

## MAMMALS OF HARYANA

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### INTRODUCTION

Haryana State (Fig. 1.) was extensively surveyed in 1986 by survey parties of the Northern Regional Station, Zoological Survey of India, Dehra Dun for the study of fauna. The present paper records 30 species of mammals from that State, mostly based on sight records by the author, and some from published literature. Their status were also assessed by the author in the field by visual observation, as well as discussion with the authorities of forest and wildlife departments.

Haryana\* is a small State, situated in northern India and is bounded in the north by Himachal Pradesh, north-west by Punjab and west and south-west by Rajasthan and in the east by Uttar Pradesh. Delhi forms an enclave on its eastern boundary. The State has an area of 44,222 sq. km. The topography of Haryana is more or less flat and featureless. On its western part, which is contiguous with the desert conditions of Rajasthan, the area is dotted with sand dunes. The Aravalli mountain system, one of the oldest in the country is extending into Haryana.

In Haryana, mainly being an agricultural State, the forest cover is limited to a small area of 3.7% only. Half of this constitutes the forest blocks and the remaining half is in the form of narrow strips along roads, canal, railway lines, drains and flood-protection embankments. The State is having semi-arid conditions in most parts. Insecticides which are extensively used for better yield of agricultural products, have adversely affected the mammalian fauna. Small mammals are no exception.

In the present paper, classification is based on Simpson (1945). Distribution and other characters are after Blanford (1880), Pocock (1939), Ellermann and Morrison-Scott (1951), Walker (1968), Prem *et al.* (1970), Prater (1971), Dhir *et al.* (1976), Anderson (1981), Sc Later (1981), Ahuja and Bajaj (1982), Bhoria and Bajaj (1983), Bhoria *et al.* (1984), Tripathi *et al.* (1985), Singh and Ranga (1986), Bhatia and Kumar (1987) and Sinha (in press).

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\*The State was created in 1966 with seven districts. Five more districts were created in early seventies. It is proposed to create four more districts viz. Kaithal, Yamunanagar, Panipat and Rewari from November, 1989. The actual boundary of these new districts are not known.

## SYSTEMATIC ACCOUNT

Order : INSECTIVORA

Family : ERINACEIDAE

1. *Hemiechinus auritus* (Gmelin)

Long-eared Hedgehog

1770. *Erinaceus auritus* Gmelin, *Nov. Comment. Acad. Sci. Petrop*, 14: 519 (Type locality; Astrakhan, South-eastern Russia).

*Diagnostic characters* : Snout pig-like with clumsy body, short tail, stumpy legs with claws. There is a dense mat of spines which cover the back and sides. During danger, they roll their body in to a ball of bristles.

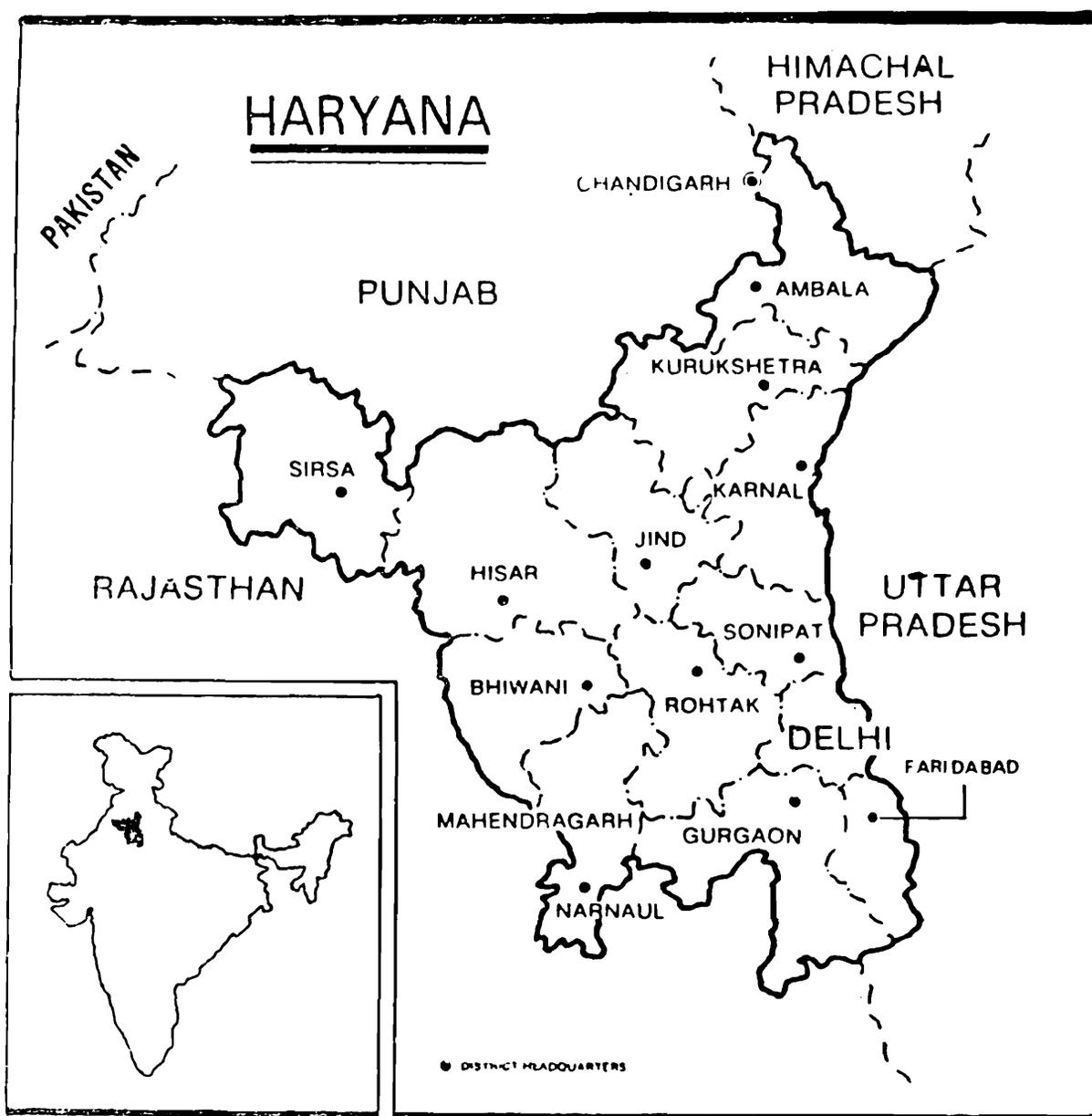


Fig.1. Map of Haryana showing various districts.

*Distribution* : Widely distributed :in [Africa, Middle East, Western Asia, Asia Minor, Chinese Turkestan, Mongolia, Russia and Pakistan. In India, the species is confined mainly in dry plains and desert zones of Cutch, Punjab and neighbouring tracts.

*Status in Haryana* : Two specimens were noticed at embankment near Panipat (Karnal district) by the author at dusk. This constitutes the first record of the species from Haryana State. Though they are quite common, they seem to have escaped attention earlier because of their open habitat preference and nocturnal habits.

*Remarks* : Hedgehog is nocturnal, taking shelter during day in holes in the sand or beneath thorny bushes or grasses, but coming out to feed at dusk and retiring again at dawn. It is omnivorous and feeds on insects, worms, slugs, lizards, rats, mice and eggs of vertebrates, various kinds of fruits and roots. The species covers long distances in the rambles, going at a steady trot.

Family : SORICIDAE

2. *Suncus murinus* (Linnaeus)

House Shrew

1766. *Sorex murinus* Linnaeus, *Syst. Nat. 12th ed.* 1 : 44 (Type Locality : Java).

*Diagnostic characters* : The long pointed snout projecting beyond the lower lip, two front curved teeth, depressed ears, small eyes, with feet and tail sparsely clad with hairs, make them easily identifiable from rats.

*Distribution* : Throughout temperate and tropical regions of Europe, Africa, North America and Asia. This is the commonest shrew in India and is found throughout the Indian subcontinent.

*Status in Haryana* : Very common. Seen moving in the camps at Karnal and Gurgaon by the author during early nights. Also reported from Ambala district (Bhoria *et al.*, 1984), Bhiwani district (Ahuja and Bajaj, 1982), Hissar district (Bhatia and Kumar, 1987) and Jind district (Singh and Ranga, 1986.)

*Remarks* : Shrews are nocturnal and enter houses in search of insects. The loud squeaking cry and unpleasant musky odour are instant causes for their being killed. They are useful animals and get rid of cockroaches and other pests. Shrews are intolerant to rats and drive them away. It is generally believed that the food articles it touches get contaminated, which is not true. Two to three youngones are born at a time and are very active after birth and follow their mother by holding her tail, one after another, in a trailing fashion.

Order : CHIROPTERA

Family : VESPERTILIONIDAE

3. *Hesperoptenus tickelli* (Blyth)

Tickell's Bat

1851. *Nycticejus tickelli* Blyth, *J. Asiat. Soc. Bengal*, 20 : 57. (Type locality : Chaibasa, Bihar, India).

*Diagnostic characters* : The body colour is yellowish grey, with head grey. Tufts

of whitish hair present at the base of ears. Tail-tip naked. Wings long and third finger having a third phalange.

*Distribution* : Throughout India, Mayanmar (Burma), Bhutan and Sri Lanka.

*Status in Haryana* : A common species in Haryana and is recorded from Ambala district (Bhoria *et al.*, 1984), Bhiwani district (Ahuja and Bajaj, 1982), Hissar district (Bhatia and Kumar, 1987) and Jind district (Singh and Ranga, 1986.)

*Remarks* : An early evening flier with slow flight which is limited to its territory. A single young is born in summer.

#### 4. *Scotophilus heathi* (Horsfield)

##### Greater Yellow Bat

1831. *Nycticejus heathi* Horsfield, *Proc. zool. Soc. Lond.*, 113. Type locality : Madras, India),

*Diagnostic characters* : The body colour is yellowish-brown above and underparts some what canary-yellow.

*Distribution* : China and its adjoining south-eastern parts, Mayanmar, Bhutan, and Sri Lanka. The species is found throughout India.

*Status in Haryana* : A common species in Haryana and is recorded from Ambala district (Bhoria *et al.*, 1984), Bhiwani district (Ahuja and Bajaj, 1982), Hissar district (Bhatia and Kumar, 1987) and Jind district (Singh and Ranga, 1986.)

*Remarks* : Early flier, in small groups. A very noisy bat quarrelling among themselves. Roosts in small colonies in cracks and holes in roofs. Food consists of flying ants and similar insects. Usually two young are born in monsoon.

Order : PRIMATES

Family : CERCOPITHECIDAE

#### 5. *Macaca mulatta* (Zimmermann)

1780. *Circopithecus mulatta* Zimmermann, *Geogr. Gesch. Mensch.*, 2 : 195 (Type locality : India).

*Diagnostic characters* : Face, loin and rump are of orange red colour. Squat and thickset body built. The crown-hairs radiate backwards from forehead, without central parting.

*Distribution* : Afghanistan, Nepal, Mayanmar, east to Vietnam, Southern China and Tibet. Widely distributed in India from the river Tapti and Godavari in south to whole of central and northern parts including Himalayas where the species is found up to 2340 m altitude.

*Status in Haryana* : Widely distributed in whole of Haryana and is recorded by the author in all the districts he surveyed. Also recorded from Ambala district (Bhoria *et al.*, 1984), Bhiwani district (Ahuja and Bajaj, 1982), Gurgaon district (Bhoria and

Bajaj, 1983), Hissar district (Bhatia and Kumar, 1987), Jind district (Singh and Ranga, 1986), Karnal district (Dhir *et al.*, 1976), and Rohtak district (Prem *et al.*, 1970.)

*Remarks* : A common monkey of northern India which prefers open country. Large troops live near human settlement in grooves, tanks, temples, railway station, etc. In forested zones they prefer to live at periphery. Food comprises of various types of crop, fruits, plants and cooked food ; also insects and spiders. The social organisation is an open type and is dominated by large male. The mating is observed in all seasons, with peak from October to December ; majority of youngones are born between March and June, suggesting a gestation period of 6 months.

## 6. *Presbytis entellus* (Dufresne)

### Hanuman Langur

1797. *Simia entellus* Dufresne, *Bull. Soc. Philom. Paris*, (I) 7 : 49 (Type locality : Bengal, India).

*Diagnostic characters* : Long-limbed, long-tailed, black faced monkeys seen as much about towns and villages as in forests.

*Distribution* : Practically the whole of India, except western deserts, Sri Lanka and Southern Tibet.

*Status in Haryana* : A troop of 23 individuals were seen feeding in forest near Karnal township (Karnal district) by the author. Also recorded from Ambala district (Bhoria *et al.*, 1984), Bhiwani district (Ahuja and Bajaj, 1982), Hissar district (Bhatia and Kumar, 1987), Jind district (Singh and Ranga, 1986) and Rohtak district (Prem *et al.*, 1970.)

*Remarks* : The langur is vegeterian and lives in groups which are led by males. The marked period of breeding is between April and May in northern India.

Order : CARNIVORA

Family : CANIDAE

## 7. *Canis lupus* Linnaeus

### Wolf

1758. *Canis lupus* Linnaeus, *Syst. Nat.*, 10th ed. 1 : 39 (Type locality : Sweden).

*Diagnostic characters* : The large-sized skull and teeth instantly distinguish them from other carnivores.

*Distribution* : North America, Europe, USSR, Northern Greece, Turkey, Asia and practically whole of India.

*Status in Haryana* : Not common. Occasionally been recorded from Bhiwani district (Ahuja and Bajaj, 1982), Gurgaon district (Bhoria and Bajaj, 1983) and Rohtak district (Prem *et al.*, 1970.)

*Remarks* : The wolf lives in bare and open regions in holes, caves and cavities of rocks, thickets of reeds and shrubs and in burrows dug in sand dunes in the deserts. The species hunt both during the day and night and its main food is cattle, but occasionally it kills human babies and lone adult. The mating takes place during the end of rainy season and youngones, numbering up to three, are born in December.

#### 8. *Canis aureus* Linnaeus Asiatic Jackal

1758. *Canis aureus* Linnaeus, *Syst. Nat.* 10th ed. 1 : 40 (Type locality : Province of Lar, Iran).

*Diagonostic characters* : Deep-chested body, with long, slender limbs and bushy tail. The muzzle is long and slender, and the ears are large and erect. The first digit on the fore foot and the hind foot is reduced. The species is pale dirty yellow mixed with reds and blacks and has a reddish-brown tail with a black tip.

*Distribution* : South-eastern Europe, south-western Asia, throughout India, Nepal, Sri Lanka, extending a little into Myanmar and south-eastern Thailand.

*Status in Haryana* : Widely distributed and are found in forests, crop-fields, wastelands and shrub throughout the Haryana (Bhoria *et al.*, 1984 ; Ahuja and Bajaj, 1982 ; Bhoria and Bajaj, 1983 ; Bhatia and Kumar, 1987 ; Singh and Ranga, 1986 ; Dhir *et al.*, 1976 ; and Prem *et al.*, 1970). The author has also recorded it from Karnal and Gurgaon districts in singles and paires.

*Remarks* : A best adapted animal to its environment, it is found anywhere from humid forests to dry open plains or deserts and upto 3,660 metres in Himalayas. It live in holes on the ground or in dense grass and shrubs. Jackals' call is eerie, the howling at night is perhaps most familiar to most people than the animal itself. There is no distinct breeding season.

#### 9. *Vulpes bengalensis* (Shaw) Bengal Fox or the Indian Fox

1800. *Cuon bengalensis* Shaw, *Gen. Zool.* (I) 2 : 330 (Type locality : Bengal),

*Diagonostic characters* : Indian fox is similar to jackal except for its size which is smaller. It has distinct black-tipped tail.

*Distribution* : Whole of India.

*Status in Haryana* : One specimen has been seen in the agriculture field near Panipat (Karnal district) in the morning by the author. It is very common species in agricultural fields, forests and wasteland, especially on the banks of irrigation channels, throughout Haryana State (Bhoria *et al.*, 1984 ; Ahuja and Bajaj, 1982 ; Bhoria and Bajaj, 1983 ; Bhatia and Kumar, 1987 ; Singh and Ranga, 1986 ; Dhir *et al.*, 1976 ; Prem *et al.*, 1970).

*Remarks* : The species is an inhabitant of open country, lives in durrows in wasteland and cultivated fields. The Indian Fox is nocturnal. Food comprises of small mammals, reptiles, crabs and insects ; and at times melon, ber fruit, shoots and pods. Those living near human settlements enter compounds and gradens, but seldom attack poultry. The mating takes place in winter and the youngones, numbering usually four, are born between February and April.

Family : VIVERRIDAE

10. *Viverricula indica* (Desmarest)

Rasse or Small Indian Civet

1819. *Viverra indica* Desmarest, *Nouv. Dict. Nat. Hist.*, 7 : 170 (Type locality ; India).

*Diagonostic characters* : There is no dorsal crest which distinguishes it from the large Indian Civet. A tawny grey or greyish brown animal with typically civet-like built, lined and steaked on back and croup ; spotted more or less in rows along the flanks, with usually cross bars on the neck.

*Distribution* : Southern China, further to south-eastern Asia, Bhutan, Mayanmar and throughout India, except Himalayas.

*Status in Haryana* : Rare. Hitherto these are reported from Bhiwani district (Ahuja and Bajaj, 1982), Hissar district (Bhatia and Kumar, 1987) and Jind district (Singh and Ranga, 1986).

*Remarks* : Economically important for 'Civet', which is extracted from scent glands. Inhabits long grasses or shrubs in forests but mostly live near human settlements, finding refuge in holes under rocks or lies down in grass or under bushes, in drains and abandoned houses. Being nocturnal, the food consists of rats, squirrels, small birds, lizards, snakes, etc., and also takes fruits, roots and other vegetable matters. There is no marked breeding period. Youngone are seen round the year. Litter consists of four to five youngones.

11. *Herpestes edwardsi* (Geoffroy)

Indian Grey Mongoose

1818. *Ichneumon edwardsii* Geoffroy, *Deser. Egypte*, 2 : 139 (Type locality : Madras, India ).

*Diagonostic characters* : A tawny yellowish-grey mongoose with no stripes on the side of neck. The tail which is as long as its body is tipped with white or yellowish-red.

*Distribution* : Western Asia, Pakistan, Napal, Sri Lanka and throughout India, except Himalayas.

*Status in Haryana* : Quite a few have been seen in fields in Karnal district, Gurgaon district and Faridabad district by the author. Common and widely distributed in Haryana and is recorded from Ambala district (Bhoria *et al.*, 1984), Bhiwani district

(Ahuja and Bajaj, 1982), Gurgaon district (Bhoria and Bajaj, 1983), Hissar district (Bhatia and Kumar, 1987) and Jind district (Singh and Ranga, 1986).

*Remarks* : Usual habitat is open land, shrub jungles, cultivated fields, hedgs rows, thickets and grooves of trees, taking shelter under rocks, bushes, holes in the ground and tree hollows. The species is both, diurnal and nocturnal and the food consists of rats, mice, snakes, lizards, frogs, etc. Breeding has been recorded round the year.

Family : HYAENIDAE

12. *Hyaena hyaena* (Linnaeus)

Hyaena

1758, *Canis hyaena* Linnaeus, *Syst. Nat.* 10th ed. 1 : 40 (Type locality : Laristan, southern Iran).

*Diagonostic characters* : Dog like ; head and front part of body massive ; jaws specially built for crushing hard bones. Heavy dorsal crest of long hairs present. Trnssverse stripes on dirty-white coat are prominent.

*Distribution* : Southern Russia, south-western Asia Minor, northern Africa, Nepal (Terai) and throughout India.

*Status in Haryana* : Not common in Haryana, hitherto reported only from Bhiwani district (Ahuja and Bajaj, 1982) and Rohtak district (prem *et al.*, 1970) in the recent past.

*Remarks* : Usually prefers to live in open country where low hills and ravines offer convenient holes and caves for shelter. Being nocturnal, the hyaena comes out in pack of 2 to 5 or 6 individuals and tramps many a kilometer in quest for food. The food usually consists of left-overs, but when hungry the species can even deprive leopards of their food. The mating takes places in cold weather and youngones are born in hot season.

Family : FELIDAE

13. *Felis chaus* Guldenstaedt

Jungle Cat

1776. *Felis chaus* Guldensteydt, *Nov. Com. Acad. Petrop.*, 20 : 483 (Type locality : Terek river, north of Caucasus).

*Diagonostic character* : Distinct in appearance with long legs and comparatively short tail. The eyes pale green, which give a cruel experssion. Body colour sandy yellowish-grey. The wild cat walks gracefully like leopard,

*Distribution* : Widely distributed from north Africa thriugh south-eastern Asia, Indo-China, Sri Lanka, Mayanmar and throughout India.

*Status in Haryane* : Very common in the districts (Bhoria *et al.*, 1984 ; Ahuja

and Bajaj, 1982 ; Bhoria and Bajaj, 1983 ; Bhatia and kumar, 1987 ; Singh and Ranga, 1986 ; Dhir et al., 1976 ; Prem et al., 1970).

*Remarks* : The species prefers grassland, shrub jungle, reed-bank and marshes. The species is diurnal and more active during the mornings and evenings. The food consists of small mammals, birds and poultry. It is generally believed that two litters are produced in a year.

#### 14. *Panthera pardus* (Linnaeus)

##### Leopard

1758 *Felis pardus* Linnaeus, *Syst. Nat. 10th ed* 1 : 41 (Type locality : Egypt)-

*Diagonostic character* : Body colour bright fulvus ; marked with small close-set thick rimmed rosettes.

*Distribution* : Widely distributed in Russia, Asia Minor, Parts of African continent, western Asia, China, Tibet, east to Vietnam, Malaysian States, whole of India, Myanmar and Sri Lanka.

*Status in Haryana* : Commonly found in the State in the past but now very rare and restricted to Kalsia-Kaleshar forests of Ambala district (Anon, 1984).

*Remarks* : Not restricted to forests only, but it also inhabits open country as among rocks and shrubs. Being more tolerant to sun, the leopard also hunts during the day time. The food comprises domesticated cattles, artiodactyles, monkeys, small beasts of prey, rodents birds, reptiles, crabs etc. There is no marked breeding season and the gestation period is about 100 days. Two to four cubs are born at a time.

#### 15. *Panthera tigris* (Linnaeus)

##### Tiger

1758. *Felis tigris* Linnaeus, *Syst. Nat. 10th ed.*, 1 : 41 (Type locality : Bengal, India).

*Diagonostic characters* : A rich coloured striped animal. The limbs are sinewy ; the fore foot has five digits and the hind foot four. The claws are retractile, large, compressed, strongly curved and sharp. Except for the naked pads, the feet are well haired to aid in the silent stalking of prey.

*Distribution* : Widely distributed in parts of Russia and China, Iran, most parts of India except the desert zone, Myanmar, Vietnam, Malaysian States, Sumatra, Java and Bali.

*Status in Haryana* : The tiger was quite common in the past but their existence is doubtful in Haryana.

*Remarks* : The tiger lives in a variety of ecological conditions varying from humid evergreen forests to open jungles and in the grassy swamps of Terai. In

Sunderbans it leads an amphibious life in a terrain of trees, mud and water. The mating generally takes place after the rainy season and the majority of youngones are born between February and May. Gestation lasts for 105-120 days. Two to three, rarely six, cubs are born at a time.

Order : ARTIODACTYLA

Family : SUIDAE

16. *Sus scrofa* Linnaeus

Wild Boar

1758. *Sus scrofa* Linnaeus, *Syst. Nat.*, 10th ed., 1 : 49 (Type locality ; Germany).

*Diagonostic characters* : There is a full crest or mane of back bristles reaching from nape down the back. The tushes are well developed in the males and both the upper and lower tushes curve outward and project from the mouth.

*Distribution* : Widely distributed throughout the world.

*Status in Haryana* : Due to loss of habitat and expansion of agriculture, the species is losing its foothold and is found in Hissar district (Bhatia and Kumar, 1987) and Rohtak district (prem *et al.*, 1970) and its adjoining areas.

*Remarks* : It inhabits scanty bush-jungle, sometimes in forests. The wild boar is most destructive to crop and raids crop fields. Being omnivorous, food comprises roots, tubers, offal and carrion ; insects, snakes, etc. Mostly diurnal, the wild boar is intelligent and show great courage and determination at the time of danger. Highly prolific and breeds in all the seasons.

Family : CERVIDAE

17. *Axis porcinus* (Zimmermann)

Hog Deer (para)

1780. *Cervus porcinus* Zimmermann, *Geog. Geseh.*, 2 : 131 (Type locality : Bengal, India).

*Diagonostic characters* : Hog deer has squat, pig-lik appearance and hog-like movement, with low head, long body, shorter legs and stouter built. The body fur has speckly appearance with white hair-tip. Antlers are small, on long bony pedicels.

*Distribution* : Low alluvial grass plains in northern India from Sind and Punjab to Assam extending into neighbouring Mayanmar, east to Vietnam. Introduced in Sri Lanka.

*Status in Haryana* : Uncommon and found only in the reserve forests of Karnal district (Dhir *et al.*, 1975).

*Remarks* : The species inhabits a variety of habitats, including short grassy meadows to grass covered delta islands and shrub jungles. Normally the hog deer roams solitary, but herds upto 18 individuals have also been in records. Youngones are born twice a year in early summer and monsoon months. Gestation lasts for about 240 days.

### 18. *Axis axis* (Erxleben)

#### Spotted deer, Chital, Axis Deer

1777. *Cervus axis* Erxleben, *Syst. Regn. Anim.* : 312 (Type locality : Bank of Ganges, India).

*Diagonostic characters* : Body coat bright rufous-fawn, profusely studded with white spots at all stages and in all seasons. Males having antlers with three tines.

*Distribution* : Nepal, Sri Lanka and practically whole of India upto an elevation of about 1,000 metres.

*Status in Haryana* : Found in the reserve forests of Kaithal in Kurukshetra district (Anon, 1984).

*Remarks* : Herds of chital number something between a small group of two to several hundred individuals. The species inhabits grassy forest and shaded streams, where its association with monkeys is a common sight. The food consists of a variety of grass, leaves and fruits. The species is prolific breeder and sometimes they breed twice in a year.

### 19. *Cervus unicolor* (Kerr)

#### Sambar

1792. *Cervus axis unicolor* Kerr, *Anim. Kingd.* : 300 (Type locality : Sri Lanka).

*Diagonostic characters* : Typical nocturnal forest-deer of south eastern Asia, with coarse and shaggy body coat and prominent mane. The males are having stout and rugged antlers.

*Distribution* : India, Mayanmar and Sri Lanka, extending through Indo-China, Siam, Malaysian countries and eastward to Philippines and beyond.

*Status in Haryana* : Sambar found in forest blocks of Kalsia-Kaleshar in Ambala district (Anon., 1984).

*Remarks* : The food consists of leaves and a variety of wild fruits. Crop fields are also raided by sambar. The species is less gregarious and upto 3-4 individuals is commonly met. Males fight for possession of harem. Mating takes place in winter and one young is born in summer.

Family : BOVIDAE

20. **Boselaphus tragocamelus** (Pallas)

Nilgai ; Blue Bull

1766. *Antilope tragocamelus* Pallas, *Misc, Zool.*, : 5 (Type locality : Plains of peninsular India).

*Diagnostic character* : A horse-like animal with high withers, low rump and dark bluish mane. Male possess distinctive tufts of stiff black hair on the throat and stout cone-like horn.

*Distribution* : Whole of peninsular India and its adjoining areas in north and north-West.

*Status in Haryana* : Very common in Haryana and has been seen by the author in Karnal, Kurukshetra, Ambala and Gurgaon districts. It has also been recorded from Bhiwani district (Ahuja and Bajaj, 1982), Gurgaon district (Bhoria and Bajaj, 1983), Hissar district (Bhatia and Kumar, 1987), Jind district (Singh and Ranga, 1986) and Karnal district (Dhir *et al.*, 1976) and Rohtak district (Prem *et al.*, 1970).

*Remarks* : Nilgai being highly gregarious inhabit open forest with grass and patches of scrub in hilly country. Being attached with the religious sentiments of Hindus, the nilgai have got immunity from persecution and as a result, the population has increased uncontrolled and is now a menace to our crop fields adjoining to their habitation. The gestation period is about 240 to 270 days.

21. **Antilope cervicapra** (Linnaeus)

Blackbuck

1758. *Capra cervicapra* Linnaeus, *Syst. Nat.*, 10th ed., 1 : 69 (Type locality : Trivendram, India).

*Diagnostic character* : Recognised by striking black colour and spiral horns.

*Distribution* : India from Punjab, Kathiawar and Peninsula.

*Status in Haryana* : A group of five blackbuck have been seen grazing in the crop field near Karnal-Kaithal road in Karnal district by the author. The species is also reported from Bhiwani district (Ahuja and Bajaj, 1982), Gurgaon district (Bhoria and Kumar, 1987), Jind district (Singh and Ranga, 1986) and Karnal district (Dhir *et al.*, 1976).

*Remarks* : Blackbuck is an animal of open country, with scrub and cultivation and have great tolerance to sun. The species is highly gregarious, herd varies from 20-30 individuals to several hundred individuals depending on the density of population. Territoriality is maintained by the males, who keep a harem of does. Breeding goes on round the year and one youngone is born after a gestation period of about 180 days.

22. *Gazella gazella* (Pallas)

## Chinkara

1766. *Antilope gazella* Pallas, *Misc. Zool.* : 7 (Type locality ; Syria).

*Diagnostic characters* : Chinkara is a small, slender, graceful animal with white streak down each side of face and a dusky patch above nose. Horns are not sex-linked character and can be present in both the sexes.

*Distribution* : Northern and central Africa, western Asia, Nepal. In India, chinkara is found in Rajasthan, Cutch and Kathiawar, Punjab, Hariyana, Uttara Pradesh and parts of peninsula.

*Status in Haryana* : Common in suitable pockets and reported from Bhiwani district (Ahuja and Bajaj, 1982), Hissar district (Bhatia and Kumar, 1987), Jind district (Singh and Ranga, 1986), Karnal district (Dhir *et al.*, 1976) and Rohtak district (Prem *et al.*, 1970).

*Remarks* : The preferred habitat of species is scattered bushy patches, thin forests, broken lands of ravines and rivulets, where it live in herds of upto 20 individuals. Chinkara can live without water for longer periods and it is presumed that they have developed the mechanism of recycling of water within body. Food consists of grass, various types of leaves, crops and fruits. There is no marked breeding season. Interbreeding with blackbuck is not uncommon.

Order : LAGOMORPHA

Family : LEPORIDAE

23. *Lepus nigricollis* Cuvier

## Indian Hare, Black-naped Hare

1823. *Lepus nigricollis* Cuvier, *Diet. Sci. Nat.*, 26 : 307 (Type locality : Madras, India).

*Diagnostic characters* : There is a dark brown or black patch on back of neck from ear to shoulder. Upper surface of the tail black.

*Distribution* : Practically whole of India, Pakistan, Nepal, Mayanmar, Sri Lanka, Bhutan and Java.

*Status in Haryana* : Commonly found in suitable habitats throughout Haryana. Seen in the field during night drive in Karnal and Sonipat districts by the author. Also reported from Ambala district (Bhoria *et al.*, 1984), Bhiwani district (Ahuja and Bajaj, 1982), Jind district (Singh and Ranga, 1986).

*Remarks* : Large tracks of bush and jungle alternating with cultivated plains afford them ideal conditions to live. Many also live in neighbourhood of villages and cultivation. Youngs are born with open eyes and are able to walk within 12 hours of birth.

Order : RODENTIA

Family : SCIURIDAE

24. *Funambulus pennanti* Wroughton

Northern Palm Squirrel

1905. *Funambulus pennanti* Wroughton, *J. Bombay nat. Hist. Soc.* 16 (3) : 411 (Type locality : Surat, India).

*Diagonostic characters* : There are five stripes on back, three median, pale ; dorsal stripes flanked on each side with a suplimentary pale stripe.

*Distribution* : Pakistan, Nepal and throughout India, except southern States.

*Status in Haryana* : Most common of all the mammals and found practically everywhere in the State by the author. It is also reported from Ambala district (Bhoria *et al.*, 1984), Bhiwani district (Ahuja and Bajaj, 1982), Hissar district (Bhatia and Kumar, 1987), Jind district (Singh and Ranga, 1986) and Rohtak district (Prem *et al.*, 1970).

*Remarks* : The species is most common and familiar of all wild animals of India and can be seen near human settlements in houses, gardens, grooves, hedges and road side tress. Food consists of fruits, nuts, young shoots, buds, pods, insects, eggs of birds, etc., and the species drink nector from flowers. Female mates with more than one male. Gestation period is about 45 days and two to three youngones are produced in an untidy nest.

Family : HISTRICIDAE

25. *Hystrix indica* (Kerr)

Indian Crested Porcupine

1792. *Hystrix cristata* var. *indica* Kerr, *Anim. Kingd.* : 213 (Type locality : India).

*Diagonostic characters* : Body hairs modified into formidable spines or quills, measuring 15 to 30 cms. These quills profusely crown the neck, shoulder region and back. Each quill is ornamcnted with deep brown or black and white rings.

*Distribution* : Western Asia, southern Arabia, parts of Turkestan, Transcaucasia, Sri Lanka, Nepal and widely distributed in north-western, northern and peninsular India.

*Status in Haryana* : Rare, found in western parts in the districts of Bhiwani (Ahuja and Bajaj, 1982), Hissar (Bhatia and Kumar, 1987) and Jind (Singh and Ranga, 1986).

*Remarks* : Preferred habitat is rocky hill sides, but can live in any habitat including Himalayas upto an elevation of 2,400 metres. The Indian porcupine is brave and good fighter which can even kill animals like tiger and leopard. Nocturnal.

Family : MURIDAE

26. **Rattus rattus** (Linnaeus)

House Rat ; Black Rat

1758. *Mus rattus* Linnaeus, *Syst. Nat.*, 10th ed., 1 : 61 (Type locality : Sweden).

*Diagonostic character* : The dorsal fur is black and the belly smoky-gray.

*Distribution* : Widely distributed throughout world including India.

*Status in Haryana* : Very common in Haryana and is reported from Ambala district (Bhoria *et al.*, 1964), Bhiwani district (Ahuja and Bajaj, 1982), Gurgaon district (Bhoria and Bajaj, 1983), Hissar district (Bhatia and Kumar, 1987) and Jind district (Singh and Ranga, 1986).

27. **Mus musculus** Linnaeus

House Mouse

1758. *Mus musculus* Linnaeus, *Syst. Nat.* 10th ed , 1 : 62 (Type locality : Sweden).

*Diagonostic character* : In general built and appearance, the house mouse is a miniature replica of the common house rat (*R. rattus*), measuring 5 to 8 cms. without tail, which is of equal length.

*Distribution* : Distributed throughout world including India.

*Status in Haryana* : Most common in Haryan and is reported from Ambala district (Bhoria *et al.*, 1984), Bhiwani district (Ahuja and Bajaj 1982), Gurgaon district (Bhoria and Bajaj, 1983), Hissar district (Bhatia and Kumar, 1987) and Jind district (Singh and Ranga, 1986).

*Remarks* : prefer to live in houses, gardens and fields near human settlements. The house mouse is prolific breeder and gives birth to 4-5 youngones after every 2 to 4 months. The youngones attain maturity at an early age of a month and starts breeding.

28. **Bandicota bengalensis** (Gray and Hardwicke)

Lesser Bandicoot Rat "Indian Mole Rat"

1833. *Arvicola bengalensis* Gray & Hardwicke, *Illus. Indian Zool* , 2, pl. 21 (Type locality : Bengal, India).

*Diagonostic characters* : The species has a robust form, rounded head and ears with short broad muzzle. The body coat colour is dark greyish-brown with underside paler.

*Distribntion* : South eastern Asia including whole of India.

*Status in Haryana* : The species is recorded only from Rohtak district (Prem *et al.*, 1976).

*Remarks* : Inhabit cultivated plains, gardens, pasture land, wastland and forest. The species' presence is made known by a pile of fresh earth resembling a large mole hill from which its name "mole rat" has been derived. Youngones get sexual maturity at an early age of 90 days and can produce 10 to 12 youngones at a time.

### 29. *Tatera indica* (Hardwicke)

Indian Gerbil ; Antelope Rat

1807. *Dipus indicus* Hardwicke, *Trans. linn. Soc. Lond.*, 8 : 297 (Type locality : Uttar Pradesh, India).

*Diagonistic characters* : Tail is covered with more hairs at tip, the hind legs are longer which help in leaps.

*Distribution* : Arab countries, Pakistan, Sri Lanka and throughout India,

*Status in Haryana* : Common on western part adjoining Rajasthan. The species is also recorded from Ambala district (Bhoria *et al.*, 1984), Bhiwani district (Ahuja and Bajaj, 1982), Hissar district (Bhatia and Kumar, 1987) and Jind district (Singh and Ranga, 1986).

*Remarks* : The Indian Gerbil builds its burrow near hedges and thickets in open areas bordering cultivation. Sexes live in separate burrows. Food consists mainly of grain, roots, leaves and grasses. A prolific breeder, usually four youngones are born at a time.

### 30. *Meriones hurrianae* (Jerdon)

Indian Desert Gerbil

1867, *Gerbillus hurrianae* Jerdon, *Mamm. India*, 186 (Type locality : Hissar, Haryana, India).

*Diagonistic characters* : Tail clothed with hair and ends in tassel. Hind feet are longer than fore feet. Its body and limbs are sandy-yellow ; underparts dirty white.

*Distribution* : Desert and semi desert zones of north-west and central India.

*Status in Haryana* : Recorded from Hissar district (Jerdon, 1967).

*Remarks* : Habits similar to Indian Gerbil except that it is more gregarious and lives in small colonies. Diurnal in habit, seen up and about at all hours of the day, in all seasons. Food comprises mainly of seeds, supplemented by bulbous roots, grass, leaves, flowers and nuts. The species breed throughout the year with two peak birth seasons in late winter and in monsoon.

#### SUMMARY

A comprehensive list of 30 species of mammals observed in Haryana State during 1987 has been furnished. This includes actual observation in the field, supplemented

with informations from the published records. The status of each species in Haryana, has been assessed by visual observation and after gathering information from the authorities of the wildlife and Forest departments.

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