SOME SELECTED FAUNA
OF
GOBIND PASHU VIHAR

ZOOCLOGICAL SURVEY OF INDIA
SOME SELECTED FAUNA
of
GOBIND PASHU VIHAR

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CITATION

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Zoological Survey of India, Northern Regional Station Dehra Dun

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October, 2003

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SOME SELECTED FAUNA OF
GOVIND WILDLIFE SANCTUARY
(Uttarkashi : Uttaranchal)
CONSERVATION AREA SERIES

No. 18  2004  90

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GOBIND PASHU VIHAR AN OVERVIEW

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INTRODUCTION

The Govind Wildlife Sanctuary, a part of Himalayan highland, was notified in the year 1954, when its name was changed from Tons to Govind Pashu Vihar. The Government of Uttar Pradesh notified its intention to constitute a part of the sanctuary as National Park in 1991.

Location and Area

The Sanctuary is situated in Purola Teshil of Uttarkashi district (Uttaranchal) and lies between latitude 31° 02’ - 31° 20’ N and longitude 77° 55’ - 78° 40’ E. The nearest town is Purola. The altitude varies from 1290 to 6323 m, the highest point being the Banderpunch peak. The sanctuary covers a total area of 953.12 sq kms, of which 472.08 sq kms has been demarcated as National Park, encompassing the upper Catchment area of river Tons.

Boundary

The sanctuary is bounded in the north by Himachal Pradesh, in the east by a chain of mountain peaks along the main snowline, in the south by Banderpunch – Kedarkanta ridge and in the west by Kedarkanta Changsil peak.

Drainage

Two major rivers and their tributaries, viz, the Rupin and the Supin flow through the Sanctuary joining at Naitwar, forming the river Tons there after. The area is also dotted with ponds and tanks.

Climate

The climate of the area is typical himalayan with rainfall during July-August at lower altitudes. The average rainfall is 1500 mm. Extreme cold with three to four months snowfall in winter with permanent snowline in higher reaches.

Human Habitations

The human population in the sanctuary is very thin and scattered in to about 47 villages (Annon, 1986). The people sustain mainly on lives stock (such as Sheep, Goats and Cattles),
cultivation and forest products. Gujjars frequently visit the sanctuary with their buffalos during summer. Har-ki-dun and other tourist sites are regularly visited by tourists / trekkers.

Vegetation

The vegetation pattern in the sanctuary resembles the broad pattern of vegetational zones of North West Himalaya. According to elevation the vegetation of the sanctuary can be divided into the following zones:

(i) **Sub Tropical Zone** (up to 1500 m)
(ii) **Temperate Zone** (1500 – 2400 m)
(iii) **Sub Alpine Zone** (2500 – 3000 m)
(iv) **Alpine Zone** (3000 – 5500 m)

(i). **Sub Tropical Zone**: Here the tree species like Toon (*Toona ciliata*), Rohini (*Mallotus philippensis*), Utis (*Alnus nepalensis*), Chirpine (*Pinus roxburghii*) etc. are common. The shrub habit is dominated by *Colebrooka oppositifolia*, *Pyracantha crenulata*, *Ziziphus mauritiana* etc.

(ii). **Temperate Zone**: Here the tree species like Banj (*Quercus leucotrichophora*), Akhrot (*Juglans regia*), Bhotia Badam (*Corylus jacquemontii*), Burans (*Rhododendron arboreum*) etc. are common. The shrubs like *Viburnum continifolium*, *Hippophae rhamnoides* and *Berberis* spp. are common.

(iii). **Sub Alpine Zone**: Here the dense coniferous forests are represented by Kail (*Pinus wallichiana*), Himalayan Yew (*Taxus wallichiana*) etc. and intermixed broad leaved by Kharsu (*Quercus semecarpifolia*) etc. The common shrubs are *Rosa webbiana*, *Cotoneaster* sp. and *Berberis* sp. etc. The herbaceous species like *Delphinium* sp., *Swertia* sp. and *Pedicularis* sp. are common.

(iv). **Alpine Zone**: Here the herbaceous paints of different size, forms and color are prevalent. Common herbs are *Cyananthus* sp., *Ogentiana* sp. and *Potentilla* sp. The medicinal paints like *Picrorhiza scrophulariflori*, *Nardostachys grandiflora*, *Aconitum heterophyllum* are common.

Fauna

The fauna of the sanctuary is poorly known. Only a few scattered references on the Mammals, Birds, Butterflies and Moths are available. Dang (1968) published a report on the preliminary ecological survey of Har-ki-dun and adjacent valleys, with special reference to Bharal and Red (Brown) Bear.

Calcutta Mountaineering Club “DUTAGAR” organised a joint expedition to the Tons Valley of Western Garhwal Himalaya (Uttaranchal) in collaboration with Anthropological Survey of India, Kolkata and Zoological Survey of India, Kolkata, Mondal (1984), a delegate from Z.S.I., Kolkata, published an annotated list of 17 species of Lepidoptera of which 14 species were recorded from the areas falling under the sanctuary.
Wildlife Institute of India, Dehra Dun conducted a survey in the sanctuary during 1986, as a part of an Indo-U.S. snow leopard survey and reported sightings of 11 species of Mammals.

Sathyakumar (1994) reported about 20 species of mammals and 100 species of birds from the sanctuary.

In the light of findings of the above Surveys a working plan was proposed by the Scientists of the Zoological Survey of India, Dehra Dun, to undertake systematic exploration of Invertebrate as well as Vertebrate fauna of the Sanctuary. Consequently four extensive surveys were conducted in the years 1993, 1994 and 1996 (Table - I). During these surveys faunal samples were collected and observed from different localities and altitudes.

An annotated list of 257 taxa belonging to nine faunal groups is included in this document, the details of which are as under; Invertebrates 98 species, Vertebrates 159 species. Of the 98 forms of Invertebrates there are 12 species of Odonata, 55 species of Lepidoptera, 25 species of Hymenoptera and six species of Chilopoda. Among vertebrates two species of Pisces, four species of Amphibia, six species of Reptilia, 115 species of Aves and 32 species of Mammalia have been recorded.

Table : Summary of Faunistic Surveys and Research studies carried out in Govind Wildlife Sanctuary by Zoological Survey of India, Dehra Dun.

<table>
<thead>
<tr>
<th>Task Force</th>
<th>Year</th>
<th>Duration</th>
</tr>
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</table>

LIST OF THE LOCALITIES SURVEYED

6. Fafrala village        18. Landhora village (Manora khad)
11. Har-ki-dun            23. Osla village   32. Sunkundi village
REFERENCES


INSECTA: ODONATA

ARUN KUMAR

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INTRODUCTION

The Odonata fauna of Himalayan Ecosystem has been extensively studied by Kumar & Prasad (1981). Consequently about 240 species, out of a total of 550 known Indian forms, have been recorded from Himalaya, which include a number of new species and new records subsequent to the publication of Fauna of British India: Odonata (1-3) (Fraser 1933-36).

The present study is based on the collection of Odonata from the Wildlife Sanctuary in the Northern Regional Station of Zoological Survey of India at Dehra Dun. The present communication records only twelve species of Odonata from the Sanctuary.

SYSTEMATIC ACCOUNT

A. Suborder ZYGOPTERA

I. Family PLATYENEMIDIDAE

1. Calenemia eximia Selys


*Distribution*: India: Himachal Pradesh, Uttarakhand, West Bengal, Sikkim.

*Elsewhere*: Nepal, Myanmar, Malaysia, Java, Indo-China, Taiwan.

II. Family COENAGRIIDAE

2. Pseudogrion rubriceps Selys

Distribution: India: Himachal Pradesh, Uttarakhand, West Bengal.

Elsewhere: Nepal, Myanmar, Malaysia, Java, Indo-China, Taiwan.

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3. Ceriagrion coromandelianum Fabricius


Distribution: India: Himachal Pradesh, Uttarakhand, West Bengal.

Elsewhere: Nepal, Myanmar, Malaysia, Java, Indo-China, Taiwan.

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4. Ishnura aurora aurora Hagen


Distribution: India: Himachal Pradesh, Uttarakhand.

Elsewhere: Myanmar, Throughout Southern Asia, Malaysia, Philippine, Samoa, Sundaic Archipelago, New Guinea, Australasia.

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III. Family LESTIDAE

5. Lestes praemorsa praemorsa (Selys)


Distribution: India: Himachal Pradesh, Uttarakhand, West Bengal.

Elsewhere: Nepal, Myanmar, Malaysia, Java, Indo-China, Taiwan.

---

6. Celonlestes cyanea (Selys)


Distribution: India: Punjab, Himachal Pradesh, West Bengal.

Elsewhere: Myanmar.
Suborder ANISOPTERA

IV. Family CORDULEGASTERIDAE


Distribution: India: Kashmir, Himachal Pradesh, Uttaranchal, Assam.

Elsewhere: Nepal.

8. Orethetrum chrysostigma luzonicum (Braver)


Distribution: India: Himachal Pradesh, Uttaranchal, Tamil Nadu, Andra Pradesh, West Bengal, Assam.


9. Palpopleura sexmaculata sexmaculata (Fabricius)


Distribution: Nepal, Sri Lanka, Malaysia, Indo-China, China.

10. Acisoma panorpoides panorpoides Rambur


Distribution: India: Himachal Pradesh, Uttaranchal, Madhya Pradesh, Assam, Sikkim, West Bengal.

11. *Crocothemis servilia sevilia* (Drury)


*Distribution*: India: Himachal Pradesh, Uttaranchal, Madhya Pradesh, Bihar, West Bengal.


12. *Neurothemis fulvia* (Drury)


*Distribution*: India: Himachal Pradesh, Uttaranchal, Throughout India.

*Elsewhere*: Nepal, Myanmar, Sri Lanka, Old World Tropics & Sub Tropics South Asia, Taiwan, Thailand, Ryukus, Timor, Sumba, Seychelles to Pacific, Japan, Australia, Sunda Island, Micronesia Philippines.

**REFERENCES**


INSECTA : LEPIDOPTERA : RHOPALOCERAS

PRAMOD KUMAR and S. K. GUPTA
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INTRODUCTION

The butterflies always attracted attention of both the entomologists and the naturalists because of their aesthetic, economic and scientific value.

Arora et al. (1995) published on the butterflies of Western Himalaya (U.P.) and prepared a list of 223 taxa from eight districts of Kumaon and Garhwal.

So far as earlier records of butterflies from the sanctuary is concerned, Mondal (1984), identified and recorded 11 species (10 families) of butterflies based on the material collected during Tons Valley Expedition (1972), of these nine species were recorded from the area falling under the sanctuary viz. Eurema hecaube contubernalis (Moore), Colias electo fieldi (Menetries), Aulocera brahminus brahminus (Blanchard), A. swaha swaha (Kollar), Callerebia scanda scanda (Kollar), Ypthima sakra nikaea Moore, Celastrina argiolus kollari (Westwood), Zizeeria maha maha (Kollar), Lycaena phaleas stygianus (Butler).

The present study is based on the material collected from the sanctuary by four field task forces of this Regional Station in the years 1993, 1994 and 1996. As a result 48 species of butterflies belonging to 7 families have been identified. This includes two species, viz. Callerebia scanda scanda (Kollar) and Zizeeria maha maha (Kollar), recorded earlier by Mondal (1984). Thus a total of 55 species of butterflies are now known from the sanctuary.

SYSTEMATIC ACCOUNT

The systematic account deals with 48 species of butterflies under 7 families:

I. Family PAPILIONIDAE

1. Papilio protenor protenor Cramer
   Spangel


2. *P. polyctor polyctor* Boisduval
   Common Peacock

*Material examined*: India: Uttarakhand, Uttarkashi dist., higher bank from vill. Naitwar (Rupin valley), 1300-1350 m, 1 ex., 7.x.1993, coll. *Arun Kumar & party*.

*Distribution*: India: Kashmir to Kumaon.

*Elsewhere*: Pakistan (Chitralt).

3. *P. polytes romulus* Cramer
   Common Mormon


*Distribution*: Widely distributed in India.

*Elsewhere*: Nepal; Myanmar and Sri Lanka.

4. *Sephisa dichroa* (Kollar)
   The Western Courtier


*Distribution*: India: Kashmir to Kumaon.

*Elsewhere*: Pakistan (Chitralt).

II. Family PIERIDAE

5. *Pieris canidia indica* Evans
   Indian Cabbage White


*Distribution*: India: Himalayas, Nilgiris, Kerala, Karnataka.

*Elsewhere*: Pakistan (Baluchistan and Chitralt); Myanmar and Nepal.

6. *P. brassicae nepalensis* Doubleday
   Large Cabbage White

KUMAR AND GUPTA: *Lepidoptera: Rhopalocera*

*Distribution*: India: Common from Terai to 12000 feet in Himalayas.

*Elsewhere*: Nepal.

### 7. *Pontia daplidice moorei* (Rober)

**Bath White**


*Distribution*: India: Kashmir to Punjab, Western Himalaya.

*Elsewhere*: Nepal and Pakistan (Chitral).

### 8. *Catopsilia pomona* (Fabricius)

**The Lemon Emigrant**

*Material examined*: India: Uttaranchal, Uttarkashi dist, higher bank from Naitwar, 1300-1350 m, 1 ex., 07.x.1993, Sabror vill., *ca* 5 km from Naitwar, 1325 m, 1 ex., 07.x.1993, coll. Arun Kumar & party.

*Distribution*: India: Throughout.

*Elsewhere*: Sri Lanka and Myanmar.

### 9. *Gonepteryx rhamni nepalensis* (Doubleday)

**Common Brimstone**


*Distribution*: India: Throughout Himalayas.

*Elsewhere*: Nepal and Pakistan (Chitral).

### 10. *Eurema blanda sililetani* (Wallace)

**The Three-Spot Grass Yellow**


*Distribution*: India: Peninsular India to Sikkim and Assam.

*Elsewhere*: Myanmar.

### 11. *E. laeta laeta* (Boisduval)

**Spotless Yellow**

*Material examined*: India: Uttaranchal, Uttarkashi dist., Sakhrola vill., *ca* 17 km from Naitwar, 1350 m, 1 ex., 8.x.1993, coll. Arun Kumar & party, Himri-Istragad road, 1 ex.,

*Distribution*: India: Peninsular to Western Himalaya.

*Elsewhere*: Sri Lanka and Myanmar.

12. *Colias electo fieldi* Menetries

**Dark Clouded Yellow**


*Distribution*: India: North West Himalaya.

*Elsewhere*: Nepal; Myanmar and Pakistan.

13. *C. erate* (Esper)

**Pale Clouded Yellow**


*Distribution*: India: Himalaya (Kashmir to Kumaon), hills of southern India.

*Elsewhere*: Pakistan (Baluchistan and Chitral).

14. *C. myrmidone* Danube

**Clouded Yellow**


*Distribution*: India: Western Himalaya.

15. *Aporia aganthon caphusa* (Moore)

**The Great Black Vein**


*Distribution*: India: Uttaranchal (Mussoorie to Kumaon).

16. *A. leucodyce saracta* Moore

**The Himalayan Black Vein**

KUMAR AND GUPTA: *Lepidoptera: Rhopalocera*

*Distribution*: India: Ladakh and Kashmir to Kumaon.

*Elsewhere*: Pakistan (Baluchistan).

### III. Family DANAIDAE

17. *Danaus genutia genutia* (Cramer)

**The Common Tiger**


*Distribution*: India: Uttaranchal (Western Himalaya), Andaman & Nicobar Islands.

*Elsewhere*: Nepal; Myanmar; Sri Lanka; Vietnam; Thailand; South China; Hong Kong; Pakistan; Afganistan.

### IV. Family SATYRIDAE

18. *Lethé verma verma* (Kollar)

**The Strighted Banded Tree Brown**


*Distribution*: India: Kashmir to Assam (4000-9000 feet Altitude).

*Elsewhere*: Myanmar.

19. *Lethé insana insana* (Kollar)

**Common Forester**


*Distribution*: India: Himachal Pradesh, Uttaranchal (Himalayas).

### 20. *Lethé jalaurida jalaurida* (deN)

**Small Silver Fork**


*Distribution*: India: Himachal Pradesh, Uttaranchal (Himalayas).

### 21. *Pararge schakra schakra* (Kollar)

**Common Wall**

*Material examined*: India: Uttaranchal, Uttarkashi dist., Taluka, 1900 m, 1 ex, 11.x.1993;

*Distribution*: India: Uttarakhal (Himalayas).

*Elsewhere*: Nepal, Pakistan.

22. *Aulocera saraswati* (Kollar)

*Triated Satyr*


*Distribution*: India: Western Himalayas, Sikkim.

*Elsewhere*: Nepal.

23. *Callerebia nirmala nirmala* (Moore)

*Common Argus*


*Distribution*: India: Kashmir to Kumaon.

*Elsewhere*: Nepal.

24. *C. scanda scanda* (Kollar)

*Pallid Argus*

*Material examined*: India: Uttarakhal, Uttarkashi dist., Gia gad, *ca* 2 km from Taluka on Sankri Road, 2100 m, 2 exs., 16.vi.1994; Taluka Osla road, up to 5 km, 1 ex., 17.vi.1994, coll. *N.K. Sinha & party*.

*Distribution*: India: Kashmir to Kumaon, Sikkim.

*Elsewhere*: Nepal.

V. Family ERYCINIDAE

25. *Dodona durga* (Kollar)

*Common Punch*


*Distribution*: India: Western Himalaya (800-2500 m).
26. *Libythia lepita* Moore


*Distribution*: India: Kashmir to Assam, Southern India.

*Elsewhere*: Myanmar and Sri Lanka.

VI. Family NYMPHALIDAE

27. *Athyma opalina opalina* (Kollar)

**Himalayan Sergeant**


*Distribution*: India: Kashmir to Kumaon.

28. *Neptis hylas astola* Moore

**Common Sailor**


*Distribution*: India.

*Elsewhere*: Myanmar.

29. *N. yerburyi yerburyi* (Butler)

**Yerburyis Sailor**


*Distribution*: India: Kashmir to Kumaon.

30. *Cyrestis thyodamas ganescha* (Kollar)

**Map Butterfly**


*Distribution*: India: Kashmir to Kumaon.

31. *Precis iphita siccata* (Stichel)

**Chocolate Solider**

*Material examined*: India: Uttarakhand, Uttarkashi dist., higher bank from vill. Naitwar, 1300-1350 m, 1 ex., 7.x.1993; Sunkundi vill., ca 27 km from Naitwar on road to Jakhol, 1
ex., 8.x.1993, coll. Arun Kumar & party; Fafrala gad, ca 3 km from Sankri on Naitwar road, 1900 m, 1 ex., 28.x.1996; Chhibara Khad, ca 2 km from Naitwar on Mori road, 1375 m, 1 ex., 6.xi.1996, coll. J.P. Sati & party.

Distribution: India: Kashmir to Kumaon.

32. Cyanthia cardui (Linn.)
Painted Lady

Material examined: India: Uttarakhand, Uttarkashi dist., Bedgad Nala, up hill near Naitwar, 1 ex., 22.iii.1996; Saruka Tal, ca 2 km up hill from Jahkol, 2825 m, 1 ex., 31.iii.1996, coll. Akhlaq Husain & party; Gia gad, 2 km from Taluka on Sankri road, 2100 m, 1 ex., 16.vi.1994, on way to Sirga vill. from Jakhol, 2500-3000 m, 1 ex., 14.vi.1994, coll. N.K. Sinha & party.

Distribution: India: Common throughout.

Elsewhere: Sri Lanka and Myanmar.

33. Vanessa indica indica Herbst
Indian Red Admiral

Material examined: India: Uttarakhand, Uttarkashi dist., Halara gad, ca 2 km from Sankri vill, 1800 m, 1 ex., 6.xi.1993; Sunkundi vill, ca 27 km from Naitwar on road to Jakhol, 1 ex., 8.xi.1993, coll. Arun Kumar & party.

Distribution: India: Himalaya (Kashmir to Eastward).

Elsewhere: Nepal, Myanmar, China and Thailand.

34. V. egea (Cramer)
The Comma


Distribution: India: North West Himalaya.

Elsewhere: Pakistan (Baluchistan) and Bhutan.

35. Kanisha canace himalaya Evans
Blue Admiral


Distribution: India: North West Himalaya.
Elsewhere: Pakistan (Chitral).

36. *Aglais cashmiriensis aesis* Fruhstofer
   Indian Tortoise Shell


*Distribution*: India: Himachal Pradesh (Kullu) to Sikkim.

37. *Symbrenthia niphanda* Moore
   Blue Tail Jester


*Distribution*: India: Kashmir to Assam Hills.

38. *Fabriciana kamala* (Moore)
   Common Silver Stripe


*Distribution*: India: North West Himalaya.

Elsewhere: Pakistan (Chitral) and Nepal.

39. *Childrena childreni sukontala* Kollar
   Large Silver Stripe


*Distribution*: India: Kashmir to Kumaon.

Elsewhere: Pakistan (Chitral).

40. *Argyreus hyperbius hyperbius* (Johanssen)
   Indian Fritillary


*Distribution*: India: Himalayas.
Elsewhere: Nepal, Pakistan (Chitral).

41. *Issoria lathonia issoea* Doubleday  
Queen of Spain Fritillary

*Distribution:* India: Himalayas.  
Elsewhere: Pakistan (Chitral) and North Myanmar.

42. *Kalima inachus* Boisduval  
The Orange Oak Leaf

*Distribution:* India: Himalayas, Assam, Southern India (Eastern Ghats) and Bihar.

43. *Atella phalantha* (Drurry)  
The Common Leopard

*Distribution:* India: Himalayas.  
Elsewhere: Sri Lanka, Myanmar.

VII. Family LYCAENIDAE

44. *Lycaena pavana* (Kollar)  
White Bordered Copper

*Distribution:* India: Kashmir to Kumaon.  
Elsewhere: Nepal.

45. *Heliphorus andocles coruscans* Moore  
Green Sapphire

**Distribution**: India: Kashmir to Assam.

**Elsewhere**: North Myanmar.

**46. Heliphorus brahma** Moore

*Golden Sapphire*

*Material examined*: India: Uttarakhal, Uttarkashi dist., on way from Taluka to Osla, 1 ex., 11.x.1993, coll. Arun Kumar & party.

**Distribution**: India: Kumaon to Assam.

**Elsewhere**: Nepal; Myanmar and West China.

**47. Celastrina huegelli huegelli** Moore

*Large Hedge Blue*

*Material examined*: India: Uttarakhal, Uttarkashi dist., Sankhi vill., ca 12 km from Naitwar, 1 ex., 4.x.1993, coll. Arun Kumar & party; Gia gad, ca 2 km from Taluka on Sankri road, 2100 m, 1 ex., 16.11.1994, coll. N.K. Sinha & party; Fafrala gad, ca 3 km from Sankri on Naitwar road, 2900 m, 1 ex., 29.x.1996; Naitwar, 1400 m, 1 ex., 3.xi.1996; Manora khad and Landhora vill. on Naitwar-Sankri road, 1500 m, 1 ex., 5.xi.1996, coll. Akhlaq Husain & party.

**Distribution**: India: Kashmir to Kumaon.

**48. Zizeeria maha maha** (Kollar)

*The Pale Grass Blue*


**Distribution**: India: Throughout.

**Elsewhere**: Myanmar, Pakistan (Blauchistan).

**REFERENCES**


INSECTA : HYMENOPTERA : ACULEATA

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INTRODUCTION

The aculeate hymenopteran insects are considered to be one of the most beneficial groups of insects, due to their economic and biological importance. Majority of these insects make food, pollinate crops and destroy insects pests of crops and forests.

Bingham’s (1897, 1903) two volumes of “The Fauna of British India, including Ceylon and Burma” are valuable contributions on aculeate Hymenoptera. Gupta (1995) recently studied the hymenopteran fauna of western Himalaya (U.P.), and prepared an annotated list of 200 species belonging to 12 families from the eight districts of Kumaon and Garhwal.

The present studies is based on the material of collected by the field survey task forces of Zoological Survey of India, Dehra Dun gives an account of 25 species belonging to six families. The genus Passaloecus Schuckard, belonging to the family Sphecidae, is recorded for the first time from India on the basis of two female specimens. Odontomachus puntulatus Forel (family Formicidae) and Odynerus sikkimensis Bingham (family Eumenidae) are new distributional records from western Himalaya and Uttaranchal.

SYSTEMIC ACCOUNT

I. Family TIPHIIDAE

1. *Tiphia (Tiphia) implicata* Cameron


   Distribution: India: Uttaranchal (Kumaon and Garhwal Hills).

   Remarks: Previously unknown female has been recorded.

2. *Tiphia (Tiphia) pulchakae* Allen

Distribution: India: Uttarakhand (Kumaon and Garhwal Hills).
Elsewhere: Nepal.

II. Family SCOLIIDAE

3. Campsomeriella (Campsomeriella) collaris collaris (Fabricius)


Distribution: India: Widely distributed.

4. Megacampsomeris asiatica himalayana (Betrem)

Material examined: India: Uttarakhand, Uttarkashi dist., Chibbara Khad, ca 2 km form Naitwar on Mori road., 1375 m, 1 ♂, 6.xi.1996, coll. J.P. Sati & party.

Distribution: India: H.P., Meghalaya, Uttar Pradesh.
Elsewhere: Nepal.

5. Megacampsomeris prismatica (Smith)

Material examined: India: Uttarakhand, Uttarkashi dist., Taluka, 1900 m, 2 ♂, 11.x.1993, coll. Arun Kumar & party; Sankri, 1900 m, 1 ♂, 31.x.1996, Fafrala gad, 1900 m, ca 3 km from Sankri on Naitwar road, 5 ♂, 29.x.1996, Soud vill., 1900 m, ca 2 km from Sankri on Taluka road, 1 ♂, 13.x.1996, coll. J.P. Sati & party.


Elsewhere: China; Japan; Korea; Nepal; Myanmar; Indonesia; Philippines and Taiwan.

III. Family FORMICIDAE

Subfamily PONERINAE

6. Odontomachus punctulatus Forel

GUPTA: Hymenoptera: Aculeata

Distribution: India: Assam, Sikkim, Uttaranchal.

Elsewhere: Myanmar.

Remarks: This is the first record of this species from Uttaranchal and western Himalaya.

Subfamily MYRMECINAE

7. Myrmica rugosa Mayer


Distribution: India: Himalayas along their whole length and above 1300 m.

8. Messor himalayanus (Forel)


IV. Family EUMENIDAE

9. Delta dimidiatipennis (Saussure)


Elsewhere: Pakistan, Arabia and Africa.

10. Odynerus sikkimensis Bingham


Distribution: India: Sikkim and Uttaranchal.

Remarks: This is the first record of the species from Uttaranchal and western Himalaya.
V. Family VESPIDAE
Subfamily POLISTINAE

11. Polistes tenebricosus sulcatus Smith

*Material examined*: India: Uttarakhand, Uttarkashi dist., Sabror vill., *ca* 5 km from Naitwar, 1325 m, 1 ♀, 7.x.1993, coll. Arun Kumar & party.

*Distribution*: India: Jammu Kashmir, Uttarakhand, Sikkim, West Bengal, Assam and Meghalaya.

*Elsewhere*: China and Japan.

12. Parapolybia varia (Fabricius)


*Distribution*: India: H.P., Punjab, Delhi, Uttarakhand, Uttar Pradesh, Sikkim, West Bengal, Assam, Meghalaya and Manipur.

*Elsewhere*: Nepal; Myanmar; Philippines; Malaysia; Indonesia; China and Japan.

Subfamily VESPINAE

13. Vespa velutina auraria Smith

*Material examined*: India: Uttarakhand, Uttarkashi dist., Naitwar, Rupin Valley higher bank, 1300-1350 m, 3 workers, 7.x.1993, Sabror vill., *ca* 5 km from Naitwar 1325 m, 5 workers, 7.x.1993, coll. Arun Kumar & party; Naitwar, 1530 m, 3 workers, 3.xi.1996, Naitwar – Himri trek, 1400-1450 m, 4.xi.1996, coll. J.P. Sati & party; Sankri vill., *ca* 12 km from Naitwar, 1 worker, 1.x.1993, on road from Taluka to Sankri, *ca* 4 km from Taluka, 2 workers, 12.x.1993, from Taluka – Osla road, *ca* 4 km from Taluka, 2500 m, 1 worker, 13.x.1993, coll. Arun Kumar & party; Gian gad, *ca* 8 km from Sankri on Taluka road, 2 workers 30.x.1996, coll. J.P. Sati & party; on way to Har-ki-dun, *ca* 19 km from Osla, 3000-3480 m, 1 worker, 12.x.1993, Guiyan Ghati on Jakhol road, *ca* 20 km from Naitwar, 1300-1400 m, 1 worker, coll. Arun Kumar & party.

*Distribution*: India: Uttarakhand (Kumaon & Garhwal Hills), Himachal Pradesh and Meghalaya.

*Elsewhere*: Myanmar and Nepal.

14. Vespula flaviceps flaviceps Smith

road, 1900 m, 1 ♂, 30.x.1996, Kedarkanta trek, 1900-2800 m, 3 ♂, 2.xi.1996, coll. J.P. Sati & party; Taluka Sankri road, 1800 m, 2 ♂, 12.x.1993, on way to Har-ki-dun, ca 19 km from Osla, 3000-3480 m, 5 ♂, 7 ♀, 12.x.1993, Arun Kumar & party.


Elsewhere: Nepal; Myanmar; China; Korea and southern Primores.

15. *Vespula structor* Smith

Material examined: India: Uttarakhand, Uttarkashi dist., on way to Har-ki-dun, ca 19 km from Osla, 3000-3480 m, 2 ♂, 12.x.1993, coll. Arun Kumar & party.


Elsewhere: Nepal and China.

VI. Family SPHECIDA

Subfamily SPHECINAE

16. *Ammophila atripes* Smith


Distribution: India: Uttarakhand and Himachal Pradesh.


17. *Ammophila punctata* Smith

Material examined: India: Uttarakhand, Uttarkashi dist., Naitwar, 1400 m, 3 ♂, 3 ♀, 3.xi.1996, Chibbara Khad, ca 2 km from Naitwar on Mori road, 1375 m, 2 ♂, 1 ♀, 6.xi.1996, coll. J.P. Sati & party; Sabor vill, ca 5 km from Naitwar, 1325 m, 4 ♂, 7 ♀, 7.X.1993, Sankri vill, 1420 m, 1 ♂, 9.x.1993, Sakhrola vill., ca 17 km from Naitwar, 1 ♂, 8.x.1993, coll. Arun Kumar & party, Manora Khad & Landhora vill., Naitwar – Sankri road, 1500 m, 2 ♂, 1 ♀, 5.xi.1996, J.P. Sati & party; Taluka, 1900 m, 1 ♂, 1 ♀, 11.x.1993, Taluka – Osla road, ca 4 km from Taluka 2 ♂, 2 ♀, 13.x.1993; coll. Arun Kumar & party; Har-ki-dun gad at bridge, ca 8 km from Sankri on Jakhol road, 1 ♂, 1 ♀, 29.x.1996; coll. J.P. Sati & party; Jakhol, 2525 m, 1 ♂, 16.vi.1994, Sirga vill., 2500-3000 m, 1 ♂, 10 ♀, 14.vi.1994, Sunkundi vill, ca 5 km from Jakhol, 2000 m, 2 ♂, 18 ♀, 15.vi.1994, coll. N.K. Sinha & party; Kedarkanta trek, 1900-2800 m, 1 ♂, 2.xi.1996, coll. J.P. Sati & party; on way to Har-ki-dun, ca 19 km from Osla, 3000-3480 m, coll. Arun Kumar & party.
**Distribution**: India: Uttaranchal, Himachal Pradesh and Sikkim.

*Elsewhere*: Myanmar.

18. *Podalonia* sp.

*Material examined*: India: Uttarakhand, Uttarkashi dist., on way to Har-ki-dun, ca 19 km from Osia, 3000-3480 m, 3 ♂, 12.x.1993, coll. Arun Kumar & party.

*Remarks*: This undescribed species, represented by three female specimens, superficially resembles *Podalonia laeta* (Bingham) of Afghanistan in having, more or less, similar body coloration. It can, however, be easily differentiated by having propodeal vesture black instead of yellowish white and propodeal dorsum transversely striated instead of being punctate.

**Subfamily PEMPHREDONINAE**

19. *Psen orientalis* Cameron

*Material examined*: India: Uttarakhand, Uttarkashi dist., Taluka – Sankri road., ca 4 km from Taluka, 1800 m, 3 ♂, 12.x.1993, Taluka – Osia road, ca 4 km from Taluka, 2500 m, 1 ♂, 13.x.1993; Taluka, 1 ♂, 11.x.1993, coll. Arun Kumar & party; Har-ki-dun at bridge, ca 8 km from Sankri on Jakhol road, 1 ♂, 29.x.1996, coll. J.P. Sati & party.

*Distribution*: India: Uttarakhand and Himachal Pradesh (Shimla Hills).

20. *Pemphredon fuscipennis* (Cameron)

*Material examined*: Uttarakhand, Uttarkashi dist., Sankri vll., 1420 m, 2 ♂, 1 ♀, 9.x.1993, coll. Arun Kumar & party; Soud vll, ca 2 km from Sankri on Taluka road, 1900 m, 1 ♂, 30.x.1996, coll. J.P. Sati & party; Saruka Tal, ca 2 km from Jakhol, 2825 m, 1 ♂, 13.vi.1994, on way to Sirga vll. from Jakhol, 2500-3000 m, 3 ♂, 14.vi.1994; Taluka – Osia road, ca 5 km from Taluka, 1 ♂, 17.vi.1994, coll. N.K. Sinha & party.

*Distribution*: India: Uttarakhand (Garhwal Hills).

21. *Passaloecus* sp.


*Remarks*: The genus *Passaloecus* Schuckard, previously unknown from India, is recorded here with female specimens belonging to an undescribed species.

The genus with 21 known species is primarily Holarctic, with one of the species reaching to Taiwan in the Orient.
Subfamily ASTINAE

22. Dryudella sp.

Material examined: India: Uttarakhand, Uttarkashi dist., on way to Har-ki-dun, ca 19 km from Osla, 3000-3480 m, 3 ♂, 6 ♀, 12.x.1993, coll. Arun Kumar & party.

Remarks: This undescribed species, represented by series of both sexes, is close to Dryudella maculifrons (Cameron) known from Mussoorie (Uttarakhand). Both sexes, however, differ in lacking transverse yellow mark in front of anterior ocellus and having the tegulae black. In addition the enclosed space of the propodeum is coriaceous instead of being punctate.

VII. Family APIDAE

23. Megachile disjuncta (Fabricius)


Distribution: India: Widely distributed.

Elsewhere: Myanmar.

24. Apis (Apis) cerana indica (Fabricius)


Distribution: India: widely distributed.

Elsewhere: Nepal; Sri Lanka and Bangladesh.

25. Apis (Megapis) laboriosa Smith

Material examined: India: Uttarakhand, Uttarkashi dist., higher Bank from village Naitwar, 1300-1350 m, 1 worker, 7.x.1993, coll. Arun Kumar & party.

Distribution: India: Arunachal Pradesh, Sikkim, West Bengal (Darjeeling dist.) and Uttarakhand.

Elsewhere: Nepal, Myanmar and China.
REFERENCES


CENTIPEDES
(Chilopoda : Scolopendromorpha)

VINOD KHANNA
Zoological Survey of India, Northern Regional Station, Dehra Dun - 248 195

INTRODUCTION

The centipede fauna of the Himalayan Ecosystem, U.P., has been extensively studied and published by Khanna (1987, 1994, 1995, 1997, 1998a and 1998b) and Khanna and Kumar (1984) while the fauna of Himalayan Ecosystem, Himachal Pradesh has been studied by Khanna and Tripathi (1985, 1986) and Khanna (in press). The perusals of these references reveal the occurrence of 23 species of the Order Scolopendromorpha, including one belonging to the family Cryptopidae from Western Himalaya, Uttaranchal. With the record of *Rhysida longipes simplicior* Chamberlin during the present studies of the material from Gobind Pashu Vihar, Uttaranchal, the total of known species of Scolopendrid centipedes has been raised to twenty-four from Western Himalaya, Uttaranchal.

The collection of the centipedes made from the sanctuary on identification was found referable to the following six species. All are first records from the sanctuary.

1. *Rhysida monalii* Khanna and Kumar
2. *Rhysida longipes simplicior* Chamberlin
3. *Otostigmus pooname* Khanna and Tripathi
4. *Otostigmus politus quadrispinosus* Khanna
5. *Cormocephalus dentipes* Pocock
6. *Scolopendra morsitans* Linnaeus

<table>
<thead>
<tr>
<th>Family</th>
<th>SCOLOPENDRIDAE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subfamily</td>
<td>OTOSTIGMINAE</td>
</tr>
<tr>
<td>Tribe</td>
<td>Otostignini</td>
</tr>
</tbody>
</table>

1. *Rhysida monalii* Khanna and Kumar


2. *Rhysida longipes simplicior* Chamberlin


*Distribution*: India: Delhi and Tamil Nadu.

*Remarks*: First record of the species from Uttarakhand.

3. *Otostigmus poonamae* Khanna and Tripathi


*Distribution*: India: Himachal Pradesh and Uttarakhand.

4. *Otostigmus politus quadrispinosus* Khanna


*Distribution*: India: Himachal Pradesh and Uttarakhand.

*Remarks*: Additional records from the area.

5. *Cormocephalus dentipes* Pocock


*Distribution*: India: Andaman & Nicobar Islands, Bihar, Delhi, Himachal Pradesh, Meghalaya, Mizoram, Madhya Pradesh, Orissa, West Bengal, Uttarakhand and Uttar Pradesh.

*Remarks*: Additional distribution records from the area.

6. *Scolopendra morsitans* Linnaeus


*Distribution*: Cosmopolitan.
SUMMARY

One species *Rhysida longipes simplicior* Chamberlin has been recorded for the first time from Uttarakhand while species *Rhysida monalii*, Khanna and Kumar, *Otostigmus poonamae* Khanna and Tripathi and *Cormocephalus dentipes* Pocock are already known from Uttarkashi district of the Western Himalaya, Uttarakhand. The species *Otostigmus politus quadrispinosus* and *Scolopendra morsitans* though already known widely from Western Himalaya, Uttarakhand are an addition to the known centipedes fauna of district Uttarkashi from Gobind Pashu Vihar.

REFERENCES


INTRODUCTION

In spite of the best efforts, no local fish species could be collected from the Sanctuary area. However *Salmo trutta fario* Linnaeus, the Brown Trout, an exotic fish, washed down from Himachal Pradesh through the Tons where it has been introduced and *Catla catla* (Hamilton-Buchanan), the Katla, one of the major Indian carps, probably being tried for culture by local people, are the only fishes which have been collected during 1994 and 1996 surveys. *Schizothorax richardsonii* (Gray) is reported to ascend the area during rainy and breeding seasons but surprisingly not a single specimen of this too was collected.

Earlier Husain (1995) enlisted 27 species from Uttarkashi, the Sanctuary district and Prasad & Pant (1980) studied the propagation of trout in the district.

SYSTEMATIC ACCOUNT

Class OSTEICHTHYES
Order CYPRINIFORMES
I. Family CYPRINIDAE

1. *Catla catla* (Hamilton - Buchanan)
   Katla


   *Distribution:* India : Northern India and up to Krishna river in south, introduced into Kaveri river system.

   *Elsewhere:* Pakistan; Nepal; Bangladesh; Myanmar; Thailand. Introduced in China and Sri Lanka.

   *Remarks:* The species is not naturally found in the area. Being one of the renowned major carps it must have been introduced in the tank for experimental culturing.
Order  SALMONIFORMES
II. Family  SALMONIDAE

2. *Salmo trutta fario* Linnaeus
   Brown Trout


*Distribution*: India: Introduced.

*Elsewhere*: Naturally found in Eurasia. Introduced into Pakistan; S. Africa; Australia; N. America; New Zealand; Japan etc.

*Remarks*: Brought to India from U.K. in 1899 and 1901 and introduced in Himalayan region for sport.

**REFERENCES**


INTRODUCTION

The amphibian fauna is scarcely known in general. During the present study four species, two each of frogs and toads were collected from the Sanctuary area and the occurrence of *Rana limnocharis* Boie and *R. leibigii* Gunther is being reported for the first time from the district itself. Earlier Ray (1995) recorded six species from the district, out of which the *Bufo* spp. are common to the present find. Waltner (1974) studied the geographical and altitudinal distribution of amphibians in Himalayan region.

SYSTEMATIC ACCOUNT

Order ANURA

1. Family RANIDAE

1. *Rana leibigii* Gunther

*Mountain Frog*


*Remarks*: In the present material the glandular fold on each side of the back is not well defined. The species appears breeding before monsoon.

2. *Rana limnocharis* Boie

*Paddy-field Frog*

& party; Soud vill., ca 2 km from Sankri, Taluka road, 2 exs (tadpoles), 30.x.1996; Naitwar-Himri trek, alt. ca 1450-1500 m, 1 ex., 4.xi.1996; Manora khad, Landhora vill., alt. ca 1500 m, 12 exs. (5 adults, 7 tadpoles), 5.xi.1996; Chhibara khad nr. G.V.J. Vihar Gate, alt. ca 1375 m., 11 exs., 6.xi.1996, coll. J.P. Sati & party.

**Distribution**: India: Plains and Himalaya up to 2500 m.

**Elsewhere**: Japan, China, Pakistan, Sri Lanka, Malay Peninsula, Philippines, Borneo, Lombok.

**Remarks**: A highly variable species as regard colour pattern.

II. Family BUFONIDAE

3. *Bufo himalayanus* Gunther

**Mountain Toad**

**Material examined**: India: Uttaranchal, Uttarkashi dist., Confluence of Chhibara khad and Tons river, ca 3-4 km from Naitwar, Mori road, 1 ex., 20.iii.1996; Fish tank, Taluka, 2 exs., 31.iii.1996, coll. Akhlaq Husain & party.

**Distribution**: India: all along Himalaya.

**Elsewhere**: Nepal.

**Remarks**: Largest toad of India. Parotid gland low and almost concealing the tympanum.

4. *Bufo melanostictus* Schneider

**Common Toad**


**Distribution**: India: Plains to about 2000 m.

**Elsewhere**: Pakistan, Nepal.

**Remarks**: It can be easily differentiated from *B. himalayanus* in the presence of black edged cranial ridge.

**REFERENCES**


INTRODUCTION

The study of reptiles, particularly that of snakes has always been a difficult task due to various suppressions and the fear of being bitten. During the present study three species each of lizards and snakes were collected from the Sanctuary area of which *Eumeces taeniolatus* (Blyth) and *Boiga* spp. are new to the known fauna of the district. Earlier Husain & Ray (1995) listed seven and eleven species of lizards and snakes respectively. Waltner (1974) gave geographical and altitudinal distribution pattern of reptiles in Himalaya in general.

SYSTEMATIC ACCOUNT

Class REPTILIA
Order SAURIA
I. Family AGAMIDAE

1. *Agama tuberculata* Hardwicke & Gray
   **Common Rock Lizard**


   *Elsewhere*: Pakistan; Nepal; Afghanistan.

   *Remarks*: Most common lizard of Western Himalaya.

II. Family SCINCIDAE

2. *Scincella himalayanum* (Gunther)
   **Himalayan Skink**

   *Material examined*: India : Uttaranchal, Uttarkashi dist. Fafrala vill., alt. ca 2000 m, ca 9 km from FRH, Naitwar, 1 ex., 6.x.1993; Sakhrola, ca 17 km from Naitwar, 1 ex., 8.x.1993;

Distribution : India : Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Uttar Pradesh (ascending up to 3658 m, common between 1219 m and 2734 m).

Elsewhere : Pakistan; Nepal and Turkistan.

The study of reptiles, particularly that of snakes has always been a difficult task due to various superstions and the fear of being bitten. During the present study three species each of lizards and snakes were collected from the Sanctuary area of which *Eumeces taeniolatus* (Blyth) and *Boiga* spp are new to the known fauna of the district. Earlier Husain & Ray (1995) listed seven and eleven species of lizards and snakes respectively. Waltner (1974) gave geographical and altitudinal distribution pattern of reptiles in Himalaya in general.

Remarks : Small Skink, preferring damp areas or open grassy patches generally between 400 and 1200 m.

3. *Eumeces taeniolatus* (Blyth)
Yellow-bellied Mole


Distribution : India : Jammu & Kashmir, Uttarakhand, Rajasthan, Gujarat.

Elsewhere : Pakistan, Arabia to Transcaspia.

Remarks : Most secretive and agile lizard. Generally found in sandy burrows and understones in rocky habitats. First record from Uttarkashi district, Uttarakhand.
Order SERPENTES

III. Family NATRICIDAE

4. *Amphiesma platyceps* (Blyth)

**Mountain Keelback**


*Distribution*: India: Himalaya, generally between 1524 m and 1829 m.

*Elsewhere*: Nepal; Myanmar up to 3048 m.

*Remarks*: Males comparatively longer than females. Colouration variable.

IV. Family HOMALOPSIDAE

Subfamily BOIGINAE

5. *Boiga multifasciata* (Blyth)

**Himalayan Cat Snake**


*Distribution*: India: Himalaya, 900 m to 2700 m generally above 1524 m.


6. *Boiga trigonata* (Schneider)

**Common Cat Snake/Indian Gamma**


*Distribution*: India: Throughout, plains to 1500 m.

*Elsewhere*: Pakistan; Sri Lanka. First record from Uttarkashi district, Uttaranchal.


**REFERENCES**


AVES

P.C. TAK, J.P. SATI AND P. KUMAR

Zoological Survey of India, Northern Regional Station, Dehra Dun – 248 195

INTRODUCTION

The working plan for the Tons Division (1965-66 to 1974-75) by Pandey mentioned over 50 names of birds. Govind Pashu Vihar (GPV) forms a part the Tons Division in district Uttarkashi of the state Uttaranchal. Prasanna and Bagchi (1994) provided observations for more than 30 species of birds along the trek from Sankri (1500 m) to Harkidun (3557 m) in GPV. Sathyakumar (1994) gave an indication of occurrence of more than 100 species of birds, but without any list. Sathyakumar (in press) detailed seven species of Galliformes (game birds) along with their encounter rates etc. in GPV. The present communication is primarily based on the various faunistic surveys (1994-96) of GPV area. It also incorporates 11 exclusive species of birds recorded by Prasanna and Bagchi (1994) and two species (Chir Pheasant and Woodcock) of the above mentioned working plan. Thus, the present systematic list provides 115 species of birds. The list also provides status, localities within GPV, and the altitudinal range for each bird species. The altitudinal range explored during the present surveys varied from ca 1300-3600 m. However, the existing knowledge on zoogeography of birds suggest that the GPV, an area of 957.97 sq. km., may support more than 300 species of birds. This invites further intensive ornithological surveys in the area.

ANALYSIS AND RESULTS

These 115 species of birds belong to 82 genera, 31 families and 11 orders. The nomenclature followed is after Ali and Ripley (1968-78). The subspecific level is included on the basis of the reported range of the subspecies. For convenience, the Handbook number has been given within bracket following the common English name of each bird species (Table).

The status of 115 species is as follows (after Ali & Ripley, 1968-78) (Table):

<table>
<thead>
<tr>
<th>Status</th>
<th>Species (Nos. only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>Resident (including Rbr+, R/Sbr+, br+ &amp; R/M)</td>
</tr>
<tr>
<td>R/LM</td>
<td>Resident with local movements</td>
</tr>
<tr>
<td>R/AM</td>
<td>Resident with altitudinal movements</td>
</tr>
</tbody>
</table>
A familywise analysis revealed that the family Muscicapidae (the most crowded family of the passerine or song birds) predominates (30 species); followed by Phasianidae – the game birds (11); Accipitridae (9); Corvidae (8); Columbidae (7); Picidae (6); Paridae, Ploceidae and Fringillidae (4 each); Pycnonotidae and Sittidae (3 each) and so on (Table).

The altitudinal records as documented in Ali & Ripley (1968-78) are presented against each bird species. The present observations revealed that as many as eight species (out of 102 species observed during the present surveys) have been recorded beyond their documented altitudinal range. This has been indicated with the sign of plus (+), wherever applicable, in column for the altitude (Table). This does not include 11 exclusive species of Prasanna and Bagchi (1994) and two species of the working plan. The eight species are as follows:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Species</th>
<th>Altitudinal Range (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Documented</td>
</tr>
<tr>
<td>1.</td>
<td>Indian Shikra (138)</td>
<td>1400</td>
</tr>
<tr>
<td>2.</td>
<td>Himalayan Redbilled Blue Magpie (1027)</td>
<td>1000-2100</td>
</tr>
<tr>
<td>3.</td>
<td>West Himalayan Tree Pie (1037)</td>
<td>600-2100</td>
</tr>
<tr>
<td>4.</td>
<td>Pale Blue Flycatcher (1439)</td>
<td>Foothills-1200</td>
</tr>
<tr>
<td>5.</td>
<td>Northern Pied Bush Chat (1700)</td>
<td>up to 1500</td>
</tr>
<tr>
<td>6.</td>
<td>Western Chestnutbelled Nuthatch (1827)</td>
<td>300-1500</td>
</tr>
<tr>
<td>7.</td>
<td>Indian White-eye (1933)</td>
<td>up to 1500</td>
</tr>
<tr>
<td>8.</td>
<td>Himalayan Greenfinch (1990)</td>
<td>1300-2700</td>
</tr>
</tbody>
</table>

= For localities vide Table.
TAK et al. : Aves

The most notable feature about the avifauna of GPV is the survival of the much-depleted populations of the following six threatened species of birds.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Species</th>
<th>Red Data Book</th>
<th>W(P) Act</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ZSI 1994</td>
<td>IUCN 1990</td>
</tr>
<tr>
<td>1.</td>
<td>Himalayan Bearded Vulture</td>
<td>Endangered</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Western Tragopan</td>
<td>Endangered</td>
<td>Vulnerable</td>
</tr>
<tr>
<td>3.</td>
<td>Satyr or Crimson Horned Tragopan</td>
<td>Vulnerable</td>
<td>-</td>
</tr>
<tr>
<td>4.</td>
<td>Impeyan or Himalayan Monal Pheasant</td>
<td>Endangered</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>Koklass Pheasant</td>
<td>Vulnerable</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>Cheer Pheasant</td>
<td>Endangered</td>
<td>Vulnerable</td>
</tr>
</tbody>
</table>

REFERENCES


### SYSTEMATIC LIST

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the species</th>
<th>Status</th>
<th>Distribution</th>
<th>Altitudinal range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Order FALCONIFORMES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Family ACCIPITRIDAE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Accipiter badius dussumieri (Temminck)</td>
<td>R</td>
<td>Sankri</td>
<td>+ 1400 m</td>
</tr>
<tr>
<td></td>
<td><strong>Indian Shikra</strong> (138)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>A. trivirgatus indicus (Hodgson)</td>
<td>R</td>
<td>Himri</td>
<td>2000 m</td>
</tr>
<tr>
<td></td>
<td><strong>North Indian Crested Goshawk</strong> (144)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Aquila chrysaetos daphanea Severtzov</td>
<td>R</td>
<td>Naitwar, Dhaula</td>
<td>1850-snowline</td>
</tr>
<tr>
<td></td>
<td><strong>Himalayan Golden Eagle</strong> (166)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Ictinaetus malayensis perniger (Hodgson)</td>
<td>R</td>
<td>Naitwar, Himri</td>
<td>up to 2700 m</td>
</tr>
<tr>
<td></td>
<td><strong>Black Eagle</strong> (172)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Gyps himalayensis Hume</td>
<td>R</td>
<td>Naitwar, Jakhol, Saruka Tal, Himri, Dhaula, Duni, Satta,</td>
<td>600-2500 m</td>
</tr>
<tr>
<td></td>
<td><strong>Himalayan Griffon Vulture</strong> (181)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Gyps bengalensis (Gmelin)</td>
<td>R</td>
<td>Naitwar, Himri</td>
<td>1500-2500 m</td>
</tr>
<tr>
<td></td>
<td><strong>Indian Whitebacked Vulture</strong> (185)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Neophron percnopterus ginginianus (Latham)</td>
<td>R</td>
<td>Naitwar, Himri</td>
<td>up to 2000 m</td>
</tr>
<tr>
<td></td>
<td><strong>Indian Scavenger Vulture</strong> (187)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8.</td>
<td>Gypaetus barbatus aureus (Hablizl)</td>
<td>R</td>
<td>Taluka, Osla,</td>
<td>1200-4000 m</td>
</tr>
<tr>
<td></td>
<td><strong>Himalayan Bearded Vulture</strong> (188)</td>
<td></td>
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<tr>
<td>9.</td>
<td>Spilornis cheela cheela (Latham)</td>
<td>R/LM</td>
<td>Dhaula</td>
<td>up to 2000 m</td>
</tr>
<tr>
<td></td>
<td><strong>Crested Serpent Eagle</strong> (196)</td>
<td></td>
<td></td>
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<tr>
<td><strong>10.</strong></td>
<td>Falco subbuteo subbuteo Linnaeus</td>
<td>WV</td>
<td>Sankri</td>
<td>1220-2135 m</td>
</tr>
<tr>
<td></td>
<td><strong>Hobby</strong> (212)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11.</td>
<td>Falco tinnunculus tinnunculus Linnaeus</td>
<td>Rbr+</td>
<td>Naitwar</td>
<td>700- 3300 m</td>
</tr>
<tr>
<td></td>
<td><strong>European Kestrel</strong> (222)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Lerwa lerwa (Hodgson)</td>
<td>R</td>
<td>Harkidun, Jura Tal</td>
<td>2500-5000 m</td>
</tr>
<tr>
<td></td>
<td><strong>Snow Partridge</strong> (227)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Name of the species</td>
<td>Status</td>
<td>Distribution</td>
<td>Altitudinal range</td>
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<tr>
<td>13.</td>
<td><em>Tetraogallus himalayensis</em> <em>himalayensis</em> J.E.Gray Himalayan Snowcock (232)</td>
<td>R</td>
<td>Harkidun</td>
<td>2400-5000 m</td>
</tr>
<tr>
<td>14.</td>
<td><em>Alectoris chukar chukar</em> (J.E.Gray) Chukar Patridge (236)</td>
<td>R</td>
<td>Jakhol</td>
<td>1200-5000 m</td>
</tr>
<tr>
<td>15.</td>
<td><em>Francolinus francolinus</em> <em>asiae</em> Stephens Indian Black Partridge (238)</td>
<td>R</td>
<td>Naitwar, Sankri, Sunkhundi</td>
<td>up to 2500 m</td>
</tr>
<tr>
<td>16.</td>
<td><em>Arbophila torqueola torqueola</em> Hodgson Common Hill Partridge (267)</td>
<td>R</td>
<td>Istragad</td>
<td>1500-4000 m</td>
</tr>
<tr>
<td>17.</td>
<td><em>Tragopan melanocephalus</em> (J.E. Gray) Western Horned Pheasant (285)</td>
<td>R</td>
<td>Pustara peak area 1350-3600 m above Giyan gad, Obera gad-Manjeevan peak area in Supin valley</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td><em>T. satyra</em> (Linnaeus) Crimson Horned Pheasant or Satyr Tragopan (286)</td>
<td>R</td>
<td>Sympatrism reported by Prasad (1993)</td>
<td>1800-4250 m</td>
</tr>
<tr>
<td>19.</td>
<td><em>Lophophorus impejanus</em> (Latham) Impeyan or Himalayan Monal Pheasant (290)</td>
<td>R</td>
<td>Saruka Tal</td>
<td>2600-5000 m</td>
</tr>
<tr>
<td>20.</td>
<td><em>Lophura leucomelana hamiltonii</em> (J.E.Gray) Whitecrested Kaleej Pheasant (293)</td>
<td>R</td>
<td>Naitwar, Taluka, Himri, Dhaula, Istragad</td>
<td>400-3600 m</td>
</tr>
<tr>
<td>21.</td>
<td><em>Pucrasia macrolopha macrolopha</em> (Lesson) Koklas (305)</td>
<td>R</td>
<td>Osla, Sirga, Saruka Tal</td>
<td>1500-4000 m</td>
</tr>
<tr>
<td><strong>22.</strong></td>
<td><em>Careus wallichii</em> (Hardwicke) Chir Pheasant (307)</td>
<td>R **</td>
<td>2135-3050 m</td>
<td></td>
</tr>
<tr>
<td><strong>23.</strong></td>
<td><em>Scolopax rusticola rusticola</em> Linnaeus Woodcock (411)</td>
<td>br+ **</td>
<td>2000 -3800 m</td>
<td></td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Name of the species</td>
<td>Status</td>
<td>Distribution</td>
<td>Altitudinal range</td>
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</tr>
<tr>
<td>IV. Order COLUMBIFORMES 5. Family COLUMBIDAE</td>
<td>TReron phoenicoptera (Latham) <strong>Green Pigeon</strong> (493-505)</td>
<td>R/LM</td>
<td>Naitwar</td>
<td>Gangetic plains to Himalayan foothills</td>
</tr>
<tr>
<td>25.</td>
<td><em>Columba</em> leuconota leuconota Vigors <strong>West Himalayan Snow Pigeon</strong> (513)</td>
<td>R</td>
<td>Taluka, Osla, Harkidun, Saruka Tal</td>
<td>1500-5000 m</td>
</tr>
<tr>
<td>26.</td>
<td><em>C. livia intermedia</em> Strickland <strong>Indian Blue Rock Pigeon</strong> (517)</td>
<td>R</td>
<td>Naitwar, Jakhol, Himri, Dhaula, Istragad</td>
<td>up to 3000 m in Himalayas</td>
</tr>
<tr>
<td><em>27. Streptopelia orientalis orientalis</em> (Latham) <strong>Rufous Turtle Dove</strong> (530)</td>
<td>WV</td>
<td>Seema</td>
<td>150-3660 m</td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td><em>Streptopelia orientalis meena</em> (Sykes) <strong>Western Turtle Dove</strong> (531)</td>
<td>Rbr+</td>
<td>Naitwar, Taluka, Sunkhundi, Jakhol, Sirga</td>
<td>up to 4000 m</td>
</tr>
<tr>
<td>29.</td>
<td><em>S. decaocto decaocto</em> (Frivaldszky) <strong>Indian Ring Dove</strong> (534)</td>
<td>R/LM</td>
<td>Naitwar</td>
<td>up to 2400 m</td>
</tr>
<tr>
<td>30.</td>
<td><em>S. chinensis suratensis</em> (Gmelin) <strong>Indian Spotted Dove</strong> (537)</td>
<td>R/AM</td>
<td>Naitwar, Sankri, Taluka, Dhaula, Duni, Satta</td>
<td>up to 2400 m in Himalayas</td>
</tr>
<tr>
<td>V. Order PSITTACIFORMES 6. Family PSITTACIDAE</td>
<td><em>Psittacula cyanocephala bengalensis</em> (Forster) <strong>Northern Blossomheaded Parakeet</strong> (557)</td>
<td>R/LM</td>
<td>Sankri, Taluka, Himri, Dhaula, Duni, Istragad</td>
<td>up to 1500 m in Himalayas</td>
</tr>
<tr>
<td>32.</td>
<td><em>P. himalayana</em> (Lesson) <strong>Himalayan Slatyheaded Parakeet</strong> (562)</td>
<td>R/AM</td>
<td>Naitwar</td>
<td>600-2590 m</td>
</tr>
<tr>
<td>VI. Order STRIGIFORMES 7. Family STRIGIDAE</td>
<td><em>Strix leptogrammica newarensis</em> (Hodgson) <strong>Himalayan Brown Wood Owl</strong> (658)</td>
<td>R</td>
<td>Duni</td>
<td>750-2450 m</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Name of the species</td>
<td>Status</td>
<td>Distribution</td>
<td>Altitudinal range</td>
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<tr>
<td>VII.</td>
<td>CAPRIMULGIFORMES</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8.</td>
<td>Family CAPRIMULGIDAE</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>34.</td>
<td><em>Caprimulgus indicus hazarae</em></td>
<td>R/AM Sirga</td>
<td>Himalayan Jungle Nightjar (670)</td>
<td>Foothills to 3300 m</td>
</tr>
<tr>
<td>VIII.</td>
<td>APODIFORMES</td>
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<tr>
<td>9.</td>
<td>Family APODIDAE</td>
<td></td>
<td></td>
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<tr>
<td>35.</td>
<td><em>Apus pacificus leuconyx</em> (Blyth)</td>
<td>UnC Taluka</td>
<td>Blyth’s or Himalayan Whiterumped Swift (700)</td>
<td>600-3600 m in Himalayas</td>
</tr>
<tr>
<td>IX.</td>
<td>CORACIIFORMES</td>
<td></td>
<td></td>
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<tr>
<td>10.</td>
<td>Family ALCEDINIDAE</td>
<td></td>
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</tr>
<tr>
<td>36.</td>
<td><em>Ceryle lugubris continentalis</em> Hartert</td>
<td>R Himri</td>
<td>West Himalayan Pied Kingfisher (717)</td>
<td>Terai-2000 m</td>
</tr>
<tr>
<td>X.</td>
<td>PICIFORMES</td>
<td></td>
<td></td>
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<tr>
<td>12.</td>
<td>Family CAPITONIDAE</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>38.</td>
<td><em>Megalaima virens marshallorum</em> Swinhoe</td>
<td>R/AM Sankri, Taluka, Sunkhundi, Jakhol, Dhaula, Mashri, Istragad</td>
<td>Himalayan Great Barbet (777)</td>
<td>Foothills-3000 m</td>
</tr>
<tr>
<td>13.</td>
<td>Family PICIDAE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39.</td>
<td><em>Picus squamatus squamatus</em> Vigors</td>
<td>R/AM Duni</td>
<td>Himalayan Scalybellied Green Woodpecker (807)</td>
<td>1000-3000 m</td>
</tr>
<tr>
<td>40.</td>
<td><em>P. canus sanguiniceps</em> Baker</td>
<td>R Naitwar, Dhaula</td>
<td>Indian Blacknaped Green Woodpecker (809)</td>
<td>Terai-2400 m</td>
</tr>
<tr>
<td>41.</td>
<td><em>P. flavinucha kumaonensis</em> (Koelz)</td>
<td>R Naitwar</td>
<td>Kumaon Large Yellownaped Woodpecker (812)</td>
<td>Foothills-1700 m</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Name of the species</td>
<td>Status</td>
<td>Distribution</td>
<td>Altitudinal range</td>
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<tr>
<td>42.</td>
<td><em>Hypopicus hypythrurus marshalli</em> (Hartert) Western Rufousbellied Woodpecker (832)</td>
<td>R</td>
<td>Sankri</td>
<td>1600-3000 m</td>
</tr>
<tr>
<td>43.</td>
<td>Picoides himalayensis himalayensis (Jardine &amp; Selby) Garhwal Pied Woodpecker (837)</td>
<td>R</td>
<td>Naitwar, Jakhol, Sirga, Saruka Tal</td>
<td>1000-3000 m</td>
</tr>
<tr>
<td>44.</td>
<td><em>P. auriceps auriceps</em> (Vigors) West Himalayan Brownfronted Pied Woodpecker (842)</td>
<td>R</td>
<td>Naitwar, Dhaula, Satta</td>
<td>700-3300 m</td>
</tr>
<tr>
<td></td>
<td>XI. Order PASSERIFORMES</td>
<td></td>
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<tr>
<td></td>
<td>14. Family HIRUNDINIDAE</td>
<td></td>
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<tr>
<td>45.</td>
<td><em>Delichon urbica</em> (Linnaeus) House Martin (931, 32 ?)</td>
<td>R</td>
<td>Sankri</td>
<td>1500-5000 m</td>
</tr>
<tr>
<td>46.</td>
<td><em>Hirundo rupestris</em> Scopoli Crag Martin (913)</td>
<td>br+</td>
<td>Duni</td>
<td>1600-5000 m</td>
</tr>
<tr>
<td></td>
<td>15. Family ORIOLIDAE</td>
<td></td>
<td></td>
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<tr>
<td>47.</td>
<td><em>Oriolus traillii traillii</em> (Vigors) Indian Maroon Oriole (961)</td>
<td>R/LM</td>
<td>Istragad</td>
<td>Lower Himalayas to 2400 m</td>
</tr>
<tr>
<td></td>
<td>16. Family DICRURIDAE</td>
<td></td>
<td></td>
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<tr>
<td>48.</td>
<td><em>Dicrurus adsimilis albirictus</em> (Hodgson) North Indian Black Drongo or King Crow (962)</td>
<td>R/LM</td>
<td>Naitwar, Dhaula, Istragad</td>
<td>Plains-2100 m</td>
</tr>
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<td></td>
<td>17. Family STURNIDAE</td>
<td></td>
<td></td>
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<tr>
<td>49.</td>
<td><em>D. leucophaeus longicaudatus</em> Hay Indian Ashy Drongo (965)</td>
<td>br+</td>
<td>Naitwar, Sankri, Jakhol</td>
<td>Foothills-3300 m</td>
</tr>
<tr>
<td></td>
<td>18. Family CORVIDAE</td>
<td></td>
<td></td>
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<tr>
<td>50.</td>
<td><em>Acridotheres tristis tristis</em> (Linnaeus) Indian Myna (1006)</td>
<td>br+</td>
<td>Naitwar, Sankri, Taluka, Jakhol, Duni</td>
<td>up to 3000 m</td>
</tr>
<tr>
<td></td>
<td>19. Family <em>Garrulus glandarius bispecularis</em> Vigors</td>
<td>R/AM</td>
<td>Seema</td>
<td>1000-2500 m</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Name of the species</td>
<td>Status</td>
<td>Distribution</td>
<td>Altitudinal range</td>
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<tr>
<td>52.</td>
<td><em>Cissa flavirostris cucullata</em> (Gould) Western Yellowbilled Blue Magpie (1025)</td>
<td>R/AM</td>
<td>Naitwar</td>
<td>1600-3300 m</td>
</tr>
<tr>
<td>53.</td>
<td><em>C. erythrorhyncha occipitalis</em> (Blyth) Himalayan Redbilled Blue Magpie (1027)</td>
<td>R/AM</td>
<td>Naitwar, Jakhol</td>
<td>+ 1000-2100 m</td>
</tr>
<tr>
<td>54.</td>
<td><em>Dendrocitta formosae occidentalis</em> Ticehurst West Himalayan Tree Pie (1037)</td>
<td>R/AM</td>
<td>Naitwar, Sankri, Osla</td>
<td>+ 600-2100 m</td>
</tr>
<tr>
<td>55.</td>
<td><em>Nucifraga caryocatactes hemispila</em> Vigors Himalayan Nutcracker (1043)</td>
<td>R</td>
<td>Naitwar, Sankri, Jaura Tal</td>
<td>2000-3300 m</td>
</tr>
<tr>
<td>56.</td>
<td><em>Pyrrhocorax graculus digitatus</em> Hemprich &amp; Ehremberg Yellow-billed Chough (1045)</td>
<td>R/AM</td>
<td>Harkidun</td>
<td>1800-5000 m</td>
</tr>
<tr>
<td>57.</td>
<td><em>P. pyrrhocorax centralis</em> Streemann West Himalayan Redbilled Chough (1046)</td>
<td>R/AM</td>
<td>Taluka, Osla</td>
<td>1600-3500 m</td>
</tr>
<tr>
<td>58.</td>
<td><em>Corvus macrorhynchos intermedius</em> Adams Himalayan Jungle Crow (1054)</td>
<td>R/AM</td>
<td>Throughout</td>
<td>1800-4500 m</td>
</tr>
<tr>
<td>59.</td>
<td><em>Henipus picatus capitatis</em> (Horsfield) Brownbacked Pied Flycatcher-Shrike (1064)</td>
<td>R</td>
<td>Seema</td>
<td>Plains-2100 m</td>
</tr>
<tr>
<td>60.</td>
<td><em>Pericrocotus ethologus favillaceus</em> Bangs &amp; Phillips (1085) West Himalayan Longtailed Minivet (1085)</td>
<td>SV</td>
<td>Taluka, Sunkhundi, Jakhol, Sirga</td>
<td>1800-2400 m</td>
</tr>
<tr>
<td>61.</td>
<td><em>Pycnonotus leucogenys leucogenys</em> (Gray) Whitecheeked Bulbul (1125)</td>
<td>R/LM</td>
<td>Naitwar, Sankri, Dhaula</td>
<td>300-2100 m</td>
</tr>
<tr>
<td>62.</td>
<td><em>P. cafer intermedius</em> Byth Punjab Redvented Bulbul (1126)</td>
<td>R</td>
<td>Naitwar</td>
<td>Plains-1500 m</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Name of the species</td>
<td>Status</td>
<td>Distribution</td>
<td>Altitudinal range</td>
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<tr>
<td>63.</td>
<td>Hypsipetes madagascariensis psaroides Vigors</td>
<td>R/AM</td>
<td>Sankri, Taluka, Dhaula, Duni, Satta, Istragad</td>
<td>1000-2400 m</td>
</tr>
<tr>
<td>64.</td>
<td>Garrulax albogularis whistleri Baker Western Whitethroated Laughing Thrush (1273)</td>
<td>R/M</td>
<td>Sankari</td>
<td>1200-2900 m</td>
</tr>
<tr>
<td>65.</td>
<td>Minla strigula simlaensis (Meinertzhagen) Western Barthroated Siva (1358)</td>
<td>R/AM</td>
<td>Jakhol, Saruka Tal</td>
<td>1300-3600 m</td>
</tr>
<tr>
<td>66.</td>
<td>Yuhina gularis vivax Koelz Western Stripedthroated Yuhina (1371)</td>
<td>UnC</td>
<td>Duni</td>
<td>2500 m</td>
</tr>
<tr>
<td>67.</td>
<td>Heterophasia capistrata capistrata (Vigors) Western Blackcapped Sibia (1396)</td>
<td>R/AM</td>
<td>Sankri, Dhaula</td>
<td>1800-2700 m</td>
</tr>
<tr>
<td>68.</td>
<td>Muscicapa strophiata strophiata (Hodgson) Orangegorgeted Flycatcher (1414)</td>
<td>R/AM</td>
<td>Taluka</td>
<td>2400-3600 m</td>
</tr>
<tr>
<td>69.</td>
<td>M. westermanni collini Rothschild Western Little Pied Flycatcher (1419)</td>
<td>AM</td>
<td>Taluka</td>
<td>Plains-2500 m</td>
</tr>
<tr>
<td>70.</td>
<td>M. superciliaris superciliaris Jerdon Whitebrowed Blue Flycatcher (1421)</td>
<td>SV</td>
<td>Naitwar, Sankri, Taluka, Saruka Tal, Istragad</td>
<td>2100-2500 m</td>
</tr>
<tr>
<td>71.</td>
<td>M. leucomelanura leucomelanura (Hodgson) Western Slaty Blue Flycatcher (1423)</td>
<td>AM</td>
<td>Taluka</td>
<td>1800-3000 m</td>
</tr>
<tr>
<td>72.</td>
<td>M. sundara whistleri (Ticehurst) Western Rufousbellied Niltava (1431)</td>
<td>AM</td>
<td>Satta</td>
<td>1600-2700 m</td>
</tr>
<tr>
<td>73.</td>
<td>M. unicolor unicolor (Blyth) Pale Blue Flycatcher (1439)</td>
<td>UnC</td>
<td>Naitwar, Himri, Satta, Istragad</td>
<td>+ Foothill-1800 m</td>
</tr>
<tr>
<td>74.</td>
<td>M. thalassina thalassina Swainson Verditer Flycatcher (1445)</td>
<td>SV</td>
<td>Naitwar, Jakhol</td>
<td>1200-2700 m</td>
</tr>
<tr>
<td>75.</td>
<td>Culicicapa ceylonensis calochrysea Oberholser Northern Greyheaded Flycatcher (1448)</td>
<td>SV/R</td>
<td>Sankri, Taluka, Himri, Duni</td>
<td>1500-2400 m</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Name of the species</td>
<td>Status</td>
<td>Distribution</td>
<td>Altitudinal range</td>
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<tr>
<td>76.</td>
<td><em>Rhipidura hypoxantha</em> Blyth</td>
<td>AM</td>
<td>Naitwar, Dhaula</td>
<td>Plains-2400 m</td>
</tr>
<tr>
<td></td>
<td>Yellowbellied Faintail Flycatcher (1450)</td>
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<tr>
<td>77.</td>
<td><em>Orthotomus sutorius guzuratus</em> (Latham)</td>
<td>R</td>
<td>Naitwar</td>
<td>up to 1400 m in Himalaya</td>
</tr>
<tr>
<td></td>
<td>Indian Tailor Bird (1535)</td>
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<tr>
<td>78.</td>
<td><em>Phylloscopus affinis affinis</em> (Tickell)</td>
<td>SV</td>
<td>Jakhol</td>
<td>2700-3300 m</td>
</tr>
<tr>
<td></td>
<td>Tickell's Leaf Warbler (1579)</td>
<td></td>
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<tr>
<td>79.</td>
<td><em>P. inornatus humei</em> (Brooks)</td>
<td>SV</td>
<td>Jakhol</td>
<td>2100-3600 m</td>
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<tr>
<td></td>
<td>Hume's Yellowbrowed Leaf Warbler (1590)</td>
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<td>80.</td>
<td><em>P. maculipennis virens</em> Ticehurst</td>
<td>AM</td>
<td>Sunkhundi, Jakhol</td>
<td>1200-1500 m</td>
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<tr>
<td></td>
<td>Western Grayfaced Leaf Warbler (1597)</td>
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<tr>
<td>81.</td>
<td><em>P. occipitalis occipitalis</em> (Blyth)</td>
<td>SV</td>
<td>Istragad</td>
<td>1800-3200 m</td>
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<tr>
<td></td>
<td>Large Crowned Leaf Warbler (1606)</td>
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<tr>
<td>*82.</td>
<td><em>Erithacus cyanurus pallidior</em> (Baker)</td>
<td>Am</td>
<td>Seema</td>
<td>1200-3600 m</td>
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<tr>
<td></td>
<td>Kashmir Redflanked Bush Robin (1654)</td>
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<tr>
<td>83.</td>
<td><em>Copsychus saularis saularis</em> (Linnaeus)</td>
<td>R</td>
<td>Naitwar, Sankri</td>
<td>up to 2000 m in Simla</td>
</tr>
<tr>
<td></td>
<td>Indian Magpie-Robin (1661)</td>
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<td>84.</td>
<td><em>Phoenicurus erythrogaster grandis</em> (Gould)</td>
<td>R/AM</td>
<td>Saruka Tal</td>
<td>3600-5200 m</td>
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<tr>
<td></td>
<td>Gouldenstadt's Redstart (1678)</td>
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<tr>
<td>85.</td>
<td><em>Rhyacornis fuliginosus fuliginosus</em> (Vigors)</td>
<td>R/AM</td>
<td>Naitwar, Sankri, Taluka, Himri, Dhaula</td>
<td>1200-2100 m</td>
</tr>
<tr>
<td></td>
<td>Plumbeous Redstart (1679)</td>
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<tr>
<td>86.</td>
<td><em>Enicurus scouleri scouleri</em> Vigors</td>
<td>R/LM</td>
<td>Jakhol</td>
<td>1800-3300 m</td>
</tr>
<tr>
<td></td>
<td>Little Forktail (1684)</td>
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<tr>
<td>87.</td>
<td><em>E. maculatus maculatus</em> Vigors</td>
<td>R</td>
<td>Sankri</td>
<td>1200-3000 m</td>
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<tr>
<td></td>
<td>Western Spotted Forktail (1688)</td>
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<tr>
<td>88.</td>
<td><em>Saxicola caprata bicolor</em> Sykes</td>
<td>SV</td>
<td>Naitwar, Sankri, Taluka, Saruka Tal, Dhaula, Istragad</td>
<td>+ up to 1500 m</td>
</tr>
<tr>
<td></td>
<td>Northern Pied Bush Chat (1700)</td>
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<tr>
<td>89.</td>
<td><em>Chaimarrornis leucocephalus</em> (Vigors)</td>
<td>AM</td>
<td>Naitwar, Taluka, Istragad</td>
<td>1800-3600 m</td>
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<tr>
<td></td>
<td>Whitecapped Redstart or River Chat (1716)</td>
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<tr>
<td>Sl. No.</td>
<td>Name of the species</td>
<td>Status</td>
<td>Distribution</td>
<td>Altitudinal range</td>
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<tr>
<td>90.</td>
<td><em>Monticola cinclorhynchos</em> (Vigors) <strong>Blueheaded Rock Thrush</strong> (1723)</td>
<td>SV</td>
<td>Sankri</td>
<td>1200-2200 m</td>
</tr>
<tr>
<td>91.</td>
<td><em>Myiophonus caeruleus temminckii</em> (Vigors) <strong>Himalayan Whistiing Thrush</strong> (1729)</td>
<td>R/AM</td>
<td>Naitwar, Sankri, Taluka, Himri, Dhaula, Istragad</td>
<td>1000-3600 m</td>
</tr>
<tr>
<td>92.</td>
<td><em>Zoothera wardii</em> (Blyth) <strong>Pied Ground Thrush</strong> (1731)</td>
<td>SV</td>
<td>Sankri</td>
<td>1500-2400 m</td>
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<tr>
<td>93.</td>
<td><em>Zoothera mollissima whiteheadi</em> (Baker) <strong>Western Plain-backed Mountain Thrush</strong> (1738)</td>
<td>AM</td>
<td>Jakhol, Sankri, Taluka</td>
<td>900-3600 m</td>
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<tr>
<td>94.</td>
<td><em>Cinclus pallasi tenuirostris</em> Bonaparte <strong>West Himalayan Brown Dipper</strong> (1775)</td>
<td>R</td>
<td>Naitwar, Taluka, Himri, Dhaula</td>
<td>2700-3900 m</td>
</tr>
<tr>
<td>95.</td>
<td><em>Parus major</em> Linnaeus <strong>Gray Tit</strong> (1792, 93)</td>
<td>R/AM</td>
<td>Naitwar, Istragad</td>
<td>1000-1800 m</td>
</tr>
<tr>
<td>96.</td>
<td><em>Parus major monticulus</em> Vigors <strong>Greenbacked Tit</strong> (1799)</td>
<td>R/AM</td>
<td>Sankri, Taluka, Jakhol, Himri, Dhaula, Duni, Mashri, Istragad</td>
<td>Foothills-2400 m</td>
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<tr>
<td>97.</td>
<td><em>P. monticulus melanolophus</em> Vigors <strong>Crested Black Tit</strong> (1802)</td>
<td>R/AM</td>
<td>Taluka</td>
<td>1600-2000 m</td>
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<tr>
<td>98.</td>
<td><em>Aegithalos concinnus iredalei</em> (Baker) <strong>Western Redheaded Tit</strong> (1818)</td>
<td>R</td>
<td>Sankri</td>
<td>900-2400 m</td>
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<tr>
<td>99.</td>
<td><em>Sitta castanea almorae</em> Kinnear &amp; Whistler (1827) <strong>Western Chestnut-bellied Nuthatch</strong> (1827)</td>
<td>R</td>
<td>Jakhol, Sankri, Taluka</td>
<td>+ 300-1500 m</td>
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<tr>
<td>100.</td>
<td><em>Sitta leucopsis leucopsis</em> Gould <strong>Western Whitecheeked Nuthatch</strong> (1832)</td>
<td>R/AM</td>
<td>Taluka, Jakhol, Sankri, Taluka</td>
<td>1800-3000 m</td>
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<tr>
<td>101.</td>
<td><em>Tichodroma muraria nepalensis</em> Bonaparte <strong>Wall Creeper</strong> (1839)</td>
<td>R/AM</td>
<td>Sunkhundi</td>
<td>Foothills-3300 m</td>
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<tr>
<td>Sl. No.</td>
<td>Name of the species</td>
<td>Status</td>
<td>Distribution</td>
<td>Altitudinal range</td>
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<td>25.</td>
<td>Family CERTHIIDAE</td>
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<tr>
<td>102.</td>
<td><em>Certhia himalayana</em></td>
<td>AM</td>
<td>Taluka, Himri, Dhaula, Duni, Satta</td>
<td>br 2100+ m</td>
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<td></td>
<td><em>limes</em> Meinertzhagen</td>
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<td></td>
<td>West Himalayan Tree Creeper (1845)</td>
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<td>26.</td>
<td>Family MOTACILLIDAE</td>
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<td>103.</td>
<td><em>Motacilla caspica caspica</em> (Gmelin)</td>
<td>SV</td>
<td>Naitwar</td>
<td>1500-3900 m</td>
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<td></td>
<td>Gray Wagtail (1884)</td>
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<td>104.</td>
<td><em>M. alba</em> Linnaeus</td>
<td>WV</td>
<td>Naitwar, Taluka, Osla, Dhaula</td>
<td>Foothills to Kerala</td>
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<td></td>
<td>Pied Wagtail (1885-90)</td>
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<td>Family DICAEIDAE</td>
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<tr>
<td>105.</td>
<td><em>Dicaeum erythrorynchos</em></td>
<td>R</td>
<td>Naitwar</td>
<td>Foothills and plains</td>
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<tr>
<td></td>
<td><em>erythrorynchos</em> (Latham)</td>
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<td></td>
<td>Tickell's Flowerpecker (1899)</td>
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<td>28.</td>
<td>Family ZOSTEROPIDAE</td>
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<td>106.</td>
<td><em>Zosterops palpebrosa</em></td>
<td>R/LM</td>
<td>Jakhol, Sirga, Saruka Tal</td>
<td>+ up to 1500 m</td>
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<tr>
<td></td>
<td><em>palpebrosa</em> (Temminck)</td>
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<td></td>
<td>Indian White-eye (1933)</td>
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<td>Family PLOCEIDAE</td>
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<tr>
<td>107.</td>
<td><em>Passer domesticus parkini</em></td>
<td>R/AM</td>
<td>Naitwar, Sankri</td>
<td>Plains to 2000 m</td>
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<tr>
<td></td>
<td>Whistler Kashmir House Sparrow (1939)</td>
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<td>108.</td>
<td><em>P. montanus</em> (Linnaeus)</td>
<td>R/LM</td>
<td>Naitwar, Sankri, Jakhol, Himri, Dhaula, Duni, Mashri, Istragad</td>
<td>450-2200 m</td>
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<tr>
<td></td>
<td>Tree Sparrow (1941-44)</td>
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<td>109.</td>
<td><em>P. rutilus cinnamomeus</em> (Gould)</td>
<td>R/AM</td>
<td>Naitwar, Taluka, Sunkhundi, Jakhol, Sirga, Saruka Tal</td>
<td>500-2700 m</td>
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<td></td>
<td>Himalayan Cinnamon Tree Sparrow (1946)</td>
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<td>110.</td>
<td><em>Lonchura punctulata</em></td>
<td>R</td>
<td>Naitwar</td>
<td>up to 1800 m</td>
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<td></td>
<td><em>punctulata</em> (Linnaeus)</td>
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<td>Indian Spotted Munia (1974)</td>
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<td>Family FRINGILLIDAE</td>
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<td>111.</td>
<td><em>Mycerobas affinis</em> (Blyth)</td>
<td>R/AM</td>
<td>Sankri</td>
<td>1800-3900 m</td>
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<tr>
<td></td>
<td>Allied Grosbeak (1983)</td>
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<td>Sl. No.</td>
<td>Name of the species</td>
<td>Status</td>
<td>Distribution</td>
<td>Altitudinal range</td>
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<td>112.</td>
<td><em>Carduelis spinoides spinoides</em> Vigors</td>
<td>SV</td>
<td>Sankri, Taluka, Sunkhundi, Jakhol, Sirga, Saruka Tal, Dhaulai</td>
<td>+ 1300-2700 m</td>
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<td></td>
<td>Himalayan Greenfinch (1990)</td>
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<td>113</td>
<td><em>Carpodacus nipalensis kangrae</em> (Whistler)</td>
<td>AM</td>
<td>Satta, Mashri</td>
<td>1800-3600 m</td>
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<td>Garhwal Dark Rosefinch (2014)</td>
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<td>114</td>
<td><em>Pyrrhoplectes epauletta</em> (Hodgson)</td>
<td>R/AM</td>
<td>Duni</td>
<td>1400-3900 m</td>
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<td></td>
<td>Goldheaded Black Finch (2035)</td>
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<td>115</td>
<td><em>Emberiza cia stracheyi</em> Moore</td>
<td>R/AM</td>
<td>Dhaulai</td>
<td>600-4000 m</td>
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<td></td>
<td>Himalayan Rock Bunting (2052)</td>
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</table>
MAMMALIA

J.P. SATI and N.K. SINHA
Zoological Survey of India, Northern Regional Station, Dehra Dun -248 195.

INTRODUCTION

The mammalian fauna of Himalayan Ecosystem is magnificent and well adapted to the Himalayan conditions. There are about 100 species of mammals known from the western Himalaya (Uttaranchal), of which nearly 35 species have been recorded from district Uttarkashi (Sinha, 1995).

Dang (1968) made some ecological observations on Bharal and Brown Bear from Har­ki-dun and adjacent area. Wildlife Institute of India while working for Snow Leop­ard survey under Indo-U.S. project reported 11 species of mammals from the sanctuary (Fox et al. 1986). An undated publication of the forest department, on the sanctuary reported 15 species of mammals. Thereafter Sathyakumar (1994) recorded 20 species from Rupin and Supin valley of the sanctuary.

The mammalian fauna of the GWS & NP is typical of high altitude. There are three altitudinal zones, viz., temperate broad leave forest (1300-2500 m), Sub-alpine mixed coniferous forest (2500-3000m) and Alpine scrubs and meadows (3000 m and above).

The representative mammalian fauna of these zones were recorded and analyzed. In all, 32 species of mammals belonging to 29 genera, 16 families and 7 orders have been listed from the area either by direct or indirect sightings. Each species has been given the locality record with in sanctuary with altitude and its worldwide distribution.

The classification has been followed after Wilson and Reeder (1992) and Alfred et al. (2002).

Order INSECTIVORA
Family SORICIDAE

1. Suncus etruscus (Savi)
Savi’s Pygmy Shrew; Pygmy White-toothed Shrew

Remarks : Only once seen at Naitwar (1450 m).

Distribution : India : Himachal Pradesh, Uttar Pradesh, Uttaranchal, Bihar, West Bengal and Northeastern states.

2. Suncus murinus (Linnaeus)  
House Shrew

Remarks: One example was seen at Himri (1350).

Distribution: India: Kashmir, Pondichery, Bengal, Bihar, Tamil Nadu, Madhya Pradesh, Orissa, Uttar Pradesh, Uttaranchal, Punjab, Haryana, NE States, Sikkim, Kerala, Rajasthan, Gujarat, Western Ghats, Karnataka, Andhra Pradesh.

Order: CHIROPTERA  
Family: PTEROPODIDAE

3. Cynopterus sphinx (Vahl)  
Short-nosed Fruit Bat

Remarks: Observed at Naitwar, Himri & Duni between 1450–1900 m Altitude.

Distribution: India: Throughout.

Elsewhere: Bhutan, Southern China, Cambodia, Indo-China, Indonesia, Myanmar, Pakistan.

Family: VESPERTILIONIDAE

4. Pipistrellus babu Thomas  
Pipistrelle Bat

Remarks: Colonies of Pipistrelle seen active at dusk near Naitwar, Himri & Duni at an altitude of 1450, 1530–1900 m respectively.

Distribution: India: Assam, Sikkim, Kumaon, Himachal Pradesh and Madhya Pradesh.

Elsewhere: Afghanistan, Bhutan, China, Myanmar, Nepal and Pakistan.

Order: PRIMATES  
Family: CERCOPITHECIDAE

5. Macaca mulatta (Zimmermann)  
Rhesus Macaque

Remarks: Nearly 8 groups of 4 to 40 individuals observed at Naitwar, (1480 m), Himri
(1550 m), Dhaula (1600 m), Duni (1900 m), Masri (2150 m), Istragad (2075 m), Taluka (2100 m), Sankri (1850 m) & Jakhol (2400 m).

**Distribution**: India: North and East India above Tapti and Godavari.

**Elsewhere**: Afghanistan, Nepal, Myanmar, Indo-China, Tibet, China, Thailand, Hong Kong, Mongolia and Bhutan.

6. *Semnopithecus entellus* (Dufresne)

**Hanuman Langur**

**Remarks**: Six groups of 8 to 25 individuals and solitary males at two places observed at Naitwar (1450 m), Dhaula (1600 m), Istragad (2075 m), Sankri (1850 m), Jakhkol (2400 m) & Kedarkanta Trek (2700 m).

**Distribution**: India: Practically throughout in suitable localities.

**Elsewhere**: Pakistan, Sri Lanka, Nepal and Tibet.

**Status**: CITES-Appendix I.

<table>
<thead>
<tr>
<th>Order</th>
<th>CORNIVORA</th>
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<tr>
<td>Family</td>
<td>CANIDAE</td>
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</table>

7. *Canis aureus* Linnaeus

**Asiatic Jackal; Golden Jackal**

**Remarks**: Hawling recorded at, Taluka (2150 m), Sankri (1850 m); locals reported it from Satta (2050 m) & Masri (2150 m).

**Distribution**: India: Bihar, Gujarat, Haryana, Madhya Pradesh, Orissa, Punjab, Peninsula, North-eastern States, Uttar Pradesh, Western India and West Bengal.

**Elsewhere**: North and East Africa, South-west Asia, Central Asia, Afghanistan, South-east Europe, Nigeria, Sri Lanka, Senegal, Thailand, Tanzania, Transcaucasia.

8. *Vulpes bengalensis* (Linnaeus)

**Common Red Fox; Red fox**

**Remarks**: Local villagers reported from Taluka (2100 m).

**Distribution**: India: Gujarat, Kashmir, Ladakh, Punjab, Sikkim and Uttar Pradesh Himalaya.

**Elsewhere**: Throughout Palaearctic region, Australia, Palaearctic Africa, Central Asia, North America, Europe, Indo-China, Japan.

**Status**: CITES-Appendix III (India) as *V. v. griffithi*, *V. v. montana* and *V. v. pusilla* (= *leucopus*).
Family FELIDAE

9. *Felis chaus* Schreber
   Jungle Cat

Remarks: Reported by the villagers from Satta (2050 m).

Distribution: India: Gujarat, Kashmir, Madhya Pradesh, Sikkim, South of Krishna river, Rajasthan, Uttar Pradesh and West Bengal.


Status: CITES-Appendix II.

10. *Prionailurus bengalensis* (Kerr)
    Leopard Cat

Remarks: Fecal matter was seen on Kedarkhanta trek (2550 m) & Istragad (2075 m).

Distribution: India: Northwestern, Central, North-eastern States.

Elsewhere: Afghanistan, Bangladesh, Myanmar, Cambodia, China, Indonesia, Japan, Korea, Laos, Malaysia, Nepal, Pakistan, Philippines, Taiwan, Thailand, Vietnam, C.I.S. Countries.

Status: CITES-Appendix I as *Felis bengalensis* (except for Chinese population); otherwise Appendix II, IUCN-Endangered, as *Felis irimotensis*.

11. *Panthera pardus* (Linnaeus)
    Leopard; Panther

Remarks: Local villagers reported from Satta (2050 m), Jakhol (2400 m) & Sankri (1850 m).

Distribution: India: throughout in suitable pockets.


Status: CITES-Appendix I, IUCN-Threatened.

12. *Uncia uncia* (Schreber)
    Snow Leopard

Remarks: Wildlife guards reported their presence on higher ridges on Kedarkhanta trek & Osla at an altitude of 2700 m & above.
Distribution: India: Kashmir.
Elsewhere: Afghanistan, Pakistan, C.I.S. countries, China, Mongolia, Nepal, China, Bhutan.
Status: CITES-Appendix I; IUCN-Endangered.

Family MUSTELIDAE

13. Martes flavigula (Boddart)
Yellow-Throated Marten

Remarks: Observed two individuals at Naitwar (1480 m) and one at Jakhol (2400 m).
Distribution: India: From Kashmir to North-east India along the foothills of Himalaya, Southern States in suitable pockets.
Elsewhere: Russia, Korea, China, Pakistan, Southeast Asian Countries, Taiwan, and Indonesia.
Status: CITES – Appendix III (India); IUCN – Intermediate as M. f. chrysospila.

14. Mustela altaica Pallas
Mountain Weasel; Alpine Weasel

Remarks: Reported by the villagers near Jakhol (2400 m).
Distribution: India: Upper Sutlej Valley (1400 m), Sikkim.
Elsewhere: CIS states, Mongolia, China, Tibet, Korea.
Status: CITES – Appendix III (India).

Family URSIDAE

15. Ursus arctos Linnaeus
Brown Bear; Grizzly Bear

Remarks: Villagers reported the presence on higher ridges near Jakhol (2700 m); Sathyakumar (1994) has also reported from the sanctuary.
Elsewhere: Sweden, Finland, Estonia, Poland, Czechoslovakia, Austria, Yugoslavia, Albania, Romania, Bulgaria, Greece, Italy, France, Spain, C.I.S. Countries, Central Asia, Mongolia, Manchuria, Japan, Tibet, China, Syria, Persia, Asia Minor, North America, Germany, Scandinavia, Switzerland, Siberia, Nepal, Afghanistan, Pakistan, Palestine, Korea.
Status: CITES – Appendix I as U. arctos (Mexico), Bhutan, China, Mongolia populations), U. a. sabellinus and U. a. pruinosus; otherwise Appendix II; IUCN – Extinct as U. a. nelsoni.
16. *Ursus thibetanus* Cuvier

**Asiatic Black Bear**

*Remarks*: 2 cubs were seen as pet near Naitwar, brought form the local Forest near Sankri; Sathyakumar (1994) reported them from the sanctuary.

*Distribution*: India: Lidder Valley, Kashmir, Himachal Pradesh, Darjeeling in West Bengal.

*Elsewhere*: Siberia in Russia, Japan, Manchuria, China, Myanmar, Afghanistan, Indo-China, Korea, Laos, Pakistan, Nepal, Taiwan, Thailand, Vietnam.

*Status*: CITES – Appendix I; IUCN – Endangered as *U. t. gedrosianus*, otherwise Vulnerable.

**Order** ARTIODACTYLA  
**Family** SUIDAE

17. *Sus scrofa* Linnaeus

**Wild Boar**

*Remarks*: Villagers of Satta (2050 m) Masri (2150 m) and Sankri (1850 m) reported that the wild boar damages their potato crops frequently. Sathyakumar (1994) has also reported it from sanctuary.

*Distribution*: India: Throughout.

*Elsewhere*: Europe, Southern Russia and China to middle east, Sri Lanka, Indonesia, Norway, Sweden, South Africa, Lesser Sunda Islands, Australia, U.S.A., West Indies, Central and South America, Numerous Oceanic Islands, Mauritius, Hawaiian, Galapagos and Fiji Islands, Moluca Island, New Guinea and Solomon Islands.

*Status*: IUCN – Vulnerable as *S. s. riukiuanus*.

**Family** MOSCHIDAE

18. *Moschus chrysogaster* Hodgson

**Forest Musk Deer; Kastura**

*Remarks*: Sathyakumar (1994) reported it from sanctuary. Local villagers reported the presence on upper ridges of Har-ki-dun.

*Distribution*: India: Kashmir, Uttarakhand Himalaya, Sikkim, North-east Himalaya.

Status: CITES – Appendix I in Afghanistan, Bhutan, India, Nepal and Pakistan; otherwise Appendix II.

Family CERVIDAE

19. Cervus unicolor Kerr
Sambar

Remarks: Local villagers reported from Sankri (1850 m), Taluka (2100 m), Jakhol (2400 m) & Osla (2550 m); Sathyakumar, (1994) has also reported Sambar in the sanctuary

Distribution: India: Peninsula, Kumaon, North-east States, Northern India, Coromondal, Bengal.

Elsewhere: Sri Lanka, Southern China, Hainan Islands, Taiwan, Peninsular Malaysia, Sumatra, Borneo, Siberut, Sipora and Pagi and Nias Islands, Australia, New Zealand.

20. Muntiacus muntjak (Zimmermann)
Indian Muntjak; Barking Deer

Remarks: Widely distributed in Naitwar, Sankri, Masri, Taluka, Satta, Jakhol, between from 1450 m to 2400 m altitude the villagers says from Istragad & Duni during present surveys. Sathyakumar (1994) has reported the species from sanctuary.

Distribution: India: North, Peninsula, Kumaon, Bengal, Maharashtra, Deccan plateau, Nagarhole, Karnataka, Malabar coast.


Family BOVIDAE

21. Hemitragus jemlahicus (H. Smith)
Himalayan Tahr; Tahr

Remarks: Forest officials and villagers report their availability in the Taluka and Jakhol area. Sathyakumar (1994) has reported this from sanctuary.

Distribution: India: Himalayas from Kashmir through northern India to Sikkim.

Elsewhere: Nepal, Southern Tibet.

22. Nemorhaedus goral (Hardwicke)
Goral

Remarks: During recent surveys Gorals were observed at Himri (1550 m), Dhaula (1600 m) and Istragad (2075 m). Sathyakumar (1994) reported Goral from sanctuary.
**Distribution**: India: Himachal Pradesh, Kashmir, Kumaon, Assam, Sikkim.

**Elsewhere**: Siberia, Manchuria, Korea, China, Tibet, Myanmar, Nepal, Bhutan and Pakistan.

**Status**: CITES – Appendix I.

23. *Nemorhaedus sumatraensis* (Bechstein)

**Mainland Serow; Serow**

**Remarks**: Local villagers reported Serow from Jakhol (2400 m) while Sathyakumar (1994) reported it from sanctuary.

**Distribution**: India: Kashmir, Lahul (Himachal Pradesh), Kumaon, Sikkim, Kalimpong (West Bengal).

**Elsewhere**: Nepal, China, Myanmar, Indo-China, Malay Peninsula, Sumatra, Thailand.

**Status**: CITES – Appendix I, IUCN – Endangered.

24. *Pseudois nayaur* (Hodgson)

**Bharal, Blue Sheep**

**Remarks**: Villagers reported them from the higher ridges near Taluka (2100 m) and Jakhol (2400 m). Sathyakumar (1994) has also reported Bharal from the sanctuary.

**Distribution**: India: Ladakh, Sikkim.

**Elsewhere**: Pamir range in Tadzhikistan, Northern Pakistan, Tibet, China, Mongolia, Nepal.

Order **LAGOMORPHA**

Family **LEPORIDAE**

25. *Ochotona roylei* (Ogilby)

**Royale's Pika, Large-eared Pika**

**Remarks**: Local information says that, they were seen at Osla area on Kedarkanta trek.


**Elsewhere**: Russian central Asia, Himalayan Mountains in North and West Pakistan, Tibet, China, Nepal and Myanmar.

26. *Lepus nigricollis* F. Cuvier

**Indian Hare; Black-naped Hare**

**Remarks**: Once it was sighted near Naitwar (1450).

**Distribution**: India: Throughout.

**Elsewhere**: Pakistan, Nepal, Bhutan, Bangladesh, Sri Lanka, Java.
Order RODENTIA
Family SCIURIDAE

27. Petaurista petaurista (Pallas)
Red Giant Flying Squirrel; Common Giant Flying Squirrel

Remarks: At dusk it was seen gliding on pine trees near Naitwar (1450).

Distribution: India: Nagaland, Assam, Punjab, Kashmir, Peninsula, Himachal Pradesh, Kumaon, Tamil Nadu, Bihar, Maharashtra.

Elsewhere: Afghanistan, China, Myanmar, Thailand, Indo-China, Malaysia, Indonesia, Borneo.

Family MURIDAE

8. Microtus leucurus (Blyth)
Blyth's Vole

Remarks: Once seen near Istragad (2075).


Elsewhere: Tibet, Chinese Turkistan, Nepal.

29. Apodemus wardi (Wroughton)
Field Mouse

Remarks: A few individuals were seen near Naitwar (1480 m), Sankri (1850 m) and Taluka (2100 m).


Elsewhere: Nepal, Pakistan, Afghanistan, Iran.

30. Millardia melitata (Gray)
Soft-furred Field Rat; Metad

Remarks: Once seen at Naitwar (1450 m).

Distribution: India: Maharashtra, Peninsula, Guajarat, Rajasthan, Himachal Pradesh, Bihar, West Bengal, Nilgiri Hills, Tamil Nadu, Haryana, Punjab.

Elsewhere: Sri Lanka, Pakistan, Nepal.

31. Mus musculus Linnaeus
House Mouse

Remarks: On many occasions they were seen at Naitwar F.R.H. (1450 m and Sankri area (1850 m).
Distribution: India: Practically throughout.
Elsewhere: Worldwide.

Family HYSTRICIDAE

32. Hystrix indica Kerr
Indian Crested Porcupine; Short-tailed Porcupine

Remarks: Many occasions the quills were seen near Sankri (1850 m), Dhaula (1600 m), Istragad (2075 m).


Elsewhere: Sri Lanka, Pakistan, Nepal, Tibet, Transcaucusus, Asia Minor, Israel, Arabia to Kazakhastan, Palestine, Syria, parts of U.S.S.R.

REFERENCES


### SUMMARY OF FAUNA

**Order ODONATA**

Suborder ZYGLOPTERA

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<p>| Family               | Subfamily          | Name of the species                                      |
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**CENTIPEDES**

(CHILOPODA SCLOPENDROMORPHA)

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### PISCES

Class OSTEICHTHYES  
Order CYPRINIFORMES

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### AMPHIBIA

Class AMPHIBIA  
Order ANURA

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Class REPTILIA

Order SAURIA

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Order SERPENTES

Family NATRICIDAE

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**Order FALCONIFORMES**

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<td>13.</td>
<td>Tetraogallus himalayensis himalayensis J.E. Gray</td>
<td>Himalayan Snowcock (232)</td>
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<td>14.</td>
<td>Alectoris chukar chukar (J.E. Gray)</td>
<td>Chukar Patridge (236)</td>
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<td>15.</td>
<td>Francolinus francolinus asiae Stephens</td>
<td>Indian Black Partridge (238)</td>
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<td>16.</td>
<td>Arbophila torqueola torqueola Hodgson</td>
<td>Common Hill Partridge (267)</td>
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<td>17.</td>
<td>Tragopan melanocephalus (J.E. Gray)</td>
<td>Western Horned Pheasant (285)</td>
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<td>18.</td>
<td>T. satyra (Linnaeus)</td>
<td>Crimson Horned Pheasant or Satyr Tragopan (286)</td>
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<td><em>Lophophorus impejanus</em> (Latham)</td>
<td>Impeyan or Himalayan Mona Pheasant (290)</td>
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<td><em>Lophura leucelana hamiltonii</em> (J.E. Gray)</td>
<td>Whitecrested Kaleej Pheasant (293)</td>
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<td><em>Pucrasia macrolopha macrolopha</em> (Lesson)</td>
<td>Koklas (305)</td>
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<td><strong>22</strong></td>
<td><em>Catreus wallichii</em> (Hardwicke)</td>
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<td><em>Scolopax rusticola rusticola</em> Linnaeus</td>
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<td>24. <em>Treron phoenicoptera</em> (Latham)</td>
<td>Green Pigeon (493-505)</td>
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<td>25. <em>Columba leuconota leuconota</em> Vigors</td>
<td>West Himalayan Snow Pigeon (513)</td>
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<td>26. <em>C. livia intermedia</em> Strickland</td>
<td>Indian Blue Rock Pigeon (517)</td>
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<td><em>27. Streptopelia orientalis orientalis</em> (Latham)</td>
<td>Rufous Turtle Dove (530)</td>
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<td>28. <em>Streptopelia orientalis meena</em> (Sykes)</td>
<td>Western Turtle Dove (531)</td>
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<td>29. <em>S. decaocto decaocto</em> (Frivaldszky)</td>
<td>Indian Ring Dove (534)</td>
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<td>30. <em>S. chinensis suratensis</em> (Gmelin)</td>
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<td>33. <em>Strix leptogrammica newarensis</em> (Hodgson)</td>
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<td>35. <em>Apus pacificus leuonyx</em> (Blyth)</td>
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<td>CORACIIFORMES</td>
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<td>37. <em>Upupa epops epops</em> Linnaeus</td>
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<td>PICIFORMES</td>
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<td>38. <em>Megalaima virens marshallorum</em> Swinhoe</td>
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<td>39. <em>Picus squamatus squamatus</em> Vigors</td>
<td>Himalayan Scalybellied Green Woodpecker (807)</td>
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<td>40. <em>P. canus sanguiniceps</em> Baker</td>
<td>Indian Blacknaped Green Woodpecker (809)</td>
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<td>41. <em>P. flavinucha kumaonensis</em> (Koelz)</td>
<td>Kumaon Large Yellownaped Woodpecker (812)</td>
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<td>43. Picoides himalayensis himalayensis (Jardine &amp; Selby)</td>
<td>Garhwal Pied Woodpecker (837)</td>
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<td>West Himalayan Brownfronted Pied Woodpecker (842)</td>
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<td>*45. Delichon urbica (Linnaeus)</td>
<td>House Martin (931, 32 ?)</td>
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<td>46. Hirundo rupestris Scopoli</td>
<td>Crag Martin (913)</td>
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<td>47. Oriolus traillii traillii (Vigors)</td>
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<td>48. Dicrurus adsimilis albirictus (Hodgson)</td>
<td>North Indian Black Drongo or King Crow (962)</td>
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<td>49. D. leucophaeus longicaudatus Hay</td>
<td>Indian Ashy Drongo (965)</td>
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<td>50. Acricotheres tristis tristis (Linnaeus)</td>
<td>Indian Myna (1006)</td>
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<td>18. CORVIDAE</td>
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<td>*51. Garrulus glandarius bispecularis Vigors</td>
<td>West Himalayan Redcrowned Jay (1020)</td>
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<td>52. Cissa flavirostris cucullata (Gould)</td>
<td>Western Yellowbilled Blue Magpie (1025)</td>
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<td>53. C. erythrorhynchata occipitalis (Blyth)</td>
<td>Himalayan Redbilled Blue Magpie (1027)</td>
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<td>54. Dendrocitta formosae occidentalis Ticehurst</td>
<td>West Himalayan Tree Pie (1037)</td>
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<td>55. Nucifraga caryocatactes hemispila Vigors</td>
<td>Himalayan Nutcracker (1043)</td>
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<td>Brownbacked Pied Flycatcher-Shrike (1064)</td>
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<td>60. Pericrocotus ethologus favillaceus Bangs &amp; Phillips (1085)</td>
<td>West Himalayan Longtailed Minivet (1085)</td>
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<td>61. Pycnonotus leucogenys leucogenys (Gray)</td>
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<td>62. P. cafer intermedius Blyth</td>
<td>Punjab Redvented Bulbul (1126)</td>
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<td>63. Hypsipetes madagascariensis psaroides Vigors</td>
<td>Himalayan Black Bulbul (1148)</td>
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<td>21. MUSCICAPIDAE</td>
<td><em>64. Garrulax albogularis whistleri</em> Baker</td>
<td>Western Whitethroated Laughing Thrush (1273)</td>
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<td>65. Minla strigula simlaensis (Meinertzhagen)</td>
<td>Western Barthroated Siva (1358)</td>
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<td>66. Yuhina gularis vivax Koelz</td>
<td>Western Stripethroated Yuhina (1371)</td>
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<td>67. Heterophasia capistrata capistrata (Vigors)</td>
<td>Western Blackcapped Sibia (1396)</td>
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<td>68. Muscicapa strophiata strophiata (Hodgson)</td>
<td>Orangegeorgeted Flycatcher (1414)</td>
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<td><em>69. M. westermanni collini</em> Rothschild</td>
<td>Western Little Pied Flycatcher (1419)</td>
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<td>70. M. superciliaris superciliaris Jerdon</td>
<td>Whitebrowed Blue Flycatcher (1421)</td>
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<td>71. M. leucomelanura leucomelanura (Hodgson)</td>
<td>Western Slaty Blue Flycatcher (1423)</td>
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<td>72. M. sundara whistleri (Ticehurst)</td>
<td>Western Rufousbellied Niltava (1431)</td>
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<td>73. M. unicolor unicolor (Blyth)</td>
<td>Pale Blue Flycatcher (1439)</td>
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<td>74.</td>
<td><em>M. thalassina thalassina</em> Swainson</td>
<td>Verditer Flycatcher (1445)</td>
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<td>75.</td>
<td><em>Culicicapa ceylonensis calochrysea</em> Oberholser</td>
<td>Northern Greyheaded Flycatcher (1448)</td>
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<td>76.</td>
<td><em>Rhipidura hypoxantha</em> Blyth</td>
<td>Yellowbellied Faintail Flycatcher (1450)</td>
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<td>77.</td>
<td><em>Orthotomus sutorius guzuratus</em> (Latham)</td>
<td>Indian Tailor Bird (1535)</td>
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<td><em>Phylloscopus affinis affinis</em> (Tickell)</td>
<td>Tickell’s Leaf Warbler (1579)</td>
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<td><em>P. inornatus humei</em> (Brooks)</td>
<td>Hume’s Yellowbrowed Leaf Warbler (1590)</td>
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<td><em>P. maculipennis virens</em> Ticehurst</td>
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<td><em>P. occipitalis occipitalis</em> (Blyth)</td>
<td>Large Crowned Leaf Warbler (1606)</td>
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<td>*82.</td>
<td><em>Erithacus cyanurus pallidior</em> (Baker)</td>
<td>Kashmir Redflanked Bush Robin (1654)</td>
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<td><em>Copsychus saularis saularis</em> (Linnaeus)</td>
<td>Indian Magpie-Robin (1661)</td>
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<td><em>Phoenicurus erythrogaster grandis</em> (Gould)</td>
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<td><em>Rhyacornis fuliginosus fuliginosus</em> (Vigors)</td>
<td>Plumbeous Redstart (1679)</td>
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<td><em>Enicurus scouleri scouleri</em> Vigors</td>
<td>Little Forktail (1684)</td>
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<td>87.</td>
<td><em>E. maculatus maculatus</em> Vigors</td>
<td>Western Spotted Forktail (1688)</td>
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<td>88.</td>
<td><em>Saxicola caprata bicolor</em> Sykes</td>
<td>Northern Pied Bush Chat (1700)</td>
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<td>89.</td>
<td><em>Chaimarrornis leucocephalus</em> Vigors</td>
<td>Whitecapped Redstart or River Blueheaded Rock Thrush (1723)</td>
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<td><em>Monticola cinclorhynchus</em> (Vigors)</td>
<td>Himalayan Whistling Thrush (1729)</td>
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<td><em>Myiophonus caeruleus temminckii</em> (Vigors)</td>
<td>Pied Ground Thrush (1731)</td>
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<td>*92.</td>
<td><em>Zoothera wardii</em> (Blyth)</td>
<td>Western Plainbacked Mountain Thrush (1738)</td>
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<td>93.</td>
<td><em>Z. mollissima whiteheadi</em> (Baker)</td>
<td>West Himalayan Brown Dipper (1775)</td>
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<td>94.</td>
<td><em>Cinclus pallasii tenuirostris</em> Bonaparte</td>
<td>West Himalayan Brown Dipper (1775)</td>
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22. CINCLIDAE
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<td>95.</td>
<td><em>Parus major</em> Linnaeus</td>
<td>Gray Tit (1792, 93)</td>
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<td>96.</td>
<td><em>P. monticolus monticolus</em> Vigors</td>
<td>Crested Black Tit (1802)</td>
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<td>97.</td>
<td><em>P. melanolophus</em> Vigors</td>
<td>Western Redheaded Tit (1818)</td>
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<td>*98.</td>
<td><em>Aegithalus concinnus iredalei</em> (Baker)</td>
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<td>99.</td>
<td><em>Sula castanea almorae</em> Kinnear &amp; Whistler (1827)</td>
<td>Western Chestnutbellied Nuthatch (1827)</td>
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<td>100.</td>
<td><em>S. leucopsis leucopsis</em> Gould</td>
<td>Western Whitecheeked Nuthatch (1832)</td>
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<td><em>Tichodroma muraria nepalensis</em> Bonaparte</td>
<td>Wall Creeper (1839)</td>
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<td>101.</td>
<td><em>Tichodroma muraria nepalensis</em> Bonaparte</td>
<td>Wall Creeper (1839)</td>
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<td><em>Certhia himalayana limes</em> Meinertzhagen</td>
<td>West Himalayan Tree Creeper (1845)</td>
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<td>103.</td>
<td><em>Motacilla caspica caspica</em> (Gmelin)</td>
<td>Gray Wagtail (1884)</td>
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<td><em>M. alba</em> Linnaeus</td>
<td>Pied Wagtail (1885-90)</td>
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<td><em>Dicaeum erythrornynchos erythrornynchos</em> (Latham)</td>
<td>Tickell’s Flowerpecker (1899)</td>
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<td>28. ZOSTEROPIDAE</td>
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<td><em>Zosterops palpebrosa palpebrosa</em> (Temminck)</td>
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<td>108.</td>
<td><em>P. montanus</em> (Linnaeus)</td>
<td>Tree Sparrow (1941-44)</td>
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<td>109.</td>
<td><em>P. rutilans cinnamomeus</em> (Gould) Sparrow (1946)</td>
<td>Himalayan Cinnamon Tree</td>
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30. **FRINGILLIDAE**

| 112.        | *Carduelis spinoides spinoides* Vigors            | Himalayan Greenfinch (1990)              |
| 114.        | *Pyrrhoplectes epauletta* (Hodgson)               | Goldheaded Black Finch (2035)            |

31. **EMBERIZIDAE**

<p>| 115.        | <em>Emberizacia stracheyi</em> Moore                     | Himalayan Rock Bunting (2052)            |</p>
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<td>SORICIDAE</td>
<td>1. <em>Suncus etruscus</em> (Savi)</td>
<td>Pygmy Whitetoothed Shrew</td>
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<td>2. <em>Suncus murinus</em> (Linn.)</td>
<td>House Shrew</td>
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<td>CHIROPTERA</td>
<td>PTEROPODIDAE</td>
<td>3. <em>Cynopterus sphinx</em> (Vahl)</td>
<td>Short-nosed Fruit Bat</td>
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<td>VESPERTILIONIDAE</td>
<td>4. <em>Pipistrellus babu</em> Thomas</td>
<td>Pipistrelle Bat</td>
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<td>PRIMATES</td>
<td>CERCOPITHECIDAe</td>
<td>5. <em>Macaca mulatta</em> (Zimmermann)</td>
<td>Rhesus Macaque</td>
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<tr>
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<td></td>
<td>6. <em>Semnopithecus entellus</em> (Dufresne)</td>
<td>Hanuman Langur</td>
</tr>
<tr>
<td>CARNIVORA</td>
<td>CANIDAE</td>
<td>7. <em>Canis aurens</em> Linn.</td>
<td>Asatic Jackal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. <em>Vulpes bengalensis</em> (Linn.)</td>
<td>Common Red Fox</td>
</tr>
<tr>
<td>FELIDAE</td>
<td></td>
<td>9. <em>Felis chaus</em> Schreber</td>
<td>Jungle Cat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10. <em>Prionailurus bengalensis</em> (Kerr)</td>
<td>Leopard Cat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11. <em>Panthera pardus</em> (Linn.)</td>
<td>Panther</td>
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<td></td>
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<td>12. <em>Uncia uncia</em> (Schreber)</td>
<td>Snow Leopard</td>
</tr>
<tr>
<td>MUSTELIDAE</td>
<td></td>
<td>13. <em>Martes flavigula</em> (Boddaert)</td>
<td>Yellow Throated Marten</td>
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<td>14. <em>Mustela altaica</em> Pallas</td>
<td>Mountain Weasel</td>
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<td>16. <em>Ursus thibetanus</em> Cuvier</td>
<td>Asiatic Black Bear</td>
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<td>ARTIODACTYLA</td>
<td>SUIDAE</td>
<td>17. <em>Sus scrofa</em> Linn.</td>
<td>Wild Boar</td>
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<td></td>
<td>MOSCHIDAE</td>
<td>18. <em>Moschus chrysogaster</em> Hodgson</td>
<td>Forest Musk Deer</td>
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<td>CERVIDAE</td>
<td>19. <em>Cervus unicolor</em> Kerr</td>
<td>Sambar</td>
</tr>
<tr>
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<td>20. <em>Muntiacus muntjak</em> (Zimmermann)</td>
<td>Indian Muntjak / Barking Deer</td>
</tr>
<tr>
<td>Order</td>
<td>Family</td>
<td>Name of the species</td>
<td>Common Name</td>
</tr>
<tr>
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<td></td>
<td>BOVIDAE</td>
<td>21. <em>Hemitragus jemlahius</em> (H. Smith)</td>
<td>Himalayan Tahr</td>
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<td></td>
<td>22. <em>Nemorchaedus goral</em> (Hardwicke)</td>
<td>Goral</td>
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<td>23. <em>N. sumatraensis</em> (Bechstein)</td>
<td>Serow</td>
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<td>24. <em>Pseudois nayaur</em> (Hodgson)</td>
<td>Bharal/Blue Sheep</td>
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<td>LAGOMORPHA</td>
<td>25. <em>Ochotona roylei</em> (Ogilby)</td>
<td>Royale's Pika</td>
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<td>LEPORIDAE</td>
<td>26. <em>Lepus nigricollis</em> F. Cuvier</td>
<td>Indian Hare, Black-naped Hare</td>
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<td></td>
<td>RODENTIA</td>
<td>27. <em>Petaurista petaurista</em> (Pallas)</td>
<td>Red Giant Flying Squirrel</td>
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<td>SCIURIDAE</td>
<td>28. <em>Microtus leucurus</em> (Blyth)</td>
<td>Blyth's Vole</td>
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<td>MURIDAE</td>
<td>29. <em>Apodemus wardi</em> (Wroughton)</td>
<td>Field Mouse</td>
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<td>30. <em>Millardia melatha</em> (Gray)</td>
<td>Soft-furred Field Rat</td>
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<td>31. <em>Mus musculus</em> Linn.</td>
<td>House Mouse</td>
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<td>HYSTRICIDAE</td>
<td>32. <em>Hystrix indica</em> (Kerr)</td>
<td>Indian Crested Porcupine</td>
</tr>
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</table>
Map of Govind Pashu Vihar showing collection localities.
Fig. 1-6. 1. A view of Har-ki-Dun Peak from Sankri; 2. Kedarkanta trek—A coniferous forest; 3. Taluka village; 4. Confluence of rivers Rupin & Supin at Netwar; 5. Taluka—A view of hill stream; 6. Jura Tal—Kedarkanta trek.
Fig. 1-6. 1. Calias erate (Esper); 2. Aporia agantho caphusa (Moore); 3. Aporia leucodyce saracta Moore; 4. Danaus genutia genutia (Cramer); 5. Lebythia leptia Moore; 6. Athyma opalina opalina (Kollar).
Fig. 1-6. 1. Neptis hyalas astola (Moore); 2. Cyrestis thyodamas ganescha (Kollar); 3. Precis iphita siccata (Stichel); 4. Cyanthia cardui (Linnaeus); 5. Kanisha canace himalaya Evans; 6. Symbrenthia niphanda (Moore).
Fig. 1-6. 1. *Argyreus hyperbius hyperbius* (Johansen); 2. *Issoria lathonia issoea* Doubleday; 3. *Vanessa egea* (Cramer); 4. *Kalima inachus* Boisduval; 5. *Celastrina huegelli huegelli* (Moore); 6. *Lycaena pavana* (Kollar).
Fig. 1-3. 1. *Salmo trutta fario* Linnaeus; 2. *Agama tuberculata* Hardwicke & Grey; 3. *Scincella himalayanum* (Gunther).
Fig. 1-3. 1. *Muntiacus muntjak* (Zimmermann); 2. *Ursus thibetanus* G. Cuvier; 3. *Semnopithecus entellus* (Dufresne).