

## RECENT PUBLICATIONS

BULLETIN OF THE CHICAGO HERPETOLOGICAL SOCIETY Volume 22, No. 4. April, 1987

Franco R.C. 1987. New records of reptiles from the Mexican State of Morelos. pp. 69 - 70.

Ortega, A. et al. 1987. Mating of the San Lucan Alligator lizard, *Gerrhonotus paucicarinatus*: An endemic Baja California lizard. pp. 70.

Miller, M.J. 1987. The use of Vercom paste as an anthelmintic in reptiles. pp. 73 - 74.

Redmer, M. 1987. Cannibalism in captive *Hyla crucifer*. pp. 75.

Zaworski, J.P. 1987. Observations on unusual behaviour in the parthenogenetic gecko, *Lepidodactylus lugubris* Fitzsinger. pp. 76.

Zaworski, J.P. 1987. Egg molding behaviour by male *Gekko gekko* and *Gekko petricolus*. pp. 77.

Moore, J. 1987. The venomous reptiles of Arizona: Review. p. 78.

Michaels, S.J. 1987. Artificial lighting for herps: A preliminary study. pp. 79 - 83.

Beltz, E. 1987. Herpet-pourri. pp. 84 - 86.

Mierzwa, K. 1987. Legislative update. pp. 87.

Gaspar, J. 1987. Snakehooks: The legend of Houdini. pp. 88.

BULLETIN OF THE CHICAGO HERPETOLOGICAL SOCIETY

Volume 22, No. 5. May 1987

Blair, K.D. 1987. The role of snake venom phospholipase A2 in digestion. pp. 93 - 94.

Casper, G. 1987. New herpetological records for Wisconsin. pp. 95.

Pawley, R. 1987. The management of the Goliath frog, *Conraua goliath*: A goliath problem. pp. 96 - 97.

Perret, J.L. 1987. Observations on *Rana goliath* Boulenger. pp. 98 - 101.

Beltz, E. 1987. Herpet-pourri. pp. 102.

Mierzwa, K.S. 1987. Legislative update. pp. 104.

Anderson, S. 1987. Snakehooks: Rendezvous with a snake. pp. 105.

### FOR SALE

2 x male Nile Crocodiles (*Crocodylus niloticus*) measuring 2,5 m and 2,7 m. R1500.00 each. Tel: 04431-5593 (W)

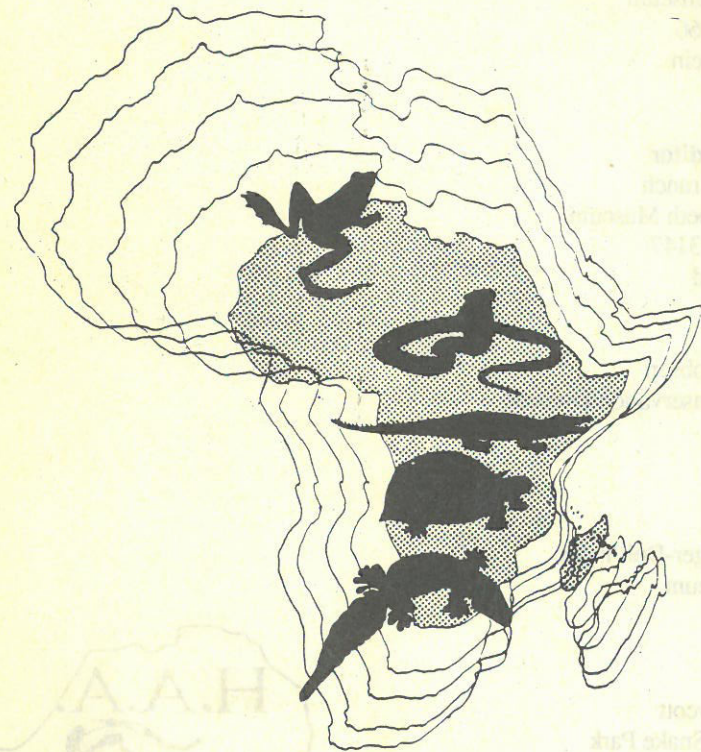
### WANTED

Gaboon Vipers (*Bitis gabonica*). Tel: 04431-5593 (W)

H.A.A. COMMITTEE

# H.A.A.

## NEWSLETTER 10



## OCTOBER 1987

HERPETOLOGICAL ASSOCIATION OF AFRICA



# H.A.A. COMMITTEE

## Chairman & Newsletter Editor:

Mr. J. Marais  
Kwena Gardens  
P.O. Box 234  
Sun City  
Bophuthatswana

## Secretary/Treasurer:

Mr. R.M. Douglas  
National Museum  
P.O. Box 266  
Bloemfontein  
9300

## Journal Editor

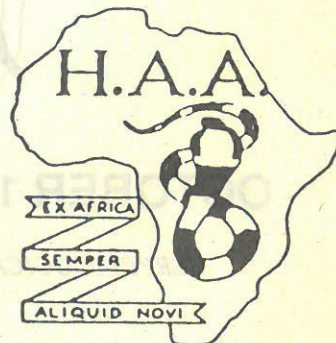
Dr. W.R. Branch  
Port Elizabeth Museum  
P.O. Box 13147  
Humewood  
6013

Mr. N. Jacobsen  
Nature Conservation Division  
P.B. X209  
Pretoria  
0001

Dr. H. Berger-Dell'mour  
State Museum  
Windhoek  
S.W.A.

Mr. R. Boycott  
Transvaal Snake Park  
P.O. Box 97  
Halfway House  
1685

Dr. P. le F.N. Mouton  
Dept. of Zoology  
University of Stellenbosch  
Stellenbosch



# EDITORIAL

Firstly, my thanks to Attie van Wyk, the past chairman and newsletter editor, for all his effort and hard work during his term in office. Few of us realise how demanding such an organization can be.

Dr. Bill Branch, Journal Editor, and Rod Douglas, Secretary/ Treasurer are both still in office. To them we also owe a great deal of gratitude.

The Stellenbosch Symposium earlier this year was without doubt a milestone in the history of the H.A.A. Congratulations to everyone who was involved in organizing it and thanks to those who supported it. It was well attended and a variety of papers and posters were presented. It was also the first H.A.A. symposium during which several husbandry papers were presented. As the majority of our members are amateurs, many of them keeping reptiles and/or amphibians, it is essential that more husbandry information is made available, perhaps through the newsletter. Dr. Branch is at present working on publishing the proceeds of the symposium and contributors should submit their papers as soon as possible. Perhaps we should look at having a husbandry symposium in the Transvaal early next year.

But all is not well within the organization. The entire membership list was accidentally erased from a floppy disk and it was recently that I received the entire address list written out. It had to be fed into a computer again, time that could have been used more constructively. I cannot remember when last the Journal of the Herpetological Association of Africa appeared. Since the symposium I have done everything possible to hasten the production of the next Journal (short of producing it myself!). I have also done my utmost to identify problem areas and to ensure that the production of journals runs as smoothly as possible. Unfortunately little has been achieved and a no journals have appeared yet.

I do believe that these problems will be eliminated soon and that future journals will appear on time. Right now we have two, possibly three, journals in different stages of production. The H.A.A. consists of the journal and the newsletter and if these publications do not appear on time, what do members pay for? Some members are behind with their subscriptions but can anyone blame them?

We need support more than ever before. We need you to contribute, submit papers for publication in the journal or the newsletter or merely your comments or criticism for possible inclusion in a future newsletter. We also need to solicit new members, hence the application form with each newsletter.

## Johan Marais

Chairman/ Newsletter Editor



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

Ernst H.W. Baard

Jonkershoek Nature Conservation Station

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 for 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, 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 the 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 official 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 cer-

tain cases.

## 2.1 Herpetological parks, zoos, museums and crocodile breeding farms.

The collecting, purchasing, transport, 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 application. 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, captive regulations, and permit application forms, please write to:

The Acting Chief Director

Chief Directorate Nature and Environmental Conservation

Private Bag 9086 Cape Town 8000



## MEMBERSHIP FEES AND STRUCTURE AS FROM 1ST JANUARY 1988

Owing to our world wide membership, it has become clear that our members in certain parts of the world have specific problems in paying their membership fees. In order to accommodate our member's needs, the committee has decided to introduce various and new methods of payment as from 1 January 1988. We hope that the new structure will be of help to all our members.

You will notice that a new 3 year membership category has been introduced. The amount given for a three year period will remain fixed for 3 years from the date of payment and will not be increased during that time, even if the 1 year membership fees are increased.

### H.A.A. MEMBERSHIP FEES

#### AFRICA MEMBERSHIP

##### ORDINARY

1 YEAR R15.00 To be submitted in Rand or equivalent US Dollar plus 10%.

3 YEAR R42.00 To be submitted in Rand or equivalent US Dollar plus 10%.

##### SCHOLARS

1 YEAR R10.00 To be submitted in Rand or equivalent US Dollar plus 10%.

#### OVERSEAS MEMBERSHIP

##### DOLLAR PAYMENTS

1 YEAR \$12.50 Personal cheque or Bank cheque submitted in US Dollar only.

3 YEAR \$35.00 Personal cheque or Bank cheque submitted in US Dollar only.

##### RAND PAYMENTS

1 YEAR R20.00 Submitted in Rand only by Bankers draft, Post Office Money Order or to our Building Society Account.

3 YEAR R56.00 Submitted in Rand only by Bankers draft, Post Office Money Order or to our Building Society Account.

**H.A.A. ACCOUNT:** 124234174; United Building Society, Maitland Street Branch, P.O. Box 538, BLOEMFONTEIN, 9300, South Africa.

**Please note:** Members submitting subscriptions through our account are kindly requested to notify the treasurer in writing of such transactions.

#### UNCLAIMED MEMBERSHIP FEE

One of our Johannesburg members has sent Postal Orders to the value of R18.00 as payment for membership fees. Unfortunately the member put the postal orders in an envelope and posted it without including a note to say who it was from. The postal orders were purchased from the Rissik Street Post Office on the 27th of May 1987 and posted on the same day.

Would the person concerned please let the Secretary/Treasurer know who he/she is as soon as possible so that he/she can be credited with R18.00.

## HANDLING: A DIRTY WORD?

*Dave Morgan Transvaal Snake Park*

How many times have we all been told that handling snakes can be dangerous; that bites are unpleasant if not life-threatening, that a good snake handler never gets bitten? How many times have we nodded sagely and replied, "Janowellfine! We should try to avoid being bitten". And how often do any of us listen?

The moral of the story is, of course, don't get bitten. To avoid being bitten we avoid handling our animals unless we have no choice - or do we? There is no merit in handling for handling's sake, but it remains surprising how many of us find excuses to handle our charges - and how many of us get bitten. Chaps, we are messing up seasonal snakebite statistics. Aspirant young herpetologists beware! Parents take a dim view of bite incidences amongst their progeny. The toxic effects of envenomation then tend to have more unpleasant side-effects in the form of permanent maternal curtailment of further herpetological activity. And this should apply to some of the older guys as well!

If you are keeping snakes (venomous and non-venomous alike) think before you fiddle. Ask yourself:-

- (a). Is it really necessary to subject this unfortunate animal to the stress and trauma of being carted around in my sweaty hands, and
- (b). Are my life insurance premiums fully paid up? You laugh! Ask Gerald Haagner about his last *Naja mossambica* bite. (Sorry Gerald).

There are four situations where one is justified in handling ones charges. They are:-

1. Capture and/or cage transferring.
2. Sex determination (Should have taken place during 1.).
3. Medication and/or examination.
4. Destruction of the reptile.

Point No. 4 may seem like a rather odd one to include. After all, the object of reptile husbandry is to keep the specimens intact and healthy. However, if you are one of the lunatic fringe that insist upon keeping exotic venomous snakes without adequate supplies of the relevant antivenine, then you would do well to address yourself to this particular point. The Crotalid polyvalent is nigh-on impossible to obtain in this country. Ah, but I forget myself! You guys never get bitten, do you?

No doubt having now mortally offended many of the readers thus far, I can safely move on to "handling" as such. Everyone evolves their own personal method of handling and usually stick by it. In all likelihood, some of the methods I intend outlining below will be met with cries of scorn and derision by certain parties who



know it all anyway. Notwithstanding, the key word for any "method" is safety. The means by which the snake is handled must be safe for the handler and the reluctant reptile you intend on interfering with. If the proceeding cannot be performed without injury on either side, then it should not be undertaken in the first place. For this reason, the second key word comes into play - restraint. The handler should restrain himself from hysteria, excitement and megalomania and impose upon the snakes body gentle physical restraint to prevent it lashing around and damaging the equipment or itself.

There are several implements that one can use for this purpose. These can take the form of "conventional" equipment such as tongs, hook sticks, nooses, gloves and so on. With the exception of gloves, all of these are useful and safe tools in the right hands. In the wrong hands they display a marked tendency to be ophidiocidal in their use. I make the exception with gloves as I am of the belief that anyone who uses them has a blatant death-wish. They decrease the handlers sense of touch, they impart a totally false sense of security and King Cobras can easily bite through them.....I'm told.

The much-maligned Pillstrom Tongs are one of the best inclusions in any self-respecting handlers armoury. The view adopted by many people that tongs damage snakes can be discounted out of hand, as bad workmen always blame their tools. That tongs can impart serious injury to the snake is certainly true - however, that is in no way the fault of the tongs. I would earnestly recommend that a potential tong-user first try his hand out on inanimate objects. The temporary staff of the Transvaal Snake Park soon gain the "feel" of tongs after 2-3 weeks of picking up litter in the car park. Cigarette ends are particularly difficult. Once proficient with litter, I then suggest you persuade someone to lob raw eggs at you. If you can catch six eggs in quick succession in the tongs without cracking them, then you are ready to move onto phase three and start picking up house snakes with them. The basic function of the tongs is to grasp the snake's body. They can also be used to trap snake's heads and to keep their mouths shut prior to being handled - the rest of the snake's body should be restrained under a booted foot whilst doing so. In the field tongs are very useful and are admirably suited to removing boiling billy-cans from the camp fire.

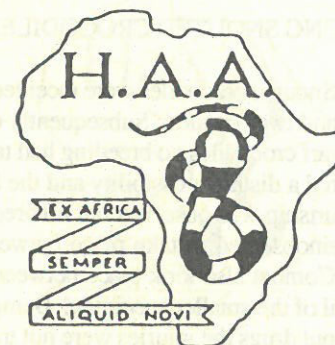
Hook sticks, press sticks and nooses are self-explanatory in their use. A good idea though, if the snake is to be pinned down, is to place it first on a thick pad of foam rubber. Then you can grind down on its neck if you are so inclined in the sure knowledge that the foam will absorb some of your weight without destroying the snakes nerve locomotor function.....too much.

It is regrettable that the term "handling" implies that the animal actually be touched by hands. This is not necessarily so. If a venomous snake has to be moved from one cage to another, the easiest method is surely a shift box. This is a simple box with a hole large enough for the snake to enter with a slide or swing cover above

it. This is placed in the cage and left for the snake to move into it at its leisure. The cover is then closed and the whole lot lifted out and placed in a new cage or replaced after cleaning. No stress, no fuss and no handling.

A young Egyptian Cobra requires an injection of antibiotics. Two pads of foam rubber negate the necessity of holding the snake behind the head. The snake is simply dropped onto one pad and the second pad used to trap the anterior half of the body. Whilst the snake is held in position by pressure onto the foremost pad, a second person can administer the antibiotic to the posterior section of the body. An obstreperous Mole Snake requires probing but refuses to stay still whilst you hold it. Calmly resisting the urge to stretch the snake several meters long, you persuade it to enter a plastic tube of the type used for subgravel aquarium filters. Ensuring that the diameter of the tube is slightly more than the snake is thick so that it cannot double back, the snake and the tube can be grabbed simultaneously once most of the snake is up the tube and the whole thing inverted, exposing the cloaca in position ready for the probe.

A responsible reptile keeper almost never handles his charges and, if so, never on his own (See my *D. angusticeps* bite in a previous H.A.A. Journal). Handling, no matter how expertly performed, will invariably be stressful to the reptile. A bit of imagination, care and consideration for the specimen goes a long way. In short, a responsible attitude. It goes without saying that handling is as dangerous as you make it, that practice makes perfect, but that familiarity also breeds contempt, so watch it!





# ST. LUCIA CROCODILE CENTRE BREEDING BANK

*D. Blake Warden St Lucia Crocodile Centre*

## BACKGROUND

As part of the Crocodile Specialist Group's plan to establish breeding banks for endangered species of crocodylians, a breeding bank was set up at the St. Lucia Crocodile Centre in 1975 for endangered African crocodiles.

Both *Crocodylus cataphractus* and *Osteolaemus t. tetraspis* were supplied to the centre.

### 1. DWARF CROCODILES (*Osteolaemus t. tetraspis*)

In June 1974 three Dwarf crocodiles were received from New York. These arrived in mid winter and did not settle in at all. By October that year all three had died.

In October 1975 a replacement male was received from New York and in September 1976, what was believed to be a replacement female, was received from Tel Aviv.

Up until my arrival at the centre in July 1984 no breeding success had been achieved. Apart from climatic conditions I considered that diet might play an important part in breeding. Up to this time diet had in the main consisted of red meat, either venison or hippopotamus. I supplemented the diet with fish and penaeid prawns.

This seemed to have the desired effect as the Dwarfs were observed at what appeared to be mating in September 1985. This however turned out to be combat and an examination of both showed that we had two males.

The only known Dwarf female in South Africa was held by the Port Elizabeth Museum in their tropical house. It was decided to lend them the smaller of the two males in the hopes that they may successfully breed.

This male was flown by light aircraft to Port Elizabeth in November 1986.

Attempts to obtain an additional female for the male at St. Lucia have to date been unsuccessful.

### 2. WEST AFRICAN LONG SNOUDED CROCODILE (*Crocodylus cataphractus*)

In June 1974 four Long Snouted crocodiles were received from New York. These consisted of two males and two females. Subsequently one of the females died. As in the case of the Dwarf crocodiles no breeding had taken place up until 1984. Again diet was considered a distinct possibility and the feed was changed to one of fish. In late 1984 courtship was observed but no breeding took place. In late 1985 courtship was again observed to take place between the larger of the two males and the female. Combat also took place between the two males with injuries inflicted on the tail of the smaller specimen. Being reluctant to manhandle this animal with or without drugs the injuries were not treated as such. However, penicillin was administered using a pole syringe. This crocodile recovered and

moved itself well away from the other male.

On 20 January 1986 the female was observed laying. She built a mound nest under a low lying tree into which she deposited her eggs. Not having proper incubation facilities it was decided to leave the eggs in situ for 75 days and then lift them for the final stage. However, the 70th day they hatched and were removed by the female. Four hatchlings were found in the vicinity of the nest. Two were found dead in the pond and two more seen, one of which was subsequently captured. From egg shell remains it was concluded that some 10 - 11 eggs had been laid. In June another dead hatchling was found and two were observed in the pond. On 5 September the pond was drained and 5 hatchlings recovered. The next day an additional hatchling was found.

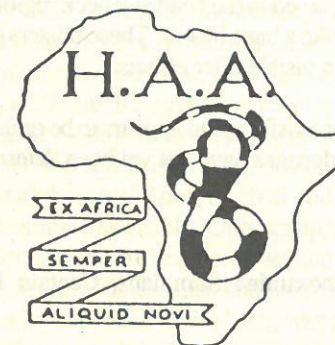
The total count was therefore as follows:

31 March	4 live
31 March	2 dead
-	1 live
-	1 dead
5 September	5 live
6 September	1 live
	14
	1 rotten egg
	15 Total clutch

In May 1987 3 hatchlings died as a result of food poisoning.

No decision will be made on the disposal of the remainder until they are 1 m in length.

No breeding took place in the 1986/'87 season probably due to the lack of a suitably sized pond following the drought condition in northern Natal.





## VITAMIN BOOSTER SAVES FILE SNAKE

G.V. Haagner  
Gazankulu Nature Conservation

On 23 March 1987 a large female File snake (*Mehelya c. capensis*) was caught. She measured 161 cm. The specimen was in bad physical condition and had several body scars and ticks which were removed for identification. Despite being housed in a large cage with a hiding box and ample fresh water, she refused all food for nearly a month and continually hid her head beneath her coils when disturbed. She became so lethargic that she eventually declined to move, even when handled.

Dave Morgan of Transvaal Snake Park suggested I use an appetite stimulant Phosamine on her. T.S.P. had used it successfully on *Telescopus s. semiannulatus* and *Causus rhombeatus*. The File snake was injected with Phosamine at a dosage of 0,3 ml/kg body weight. Phosamine is a Disodium glycerophosphate based veterinary medicine which contains vitamin B 6 and B 12. The dorsolateral injection was administered subcutaneously. Soon afterwards she shed and was offered a juvenile Boomslang (*Dispholidus t. typus*). It was taken immediately and no further meals were refused.

The feeding routine of the captive *Mehelya c. capensis* is rather interesting. Soon after placing a snake in the cage she senses it by smelling and her tongue flickers rapidly. The prey is located quickly and is usually grabbed by the anterior third of the body. This sometimes results in a fierce battle during which the File snake is often bitten, also by poisonous snakes such as *Naja mossambica*, *Dispholidus t. typus* and *Causus defillipii*. She forces her way up to the head with sideways movements of the jaws until the prey's head is in her mouth. Then she swallows it, sometimes still very alive!

Bites were normally received in the head and neck region usually resulting in bubble-like blisters, not unlike a burn blister. These blisters disappear within two days and the snake suffers no visible after effects.

Phosamine was used successfully and appears to be quite safe to use even if slightly overdosed. Correct dosages have not yet been determined.

Product mentioned: Phosamine Stimulans, Centaur Labs, 36 Durban Street, Johannesburg.

## OBSERVATIONS ON THE REPRODUCTION OF THE AMERICAN ALLIGATOR (*Alligator mississippiensis*) IN CAPTIVITY

A. Eriksen

### HISTORY

Two alligators (*Alligator mississippiensis*) were received at Cango Crocodile Ranch in 1984. The male, now measuring 2.13 metres, is 21 years old while the 19-year old female measures 1.83 m. A 15-year old female, measuring 1.52 metres, was added to the enclosure but was a male and had to be removed.

### ENCLOSURE

The breeding pen in which the pair is housed measures ten square meters and has an irregularly shaped pool of some forty five square meters. The concrete pool is drained twice a week and filled with borehole water which is not heated. A small, heated enclosure provides protection against the cold in winter.

### DIET

Food consists of ostrich meat, mainly ostrich heads and wing tips. Feeding takes place approximately 4 times a week in summer.

### BREEDING

In 1986 eggs were deposited on 14 January and in 1987 on 26 January. On both occasions laying was preceded by heavy bellowing in December.

The 1986 clutch consisted of 45 eggs which were deposited in a nest built from grass cuttings and leaves from reeds which were placed in the enclosure. Once the eggs had been deposited, the female displayed typical aggression. In the two weeks prior to laying the nest mound was disturbed three times to check for eggs and this disturbance may have led to the eggs being retained by the female for too long. On finding the eggs it was established that 19 were fertile and were already banding. All development ceased within two weeks and none of the eggs hatched. Again, in 1987, copulation was not observed. Bellowing occurred towards the end of December and nest construction commenced in mid January, lasting some two weeks. On 27 January 1987 the female showed aggression and the nest was opened. Of the 49 eggs deposited, three were badly damaged and contaminated other eggs. This resulted in fungus destroying good eggs during incubation. Only 28 eggs started banding. On 20 March 5 eggs were removed as banding had again discontinued on day 14. Dead 14-day old embryos were found in these eggs. On 26 March 40 eggs were removed and in all these cases there were large air pockets where the membrane had detached from the shell and in the few fertile eggs remaining, embryonic regression was visible. One egg appeared to be healthy and was developing at the normal rate. At this point we had 5 eggs left which had banded well and appeared healthy. These also had air spaces of between 20 and 25%. On the 27th the outer layer of shell of each egg was cracked manually. The first hatchling broke through the membrane on 2 April, with his head upside down. This occurred at 17H30 and by 14H00 the next day he had still not emerged. The



membrane was slit manually and the hatchling freed himself from the egg. By 7 April no further eggs had hatched and the remaining eggs were opened, each containing a dead fullterm embryo.

The eggs were incubated in a laboratory incubator at 31 degrees Celsius and humidity maintained at 90 - 95%. During incubation the eggs were placed on racks with no substrate covering them. Five centimeters of distilled water was placed at the bottom of the incubator. An additional tray with 3 cm of water was placed above the eggs.

### HATCHLING

The hatchling alligator appeared to be about two weeks premature and had an extended abdomen and a large amount of retained yolk. At the time of writing it had absorbed most of the yolk and was feeding on mince, fish and liver. Its length at birth was 233 mm and its weight 35 gms. The eggs averaged 71 mm X 39,5 mm and weighed 66 gms.

## HELP REQUIRED

### *Study on frog parasites*

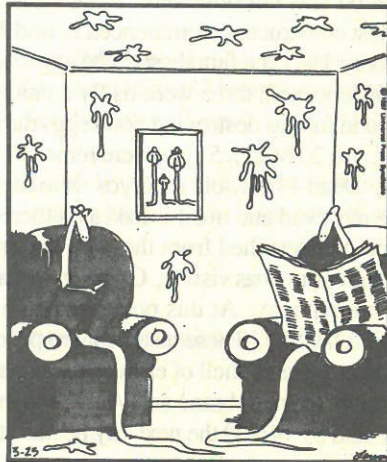
At present I am busy with a study on frog parasites, especially flatirons in the urinary bladder of any species of frog.

The length of the parasite varies between 3 to 8 mm. The parasite can normally be seen as a dark object in the transparent urinary bladder. It attaches itself to the bladder wall by means of six posterior suckers.

Have you come across an organism like this before? If you do accidentally come across one or if you are in possession of extra fixated frogs, I will appreciate you contacting me. The exact locality of the specimen is vital. There is a strong possibility that similar parasites occur in terrapins.

Mr. L. H. du Preez

Loveway Gardens Loveday Street Muckleneuk Pretoria 0002



The spitting cobras at home

# INSTITUTIONAL NEWS

## EAST RAND HERPETOLOGICAL ASSOCIATION

P.O. Box 10743

Aston Manor

1630

Since the founding of this association the following objectives have been realized:

- 1). The response to the forming of this amateur herpetological association has been phenomenal. Membership figures have now topped the 100 mark with some 80 members attending each monthly meeting during the past fourteen months.
- 2). Conservation by education has been a priority with local schools participating in talks and exhibitions on reptile care and conservation. More than 1500 children have participated.
- 3). Communication between our group and professional herpetologists has reached a point where knowledge and ideas are exchanged regularly.
- 4). Our committee has met with the Transvaal Division of Nature Conservation, requesting recognition and better communication between us and the department. Our constitution has been submitted to the department for approval and a positive response from the department will result in the association assisting the department in various aspects of reptile management.

For further information, please write to the Secretary.

G. Swanepoel

## H.A.A. NATAL BRANCH

Meetings are held monthly in the greater Durban region. Persons interested in attending can call the chairman Steve Horn at Tel:031-443231 a/h.



## TRANSVAAL SNAKE PARK

P.O. Box 97  
Halfway House 1685

The staff consists of Rod Patterson (Director), Richard Boycott (Curator) and Dave Morgan (Asst. Curator).

The park houses a collection of approximately 100 (60 indigenous and 40 foreign) species and subspecies of reptiles and amphibians numbering some 400 individuals.

Apart from fulfilling an important educational and recreational role we are also committed to the captive propagation and husbandry of reptiles and amphibians. It may be said that most herpetological institutions concentrate more on the attractive and the unusual. While it would be foolish to turn away from such species we try to strike a happy medium and have committed ourselves to the propagation of several rare and endangered species as well as some of the more common indigenous forms.

We are currently directing our efforts at the establishment of breeding groups of the following C.I.T.E.S. appendix animals, Gila Monsters (*Heloderma suspectum*), Aldabra tortoises (*Geochelone gigantea*), Radiated tortoise (*Geochelone radiata*), Cuban boas (*Epicrates angulifer*), Madagascan ground boas (*Acrontophis madagascariensis*), False water cobras (*Hydrodynastes gigas*), and Angola dwarf pythons (*Python anchietae*).

Some of the indigenous species that are bred on a fairly regular basis include colubrids *Pseudaspis cana*, *Lamprophis* spp., *Telescopus* spp., elapids *Dendroaspis* spp., *Hemachatus haemachatus*, and viperids *Causus rhombeatus* and *Bitis* spp. We have had some success with monitor lizards (*Varanus* spp.) and plated lizards (*Gerrhosaurus* spp.). By corresponding on a regular basis with local and overseas organisations we try to keep abreast of new developments in the management of captive breeding groups of reptiles and amphibians.

Current breeding projects with other organisations:

- 1). In June 1986 we embarked on a joint captive breeding program of Angolan dwarf pythons (*Python anchietae*) with the S.W.A. Department of Agriculture and Nature Conservation.
- 2). T.S.P. and the Natal Parks Board have embarked on a joint captive breeding program of Radiated tortoises (*Geochelone radiata*).
- 3). During 1986/1987 "Crusty", the National Zoological Gardens' Aldabra tortoise (*Geochelone gigantea*) was on 8 months breeding loan from the Pretoria Zoo. Feasibility studies are currently being undertaken with a view to the establishment of a captive breeding group of Sungazers (*Cordylus giganteus*) in conjunction with the Transvaal Nature Conservation Division. We have plans to redesign our lizard facility specifically for the ground dwelling Sungazers.

We would like to take this opportunity to thank these organisations for their assistance and cooperation and hope for their continued support in the future.

## Recent publications

- Boycott, R.C. 1986. A review of *Homopus signatus* (Schoepff) with notes on related species (Cryptodira: Testudinidae). I. *Herp. Assoc. Afr.* 32: 10 -16.
- Boycott, R.C. and A.L. de Villiers. 1986. The status of *Heleophryne rosei* Hewitt (Anura: Leptodactylidae) on Table Mountain and recommendations for its conservation. *S. Afr. J. Wildl. Res.* 16: 129 - 134.
- Patterson, R.W. and P.R. Meakin. 1986. Snakes. C. Struik Publishers.
- Submitted by Richard Boycott.

## FITZSIMONS SNAKE PARK, DURBAN

### Captive Breeding:

Several species have been bred at the park, however, it is very difficult to confirm matings in some instances as displays are spread out. Many gravid females are also brought into the park. Information on eggs and young from these females is recorded but detailed information still lacks to a large extent. We hope to better our record-keeping system in the near future and w recording gestation periods, incubation periods, etc.

The following have been bred at the park during the last season, those in column A reflecting captive mating and those in column B from gravid females having been brought in.

COLUMN A	COLUMN B
<i>Crocodylus niloticus</i>	<i>Telescopus s. semiannulatus</i>
<i>Varanus niloticus</i>	<i>Thelotornis c. capensis</i>
<i>Crysemys s. elegans</i>	<i>Dendroaspis polylepis</i>
<i>Trimeresurus stejnegeri</i>	<i>Naja haje annulifera</i>
<i>Elaphe o. quadrivittata</i>	<i>Philothamnus s. semivariegatus</i>
<i>Elaphe guttata</i>	<i>Philothamnus n. natalensis</i>
<i>Python molurus bivittata</i>	<i>Dasypeltis scabra</i>
<i>Thamnophis sirtalis</i> sp.	<i>Dispholidus t. typus</i>
<i>Boiga dendrophilla</i>	<i>Crotaphopeltis h. hotamboeia</i>
<i>Constrictor constrictor</i>	<i>Naja mossambica</i>
<i>Lamprophis fuliginosus</i>	<i>Causus rhombeatus</i>
<i>Psammophis phillipsii</i>	<i>Psammophis s. brevisrostris</i>
	<i>Dendroaspis angusticeps*</i>

\* Eggs brought into park.

The park received two xanthic Night Adders (*Causus rhombeatus*) from Westville, near Durban. At the time of writing, both were feeding and in good condition.

T. Bodbijn  
Former Curator



## SWADINI REPTILE PARK

Donald Strydom  
P.O. Box 175  
Hoedspruit  
Tel: 0131732-1121(W)

This park was established recently, having been moved from a previous site. At present some 30,000 - 50,000 people visit Swadini Reptile Park per year. Many of these visitors are scholars on educational tours.

Facilities for the visitors include an audiovisual room, museum, demonstration pit, an open lawn discussion area with blackboard, tables and chairs and, of course, the reptile displays. Over 300 reptiles are on view.

Most of the trees on the premises have been identified and labelled and several bird trays provide food for a variety of local birds.

"Problem" snakes in the area are removed from gardens and households, cultivated lands and during bush clearing operations while D.O.R. specimens are collected and utilized for accurate localities.

Reptiles collected are marked, measured, weighed and photographed and released into local reserves that are not frequented by hikers and campers. This is done in conjunction with the Division of Nature Conservation.

The removal of problem snakes has resulted in members of the public telephoning and requesting the removal of snakes rather than killing them. As a rule snakes are never paid for, thus not creating a market for them.

As a result of the relocation of the park, captive propagation has been somewhat limited and the following species have been bred:

*Bitis a. arietans*, *Dendroaspis polylepis*\*, *Python sebae natalensis*\*, *Mehelya nyassa*\*, *Naja mossambica*, *Lamprophis fuliginosus*, *Trimeresurus spp.*, *Telescopus s. semiannulatus*, *Dasypeltis scabra*, *Geochelone pardalis babcocki*, *Elaphe guttata*, *Elaphe o. spilodes*, *Elaphe o. quadrivittata*, *Causus defillippi*\*, *Pituophis melanotus melanotus*, *Naja nivea*, *Chamaeleo dilepis*, *Varanus niloticus*\*, *Crotaphopeltis h. hotamboeia*, *Philothamnus hoplogaster* and *Naja haje anulifera*.

\* Female gravid when captured.

## CROCODILE FARMING

Since the last newsletter of the South African Crocodile Farmers Association (dated 2 December 1983) there has been no further newsletters reaching farmers and people interested in the crocodile farming industry.

After receiving numerous inquiries concerning a newsletter, I approached a several farmers who expressed their interest in better communication through a newsletter. I then approached the Herpetological Association of Africa and asked whether contributions from crocodile farmers could be included in their newsletter. Their reply was positive and the success of this attempt now lies in the hands of farmers. Here are some interesting thoughts:

### 1). DRUG BOX

The months ahead promise to be busy and rather demanding as everyone prepares for the coming laying season. Check the contents of your drug-box, update and refill it and ensure that all your equipment is in good order.

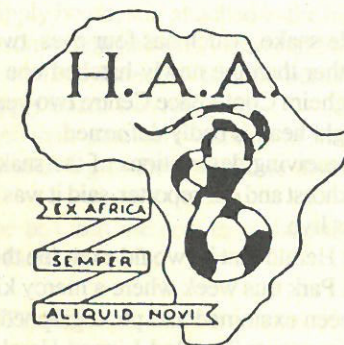
### 2). CROCODILES FOR SALE

Crocodiles are at present in great demand, some fetching high prices, others not. Ever thought of sale by auction? This may stabilize price structures and enable farmers to compete for good stock.

### 3). RAW SALTED SKINS

Several skins are held at present on the various farms, collectively accounting for a large number. Grading is done overseas and the seller has very little control over his products. The cost of a return air ticket and accommodating a grader to grade all skins here may be well worth considering.

Trevor Bond  
Pretoria





## FROM THE PRESS

### FROM THE SOUTH COAST HERALD

13 March, 1987

## SAME PARENTS FOR RARE SIAMESE SNAKES?

by Sheila Park

A rare discovery of a two-headed Red-Lipped Herald in Ramsgate on Saturday, almost two years to the day after one was killed at Izotsha, has snake lovers (they do exist) hissing with excitement.

And, according to Angelo Lambiris, senior technician research for the Natal Parks Board in Pietermaritzburg, it is not only probable but highly likely that these two little snakes come from the same mother and father.

Mr. Lambiris said male sperms could be stored in the female snake for many years and it was perfectly feasible for the mother snake to have travelled the approximately 10 km distance from Izotsha to Ramsgate in the past two years.

Because this genetic deformity was extremely rare, with only a few such cases recorded in this country, Mr. Lambiris felt strongly that the two snakes were from a single mating.

The discovery of the snake on Saturday was made by young Lucinda Thrussell, a Class 11 pupil at Margate Primary School.

Lucinda told the Herald that she was catching butterflies in her garden when she saw something wriggling near the pampas grass. She called her brother, who caught the snake, which measures about 16 cm, in her butterfly net.

It was handed over, unharmed, to Ramsgate herpetologist, Allan Williams, an honorary Natal Parks Board Officer, who told the Herald that it was about two weeks old and that it had no chance of survival.

"Unfortunately the heads are too close together - it lives only on frogs and would fight itself to survive," he said, adding that it could probably only live for another week.

The heads of the little snake, which has four eyes, two mouths and two tongues, are more fused together than the newly-hatched one discovered and killed by a staff member at Skogheim Conference Centre two years ago. And the lower part of its mouth on its right head is badly deformed.

Mr. Lambiris, after receiving descriptions of the snake from the N.P.B. zone officer, Manfred Bronkhorst and our reporter, said it was unlikely that the little snake could be fed and thus live.

However, he told the Herald that he would examine the snake which will be taken to the Durban Snake Park this week where a mercy killing is expected to be performed after it had been examined and photographed. It, too, will be forwarded to the South African museum. The Red-Lipped Herald is totally harmless, as are all but four species of snakes in Natal, Allan Williams told the Herald. Mr. Williams stressed that it was unnecessary to kill harmless snakes, but dangerous for

the uninformed to keep poisonous snakes. He is willing to give talks and slide shows to interested parties, as well as help and advice. He can be contacted at 03931-20294 (home) or 03931-22422 (work).

Submitted by G. Lewis, Slippery Drift Farm.

## TURTLES CLEAN UP GANGES

NEW DELHI - Partially-burned human bodies will be cleared from the sacred Ganges River by carnivorous turtles under a new anti-pollution plan here.

The Press Trust of India (PTI) said the turtles were being released by officials in Uttar Pradesh state, which has set up breeding centers in Kukrail and the holy city of Varanasi, which are situated along the Ganges.

Similar centers would be opened depending on how successfully the turtles eat their way along the Ganges, PTI said.

There were no details about the number of turtles engaged.

Last year, Hindu devotees cremated more than 40 000 bodies along the river, according to official estimates, but a large number were only partially burnt.

India is spending R68 million in five years to clean the 2 500 km Ganges. - Sapa-Reuter.

## WHAT SHOCKING TASTE!

Damage estimated at thousands of rand was caused to a repeater station near Smithfield when a hungry lizard had a bite at a high-tension wire running through a power supply box in the station.

Its bite proved to be lethal as it resulted in a short-circuit which blew up the complete power supply system of the repeater station.

Officials, who were at a loss at the station's sudden refusal to function, dispatched it to the shop of Mr. J.L. Pieterse in Bloemfontein where repairs to telecommunication equipment are carried out.

"When we opened the box, we found the head of the lizard, where it was protruding from under the power supply board, still attached to the high tension wire. It's the first time I've ever seen something like this," says Mr. Pieterse.

To add to their amazement a whole family of lizards, burnt to cinders, was discovered when the power supply board was removed.

They were all cremated when their sanctuary went up in smoke. It's hard to say how long the lizards had been living in the box before their tranquil life was so cruelly disturbed.

It is impossible to repair the box and the cost to replace it could well run into thousands of rand, says Mr. Pieterse.

ONS STAD, BLOEMFONTEIN.



# NEW MEMBERS

Mr. M. Body  
124 Provincial Building  
Broad Street  
Durban 4093

Mr. I. Crab  
Verbindingslaan 86/22  
Heverlee  
B-3030  
Belgium

Mr. J. de Graaf  
P.O. Box 270  
Molepolole  
Botswana

Mr. J.G. Douglas  
12 Sue Avenue  
Blairgowrie 2194

Mr. J. Friedman  
60 Maple Drive  
Athol  
Sandton 2196

Dr. U. Joger  
Hessisches Landes Museum  
Zoologische Abteilung  
Friedenplatz  
6100 Darmstadt  
West Germany

Mr. A. Lourens  
16 President Fouche Str.  
Panorama  
Bethlehem 9700

Mr. J. Lougher  
34 Longfellow Street  
Ridgeway  
Johannesburg 2091

Museum D'Histoire-Naturella  
Case Postale 434  
CH-1211 Geneve  
Switzerland

Mr. D. Blake  
P.O. Box 127  
St. Lucia Estuary  
3936

Mr. O. Cooper  
2 Tabak Avenue  
Van Riebeeck Park  
Kempton Park  
1620

Mr. G. Davies  
P.O. Box 42  
Louwsberg  
2194

East Rand Herpetological Ass.  
P.O. Box 10734  
Aston Manor 1630

Mr. G. Grove  
164 Nederveen Highway  
Leondale  
Germiston 1401

Mr. S.R. Kantor  
P.O. Box 6081  
Birchleigh  
1621

Mr. A.J. Lourens  
29 Bontebok Street  
Van Riebeeck Park  
Kempton Park 1620

Mr. W. Mc Lennan  
48 Krombek Street  
Birch Acres  
Kempton Park 1620

Mr. C. Nish  
8 Haven Lane  
Malvern  
4093

Mr. N.G. Palmer  
Jonkershoek Nature  
Conservation Station  
Private Bag 5014  
Stellenbosch 7600

Mr. S. Renou  
113 Kwartel Road  
Birch Acres  
Kempton Park 1620

Mr. H. Seuffer  
Kreuzstrasse 3  
D-7538 Keltern-Weiler  
West Germany

Mr. G. Setaro  
12 Michael Court  
Percy Osborne Road  
Durban 4001

Mr. J.P. Zaworski  
39 Clark Street  
Galesburg  
IL. 61401  
U.S.A.

Mr. R. Ansermino  
297 Louis Botha Ave  
Rouxville  
Johannesburg 2192

Mr. M. Perry  
P.O. Box 70564  
Bryanston  
2021

Mr. A. Roberts  
2 Richmond Place  
Padfield Park  
Pinetown 3600

Mr. J.M. Spence  
Tigerberg Zoo  
P.O. Box 524  
Kraaifontein 7570

Dr. M. Verseput  
P.O. Box 39112  
Bramley  
2018

Mr. L.H. du Preez  
402 Loveway Gardens  
Loveday Street  
Muckelneuk  
0002

