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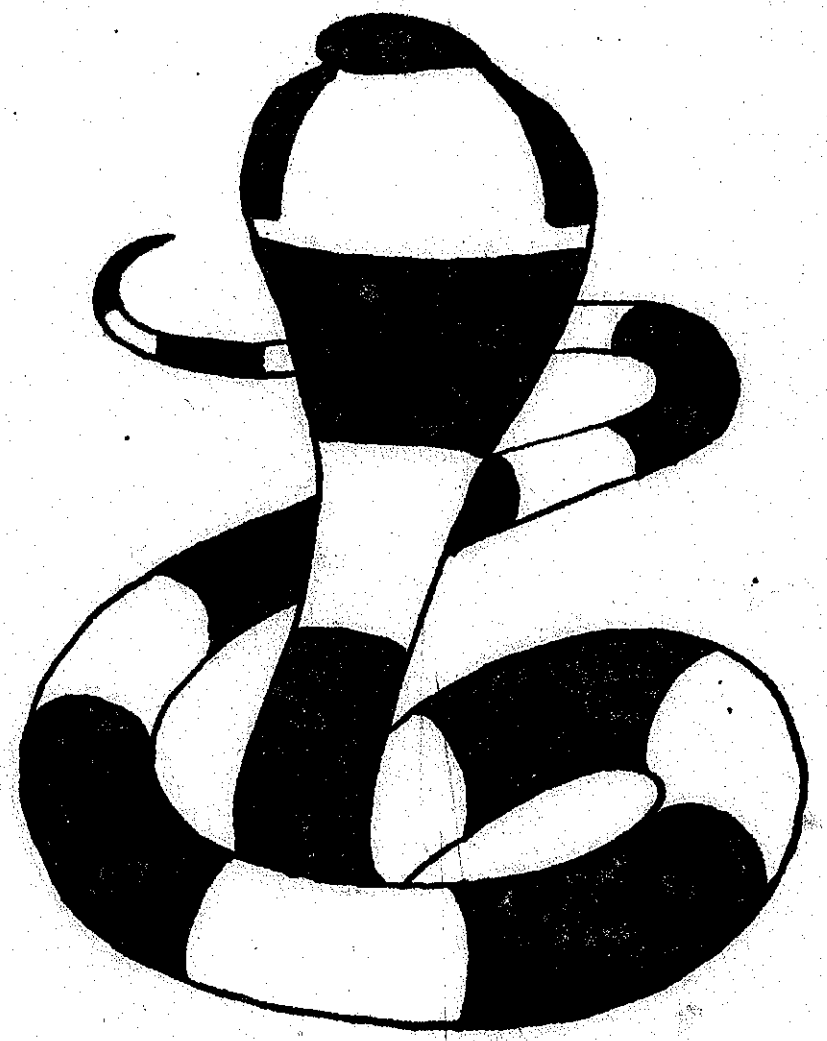
H.A.R.
JOURNAL



THE JOURNAL OF THE HERPETOLOGICAL ASSOCIATION OF RHODESIA.

No. 12 AUGUST, 1960.

CONTENTS

JOTTINGS FROM COBRA CORNER

Dear Member,

For once, no accidents have occurred to delay the appearance of this Journal. The winter months are rather barren ones for the herpetologist and this is reflected by the lack of variety in this issue's articles, which are top heavy with snake-bite case histories! Fortunately, I recently got round to examining some of the specimens collected by H.A.R. members last season and this yielded material for two articles. Interesting articles by members are still required for future issues.

The first General Meeting of the Association will be held at 8.30 p.m. on 10th September at Salisbury Snake Park. Will all members who expect to attend please notify the Hon. Secretary as soon as possible. Nominations for the post of Chairman and Secretary/Treasurer, as well as any proposed amendments to the Constitution must be submitted to the Hon. Secretary by 24th August. D.K. Blake has been Acting Chairman for the past three years.

Twelve Blazer Badges have been ordered from London and should arrive within a few weeks. They will be sold on a basis of "first come, first served". They cost 57/6 each and cash must be sent with order.

The Hon. Treasurer's Report shows our finances to be in a healthy state, but I call upon all members to pay any outstanding subscriptions so that I can bring the books right up to date.

Good hunting,

Donald G. Broadley

Hon. Secretary/Treasurer, H.A.R.

Director, Salisbury Snake Park,
P.O.Box 3489, Salisbury, S.Rhodesia.

Hon. Keeper of Herpetology,
National Museums of Southern Rhodesia.

NEW MEMBERS

A.J.Boughey, 3 Rollo Drive, Alexandra Park, SALISBURY N.12, S.R.

H.D.Richardson, 65 Caledon Avenue, Caledon, SALISBURY, S.Rhodesia.

M.G.Goddard, P.O.Box 1257, BULAWAYO, S.Rhodesia.

C.Findlay, Lujeri Tea Estate, P.O.LUJERI, Nyasaland.

CHANGES OF ADDRESS

H.P.Walsh, c/o Veterinary Dept., P.O.Box 30, FORT VICTORIA, S.R.

P.H.Read, 86 8th Avenue, Parktown, JOHANNESBURG, South Africa.

HON TREASURER'S REPORT FOR THE YEAR 1959-60.

Balance Sheet for the year ending 31st March 1960.

Balance as at 31st March 1959	£55.. 6.. 0.	Current Account Netherlands Bank	£48.. 5.. 2.
Excess of Revenue over Expenditure for the Year	£20.. 2.. 8.	Cash in Hand	£27.. 3.. 6.
Capital Reserve	£41..19.. 0.	Office Equipment	£41..19.. 0.
	£117.. 7.. 8.		£117.. 7.. 8.

Revenue and Expenditure Account for the Year ending 31st March 1960.

Postages	£ 1.. 6.. 6.	Entrance Fees and Subscriptions	£63..10.. 2.
Bank Charges	19.. 0.	Sale of Blazer Badges	£ 5..15.. 0.
Stationary & H.A.R. Journal	£24.. 3.. 1.	Bulawayo Show (10% Net Profits)	£22..15..10.
Roneo "250" Duplicator & styli	£36.. 5.. 0.		
Rexel "Comet" Stapler & staples	£ 3.. 5.. 0.		
Velos Paper Punch	£ 2.. 9.. 0.		
Membership Cards	£ 3..19.. 9.		
Balance, being excess of Revenue over Expenditure for the Year.	£20.. 2.. 8.		
	£92.. 1.. 0.		£92.. 1.. 0.

Being a true and correct statement of the Accounts and Books of the Herpetological Association of Rhodesia as at 31st March 1960.

D.G.Broadley
Hon. Secretary/Treasurer.

I have examined the Books, Vouchers and Accounts of the H.A.R. and in my opinion the Income and Expenditure Account and Balance Sheet reflect a true and correct account of the same as at the 31st March 1960.

D.K.Blake
Hon. Auditor.

VIPERA SUPERCILIARIS - A RARE VIPER ADDED TO THE NYASALAND LIST.

By Donald G. Broadley

The Lowland Viper, Vipera superciliaris, is one of the rarest of the African Viperidae. It was originally described by Wilhelm Peters in 1854 from a single specimen collected on the mainland opposite Querimba Island, Cape Delgado, Mozambique (this is close to the Tanganyika border). Pffefer recorded another specimen from Quelimane in 1893, but it was not found again until 1927, when H.B.Cott collected four from the lower Zambezi (2 from Charre on the north bank; 1 each from Caia and Fambani on the south bank). So far all the records had been from Mozambique, but in 1930 Arthur Loveridge collected two specimens at Mwaya, on the northern tip of Lake Nyasa in Tanganyika Territory.

At 7 a.m. on the 19th December 1959, Roger Blaylock caught the first recorded Nyasaland specimen of Vipera superciliaris on the banks of the Shire River 15 miles north of Liwonde. It is now NMSR/M.3873 and its data are as follows. Length 548 (485-63) mm. Midbody scale rows 27; ventrals 145; anal entire; subcaudals 32; upper labials 8-9. This species has the rather slender body typical of the genus (slightly more slender than Causus). The head is covered with small keeled scales, except for a pair of large supraocular shields which are quite distinctive. The body is grey-brown with a series of dark blotches crossing the back, these are divided into three parts by a dorso-lateral series of longitudinal yellow streaks. Top of head grey-brown, sides of head cream, three broad black chevrons on head, first extends from top of snout along the suture of rostral and nasal/first labial, continuing under the chin as a pair of black stripes; the second extends from top of snout through eye to the lower labials; the third extends from between the orbits to the lower labials at the angle of the jaw. The throat has a broad black median stripe extending for 12 ventrals, it then braks up into spots, the rest of the belly is white with large irregular black spots.

I have not been able to assemble data for all the known specimens of Vipera superciliaris, but the range of variation in Cott's four snakes was - midbody scale rows 26-30; ventrals 148-159; subcaudals 38-43; his largest was a female from Charre with a total length of 607 (552-55) mm. None of Cott's snakes could be induced to feed in captivity (he was collecting live specimens for the Zoological Society of London), Blaylock's snake also refused to feed.

Vipera superciliaris probably has a wide range in Nyasaland at altitudes below 1,500 feet, this would include the whole of the Shire Valley and the shores of Lake Nyasa. Its centre of distribution would appear to be the lower Zambezi and it may well extend

southwards through extensive marshy areas to Beira and the Amatongas.

TWO SNAKES NEW FOR SOUTHERN RHODESIA AND SOME OTHER INTERESTING SPECIMENS.

By Donald G. Broadley.

I have at long last been able to make a start on the task of examining and cataloguing a huge backlog of collections and odd specimens which has accumulated since I took over the Directorship of Salisbury Snake Park. Some very interesting specimens have turned up, including two species new for Southern Rhodesia.

Xenocalamus transvaalensis was originally described by Methuen in 1919 from N'jelele River, a tributary of the Limpopo in the northern Transvaal. A second specimen was recorded by FitzSimons in 1946 from Lourenco Marques, Mozambique.

The third known specimen was collected by W.W. Armitage in December 1959 at the Sabi Experimental Station near the Sabi - Tanganda Confluence. The data for this specimen (NMSR/M.3827) are as follows (variation for previous two specimens in parentheses) Midbody scale rows 17; ventrals 193 (184-195); anal divided; subcaudals 29 (30-31); upper labials 5, the second and third entering the orbit; lower labials 6, the first 3 in contact with the anterior sublinguals; preocular 1; postocular 1. Length 347 (310-37) mm. Black above, outer 2½ scale rows and ventrum white.

Dasypeltis medici medici (Bianconi) occurs in coastal East Africa, from southern Kenya to northern Mozambique. In November 1959, A.G. Shepherd collected a specimen on the Inyangani Tea Estates in the Pungwe Valley, close to the Mozambique border, this is the first record from south of the Zambezi. This snake, a male, in now NMSR/M. 3918 and has the following data (variation for the race in parentheses) midbody scale rows 23 (22-25); ventrals 232 (235-252 in males; 237-259 in females); anal entire; subcaudals 84 (81-109 in males; 71-90 in females); upper labials 7, the third and fourth entering the orbit; preocular 1; postoculars 2; temporals 2-3/2-4. Frontal shield only marginally pitted (normally entirely pitted), without median suture; lateral serration extending over 4 scale rows; anal serration marked; apical scale pits all sharply defined by dark pigment. Body pinkish brown with five narrow, forward directed V's on head and neck, followed by narrow dark crossbars which enclose a light spot on the vertebral line. Belly cream with brown stippling. Length 730 (600-130) mm.

This snake should be looked for at low altitudes in the north-eastern corner of Southern Rhodesia, it usually occurs on reddish laterite soils.

There are two other interesting records from the Inyangani Tea Estates. A Naja melanoleuca subfulva died after several weeks at the Snake Park and is now NMSR/M.3850. It is a female measuring 1460 (1210-250) mm. with 211 ventrals and 67 subcaudals. There is also the head of a Dendroaspis angusticeps from the same locality. Both these species are recorded from Southern Rhodesia for only the second time.

Three more snakes are Southern Rhodesian records for their respective species:-

NMSR/M.3828 Thelotornis kirtlandii oatesii Mtorashanga
Length 1682 (1062-620) mm. Apparently a record for the species.

NMSR/M.3832 Psammophis s. subtaeniatus Binga
Length 1370 (900-470) mm.

NMSR/M.3849 Bitis caudalis Hillside, Bulawayo
Length 333 (307-26) mm.

GLOVES: TO BE OR NOT TO BE? By D.K.Blake and D.T.Crow.

Every herpetologist has at some time or other worn or considered wearing gloves for the handling of dangerous reptiles. The discussion following is an attempt to settle the question as to whether or not their use is justified. The final decision, of course, is for the individual and the views expressed are purely those of the authors.

The purpose of wearing gloves is to prevent the fangs of a snake from reaching the flesh underneath or at least to lessen the degree of a bite. To be of any real value, therefore, a glove must be of reasonable thickness and of pliable material - the most suitable probably being leather. This material also has the property of being absorbent. There are several of the larger back-fanged African snakes which are potentially dangerous and it will be shown that gloves can be of very great value when handling these. As their fangs are grooved it is reasonable to assume that much of the venom of these snakes will be absorbed when a bite is delivered through a material such as leather. This in fact was the case when the senior author was bitten by a large male Boomslang (Dispholidus typus). At the time he was wearing thin leather gloves. The bite was delivered on the index finger of the left hand and while the snake was chewing one fang was forced through the glove, leaving a hole of approx. 1 mm. in diameter. Slight smarting was the only result, though venom was observed to be discharged upon the glove. The gloves in this case were too thin and it is probable that more serious effects would have resulted if the snake had been allowed to chew.

More recently D.G.Broadley received a bite from an immature D.typus which almost proved fatal. At the time he was wearing skin tight surgical rubber gloves (these were worn while "milking" mambas to prevent venom from entering cuts on his hands). It is possible that this type of glove may have sealed venom between the glove and the hand long enough for a greater quantity of venom to be absorbed than would be the case if a more absorbant material was utilised or if the hand was uncovered.

The front-fanged snakes are a different proposition. Thick leather would probably prevent the short fangs of cobras and mambas from reaching the skin, however the cobra tends to chew and therefore, if allowed, can force its fangs through a considerable thickness of material. The mambas on the other hand tend to strike high,

often several times in quick succession.

As far as the larger vipers are concerned, nothing short of armour plate would be of any use, owing to the great length of the fangs and the force behind the strike.

We cannot claim to have used all the materials available and possibly there is something that would be suitable in every way for dealing with the dangerous snakes. Snakes are caught for study and/or display and sometimes just for venom extraction. In any event it is preferable that the animal is not injured, either by rough handling or through damage to the mouth which may occur when the snake is withdrawing from a strike. Obviously it is advisable to capture and handle snakes with care if they are to be kept in good condition. Cane this be done if gloves are used? Gloves which are too thick and inflexible are clumsy and one cannot handle a snake with the care which is warrented, due to the complete loss of the sense of touch. Surely one would tend to develop an attitude of omnipotence if it was certain that the gloves could not be penetrated by the fangs of any snake? It is certain that one would not take as much care as if nothing were worn on the hands and bites might even be invited? Injury to the snakes being displayed would be inevitable.

The risk involved in handling dangerous snakes bare-handed is great, yet one takes greater care not to be bitten and it involves less wear and tear on the snakes!

CASE HISTORY OF A GREEN MAMBA BITE IN THE CONGO.

By Paul Leloup, D.S. Bukavu, Congo Republic.
Translated by Dr. J.H.Mason, S.A.I.M.R.

The mishap occurred at 2.44 p.m. on the 17th March 1960 in the Congo when a Green Mamba (Dendroaspis angusticeps) 215 cm. (84.7 in.) long was being "milked". It partially released itself and inserted one fang deeply into the tip of the 3rd (ring) finger of the right hand of a 19 year old Native male weighing 54 Kg. (119 lb.).

A few seconds after the accident, a small drop of blood exuded from the wound. The victim felt no pain, but was very frightened. An incision, 5 mm deep, was made through the fang mark and massage applied without, however, producing much haemorrhage. A tourniquet was tied round the upper arm just below the shoulder, 4 ml (c.c.) of mamba antivenom was injected subcutaneously on the distal side of the tourniquet in the direction of the venous blood flow and 16 ml at other sites on the body and limbs. A dressing soaked in a solution of permanganate of potash was applied to the wound. An interval of 3½ minutes elapsed from the infliction of the bite to the end of the treatment.

Observations:

2.51 p.m.:- Local - slight numbness of arm.
General - slight discomfort in region of throat.
Psychological - profound depression.

3.10 p.m.:- Local - a small ammount of blood exuded when the tourniquet was removed for a few moments.
General - pain in the region of the throat and in the chest, but respiration normal.

Psychological - morale low.

3.30 p.m.:- The removal of the tourniquet brought relief to the patient.
Local - arm numb.
General - As at 3.10 p.m., but the voice was slightly altered and breathing, although regular, was somewhat painful.
Psychological - patient in great distress.

3.45 p.m.:- Local - the 3 phalanges of the bitten finger were somewhat puffy, no pain, arm numb.
General - rather severe pain in chest, dizziness, desire to lay down, pulse and temperature normal.
Psychological - patient more reassured, morale better.

4.15 p.m.:- Local - arm numb.
General - severe pain in chest, tongue 'heavy', voice deeper than usual, hearing more acute, the patient reacting to the slightest noise, pulse and temperature normal, respirations slightly increased.
Psychological - morale good.

From now onwards, all the symptoms decreased in intensity.

5.00 p.m.:- Local - finger swollen and arm numb.
General - pain in chest much less, voice normal, dizziness has passed off.
Psychological - patient wants to go home, considering himself cured.

24 hours later:- Local - whole hand slightly oedematous.
General - slight pain in the region of the throat.

3 days later:- The oedema has disappeared. Around the wound, there is a scar measuring 1 cm. in diameter.

1 month later:- The necrosis of the finger tip is still present and suppuration is occurring. The tip has lost its epidermis several times, which indicates that the venom of the mamba possesses cytotoxic (haemotoxic) properties.

Note:- An estimation of the ammount of venom injected into the victim of this mishap is between 30 and 40 mg., perhaps 50 mg. and even possibly 70 mg. The antiserum was very potent because, without it, death would probably have supervened in an hour.

Twentynine milkings yielded 2 grams of venom. Allowing a loss of 20% during milking and further handling, the yield is about 86 mg. per snake or 43 mg. per fang. The mamba in question was larger than the average (84.7 inches against between 60 and 70 inches) and thus the am ount of venom injected was possibly greater. But the amount injected into the victim can only be a rough estimate; further, it should be borne in mind the the yield in venom from one particular snake can vary considerably from one milking to another.

In contradistinction to cobras, mambas eject nearly all their venom at once. Strictly speaking, they do not bite but 'needlestab' in a rapid manner. The venom, very liquid as it leaves the fang, is ejected under great pressure and forms a fine spray if its passage is not impeded; it coagulates very rapidly when it comes into contact with air. Once the venom has been expelled, a second stab, or pressure over the parotid region yields only a tiny amount, contributing, in part, to the difficulty of obtaining it because a sudden movement can trigger off the ejection reflex before a chance is got of collecting the venom. Naja melanoleuca, on the other hand, can bite 6 or 7 times, injecting a progressively decreasing amount of venom in the process.

Comment by Dr. J.H.Mason of the South African Institute for Medical Research, Johannesburg, to whom the report, in French, was originally submitted.

The antiserum (enzyme-purified globulins) was prepared in a horse

by immuniizing it with a mixture of the venoms of D.polylepis and and D.angusticeps, that of polylepis predominating.

Numbness in arm:- In addition to being a direct effect of the venom, this symptom may have been aggravated by the tourniquet.

Symptoms in general:- As the very sight of a mamba can induce nervousness in some people, it would not be surprising if a bite produced all sorts of subjective symptoms. Thus, as the patient, an assistant of M.Leloup, must have known the mamba's reputation, it is difficult to separate true symptoms caused by the venom from those produced by justifiable fear.

Comment by the editor:- Three case histories of mamba bites have previously been recorded in the Journal - bites from D.polylepis in No. 8, p.6 and No. 9/10, p.17; a bite from D. angusticeps in No. 8, p.7.

Another mamba bite may briefly be recorded here. On 18th April 1960 at 3.30 p.m. D.K.Blake was catching a D.angusticeps prior to milking it when it swung round and struck, one fang entering the dorsal surface of the right hand middle finger just above the nail, a little blood oozed from the fang puncture. Blake then caught and milked the mamba, which gave an average venom yield. No symptoms of any sort developed. A few weeks earlier I had caught a mamba for milking and was looping its tail through the fingers of my right hand for convenience when I scratched my finger on one of the snakes fangs, again no symptoms developed, although the fang drew blood it seems likely that no venom was deposited as it was not a deliberate strike. One is never likely to complain of boredom when extracting venom from mambas!

A BITE FROM A VINE SNAKE IN BULAWAYO. By R.S.Blaylock.

On 8th October 1959 I was bitten by a Thelotornis kirtlandii oatesii from Kariba which measured 4 feet 8 inches. The snake chewed for at least 30 seconds on the thumb of the right hand, the bite smarted very much. A headache developed half an hour later, - not feeling so good. The bite occurred at 5 p.m.

6 p.m. Given 5 c.c. of polyvalent antivenene in the bitten thumb and a further 10 c.c. in the right buttock. By this time the hand was swollen. Headache persisted. Returned home.

8 p.m. Went to church, but walked out in the middle of the sermon. I felt very sick and feverish. I then spent the worst half hour of my life waiting in the car for the sermon to finish.

9.30 p.m. Went to bed, but could not sleep. Vomited.

9th October. Vomited at 8 a.m. Taken to hospital about 9.30 a.m., where a blood sample was taken. (I had accompanied Roger to the Hospital and shown the doctor the case history of Lock's fatal Thelotornis bite, pointing out that blood transfusions on a large scale might be required. - Editor) This blood would not clot, so at 1 p.m. I was given 1 pint of erythrocytes. During this process,

which lasted three hours, cuts bled on my body. These were numerous as I had been in the bush on the previous afternoon. At 2 p.m. I vomited again. Did not eat.

10th October. Blood blisters formed on cuts. Did not eat, but felt much better. Kidneys and stomach were very painful. The serum injection in the right buttock caused a large patch of local haemorrhage and swelling for a radius of 3-4 inches. This was very painful to touch and I could not lay on my right side.

11th October. Put on a diet of very soft foods. Blood blisters still present on cuts. Kidneys painful.

12th October. Blood clotting satisfactorily. Kidneys painful. Swelling and haemorrhage on right buttock started to subside and eventually dissapeared two weeks later.

13th October.Sent home. Passed blood in urine. 6 p.m. A bad serum reaction began which lasted until the 15th.

15th October. Returned to Hospital to rest injured kidneys.

16th October. Felt fit except for a slight serum rash. Returned home after a week and back to school after another week. There were no after effects.

CASE HISTORY OF A BITE FROM A PIGMY RATTLESNAKE. By David K. Blake.

At 5.30 p.m. on the 20th of April 1960 I was bitten by a Pigmy Rattlesnake (Sistrurus miliarius barbouri). I was placing a white mouse in the cage at the time, holding the mouse by the tail with the thumb and forefinger of the right hand. As I swung it through the door of the cage the rattler struck a distance of 4 to 6 inches, sinking one fang into the outside of the index finger and the other into the mouse. I immediately withdrew my hand, still holding the mouse, which I returned to the box I had taken it from.

There was now a burning sensation at the site of the bite and a slight discharge of blood. I then applied a tourniquet to the finger and held it under a running tap. The smarting soon stopped and there was only a slight inflammation at the site of the bite, so I decided not to cut through the fang punctures and removed the tourniquet. There were no after effects.

On observing the mouse that had been bitten I found it staggering about and it finally died fifteen minutes after the bite. The rattler was given another mouse, which it immediately killed and devoured.

HERE AND THERE

WEDZA - Brian Rickson recently collected two fine specimens of Psammophis jallae, this is the most easterly locality from which this species has been recorded.

ADVERTISEMENT

H.A.R. Badges in pewter, suitable for fitting on car doors, plaques, etc, are now available at £1..1s. each. Size approx. 4½ X 4 inches - as on cover of No. 1 Journal, same size as the blazer badge. Available from B.Rickson, or through Hon. Secretary.