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MADRAS SNAKE PARK TRUST

Quarterly Newsletter of the Madras Snake Park Trust

Cover

Indian Bullfrog (*Rana tigerina*) :
The largest of Indian frogs has an appetite that matches its size. Here one is seen swallowing a young rat snake (*Ptyas mucosus*) almost four times its own length.

Photo : Surya Narayana Rao Addoor.

Cobra

Volume 21 **July - September '95**

CONTENTS

1 **Editorial**

2 **Distribution of *Pythons molurus bivittatus* in India**
S. Bhupathy

6 **Notes on the Status of Monitor Lizards & Crocodiles in India : R. J. Ranjit Daniels**

12 **A Catalogue of Herpetological Specimens in The Madras Snake Park - Part III Snakes to Crocodiles : V. Kalaiarasan, R. Aengals & R. Rajarathinam**

16 **Hibernating Lizards : R. Mathew**

17 **A Preliminary Survey on the Trade of Common Indian Monitor : Brij Kishor Gupta**

20 **Random Harvest : B. Vijayaraghavan**

Cobra invites articles and short notes on reptiles and amphibians, their ecology, biology, natural history, conservation or other aspects. These may be of scientific or popular interest. Black and white photographs are also welcome.

Please send your contribution to the Editor, **Cobra**,
Madras Snake Park Trust, Raj Bhavan Post,
Madras - 600 022.

"A sparrow can be as interesting as a bird of paradise, the behaviour of a mouse as interesting as that of a tiger. Our planet is beautifully intricate, brimming over with enigmas to be solved and riddles to be unravelled."

Gerald Durrell.
(1925-1995)

Editorial

I once saw outside my house in Madras a painted frog (*Kaloula pulchra*) taking shelter within the canopy of a tall coconut tree. After a while, there was a *Ramanella variegata* that seemed to share the tree with the painted frog. On a later date I watched a common tree frog (*Polypedates maculatus*) crawling up the same tree. This coconut tree is a favourite haunt of the geckos *Hemidactylus frenatus* and *Hemidactylus leschenaulti*. Is this not a rich community of herps for a single coconut tree ? Let us save trees for the herps.

Editor

DISTRIBUTION OF *PYTHON MOLURUS BIVITTATUS* IN INDIA

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The Indian subcontinent has two species of python (*Family: Boidae*); *Python molurus* and *P.reticulatus*. The former species has wide distribution in India and elsewhere in Southeast Asia. *P. reticulatus* (Reticulated Python) is distributed in the Andaman and Nicobar islands, Northeast Indian states and Southeast Asia as well. Both species grow up to 6-8 meters in length. They mostly feed on warm-blooded animals such as birds and mammals.

Two subspecies of *Python molurus* have been described, namely Indian python *P.m molurus* and Burmese *P. m. bivittatus* (Smith 1943, Daniel 1983). These subspecies differ in the following features: in *P.m.molurus* 6th or 7th labial contacts the eye and lance- shaped mark on the top of the head fades anteriorly. In *P. m. bivittatus* the labials are separated from the eye by suboculars and lance - shaped mark on the head is well-pigmented throughout (Smith 1943, Daniel 1983).

Smith (1943) reported that *P. m. molurus* has wide distribution in peninsular India and from Sind in the Northwest to Bengal in the Northeast, whereas *P. m. bivittatus* occurs in Indo-Chinese subregion, south China, Hong Kong and Hainan. Precise information on the distribution of this sub species within India is not available (except for Indo-Chinese subregion: Northeast India ?; Smith 1943, Daniel 1983).

I have visited about 50 Indian wildlife sanctuaries and national parks between 1991 and 1994 when I was conducting a country-wide turtle survey. On encountering a python in the wild or a preserved specimen in the collection of a sanctuary or national park, I examined the snake for the above mentioned features especially labials, suboculars and lance - shaped mark on the head.

Thirtyfive pythons were examined in 12 localities: 25 individuals of *P.m.molurus* in six localities and ten *P.m.bivittatus* in the remaining areas (Fig.1). In all instances identification features described by Smith (1943) and Daniel (1983) were fitting well. The present observations on *P.m.bivittatus* in India indicate:

1. *P.m.bivittatus*, a Malayan faunal element, appears to have wide distribution in North, East and Northeast India. Also, it appears that this subspecies has distribution all along the Himalayan foot hills, terai and mangroves of east coast at least up to Bhitarkanika WLS (Mahanadi-Brahmani-Baitarani Delta) in India (Fig.1). All present observations outside Northeast India, namely Buxa Tiger Reserve (TR), Sunderban TR, Rajaji TR, Gorumara Wildlife Sanctuary (WLS) and Bhitarkanika WLS are additional locality records for this subspecies.

2. To date, in India, the known Northwestern and Southeasternmost distribution range of *P. m. bivittatus* are Rajaji TR, Uttar Pradesh and Bhitarkanika WLS, Orissa respectively (Fig.1).

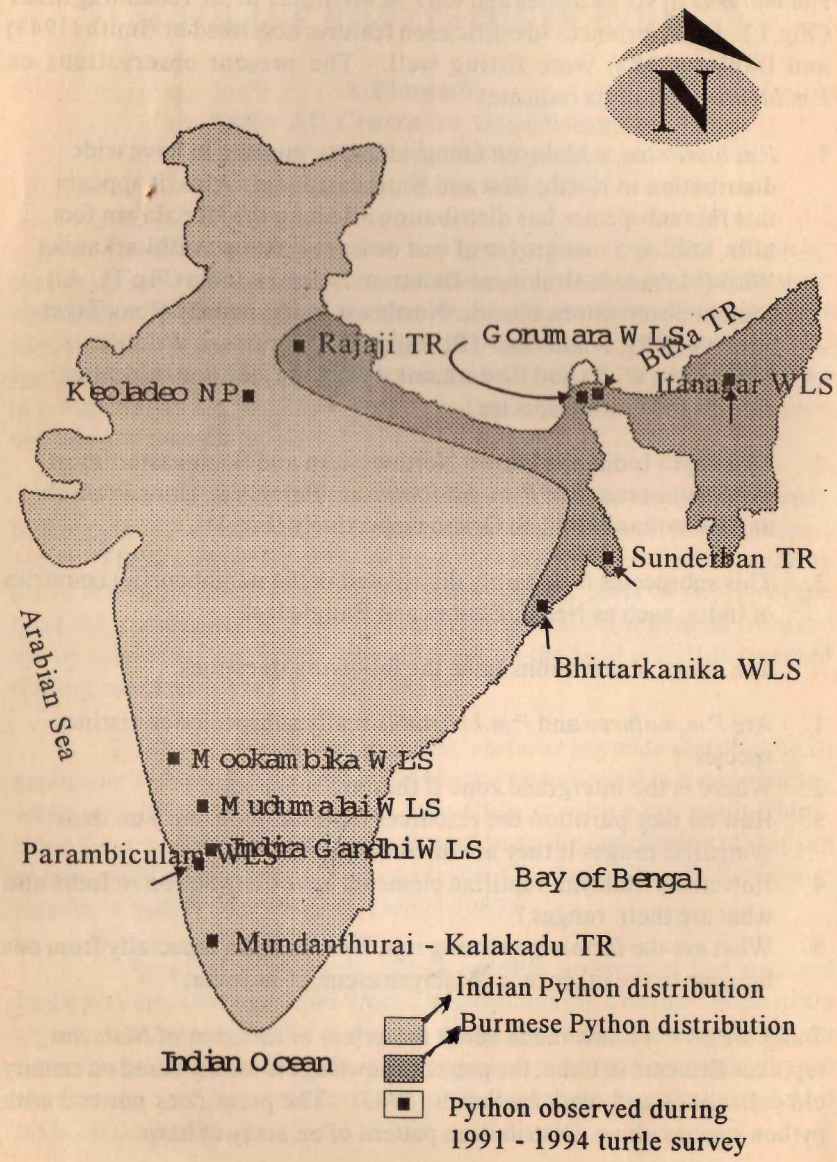
3. This subspecies is certainly distributed in the neighbouring countries of India, such as Nepal, Bhutan and Bangladesh.

The above observations raise the following questions:

1. Are *P.m.molurus* and *P.m.bivittatus* really subspecies or distinct species ?
2. Where is the intergrade zone if they are subspecies ?
3. How do they partition the resources (habitat, food, etc.) on their sympatric ranges if they are distinct species?
4. How many Malayan reptilian elements have distribution in India and what are their ranges ?
5. What are the factors governing reptilian invasion especially from one biozone to the other (e.g. Malayan element in India)?

Today we do not know much about the extent of invasion of Malayan reptilian elements in India; the present knowledge is mostly based on century old collections and work by Smith (1943). The point does not end with python species alone. Distribution pattern of an array of herp

Fig I : Python distribution in India



species should be examined. Recent records of species such as (1) tree frog *Rhacophorus taeniatus* ? (2) tricarinate hill turtle *Melanochelys tricarinata* and (3) Copper head *Elaphe radiata* near Dehra Dun are testimony for this. Serious co-ordinated field surveys and ecological studies on long-ignored herps are urgently needed.

Much of the present information was gathered when I was working with the WII-USFWS project, 'Conservation of the Freshwater Turtles and Land Tortoises of India'. I am grateful to various state Forest Department officials for permission to conduct the field studies and co-operation. Thanks are due to colleagues at Wildlife Institute of India, Dehra Dun especially Mr. B.C. Choudhury, Scientist SE for encouragement. Dr. P.A.Azeez, Principal Scientist, SACON had gone thorough an earlier draft of this paper and offered comments.

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NOTES ON THE STATUS OF MONITOR LIZARDS & CROCODILES IN INDIA.

R.J. Ranjit Daniels
M.S. Swaminathan Research Foundation.
Madras - 600 113

Monitor Lizards

Species: *Varanus flavescens*

(a) Common names: English: Yellow Monitor, Oval Grain (Trade)
Indian: Bengali - Sarna Godhika, Hindi - Gho

(b) Distribution: India: Haryana, Uttar Pradesh, West Bengal, Bihar, Orissa, Assam Meghalaya, Punjab (?), Rajasthan (?)
Extralimital : Bangladesh, Burma, Pakistan, Nepal

(c) Population : Captive : A few in zoos
Wild : Unknown. Uncommon in India.

(d) Trade: Capture Methods: Digging from holes, chasing with dogs, hand catching
Traders : Not well known.
Centres : Kanpur and Calcutta (possibly with other Lizards)
Trade : 1984-1985 - 372 skins exported.

(e) Legal status Indian Wildlife Act: Schedule I
CITES: Appendix I

Species: *Varanus bengalensis*

(a) Common names :
English :Common Monitor, Bengal Monitor, Agra Lizard (Trade)
Indian : Hindi - Gho,
Bengali - Krishna Godhika, Gho - sap,
Gujarati - Patla Gho,
Oriya - Godhi,
Marati - Ghorpad,

Tamil /Malayalam - Oodoombu,
Kannada - Ooda, Chaape,
Telugu - Ooder

(b) Distribution : India - Throughout India
Extralimital : Afghanistan, Pakistan, Iran Nepal, Bangladesh, Burma, Sri Lanka, Indonesia, Vietnam, Bhutan (?), Kampuchea (?)

(c) Population : Captive: A few in zoos.
Wild: Unknown. Common over much of its range.

(d) Trade : Capture
Methods : Trapping, Digging out burrows Chase and capture.
Traders : Medicine-men, Gypsies Village musicians for making drums
Centres : All urban and suburban parts of India (mainly Madras and Calcutta)
Trade : None reported since 1980.

e) Legal status Indian Wildlife Act: Schedule II
CITES: Appendix I

Species: *Varanus salvator*

(a) Common names: English: Water Monitor, Ring Lizard (Trade)
Indian: Bengali - Ram Godhika

(b) Distribution: India: Orissa, West Bengal, Andaman & Nicobars Meghalaya, Nagaland, Mizoram
Extralimital: Bangladesh, Bhutan, Burma, Sri Lanka, Brunei, S. China Hongkong, Indonesia, Kampuchea, Dem Lao PDR, Malaysia, Nepal Philippines, Singapore, Thailand & Vietnam

(c) Population : Captive: Less than 100 at Centre for Herpetology, Madras Crocodile Bank & Madras Snake Park.
Wild: Unknown. Localized in Bhitarkanika (Orissa) Sunderbans (West Bengal) and Andaman and Nicobars. Scarce elsewhere.

(d) Trade: Capture Methods: Trapping. Chasing with dogs
Traders: Skin trade not significant. Meat and fat.
Centres: Formerly Calcutta

(e) Legal status Indian Wildlife Act: Schedule II
CITES: Appendix II

Species : *Varanus griseus*

(a) Common names:
English: Desert Monitor, Baghdad Small Grain, Agra Lizard (Trade)
Indian: Hindi - Gho

(b) Distribution: India: Rajasthan, Delhi, Uttar Pradesh, Haryana, Madhya Pradesh
Extralimital: North Africa - Egypt, Sudan, Syria Arabia, Pakistan, Iran, Afghanistan, USSR

(c) Population: Captive: Probably none.
Wild: Unknown. Uncommon over most of its range in India.

(d) Trade : Capture Methods: Digging out, chasing with dogs.
Traders : Killed for skin, meat and fat.
Centres : Agra.
Trade : 1981-1365 skins exported.

(e) Legal status Indian Wildlife Act: Schedule II
CITES: Appendix I

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Crocodiles

Species: *Crocodylus porosus*

(a) Common names : English : Saltwater Crocodile
Indian : Oriya - Baula Khumbira

(b) Distribution :
India : Orissa, West Bengal, Andaman and Nicobars.
Extralimital : Bangladesh, Burma, SE China, PR Fiji, Hongkong, Indonesia, Kampuchea, Malaysia, Papua New Guinea, Philippines, Singapore, Sri Lanka, Thailand, Vietnam, N. Australia.

(c) Population: Captive : 2000 - 3000. Breeding at 9 centres in India.
Wild: Under 2000. Mostly released from captive breeding centres.

(d) Trade : Capture Methods: Similar to Marsh Crocodile.
Traders : Flesh and fat as food.
Centres : Same as Marsh Crocodile.
Trade : No recent records.

(e) Legal status Indian Wildlife Act: Schedule I
CITES: Appendix I

Species: *Crocodylus palustris*

(a) Common names :
English : Marsh Crocodile, Mugger, Indian Freshwater Crocodile
Indian : Hindi, Marathi, Gujarati - Mugger,
Oriya - Kuji Khumbiora, Bengali - Kuhmir,
Tamil - Mothalai, Kannada - Mosalay,
Telugu - Mosali, Malayalam - Cheenkanni

(b) Distribution :
India : Throughout India.
Extralimital : Baluchistan, Iran, Pakistan, Napal, Bhutan, Bangladesh, Burma, Sri Lanka

(c) Population :
Captive : 20,000 (10,000 in Madras Crocodile Bank).
Bred in 33 centres in India.
Wild : 3000-5000

(d) Trade : Capture Methods: Nets, Clubbing, Spearing, Fish hooks
Traders : Locally killed for food and fat. Eggs collected for food.
Centres : Formerly Madras, Mysore, Calcutta and Kanpur.
Trade : No recent trade.

(e) Legal status Indian Wildlife Act: Schedule I
CITES: Appendix I

Species : *Gavialis gangeticus*

(a) Common names :
English : Gavial, Gharial, Longsnouted Crocodile
Indian : Hindi - Gharial
Bengali - Mecho Kumhir
Oriya - Thantia Kumhira
Bihari - Nakar, Bahsoolia nakar

(b) Distribution : India : Indus, Ganges, Brahmaputra, Mahanadi
Extralimital : Irrawady - Arakan (Burma)
Bangladesh, Pakistan, South Nepal

(c) Population : Captive: Breeding at Madras Crocodile Bank, Kukrail & Nandan Kannan. 2000 released into the wild.
Wild : 1000.

(d) Trade : Capture methods: As in Marsh Crocodile.
Traders: As in Marsh Crocodile.
Centres: As in Marsh Crocodile

(e) Legal status Indian Wildlife Act: Schedule I
CITES: Appendix I

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A CATALOGUE OF HERPETOLOGICAL SPECIMENS IN THE MADRAS SNAKE PARK - PART III * - SNAKES, TO CROCODILES

V. Kalaiarasan, R. Aengals & R.Rajarathinam
Madras Snake Park Trust, Madras - 22.

Collection No.M S P T\ S	Family	Genus	Species	No. of examples
1	Typhlopidae	*Typhlina*	*bramina*	17
2		"	*acutus*	1
2A	Uropeltidae	*Platyplectrurus*	*madurensis*	1
3		*Uropeltis*	*liura*	1
4		"	*wood-masoni*	2
4A		"	*pulneyensis*	1
5		"	*sps.*	1
5A		"	*ellioti*	1
6		"	*articeps*	1
7		"	*nitidus*	1
7A		"	*petersi*	1
8		"	*ceylanicus*	4
9		*Melanophidium*	*punctatum*	1
10		*Teretrurus*	*sanguineus*	1
11		*Rhinophis*	*travancoricus*	1

*** Parts I & II appeared in Vol. 18 & 19**

12		*Uropeltis*	*rubromaculatus*	1
13		"	*phipsoni*	1
14		*Brachyophidium*	*rhodogaster*	13
15		*Plectrurus*	perroteti	31
16	Boidae	*Python*	*molurus*	9
17		"	*reticulatus*	3
18		*Eryx*	*conicus*	4
19		"	*johnii*	1
20		"	*sps.*	1
21	Natricidae	*Atretium*	*schistosum*	3
22		*Amphiesma*	*stolata*	20
23		*Xenochropis*	*piscator*	6
24		*Amphiesma*	*beddomei*	2
25		*Natrix*	*nicobarensis*	6
26		*Macropisthodon*	*plumbicolor*	5
27		*Amphiesma*	*monticola*	1
28	Dipsadidae	*Lycodon*	*aulicus*	6
29		"	*travancoricus*	1
30		"	*striatus*	12
31		*Oligodon*	*arnensis*	2
32		"	*taeniolatus*	17
33		"	*sps.*	1
34		"	*sps.*	1
35		*Dryocalamus*	*nympha*	1

36		*Sibnyophis*	*subpunctatus*	5
37		*Xylophis*	*perroteti*	1
38		*Xylophis*	*stenorhynchus*	3
39	Homalopsidae	*Boiga*	*ceylonensis*	1
39A		"	*trigonata*	5
40		"	*sps.*	1
41		*Cerberus*	*rhynchops*	43
42		*Enhydris*	*enhydris*	4
43	Colubridae	*Elaphe*	*helena*	4
44		*Ahaetulla*	*nasuta*	9
45	"	"	*pulverulentus*	2
46		*Ptyas*	*mucosus*	1
47		*Chrysopelea*	*ornata*	6
48		"	*paradisi*	1
49		*Dendrelaphis*	*tristis*	42
49A	Colubridae	*Spalerosophis*	*diadema*	
50		*Argyrogena*	*fasciolatus*	2
51		*Coluber*	*sps.*	3
52	Elaphidae	*Callophis*	*melanurus*	4
53		*Naja*	*naja naja*	22
54		*Bungarus*	*caeruleus*	11
55		"	*fasciatus*	12
56		*Ophiophagus*	*hannah*	21
57		*Naja*	*naja kaouthia*	3
58	Hydrophidae	*Hydrophis*	*spiralis*	9

59		*Hydrophis*	*cyanocinctus*	8
60		*Microcephalophis*	*gracilis*	10
61		*Enhydrina*	*schistosa*	3
62		*Lapemis*	*curtus*	5
63		*Pelamis*	*platurus*	2
64	Viperidae	*Vipera*	*russellii*	8
65		*Echis*	*carinatus*	40
66		*Agkistrodon*	*hypnale*	7
67		*Trimeresurus*	*strigatus*	1
68		"	*gramineus*	1
69		"	*macrolepis*	1
70		'	*purpureomaculatus* - *andersoni*	13
71		"	*sps.*	1
72		"	*sps.*	1
73		"	*sps.*	1
74		"	*sps.*	1
75	Acrochordidae	*Acrochordus*	*granulatus*	1
76		*Trimeresurus*	*malabaricus*	
MSPT/T		**Turtles, Tortoises & Crocodiles**		
1	Testudinidae	*Geochelone*	*elegans*	18
2	Emydidae	*Melanochelys*	*trijuga*	5
3	"	*Lepidochelys*	*olivacea*	27 (babies)
MSPT/C1	Crocodylidae	*Crocodylus*	*palustris*	1 ~~egg~~ Baby

HIBERNATING LIZARDS

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Hibernation is a state of greatly reduced metabolic activity and lowered body temperature adopted by certain animals and plants. Hibernation is well known in mammals, birds, reptiles, amphibians and fishes. Amongst the invertebrates, insects and some molluscs are known to hibernate.

Observations made on hibernating animals are not commonly reported. I had the opportunity to observe a pair of locally common agamids viz; *Ptyctolaemus gularis* Peters in a dormant state from the 27th of November, `94 at Shillong. The place they chose was a store room away from bright light but not far from human interference.

The first two days they were moving about finding a suitable place and finally they settled; one amongst the artificial flowers of a vase and the other on the side of a stocked away thermocol cover of a telivision set. Once thus settled, the only movements observed were the flickering of the eyes when the lights were switched on in the store room or when observed from a very close range. The female lizard on the flower vase was perched on the stalk of the flower in a slanting or ``falling off'' position. The male on the thermocol cover was straightly aligned. Photographs of the two hibernating lizards were taken on 17th March, `95. Subsequently the male lizard woke up and crawled away on the next day. The female lizard which had a better cover continued in the same place and woke up early on the 25th of March, `95 and ventured out on the next day. The pair now lives on the nearby hedge and adjacent vegetation . The maximum and minimum temperatures recorded during the period of observation were 26.2 °C and 3.2 °C. 18th March, `95 recorded a maximum temperature of 22.8 °C and 26th March, `95 recorded a maximum temperature of 26.2 °C

ACKNOWLEDGEMENT

The author is grateful to the Director, Zoological Survey of India, Calcutta and to the Officer-in-Charge, Eastern Regional Station, Zoological Survey of India, Shillong for permission and working facilities.

A PRELIMINARY SURVEY ON THE TRADE IN COMMON INDIAN MONITOR (*Varanus bengalensis*) IN UTTAR PRADESH

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The Common Indian Monitor (*Varanus bengalensis*) is widely distributed in India (Daniel, 1983). The species occurs from the evergreen biotopes to the borders of the deserts. The data on trade of *V. bengalensis* was collected in Uttar Pradesh during September 1992 to February 1993. The total of 180 hides were examined from local tribes and leather brokers (Table 1). Each skin was identified and the proportions of the *V. bengalensis* in the sample was 95 % (n = 171) & 5 % (n = 9) included *V. flavescens* and *V. griseus*. This study shows that *V. bengalensis* is a commonly available species compared to the other two species.

There was no direct evidence that *V. bengalensis* inhabiting survey areas have suffered decline in geographic range but there was anecdotal evidence from local tribes ``Kanjars'' that *V. bengalensis* is less common in most of the surveyed areas. Species like *V. flavescens* and *V. griseus* with confined geographic ranges and specialised habitat requirements will be the greatest cause for concern due to illegal hunting and urbanisation (Inskipp, 1984).

It was noticed that the skins of monitor lizards are particularly popular with leather brokers. In an interview with local tribes it was found that monitor hunt is mostly done by recognising their burrows and signs that suggest a monitor is at home. These signs include absence of spider webs across the passage, scratch marks, tail drags and foot prints at or near the burrow mouth and faeces.

In most of the places it was found that *V. bengalens*is is used as leather in making drums. An estimate shows that 15 - 20 % of local tribes eat the

flesh and use blood, often but not always, for medicinal purposes. In a study of Auffenberg (1989) in Pakistan on utilization of monitor lizards, he has reported that oil of these monitor lizards is illegally sold on street corners as an aphrodisiac/symbolic gesture of desired fertility, which is authenticated in some of the areas of this study. The small number of monitor lizards are still used by colleges and universities as display specimens and for scientific purposes despite its status of being Schedule II animal of the Indian Wildlife (Protection) Act 1972

I thank Mr. R.C. Bhadouria, Chief Wildlife Warden, Uttar Pradesh for permission, Dr. A.K. Sinha and Dr. Sant Prakash for the facilities and suggestions.

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TABLE 1. The figures listed represent the number of skins of *V. bengalensis* recorded in 1992-1993.

S.NO.	MONTH OF VISIT	PLACE OF HIDE EXAMINED	NO. OF HIDES
1.	November, 1992	Agra	37
2.	November, 1992	Sikandara	8
3.	December, 1992	Keetham	10
4.	September, 1992	Mathura	19
5.	December, 1992	Aligarh	12
6.	January, 1993	Meerut	18
7.	February, 1992	Pinahat	6
8.	September, 1992	Kanpur	9
9.	October, 1992	Lakhimpur Kheri	3
10.	January, 1993	Firozabad	2
11.	October, 1992	Hathras	23
12.	October, 1992	Etah	6
13.	January, 1993	Bah	12
14.	September, 1992	Jhansi	5
15.	January, 1993	Bazidpur	2
16.	January, 1993	Bulandshahar	8

RANDOM HARVEST

The Eternal Triangle

In Vol.18 of *Cobra,* an account was published of the curious behaviour of male rat snakes and kraits of getting entwined from head to tail. It was mentioned that though presumed to be a `combat dance' it's exact significance was not known and that this needed further study. In *Predators-Great Hunters of the Natural World* (1995), Malcolm Penny and Caroline Brett have this to say about the similar behaviour of the adder:

"The so-called'dance' is a wrestling match between two males to find out which of them is the stronger, and thus the dominant animal, with the right to mate with a nearby female who takes no part in the contest. The two males rear up and twine the upper parts of their bodies round each other, often springing apart with a violent jerk as they momentarily lose their grip. The snakes thrash and tangle in the grass until eventually one of them gives in to the superior strength of the other and leaves him with the female."

In the reports published so far from India, there is no mention of a female noticed in the vicinity. Those who are fortunate to come across two snakes in a clinch will do well to closely look around for a third snake.

The Compleat Angler

The alligator snapper, *Macroclemis temmincki,* is one of the largest fresh water turtles in the world and the largest in North America. (Carapace length: two feet; another foot each for the head and the tail). Sometimes, the alligator snapper, instead of foraging for its food, waits in ambush. The snapper lies motionless on the bottom with only it's mouth open, it's brownish, algae-covered shell providing the perfect camouflage. On the floor of it's mouth is a double-ended moveable section of it's tongue that looks like a wriggling red worm. Fish are frequently attracted to the 'bait' and are snapped up.

(Source: *Voice of the Turtle* - The newsletter of the San-Diego Turtle and Tortoise Society. Aug., 1995)

The Terrible Recluse

The Inland taipan (not the same as the taipan) of Australia, also known as the fierce snake, is believed to be the most venomous land snake in the world, a single bite of which delivers enough venom to kill a quarter of a million mice. Once thought to be extinct, it was rediscovered in 1967 and promptly bit the naturalist who rediscovered it. But the naturalist was made of sterner stuff. Though he became critically ill and his heart stopped twice, he survived to tell the tale. Fortunately, the fierce snake is not much of a threat. It is a shy and retiring reptile and it has retreated inland away from the spread of agriculture and can rarely be seen today.

(Source: *Nightmares of Nature* (1995) by Richard Mathews)

Snakes in Australia

The majority of the 130 Australian terrestrial snake species are venomous members of the Elapidae family. However, of these, the bites of most are no more severe than wasp stings, and only about twenty species are thought to be capable of killing humans. There are only about six dangerous species (or groups of species) that are commonly encountered.

Despite the prevalence of highly venomous snakes (resulting in the use of antivenom in atleast 300 bite victims per year), only about one or two human deaths per annum occur in a population of 16 million people in Australia.

(Source: *The Australian Reptile Park Story* (1990) published by the Australian Reptile Park, Gosford, New South Wales, Australia.)

The Croc's Secret

"British and Japanese scientists have reported that they have found the quirk of nature that lets crocodiles lurk underwater for hours. Some crocodilians (possible all) have a unique hemoglobin, the molecule in red blood cells that carries oxygen, which lets them stay underwater without breathing for long periods of time. The mechanism is different from that of marine mammals."

(Source: Barry Ransom in *The Monitor*, the newsletter of the Hoosier Herpetological Society, July, 1995.)

The Night of the Crocodile

Of the 22 species of crocodiles, only two, the Nile crocodile (*Crocodylus niloticus*) and the Indo-Pacific or saltwater or estuarine crocodile (*C. porosus*) have a proven record of being man-eaters. The most gruesome of such incidents ever recorded occurred near the island of Ramree, off the coast of Burma, on the night of 19th February 1945 when Japanese troops were trying to escape from the island through a mangrove swamp infested with this crocodile species. An eyewitness to the macabre scene was Bruce Wright, a member of the British forces who had trapped the Japanese on the island and himself a naturalist. He wrote:

"The scattered rifle shots in the pitchblack swamp punctuated by the screams of wounded men crushed in the jaws of huge reptiles and the blurred worrying sound of the spinning crocodiles made a cacophony of hell that has rarely been duplicated on earth. At dawn, the vultures arrived to clean up what the crocodiles had left.... Of about one thousand Japanese soldiers that entered the swamps of Ramree, only about twenty were found alive."

(Source: *Nightmares of Nature* (1995) by Richard Matthews)

His Last Wish

The taipan of Australia has the reputation of being the most dangerous snake in the world.

"The taipan was so lethal for so long because there was no known antivenin. The story of it's development is one of human heroism. In 1950 a young Sydney snake collector, Kevin Budden, found a taipan in a rubbish tip. He seized the 1.9 meter (6.2 ft.) snake and took it to his car. As he was stuffing it into a sack, it gave him multiple bites on his thumb. Witnesses tried to kill the taipan but Budden stopped them and, before he became paralysed and lost the power of speech, stressed that it must be kept alive and sent to the Commonwealth Serum Laboratories in Melbourne. Kevin died a few hours later, but his instructions were carried out, and the taipan was milked yielding venom from which two years later, the first taipan antivenin was produced."

(Source : *Ibid)*

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AIMS AND OBJECTIVES OF

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i) To maintain and display a captive collection of snakes and other reptiles as a means of education of the public.

ii) To promote knowledge on snakes and other reptiles and dispel the erroneous beliefs about them.

iii) To undertake captive breeding of vulnerable species of snakes and other reptiles.

iv) To aid and assist research in herpetology.

v) To provide facilities for the identification and classification of snakes and other reptiles and, for this purpose, maintain a museum of study collections.

vi) To maintain a library of books and other literature on herpetology.

vii) To publish scientific and semi- scientific literature on snakes and other reptiles.

viii) To undertake survey on the distribution and status of snakes and other reptiles.

ix) To provide consultancy services on snakes and other reptiles.

x) To provide a common forum for amateur herpetologists to interact.