

WILD MAMMALS OF FOREST COLLEGE AND RESEARCH INSTITUTE CAMPUS, METTUPALAYAM

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The 200 hectare campus of Forest College and Research Institute is situated at 11.19 N and 76.56 E within the Odanthurai reserve forest. This is a combination of scrub thorny jungle and dry deciduous forest located at 300m (MSL) with the annual rainfall averaging 720 mm. The Odanthurai reserve forest is bisected by the Mettupalayam - Kotagiri road bordering the western boundary of the campus. The dominant flora include trees like *Acacia nilotica*, *A. leucophloea*, *Albizia lebbekii*, *Cassia* spp., *Bauhinia racemosa*, *Gyrocarpus americana*, *Eucalyptus tereticornis*, *Hardwickia binata*, *Santalum album*, *Azadirachta indica*, *Zizyphus* spp. and others with undergrowths and grassy patches. The avifauna of this area were surveyed and documented recently (Thirumurthi and Balaji, 1997). In the present study the wild mammals associated with this forest surveyed during the years 1994-96 are listed with remarks on whether these are resident or periodical visitors.

The wildlife surveys were conducted in crisscross walks between 0600-0730 hours and between 1800 and 1900 hours at week ends for three years. Pugmarks of the carnivora were also studied during wet weather periods between October - December in 1994 and 1995. The field characters sighted were compared with the descriptions by Prater (1971). A total of 29 mammalian species were found to be associated with this forest as indicated in the following list.

Wild mammals at Forest College and Research Institute Campus Mettupalayam.

1. Bonnet macaque (*Macaca radiata*): These common monkeys occasionally stray into this area from Kallar from west or from south eastern slopes of Nilgiris. They stay here for a while and return to their natural habitats.

2. Common langur (*Presbytis entellus*): The grey langurs visit the dry deciduous forests around the campus very rarely from Kallar valley through western corridor. They never stay here.

3. Leopard (*Panthera pardus*): At least two adult leopards inhabit the scrub jungle in the environs. Pugmarks and pellets could be observed around here regularly. However, no killing of herbivores like chital or sambar by these cats has been reported so far.

4. Jungle cat (*Felis chaus*): Solitary individuals of this longlegged and short tailed cat occasionally roam in the periphery of the forests bordering the villages located on the south eastern side. They are purely nocturnal.

5. Indian palm civet (*Paradoxurus hermaphroditus*): They are the smallest members of the civet family. These partially arboreal animals are crepuscular and inhabit the forest area adjoining the villages where coconut is grown. The palm civets raid coconut trees in night.

6. Jackal (*Canis aureus*): Individuals rarely stray into this area.

7. Indian fox (*Vulpes bengalensis*): These animals inhabit the forested areas adjoining the villages on the southern side. They are known to prey upon chicken and rodents.

8. Common mongoose (*Herpestes edwardsi*): Individuals of this yellowish grey mongoose live here. They prey upon rodents and birds.

9. Chital (*Axis axis*): The spotted deer is the commonest animal living here. They can be seen in groups of 5 to more than 50 members. They feed on grasses, shrubs and crop cultivated for experimental purposes. They are the important pests of the nurseries located in the campus.

10. Sambar (*Cervus unicolor*): Small parties of 3-4 animals move about in the forest area on the western side of the Kotagiri road. Occasional sighting is possible near the ghat section on the eastern side.

11. Barking deer (*Muntiacus muntjak*): These deer rarely stray into the campus forests during the winter season. They probably escape from the Thalaimalai forests on the north eastern side of the area.

12. Indian chevrotain or Mouse deer (*Tragulus memina*): Chevrotain, the smallest of Indian deer inhabits the foothills of the Nilgiri mountains adjoining the campus forests. It is a nocturnal animal and frequents the campus forests. This deer is a favourite of locals for food. Their population is declining due to poaching.

13. Black buck (*Antelope cervicapra*): These antelopes could be occasionally sighted on the north eastern side of the campus forests. They come here from Thalaimalai area in the adjoining Erode District. They are seen in small parties of 2-5 animals and return to their original habitat.

14. Indian wild boar (*Sus scrofa*): Small parties of these pigs inhabit the peripheries of the forest adjoining the cultivated lands. They affect the crops like groundnut and banana.

15. Indian porcupine (*Hystrix indica*): Individuals stray into the area and at times affect crop raiding in nearby farms.

16. Indian hare (*Lepus nigricollis*): The blacknaped hares are common residents here. Individuals can be seen in evenings feeding on grasses and other plants. They also attack seedlings in the nursery area.

17. Asian elephant (*Elephas maximus*): Elephants are commonly seen here as small herds of 3-10 animals. Solitary bulls also stray into the area. The campus forest is a part of the corridor on the traditional route of elephant migration and movement in the Nilgiri Biosphere Reserve during the months of April-June. During the drought these animals cross over

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A NOTE ON ISOSPORA INFECTION IN A SOUTHERN REDWHISKERED BULBUL (*Pycnonotus jocosus fuscicaudatus*)

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The Southern Redwhiskered Bulbuls are perky garden and shrubby haunting birds found in moist deciduous and evergreen biotopes of the low country, both near and away from human habitations. Though a resident of Kerala, it ranges down the western side of peninsular India, Western Madhya Pradesh and South to Kanyakumari. The species in several races is found practically throughout India.

The authors had the opportunity to find an adult bird of the above species in a nest along with young ones in the gardens of Veterinary college hospital. The adult bird appeared dull and showed ruffled feathers. The nest was kept under careful observation and was examined when the bird flew off with the young ones. The droppings in the nest was found to be diarrhoeic and mixed with mucus. Hence it was collected and on microscopical examination, oocysts of coccidia could be detected in very large numbers.

The sample was centrifuged and kept in 2.5% potassium dichromate solution for sporulation of oocysts. The morphological details of both sporulated and nonsporulated oocysts were studied under oil immersion of a microscope. The oocysts were neraly spherical, double walled and measured 19.92 to 23.8 x 18.9 to 23.76 μ m in size and contained two sporocysts each with four sporozoites. Micropyle, polar cap and oocyst residum were absent. Majority of the oocysts had a single polar granule but some had two polar granules. The sporocysts had a plug like stieda body and measured 13.8 to

15.1 x 8.0 to 8.98 μ m Sporocyst residuum as scattered granules was present and the sporozoites were elongate with a refractile globule at either end.

A perusal of the available literature did not reveal the occurrence of isosporan coccidia in Southern Redwhiskered Bulbul. Occurrence of *Isospora pycnonotae* and *I. pycnonotusi* were reported in Redwhiskered Bulbul (*Pycnonotus jocosus*) by Mandal (1971) and Bhatia *et al.* (1973) respectively. The specimens in the present study is closest to *I. pycnonotusi* in measurements and characters.

Hence, we report the occurrence of *I. pycnonotusi* in Southern Redwhiskered Bulbul (*Pycnonotus jocosus fuscicaudatus*) in Kerala. The sick nature of the adult bird and the diarrhoeic and mucous containing droppings might be due to the infection.

References

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the area to Bhavani river. They also damage trees and other vegetation in the campus and affect banana and other crops in nearby farms.

18. Gaur (*Bos gaurus*): Small parties and solitary individuals stray into the area from Kaslar valley on the western side of the forest.

19. Sloth bear (*Melursus ursinus*): The sloth bears rarely escape into the area from plantations and shola forests located in Mamaram area. They do not stay here.

Besides these animals three species of bats viz., the flying fox (*Pteropus giganteus*), short nosed fruit bat (*Cynopterus sphinx*) and Indian pipistrelle (*Pipistrellus coromandra*) are found here. The silk cotton trees in the campus are largely pollinated by bats mainly by *P. giganteus*. The rodent fauna include Indian mole rat (*Bandicota bengalensis*), bandicoot rat (*Bandicota indica*), house rat (*Rattus rattus*), Indian gerbille (*Tatera indica*), metad (*Millardia meltda*) and field mouse (*Mus booduga*).

The three striped squirrel (*Funambulus palmarum*) is the only squirrel inhabiting the area. The flying squirrels which inhabit the evergreen forests of Mamaram area and Longwood shola

up on the hills are absent here.

The Forest College and Research Institute campus and associated forest area form a vital part of the corridor for elephants and chital within the Nilgiri biosphere. The expansion of human activities, laying of trench on the western side of the campus, increased traffic vehichlar on Mettupalayam - Kotagiri road pose serious threat to these animals particularly elephants. The man-elephant conflict is on the increase on the eastern and south eastern side of the forest where the crop raids are a common affair.

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