rod Douglas produced a number of research papers.

Current research activities involve various aspects of herpetology. Apart from distributional and taxonomic work, considered classic research fields in museum natural history departments, we also study reptile diets and reproduction. Previous papers, as well as some currently *in press*, also report on certain curatorial and research methodologies.

Much of the Department's previous research activities centred around reproductive studies in reptiles (*Cordylus polyzonus* and *Cordylus giganteus*). This gained new impetus with the appointment of Alex Flemming, who has a special interest in this field. He is currently studying the reproductive cycle of the Cape Skink, *Mabuya capensis*, and the Drakensberg Crag Lizard, *Pseudocordylus m. melanotus*.

Mike Bates is involved in a number of projects, including the distribution of the Common Longtailed Seps, *Tetradactylus tetradactylus*, the diet of the Cape Wolf Snake, *Lycophidion c. capense* and reproduction in the Variable Skink, *Mabuya varia* and Bibron's Gecko, *Pachydactylus bibronii*. He will soon be publishing a number of new distribution records for the Orange Free State (and updating De Waal's maps) and Lesotho herpetofauna (first checklist, to be co-authored by Angelo Lambiris).

Rod Douglas is involved in the taxonomic complexities and status of dwarf chameleons (genus *Bradypodion*) in the Orange Free State, and is examining possible new species with Mike Bates and Lynn Raw. His other projects include investigating the effectiveness of array traps while doing a herpetofaunal study in the central O.F.S., micro and macroscopic procedures in snake diet studies and volume determination methods on reptile eggs and the practical applications thereof.

An important aspect of our research, which is almost exclusively collection-related, is the quality of curatorial activities. Mike Bates acts as collection manager, and the exceptional way in which he handles curation needs to be acknowledged. He receives excellent assistance from Simon Mosala, who is also involved in editing the herpetology collection's computerized index (which is in an advanced state of completion); computerization is supervised and coordinated by Rod Douglas.

Recent publications from this department:

Scientific articles

Bates, M.F. 1988. Life history notes: *Bradypodion ventrale ventrale:* Reproduction; *Mabuya variegata punctulata*: Avian predation; *Mabuya capensis*: Avian predation; *Pachydactylus mariquensis mariquensis*: Avian predation; *Pachydactylus capensis capensis*: Aggressive behaviour. *J. Herp. Assoc. Afr.* **34**: 47-49.

Bates, M.F. 1988. Geographical Distribution: *Typhlosaurus lineatus lineatus; Xenocalamus bicolor bicolor; Xenocalamus mechowii inornatus. J. Herp. Assoc. Afr.* **34**: 50.

Bates, M.F. 1988. New distribution records for the Orange Free State (Amphibians and Reptiles). *J. Herp. Assoc. Afr.* **34:** 51.

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M.F. Bates. The hidden value of a reptile wet collection, with special reference to the National Museum, Bloemfontein.

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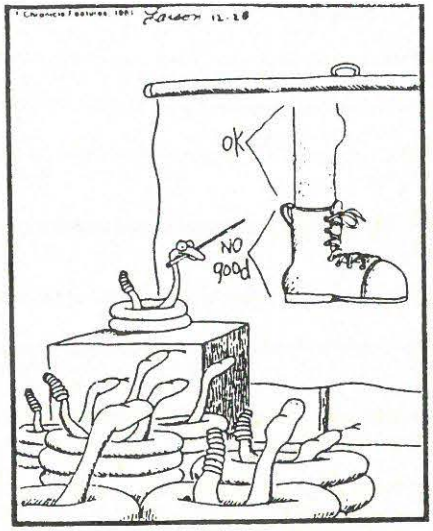
M.F. Bates. Developments in the management of reptile and amphibian collections at the National Museum, Bloemfontein.
R.M. Douglas. Fire prevention and control in museums.

Submitted by: Alex Flemming, National Museum, Bloemfontein, 9300



MANYELETI MORSELS

(News from Manyeleti Reptile Centre, Gazankulu)

It has been a very active and exciting time since the destruction of the Manyeleti Reptile Centre by fire on 13 September last year (see *H.A.A. Newsletter* **12:** 1-2). Nothing like a good fire to warm things up! Notwithstanding, immediate action was taken and the problem was turned into a challenge, with an an official Trust account M1/603 being established for us by the Gazankulu Government. The idea being that we attempt to solicit our own funding to rebuild the Centre from potential benefactors. To date, despite all our efforts, the fund-raising has been a little disappointing. So far we've managed to raise only apr. R2000,00. Enough to keep the rodent culture in food, but little else. The fund-raising is ongoing however, and we sincerely hope to generate more money as the year progresses.

Fortunately, with the generous assistance of the Gazankulu Government, additional funds were made available for the re-establishment of the Centre. Although far from the amount needed to replace the facility, it enabled us to rebuild the basic structure and replace the roof, inner cupboards and floors.

Furthermore, the incident was used as prime motivation for the creation of a new post of "Curator of the Manyeleti Reptile Centre". This was subsequently filled by Dave Morgan (previous at the Transvaal Snake Park). Other than some minor domestic problems involving a curious Hyaena (christened "Horace" by his wife), Dave has settled in, is feeding well and is due to shed soon.

The rebuilding of the Centre has, by necessity, engulfed the majority of our time of late. During the April vacation we were ably assisted by 7 University of Pretoria students who, apart from efficiently smearing the floor with paint, actually managed to get some to adhere to the walls as well. Amongst the more practical lessons that they learned - one that should stand them in good stead for field work - was that there is a great deal more to cooking venison than hurling a partially dismembered Impala onto the fire. We are also indebited to the various members of the Transvaal Herpetological Association and the East Rand Herpetological Association for their continuing (we hope) moral and on occasion, practical support for the Centre.

With the destruction of the Centre, we had the opportunity to rethink our goals and objectives and to redesign the Centre accordingly.

Our main objective is the successful captive maintenance of selected African reptiles under semi-natural conditions, so as to gain insights into their reproductive biology and associated behaviour. Whilst the majority of African herpetological research is aimed at the systematics and distribution of our diverse herpetofauna, little work is being directed towards the autecology of species. Field research on most reptiles is difficult, if not impractical, involving the expenditure of hundreds of man-hours in the field under trying conditions, with proportionately little gain. It is our hope to provide a facility whereby data may be gleaned from captive animals under semi-natural conditions, so as

to provide base-line data (if nothing else) for further field investigation. We must admit, however, that our selection of target species is fairly arbitrary and is based upon personal interest and prior experience (where else do we start?).

Our secondary objective is the utilization of the facility as a breeding centre for some of the more threatened indigenous species, along the lines of the famous Jersey Wildlife Preservation Trust. The preservation ethic is well established within the international Zoo community and whilst local attention is invariably focused on the "Bambi-syndrome" animals such as the Riverine Rabbit, species like the Zululand Gaboon Viper and Setaroi's Dwarf Chameleon could also use protected captive gene-pools. Cry *Psammobates geometricus*!

Once our motivations and *raisons d'etre* had been thrashed out, it was a great moment for us when the first of the snakes were moved to the "new" old Centre on 13 May 1990, exactly 8 months after the fire. Although the current collection is very small, attempts will be made to obtain focus species as the rest of the Centre is completed. In the meantime we have had some very interesting behaviour in several of our captive animals, including male combat and copulation in the Green Mambas (*Dendroaspis angusticeps*) and Lowland Vipers (*Atheris superciliaris*). We believe that this is the first time that combat has been observed in the Lowland Viper. The establishment of an apparent linear social hierarchy among the mambas was particularly interesting. Relevant articles to follow soon!

So we will continue to plod along out here in the sticks (Styx? It is certainly as hot as hell sometimes). If you are at all interested in the work that we propose to do, give us a call (0020: Manyeleti No 3) and come on out and see us - we would welcome your suggestions or criticism.

That's all for now.

Gerald V. Haagner and Dave Morgan
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EDITOR: Any persons wishing to make donations towards the re-building of the Manyeleti Reptile Centre should use Trust account M1/603 or contact Gerald or Dave at tel. 0020 (ask for Manyeleti no. 3) or the above address for details.

WHERE DO EGG-EATERS FIND FOOD IN OPEN GRASSLANDS?

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Three species of egg-eating snakes, *Dasypeltis scabra, D. inornata* and *D. medici* occur in southern Africa, and all subsist entirely on a diet of bird eggs (Broadley, 1983). These snakes are nocturnal and are known to climb trees and rock faces in search of birds' nests (Branch, 1988). Only fresh eggs are eaten, but include those that are partly-incubated (Rose, 1950; Gans, 1952, De Waal, 1978).

The Common Egg-eater *(Dasypeltis scabra)* is distributed throughout southern Africa, to Sudan in the north and Gambia in the west, and is absent only from true desert and closed-canopy forest (Branch, 1988). In the Orange Free State, specimens are commonly found in disused termite mounds, but also under rocks (De Waal, 1978).

Vast areas of open grassland with no trees and few bushes, but numerous termite mounds, are common in the O.F.S. and other highveld areas. A variety of reptile species occupy these mounds throughout the year. Open grasslands, in comparison to many other vegetational types, do not usually have refuges in the form of rocks, trees and shrubs, but termite mounds often serve this purpose for snakes and lizards (Lynch, 1988). These mounds offer a stable microclimate, safety from many predators and protection from veld fires.

But how do egg-eaters obtain food in open grasslands, where there are no trees for nesting birds? It is unlikely that they seek out areas with trees each time they require food, as this would often mean travelling great distances. Also, both adults and juvenile *D. scabra* refuse eggs of the gecko *Pachydactylus c. capensis* (pers. obs.), which are small (11-14 x 9 - 10 mm; Branch, 1988), hard-shelled, often laid in termite mounds and would seem, at least for juvenile snakes, the perfect food source. It would seem that egg-eaters are able to distinguish, perhaps chemically, between bird and reptile eggs, consuming only the former.

Ditmars (1922 : 276) suggested that soft, leathery-shelled eggs of other species of snakes are eaten. Cansdale (1948 : 46) reported that specimens would probably take all varieties of eggs, not only those of birds, and mentioned a captive "three-foot" specimen that was laying eggs and seemed to swallow each egg the day after it was laid. However, there is still no firm evidence for the use of non-avian eggs as food (see Gans, 1952; 1959).

Although not at first apparent, open grasslands support a great variety and number of ground-breeding birds (Maclean, 1985; Lynch, 1988). Although Lynch (1988)suggested that the eggs of ground-nesting birds provided the food source of egg-eaters in grassland areas, the writer knew of no solid evidence to support this contention. However, in a paper on the breeding behaviour of three species of ground-nesting

Plovers, Ward (1989) recorded *Dasypeltis scabra* as being an egg-eating predator of all three plover species. Of these, the Crowned Plover (*Vanellus coronatus*) lays eggs with average dimensions of 40,0 x 28,9mm, the Blackwinged Plover's (*V. melanopterus*) eggs average 41,8 x 29,4mm whereas those of the Lesser Blackwinged Plover (*V. lugubris*) average 34,2 x 26,3mm (Maclean, 1985). According to Gans (1952) and Branch (1988), egg-eaters are capable of swallowing eggs with a diameter of at least three times that of their head, and therefore only adult egg-eaters would be capable of successfully preying on the eggs of these birds.

With reference to Gans' (1952) statement that "...there is no evidence indicating how this reptile *D. scabra* manages to find food the year-round in such regions as South Africa," it is interesting to note that the ground-nesting Blacksmith Plover, which occurs throughout southern Africa, breeds throughout the year in the Transvaal (Maclean, 1985).

But what of juvenile egg-eaters? What would be the largest egg that a juvenile or hatchling egg-eater could cope with? According to Branch (1988), hatchling *D. scabra* have a total length of 210-240mm. The greatest head width of two hatchlings measuring 239 and 234mm total length (preserved in the collection of the National Museum, Bloemfontein : NMB R878; 70) were found to be 5,8 and 6,1 mm respectively. If an egg-eater can consume an egg three times wider than the width of its head, a juvenile with a head 5,8 mm wide could swallow an egg with a width of 17,4mm.

But which birds nest in grasslands and lay small enough eggs for juvenile egg-eaters? Larks (family : Alaudidae) construct a cup-shaped nest on the ground, usually under the shelter of a grass-tuft or stone; the largest eggs laid by any southern African lark have average dimensions of 23,3 x 16,7 mm (Maclean, 1985). Many other bird species, including cisticolas, build their nests low-down in vegetation or between grass-tufts or stems, and lay small eggs. The largest eggs in the genus *Cisticola* measure 18,7 x 13,7mm (Maclean, 1985). The eggs of larks, cisticolas and other small birds could therefore provide the food source of small as well as large egg-eaters in grassland areas.

Thus, it would seem, the "riddle of the stranded egg-eaters" is resolved.

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EXCEPTIONALLY LONG VENOM GLANDS IN THE GENERA *CAUSUS* AND *MATICORA*

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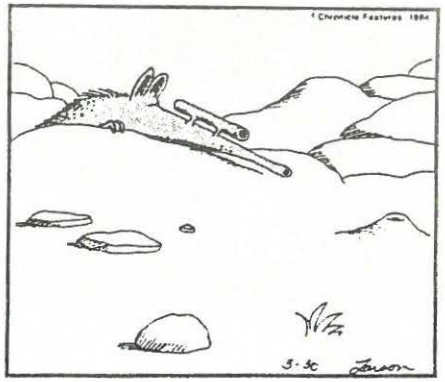
The Rhombic Night Adder *(Causus rhombeatus)* is unique in the genus in having elongated venom glands which extend 5-7 cm into the neck in adults (see photo on page 25). Evolutionary reasons behind this enlargement would at first seem to be the production of larger amounts of a rather feeble venom, to add to its efficiency. However, minor reactions in both man and prey seem to contradict this. Could it have to do with speeding up and hence making more effective the snake's digestive capabilities?

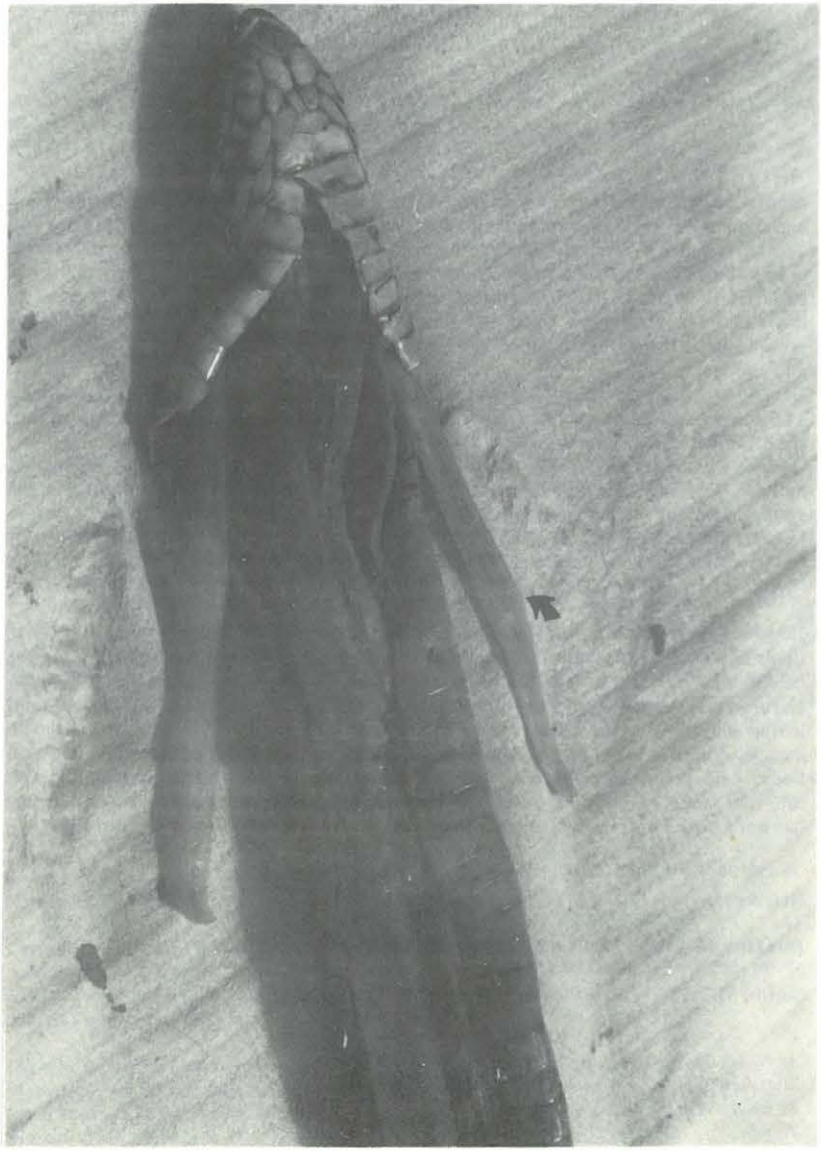
Specimens of the genus *Maticora*, from south-east Asia, also possess greatly elongated venom glands, resulting in the common name of Long Glanded Coral Snake. The elongation here, however, is far more pronounced than in *Causus*. The venom glands extend one third the length of the snake's body, causing displacement of the heart. Although the majority of species rarely exceed 60 cm in length, *M. bivirgatta* can attain a length in excess of 5 feet. This makes for glands exceeding a foot and a half in length! The venom yields must be enormous, and these snakes have been known to inflict fatal bites on man.

Acknowledgements

I would like to thank Donald Strydom for his support, encouragement and enthusiasm.



Anteaters of the future.



CAROLUS LINNAEUS AND THE FOUL AND LOATHSOME ANIMALS

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Man soon recognized that all organisms in his world could be categorized into a hierarchical pattern. Hierarchical classification of organisms has had a long history and developed into a science called taxonomy. Orderly classification is considered a practical necessity. Dawkins (1986) views it as follows- "...biologists find their life made easier if they can pigeonhole animals and plants in agreed categories with names". Most people are at least somewhat familiar with the "agreed categories" (order of groups) used in modern taxonomy - Kingdom, Phylum, Class, Order, Family, Genus and species.

The most basic principle of taxonomy is that every plant and animal should have a scientific name, as "common names" have limited value. It was a Swedish botanist, Carolus Linnaeus (1707-1778), that provided a practical and since then only acceptable method of giving scientific names to organisms. His so-called binomial nomenclature system, whereby each species has a first (generic) name and a second (specific) name [e.g. *Dendroaspis* (generic name) + *polylepis* (specific name) = *Dendroaspis polylepis*, the scientific name for the Black Mamba], was first published in the 10th Edition of the "Systema Naturae" in 1758.

Linnaeus' invaluable contribution to reptile and amphibian taxonomy, as for other fields of biology, is obvious. Interestingly though, he appears to have had little interest or fondness for the herpetofauna he knew. In the summary of the 10th "Systema Naturae", Linnaeus made the following astonishing statement: "These foul and loathsome animals are distinguished by a heart with a single ventricle and a single auricle, doubtful lungs and a double penis. Most are abhorrent because of their cold body, pale color, cartilaginous skeleton, filthy skin, fierce aspect, calculating eye, offensive smell, harsh voice, squalid habitation and terrible venom; and so their Creator has not exerted his powers (to make) many of them." (translation after Smith, 1951).

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RECORD-BREAKING REPTILES

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The following records have been extracted from *The Guinness Book of Records* (31st Edition - 1985):

Largest and heaviest reptile: Estuarine or Salt Water Crocodile (*Crocodylus porosus*) of SE Asia, N Australia, New Guinea, Malay Archipelago and Solomon Islands. These giants may weigh in excess of two tonnes. A specimen from Norman River, Australia, collected in July 1957, measured 8,63 metres in length.

Smallest reptile: The gecko *Sphaerodactylus parthenopion*, found only on the island of Virgin Gorda (British Virgin Islands) in the West Indies. This gecko has a snout-vent length (SVL) of 18 mm. However, the gecko *S. elasmorhynchus*, known from only one specimen, measured 17 mm SVL + 17 mm tail length. This specimen was collected among the roots of a tree in western Massif de la Hotte in Haiti.

Fastest reptile: The land record is 29 km/hr for a Six-lined Racerunner (*Cnemidophorus sexlineatus*) in South Carolina in 1941; whereas the aquatic record of 35 km hour is held by a Pacific leatherback turtle.

Largest lizard: Komodo Dragon (*Varanus komodoensis*) found on the Indonesian islands of Komodo, Rintja, Padar and Flores. Adult males average 2,25 m in length and weigh about 59 kg. The largest specimen accurately measured was a male presented to an American Zoologist in 1928 by the Sultan of Bima, which measured 3,05 m. When displayed at the St Louis Zoological Gardens in 1937, it measured 3,10 m and weighed 166 kg.

Longest lizard: Salvadori Monitor (*Varanus salvadori*) of New Guinea, reliably measured up to 4,75 m.

Longest-lived lizard: A male Slow Worm (*Anguis fragilis*), housed at the Zoological Museum in Coppenhagen, Denmark, for 54 years (1892-1946).

Largest chelonian: Pacific Leatherback Turtle (*Dermochelys coriacea schlegelii*). Adults average 1,83 - 2,13 m in overall length (carapace length = 122-152 cm) and weigh up to 453 kg. A male captured off Monterey, California on 29 August 1961, measured 2,54 m overall and weighed 865 kg.

Largest living tortoise: *Geochelone gigantea* of the Indian Ocean islands of Aldabra, Mauritius and Seychelles (introduced in 1874). Wild males may exceed 200 kg in weight, but a male at London Zoo (received in 1951) peaked at 279 kg before his death on 27 January 1963.

Longest-lived chelonian: A male Marion's Tortoise (*Testudo sumeirii*), brought from the Seychelles to Mauritius in 1766 by the Chevalier de Fresne, and presented to the Port Louis army garrison. The specimen lived to an excess of 152 years. It went blind in 1908 and was accidentally killed in 1918.

The greatest proven age of a continuously observed tortoise is ie. 116+ years for a Mediterranean Spur-thighed Tortoise (*Testudo graeca*).

Slowest moving chelonian: Male Giant Tortoise (*Geochelone gigantea*) - 4,57 m in 43,5 sec (0,37 km/hr).

Longest snake (ave. adult length): Reticulated Python (*Python reticulatus*) of SE Asia, Indonesia and the Philippines. The record length is 10 m (32 ft 9 in).

Shortest snake: Thread Snake *Leptotyphlops bilineata*, found on the islands of Martinique, Barbados and St. Lucia in the West Indies. Adults have a total length of 119 mm.

Longest venomous snake: King cobra (*Ophiophagus hannah*). A specimen at London Zoo measured 5,71 m (18 ft 9 in) in length.

Shortest venomous snake: Dwarf Adder (*Bitis schneideri*) of Little Namaqualand and SW Namibia. Adults average 228 mm in length, with a maximum length of 28 cm (Branch, W.R. 1988. *Field Guide to the Snakes and other Reptiles of Southern Africa*, Struik, Cape Town).

Longest and heaviest captive snake: A female Reticulated Python *(Python reticulatus)* named 'Colossus', which died at Highland Park Zoo, Pennsylvania on 15 April 1963. The snake measured 8,68 m (28 ft 6 in) and weighed 145 kg at her heaviest.

Heaviest snake: Anaconda (*Eunectes murinus*). A snake from Brazil weighed 227 kg with a girth of 111 cm and length of 8,45 m.

Longest-lived snake: A male Common Boa (*Boa c. constrictor*) named 'Popeye' which died at Philadelphia Zoo at the age of 40 years, 3 months and 14 days.

Most venomous snake: Sea snake, *Hydrophis belcheri*, which abounds round Ashmore Reef in the Timor Sea, off the coast of NW Australia. This snake has a venom 100 times as toxic as that of the Australian Taipan, *Oxyuranus scutellatus.*

However, in an information pamphlet entilted *Living with Snakes*, published by the *ACT Parks and Conservations Service* (Australia), the Western Taipan (*Oxyuranus microlepidotus*) is regarded as having the most toxic of all snake venoms.

Most venomous land snake: Western Taipan (*Oxyuranus microlepidotus*) of Channel Country, Queensland, Australia. This snake has a venom 9 times as toxic as that of the

Tiger Snake (*Notechis scutatus*) of S Australia and Tasmania. One specimen yielded 110 mg of venom after milking, enough to kill 125 000 mice.

Between 30-40 000 people (excluding Chinese and Russians) die from snakebite each year. Three-quarters of such cases occur in densely populated India. Burma has the highest mortality rate, with 15,4 deaths/100 000 of the population per year.

Heaviest venomous snake: The record is held by the Eastern Diamond-back Rattlesnake (*Crotalus adamanteus*) of the SE United States. A specimen of 2,36 m long weighed 15 kg.

Longest-fanged snake: Gaboon Adder (*Bitis gabonica*) of tropical Africa. A 1,83 m long specimen had fangs measuring 50 mm (1,96 in).

Fastest-moving snake: Black Mamba (*Dendroaspis polylepis*) of Africa. A speed of 24 km/hr may be possible for short bursts over level ground.

Commonest reptile: The Sea snake *Astrotia stokesii*, found in great numbers from the Arabia sea to southwestern Pacific. In May 1929, a coiled mass of these snakes was observed in the Malacca Straits, measuring 96 km in extent.

Rarest reptiles: Dwarf chameleon, *Evoluticanda tuberculata* from Madagascar, known from only one specimen (holotype); and the gecko, *Sphaerodactylus elasmorhynchus*, of which one specimen was collected in Haiti.

Rarest snake: Keel-scaled Boa (*Casarea dussumieri*) of Round Island, western Indian Ocean. The total population was estimated at 75 individuals.

Article reprinted from *Herpetological Review* **20(3):** 59-60 [1989].

ANALYSIS OF A *PYTHON ANCHIETAE* FAECAL SAMPLE

Only a single report on the natural diet of the Angolan dwarf python, *Python anchietae* appears in the literature (Steyn and Els 1963). Additional information on the feeding habits of this species is therefore of considerable value.

Python anchietae is a small, rare python associated with the hills and mountains of the Namibian and southern Angolan escarpment. The southern limit of its range is 22°S. The only available record on the natural diet of this species (Steyn and Els 1963) reports recovery of the head of a gerbil, *Tatera schinzi* (= *T. leucogaster*, the bushveld gerbil; see Meester et al. 1986) from the stomach of a dead specimen.

Steyn and Els (1963) also reported feeding a captive specimen on the sparrow, *Passer jogoensis motilensis.* Since no sparrow with this species name has been described, the author (or publisher) may have misspelled *iagoensis.* Also the subspecies, *motitensis* does not appear to have been formally described. Howard and Moore (1984) give the distribution of *Passer iagoensis* as the Cape Verde islands, so it would appear that the referred-to species is most probably the great sparrow, *P. motitensis benguellensis* (Howard and Moore 1984; Maclean 1985). The main diet of specimens at the Transvaal Snake Park, where a captive breeding programme is in operation, is the multimammate mouse, *Mastomys natalensis* which is readily taken (Morgan, pers. comm.).

On 25 June 1985, a female *Python anchietae* (snout-vent length = 915 mm; tail length 106 mm) was donated to the Transvaal Snake Park after being collected in southern Angola and confiscated by the Directorate of Nature Conservation. Shortly after its arrival at the Park the specimen defecated and the sample was stored in 70% alcohol until analysis in November 1988.

Analysis of the faeces at X16 revealed the following:

Feathers: The bulk of the sample consisted of feather remains which were very broken up by digestive action. As no reference collection for this type of material was known to the author, detailed chemical and electron microscopic analysis were not carried out. Day (1966) considered the nodes on the downy barbules of covert feathers to be diagnostic to order level. An examination of covert feathers from orders such as Galliformes, Columbiformes and Passeriformes showed that there were distinct differences in the nodes and the pigmentation at the nodes of the barbules. Microscopic comparisons with the feather remains in the faecal sample indicated that these remains were Passeriformes and of the genus *Passer* (Ploceidae).

Hair: Identification was based on the negative cuticular scale patterns of hairs which were produced on gelatin-coated slides after Day (1966), Brunner and Coman (1974), Douglas (1985 and 1988 unpublished) and Keogh (1985). Final identification was based on a negative cuticular scale pattern reference collection, compiled from hairs in the National Museum Mammalogy Department study skin collection. Work being done on other species by the author has shown that a large amount of dietary information may be lost in studies of this type by not identifying the hair portion and that up to 70% of this information may be lost, particularly from intestinal and stomach remains. Examination of the sample revealed only 11 individual pieces of hair. Owing to the fact that the majority of the hairs were only pieces of hair or not guard hairs (on which this type of identification is based), only one positive identification was possible, namely that of an elephant shrew, Macroscelididae. It was not possible to be more specific because: (a) R. Parker (1985, pers. comm.) found that while working on Macroscelididae guard hairs, there were no defining morphological characters which enabled identification to below family level, and (b) Distribution records for Macroscelididae in southern Angola are very incomplete.

Other recognizable items: Twelve teeth of the python were found in the sample and were either swallowed during tooth replacement or were lodged in the prey items when these were caught or swallowed.

A portion of chitinous insect remains was also present, but these were regarded as secondary items, possibly from the Macroscelididae specimen.

Fairly large amounts of very fine quartz gravel were evident and were most probably ingested while swallowing prey or were present in the digestive tracts of prey items.

The results of this analysis indicate that birds and small mammals are eaten by *Python anchietae* in the wild. The feather, mammal hair and other limited feeding data available, would also imply that *Python anchietae* is an opportunistic feeder.

ACKNOWLEDGEMENTS

I would like to thank R. Boycott, formerly of Transvaal Snake Park, for supplying the sample; D. Morgan, present Curator of Transvaal Snake Park, for information relating to the specimen; and R. Parker, formerly of the Mammal Research Institute, University of Pretoria, for his valuable information on Macroscelididae hair identification. I would also like to thank S. Louw and M. Bates of the National Museum for commenting on the manuscript.

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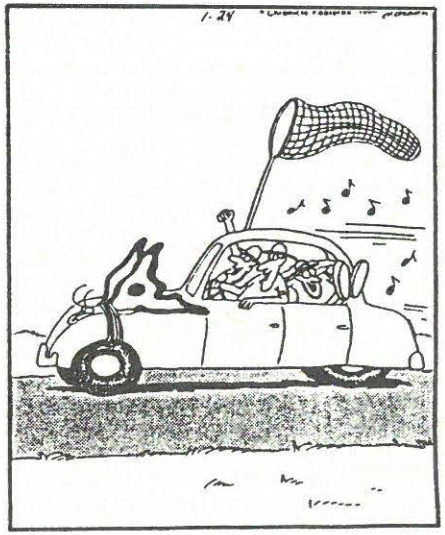

Article reprinted from *Herpetological Review* **20(1)**: 14-15 [1989].

NEW SNAKE RECORDS FOR BOTSWANA, SOUTHERN AFRICA

Up-to-date information on snake distribution in Botswana is summarized in Broadley's "FitzSimons Snakes" (1983. Delta Books, Johannesburg). The authors have been collecting in southern Botswana from 1985 through March 1987. This paper details new records and range extensions in that area. Many of these species are listed from southeast Botswana (Auerbach 1985. The Reptiles of Gaborone. Botswana Book Centre. 48 pp.), but are speculative, without precise locality citations. To avoid repetition, coordinates of the two major localities are given here: Otse village (25°02'S, 25°45'E); Molepolole - Letlhakeng road = paved road running NW SE between Molepolole (24°26'S, 25°34'E) and Letlhakeng (24°03'S, 25°04'E). Specimens were deposited in the Natural History Museum of Zimbabwe (NMZB) and identifications were verified by D.G. Broadley, unless otherwise noted.

TYPHLOPS S. SCHLEGELII

(Schlegel's Blind Snake). Moeding College, Otse. 17 March 1987. S. Spawls. (NMZB 8761). Southernmost record in Botswana, westernmost record in southern Africa, extends range 100 km SW.

TYPHLOPS LALANDEI

(Delalande's Blind Snake). Moeding College, Otse. 24 February 1985. S. Spawls. (NMZB 7849). First record for Botswana S of 23°S, fitting in the gap between the Mafeking, South Africa (80 km S) and Shoshong (250 km N) records.

TYPHLOPS BIBRONII

(Bibron's Blind Snake) 5 km S of Otse. 19 March 1986. S. Spawls. (NMZB 8401). First record for Botswana, extends range 100km N.

LYCOPHIDION C. CAPENSE

(Cape Wolf Snake). 8 km SSW of Otse. 10 December 1985. S. Spawls. Verified by R.C. Drewes. California Academy of Sciences (CAS 160793). First record for Botswana S of 25°S. Fits in the gap between the Madibogo, South Africa (150km S) and Molepolole (80km N) records.

MEHELYA C. CAPENSIS

(Cape File Snake). Moeding College, Otse. 14 January 1986. S. Spawls. (NMZB 8582). First record S of 25°S in Botswana, extends range 80km S; 13km NW of Molepolole, Molepolole-Letlhakeng road. 20 November 1986. J. de Graff. (NMZB 8621). Extends range 50 km W. First record for Kalahari sand area.

PSAMMOPHIS LEIGHTONI TRINASALIS

(Fork-marked Sand Snake). Jwaneng (24°30'S, 24°50'E). 9 May 1985. S. Spawls (NMZB 7831). Fits in the gap between the Pretoria, South Africa, area (300km SE) and western Kweneng (200km W); Molepolole village. 28 August 1986. J. de Graff. (NMZB 8747). Extends range 100km NE from previous record.

APARALLACTUS CAPENSIS

(Cape Centipede-eater). Maladiepe Hill, 1km NE of Otse village. 21 June 1985. S. Spawls. (NMZB 7844). First record S of 25°S in Botswana. Extends range 50km S.

AMBLYODIPSAS VENTRIMACULATA

(Kalahari Purple-glossed Snake). 20km NW Molepolole, on Molepolole-Letlhakeng road. 30 October 1986. J. de Graff. (NMZB 8603). First record S of 23°S and E of 24°E in Botswana. Extends range 450km SE.

AMBLYODIPSAS P. POLYLEPIS

(Common Purple-glossed Snake). 10km NW Molepolole, on Molepolole-Letlhakeng road. 5 November 1986. J. de Graff. (NMZB 8610). First record S of 21°S in Botswana; the only record between Okavango (500km NNW) and Pretoria, South Africa, (400km E).

XENOCALAMUS MECHOWII INORNATUS

(Elongate Quill-snouted Snake). 22km NW Molepolole, on Molepolole-Letlhakeng road. 3 November 1986. J. de Graff. (NMZB 8612). First record S of 21°S in Africa; extends range 560km S.

XENOCALAMUS B. BICOLOR

(Variable Quill-snouted Snake). 33 km NW Molepolole, on Molepolole-Letlhakeng road. 25 October 1986. S. Spawls and J. de Graff. (NMZB 8672). Fits in the gap between Gaborone record (65km E) and the Kutse Pan record (130km NW).

ATRACTASPIS BIBRONII

(Bibron's Stiletto Snake). 2km N of Otse. 17 October 1986. S. Spawls. (NMZB 8683). Fits in the gap between the Vryburg, South Africa, (250km S) and the Sikwane (80km NE) records 40km NW Molepolole, on Molepolole-Letlhakeng road. 25 October 1986. S. Spawls and J. de Graff. (NMZB 8593). Extends range 90km NNW of previous record.

PROSYMNA SUNDEVALLI LINEATA

(Lineolate Shovel-snout). 20km N of Molepolole. J. de Graff. (NMZB 8306). First record for Botswana S of 21°S, extends range 500km SE; 55km NW Molepolole, on Molepolole-Letlhakeng road. 25 October 1986. S. Spawls and J. de Graff. (NMZB 8674). Extends range 40km W of previous record.

CROTAPHOPELTIS HOTAMBOEIA

(Red-lipped Snake). 8km SSW of Otse. 24 March 1986. S. Spawls. Verified by R.C. Drewes. California Academy of Sciences (CAS 160777). First record from Botswana S of 20°S. Extends range 60km NW (from South Africa); 15km NW Molepolole, on Molepolole-Letlhakeng road. 29 October 1986. J. de Graff (NMZB 8600). First record from Kalahari sand area in Botswana. Extends range 90km NNW.

DISPHOLIDUS TYPUS

(Boomslang). Moeding College, Otse. 19 February 1985. S. Spawls. (NMZB 7798). First record for SE Botswana, although recorded ca. 20 km E in South Africa.

THELOTORNIS C. CAPENSIS

(Southern Vine Snake). 12km SSW of Otse. 20 April 1985. S. Spawls. (NMZB 7711). First record for SE Botswana S of the Tropic of Capricorn. Extends range in Botswana 300km SE.

DENDROASPIS POLYLEPIS

(Black Mamba). Otse village. 23 March 1987. S. Spawls. (NMZB 8762). Southernmost record in Botswana. Extends range 50km S.

ACKNOWLEGEMENTS

Our thanks to D.G. Broadley, Natural History Museum of Zimbabwe, Bulawayo, for identifying the specimens and critically reading the manuscript, and to our wives Laura and Frieda for tolerating their snake-hunting husbands.

Submitted by STEPHEN SPAWLS, Moeding College, Private Bag 11, Lobatse, Botswana, and JOB DE GRAFF, Lutheran World Federation, P.O. Box 1645, Gaberone, Botswana.

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SWALLOW PREDATION BY LEGUAAN

On 25 November 1984 during a bird-watching outing to Rusfontein Dam and vicinity the group witnessed predation of a nest of the South African Cliff Swallow 528 (R504) by a leguaan (*Varanus niloticus*). The colony of nests was on the underside of the concrete part of a low-water bridge, about 2½ m above a pool of water in the Modder River below the Rusfontein Dam in the Bloemfontein District (2826 BC).

The leguaan was noticed with its tail and one leg protruding from a nest. Shortly afterwards this leg also disappeared into the nest where its whole torso and legs must have been. The nest was in the corner between the horizontal part and the vertical pillar of the bridge. After about ten minutes it was decided to disturb the predator by jumping on the bridge directly above it. After a while it emerged with a nestling still in its mouth. It then lost its grip and fell into the water.

There was speculation as to how the leguaan got to the nests: from above or by climbing up the vertical wall. This was resolved after about a quarter of an hour when it was spotted about halfway up the pillar probably again on its way to the nests. It was an old bridge with a pitted surface providing sufficient unevenness for the leguaan to negotiate the vertical structure.

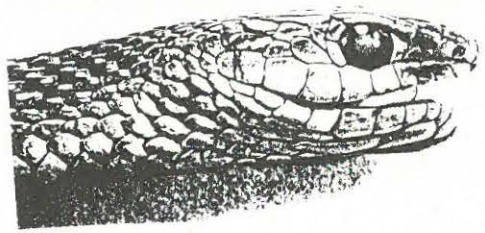
N. Grobler and J. Jacobs

Article reprinted with permission from *MIRAFRA* **6(4):** 103 [1989].

AN ENCOUNTER WITH A RINKHALS

Hazel Vickery
Lincoln, Harrismith

On 29 September 1989, on our home farm, Lincoln (2829AA), two of my sons and I were lucky enough to witness a most unusual and interesting occurrence. We had gone out birding, and were watching the birds on one of the farm dams when all of a sudden I noticed something glide from the water onto a Redknobbed Coot's (228) nest situated close to the northern side of the dam. We all watched through our binoculars and observed a big, thick Rinkhals snake *Hemachatus haemachatus* swimming away from the nest. There was a coot standing on the nest, but it did not take any notice of the snake's intrusion. As soon as the snake moved away from the nest, about 12 Redknobbed Coots immediately gathered around it and started manoeuvering it towards the middle of the dam. At this stage, other birds started showing a bit of interest as well, and a pair of Egyptian Geese (102), a pair of Yellowbilled Duck (104) and a pair of Dabchick (8) swam across to investigate. After a bit of jostling around, and with much writhing on the part of the snake, the party of birds got themselves arranged into some semblance of order, for all the world like a naval escort. The coots arranged themselves on either side of the snake with the other birds acting as outriders. After much discussion we estimated the Rinkhals to be about 1,5 metre long. Once the escort party had been arranged, the coots got down to the earnest business of escorting the snake out of the dam. They moved straight along the full length of the dam, a distance of about 100 metres. Every now and then, one of the coots would swim to the front, have an eyeball to eyeball confrontation with the snake and then move back into position at the side. Periodically the snake would stop, presumably to rest, but immediately one of the coots would peck it gently to keep it moving. All along, other birds would come along to investigate, but would leave the coots to carry on with the escort. The whole convoy moved along at a stately, graceful pace until it reached the southern bank of the dam where the Rinkhals wasted no time in disappearing under the roots of a big willow tree standing at the water's edge.



FROM THE PRESS

The Citizen, 11 May 1990, page 13.

COBRA BITES HANDLER

DURBAN.- A snake-handler at Fitzsimons Snake Park in Durban on Wednesday battled to rip away an Egyptian cobra which had sunk its fangs into his hand during a demonstration.

Mr Ernest Khuzwayo battled to pull the snake away with his free hand, but it hung on and it took a few minutes before the cobra let go.

Park owner Mr John Akers said: "It is a very nasty bite. Not so long ago he was bitten by a black mamba, but no poison entered his body. But this time the Egyptian cobra just hung on to his hand".

Mr Khuzwayo received an injection and was rushed to King Edward VIII Hospital, where he is in the intensive care unit. - Sapa.

Submitted by: Mrs Rose Bates, 548 Boeing Street, Elardus Park, Pretoria, 0181.

The Dallas Morning News, 29 April 1990, page 44A.

THREE CHARGED IN POSSESSION OF SEA TURTLE

Galveston - Federal agents arrested a captain and two crew members who were caught with an endangered Kemp's ridley sea turtle. The turtle was tethered to the men's boat, the Capt. Paul Le, when a Coast Guard boat made a routine inspection Friday in the Gulf of Mexico. National Marine Fisheries Service investigators filed a formal complaint against the three: Hung Van Tran, 37, master of the shrimp boat, and crewmen Quang Duc Nguyen, 34, and Binh Van Nguyen, 33. They were charged with illegal possession of a sea turtle. *From Wire Reports.*

Submitted by: Johan Marais, Assagay Safari Park, Botha's Hill, 3660.

Transvaler, 11 January 1990.

PADDAS MET TANDE WEK KOMMER

SACRAMENTO, Kalifornië - Al gehoor van reuse- paddas met vlymskerp tande wat meer as nege meter ver kan spring? 'n Diereversamelaar van Cameroon het almal op loop omdat hy die paddas in 'n paddaspringkompetisie wil laat inskryf.

Burokrate weier volstrek dat dié Afrika-paddas in die jaarlikse Calveras-distrik paddaspringkompetisie deelneem. Die dorpie is sowat 240 km oos van San Francisco.

"Volgens die vis- en wildkode, is daardie spesie padda ongewens en mag dit nie ingevoer word nie," sê Lenny Clavecilla, 'n woordvoerder van die Kalifornië vis- en wilddepartement.

"Hy kan nie eenvoudig die paddas oor die grens bring nie. Hy moet die verlangde permitte by die aangewensde agentskappe kry en ons sal nie die permitte vir dié doel uit te reik nie," sê hy.

Mnr Andy J. Koffman, het 10 van dié goliat-paddas wat hy in die jaarlikse paddaspringkompetisie by Angels Camp wil inskryf.

Die paddas weeg tussen 3,6 en 4,5 kg, is byna 'n meter lank en het klein skerp tande. Die paddas kan meer as 9m ver spring.

Dit is die tande wat die organiseerders bekommer. Hulle is van mening die paddas kan tydens die kompetisie in iemand se skoot beland!

Hulle glo die Afrika-paddas sal die gewone springpaddas verspot maklik wen. Die grootste van dié paddatjies weeg omtrent 400 gram.

Die hele aangeleentheid word Vrydag in kamera bespreek.

"Die kwessie trek baie aandag, maar die kompetisie word beslis benadeel," sê die bestuurder van die fees, Diane Baumann.

Mnr Koffman sê die Wet sal nie in sy pad staan nie.

"Ek het al langer 'n lisensie om paddas in te voer as wat hulle burokrate is. Die hele kwessie is onsinnig", sê mnr Koffman.

"Ek is seker dit sal uitwerk al moet die goewerneur van Kalifornië ingryp - veral met die baie publisiteit."

Die jaarlikse padaspringkompetisie is 71 jaar gelede ingestel - na aanleiding van 'n kortverhaal deur Mark Twain. - Sapa-AP.

Editor

The Dallas Morning News, 29 April 1990, page 42A.

RATTLESNAKE ROUNDUP DRAWS PROTEST

Animal rights activists, locals exchange jeers at Oklahoma event

Okeene, Okla. - Some of the locals jeered when about eight animal rights activists showed up Saturday to protest the 50th annual Okeene Rattlesnake Roundup.

The protesters distributed literature that described the rattlesnake roundup as inhumane.

Police Chief James Christian said he was keeping an eye on both sides to make sure no fights erupted.

"There's been some words exchanged. ... There have been some of them up there that's gave them a hard time. That's natural," Chief Christian said.

"I've been up there watching the area and making sure there's no trouble," he said. "I just know they've been yelling back and forth. My main concern is to make sure there's no fights and nobody gets hurt."

The Fund for Animals Inc. of Silver Spring, Md., sponsored the protest. Spokesman Bob Clark, an exotic snake breeder from Oklahoma City, expected about 20 people to show up.

Chief Christian said there were only eight at last count Saturday afternoon.

Mr. Clark said the hunt serves no useful purpose and destroys the predator-prey ratio in the wild.

"Rattlesnakes don't get the best press in the world, but I say, 'Hey, let's just leave them alone.'"

He said the snakes that are captured are thrown in a pen, dubbed "The Den of Death", where they are poked, thrown and kicked while dehydrated and starving until they are finally decapitated for their meat and hides.

He said even the decapitation is inhumane because a snake's severed head is neurologically sensitive for as long as 30 minutes.

The Okeene Junior Chamber of Commerce, which sponsors the hunt, said the number and size of snakes that hunters can capture has been restricted for several years to protect the population.

"We took those steps as a conservation move", said Ron Posey, coordinator of this weekend's event.

Sponsors contend the hunt began as a way of controlling the rattlesnake population. They say independent studies indicate mostly male rattlers are caught and that the number of snakes is not being depleted.

Organizers of the hunt, in its 50th year, expected about 500 snakes to be captured during the three-day event ending Sunday.

About 400 people were attending the annual rattlesnake roundup in Okeene, a Blaine County town of about 1,600 residents 25 miles south-west of Enid.

Mangum, 142 miles away, also was having its rattlesnake roundup this weekend. "That really hurt us", Chief Christian said.

The police chief said he has no problem with the protesters.

"My opinion is, it doesn't bother me that much. It's their right, and they're expressing their opinion about rattlesnakes", he said. *Associated Press.*

Submitted by: Johan Marais, Assagay Safari Park, Botha's Hill, 3660.

HERPETOLOGY 1989/90

Nuijten, P. 1989. De verzorging en kweek van enkele hagedissen van het geslacht *Cordylus* (1). *Lacerta* **48(1)**:6-12.

Nuijten, P. 1990. De verzorging en kweek van enkele hagedissen van het geslacht *Cordylus* (2). *Lacerta* **48(2)**: 34-37.

An English summary of the above two articles is provided at the end of part 2.

The author discusses the care and breeding of five* *Cordylus* species, namely *C. cataphractus*, *C. warreni*, *C. giganteus*, *C. jonesi* and *C.c. tropidosternum*. Notes on distribution, external appearance, sexual dimorphism and biotype are also given. The lizards are fed a diet of various insects, meat and mice, depending on their size. Lime and vitamins are added to the drinking water. All vivaria are miniature deserts, with sand on the floor, a small waterbowl and stones as hiding places. Daytime temperature may rise to 40°C, whereas night temperatures drop to 10-18°C. The author feels that, with the exception of *C.c. tropidosternum*, the other species probably need a short hibernation for better breeding results.

Both articles in the series are excellently illustrated throughout. The series is a must for any persons or institutes keeping cordylids. Although written in Dutch, persons able to read Afrikaans should have little difficulty in understanding the text.

*EDITOR: *Cordylus jonesi* is a synonym of *C. tropidosternum jonesii*, whereas *C. cordylus tropidosternum* is a synonym of *C. tropidosternum tropidosternum*.

Herpetological papers and posters presented at the Zoological Society of Southern Africa Symposium, University of Port Elizabeth, 10-12 July 1990

Channing, A. & Fresen, J. Gambling frogs: life at the edge.

Els, S.F., Branch, W.R. & Winter, P.E.D. Osmotic balance of the tortoise, *Chersina angulata*, from two different habitats. (poster)

Els, S.F., Winter, P.E.D. & Erasmus, T. Body temperature patterns of the tortoise, *Chersina angulata*, as measured by radio telemetry. (poster)

Hanrahan, S.A. & Pietruska, R.D. Seasonality and reproduction in the desert lizard, *Angolosaurus skoogi*.

Mouton, P. le F. N. & Van Wyk, J.H. The biogeography of the lizard genera *Cordylus* and *Pseudocordylus* in Southern Africa.

ABSTRACT

Bates, M.F. 1989. Tail-break frequency, tail size and the extent of caudal autotomy in the Cape thick-toed gecko, *Pachydactylus capensis capensis* (Sauria: Gekkonidae). Navors. nas. Mus., Bloemfontein 6(7): 223-242. The tails of geckos in three samples from widely separated areas in southern Africa (*viz.* Botswana/northern Transvaal, Pretoria and Orange Free State) were examined to determine tail-break frequencies, tail size and the extent of caudal autotomy. Tail-break frequencies in all samples were relatively high (51,5%, 52,9% and 68,8% respectively) when compared to most other African gekkonids and suggest the effectiveness of caudal autotomy for predator escape. There were no broken tails in the smaller specimens of each sample, after which tail-break frequency increased with increasing snout-vent length. The percentage of tail autotomized tends to increase with increasing SVL, suggesting a high occurrence of multiple tail breaks. There was no significant difference in tail-break frequencies between geckos from two microhabitat types in the Orange Free State. Growth in length of the original tail relative to SVL was symmetric, whereas growth in width of the original tail relative to SVL suggested a partial trend towards allometric growth. In a sample of geckos from the O.F.S., 64,1% of all specimens with regenerated or regenerating tails had autotomized over 80% of the tail length, suggesting that caudal autotomy commonly results in the loss of a large proportion of the tail in nature. Economy of autotomy can occur, but may be less effective for predator escape. (*Pachydactylus capensis capensis*; **Tail: break, size, extent**).

HERPETOLOGICAL BOOKS

The H.A.A. has received the latest **Catalog of Herpetological Books** from **Koeltz Scientific Books in West Germany.** We receive many enquiries from overseas members asking for or about books on African and South African herpetological subjects. It is therefore pleasing to note that amongst the world-wide selection of books which **Koeltz** has to offer, most of the relevant African and South African herpetological literature is listed.

In the latest catalogue containing 72 pages, nearly 400 books are listed, with most listings containing a brief abstract on the book itself. The catalogue has a very handy geographical index at the back, under which authors are listed according to subject matter by country. This index lists 77 different countries and geographical regions.

This catalogue should appeal to all serious minded Herp fanatics who are on the lookout for the latest, and not so recent, Herp publications. This will also be ideal for Herpetological Societies and Associations. Ms Ann Rennebeck of **Koeltz Scientific Books,** at the above address, will gladly send you a copy of their latest Herpetological Catalogue on request. Drop her a line, and if you have any other particular scientific interest about which you might require literature, do mention this as well.

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Reproductive Zoology, Zoophysiology, Comparative Physiology, Endocrinology, Herpetology, Ornithology, Developmental Biology, Poultry Science

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S.S. GURAYA, Punjab Agricultural University, Ludhiana, India

Ovarian Follicles in Reptiles and Birds

(Zoophysiology. Eds.: D.S. Farner, W. Burggren, S. Ishii, H. Langer, G. Neuweiler, D.J. Randall. **Vol. 24)**

1989. 72 figs. Approx. 305 pp. Hard cover DM 248,–. ISBN 3-540-50416-8

Contents: Introduction.– Germinal Beds, Oogenesis and Folliculogenesis.– Nucleus or Germinal Vesicles.– Ooplasmic Components.– Vitellogenesis.– Follicle Wall.– Maturation of Ovum.– Ovulation.– Postovulatory Follicles.– Follicular Atresia.– References.– Subject Index.

S.S. Guraya provides a unique, up-to-date review of recent research on ovarian follicles in reptiles and birds. He discusses problems of development, differentiation, growth, structure, chemistry and regulation of functions in various components such as oocytes, zona pellucida, follicula epithelium and theca of follicles including the interaction at the cellular and molecular levels during growth, maturation, atresia, and ovulation of follicles. Results on the morphological, ultrastructural, histochemical, biochemical, physiological and endocrinological aspects of all cells and tissues involved are critically integrated, compared and contrasted.

Dieser Band gibt neben einer kritischen Übersicht der gegenwärtigen Literatur eine umfassende Darstellung der morphologischen, ultrastrukturellen, funktionellen, endokrinologischen und reproduktionsphysiologischen Aspekte der Ovarien von Reptilien und Vögeln.

Publication date: April/May 1989

Please order through your bookseller or from Springer-Verlag, Heidelberger Platz 3, D-1000 Berlin 33.

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THE 7TH SYMPOSIUM ON AFRICAN AMPHIBIA

- Organised by the African Amphibian Working Group, will be held from the **21st to 24th JANUARY 1991** at the **NATURAL HISTORY MUSEUM OF ZIMBABWE, CENTENARY PARK, BULAWAYO, ZIMBABWE.**

Past and present workers on AfricanAmphibia are invited to attend and deliver a paper. There will be topical discussions and opportunities to observe and collect specimens.

After the symposium, a field trip of three days duration is planned. The first day will be spent travelling and collecting between Bulawayo and Birchenough Bridge on the Save River (Via Masvingo), the second day will be spent in CHIRINDA FOREST (type locality of *Stephopaedes anotis*, which should be breeding at this time) and on the third day we will return to Bulawayo.

Interested persons should contact the local organiser as soon as possible at the following address:

Dr D.G. Broadley, Natural History Museum, P.O. Box 240, BULAWAYO, ZIMBABWE.

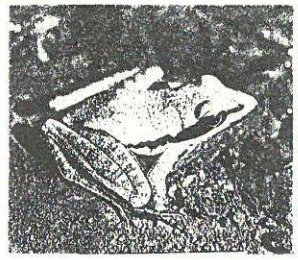
Those who wish to present papers or slide shows, or have suggestions for round table discussions, should contact:

Dr A. Channing, Biochemistry Department, University of the Western Cape, Private Bag X17, BELLVILLE, 7535 SOUTH AFRICA.

or

Prof. N.I. Passmore, Zoology Department, University of the Witwatersrand, 1 Jan Smuts Avenue, JOHANNESBURG, 2000 SOUTH AFRICA.

ONLY PERSONS REPLYING TO THIS CIRCULAR WILL RECEIVE THE FOLLOWING CIRCULAR GIVING COSTS AND THE PROVISIONAL PROGRAMME.



Vincent A. Wager

WILDLIFE 2001: POPULATIONS

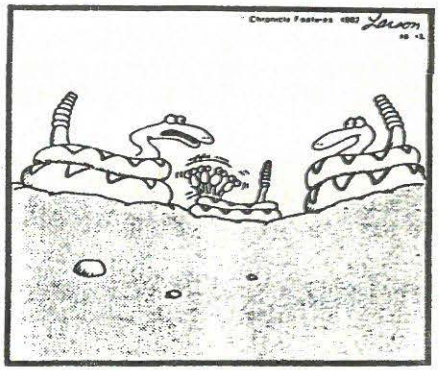
Wildlife 2001: Populations is an international conference intended for research workers and agency personnel whose interest is the science, conservation, and management of vertebrate populations (exclusive of fish and primates). Papers will assess the state of the art and set the agenda for applied wildlife population work on the verge of the 21st century. It is a followup of the highly successful Wildlife 2000, which emphasized habitat modelling, and a companion publication will be produced.

The conference will be held July 29 through 31, 1991, at the Oakland Airport Hilton Hotel in Oakland, California. This hotel is a low-rise hotel with outside courtyards and gardens, and is away from the downtown area, within a mile of the Oakland Airport. Free parking and free shuttle buses to the airport and rapid transit (BART) give easy access to the greater San Francisco Bay Area.

Morning General Sessions, with chairs, will be: Methods, Gary White; Modelling, Carl Walters; and Threatened Species, Kathy Ralls. Afternoon session include: Small Mammals, Lloyd Keith; Marine Mammals, Chuck Fowler; Waterfowl, Doug Johnson; Overabundant Populations, Fred Wagner; **Herps, Norman Scott**; Large Herbivores, Fred Bunnell; Game Birds, John Roseberry; Seabirds, David Nettleship; Passerine Birds, Barry Noon; Large Carnivores, Maurice Hornocker; Raptors, Stan Temple; and Furbearers, Bill Clark.

Initial sponsors include the Bay Area Chapter of the Wildlife Society, Western Section of The Wildlife Society, and Department of Forestry and Resource Management, University of California, Berkeley.

For further information contact the conference organizers, Dale McCullough (415) 642-8462 or Reg Barret (415) 642-7261, Dept. of Forestry and Resource Management, 145 Mulford Hall, University of California, Berkeley, CA 94720 (Fax 415/643-5438).



"This is your side of the family, you realize."

BRITISH HERPETOLOGICAL SOCIETY

(founded 1947)

LONDON MEETINGS 1990

Meetings are held in the Lecture Theatre of the Linnean Society of London, Burlington House, Piccadilly, London W1, and start at 7.00 pm, ending at 9.00 pm, unless indicated otherwise. For further details, membership, information on publications and subscriptions to the *Herpetological Journal* and quarterly BHS Bulletin, please write to BHS c/o Zoological Society of London, Regent's Park, London NW1 4RY, UK. With overall membership exceeding 1000 for the first time in its history and as a Co-Host of the First World Congress of Herpetology in 1989, the Society extends a special celebratory welcome to herpetologists from other countries, especially tropical (including developing) nations; **members of the Herpetological Association of Africa** and other herpetologists based in southern Africa and subsaharan Africa generally, especially in the Commonwealth, **are most welcome!**

Programme for second half of 1990

July 25th	**Amphibia and Reptilia worldwide: their care and breeding.** A discussion organised by the Captive Breeding Committee (Chairman: Mike Linley). Members are encouraged to bring live animals, preserved specimens, amphibian voice recordings and 35mm colour slides for display and to illustrate discussions.
September 1st	**Care and breeding of amphibians and reptiles: an open meeting**: Contributions from members - live animal and photographic display. There will be the opportunity for the sale and exchange of members' private home-bred stock and facilities for commercial displays of books and vivarium equipment. A Saturday Afternoon meeting from 2.00 to 5.30pm to be held in the Lecture Theatre of the Zoo Studies Centre, Zoological Society of London, Prince Albert Road (opposite Ormonde Terrace), London NW1.
October 10th	Mr Mark O'Shea (Wolverhampton): Reptiles, especially snakes, of Papua New Guinea.
November 13th	Mr Jonathan Denton (School of Biology, University of Sussex): Comparative ecology of natterjacks and common toads during the terrestrial phase.

American Federation Of Herpetoculturists

The American Federation of Herpetoculturists (AFH) is a non-profit national organization whose purpose is to represent the interests of herpetoculturists. A primary goal of the AFH is to form effective legislative action committees to assure that herpetoculturists can uphold their rights to pursue and enjoy herpetoculture.

Another goal of the AFH is the dissemination of information related to herpetoculture among private herpetoculturists, herpetological societies, zoos, veterinarians, research institutions, the pet industry, and the general public. This will be accomplished through *The Vivarium* the official publication of the AFH, the first high quality national herpetocultural journal to document the accomplishments of herpetoculturists and to promote a general philosophy of herpetoculture whereby captive propagation can contribute to the conservation of biological diversity.

Yearly Membership Rates

Individual Membership	$26.00*
Foreign Country Membership	32.00*
Institutional Membership	46.00*
Sustaining Membership	60.00*
Patron Membership	100.00*

*All membership dues must be paid in U.S. dollars.
(Make all checks out to the 'American Federation of Herpetoculturists')

Membership in the AFH will entitle you to the following:

1) One year membership in the American Federation of Herpetoculturists. The only national society that represents the herpetoculturist.

2) One year subscription to *The Vivarium* (six issues), a high quality 8½" x 11" magazine. Each issue contains information on captive care, propagation, legislature, books, medical, natural history, products, techniques, etc.

3) A one year subscription to the *AFH Update*, a newsletter designed to keep you informed about current herpetocultural events. It is published in between issues of *The Vivarium*.

4) Legislative action updates. The AFH's legislative action network assures you that you will be kept up-to-date on all current happenings.

5) Special discounts on all AFH sponsored programs and events.

Membership Application

(Please type or print legibly)

Name _____

Address _____

City _____ State _____ Zip Code _____ Country _____

Phone Number(s) ( ) _____, ( ) _____

What herpetological societies do you belong to? _____

What are your herpetological interests? _____

What would you like the AFH to accomplish? _____

	yes	no
Would you be interested in becoming a representative for the AFH?	( )	( )
Do you consent to having your name published in the AFH directory?	( )	( )

Send this application along with membership dues to:
American Federation of Herpetoculturists
P.O. Box 1131
Lakeside, CA 92040

HERPETOLOGICAL ASSOCIATION OF AFRICA

MEMBERSHIP FEES AS AT 1 JANUARY 1990

AFRICAN MEMBERSHIP

ORDINARY MEMBERSHIP

1 year membership R20.00. Submit in Rand or equivalent U.S. Dollar plus 10%.
3 year membership R56.00. Submit in Rand or equivalent U.S. Dollar plus 10%.

SCHOLARS MEMBERSHIP

1 year membership R15.00. Submit in Rand or equivalent U.S. Dollar plus 10%

OVERSEAS MEMBERSHIP

DOLLAR PAYMENTS

1 year membership $15.00. Submit in U.S. Dollars by personal cheque or money order.
3 year membership $42.00. Submit in U.S. Dollars by personal cheque or money order.

RAND PAYMENT FROM OVERSEAS

1 year membership R29.00. Submit in ZAR or Rand by bankers draft or money order.
3 year membership R79.00. Submit in ZAR or Rand by bankers draft or money order.

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

THE SECRETARY/TREASURER
HERPETOLOGICAL ASSOCIATION OF AFRICA
C/O NATIONAL MUSEUM
P.O. BOX 266
BLOEMFONTEIN
9300 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.

For more information on arrears membership, penalties for delayed payments, etc., see page 2.