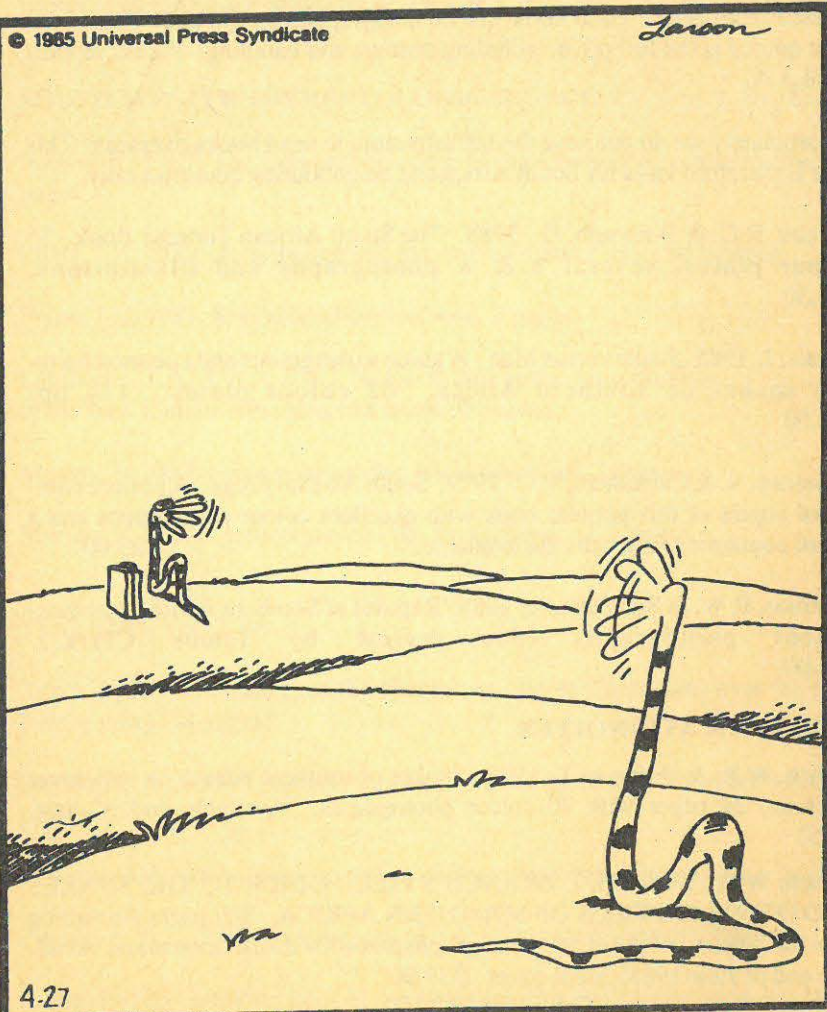


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Larson



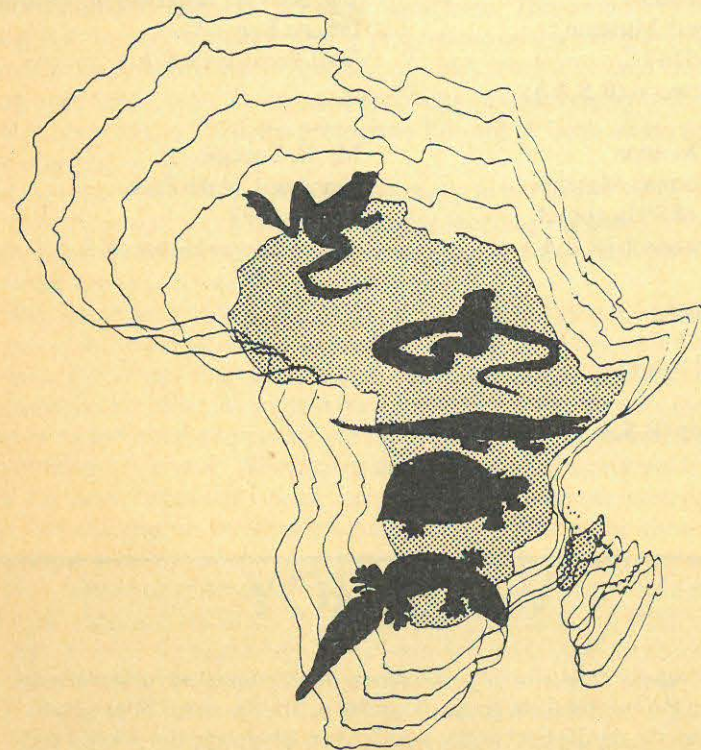
4-27

How snakes say goodbye.

Lester Braun & Assoc.

H.A.A.

NEWSLETTER 11



MAY 1988

HERPETOLOGICAL ASSOCIATION OF AFRICA

H.A.A COMMITTEE

Chairman & Newsletter Editor:

Mr. J. Marais
Cango Crocodile Ranch
P.O. Box 559
Oudtshoorn
6620

Journal Editor

Dr. W.R. Branch
Port Elizabeth Museum
P.O. Box 13147
6013 Humewood (R.S.A.)

Dr. L.F.N. Mouton

John R. Ellerman Museum
University of Stellenbosch
7600 Stellenbosch (R.S.A.)

Mr. J. Vorster

Natal Branch
76 Arundel Road
Hillary
4094 Durban (R.S.A.)

Hon. Secretary/Treasurer

Mr. R.M. Douglas
National Museum
P.O. Box 266
9300 Bloemfontein (R.S.A.)

Mr. N. Jacobsen

Tvl. Nature Conservation Division
Private Bag X209
0001 Pretoria (R.S.A.)

Mr. R. Boycott

Transvaal Snake Park
P.O. Box 97
1685 Halfway House (R.S.A.)

VACANCY

An opportunity exists for an enthusiastic herpetologist to further his interests in the subject through employment at the Transvaal Snake Park. Experience in reptile husbandry would be an advantage but is not a prerequisite as training would be provided.

Applicants should write to:

The Director
Transvaal Snake Park
P.O. Box 97
Halfway House
1685

or Tel. Mr. Patterson at 011-8053116.

EDITORIAL

AWARDS FOR CAPTIVE BREEDING

(Isn't it time to wake up)

Rod Douglas

It was with great interest, and certainly most encouraging, to read recently in "Scales and Tales" Vol. 1, No. 4, that the Reptile Breeding Foundation in Canada had just won the "Significant Achievement Award" of the American Association of Zoological Parks and Aquariums. This award was awarded to the R.B.F. for their captive breeding programme on the Mongolian Frog-eyed Sand Gecko, *Teratoscincus przewalski*, of which seven were bred, and the Asian Frog-eyed Sand Gecko, *Teratoscincus scincus*, of which eighty were bred. The R.B.F. also won, in 1978, the prestigious Edward H. Bean award for the captive breeding of *Epicrates*.

These awards and other are presented annually in the United States of America to recognize outstanding success in captive breeding programs. For a private body to receive such awards when competing against major zoos and aquariums in North America is surely a great achievement.

Perhaps we in South Africa should take a long and hard look at what is achieved overseas and hopefully take a lesson from their book. When I say "we", I refer to both the private individual and in particular to the various conservation authorities. For today, in South Africa, there are authorities who, for whatever reason, cannot see the advantages of captive breeding programmes, particularly private programmes. What makes the situation particularly ironic is the fact that it is these authorities who are set up in order to promote conservation!

The fact that captive breeding programmes contribute to the conservation of both the species and the environment appears to be as far away as Pluto to these bodies. In the recent floods which swept through the Orange Free State, North-western Cape and Natal, not to mention wanton killing and DOR specimens, thousands upon thousands of reptiles were drowned. And yet to allow only a few tens of indigenous specimens to be kept by private individuals for captive breeding is largely considered unlawful. Surely most herpetoculturalists - a brilliant word coined by the R.B.F. - would rather obtain a specimen from captive bred stock, rather than sweat it out in the hot sun, destroying the environment and possibly taking specimens which he never intended taking in the first place and all in order to catch one House snake. The authorities are unable to police the situation effectively and besides it will continue behind their back to a large extent unless they are prepared to legalize the situation and at least have a measure of control.

Some of our private South African breeders have made incredible strides and achieved amazing results with captive breeding. It is such a pity that these ef-

forts must go unsung or even be kept quiet for fear of intervention by law enforcement bodies.

Let us look at the American Association of Zoological Parks and Aquariums as a hopeful future of what might one day come to pass here. Perhaps then we will be able to give the word conservation its true and all encompassing meaning and perspective.

H.A.A. COMMITTEE MEMBER RESIGNS

Dr. Hartwig Berger-Dell'mour has left S.W.A. to return to Austria where he may be taking up a post with a pharmaceutical company. We wish him well and express our thanks for his contributions.

Dr. Berger-Dell'mour has passed the questionnaires pertaining to the preliminary "African Herpetology" list on to our secretary/treasurer. A great deal of effort has been put into this project and it will be very sad if the list is not completed. Should any member be interested in becoming involved with the completion of "African Herpetology", please contact Rod Douglas in Bloemfontein. Dr. Berger-Dell'mour's new address is: Franz Schubert Str. 9, A-3013, TULLNERBACH/Lawies, Austria, Europe.

NEW HERPETOLOGICAL ASSOCIATION FORMED

May 1987 saw the formation of a new herpetological association in Africa. The Herpetological Association of Zimbabwe has been formed and, within 6 months of being established, boasts a membership of over 35 members.

The H.A.A. would like to take this opportunity to wish them every success with their new venture and hope that they grow from strength to strength. It is surely encouraging to see this renewed interest in herpetology springing up and obviously the more associations that can be established the greater the interest that will be created.

Their first newsletter was published in October 1987 and contains articles from the first Herpetological Association of Rhodesia newsletter of 1963. As a point of interest to our new members, the Herpetological Association of Rhodesia was the founding association which later became the H.A.A.

Membership is Zim.\$12.00 per annum and further information can be obtained by writing to:

Steve Durrant
6 Alice Lane
Avondale
Harare
Zimbabwe

The H.A.A. would like to thank the H.A.Z. for kindly promoting the H.A.A. in their newsletter
Rod Douglas

CITES HAS BIGGEST MEETING EVER

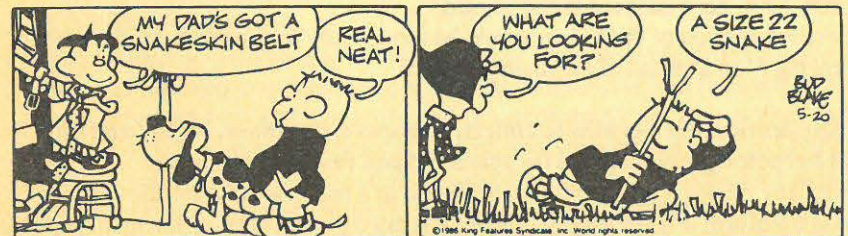
We are quite pleased to report that the CITES meeting we attended on July 12 - 24 in Ottawa, Canada, was the largest meeting on record. Almost 700 attendees expressed a keen interest in the trade of endangered species. Of the 95 member countries, 81 were present as well as delegates from 125 observer organizations. It is wonderful to see the entire exotic leather story being told as more and more people make their views known. There seemed to be more rational decisions, rather than quick emotional responses without regard for facts. We must continue to press for more support to tell our side of the story. To bring you up-to-date, the following highlight of the meeting is provided.

Nile Crocodiles

One of the key issues of the conference was the continuance of the quota system for exporting Nile crocodile hides. At the last conference in 1985, the crocodile was downlisted from Appendix 1 to Appendix 11. Under Appendix 11, hides can be traded on a commercial basis. Obviously, the quota system represents an essential balance between those who wish to utilize wildlife and those who wish to ban all use.

Supporting materials were submitted by all of the quota countries in Committee 1. Based on the materials and the lack of opposition to the quotas in general, most quotas were either continued or increased for the next two years. Please note that the U.S.A. still has its own restriction on Nile crocodiles.

Extract from International Exotic Leather Council "UPDATE REPORT", Issue # 10, December 1987.



THE HERPETOLOGICAL PERMIT SYSTEM OF THE CAPE DEPARTMENT OF NATURE AND ENVIRONMENTAL CONSERVATION

Ernst H.W. Baard
Jonkershoek Nature Conservation Station
Private Bag 5014
Stellenbosch
7600

The exploitation of South Africa's herpetological resources in the past has led to the depletion of certain species. Some species sought after by the international pet trade (e.g. *Cordylus giganteus*) have been exploited to the stage where conservation authorities even deemed it necessary to apply regulations restricting over-exploitation by unscrupulous collectors and permit systems whereby collectors are restricted were introduced. Although many may consider these measures purely playing "policeman" to prosecute wherever possible, it is the responsibility of the provincial Departments of Nature Conservation to protect and conserve species within their borders. Permit systems are therefore necessary and play an important part in protecting rare and/or threatened species.

Twenty-eight species of the Cape herpetofauna appear in the current South African Red Data Book of Reptiles and Amphibians (McLachlan, 1978). The Cape Department of Nature and Environmental Conservation considers the conservation of these species as its responsibility and therefore five of these species (*Psammobates geometricus*, *Microbatrachella capensis*, *Cacosternum capense*, *Xenopus gilli* and *Crocodylus niloticus*) are currently strictly protected as endangered species under Schedule 1 of the Cape Nature Conservation Ordinance (No. 19 of 1974) providing priority protection of these species.

The Department recently adopted a revised policy with regards to the issuing of permits to herpetological researchers, collectors and keepers. The aim of this article is to introduce this new policy to the herpetological community and also to clarify certain unclear aspects that may have been regarded as being unreasonable. The Department recognizes the need for collection of herpetological material especially where research is involved and therefore a more lenient approach has been adopted in this regard.

A detailed version of the policy would be too lengthy to discuss here, thus the following is an abstract of the main approach:

1. Applications for permits to collect, transport, purchase, export and import herpetological material for scientific and research purposes:

Where any research by a person(s) affiliated to a recognized scientific institution is involved, it is necessary to provide a brief project description mentioning the species and number of specimens required. It is also important to include a letter from the head of the institution verifying and supporting the project. The reason for this is to determine whether or not the research involved is offi-

cially conducted and approved.

The granting of permits is subject to the merit of each individual case and where unjustifiably large numbers of protected species are required, restrictions will be placed on the amount of material. The *bona fide* researcher is regarded as having the right to conduct his or her research, but the use of material should be justified.

In the case where a private person(s) wants to research a specific topic but is not affiliated to any scientific institution, a letter by a recognized scientist supporting the project is required. The latter also has to undertake to act as supervisor in this case.

Where research of any kind has led to the description of a new local taxon or taxa, the researcher is expected on completion of his work, to deposit the *type material* in a recognized local museum.

Permits for obtaining material of Schedule 1 species for research purposes will be granted only in exceptional cases.

2. Applications for permits to collect, transport, purchase, export and import herpetological material for the purpose of keeping such animals in captivity.

Although the Department does not specifically encourage the captive maintenance of herpetological species, the need thereof for educational, scientific and commercial purposes exists, especially in the case of herpetological parks, zoos, museums, crocodile breeding farms. Private collections are also recognized in certain cases.

2.1 Herpetological parks, zoos, museums and crocodile breeding farms:

The collecting, purchasing, transporting, export and importing of herpetological material for educational, scientific and commercial purposes are subject to granting of the appropriate permits and inspections of holding facilities. Regulations concerning measurements and dimensions of these facilities are available on request.

In the case where the development of new parks, pits and/or crocodile breeding farms are planned, detailed plans of the facilities, as well as the motivation for the development thereof must be submitted together with the permit applications.

2.2 Private collections:

The collecting, purchasing, transport, export and importing of herpetological material for captive maintenance by private individuals with personal interest (other than educational, scientific and/or commercial) are also subject to the granting of the appropriate permits, as well as inspections of holding facilities. Regulations concerning measurements and dimensions of facilities are as in the previous case available on request. A completed questionnaire revealing details about past experience in the keeping of herpetofauna, the source of the material, details about holding facilities, and a signed authority by the parent(s) or guardian(s) of under aged applicants must be submitted together with the permit ap-

plication. If material is to be collected from private property, a letter of approval from the landowner is also required.

Purchasing of herpetological material for captive maintenance (including indigenous and exotic species) will be allowed only where material is available from a legitimate source (i.e. recognized snake parks) or from captive bred stock. In cases where the importing of exotic species, as well as exporting of indigenous species are involved, all CITES regulations will be met.

3. Applications for permits to collect, transport, purchase, export and import herpetological material for the pet trade.

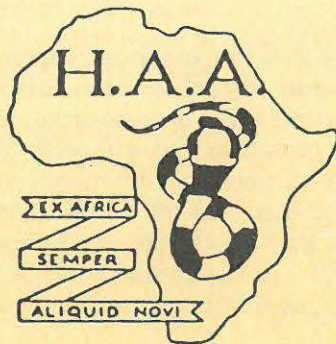
Collecting, purchasing, transport, export and importing of herpetological material for the sole purpose of trade in herpetological pets is strongly discouraged by this Department and being a signatory of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), no permits will be granted for this purpose.

The Cape Department of Nature and Environmental Conservation is committed to the preservation and conservation of indigenous wild fauna and flora and recognizes its responsibility towards the effective utilization of wildlife for scientific, educational and commercial purposes. The permit system is necessary to fulfill these responsibilities by preventing over-utilization and -exploitation and therefore infringement of any of the regulations is a violation of the Cape Nature Conservation Ordinance and may result in legal proceedings being instituted.

For further, full details of this policy, captivity regulations, and permit application forms, please write to:

The Chief Director
Chief Directorate Nature and
Environmental Conservation
Private Bag 9086
Cape Town
8000

(This letter is repeated as vital paragraphs were omitted during printing of the last newsletter - Ed.)



SNAKE

A snake came to my water-trough
On a hot, hot day, and I in pajamas for the heat,
To drink there.

In the deep, strange-scented shade of the great carob-tree
I came down the steps with my pitcher
And must wait, must stand and wait, for there he was at the through before be.

He reached down from a fissure in the earth-wall in the gloom
And trailed his yellow-brown slackness soft-bellied down, over the edge of the
stone trough
and rested his throat upon the stone bottom,
And where the water had dripped from the tap, in a small clearness,
He sipped with his straight mouth,
Softly drank through his straight gums, into his slack long body,
Silently.

Someone was before me at the water-trough,
And I, like a second comer, waiting.

He lifted his head from his drinking, as cattle do,
And looked at me vaguely, as drinking cattle do,
And flickered his two-forked tongue from his lips, and mused a moment,
And stooped and drank a little more,
Being earth-brown, earth-golden from the burning bowels of the earth
On the day of Sicilian July, with Etna smoking.

The voice of my education said to me
He must be killed,
For in Sicily the black, black snakes are innocent, the gold are venomous.
And voices in me said, if you were a man
You would take a stick and break him now, and finish him off.

But must I confess how I like him,
How glad I was he had come like a guest in the quiet, to drink at my water-
trough
And depart peacefully, pacified, and thankless,
Into the burning bowels of this earth?

Was it cowardice, that I dared not kill him?
Was it perversity, that I longed to talk to him?
Was it humility, to feel so honoured.

And yet those voices:
If you were not afraid, you would kill him!
And truly I was afraid, I was most afraid,
But even so, honoured still more

That he should seek my hospitality
From out the dark door of the secret earth.

He drank enough
And lifted his head, dreamily, as one who has drunken
And flicked his tongue like forked night on the air, so black;
Seeming to lick his lips,
And looked around like a god, unseeing, into the air,
And slowly, very slowly, as if thrice adream,
Proceeded to draw his slow length curving around
And climb again the broken bank of my wall-face.

And as he put his head into that dreadful hole,
And as he slowly drew up, snake-easing his shoulders, and entered farther,
A sort of horror, a sort of protest against his withdrawing into that horrid black hole,
Deliberately going into the blackness and slowly drawing himself after,
Overcame me now his back was turned.

I looked round, I put down my pitcher,
I picked up a clumsy log
And threw it at the water-trough with a clatter,
I think it did not hit him,
But suddenly that part of him that was left behind convulsed in undignified haste,
Writhing like a lightning and was gone
Into the black hole, the earth-lipped fissure in the wall-front
At which, in the intense still noon, I stared with fascination.

And immediately I regretted it.
I thought how paltry, how vulgar, what a mean act!
I despised myself and the voice of my accursed human education.

And I thought of the albatross,
And I wished he would come back, my snake.

For he seemed to me again like a King,
Like a King in exile, uncrowned in the underworld,
Now due to be crowned again.

And so, I missed my chance with one of the lords
Of life.
And I have something to expiate;
A pettiness.

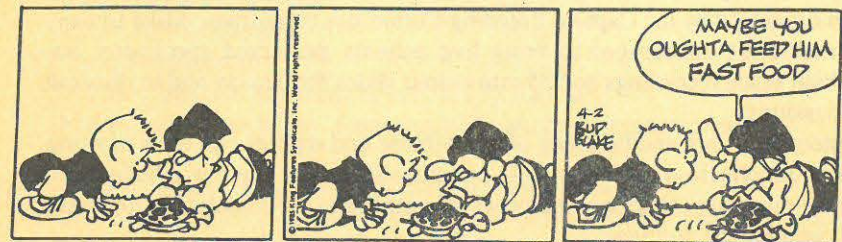
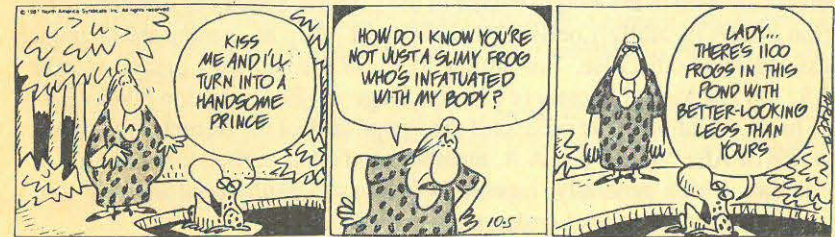
D.H. Lawrence
Submitted by N. Jacobsen

ROAD DEVIATED TO SAVE FROG - Perhaps a first in the world?

A news item in a recent copy of DIE BURGER is of interest to conservation-minded folk in the Kleinmond/ Betty's Bay region. The new road is the main topic of conversation right now. Flooded garages can be cleaned out and silted gardens soon cleared, but a destroyed natural breeding habitat of a very rare little frog is another story. This would have happened had the new road taken the planned route. However, the road engineers have been alerted to the importance of a special vleis area between Kleinmond and the Bot River road, and according to the newspaper report they have agreed to deviate the road in order to save one of the breeding grounds of this frog.

This tiny frog is about 2 cms. in size and is named *Microbatrachella capensis*, or Micro frog for short. It frequents the shallow pans and vleis in the fynbos along the southern shores as far as Hermanus (Passmore & Carruthers). Because of urban development its present distribution appears to be confined to the Betty's Bay/ Kleinmond area. According to the S.A. Red Data Book its status is "rare", and the Cape Provincial authorities consider it an endangered species. Several wetland areas in Betty's Bay are its ideal habitat and there it is under no threat.

Extract from a newsletter of the Betty's Bay Botanical Society.
Submitted by Barry Porter of Game Valley Estates.



INSTITUTIONAL NEWS

EAST RAND HERPETOLOGICAL ASSOCIATION

Since being officially recognized by the Transvaal Division of Nature Conservation, members were granted a period of grace in which to legalize their captive snakes. Members who bred snakes were also granted permission to donate the progeny to other members.

A full set of colour slides was donated to the E.R.H.A. by the Department of Nature Conservation for educational talks.

During December '87 a field trip for the younger members with Richard Newberry as chief guide and cook was conducted. Further trips are being planned for future school holidays.

Monthly meetings are held in Kempton Park. For further information, please write to:

G. Swanepoel
P.O. Box 10743
Aston Manor
1630
R.S.A.

BRITISH HERPETOLOGICAL SOCIETY - LONDON MEETINGS 1988

Meetings are held in the lecture theatre of the Linnean Society of London, Burlington House, Picadilly, London W1, and start at 7.00 p.m., ending at 9.00 p.m., unless indicated otherwise. For further details of membership, please write to B.H.S., c/o Zoological Society of London, Regent's Park, London NW1 4RY, U.K. In appreciation of the success of the symposium of the Herpetological Association of Africa (1987), H.A.A. members and other herpetologists based in subsaharan Africa generally, especially Commonwealth countries, who are visiting or passing through London are most welcome.

May 26th. David Risley (Deputy Head Keeper, Reptile House, Zoological Society of London): Captive breeding of reptiles in the London Zoo.

July 6th. 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 35 mm colour slides for display and to illustrate discussions.

September. Care and breeding of amphibians and reptiles: an open meeting. Contributions from members - live animals, slides, etc. There will be facilities for the sale and exchange of members' private home-bred stock. Saturday date and venue to be arranged.

October 13th. Talk to be arranged, hopefully Paul Edgar (Herpetologist, Operation Raleigh) on the herpetofauna of Indonesia.

November 30. Mike Linley ('Survival', Anglia Television, London, and chairman, Captive Breeding Committee) will show some herpetological films not previously screened by Anglia T.V. Date to be confirmed.

Please note that the Herpetological Journal, the Society's newly-named scientific publication, now publishes mini-reviews, short notes with a single data set, and from Dec. '87 short articles on contentious or generally controversial matters in herpetology. Mini-reviews are normally solicited by the Editor (Dr. T.J.C. Beebee, School of Biology, University of Sussex, Falmer, Brighton, BN1 9QG, U.K.).

The B.H.S. Bulletin (Co-Editor (1): John Pickett, 84 Pyrles Lane, Loughton, Essex IG10 2NW, U.K.) is quarterly and publishes articles and letters of general herpetological interest.

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, 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.

The Vivarium is a 56-64 page, 8.5 X 11 " journal with both black and white and full-colour photographs. This professional publication is published quarterly.

YEARLY MEMBERSHIP RATES

Individual Membership	\$20.00*
Foreign Country Membership	\$26.00*
Institutional Membership	\$40.00*
Sustaining Membership	\$50.00
Patron Membership	\$100.00*

*All membership dues must be paid in U.S. Dollars.

(Make cheques 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, a high quality 56-64 page colour

journal that is published four times a year. Each issue contains information on captive care, propagation, legislature, books, medical, natural history, products, techniques, etc.

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

4) Special discount on all AFH sponsored programs and events.

For more information write to: American Federation of Herpetoculturists, P.O. Box 1131, Lakeside, CA 92040, U.S.A.

ESTABLISHMENT OF AN INTERNATIONAL STUDBOOK:

Acrantophis madagascariensis

The Transvaal Snake Park and Port Elizabeth Museum are interested in the compilation of an international studbook for the Madagascar Ground Boa (*Acrantophis madagascariensis*).

Owing to the comparative paucity of this species in captive collections it is apparent that some form of cohesion is necessary between managers of captive *A. madagascariensis* to attempt to minimize inbreeding within the captive population.

It is our proposal to establish an international studbook in a hope that the information derived therefrom can be used to aid breeding group management and offspring disposition. We would appreciate your assistance if you could notify us if you are aware of any collection (including private collections) that maintains this species.

Each participating collection will receive a copy of the completed studbook. The studbook will be used to compile reports on population changes each year with reports going to each participating breeding group.

Please write to:

Mr. D.R. Morgan
Assistant Curator
Transvaal Snake Park
P.O. Box 97
Halfway House
1685
South Africa

WANTED - CORRESPONDENCE ON GECKOS

James Zaworski currently breeds some 15 species of geckos, most of them African species. James would like to correspond with persons who have a similar interest or who can help him with information on African geckos. Persons who are interested in the natural history, ecology, reproduction or husbandry of geckos may write to him at any of the following addresses:

c/o Knox College
P.O. Box 268
Galesburg
Illinois 61401
U.S.A.

REPTILE HUSBANDRY SYMPOSIUM

S.A. NATURE FOUNDATION, DELTA PARK,
JOHANNESBURG.

23-24 SEPTEMBER 1988

Convened by:

HERPETOLOGICAL ASSOCIATION OF
AFRICA

SUMMARY OF PROVISIONAL PROGRAMME

Please note that this programme is provisional and therefore subject to alteration.

FRIDAY, 23 SEPTEMBER 1988

08H00 - 09H00 REGISTRATION. (Foyer of S.A. Nature Foundation Building, Delta Park.) Tea/Coffee

09H05 - 10H00	Presentation of papers.
10H00 - 10H30	Tea
10H30 - 12H30	Presentation of papers.
12H30 - 14H00	Lunch at Delta Park.
14H00 - 15H30	Presentation of papers.
15H30 - 16H00	Tea
16H00 - 17H00	Presentation of papers.
18H30 - Braai	at Delta Park.

SATURDAY, 24 SEPTEMBER 1988

08H30 - 10H30	Presentation of papers.
10H30 - 11H00	Tea
11H00 - 12H30	Presentation of papers.
12H30 - 14H00	Lunch at Delta Park.
14H00 - 15H30	Tea
15H30 - Close	Presentation of papers.

PAPERS

Persons who wish to deliver a paper should contact Dave Morgan at Transvaal Snake Park before 15 June 1988. Following this you will be notified of acceptance.

Instructions for papers are as follows:

Each paper should be delivered within 15 minutes with 5 minutes for discussion.

An abstract should be provided to Dave Morgan by 30 June 1988.

Accepted speakers must present a manuscript consisting of no more than five typed pages (including tables and figures) to Dave Morgan **before the beginning of the symposium!** B & W photographs may be included.

The proceedings will be published and made available to delegates after the symposium.

POSTER PAPERS

Poster papers will be accepted. Posters must conform to size requirements; maximum area available is 1030 mm high x 860 mm wide. Explanatory notes should be limited to less than 200 words and lettering should be legible from a distance of 2 m. Contributors must submit an abstract no later than 30 June 1988.

REGISTRATION

The symposium is open to all members of the H.A.A. as well as anyone interested in herpetology.

Registration will take place between 08H00 -09H00 on Friday, 23 September 1988 in the foyer of the S.A. Nature Foundation Building, Delta Park. Ample parking is available.

A registration fee of R40.00 will be charged. This fee includes the cost of two lunches and all teas. Full-time students and scholars must be certified as such by their heads of Department to qualify for a reduction of R10.00.

Delegates should pay their registration before 30 June 1988. A late registration fee of R50.00 will be charged.

Cheques should be made payable to The Herpetological Association of Africa and posted together with the registration.

SOCIAL FUNCTIONS

A buffet lunch will be provided on Friday and on Saturday. Both these lunches will be held at Delta Park. Costs are included in the registration fee. Accompanying persons are welcome to attend both lunches at an additional charge of R10.00 per lunch.

ENQUIRIES AND INFORMATION

Please address all enquiries and requests for further information to:

Dave Morgan
Transvaal Snake Park
P.O. Box 97
Halfway House
1685
Tel: 011-8053116

REGISTRATION FORM

Please complete and return before **30 June 1988** to:

HUSBANDRY '88
Mr. D. Morgan
Transvaal Snake Park
P.O. Box 97
Halfway House
1685

Title: Prof/Dr/Mr/Mrs/Miss INITIALS . . . SURNAME

FIRST NAME

AFFILIATION

POSTAL ADDRESS:

.
.
.

. CODE:

TELEPHONE: BUSINESS HOME

I wish to attend the symposium Yes No

I wish to submit a paper Yes No

Title of paper:

SOCIAL FUNCTION

I will be attending the braai Yes No
(Particulars of braai to be announced).

Included, please find my cheque/postal order of R
(To be made out to the Herpetological Association of Africa)

AN INCUBUS OF REPTILE EGGS

D.R. Morgan
Transvaal Snake park

"Mr.Morgan.....telephone!.....Mr.Morgan....."

The terrarium speaker clamours its summons above the fatuous chatter of the Alex Jay show on the radio. Engrossed in prodding and palpating a vituperative female Tiger Snake, which I am certain is gravid, I mutter evilly and pretend to be deaf.

"Dave!!! Telephone!!!", Richard hisses from across the TQ.

A tic forms dangerously at the corner of my mouth and I thrust the Tiger Snake back into her moss-filled nesting box in a gesture calculated to indicate my disgust and resignation. The effect is somewhat marred when the snake, irritated beyond endurance at this somewhat cavalier handling, lunges at my withdrawing hand with pink-mouthed tenacity. In my haste to remove my extremities, I bash my elbow resoundingly on the corner of the cage and graze my fingers on the door latch.

"Mr.Morgan!.....telephone!.....".

The emphasized tones leave no further room for doubt. I glare aggrievedly at the speaker, sucking furiously on my bleeding fingers. Why the hell do I do this job, I wonder for the thousandth time this morning.

"GoodmorningMorganspeaking can I help you??", I demand brusquely into the 'phone.

"Mr. Morgan?", and excited young voice gushes. "My house snake laid eggs last night. What do I dooooo.....?".

Thrusting aside the temptation to inform him exactly what he can do with his damn house snake eggs, I sigh grandeloquently and begin the spiel.

"First you take a Tupperware sandwich box....."

With the summer season upon us, requests for advice on how to hatch reptile eggs seem to pour into the park. I must admit that through this frequency my voice probably does sound like a monotone tape-recording over the telephone. I seriously wonder if any aspirant young reptile-husbandists of today ever read any of the excellent publications on this topic that are readily available (See the Boycott & Morgan article on lizards in the H.A.A. journal Vol. 34 for a start). I did when I was a lad - but that is another story. I hope that with some of you reading this article it may mean a decrease in telephone calls to T.S.P. (Huh! Pigs might fly). I jest naturally. If any of you have a problem with your 'herps', do not hesitate in calling us - or better still, call Johan Marais who insisted I write this article in the first place.

The "spiel" I refer to involves perhaps the best known and probably the most effective method of incubating reptile eggs. This consists of thoroughly mixing coarse-grain vermiculite (available from plant nurseries) in a one-to-one ratio

with water. The ensuing mess is then placed into an airtight sandwich box and the eggs half-buried in the substrate. So, if for example you have 60 g of vermiculite, you then mix 60 ml of water into it. Once the eggs are positioned you then mist the interior side of the lid lightly with water, seal the whole package up and place it in a place which has a fairly constant temperature. The eggs are inspected every 2 - 3 days. The lid should be removed then to allow air circulation and in the absence of condensation on the inner surface of the lid, sprayed with water again. This cycle is continued until, lo and behold, the eggs miraculously hatch.

It sounds easy and in principle it is. However, there are certain pitfalls to watch out for. To begin with the eggs should be transferred to the incubating medium as soon after laying as is possible. After twelve hours or so the eggs are usually settled and any interference thereafter often results in embryonic death. Also, South African snake cages invariably seem to be pretty xerophytic in habitat and most reptile eggs (particularly snake eggs) have a high moisture requirement. If left too long the eggs may dehydrate and collapse. At the other end of the scale, if a suitable nesting box (Dad's sandwich box filled with dampened moss) is not provided for a suspected gravid female, she may well choose to lay her eggs in the water bowl, in which case the embryos will very simply drown. So move the eggs to the prepared incubator container as soon as is possible and try not to let them roll or turn upside-down.

Occasionally a totally inconsiderate female snake will produce a mass of firmly adhered eggs. I would suggest then that the entire mass be incubated together and no attempt made to separate them out. If you are fortunate to end up with a series of separate eggs, why not quickly measure and weigh them first. Then you can publish your findings in the H.A.A. journal.

Incubation temperatures are probably species-specific, and in the wild state the eggs are subject to a fair amount of temperature fluctuation. Optimal incubation temperatures can probably be determined from the species PBT (Preferred Body Temperature). However, under artificial conditions a range of 25 - 29 degrees Centigrade is adequate for most species. Too much temperature variation should be avoided as it will prolong the incubation period and exposure to temperature extremes can result in embryo death.

FUNGUS: A hated syndrome on reptile eggs and one that promotes a highly emotive response to its presence by the prospective reptile breeder. Although it is a chancey situation, one should maintain a correct perspective over the appearance of fungus. A network of fine fungal mycelia on the eggs is a sure indication that the eggs are shot and were most likely infertile in the first place. However, if only one or two eggs in the clutch are affected it does not necessarily follow that it will spread to the others (even in an egg mass) or that the others are infertile. In this event the affected eggs should be discarded or if in a mass, ignored. Mould is something different and is not normally harmful provided it is wiped away with cotton ear-buds regularly. Regrettably experience is the sole judge in determining the viability of eggs infected with fungus/mould. We have a formula for a methiolate/alcohol mix at T.S.P. which is sometimes effective against fungus and this may be obtained from us if neces-

sary.....for a consideration of course!

Some keepers puncture their incubation containers to allow for air circulation. That eggs require oxygen is certainly true and there is some evidence to suggest that an absence of adequate oxygen leads to congenital deformities in the hatchlings. However, the overall oxygen demand is fairly low and if the presence of air holes in the container means trading air supply for humidity, then rather leave them out. Provided that eggs are aerated by removing the lid every 48 - 72 hours, no problems should occur. Remember, however, that large eggs (e.g. Python eggs) will obviously require more oxygen than, say Psammophylax eggs. Desiccated or dehydrated eggs may sometimes be saved by placing dampened tissue paper over them for 24 hours.

I hope that I have supplied some pointers to the successful hatching of reptile eggs. The topic is wide and diverse and as this article has to be crammed into the newsletter somehow, I shall resist from rambling on further. In conclusion I would refer you to "Reptiles of Southern Africa" by Patterson and Bannister.

THE USE OF DISINFECTANTS IN CLEANING REPTILE CAGES

The majority of diseases affecting captive reptiles are directly or indirectly caused by incorrect husbandry. Not only is temperature and spacial requirements important, but general hygiene is essential.

Cages are normally regularly cleaned by reptile keepers but very few disinfect their cages. It is not always feasible to clean cages with disinfectants - for example it is easier to disinfect a simple cage in which newspaper is used as substrate than a decorated exhibit containing Horned Adders with Kalahari sand as substrate and logs and stones for decoration.

Some keepers do use disinfectants to clean their cages and equipment or to wash their hands after having worked with snakes. Care must however be taken in selecting a disinfectant. Mattison (In The Care of Reptiles and Amphibians in Captivity, Blanford Press 1983) warns against Phenols and Coal-tar derivatives (e.g. Dettol and "pine" disinfectants). They are toxic to reptiles and especially amphibians. It is therefore better to use a disinfectant with a sodium or chlorine base.

At the Manyeleti Research Centre Parvocide is being used as a disinfectant on the recommendations of several vets. It is a detergent disinfectant based on organic chlorine. Parvocide is a dry formulation of sodium dichloro-s-thiazinetriene which liberates chlorine to act in the same fashion as sodium hypochlorite.

Advantages of using Parvocide include:

1. Provides cleansing as well as disinfectant action.
2. Broad spectrum action.
3. Low toxicity.
4. Excellent wetting and penetrating action.

5. Neutral pH..
6. Long shelf-life and easy to mix.
7. Low cost - approximately 15c /5 litres.

Disadvantages of Parvocide:

1. Mixed with hot water it may give off gas that might be irritating to the eyes.
2. Very high concentrations may irritate skin.

Parvocide is used at 2 sachets per 10 litres of cold water. It is mixed in a bucket and used in sprays to disinfect cages, rooms, etc. The low cost makes it possible to wash all equipment and even the floor. It is a good practise to have a container with a stronger solution of parvocide in the room where equipment such as scissors and tweezers can be rinsed occasionally. It is best to rinse between feedings. A bucket of diluted disinfectant can be used for washing of water dishes and shelter boxes.

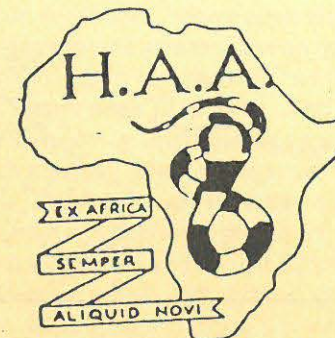
Patterson (Reptiles of Southern Africa, Struik Publ. 1987) recommends the use of Savlon which is also a "safe" disinfectant with a chloride base, although a bit more expensive. Regular disinfecting of cages and general hygienic conditions will help in reducing the incidence of diseases and parasites.

Parvocide is manufactured by:

Centaur Labs (Pty) Ltd
36 Durban Street
Johannesburg

Parvocide is obtainable from all leading veterinary suppliers.

G.V. Haagner
Gazankulu Nature Conservation
Manyeleti Game Reserve
P.O. Manyeleti
1362



MORE EVIDENCE OF THE BROWN HOUSE SNAKE'S HEARTY APPETITE

In response to Pritpal Singh Soorae's note on the brown house snake's hearty appetite in H.A.A. Newsletter No. 8, I submit a remarkably similar account.

I collected a 25 cm long brown house snake (*Lamprophis fuliginosus*) from the Pretoria district towards the end of 1976. By 14 November 1977, it had grown in length to 50 cm.

Food intake was recorded for the period 15 January to 5 December 1977 (almost 11 months), during which time the snake devoured one small *Rana* spp., 8 geckos (*Pachydactylus c. capensis*), 6 skinks (*Mabuya striata punctatissima*), 6 white mice, 2 small wild mice and one small shrew. The geckos, skinks and white mice were either adults or sub-adults.

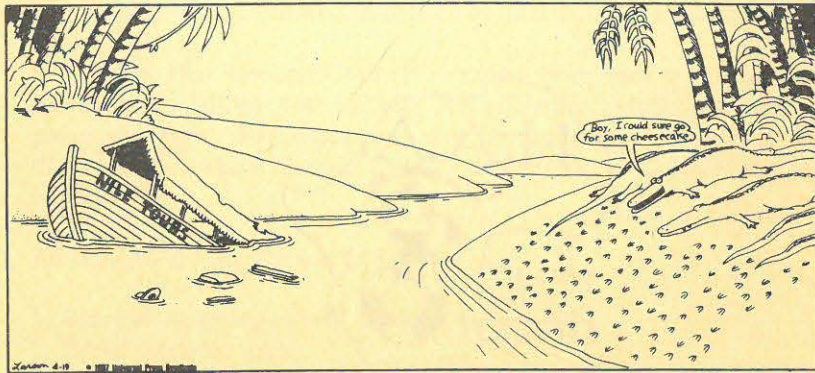
On 23 November 1977 the snake ate two large skinks, and twelve days later, on 5 December 1977, it ate two white mice.

From 17 January to 14 November 1977 (about ten months), the snake grew from 32 cm to 50 cm in length.

During the period 13 February to 7 November 1977 (almost 9 months), sloughing occurred five times.

This data once again gives an indication of the appetite and rapid growth exhibited by juvenile snakes.

Mike Bates
National Museum
P.O. Box 266
Bloemfontein
9300



MITE INFESTATIONS IN REPTILES

The amateur, and even the more experienced reptile keeper will at one stage or another encounter mites among his reptiles. These are usually first noticed on the non-poisonous species as they are handled more frequently.

Mites are spotted as small black dots on the snake where they cling and suck blood. They are sometimes found in high concentrations and if not eliminated, they adversely affect the health of the host animal. Mites appear to concentrate around the head area but are found anywhere on the animal. They are commonly found under the ventral scales, between the dorsal scales, in the eye cavities and even the nasal cavities. Infected snakes often submerge themselves in their water bowls in an attempt to rid themselves of these unwelcome little pests.

Most keepers first reaction to mites is to reach for a Vapona strip and to place it in the infested cage. It is then left unattended for days or even weeks. Such carelessness may be detrimental to the snakes' health and prolonged or excessive exposure to Vapona can cause the death of the animal.

Vapona is an organophosphorous insecticide and is absorbed into animal fat where it is deposited for long periods. Overexposure leads to organophosphorous poisoning and symptoms are loss of appetite, regurgitation, loss of coordination, convulsions and eventually death. Even though the efficiency of the insecticide subsides after approximately three months, within this period permanent damage could have been done, or even death of your prized specimen could result.

Vapona strips are commonly used among reptile keepers and I have seen cages with permanent strips in them. This I have also observed in snake parks and zoos. Vapona remains a very efficient way of controlling mites but must be used in the correct manner.

At the Manyeleti Research Centre mites are occasionally seen. At one stage mite infestations caused problems but since a mite control program was instituted, mites are hardly ever encountered. Mites are normally seen on constrictors first and I want to go so far as to say that they seem to prefer the pythons and boas. Mites have also been found on Brown House Snakes and Olive Grass Snakes. Poisonous snakes seem to suffer less from infestations. However, mites have been found on exotic species such as Russels Vipers, *Vipera russelli russelli*, as well as on Asps viper, *Vipera aspis huygi*. In these instances the infestations were never as severe as is the case on non-poisonous snakes.

When mites are seen the snakes are removed and their cage disinfected with Parvocide - 12 g per 5 litres water (2 sachets). The water dish and hiding box (carton box) are then replaced. A small strip of vapona is then stuck to the roof of the hiding box with masking tape. As the snake lies in the box the Vapona gets a chance to work. The centre uses fibreglass cages measuring 100 x 30 x 30 cm in which 3 - 4 grams of Vapona is placed for three days.

Mites have a three week life cycle and regular follow-up checks are needed to ensure that all the larvae are killed. Fibreglass cages are smooth and are easy to clean and disinfect. During each cleaning session, usually once a week, the cages are sprayed with Parvocide and to date no re-infestations have occurred.

All other objects such as logs or stones are sprayed with Parvocide. The Vapona blocks can be re-used but the efficiency is lost after three months after having opened the packet. Thereafter the Vapona can be discarded.

Jackson (In Handbook on the Maintenance of Reptiles in Captivity, Krieger Publ. Co 1987) recommends continued treatment throughout the three week period. This is a good system when practical, but difficult in large collections. He recommends that the snakes are first removed from the cage and placed with Vapona (1 cm per cubic foot of cage) for three days. Thereafter the infested cage is sealed with a plastic bag for three weeks with Vapona in it. After this period the cage is disinfected and cleaned.

Weekly disinfecting of cages and the maintaining of high hygienic standards will assist in controlling and preventing major infestations of mites in captive reptile collections.

G.V. Haagner
Gazankulu Nature Conservation
Manyeleti Game Reserve
P.O. Manyeleti
1362

INFORMATION REQUEST

All persons keeping live reptiles and amphibians are asked to contribute. Please submit the following information current January 1, 1988 for publication in the 1988 inventory.

- 1). A complete inventory of all reptiles and amphibians living in your collection as of January 1st. Sexes of adult animals should be included and should be listed male (1.0.0), female (0:1.0) or unknown (0.0.1). Juvenile animals should also be listed using the same format, for example 1.2.1 + juvenile 0.0.10 would be read: 1 adult male, 2 adult females, 1 adult of unknown sex, 0 juvenile males, 0 juvenile females, and 10 juveniles of unknown sex.
- 2). A list of all species which bred during 1987. Information can be very sparse with simply an indication that the taxon was bred during 1987, or it can be quite lengthy including, but not limited to, dates of copulation, dates of egg-laying and hatching, types of substrates and temperatures used during incubation, light cycles, hibernation, etc. Any type of information up to three or four paragraphs may be used.
- 3). Please list all specimens in your collection which you think might be a notable longevity record for the species. List the date the animal was acquired, or the number of years, months and days you have had the specimen; the sex; estimated age at capture; wild or captive bred; living or dead; there is also room for some brief notes to be included.
- 4). A listing of any publications, including books, museum bulletins, journals, magazines, etc. with references to reproduction of captive reptiles and amphibians. Supplement the list which appears in the 1985 edition.

- 5). Be sure to list your name, address, and phone numbers as you would want them listed.

All information should be sent to:
Frank L. Slavens
P.O. Box 30744
Seattle
Washington
98103
U.S.A.

NOW AVAILABLE

1987 INVENTORY - LONGEVITY - BREEDING REPORT

The 1987 "INVENTORY OF LIVE REPTILES AND AMPHIBIANS IN CAPTIVITY, CURRENT JANUARY 1, 1987", compiled by Frank L. Slavens, contains a combined inventory of 307 collections with information on location and sex of 44,348 individual specimens.

This multi-use reference allows one to search any species of reptile or amphibian reported by the 307 responding collections and find the number of male, female, or unknown sex, held by each collection. If a species was bred during 1986 the reported dates of copulation, egg laying, hatching, etc. were included. Longevity records have been expanded in this edition.

Available for \$32.50 hardbound, \$25.00 paperbound, plus \$2.50 postage or \$3.50 postage overseas.

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THE ECOLOGY OF THE NILE CROCODILE *Crocodylus niloticus* IN ZULULAND.

Over the years there have been a number of requests for copies of my Masters Degree thesis (as above). It was registered with Natal University in 1982 and comprises 350 pages.

I can have copies xeroxed and bound in board at the following price. Should you be wanting a copy, please let me know as soon as possible as I will only produce as many as are requested (please enclose payment with your order).

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THE LOWDOWN ON REPTILES

REPTILES OF SOUTHERN AFRICA by Rod Patterson and Anthony Bannister (Struik R24.95)

THE AMPHIBIANS AND REPTILES OF BOTSWANA by on D. Auerbach (Mockwepa Consultants, Box 40261, Broadhurst, Gaborone, Botswana - 65 Pulas)

These two important books on southern African reptiles have appeared simultaneously - both potentially popular reference works. Patterson is director of the Transvaal Snake Park; Auerbach frequently wrote on reptiles for The Star several years ago.

Patterson's book has the added attraction of being illustrated in colour by Anthony Bannister. It is unquestionably the best available book for the layman on the identification of reptilia (snakes, lizards, tortoises, turtles) in our region but has one fault: no distribution maps. Patterson, whose information is brief and to the point, prefers to list the regions where each species is found.

Where this book should prove popular is in its chapters on the care of reptiles in captivity, their diets, accommodation and handling - all meticulously Bannister-graphed. It has an equally well-illustrated section on the new treatment of snakebite (pressure bandage as opposed to tourniquets).

Auerbach's book, soft-bound, is a major 300-page work of considerable zoological importance, not just to Botswana but to much of our plateau region.

It is written for the layman as well as the scientist.

The amount of study involved must have been immense for Auerbach goes deeply into the history of herpetology in the region and looks at reptiles in religion and traditional beliefs.

His advice on snakebite treatment does not advocate discarding the now medically unpopular tourniquet. He points out how in the absence of a pressure bandage a tourniquet can save lives. (And while on the subject of bites, Auerbach goes on to give advice on scorpion bites! Fair enough, it's badly needed). Each species of frog, toad, lizard, tortoise, snake and so on gets a full description, distribution map and habitat description. The indexes are massive, there's a gazetteer and a bibliography that must be the longest available.

The pictures appear to have been scrambled up from all over the place - including the floor. But from an information point of view this book is invaluable.

James Clark - THE STAR, JOHANNESBURG.

RECENT PUBLICATIONS

BULLETIN OF THE CHICAGO HERPETOLOGICAL SOCIETY, Vol. 22, No. 8.

Zaworski, J.P. 1987. The captive maintenance and propagation of *Gekko petricolus* Taylor. 2 pages.

Zaworski, J.P. 1987. A note on calcium supplementation in geckos. 1 page.

Anton, T.G. 1987. Notes on winter activity in a red-eared slider *Trachemys scripta elegans*. 1 page.

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Pawley, R. 1987. Measurements of a large Alligator Snapping Turtle, *Macrochelys temminckii*, in the Brookfield Zoo. 1 page.

Whitaker, R. & Z. 1987. The Crocodile Bank. 1 page.

BULLETIN OF THE CHICAGO HERPETOLOGICAL SOCIETY, Volume 22, No. 9

Cochran, P.A. and Korb, R.M. 1987. Recent sightings of the Blandings' Turtle, *Emydoidea blandingii*, a threatened species in Wisconsin. 2 pp.

Cochran, P.A. 1987. Book review: A naturalist in the environmental crisis, by P.W. Smith. 1 page.

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BULLETIN OF THE CHICAGO HERPETOLOGICAL SOCIETY, Vol. 22, No. 10.

Mierzwa, K.S. 1987. Comments on the status of the green salamander, *Aneides aeneus*, in the Blue Ridge Mountains of North Carolina. 1 page.

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Pawley, R. 1987. Self-inflicted envenomation in the King Cobra, *Ophiophagus hannah*. 2 pages.

Redmer, M. & Zarworski, J.P. 1987. Notes on two Red Plains Garter snakes, *Thamnophis radix radix*, from Illinois. 1 page.

Mierzwa, K.S. 1987. Dispersal of the Olympic salamander, *Rhyacotriton olympicus*, into secondary growth forest. 1 page.

BULLETIN OF THE MARYLAND HERPETOLOGICAL SOCIETY, Vol. 23, No. 3.

Olson, R.E. 1987. Evaporative water loss in the tortoise *Gopherus berlandieri* in ambient temperature regimes. 7 pages.

Vance, T. 1987. The Cuban Anole (*Anolis porcatius*): A colonizing species. 4 pages.

Hayes, F.E. 1987. Interspecific kleptoparasitism and aggression in young, captive red-ear sliders (*Pseudemys scripta elegans*). 3 pages.

Perez-Higareda, G. & Smith, H.M. 1987. Comments on geographic variation in *Rhinoclemmys areolata* (TESTUDINES). 5 pages.

Graham, T.E. et al. 1987. Updated distribution of the Blanding's turtle, *Emydoidea blandingii*, in Maine. 3 pages.

Herman, D.W. 1987. An incident of twinning in the Bog turtle, *Clemmys muhlenbergii* Schoepff. 3 pages.

Smith, H.M. 1987. The concepts of species and subspecies in uniparental

populations, reflected in the nomenclature of *Cnemidophorus* (Reptilia: Lacerilia). 3 pages.

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SOUTH-WESTERN HERPETOLOGICAL SOCIETY, Vol. 1, No. 1.

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Murray, P. 1987. *Testudo graeca* - the four subspecies. 2 pages.

TESTUDO, Vol. 2, No. 5.

Zwart, P. 1987. Advances in the Veterinary care of Chelonians over the past twenty years. 14 pages?

Highfield, A.C. 1987. Casual factors of mortality in captive collections. 3 pages.

Jackson, O.F. 1987. Carapace and other bone injuries in Chelonians. 4 pages.

Pursall, B. & D. 1987. Case history of a sick *Testudo hermanni*. 3 pages.

Evans, P. 1987. Looking back at twenty years of breeding European land tortoises. 4 pages.

Madge, D. 1987. The development and behaviour of hatchlings of *Testudo marginata* in relation to competition for food. 9 pages.

Copies of the above papers are available from our Secretary-Treasurer. There may be a nominal charge to cover copying & postage. Please write to Rod Douglas.

H.A.A. BOOKSTORE

The following books are available from the H.A.A. at 10% less than the recommended retail price. Each book will be autographed by the author/s and the price quoted is the full price, including postage and handling. Please support the H.A.A.

Unfortunately we do not have the infrastructure to send books overseas. This offer is therefore valid for South Africa and neighbouring countries only.

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Marais, J. 1985. Snake versus Man - A guide to dangerous and common harmless snakes of Southern Africa. 62 colour plates. 134 pp. R18.50

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Patterson, R.W. & Bannister, A. 1988. Reptiles of Southern Africa. Many excellent photographs (See review by James Clark!). R26.00

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