

AN ANNOTATED PRELIMINARY LIST OF AMPHIBIANS AND REPTILES
KNOWN TO OCCUR IN THE NAMIB DESERT PARK, NAMIBIA

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Introduction

The Namib Desert Park, situated in the central Namib Desert, is approximately 1 409 500 hectares in extent and is bounded in the west by the Atlantic Ocean and in the east by the escarpment (this park has recently been linked with the Naukluft reserve which is not included here). The northern and southern boundaries are partially formed by the Swakop and Kuiseb Rivers respectively.

Five major habitat types can be distinguished (Stuart 1975) namely:

1. The coastal area which consists of coastal sand-dunes and hummocks, exposed mud flats, sedge-meadow and open beach.
2. The main riverine courses, Kuiseb and Gaub, Swakop and Khan, as well as the larger washes of the eastern half of the park.
3. The open gravel plains which make up the bulk of the land area, and granite inselbergs.
4. The open scrub savanna and hill ranges of the north east.
5. The "dune-sea" to the south of the Kuiseb River.

Altitude ranges from sea-level to approximately 1300 m. Precipitation varies from only a few millimetres along the coast to over 100 mm at the foot of the escarpment. Logan (1960) has discussed the climate of the central Namib Desert in some detail.

Vegetation increases towards the east, as the precipitation rises. The sand dunes have little vegetation cover, except along their northern perimeter. The eastern plains are generally poor in vegetation cover, with grasses predominating although following rains they do have a reasonable grass cover. The larger washes flowing across these plains are fairly well-wooded, chiefly by Acacia ereoloba and Euclea spp. The main riverine areas are generally well wooded with Acacia ereoloba, A. albida, Tamarix usneoides, Euclea pseudebenus and Salvadora persica. Succulents are common on many of the inselbergs, particularly in the eastern sector of the park. The western plains have very little vegetation cover.

The information for this list was collected over a period of two and a half years (1973-1975) whilst the author was resident at Gobabeb (Namib Desert Research Station). Material is housed at the Namib Desert Research Station. Numbers given are for the material housed at the above research station, unless prefixed by SMC or CR (State Museum, Windhoek), TM (Transvaal Museum, Pretoria), HF (Helmut Finkeldey collection) or AM (Albany Museum, Grahamstown).

Systematic list

Amphibia (Anura)
Family Pipidae

Xenopus l. laevis (Daudin)

Restricted to the pools in the beds of the Kuiseb and Swakop Rivers. It has not been recorded west of 15° E. This species also occurs in the perennial pools of the Gaub River just outside the Park. X. laevis has been recorded breeding in the Gaub and Kuiseb.

Family Bufonidae

Bufo vertebralis hoeschi Ahl

Channing and Stuart (1976) have discussed the occurrence of this small toad in the Namib Park. Breeding takes place immediately following the first summer rains, and the time period between oviposition and the emergence of toadlets is approx. three weeks.

Family Microhylidae

Phrynomerus annectens (Werner)

Common and widespread east of 15°15' E. In the Park it is restricted to the vicinity of granite inselbergs and other rocky areas, notably the upper Kuiseb Canyon areas. This species was observed to breed at the onset of the summer rains in rainwater pools as well as rocky bottomed pools in the upper Kuiseb.

Family Ranidae

Tomopterna cryptotis (Boulenger)

This species appears to be restricted to the main river courses; Kuiseb and Swakop Rivers as well as at the Gaub River bridge. Activity follows the first flooding and continues until the pools begin to dry up. Channing (1974) has discussed the biology and behaviour of this species in the vicinity of Gobabeb on the Kuiseb River (as T. delalandei cryptotis).

Reptilia

Testudinata

Family Pelomedusidae

Pelomedusa subrufa (Lacépède)

This terrapin has only been observed during the times of annual flooding in the Kuiseb and Swakop Rivers.

Squamata

Sauria

Family Gekkonidae

Chondrodactylus angulifer namibensis Haacke

Apparently widespread and fairly common, recorded on the open gravel plains and sandy washes and occasionally seen in the Kuiseb River and the perimeter of the dune system. Specimens were taken at 23°10'S 15°35'E and 23°16'S 15°36'E (both specimens R96) following heavy rains. One animal was taken to the east of Groot Tinkas 22°52'S 15°36'E and another was taken in the Ganab wash (2315Baa). Sightings were recorded for the vicinity of Gobabeb, Mirabib and Amichab. The State Museum has specimens from Rooibank (CR 1031) and Bloedkoppie (SMR 1385). Haacke (1976) has dealt with this ground gecko in detail, the type series having been collected at Amichab in the Park (19 specimens). He records specimens from 5 km NNW of Gorob Mine, Hotsas, Langer Heinrich, Groot Tinkas, Ubib and Gobabeb in the Park.

Ptenopus garrulus maculatus Gray

Brain (1962) records this subspecies from Gobabeb. Ptenopus are widespread in the Park but appear to be most abundant in the vicinity of sandy washes. They were heard calling in large numbers in the washes around the Ganab water hole. Specimens in the DERU collections were taken at Gobabeb (R33-3 specimens), 22°52'S 15°36'E (854) and at the edge of the red dunes (2315DBc). The State Museum has specimens from Rooibank (SMR 36+1800) Gobabeb (SMR 37) and Bloedkoppie (SMR 1380). Haacke (1975) has recorded specimens from the vicinity of Gobabeb, Gorob Mine, Amigab mt., Hotsas, Ubib, Groot Tinkas, Langer Heinrich and Tumas mt.

Ptenopus carpi Brain

Brain (1962) collected this species on the gravel plains to the north of Gobabeb and one of the specimens is housed in the State Museum (SMR 39). Haacke (1975) records specimens from Gobabeb and Ururas, the type locality being at Gobabeb.

Ptenopus kochi Haacke

Apparently confined to the vicinity of the Kuiseb River (Haacke 1975). The type locality is at Gobabeb and Haacke also records specimens from Sandwich Harbour and Ururas.

Narudasia festiva Methuen and Hewitt

DERU (R 122) was collected under a flat stone on the open gravel plain in the vicinity of the Mirabib Hills (23°28'S 16°19'E). FitzSimons (1943) records this species from Gorob.

Palmatogecko rangei Anderson

Common in the dune area to the south of the Kuiseb River, but it has been recorded from the river bed, and odd specimens were noted in the vicinity of the Gobabeb air strip. Fairly numerous at Sandwich Harbour on the coastal dunes. Specimens in the DERU collection were taken at Gobabeb (R 22), Sandwich Harbour (R 39 and 820), and Nara Valley (82). The State museum has specimens from Gobabeb (SM 82) and Rooibank (SMR 74). Numerous sightings were made between Homeb and the Kuiseb Delta, in the dune area, during night surveys. Haacke (1975) has discussed this species in some detail.

Lygodactylus capensis (A. Smith)

The subspecies bradfieldi was recorded from the vicinity of Gobabeb. There is some confusion as to the status of this gecko; Pasteur (1964) recognises bradfieldi as a distinct species, Loveridge synonymises it with capensis and FitzSimons (1943) considered it to be subspecifically distinct. Werner uses the name L. c. bradfieldi for specimens which he collected in the vicinity of Gobabeb. Four specimens from Gobabeb (DERU R 71) were deposited in the collection. Although they have been seen in the north-eastern corner of the Park as well as the Ganab wash no specimens were catalogued. Specimens in the State Museum were taken at Homeb (SMR 105) and Gobabeb (SMR 102). Usually found amongst Acacia bark and vegetation debris.

Pachydactylus punctatus Peters

Specimens in the DERU collection were taken at Hotsas (R 51), Ganab (726, R 88 - two specimens), Kuiseb River bed 2314BDd (807), Mirabib (725, 727 - two specimens), 22°46'S 15°40'E (852 - two specimens). The State Museum has a specimen from Rooibank (SMR 275).

Pachydactylus kochii FitzSimons

Haacke (no date, on DERU files) records the collection of two of these geckos from the gravel plain at Gobabeb.

Pachydactylus weberi weneri Hewitt

The type is housed in the Albany Museum (AM 6613) and it was collected on the Khan River which forms part of the north-western boundary of the Park. The State Museum has a specimen from the Khan Mine pumping station (CR 3432).

Pachydactylus rugosus Smith

No specimens were preserved but a photographic record was made of two animals taken from under the bark of an Acacia ereoloba in the vicinity of the Ganab water hole. Unfortunately both escaped.

Pachydactylus bibronii A. Smith

Geographically, the sub-species turneri Gray is probably represented here. A

common gecko in the Park, particularly to the east of 15°20'E. Shows a marked preference for the rocky habitats. Catalogued specimens in the DERU collection were taken at Ganab, Gobabeb, Homeb, Heinrichsberg and 22°59'S 15°36'E. (DERU: 775, 801, 802, 803, 804, 795, 784, 724, 838). The State Museum has specimens from the Gorob Mine (SMR 428) and Rooibank (SMR 434).

Pachydactylus laevigatus laevigatus Fischer

Both this and P. bibronii occur in and around the building complex at Gobabeb. Specimens in the DERU collection were collected at Gobabeb (R 8,9), 22°40'S 15°35'E (R 67), Ganab (R 43), Aruvlei (863), Hotsas (837a), Hebron (837b and c), 22°46'S 15°36'E (837d) and 22°46'S 15°40'E (837e-j).

Rhoptropus afer Peters

Common where found. Large populations are present in the vicinity of Gobabeb and along the course of the Kuiseb River. Specimens were taken at Gobabeb (R 18, 19 35 and 767). The State Museum has specimens from Gobabeb (SMR 678), Vogelfederberg (SMR 599) and Swartbank (SMR 581).

Rhoptropus bradfieldi bradfieldi Hewitt

Specimens were collected at 22°45'S 15°39'E (DERU R 61 - 9 specimens), Bloedkoppie (761 - 3 specimens), 22°46'S 15°28'E (762), Mirabib Hills (R 45 and 842), Kuiseb River bridge (860a, b) and 22°46'S 15°38'E (860c).

Rhoptropus barnardi Hewitt

The DERU collection contains material from 22°45'S 15°39'E (R 62 - 2 specimens), 22°40'S 15°32'E (R 63 - 3 specimens), Groot Tinkas (R107). There are specimens in the Transvaal Museum collection from Bloedkoppie (collected 21-1-74 by W. Haacke).

Family Agamidae

Agama planiceps planiceps Peters

Apparently restricted to the inselbergs and the hill country of the north east. Notably common at Bloedkoppie and Groot Tinkas. Specimens were taken at Bloedkoppie (R 99), Groot Tinkas (R 100) and 22°50'S 15°36'E (899).

Agama anchietae Bocage

Found in fairly open country as well as rocky terrain, chiefly in the eastern areas of the Park. The following specimens were collected: Klein Tinkas (828a), Groot Tinkas (828j), 22°43'S 15°29'E (828b), 22°43'S 15°36'E, (828h), 22°42'S 15°34'E (828i), 22°4 'S 15°45'E (R52), 22°48'S 15°40'E (R 53), 2215DAd (R 54), 22°40'S 15°45'E (R 55), 22°40'S 15°50'E (R 56), and Ganab (R 90).

Family Chamaeleonidae

Chamaeleo namaquensis A. Smith

Burrage (1973) has discussed this species in some detail as has Robinson (1978, 1979). Widespread and occurs in all the major habitats. Because of the ease of identification of this species only three specimens were catalogued (DERU R 7, 97, 133) from Gobabeb, Mirabib and 23°39'S 14°58'E. Sightings were made in the following blocks: 2314BAD, 2314BBb, 2315ABa, 2314BDa, 2315ABd, 2315CAb and 2314DBc.

Family Scincidae

Typhlosaurus braini Haacke

Haacke (1964) first described this species from specimens collected in the semi-stable dunes at Gobabeb. Three specimens were caught on the dune face opposite the research station (DERU R 68). They were caught at depths of 300 - 460 mm.

Typhlacontias brevipes FitzSimons

Recorded from the semi-stable sand on the southern bank of the Kuiseb River (Haacke 1964).

Mabuya occidentalis (Peters)

Specimens were taken at Gobabeb (R 112) and 22°50'S 15°28'E (R 102). A specimen taken at the Mirabib Hills escaped. There is a specimen in the State Museum (CR 2162) from Rooibank.

Mabuya acutilabris (Peters)

The DERU collection contains specimens from Bloedkoppie (R 120), Ganab (R 74), 22°40'S 15°33'E (R 95) and 22°51'S 15°38'E (896).

Mabuya sulcata sulcata (Peters)

Restricted to the inselbergs and rocky outcrops, particularly where there is reasonable vegetation cover. Material was collected at the following localities: 22°46'S 15°39'E (R 92), 22°40'S 15°34'E (R 93), 23°02'S 15°36'E (R 64), 23°08'S 15°37'E (R 131), 22°45'S 15°39'E (R 59) and 23°23'S 15°32'E (847), Tumasberg 23°09'S 15°32'E (R 94) and Ganab (849).

Mabuya spilogaster (Peters)

Apparently restricted to the wooded washes to the east of 15°20'E and usually found on Acacia ereoloba. Specimens were collected at 22°47'S 15°39'E (R 91a), 22°46'S 15°41'E (R 91b), Aruvlei (861), Ganab (R 73), Homeb (800), 2315BCa (R 76), 22°50'S 15°36'E (896). Uncatalogued specimens were collected in the vicinity of the Kamberge and visual records were made at Hotsas.

Mabuya hoeschi Mertens

Largely restricted to the inselbergs and rocky areas in the eastern half of the Park. Five specimens (R 57, 58, 110 and 111) from Bloedkoppie, 22°48'S 15°37'E, 22°45'S 15°40'E, 22°40'S 14°48'E are lodged in the DERU collection. Regular sightings of this skink were made in the vicinity of the Mirabib rock shelter, the vicinity of the Kuiseb River bridge and in the Tinkas area. No catalogued specimens were taken from these sites.

Mabuya variegata (Peters)

Broadley (1975) has identified the sub-species variegata and punctulata from material collected in the Namib Desert Park. It is interesting that both variegata and punctulata have been collected at Gobabeb! This is a common species, particularly in the south and east. DERU material (R 121, 75, 84, 72, 793, 780, 850a-f) was collected at Groot Tinkas, Hotsas, Aruvlei, Ganab, 22°48'S 15°22'E, 23°38'S 15°29'E and 22°43'S 15°35'E.

Family Lacertidae

Eremias undata undata (A. Smith)

Recorded from the gravel plains and the base of inselbergs. Material was obtained from Groot Tinkas (R 106), 22°40'S 15°27'E (18/1/74), Ganab (R 79a,b), 2215DAd (R 66). A specimen in the State Museum (SMR 2188) was collected at Gorob Mine.

Eremias namaquensis Duméril and Bibron

Widely distributed in the eastern half of the Namib Desert Park, having been collected at the Mirabib Hills (R 47), Ganab (R 80a,b), Groot Tinkas (21/1/74), 22°47'S 15°28'E (R 104) and 22°50'S 15°28'E (R105). A specimen in the State Museum (SMR 2107) was collected from Homeb.

Eremias lugubris (A. Smith)

The State Museum has a specimen collected at Rooibank (SMR 2138).

Meroles cuneirostris (Strauch)

A very common lacertid in the dune area. Two particularly ^{large} populations are present

in the delta of the Kuiseb River and the isolated dunes in the south-east corner of the Park. A large series was collected in the south-eastern corner of the Park (2315DAd and 2315DBc) and additional specimens were collected at Gobabeb (R 20, 23, 24, 30, 34, 37, 768), Homeb weather station (R 46, 50, 743 - nine specimens), 23°29'S 14°49'E (840a), 23°34'S 14°48'E (840b), Sandwich Harbour (901), Homeb (771 - ten specimens) and Narra Valley (826).

Meroles reticulatus (Bocage)

A specimen was taken at Sandwich Harbour (R 98) and the State Museum has material from Rooibank (CR 2532) and Gobabeb (CR 2783).

Meroles suborbitalis (Peters)

The common lizard of the gravel plains, particularly to the east of 15°20'E. Material in the DERU collection was taken at 2315CAa (R 32), 2215DCa, 2315ABd, 2315BAc (798 - two spec.), 22°54'S 15°34'E (R 103), 23°09'S 15°36'E (893), 23°31'S 15°1'E (855), 23°32'S 15°32'E (856), and Aruvlei (862). The State Museum has a specimen from Bloedkoppie (SMR 1348).

Aporosaura anchietae (Bocage)

Restricted to the "dune sea" to the ^{South} ~~North~~ of the Kuiseb River, but common in this habitat. The DERU collection contains material from Gobabeb (R 15, 29 - three spec., 31 - three spec., 769 - four spec.), Sandwich Harbour (R 36 - two spec., 819), Homeb weather station (R49 - two spec., 744 - four spec.) and 2314DBa (893a,b,c).

Cordylosaurus subtessellatus (A. Smith)

Specimens were collected at Gobabeb (R 13), 22°42'S 15°35'E (R 119) and three specimens (R 14) are of uncertain origin, presumably Gobabeb. The State Museum has a specimen collected at Bloedkoppie (SMR 13187).

Amphisbaenia

Family Amphisbaenidae

Zygaspis quadrifrons (Peters)

Only two specimens were lodged in the DERU collection, R 113 which was collected at Gobabeb, and R 83, taken at 23°34'S 15°02'E. Both specimens were taken on the banks of the Kuiseb River under turf and shallow white sand.

Serpentes

Family Leptotyphlopidae

Leptotyphlops occidentalis FitzSimons

Dixon (1974) first recorded this species from the Namib Desert Park. Further specimens have been taken at Gobabeb, where the original collection was made (DERU R 27, 28).

Leptotyphlops labialis (Sternfield)

FitzSimons (1962) records the Brandberg as its most southerly distribution. Four specimens were collected under small rock flakes in the bed of a sandy wash in the vicinity of the Ganab water hole (a range extension of about 250 km). (DERU R 86 plus a specimen in the Umtali Museum, Zimbabwe).

Leptotyphlops scutifrons (Peters)

Haacke (in Dixon 1974) recorded this species from Gobabeb.

Family Colubridae

Boadon fuliginosus mentalis Günther

Stuart (1976) has recorded three localities within the Park, with an additional specimen collected at Husab Mountain, Welwitschia Flats.

Rhamphiophis multimaculatus (A. Smith)

This snake has previously been recorded from Walvis Bay (FitzSimons 1962). Specimens were taken at Amichab (DERU R 81), between Mirabib and Gobabeb (DERU R 41) and Mirabib Hills (DERU R 109). There is a specimen in the State Museum (SMR 1470) collected at Bloedkoppie. They appear to favour sandy ground, particularly washes. An uncatalogued specimen was taken 2,5 km south of Gobabeb on a west facing dune slope (Photographic record).

Psammophis trigrammus Günther

One specimen was taken at 22°47'S 15°39'E under a slab of exfoliating granite (DERU R 118).

Psammophis notostictus Peters

Specimens were taken at Ganab (DERU R 117), 15 km north of Zebra Pan (DERU R 40) and Gobabeb (Photographic record). Other specimens are from Walvis Bay (SAM 43514), Rooibank (HF 12) and Bloedkoppie (SMR 1512).

Psammophis leightoni namibensis Broadley

Specimen taken at Gobabeb (DERU R 116 and SMR 1683, TM 25018,9, 30459, 31207, 37182) and Rooibank (HF 11, TM 28783, TM 32036).

Psammophis (sibilans?) (Linn)

It is uncertain whether P. s. leopardinus or P. phillipsii is involved. Broadley (1977) gives both for northern South West Africa. As the specimens (DERU R 40 and SMR 5093) have not been re-examined it is not possible to give an identification here. FitzSimons (1962) notes a specimen collected at Rooibank and on his distribution map he includes a locality for the Gobabeb area, although this is not mentioned in the text. A specimen (DERU R 40) was taken within 2315ADD and the State Museum has a specimen from Zebra Pan (SMR 59093).

Family Elapidae

Naja nivea (Linn)

There are two records of this snake from the Park, both taken in wooded washes in the vicinity of Ganab (R 128). The second specimen was not catalogued. Both were of the yellow variety.

Naja nigricollis nigricinta Bogert x N. n. woodi Pringle

A common snake particularly along the Kuiseb River. Boycott and Haacke (1979) consider the animals occurring in the Park an intergrade population. Specimens were taken at Gobabeb (DERU R 125, 126, 127) and the Onanesberg (22°47'S 15°39'E). The Transvaal Museum has specimens from Gobabeb (TM 30172, 36881, 52155) and the Kuiseb river between Gobabeb and Natab (TM 37183).

Dendroaspis polylepis polylepis Günther

Only one specimen was collected (DERU R 61) within 2215CBd. Dixon (pers comm) records a sighting of this snake in the Bloedkoppie area.

Family Viperidae

Bitis arietans arietans (Merrem)

Sightings were made regularly between Gobabeb and Hudaob in the bed of the Kuiseb River. Tracks of a large specimen were recorded two kilometres to the east of Rooibank in the Kuiseb River bed. There is a specimen in the State Museum from Rooibank (SMR 2520). Ayre (pers comm) records seeing this viper at the Vogelfederberg.

Bitis peringueyi (Boulenger)

Restricted to the "dune sea". Fairly common, tracks frequently encountered.

Four specimens in the DERU collection are from the vicinity of Gobabeb and specimen 815 was taken near Narabeb (2314DBa). The State Museum has specimens from Rooibank (SMR 2531), Gobabeb (SMR 2543) and Homeb (SMR 2545).

Bitis caudalis (A. Smith)

The most frequently encountered viper, occurring in a wide variety of habitats - rocky and sandy terrain, grassveld and thornveld. Nine specimens are deposited in the DERU collection from: Gobabeb (R 1, 2, 4, 813), Ganab (R 69), 22°39'S 15°34'E (R 60), Swartbank (R 5), 8 km due east of Groot Tinkas (812), Amigab (R 130). Additional sightings were made at the Ganab weather station, Swartbank, near Hotsas, Welwitschia wash near Homeb, between Hope and Gorob Mines and the vicinity of the Mirabib Hills.

Species recorded in the vicinity of the Namib Desert Park but not yet taken within its boundaries.

In addition to the following species, there are a number of snakes and lizards recorded within 100 km of the Park (FitzSimons 1943, 1962) and additional collecting, notably in the north-eastern sector should add a number of new species to the present list.

Serpentes

Python anchietae Bocage. Recorded close to the eastern boundary (FitzSimons 1962).

Pseudaspis cana (Linn). FitzSimons (1962) records this species from the Swakop river which forms part of the boundary to the Park.

Xenocalamus bicolor bicolor Günther. Recorded from Swakopmund (FitzSimons 1962).

Aspidelaps scutatus scutatus (A. Smith). Recorded from Swakopmund (FitzSimons 1962).

Sauria

Afroedura africana africana (Boulenger). The type locality of Walvis Bay (FitzSimons 1948) is questionable. Haacke (1965) has recorded this gecko from the Erongo and Brandberg Mountains north of the Park.

Varanus exanthematicus albigularis (Schmidt). One large individual seen within 2316ADa, east of the Park.

Cordylus polyzonus jordani (Parker). One specimen collected just outside the Park, within 2315BDa (R 89).

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Gazetteer

Amichab	23°12'S 15°31'E	Kuiseb River bridge	23°18'S 15°46'E
Aruvlei	23°19'S 15°39'E	Kuiseb Delta	2314BAa
Blutkoppie/Bloedkoppie (Auchawib)	22°49'S 15°22'E	Mirabib Hills (Anachankirab)	23°26'S 15°19'E
Ganab	23°06'S 15°33'E	Narabeb	23°34'S 14°49'E
Gobabeb	23°34'S 15°03'E	Narra Valley	2314BDd
Gorob mine	23°32'S 15°21'E	Natab	23°39'S 15°05'E
Groot Tinkas	22°52'S 15°36'E	Onanesberg	22°47'S 15°38'E
Heinrichsberg	23°13'S 15°29'E	Rooibank	23°10'S 14°38'E
Homeb	23°37'S 15°10'E	Sandwich Harbour	23°20'S 14°28'E
Home weather station	23°39'S 15°09'E	Swartbank	23°18'S 14°48'E
Hope mine	23°33'S 15°17'E	Tinkas (klein)	22°49'S 15°24'E
Hotsas	22°59'S 15°24'E	Vogelfederberg	23°04'S 14°57'E
Hudaob	23°42'S 15°27'E	Welwitschia wash (Homeb)	23°37'S 15°08'E
Kamberge	23°34'S 15°42'E	Zebra Pan	23°32'S 15°28'E

Acknowledgements

I collected the information for this note whilst employed by the Transvaal Museum (Desert Ecological Research Unit) based at the Namib Desert Research Station, which is administered by the Division of Nature Conservation of the South West African Administration. My thanks are extended to all involved, and to the CSIR for financial support. Dr D. Broadley is thanked for identifying some of the

material and the director of the State Museum kindly permitted me access to the collection. Several people contributed material, especially J.E.W. Dixon and D. Klerk. Dr W.R. Branch of the Port Elizabeth Museum and W.D. Haacke of the Transvaal Museum are thanked for their valuable and constructive comments on the manuscript.

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A DISEASED RED LIPPED SNAKE

MIKE PERRY

In April 1979 I received a Red Lipped Snake, Crotaphopeltis hotamboeia, from a friend. He believed that the snake had got a very bad cold, as its mouth was very swollen. However, the snake did not seem to have a cold as there was no slime coming out of the nostrils and the inside of the mouth was not full of slime either. The swelling was, in fact, limited to the head. The bottom jaws and the neck were quite normal, as can be seen on the photograph (see figures). The usual symptoms shown by snakes with colds are that the bottom jaw and the flesh on the top jaw is swollen, the throat is puffy and slime comes out of the nostrils.

The skin around the eyes was loose from the skull and puffy. When magnifying the eye for close-up photography I noticed something under the scale that protects the eye. I pierced the eye as I had a suspicion that the movement I had seen was that of a kind of worm swimming in the fluid under the eye scale. I placed a small drop of this fluid on a glass and took a photograph of these worms.

The worms were 1 mm in length and the thickness of a hair. They were light to colourless, about the same as the fluid they were in. One tip was white (the head?).

The snake had died before I slit the eye shield. The cause of death was starvation as it was unable to feed. I would like to know what kind of worms were in the snake's head, where they came from and what kind of treatment could be given to a reptile with this type of infection. Could it be possible that the snake mite (Ophionyssus natricis) is a carrier of worms? Any answers to these questions would be much appreciated.

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2021

(Perhaps one of our readers would compile a list of books and articles dealing with diseases in reptiles? We have a number of requests for sources of information on this topic. Editor)