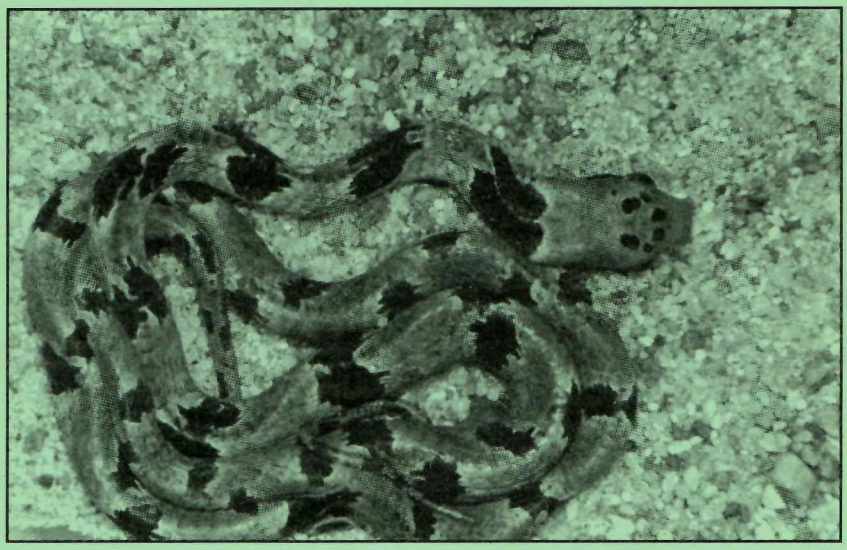
# Cobra

Volume - 48 April - June 2002



CHENNAI SNAKE PARK TRUST

*Quarterly Newsletter of the Chennai Snake Park Trust*

Price Rs: 10-00

## Cover

An unidentified species of snake in Chennai (for details see page 1)

Photo : **R.J. Ranjit Daniels.**

*Put forth to watch, unschooled, alone,*
*'Twixt hostile earth and sky –*
*The mottled lizard 'neath the stone*
*Is wiser here than I.*

*What stir across the haze of heat?*
*What omen down the wind?*
*The buck that break before my feet –*
*They know, but I am blind!*

– Rudyard Kipling.

# Cobra

**Volume - 48** **April - June 2002**

## CONTENTS

# AN UNIDENTIFIED SPECIES OF SNAKE IN CHENNAI

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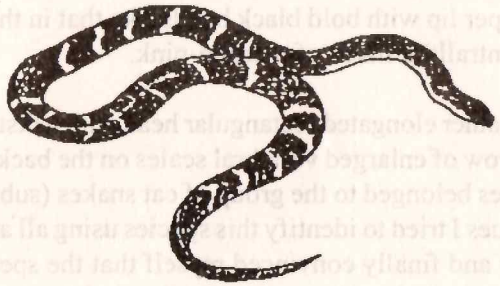
Around the 20th of January, 2002, a rather brightly colored slender snake was brought to me for identification by my colleagues at the Chennai Snake Park. This snake had been captured by the staff of the Tamilnadu Forest Department from one of their timber depots a couple of days earlier. Since the timber at the depot was of foreign origin, it was believed that the snake was an exotic species. And from its rather aggressive behavior, it was considered to be venomous!

This snake was around 50cm in total length. Its color may be described as follows: body pink-brown with bold black markings throughout the dorsal side; black markings irregular in size and shape and bordered with white; head a delicate translucent orange with a bold black stripe behind dark eyes; a set of black spots on head arranged somewhat like a pug mark; upper lip with bold black bands like that in the rat snake (*Ptyas mucosus*); ventrally a shade of maroon-pink.

The rather elongated rectangular head with a distinct neck, bulging eyes and the row of enlarged vertebral scales on the back made me suspect that the species belonged to the group of cat snakes (subfamily Boiginae). With these clues I tried to identify this species using all available literature on cat snakes and finally convinced myself that the species could be one from Madagascar or the adjacent Indian Ocean Islands. Cat snakes in the genus *Stenophis* known from Madagascar seemed the closest in overall color and shape to the snake that was in hand.

The snake lived for two months. It was certainly a nocturnal species and arboreal in habits. It started to eat 2-3 days after it was brought to me and fed on small lizards. Although the snake once took a baby *Calotes versicolor* and a young *Hemidactylus brooki,* it showed a strong preference for *Sitana ponticeriana*. It fed weekly on two lizards at a time. After each meal the snake just coiled under a small plant and remained inactive till it was hungry again. When hungry, it climbed up the small plant and stayed alert. When disturbed this snake would coil back and open its mouth widely (much as an angered vine snake *Ahaetulla nasutus*) and show off the bright color between the scales of the neck.

That this species could be one of the Madagascar cat snakes is just a guess. The photograph of this species is being published on the cover of this issue of Cobra only with the hope that someone might give us a better clue to its identity.







# HERPETOFAUNA OF MADAYIPARA HILL, KANNUR DISTRICT, KERALA

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Western Ghats Field Research Station
Zoological Survey of India
Calicut – 673 002

The Madayipara is a flat topped hillock overlooking Payangadi town on the northern bank of Kuppam river and located at lat.12° 02′ N and long. 75° 16′E, about 21 km north of Kannur town in Kerala. The top of this hillock at an elevation of about 40m ASL is a lateritic plain of about 365ha in area. The herpetofauna listed here are based on field observations made at Madayipara during our numerous study visits to the lateritic hills of Kerala since 1983.

The lateritic hillock along with its characteristic vegetation, temporary pools and a number of perennial ponds provide ample refuge for many species of animals including birds. Thirteen species of amphibians inhabit Madayipara (Table-1). Besides, *Tomopterna rufescens* has been observed to breed in the temporary pools on the hillock during monsoon months.

The reptilian fauna of Madayipara comprises of 2 species of Testudines, 18 species of snakes and 5 species of lizards (Table-II). Of these, the southern flapshell turtle, *Lissemys punctata* and the monitor lizard, *Varanus bengalensis* are species protected under Schedule II of the Indian Wildlife (Protection) Act, 1972. Once in June 1995, we observed a monitor lizard with 4 eggs within a rocky crevice. Venomous snakes represented in the area, and occasionally seen, are the Indian cobra, *Naja naja,* Russell's viper, *Vipera russellii* and krait, *Bungarus caeruleus.* Even though hump-nosed pit viper (*Hypnale hypnale*) is reported from other lateritic hills adjacent to Madayipara, it is scarce in this locality. The Indian rock python, *Python molurus* was once observed in the foothills of Madayipara during a rainy season, probably brought to the area by the storm waters of the Kuppam river. It is interesting to mention here that

including the recently described Whitaker's sand boa, *Eryx whitakeri* (Indraniel Das, 1991), all the three species of sand boas known from India are found in Madayipara.

**Acknowledgement**

We are grateful to the Director, Zoological Survey of India, Calcutta for facilities and encouragement.

**Reference**

**Das, I. 1991.** A new species of *Eryx* (Boidae: Serpentes: Squamata) from southwestern India. *J.Bombay nat Hist. Soc.* 88(1): 92-97.

**Table.I: Systematic list of Amphibians of Madayipara hill, Kerala.**

| Sl. No. | Scientific Name | Common Name |
|---|---|---|
| | **Class: Amphibia** | |
| | **Order: Anura** | |
| | **Family: Microhylidae** | |
| 1 | *Microhyla rubra* (Jerdon) | Red Narrow-mouthed Frog |
| | **Family: Ranidae** | |
| 2 | *Rana malabarica* Tschudi | Fungoid Frog |
| 3 | *Hoplobatrachus tigerinus* Daudin | Indian Bull Frog |
| 4 | *Limnonectes limnocharis* Gavenhorst | Indian Cricket Frog |
| 5 | *Euphlyctis cyanophlyctis* Schneider | Skipper Frog |
| 6 | *Euphlyctis hexadactylus* Lesson | Indian Pond Frog |
| 7 | *Limnonectes brevipalmata* Peters | Short-webbed Frog |
| 8 | *Tomopterna rufescens* (Jerdon) | Rufescent Frog |
| 9 | *Tomopterna breviceps* Schneider | Indian Burrowing Frog |
| | **Family: Rhacophoridae** | |
| 10 | *Polypedates maculatus* (Gray) | Common Tree Frog |
| 11 | *Rhacophorus malabaricus* Jerdon | Malabar Gliding Frog |
| 12 | *Philautus leucorhinus* (Lichtenstein & Martens) | White-nosed Bush Frog |
| | **Family: Bufonidae** | |
| 13 | *Bufo melanosticus* Schneider | Common Indian Toad |





**Table.II: Systematic list of Reptiles of Madayipara hill, Kerala.**

| Sl.No. | Scientific Name | Common Name |
|---|---|---|
| | **Class : Reptilia** | |
| | **Order: Testudines** | |
| | **Family: Emydidae** | |
| 1 | *Melanochelys trijuga* (Schweigger) | Indian Snail-eating Terrapin |
| | **Family: Testudinidae** | |
| 2 | *Lissemys punctata* (Lacepede) | Indian Flap-shelled Turtle |
| | **Order: Squamata** | |
| | **Suborder: Sauria** | |
| | **Family: Gekkonidae** | |
| 3 | *Hemidactylus brooki* Gray | Spotted House Gecko |
| 4 | *Hemidactylus frenatus* Schlegal | Tic-ticky House Gecko |
| | **Family: Agamidae** | |
| 5 | *Calotes versicolor* (Daudin) | Indian Garden Lizard |
| | **Family: Scincidae** | |
| 6 | *Mabuya carinata* (Schneider) | Common Indian Skink |
| | **Family: Varanidae** | |
| 7 | *Varanus bengalensis* (Daudin) | Indian Monitor Lizard |
| | **Suborder: Serpentes** | |
| | **Family: Typhlopidae** | |
| 8 | *Ramphotyphlops braminus* (Daudin) | Common Blind Snake |
| 9 | *Typhlops acutus* (Dumeril & Bibron) | Beaked Blind Snake |
| | **Family: Boidae** | |
| 10 | *Python molurus* (Linnaeus) | Indian Rock Python |
| 11 | *Eryx conicus* (Schneider) | Common Sand Boa |
| 12 | *Eryx johni* (Russel) | Red Sand Boa |

| Sl.No. | Scientific Name | Common Name |
|---|---|---|
| 13 | *Eryx whitakeri* Indraneil Das | Whitaker's Sand Boa |
| | **Family: Colubridae** | |
| 14 | *Coluber mucosus* (Linnaeus) | Rat Snake |
| 15 | *Oligodon arnensis* (Shaw) | Common Kukri Snake |
| 16 | *Dendrelaphis tristis* (Daudin) | Common Indian Bronze-back |
| 17 | *Lycodon aulicus* (Linnaeus) | Common Wolf Snake |
| 18 | *Xenochrophis piscator* (Schneider) | Checkered Keelback |
| 19 | *Amphiesma stolata* (Linnaeus) | Striped Keelback |
| 20 | *Boiga trigonata* (Schneider) | Common Cat Snake |
| 21 | *Ahaetulla nasuta* (Lacepede) | Common Green Vine Snake |
| | **Family:** Elapidae | |
| 22 | *Bungarus caeruleus* (Schneider) | Common Krait |
| 23 | *Naja naja* (Linnaeus) | Indian Cobra |
| | **Family:** Viperidae | |
| 24 | *Vipera russellii* (Shaw) | Russell's Viper |
| 25 | *Hypnale hypnale* (Merrem) | Hump-nosed Pit Viper |





# SIGHTING OF FORSTEN'S CAT SNAKE *(BOIGA FORSTENI)* AT MOUNT ABU WILDLIFE SANCTUARY, SIROHI DISTRICT, RAJASTHAN

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and

**Shailesh Patel**
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The Mount Abu Sanctuary is situated in southern Aravallis of Rajasthan State. Semi-evergreen forest is confined to the upper reaches of hills in this sanctuary. Mt. Abu Town, the only hill station in Rajasthan, is present amidst of this sanctuary, about 1219m ASL. The town is located on an irregular plateau, surrounded by several projecting peaks and elevated ridges. Guru Shikhar (The Hermit's Pinnacle) is the highest point of Abu hills, towering 1722m ASL.

Mt. Abu is rich in ophidio-fauna. McCann (1946) listed 11 species of snakes from Abu hills. Sharma (2000) and Sharma *et al* (2001) listed as many as 22 species of snakes from Mt. Abu Wildlife Sanctuary. The Forsten's cat snake (*Boiga forsteni*) and Brown whip snake (*Ahaetulla pulverulenta*) are two species, so far only reported from Abu hills in the state of Rajasthan.

Forsten's cat snake was probably first seen in Rajasthan at Abu hills by McCann (1946). It is an uncommon species here, probably confined to the upper reaches only. So far none has seen this species at Abu foothills and other parts of Rajasthan.

On June 17, 2001 at about 10.15 hrs we observed a Forsten's cat snake near a house on *Go-mukh* road. The surroundings of the house were well clad with vegetation.

The snake was captured and its length was measured. It was about 1470 mm long. The head was very distinct, brownish in color, having a prominent black stripe, starting between the eyes, extending towards neck and joining a black stripe across the base of the head. A black horizontal stripe was present behind of each eye. At day time, its eyes were dirty brownish in color. Tip of the tongue was black. Its belly was white with blackish spots along the edges. When seen from a distance, the black and whitish bars gave the appearance of 'zebra' stripes.

It is a good climber and even tries to climb vertical walls. When released inside a house, it took support of a wooden frame on the wall, climbed on the vertical wall and placed itself around a holder of an electric bulb and remained there for half an hour. No movement of the tongue was noticed as long as it remained there. When left on the floor, it raised its upper half nearly 70cm off the ground. This species coils firmly around any object making ithard to dislodge. It looks heavier and more massive than the Indian gamma (*Boiga trigonata*).

In captivity, it devoured *Bufo melanostictus*. When water was provided in pot, it readily took water. After these observations, it was released in Mt. Abu sanctuary away from the township.

A Forsten's cat snake was once again captured inside the town by KC and SP on May 26, 2002. These observations confirm that the Forsten's cat snake is still present in the upper reaches of Abu hills.





**Acknowledgements**

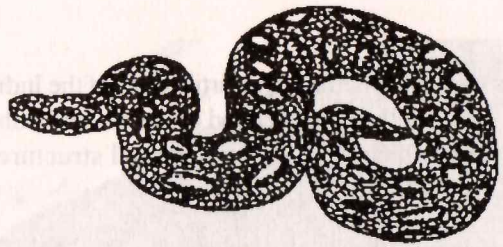
We thank Mr. R.G. Soni (PCCF), Mr. Arun Sen (CCF-WL), Mr.Virendra Singh (CF-WL), Mr. T.C. Verma (Deputy CWCW) and Mr. Karan Singh (RFO) for the facilities provided.

**References**

**McCann (1946)** The rains come to the Abu Hills. *J Bombay nat. Hist. Soc.*43:641-647.

**Sharma, S.K (2000)** Occurrence of Brown Whip snake *Ahaetulla pulverulenta,* family Colubridae in Mt. Abu Wildlife Sanctuary, Rajasthan. *Cobra* 39:21-22.

**Sharma, S.K. (2001)** Preliminary survey of the reptilian fauna of Mount Abu Wildlife Sanctuary and snake conservation efforts in Mt. Abu Town. *Cobra* 44:5-10.



# A NOTE ON THE STRUCTURE OF SNAKE EGGSHELL

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While there are many reports on the avian eggshell structure, there is very little information on snake eggshells. Avian eggs are brittle but snake and some lizard eggs, described as 'leathery', are remarkable in that they merely yield when dropped, without breaking. We decided to investigate the structure of the snake eggshell in order to find out the structure and composition apart from knowing how they have this distinct unbreakable property.

Eggshells were obtained from infertile eggs of the Indian rock python *Python molurus*. The shells were cleaned of debris and adhering fat. The features studied were ash content, cross-sectional structure and nature of collagen protein.

The ash content of the shell was very low, less than 1%. This indicates that there is little inorganic calcium present. For the avian eggshell, the calcification is very extensive and this acts as a source of calcium for the growing embryo. Turtle shells also have been reported to have calcium. In the case of the snake egg, the calcium for the growing embryo, must be available from the other components inside the shell.





The structure of the shell showed two distinct layers that stained differently with toluidine blue. The outer layer had pores while the inner layer had a uniform fibrous network. This is somewhat similar to skin and the description of snake eggs as 'leathery' seems appropriate. The inner layer also exhibited the property of birefringence when viewed in polarised light indicating the presence of oriented fibres possibly collagen, which is known to be birefringent. The red staining of this layer also shows that the material is highly anionic.

The estimation of collagen was done by determining the hydroxyproline content, the characteristic amino acid present in collagen. The estimation, using appropriate conversion factor, gave the collagen content as 90%. Together with the anionic nature exhibited, it seems that the fibrous layer has highly sulphated glycosaminoglycans bound covalently to the fibres. Scanning electron microscopy also showed two distinct regions for the egg shell with the fibrous layer distinctly indicating presence of sulphur when characteristic x-ray microscopy for the element was done.

We may conclude that the python eggshell consists of a porous collagenous bilayer with the inner one being uniformly fibrous and highly sulphated as well.

Cross section of the egg shell stained with Toluidine blue. Two distinct layers are seen. The upper layer is also birefringent when viewed in polarized light.

# GREY MUSK SHREW (*SUNCUS MURINUS*) ATTACKING AN INDIAN BULL FROG (*HOPLOBATRACHUS TIGERINUS*) AT AKYAWAD FOREST NURSERY, RAJASTHAN

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Range Forest Officer
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Kotra – 307025, District – Udaipur (Rajasthan)

On January 4, 2002, I was collecting some material from Akyawad Forest Nursery of Deola Range of Udaipur (Central) Forest Division to display an exhibition in a birding fair. At about 2000 hrs, I heared a loud cry of a Bull Frog (*Hoplobatrachus tigerinus*) which is generally produced by the frog when some snake like *Xenochrophis piscator* attacks it. At first instance, I thought it could be the attack of some water snake on a Bull Frog. But next moment I thought that both *X. piscator* and *H. tigerinus* being poikilothermic animals should be in hibernation. Hence to verify the source and cause of cry, I searched out the spot with a torch light. It was a pucca cemented nursery bed in which a full grown Bull Frog was present amidst polybags and was being attacked by a grey musk shrew *Suncus murinus*. Many fresh wounds were present on the left shoulder of the frog which were bleeding. Probably the frog was hibernating or taking temporary shelter in the space among polybags but was unfortunately noticed by the shrew. Though the shrew is an insectivorous animal it can kill frogs and other animals too to feed upon (Sharma 1991, 1995 a & b).

During winter insects keep under cover to protect themselves from the severe cold, hence availability of insects become scarece. Perhaps to overcome the scarcity of insect food, the shrew thrives on unusual food items like frogs, if available.





**Acknowledgements**

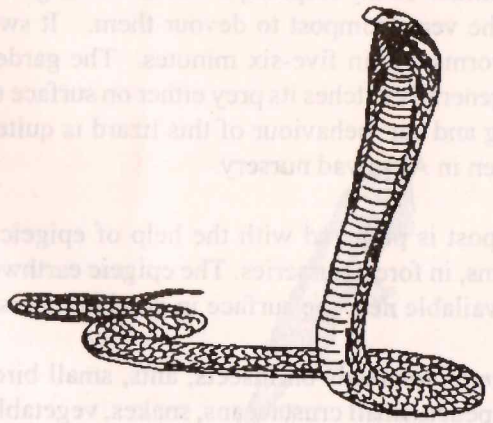
I thank Dr.N.C.Jain, Dy.CF, Mr.Chhaju Ram Sharma, Forester and Mr. Dal chand Gurjar, Forest Guard for providing facilities.

**References**

**Sharma, S.K. (1991)** Frog-eating habit of Grey Musk Shrew *Suncus murinus*. *J. Bombay nat. Hist. Soc.* 88 (1) : 109.

**Sharma, S.K. (1995a)** Further notes on frog-eating habit of Grey Musk Shrew *Suncus murinus*. *J. Bombay nat. Hist. Soc.* 92 (2) : 251.

**Sharma, S.K. (1995b)** Instance of a Grey Musk Shrew *Suncus murinus*. attacking a Fat-tailed Gecko (*Eublepharis macularius*) *J. Bombay nat. Hist. Soc.* 29(3): 411.



# INDIAN GARDEN LIZARD *CALOTES VERSICOLOR* (DAUDIN 1802) FEEDING ON EARTHWORMS AT AKYAWAD FOREST NURSERY, UDAIPUR DISTRICT, RAJASTHAN

**Satish Kumar Sharma**
Range Forest Officer
Phulwari Wildlife Sanctuary
Kotra – 307025, District – Udaipur (Rajasthan)

On June 21, 2002, whle visiting Akyawad Forest Nursery, I observed an Indian Garden Lizard *Calotes versicolor* digging something in a heap of vermicompost which was placed in a small hut having thatched roof. To observe the activities of the lizard, I maintained sufficient distance not to disturb the animal. To my surprise, it was unearthing the earthworms from the heap of the vermicompost to devour them. It swallowed two small sized earthworms within five-six minutes. The garden lizard is a surface eater, that generally catches its prey either on surface of tree trunks or on ground. 'Dig and eat' behaviour of this lizard is quite strange and opportunistic as seen in Akyawad nursery.

Vermicompost is prepared with the help of epigeic, i.e. surface dwelling earthworms, in forest nurseries. The epigeic earthworms are fast breeders and are available near the surface in good numbers.

*Calotes versicolor* feeds on insects, ants, small birds, nestlings, frogs, spiders centipedes, small crustaceans, snakes, vegetable matter, etc. (Daniel 1983, Smith 1935, Tikader & Sharma 1992, Sharma 1998, 1999). Earthworms can also be added to this menu.





**Acknowledgements**

The author is very grateful to Sh. Chhaju Ram Sharma, Forester and Sh. Dal chand Gurjar, Forest Guard for facilities.

**References**

**Daniel, J.C. (1983)** *The Book of Indian Reptiles*. BNHS, Mumbai.

**Sharma, S.K. (1998)** A Garden Lizard (*Calotes versicolor*) feeding on a dry mango (*Mangifera indica*) leaf. *Cobra* (34) : 21-22.

**Sharma, S.K. (1999)** *Calotes versicolor* feeding on *Lycodon aulicus, J.Bombay nat. Hist. Soc.* 96 (1) : 146-147.

**Smith, M.A. (1935)** *The Fauna of Birtish India*. Taylor and Francis, Red Lion court, Fleet Street, London.

**Tikader, B.K. & R.C.Sharma (1992)** *Handbook of Indian Lizards*. ZSI, Calcutta.

## RANDOM HARVEST

### The Clash of the Titans

Some 110 million years ago, there lived in the region of the present Niger, W.Africa, a giant crocodile, 40 feet long, weighing about ten tons, now named *Sarcosuchus imperator* (meaning 'flesh crocodile'). Its skull was six feet in length, studded with more than 100 teeth. Dinosaur hunters led by Paul C. Sereno of the University of Chicago have uncovered fossilised remains of the giant croc and, for the first time, assembled them into a replica of the reptile. The region of the present Niger was, in pre-historic times, a verdant river valley alive with dinosaurs. It is surmised that the giant croc could have easily pulled down a good-sized dinosaur. A report on the discovery of the skull was published recently by the journal *Science* on its website.

(Source: *The Monitor*, Newsletter of the Hoosier Herptological Society Nov./Dec. 2001)

(For a detailed account, see also *nationalgeographic.com* the website of the National Geographic)

### Lungpower

It is known that the snake, even though it does not have external and middle ears, can 'hear' sounds by picking up with the lower jaw the vibrations on the ground and, perhaps, even sound waves in the air in the low-frequency range of 0.1 to 0.7 KHZ . The vibrations are transmitted to the cochlea through the quadrate bone which connects the lower jaw to the top of the skull. But the frog which can hear sounds almost in the same manner as other animals also seems to have, in addition, a faculty similar to that of the snake. Based on a report in *Science & Children,* an item in the *Hindu* of July 31, 2002 has this to say:-





"Certain species of salamanders and lizards can actually hear through their lungs, according to a new study at the Ohio State University. The research extends previous studies showing that some types of earless frogs and toads use their lungs to pick up sound vibrations. The results of the current study suggest that lung-based hearing may exist in land-based animals. This primitive system of hearing may have been the auditory system for the first animals that lived on land, say researchers. And it appears that it may still be important for some species today, particularly ones that lack middle ears. They examined certain species of salamanders and lizards. Although salmanders lack middle and external ears, both groups of animals have inner ears that can process sound. The study showed that sound causes the animal's chest to vibrate, and the vibrations are carried by air from the lungs to the animal's inner ear to be processed as sound".

### Raucous harmony

Ludwig Koch, at the age of eight, made the world's first record of bird song. That was in the year 1889. In 1948, the BBC took over his vast collection of records which included the first known recordings of the songs of many very rare birds. It is said that an "audience of millions" used to turn to the radio when a Koch programme was on the air. Extensive work has been done since then in recording bird songs. In the U.S. and elsewhere, recordings of calls of native birds are freely available on tape and C.D.Rom. In India itself, during the last few years, similar work on bird calls has been done by P.S.Siva Prasad, Coimbatore, Br. Navarro, B. Bertram and E.Bharucha of the Bombay Natural History Society and Mukesh Bhatt of the Nature club, Surat.

However, recordings of frogcalls are hard to come by. The call of the frog also could be music to the ears even though no Keats ever addressed an ode to a frog. That apart, frogcalls are an aid to identification in the wild, especially when sight is denied.

A report in the *New Indian Express* of June 23, 2002 says that a new CD containing calls of 16 amphibian species, native to the woods and streams of New Jersey, US, has become extremely popular and has triggered widespread interest in the study of frogs. "Excited little crowds have started leapfrogging their way into bookshops to buy copies of a zoological work named *Fieldguide to Amphibians and Reptiles of New Jersey*." The CD on frogcalls is accompanied by an 89-page guide written by David M.Golden and Vicki Schwartz which details the habitat and breeding and conservation status of numerous species of frogs, toads and reptiles, with 72 distribution maps and 100 colour photographs.

When can we expect similar contributions from 'frogwatchers' in India?

**– B. Vijayaraghavan.**

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AIMS AND OBJECTIVES OF

# CHENNAI SNAKE PARK TRUST

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

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

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

iv) To aid and assist research on reptiles and amphibians.

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

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

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

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

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

x) To provide a common forum for interaction among amateur scientists and friends of reptiles and amphibians.