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ON A COLLECTION OF BIRDS FROM
BASTAR DISTRICT, MADHYA PRADESH

by

N. MAJUMDAR

Issued by the Director
Zoological Survey of India, Calcutta

RECORDS
OF THE
ZOOLOGICAL SURVEY OF INDIA

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MADHYA PRADESH

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N. MAJUMDAR

*Zoological Survey of India,
Calcutta*



सत्यमेव जयते

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INTRODUCTION

The faunal wealth of the sparsely populated tribal district of Bastar has been very little known until recently except perhaps its 'big games'. The district came into prominence since it was included in the Dandakaranya Project for the rehabilitation of refugees from the erstwhile East Pakistan.

So far, no comprehensive account of the avifauna of Bastar dist. has been published except a note by Abdulali and Ambedkar (1966). Although Salim Ali wrote an account of the birds of Bastar and Orissa (Ms. 1957, cited by Ripley 1961, p. ix) but it was never published. Presumably the data from that manuscript have been incorporated in Ali and Ripley (1968-1974).

This paper is based on a collection of birds from Bastar district made during January-February 1979 by a party of the Zoological Survey of India under my leadership.

For wing, tail and bill measurements the standard methods were followed (Ali and Ripley 1968) and are expressed in millimetres.

Weights (in g) were taken in the field soon after the birds were killed. The sex was determined from the actual examination of the gonads, whose measurements are also expressed in millimetres.

Local names were taken from Ali and Ripley (1968-1974) as well as from local sources in the field.

The collection under report comprises of 97 species and subspecies which are distributed in 38 families and 14 orders.

I am grateful to Dr. B. K. Tikader, Director, Zoological Survey of India for offering me the opportunity to work out the material. I am also indebted to Dr. B. Biswas, Jt. Director, (Since retired), Dr. A. K. Mukherjee and Dr. V. C. Agrawal, Superintending Zoologists for reading the manuscript and suggesting improvements. My thanks are due to Sri N. S. Bhil, I. F. S., D. F. O., Central Bastar Division, who helped me in various ways during my field work.

DESCRIPTION OF BASTAR DISTRICT

The Bastar district is situated in the southeastern corner of Madhya Pradesh, India. The district is surrounded on three sides by three other States. On the eastern side is Orissa; Andhra Pradesh lies on the

southern side and on the western side is Maharashtra. Durg and Raipur districts of Madhya Pradesh are situated on the northern side.

Its length is about 300 km from north to south and the breadth is about 200 km from east to west. It is the largest district in Madhya Pradesh. It was formed in 1948 by the union of two princely states, Bastar and Kanker.

This district is situated between latitudes $17^{\circ}46'$ N. and $20^{\circ}34'$ N. and longitudes $80^{\circ}15'$ E. and $82^{\circ}1'$ E., and its area is about 39,060 sq. km.

The land is undulating, rocky and not fertile. There are only a few level plain fields. For this reason, cultivation is poor and as a consequence, the standard of living is also very poor.

The main drainages are : Godavari river and its tributaries, viz., Chintavagu, Gubbal, etc., Indrawati river and a large number of its tributaries : on the north — Naragi, Boardhig, Gudra, Nibra, Kotri and on the south — Dantewara, Berudi and Chintavagu, Sabari river and its tributaries Kanger, and Malongar. Mahanadi river itself flows through this area just after its sources, beyond this district.

The district can be divided into five main physiographic divisions, viz., Kotri-Mahanadi Plain in the north ; Abujhmar Hills ; northeastern plateau (Indrawati Plain) ; southern plateau which include Bailadila Hills, Tikanpalli Hills and Dantewara Plain ; and Godavari-Sabari lowland.

There are many waterfalls in this district, the more important of which are the Chitrakut falls on the Indrawati river, and the Tiratgarh waterfalls on the Kanger river.

This district is very hot during summer (46.1°C in May) because of hot winds that blow all day and night. During winter the cold is severe (4.4°C in December).

Monsoon prevails from the middle of June to middle of October. It is more (150-160 cm) in the southwestern and less (130-150 cm) in the northeastern and southern parts. Because of shortage of rainfall in summer, there is scarcity of water.

Bastar is a forest district. Here trees like Sal (*Shorea robusta*), Teak (*Tactona grandis*) ; Bija (*Pterocarpus marsupium*), Saja (*Terminalia tomentosa*), Dhanra (*Anogeissus latifolia*), Dhobin (*Dalberoa planiculata*), Munid (*Mitragyna parviflora*), Mohua (*Madhuca latifolia*), Mango (*Mangifera indica*), Gab (*Diospyros peregrine*), Amlaki (*Embica*

officinalis), Haritaki (*Terminalia chebula*), Bahera (*Terminalia belerica*), Jaiphal (*Myristica fragrans*), Tendu (*Diospyros melanoxylon*), etc. are found in good numbers. Sal forests are concentrated in the north-eastern part while the teak in the southwestern corner of the district. From the forests, by-products such as lac, gum, medicinal plants, honey and wood for sculptures are collected.

Among the minerals, iron ore is mined from the Bailadila and Raohat Hills.

According to 1971 census, there is a human population of 15 lakhs in the district. Out of this, 96% (i.e. 14,50,000) people live in villages. The Adivasi population is 75% of the whole population. Among the Adivasis Muria, Maria, Gauri, Bhatra, Halba, Dhurwa and Dorla are noteworthy.

DESCRIPTION OF COLLECTING STATIONS

Birds were collected from five stations. Collections were made from within about ten kilometres radius of each station, which covered forested areas, cultivated tracts, fallow land and marshes. The description of each station is given below :

1. *TOINAR*. This village is situated at 19°5' N. 85°10' E. in the Toinar range of West Bastar Division, c 165 km South West of Jagdalpur. This land on which Toinar is situated is undulating. The soil is yellowish brown, coarse-grained and sandy, with little productivity. Its elevation is 370 m. The annual mean range of daily temperature is 19.1°C to 31.3°C (average 25.2°C). The annual mean rainfall is 15.95 cm. There is a hot wet summer, a wet rainy season and a cool, dry winter.

There are no big nullahs nearby. The irrigational water is taken from the wells. The population consists of tribes like Telangas, Dorlas, Halbas and Marias. Paddy is the main agricultural crop. Kodon and Kutki are the other coarse grains cultivated. Toinar Reserved Forest Block is situated about two km south and south-west of Toinar village.

According to classification of Forest types by Champion and Seth (1968) the forest has been classified as southern Dry Mixed Deciduous Forest, which may be referred to for the details of vegetation. Among them the more important plants are : Saja (*Terminalia tomentosa*), Dhaoda (*Anogeissus latifolia*), Bija (*Pterocarpus marsupium*), Tendu

(*Diospyros melanoxylon*), Mahua (*Madhuca latifolia*), Haldu (*Adina cordifolia*), Arjun (*Terminalia arjuna*), Baheda (*Terminalia balerica*), Harra (*Terminalia chebula*), Scattered Teak (*Tectona grandis*), Garai (*Cleistanthus collinus*), Tondri (*Casearia tomentosa*), Dudhi (*Holorrhena antidysenterica*), Shisham (*Dalbergia latifolia*), Maror Phali (*Helicteres isora*), Harsingar (*Nyctanthes arborcristis*), Dhawi (*Woodfordia floribunda*), Palasbel (*Butea superba*), and Makor (*Zizyphus oenoplia*).

2. **SUKMA** : This village is situated at 18°20' N. 81°40' E. on the west bank of the Sabri river about 106 km south of Jagdalpur on Konta PWD Road. Sabri river forms the boundary between the States of Madhya Pradesh and Orissa. It flows southwards and joins the Godavari river in Andhra Pradesh. Its elevation is about 675 m.

The soil is mainly sandy loam but at places murram soil is also found. According to Champion and Seth (1968) the forest comprises south Indian Moist Mixed Deciduous type. The floristic composition is as follows : Saja (*Terminalia tomentosa*), Bija (*Pterocarpus marsupium*), Haldu (*Adina cordifolia*), Dhanra (*Anogeissus latifolia*), Tendu (*Diospyros melanoxylon*), Teak (*Tectona grandis*), Harra (*Terminalia chebula*), Achar (*Buchanania lanzan*), Neel (*Indigofera arborea*), Dhawi (*Woodfordia floribunda*), Maror Phali (*Helicteres isora*), Harsingar (*Nyctanthes arborcristis*).

3. **CHHOTEDONGER** : This village is situated at 19°20' N. 81°15' E. in Chhotedongar Range of North Bastar Division, c 135 km north from Jagdalpur.

Its altitude is about 550 m. Umadehi hill top, five km from Chhotedongar, is 790 m. The village is situated near the Madin river. The mean maximum temperature is about 32.2°C. December is the coolest month with the mean temperature going down to 7.6°C approximately. Annual rainfall varies between 13 cm and 18 cm. There is heavy dew in winter but frost is unknown.

The terrain is hilly and undulating. The soil is mainly sandy loam, deep and quite porous. Clayey patches are also common.

Main tribes are Madias and Murias. The main crops are paddy, maize, kodon and jowar.

Near about the village there is no big nullah but the tract is mainly drained by Gudra nullah which flows southwards.

Near Chhotedonger village there is Chotadonger Reserve Forest Block in the west and Protected Forest Block in the east. The type of

forest as classified by Champion and Seth (1968) is 'Moist Peninsular Sal'. This forest area is composed of the following more important floral species : Sal (*Shorea robusta*), Saja (*Terminalia tomentosa*), Bija (*Peterocapus marsupium*), Amaltas (*Classia fistula*), Achar (*Buchanania lanzan*), Neel (*Indigofera arborea*), Maror Phali (*Helicteres isora*).

4. **BARSOOR** : This village is situated at 19°05' N. 81°20' E. about 102 km south-west of Jagdalpur.

The tract is slightly undulating for a radius of about three km around Barsoor. There is one tank nearby. About three km to the north, there is Mander nullah which flows south-west and meets Indrawati river which flows to the south. The river is about three km away from Barsoor to the west. There is another nullah about 0.5 km south of Barsoor. This nullah flows towards the west and south-west. Barsoor Reserved Forest Block is situated about two km to the east. Barsoor Protected Forest Block lies about three km to the south and Muchnar Protected Forest Block about 1.5 km to the west of Barsoor village. On the north there is an unclassed Government Forest and the Bodhghat Dam site.

Barsoor is situated at about 300 m. above mean sea level. Temperature and other climatic conditions are similar to that of Chhotedongar. The vegetation is also similar except that due to prevailing edaphic conditions, there are more patches of mixed forest (Dhanra, *Anogeissus latifolia*, predominating), and unlike Chhotedongar, Bamboo is found in the understorey. Annual rainfall is c. 18.50 cm. The summer is severe.

In the interior villages Marias and Murias are the main tribes. Halbas, Telangas and Dhurwas are the other tribal communities. Paddy is the main agricultural crop. Besides, Maize, Urad (Pulse), Kodon and Kutki are also cultivated. In Barsoor some people also raise 'potato' during winter.

5. **KUTUMSAR** : It is a forest village under Kanger Range of Central Bastar Division, situated at c. 36 km south of Jagdalpur. The famous Kutumsar natural cave is situated about 6 km south-east of Kutumsar village.

The land is hilly and undulating. The hill ranges from a narrow valley known as Kanger Valley through which the Kanger nullah flows towards the east and meets the Kolab river on the Orissa border. The nullah is narrow but quite deep. Crocodiles have been reported from Kolab river. This nullah is situated within 0.5 km south of Kutumsar

village. There is another small nullah which flows through the village and joins the Kanger nullah.

Kutumsar village is located at about 415 m. The annual mean temperature varies from 7.6° C. to 32.2° C. The annual precipitation is 16 cm and the area seldom has rainless month. Frost is unknown. Local storms generally occur during the month of May.

Soil is sandy loam and there is luxuriant growth of sal (*Shorea robusta*) and its other associates like Saja (*Terminalia tomentosa*), Haldu (*Adina cordifolia*), Bija (*Pterocarpus marsupium*) and Dhanra (*Anogeissus latifolia*), etc. Moist peninsular Sal type of forest is found here. Floristic composition is similar to that of Chhotedongar except that four species of bamboos are also found in the understory, namely *Dendrocalamus strictus*, *Cephalostachyum pergracile*, *Bambusa arundinacea* and *Oxytenantha nicrociliata*. Most of the trees are more than 30 m. high. It is worth while to point out that Kutumsar forest village is situated in the Kanger Reserved Forest Block. This is the biggest Reserved Forest in India, the total area of which is 944.53 sq. km. Out of this, 34.22 sq. km. are along with Kanger nullah is proposed to be declared as a Biosphere Reserve.

SYSTEMATIC LIST OF BIRDS FROM BASTER AS REPORTED IN THIS PAPER

Order CICONIIFORMES

Family ARDEIDAE

1. *Ardeola grayii grayii* (Sykes)
2. *Bubulcus ibis coromandus* (Boddaert)

Order FALCONIFORMES

Family ACCIPITRIDAE

3. *Pernis ptilorhynchus ruficollis* Lesson
4. *Accipiter badius dussumieri* (Temminck)

Order GALLIFORMES

Family PHASIANIDAE

5. *Coturnix coromandelica* (Gmelin)

Order GRUIFORMES

Family TURNICIDAE

6. *Turnix suscitator taigoor* (Sykes)

Family RALLIDAE

7. *Fulica atra atra* Linnaeus

Order CHARADRIIFORMES

Family JACANIDAE

8. *Hydrophasianus chirurgus* (Scopoli)
9. *Metopidius indicus* (Latham)

Family CHARADRIIDAE

Subfamily CHARADRIINAE

10. *Vanellus malabaricus* (Boddaert)

Subfamily SCOLOPACINAE

11. *Tringa ochropus* Linnaeus

Family BURHINIDAE

12. *Burhinus oedicephalus indicus* (Salvadori)

Order COLUMBIFORMES

Family COLUMBIDAE

13. *Treron phoenicoptera chlorigaster* (Blyth)
14. *Ducula aenea sylvatica* (Tickell)
15. *Streptopelia orientalis erythrocephala* (Bonaparte)
16. *Streptopelia chinensis suratensis* (Gmelin)

Order PSITTACIFORMES

Family PSITTACIDAE

17. *Psittacula eupatria nipalensis* (Hodgson)
18. *Psittacula krameri borealis* (Neumann)
19. *Psittacula cyanocephala cyanocephala* (Linnaeus)

Order CUCULIFORMES

Family CUCULIDAE

20. *Cuculus varius varius* Vahl
21. *Eudynamis scolopacea scolopacea* (Linnaeus)
22. *Rhopodytes tristis tristis* (Lesson)
23. *Centropus sinensis parroti* Stresemann

Order STRIGIFORMES

Family STRIGIDAE

Subfamily STRIGINAE

24. *Otus bakkamoena marathae* Ticehurst
25. *Glaucidium radiatum radiatum* (Tickell)
26. *Ninox scutulata lugubris* (Tickell)
27. *Athene brama brama* (Temminck)

Order CAPRIMULGIFORMES

Family CAPRIMULGIDAE

28. *Caprimulgus asiaticus asiaticus* Latham
 29. *Caprimulgus affinis monticola* Franklin

Order APODIFORMES

Family APODIDAE

Subfamily HEMIPROCNINAE

30. *Hemiprocne longipennis coronata* (Tickell)

Order CORACIIFORMES

Family ALCEDINIDAE

31. *Halcyon smyrnensis fusca* (Boddaert)

Family MEROPIDAE

32. *Merops leschenaulti leschenaulti* Vieillot
 33. *Merops orientalis orientalis* Latham

Family CORACIIDAE

34. *Coracias benghalensis benghalensis* (Linnaeus)

Family BUCEROTIDAE

35. *Anthracoceros coronatus coronatus* (Boddaert)

Order PICIFORMES

Family CAPITONIDAE

36. *Megalaima zeylanica caniceps* (Franklin)
 37. *Megalaima haemacephala indica* (Latham)

Family PICIDAE

Subfamily PICINAE

38. *Micropternus brachyurus phaiiceps* Blyth
 39. *Picus myrmecophoneus* Stresemann
 40. *Dinopium benghalense benghalense* (Linnaeus)
 41. *Picoides mahrattensis mahrattensis* (Latham)
 42. *Picoides nanus hardwickii* (Jerdon)
 43. *Chrysocolaptes lucidus quttacristatus* (Tickell)

Order PASSERIFORMES

Family ALAUDIDAE

44. *Mirafrassamica affinis* Blyth
 45. *Eremopterix grisea* (Scopoli)

Family HIRUNDINIDAE

46. *Hirundo daurica nipalensis* Hodgson

Family LANIIDAE

47. *Lanius cristatus cristatus* Linnaeus

Family ORIOLIDAE

48. *Oriolus oriolus kundoo* Sykes
 49. *Oriolus xanthornus maderaspatanus* Franklin

Family DICRURIDAE

50. *Dicrurus adsimilis macrocercus* Vieillot
 51. *Dicrurus caerulescens caerulescens* (Linnaeus)
 52. *Dicrurus paradiseus grandis* (Gould)

Family STURNIDAE

53. *Sturnus malabaricus malabaricus* (Gmelin)
 54. *Sturnus pagodarum* (Gmelin)
 55. *Sturnus contra contra* Linnaeus
 56. *Gracula religiosa intermedia* A. Hay

Family CORVIDAE

57. *Dendrocitta vagabunda vagabunda* (Latham)

Family CAMPEPHAGIDAE

58. *Tephrodornis pondicerianus pondicerianus* (Gmelin)
 59. *Coracina novaehollandiae macei* (Lesson)
 60. *Coracina melanoptera sykesi* (Strickland)
 61. *Pericrocotus flammeus semiruber* Whistler & Kinnear
 62. *Pericrocotus cinnamomeus cinnamomeus* (Linnaeus)

Family IRENIDAE

63. *Aegithina tiphia humei* Baker
 64. *Chloropsis cochinchinensis jerdoni* (Blyth)

Family PYCNONOTIDAE

65. *Pycnonotus melanicterus flaviventris* (Tickell)
 66. *Pyononotus cafer humayuni* Deignan

Family MUSCICAPIDAE

Subfamily TIMALIINAE

67. *Pellorneum ruficeps ruficeps* Swainson
 68. *Macronous qularis rubricapilla* (Tickell)
 69. *Chrysomma sinense sinense* Gmelin
 70. *Turdoides striatus orientalis* (Jerdon)
 71. *Alcippe poiocephala brucei* Hume

Subfamily MUSCICAPINAE

72. *Muscicapa subrubra* Hartert & Steinbacher
 73. *Muscicapa tickelliae tickelliae* (Blyth)
 74. *Muscicapa thalassina thalassina* Swainson

Subfamily MONARCHINAE

75. *Hypothymis azurea styani* (Hartlaub)

Subfamily SYLVIINAE

76. *Prinia sylvatica sylvatica* Jerdon
 77. *Orthotomus sutorius guzuratus* (Latham)
 78. *Acrocephalus dumetorum* Blyth

Subfamily TURDINAE

79. *Copsychus saularis saularis* (Linnaeus)
 80. *Copsychus malabaricus indicus* (Baker)
 81. *Saxicoloides fulicata intermedia* Whistler & Kinnear
 82. *Monticola cinclorhynchus* (Vigors)
 83. *Zoothera citrina cyanotus* (Jardine & Selby)

Family PARINAE

Subfamily PARINAE

84. *Parus major stupae* Koelz
 85. *Parus xanthogenys aplonotus* Blyth

Family SITTIDAE

Subfamily SITTINAE

86. *Sitta castanea castanea* Lesson
 87. *Sitta frontalis frontalis* Swainson

Family MOTACILLIDAE

88. *Anthus hodgsoni hodgsoni* Richmond
 89. *Anthus novaeseelandiae rufulus* Vieillot
 90. *Motacilla cinerea cinerea* Tunstall

Family DICAEDIDAE

91. *Dicaeum agile agile* (Tickell)
 92. *Dicaeum erythrorhynchos erythrorhynchos* (Latham)

Family NECTARINIIDAE

93. *Nectarinia asiatica asiatica* (Latham)

Family PLOCEIDAE

Subfamily PASSERINAE

94. *Petronia xanthocollis xanthocollis* (Burton)

Subfamily ESTRILDINAE

95. *Lonchura punctulata punctulata* (Linnaeus)96. *Lonchura malacca malacca* (Linnaeus)

Family FRINGILLIDAE

Subfamily CARDUELINAE

97. *Carpodacus erythrinus roseatus* (Blyth)

SYSTEMATIC ACCOUNT

Order CICONIIFORMES

Family ARDEIDAE

1. ***Ardeola grayii grayii*** (Sykes)
(Indian Pond Heron or Paddybird)

Ardea Grayii Sykes, 1832, *Proc. zool. Soc. Lond.* : 158 (Dukhun = Deccan)

Material : 1 ♂, Kutumswar, 21 Jan 1979.

Measurements : 1 ♂ : Wing 216, tail 82, bill from feathers 73.

Weight : 276.

Local (Hindi) name : *Khunch bagla*.

Gonads : Testes slightly swollen, measuring 6.5 × 3.0 each.

Field notes : The Indian Pond Heron is abundant in this district. It perches on the trees along the banks of rivulets, small nullahs and ponds, and is common on mud-flats. It is generally solitary during foraging but goes to roost in flocks. Food is largely fishes frogs. and water beetles.

2. ***Bubulcus ibis coromandus*** (Boddaert)
(Cattle Egret)

Cancroma coromanda Boddaert, 1783, *Tabl. pl. Enlum.*, 54 (Coromandel).

Material : 1 ♂, Toinar, 17 Jan 1979.

Measurements : 1 ♂ : Wing 254, tail 88, Bill from feathers 6.

Weight : 300+.

Local (Hindi) name : *Gai bagla*.

Gonads ; Testes swollen, each measuring 8.0 × 2.0

Field notes : The Cattle Egret is common and resident throughout the district. Food comprises of insects, chiefly carabid beetles, earth-worms and frogs.

Order FALCONIFORMES

Family ACCIPITRIDAE

3. ***Pernis ptilorhynchus ruficollis*** Lesson
(Crested Honey Buzzard)

Pernis ruficollis Lesson, 1830, *Traite Orn.*, livr. 1 : 77 (Patrie inconnue' = Bengal).

Material : 1 ♀, Toinar, 30 Jan 1979.

Measurements : 1 ♀ : Wing 394, tail 245, bill 39.

Local name : Kadkars.

Gonad : Ovary somewhat enlarged and granular.

Field notes : It is infrequently met with. Collected while perching on a branch of a big tree. Stomach contained some mutilated bees.

4. ***Accipiter badius dussumieri*** (Temminck)
(Indian Shikra)

Falco dussumieri Temminck, 1824, Pl. Col., livr. 52, text to pl. 308 (adult), pl. 336 (immature). (India, type from Bengal).

Material : 1 ♂, Sukma, 11 Feb 1979.

Measurements : 1 ♂ : Wing 183, tail 138, bill 19.

Local name : Shikra.

Gonads : The specimen had somewhat enlarged testes each measuring 12.0 × 6.0.

Field notes : Rather uncommon in the district. Found singly. Feeds mostly on rats, mice, lizards, frogs and insects.

Order GALLIFORMES

Family PHASIANIDAE

5. ***Coturnix coromandelica*** (Gmelin)
(Blackbreasted or Rain Quail)

Tetrao coromandelicus Gmelin, 1789, *Syst. Nat.*, 13 ed. 1(2) : 764 (Coromandal Coast).

Material : 1 ♂, Sukma, 11 Feb 1979.

Measurements : 1 ♂ : Wing 92, tail 29, bill 14.

Weight : 61.

Gonads : Testes somewhat enlarged, each being 4.0×2.0 .

Field notes : This quail is met with principally in harvested cultivation, as well as in ploughed fields. Usually it is found singly or in pairs but on one occasion towards the end of the day a large flock of about 25 to 30 individuals was seen in the Kutru game sanctuary.

Order GRUIFORMES

Family TURNICIDAE

6. **Turnix suscitator taigoor** (Sykes)
(Indian Bustard-Quail)

Hemipodius Taigoor Sykes, 1832, *Proc. zool. Soc. Lond.* : 155
(Dukhun = Deccan).

Material : 1 ♀, Kutumsar, 21 Jan 1979.

Measurements : 1 ♀ : Wing 88, tail 33, bill 16.

Weight : 60.

Local name : Gundra.

Gonad : The gonad is slightly swollen and granular, being 8.0×3.0 .

Field notes : This Bustard-quail is common throughout the district wherever there is open forest. It is usually found singly or in pairs. The stomach contained grass seeds and insects.

Family RALLIDAE

7. **Fulica atra atra** Linnaeus
(Coot)

Fulica atra Linnaeus, 1758, *Syst. Nat.*, 10 *ed.*, 1 : 152.
(Europe, restricted type locality Sweden).

Material : 1 ♀, Barsoor, 6 Feb 1979.

Measurements : 1 ♀ : Wing 150, tail 65, bill from the posterior end of shield 31.

Weight : 206.

Local name : Dasarni.

Gonad : Ovary was somewhat swollen and granular, measuring 8.0×6.0 .

Field notes : The specimen is a young bird with greyish brown plumage above and pale brown mottled with white below. It was associated with Pheasant-tailed Jacana, *Hydrophasianus chirurgus* (Scopoli) and Bronze-winged Jacana, *Metopidius indicus* (Latham) in

tanks having submerged weeds and other aquatic vegetation, as well as on terrestrial grasses growing on the margins of water pools. It was observed to feed on shoots and seeds of aquatic plants.

Order CHARADRIIFORMES

Family JACANIDAE

8. *Hydrophasianus chirurgus* (Scopoli) (Pheasant-tailed Jacana)

Tringa Chirurgus Scopoli, 1786, *Del. Flor. Faun. Insubr.*, 2 : 92
(‘In nova Guiana’ = Luzon ex Sonnerat).

Material : 1 ♀, Barsoor, 3 Feb 1979 ; 1 ♂, Sukma, 9 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill from feathers
1 ♂	178	79	26
1 ♀	213	93	27

Weights : 1 ♂ 130 ; 1 ♀ 158.

Local name : *Piho*.

Gonads : Testes slightly swollen, each measuring 5.0 × 3.0 ; ovary swollen and granular measuring 10.0 × 6.0.

Remarks : The male specimen is young with crown dull rufous brown ; the female specimen is adult with a black ‘necklace’ on upper breast and a reduced tail.

Field notes : It is a marsh bird. When flushed it moves to the central area of the pool. It walks on floating leaves of water lillies.

9. *Metopidius indicus* (Latham) (Bronze-winged Jacana)

Parra indica Latham, 1790, *Index Orn.*, 2 : 765 (India).

Material : 3 ♂ and 1 ♀, Sukma, 9 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
3 ♂	153, 158 163	38, 40 (2)	35, 36 (2)
1 ♀	192	51	42

Weights : 3 ♂ 158, 180 (2) ; 1 ♀ 288.

Gonads : Testes slightly swollen, each measuring 5.0 × 3.0. Ovary well developed, measuring 14.0 × 9.0, the largest ovum being 2.0 in diameter.

Field notes : Rather common, found in swamps having thick aquatic vegetation, runs about on large floating leaves.

Remarks : The males do not appear to be in fully adult plumage. They still exhibit some young characters in the plumage, such as rufous-brown on the crown and nape, a short dull white supercilium, barred white and brown on the upper tail coverts, etc.

Family CHARADRIIDAE

Subfamily CHARADRIINAE

10. *Vanellus malabaricus* (Boddaert)
(Yellow-wattled Lapwing)

Charadrius malabaricus Boddaert, 1783, *Tabl. Pl. Enlum.*, 53 (Malabar Coast, ex Daubenton, pl. 880).

Material : 1 ♂, Toinar, 30 Jan 1979 ; 1 ♀, Chhotedongar, 14 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	203	80	30
1 ♀	195	77	30

Local name : Zirdi.

Gonads : The male specimen had somewhat unequal testes, the right smaller, 4.0 × 2.0 while the left larger, 7.0 × 3.5 ; but the female had well-developed ovary measuring 25.0 × 16.0.

Field notes : Found singly or in pairs on the bank of rivers and mudflats and also on ploughed land for foraging on insects.

Subfamily SCOLOPACINAE

11. *Tringa ochropus* Linnaeus
(Green Sandpiper)

Tringa Ochrophus (sic !) Linnaeus, 1758, *Syst. Nat.*, 10 ed., 1 : 149 (in Europa = Sweden).

Material : 1 ♀ Chhotedongar, 15 Feb 1979.

Measurements : 1 ♀ : Wing 137, tail 61, bill 36.

Weight : 78.

Gonad : Ovary slightly enlarged and granular, measuring 7.0 × 5.0,

Field notes : Found on the edges of streams and stretches of open water and mudflats. Feeds on aquatic insects, worms, and crustaceans.

Family BURHINIDAE

12. **Burhinus oedicnemus indicus** (Salvadori)
(Indian Stone Curlew)

Oedicnemus indicus Salvadori, 1865, *Atti Soc. Ital. Sci. Nat. Milang*, 8 : 381 (India).

Material : 1 ♀ , Toinar, 30 Jan 1979.

Measurements : 1 ♀ : Wing 212, tail 112, bill 43.

Local name : *Barsiri*.

Gonad : Ovary well developed, measuring 12.0 × 9.0.

Field notes : The bird is seen in pairs. Feeds principally on insects and worms, along the edge of open forests.

Order COLUMBIFORMES

Family COLUMBIDAE

13. **Treron phoenicoptera chlorigaster** (Blyth)
(Southern Green Pigeon)

Vinago chlorigaster Blyth, 1843, *J. Asiat. Soc. Beng.*, 12(1) : 167
(No locality = Indian Peninsula).

Material : 1 ♂ and 1 ♀ , Kutumsar, 22 Jan 1979 ; 2 ♂ and 1 ♀ , Toinar, 27 Jan 1979 ; 1 ♂ , Sukma, 11 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
4 ♂	182, 189	104, 108	22(4)
	190, 191	114, 115	
2 ♀	179, 183	98, 100	22, 23

Weights : 4 ♂ 228(2) 240, 248 ; 2 ♀ 226, 240.

Local name : *Harial*

Gonads : The gonads in one male (28 Jan) were slightly swollen ; in other two (22 and 27 Jan) enlarged and unequal, the right one larger (16.0 × 6.0 and 20.0 × 18.0) than the left (14.0 × 6.0 and 17.0 × 7.0) and in the fourth (11 Feb) enlarged and equal (6.0 × 8.0). The ovary in one female (22 Jan) was very minute, while in the other (27 Jan) somewhat enlarged, measuring 17.0 × 17.0, the largest ovum being 5.0 in diameter.

Field notes : Occurs in almost every forest. A single party of 20 to 30 individuals was observed. Feeds on Peepul (*Ficus religiosa*) and Mohua (*Madhuca latifolia*) berries. Stomach contained seeds of both the species.

14. ***Ducula aenea sylvatica*** (Tickell)
(Northern Green Imperial Pigeon)

Columba Sylvaticā Tickell, 1833, *J. Asiat. Soc. Beng.*, 2 : 581 (Borabhum).

Material : 1 ♂, Sukma, 11 Feb 1979 ; 1 ♀, Chhotedongar, 14 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	213	140	30
1 ♀	218	133	30

Weights : 1 ♂ 300+ ; 1 ♀ 300+.

Local name : *Bada harial*.

Gonads : Testes swollen and enlarged each being 15.0 × 7.0. Ovary well developed (17.0 × 10.0), its largest ovum being 5.0 in diameter ; oviducal funnel formed.

Field notes : It is not widely, distributed, rather uncommon, found in pairs, perching close together. The bird always perches on the tree tops. Identifiable by its characteristic call—*Wuck-woor-woor-woor*. The male specimen had fruits of Gab (*Diospyros peragrina*) in its crop while the female had Mahua leaves (*Madhuca latifolia*) and Indian black berry (*Syzygium cumini*).

15. ***Streptopelia orientalis erythrocephala*** (Bonaparte)
(Peninsular Turtle-Dove)

Turtur erythrocephalus Bonaparte, 1855, *Consp. Gen Av.*, 2 : 60 (South Africa in errore southern India vide Whistler, H., 1943. *J. Bombay nat. Hist. Soc.*, 44 : 26).

Material : 2 ♂, Toinar, 27 and 30 Jan 1979 ; 1 ♀, Chhotedongar, 18 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
2 ♂	185(2)	127, 130	23(2)
1 ♀	180	112	21

Weights : 2 ♂ 180, 220 ; 1 ♀ 178.

Gonads : The gonads in one male (27 Jan) were unequal and somewhat enlarged (right 18.0 × 8.0, left 19.0 × 7.0) whereas in the other they were equal and slightly swollen (10.0 × 6.0). The female had enlarged gonad (15.0 × 6.0), the largest ovum being 4.0 in diameter.

Field notes : Found in small parties comprising of three or four individuals. Feeds on cereals, viz., rice, millets, etc.

16. **Streptopelia chinensis suratensis** (Gmelin)
(Indian Spotted Dove)

Columba suratensis Gmelin, 1789, *Syst. Nat.*, 13 ed., 1(2) : 778 (Surat, Gulf of Cambay, India).

Material : 2 ♀, Kutumsar, 22 and 24 Jan 1979 ; 3 ♀, Barsoor, 5 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
5 ♀	122, 123, 132, 135, 136	104, 107, 130, 131, 132	19, 20(4)

Weights : 5 ♀ 82, 100, 102, 110, 120.

Local name : *Parki*.

Gonads : The gonads in one female from Kutumsar (22 Jan) was slightly swollen (8.0 × 3.0), whereas in the other (24 Jan) enlarged and granular (8.0 × 8.0) ; the largest ovum in the latter being 2.0 in diameter. The gonad in one female from Barsoor (5 Feb) was slightly swollen (5.0 × 4.0), in another granular and somewhat enlarged (10.0 × 8.0), whereas in the third it was quite enlarged (14.0 × 8.0), with its largest ovum measuring 5.0 in diameter.

Field notes : Very common throughout the district, commoner in the open forest or by roadside. Its food comprises largely of rice, and Peepul figs (*Ficus religiosa*). In one specimen (22 Jan) mustard seeds and some grit were found in its crop.

Order PSITTACIFORMES

Family PSITTACIDAE

17. **Psittacula eupatria nipalensis** (Hodgson)
(Large Indian Parakeet)

Palaeornis Nipalensis Hodgson, 1836, *Asiat. Res.*, 19(1) : 177 (Nepal).

Material : 1 ♀, Chhotedongar, 14 Feb 1979.

Measurements : 1 ♀, Wing 197, tail—, bill 31.

Weight : 198.

Local name : *Karan tota*.

Gonad : Ovary somewhat enlarged and granular, measuring 11.0 × 6.0.

Field notes : Congregates in good number, prefers to perch on tree tops. Crop contained tender leaves of Sal (*Shorea robusta*).

18. **Psittacula krameri borealis** (Neumann)
(Northern Roseringed Parakeet)

Palaeornis krameri borealis Neumann, 1915, *Orn. Mber.*, 23 : 178 (Assam).

Material : 1 ♂, Barsoor, 6 Feb 1979.

Measurements : 1 ♂ : Wing 171, tail 252, bill from cere 25.

Weight : 134.

Local name : *Tota*.

Gonads : Testes somewhat enlarged measuring 16.0 × 8.0.

Field notes : Rather common, found frequently in open forests. In habits, it is more or less similar to the preceding species.

19. **Psittacula cyanocephala cyanocephala** (Linnaeus)
(Southern Blossomheaded Parakeet)

Psittacus cyanocephalus Linnaeus, 1766, *Syst. Nat.*, 12 ed., 1 : 141 (East Indies = Gingi, South Arcot district, Madras = Tamil Nadu).

Material : 1 ♂, Kutumsar, 24 Jan 1979 ; 1 ♀, Toinar, 29 Jan 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	134	188	19
1 ♀	137	160	17

Weights : 1 ♂ 62 ; 1 ♀ 66.

Local name : *Tuiya tota*.

Gonads : Testes slightly swollen measuring 6.0 × 2.0 ; ovary also slightly swollen and granular measuring 5.0 × 3.0, the largest ovum being 1.0 in diameter.

Field notes : Often seen in flocks of considerable size, invading cultivated fields. The male had millets and grass seeds in its crop.

Order CUCULIFORMES

Family CUCULIDAE

20. **Cuculus varius varius** Vahl
(Common Hawk-Cuckoo or Brainfever Bird)

Cuculus varius Vahl, 1797, *Skriv. Naturhist.-Selsk.*, *Kjobenhavn* 4(1) : 60 (Tranquebar).

Material : 1 ♂, Toinar, 27 Jan 1979 ; 1 ♀, Barsoor, 4 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	202	156	28
1 ♀	207	168	29

Weights : 1 ♂ 100 ; 1 ♀ 108.

Local name : Papiha.

Gonads : Testes slightly enlarged, measuring 5.0×4.0 ; ovary somewhat swollen and granular, measuring 9.0×8.0, largest ovum being 1.5 in diameter.

Field notes : Rather common, seen singly or sometimes in pairs. Feeds mainly on insects.

21. ***Eudynamys scolopacea scolopacea*** (Linnaeus)
(Indian Koel)

Cuculus scolopaceus Linnaeus, 1758, *Syst. Nat.*, 10 ed., 1 : 111 (Malabar).

Material : 1 ♂, Kutumsar, 19 Jan 1979.

Measurements : 1 ♂ : Wing 198, tail 187, bill 33.

Weight : 202.

Local name : Koel.

Gonads : Testes were somewhat enlarged.

Remarks : Found in pairs. Feeds on insects.

22. ***Rhopodytes tristis tristis*** (Lesson)
(Large Greenbilled Malkoha)

Melias tristis Lesson, 1830, *Traite Orn.*, livr. 2 : 132 (Sumatra, *errore* = Bengal).

Material : 1 ♂, Kutumsar, 20 Jan 1979.

Measurements : 1 ♂ : Wing 163, tail 345, bill 36.

Weight : 124.

Gonads : Testes somewhat enlarged, each measuring 5.0×4.0.

Field notes : Very uncommon, found singly. Stomach contents revealed mainly insects particularly grasshoppers, mantids, etc.

23. **Centropus sinensis parroti** Stresemann
(Southern Crow-Pheasant)

Centropus sinensis parroti Stresemann, 1913, *Nov. Zool.*, 20 : 323 (Ceylon).

Material : 1 ♂, Kutumsar, 21 Jan 1979.

Measurements : 1 ♂ : Wing 188, tail 270, bill 41.

Weight : 240.

Local name : Mohoka.

Gonads : Testes somewhat enlarged, each measuring 12.0 × 4.0.

Field notes : Very common, found singly near human habitations. Crop contained some insects, viz., crickets, beetles, etc.

Order STRIGIFORMES

Family STRIGIDAE

Subfamily STRIGINAE

24. **Otus bakkamoena marathae** Ticehurst
(Central Indian Collared Scops Owl)

Otus bakkamoena marathae Ticehurst, 1922, *Bull. Br. orn. Cl.*, 42 : 122 (Raipur, Madhya Pradesh).

Material : 1 ♂, Toinar, 31 Jan 1979.

Measurements : 1 ♂ : Wing 154, tail 76, bill 24.

Weight : 94.

Gonads : Testes slightly swollen and unequal, the right one being smaller (5.5 × 4.0) and left one larger (6.0 × 5.0).

Field notes : Rather uncommon. Feeds on small rats, mice and insects.

25. **Glaucidium radiatum radiatum** (Tickell)
(Barred Jungle Owlet)

Strix Radiata Tickell, 1833, *J. Asiat. Soc. Beng.*, 2 : 572 (Jungle of Borabhum and Dholbhum).

Material : 1 ♂, Kutumsar, 20 Jan 1979 ; 1 ♂, Toinar, 30 Jan 1979 ; 1 ♂, Sukma, 10 Feb 1979 ; 2 ♀, Chhotedongar, 14 and 15 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
3 ♂	123, 125, 130	66, 67, 69	18 (2), 19
2 ♀	128, 129	67, 68	19, 21

Weights : 3 ♂ 90, 94, 100 ; 2 ♀ 88, 104.

Local name : *Fangli choghad*.

Gonads : Testes in two males (21 Jan, 10 Feb) slightly swollen (4.0×2.5 and 3.0×2.0), in the third (30 Jan) somewhat enlarged (6.0×4.0). Ovaries slightly enlarged (10.0×8.0 and 9.0×6.0), the largest ovum being 3.0 and 2.0 in diameter respectively.

Field notes : Widely distributed throughout the district ; found in open country as well as in forest. Food—principally insects.

26. ***Ninox scutulata lugubris*** (Tickell)
(Indian Brown Hawk-Owl)

Strix lugubris Tickell, 1833, *J. Asiat. Soc. Beng.*, 2 : 572 (Dampara, Dholbhum, Bengal = Dhalbhum, Singhbhum Dist., Bihar).

Material : 1 ♂, Toinar, 28 Jan 1979.

Measurements : 1 ♂ : Wing 222, tail 130, bill 23.

Weight : 172.

Local name : *Choghad basra*.

Gonads : Testes slightly swollen and each measured 3.5×2.5 .

Field notes : Rather uncommon, found in open jungles ; perching on trees. Crop contained some mutilated beetles.

27 ***Athene brama brama*** (Temminck)
(Southern Spotted Owlet)

Strix brama Temminck, 1821, *Pl. Col.*, livr. 12, pl 68 (Pondicherry and West Coast of India).

Material : 1 ♀, Toinar, 30 Jan 1979.

Measurements : 1 ♀ : Wing 152, tail 68, bill 21.

Weight : 110.

Gonads : Ovary enlarged and granular (20.0×12.0), largest ovum being 10.0 in diameter ; oviducal funnel developed.

Field notes : Not particularly common, found by roadside or in cultivated fields.

Order CAPRIMULGIFORMES

Family CAPRIMULGIDAE

28. ***Caprimulgus asiaticus asiaticus*** Latham
(Indian Little Nightjar)

Caprimulgus asiaticus Latham, 1790, *Index Orn.*, 2 : 588 (Bombay).

Material : 1 ♂ and 1 ♀ , Toinar, 29 Jan and 2 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	135	105	16
1 ♀	145	103	17

Weights : 1 ♂ 40 ; 1 ♀ 40.

Gonads : Testes slightly swollen, each measuring 4.0×3.0 ; ovary in the non-breeding condition (5.0×4.0).

Field notes : Very common, found in open forest. Feeds on the ground, food comprises of beetles and bugs.

29. *Caprimulgus affinis monticola* Franklin (Franklin's or Allied Nightjar)

Caprimulgus monticolus Franklin, 1831, *Proc. zool. Soc. Lond.* : 116
(Ganges between Calcutta and Benares).

Material : 1 ♂ and 1 ♀ , Toinar, 1 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	194	124	24
1 ♀	191	118	14

Weights : 1 ♂ 78 ; 1 ♀ 72.

Gonads : The gonads were in the non-breeding condition, the ovary measured 7.0×7.0 , largest ovum being 1.0 in diameter ; the testes measured 6.0×5.0 .

Field notes : Habits and food similar to those of the preceding bird.

Order APODIFORMES

Family APODIDAE

Subfamily HEMIPROCNINAE

30. *Hemiprocne longipennis coronata* (Tickell) (Crested Tree Swift)

Hirundo Coronata Tickell, 1833, *J. Asiat. Soc. Beng.*, 2 : 580 (Jungles of Borabhum and Dholbhum).

Material : 1 ♀ , Toinar, 29 Jan 1979 ; 1 ♀ , Sukma, 11 Feb 1979.

Measurements : 2 ♀ : Wing 154, 156 ; tail 42/139, 46/93+ ; bill 10(2).

Weights : 2 ♀ 28, 30.

Local name : *Tajdar ababeel*.

Gonads : The gonads were somewhat enlarged ; the ovary in one (29 Jan) measured 9.0×9.0 and in the other (11 Feb) 10.0×9.0 ; oviducal funnel developed ; largest ovum being 3.0 in diameter.

Field notes : Met with singly or in pairs, perches on the top exposed boughs or on telegraph wires.

Order CORACIIFORMES

Family AICEDINIDAE

31. *Halcyon smyrnensis fusca* (Boddaert) (Indian Whitebreasted Kingfisher)

Alcedo fusca Boddaert, 1783, *Tabl. Pl. Enlum.*, : 54 (Malabar coast ex Daubenton).

Material : 2 ♀, Chhotedongar, 15 and 17 Feb 1979.

Measurements : 2 ♀ : Wing 119, 120 ; tail 80(2) ; bill 62, 63.

Weights : 2 ♀ 66, 72.

Local name : *Kourilla*.

Gonads : Ovaries slightly swollen and enlarged and measured 7.0×5.0 and 9.0×4.0 .

Field notes : Found only once in the vicinity of a rivulet. Feeds on insects, particularly grasshoppers and water beetles and small fishes.

Family MEROPIDAE

32. *Merops leschenaulti leschenaulti* Vieillot (Chestnutheaded Bee-eater)

Merops leschenaulti Vieillot, 1817, *Nouv. Dict. d'Hist. Nat.*, 14 : 17 (Java, *errore* = Ceylon).

Material : 1 ♂, Sukma, 10 Feb 1979.

Measurements : 1 ♂ : Wing 109, tail 80, bill 41.

Weight : 72.

Local name : *Lalsir Patringa*.

Gonads : Testes were in the non-breeding condition, measuring 2.0×1.0 .

Field notes : The bird was seen quite infrequently. Feeds on insects, particularly ants and termites.

33. **Merops orientalis orientalis** Latham
(Indian Small Green Bee-eater)

Merops orientalis Latham, 1801, *Index Orn., Suppl.*, 33 (India = Pondicherry *vide* Stresemann, 1952, *Ibis* 94 : 515).

Material : 1 ♀, Toinar, 30 Jan 1979 ; 3 ♂ and 1 ♀, Barsoor, 6 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
3 ♂	91, 95, 98	116, 128, 135	33 (2), 35
2 ♀	90 (2)	108, 121	32(2)

Weights : 3 ♂ 14, 16 (2) ; 2 ♀ 14 (2).

Local name : *Harrial*.

Gonads : Testes of one male very small measuring 1.0×0.5 , whereas in other two birds slightly enlarged, both measuring 3.0×1.5 . Ovaries slightly swollen (5.0×3.0 and 4.0×2.0).

Field notes : Quite common in open forests and in the cultivated lands. Feeds on small beetles, moths, butterflies, termites and other winged insects, while on flight.

Family CORACIIDAE

34. **Coracias benghalensis benghalensis** (Linnaeus)
(Northern Roller or Blue Jay)

Corvus benghalensis Linnaeus, 1758, *Syst. Nat.*, 10 ed., 1 : 106 (Benghala).

Material : 1 ♂, Kutumsar, 24 Jan 1979.

Measurements : 1 ♂ : Wing 180, tail 126, bill 45.

Weight : 120.

Gonads : Testes were in the non-breeding condition, each measuring 4.0×3.0 .

Field notes : Not uncommon ; usually found singly. Feeds on insects mainly moths, beetles, termites, ants, etc.

Family BUCEROTIDAE

35. **Anthracosceros coronatus coronatus** (Boddaert)
(Malabar Pied Hornbill)

Buceros Coronatus Boddaert, 1783, *Tabl. Pl. Enlum.*, 53 (Malabar).

Material : 1 ♂, Chhotedongar, 18 Feb 1979.

Measurements : 1 ♂ : Wing 328, tail 316, bill from gape 167.

Weight : 300+.

Local name : *Dhan Chiri*.

Gonads : Testes enlarged, measuring 15.0 × 5.0.

Field notes : Seen always in pairs, perching close together. In morning it prefers to perch on tree-tops. Feeds on wild figs (*Ficus* spp.)

Order PICIFORMES

Family CAPITONIDAE

36. *Megalaima zeylanica caniceps* (Franklin)
(Northern Green Barbet)

Bucco caniceps Franklin, 1831, *Proc. zool. Soc. Lond.* : 121 (Ganges between Calcutta and Benares, and Vindhyan Hills between the latter place and Gurrah Mundela on the Nerbudda).

Material : 1 ♂ and 1 ♀, Kutumsar, 20 and 23 Jan 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	120	77	32
1 ♀	117	71	34

Weights : 1 ♂ 108 ; 1 ♀ 114.

Local name : *Bada basant*.

Gonads : Testes slightly swollen (3.0 × 2.0) ; ovary enlarged and granular (10.0 × 8.0), largest ovum being 1.0 in diameter.

Field notes : Generally found singly or in pairs, perching on big tree-tops. One bird had Peepul seeds (*Ficus religiosa*) in its crop.

37. *Megalaima haemacephala indica* (Latham)
(Crimsonbreasted Barbet or Coppersmith)

Bucco indicus Latham, 1788, *Index Orn.*, 1(1) : 205 (India).

Material : 1 ♀, Toinar, 29 Jan 1979 ; 1 ♂, Chhotedongar, 15 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	80	35	19
1 ♀	80	34	20

Weights : 1 ♂ 32 ; 1 ♀ 38.

Local name : *Chhota basant*,

Gonads : Both testes (9.0×7.0) and ovary (6.0×5.0) slightly enlarged.

Field notes : Rather common, usually found singly, sometimes in pairs. Feeds on wild figs (*Ficus* sp.).

Family PICIDAE
Subfamily PICINAE

38. ***Micropternus brachyurus phaiiceps*** Blyth
(Eastern Rufous Woodpecker)

Micropternus phaiiceps Blyth, 1845, *J. Asiat. Soc. Beng.*, 14(1) : 195 (Arakan).

Material : 1 ♂, Sukma, 11 Feb 1979.

Measurements : 1 ♂ : Wing 103, tail 67, bill 30.

Weight : 80.

Gonads : Testes somewhat enlarged each measuring 7.0×5.0.

Field notes : Not frequently seen. Usually found singly or in pairs. Feeds on ants, termites and small spiders.

39. ***Picus myrmecophoneus*** Stresemann
(Little Scalybellied Green Woodpecker)

Picus myrmecophoneus Stresemann, 1920, *Verh. Orn. Ges. Bayern*, 14 : 289 (Himalaya and Central India).

Material : 1 ♂, Chhotedongar, 14 Feb 1979.

Measurements : 1 ♂ : Wing 132, tail 94, bill 37.

Weight : 90.

Gonads : Testes slightly swollen and each measured 5.0×3.0.

Field notes : Rather uncommon, met with singly. Inhabitant of more open forest and avoids thick forests. Feeds on termites and ants.

40. ***Dinopium benghalense benghalense*** (Linnaeus)
(Northern Goldenbacked Woodpecker)

Picus benghalensis Linnaeus, 1758, *Syst. Nat.* 10 ed., 1 : 113. (Benghala = Chandernagor *vide* Stresemann, 1952, *Ibis* 94 : 517).

Material : 1 ♀ , Kutumsar, 24 Jan 1979 ; 1 ♀ , Toinar, 27 Jan 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	137	91	45
1 ♀	143	93	—

Weights : 1 ♂ 92 ; 1 ♀ 98.

Local name : *Khidree*.

Gonads : Testes slightly swollen, measuring 4.5×2.0 . Ovary somewhat enlarged and granular and measured 8.0×8.0 , the largest ovum being 1.0 in diameter.

Field notes : Very common in secondary jungles, generally found in pairs occupying low branches of large trees. Stomach contents of the female specimen revealed some butterflies and beetles.

41. ***Picoides mahrattensis mahrattensis*** (Latham)
(Yellowfronted Pied or Mahratta Woodpecker)

Picus Mahrattensis Latham, 1801, *Index Orn.*, Suppl., 31 (India = Mahratta Country *ex Gen. Syn.*, Suppl. 2 : 142, No. 7).

Material : 1 ♀ , Sukma, 10 Feb 1979.

Measurements : 1 ♀ : Wing 103, tail 62, bill 25.

Weight : 30.

Gonad : Ovary slightly swollen, measuring 6.0×5.0 , the largest ovum being 1.0 in diameter.

Field notes : Not very common, found usually singly or in pairs. Food mainly insects such as beetles, moths and dragonflies.

42. ***Picoides nanus hardwickii*** (Jerdon)
(Southern Browncrowned Pygmy Woodpecker)

Picus (Dendrocopos) Hardwickii Jerdon, 1844, *Madras J. Lit. Sci.*, 13 (2) : 138 (Southern India = Goomsoor, Ganjam).

Material : 1 ♀ , Toinar, 27 Jan 1979.

Measurements : 1 ♀ : Wing 78, tail 40, bill 16.

Weight : 129.

Gonad : Ovary in the non-breeding condition, measuring 4.0×3.0 .

Field notes : Found frequently in open forests, usually seen in pairs. Food comprises of insects especially caterpillars.

43. **Chrysocolaptes lucidus guttacristatus** (Tickell)
(Eastern Larger Goldenbacked Woodpecker)

Picus Guttacristatus Tickell, 1833, *J. Asiat. Soc. Beng.*, 2 : 578
(Jungles of Borabhum and Dholbhum).

Material : 1 ♀, Barsoor, 6 Feb 1979.

Measurements : 1 ♀ : Wing 160, tail 94, bill 45.

Weight : 166.

Gonad : Ovary slightly swollen, measuring 12.0 × 5.0.

Field notes : Rather common, found in pairs, sometimes in small groups ; very noisy. Feeds on insects particularly ants and termites.

Order PASSERIFORMES

Family ALAUDIDAE

44. **Mirafra assamica affinis** Blyth
(Madras Bush Lark)

Mirafra affinis 'Jerdon' = Blyth' 1845, *J. Asiat. Soc. Beng.*, 13 : 950
(Southern part of the peninsula of India).

Material : 1 ♂, Barsoor, 6 Feb 1979.

Measurements : 1 ♂ : Wing 86, tail 45, bill 17.

Weight : 26.

Local name : *Chirchira*.

Gonads : Testes have started swelling, each measuring 6.0 × 3.0.

Field notes : Very common, met with principally in stretches of abandoned cultivation having growth of wild grass and shrubs. Food mainly grass seeds.

45. **Eremopterix grisea** (Scopoli)
(Ashycrowned Finch-Lark)

Alauda grisea Scopoli, 1786, *Del. Flor. Faun. Insubr.*, 2 : 95 (Gingi, S. Arcot Dist., Madras = Tamil Nadu).

Material : 1 ♂, Chhotedongar, 17 Feb 1979.

Measurements : 1 ♂ : Wing 78, tail 42, bill 13.

Weight : 10.

Gonads : Testes enlarged each measuring 8.0 × 5.0.

Field notes : Common, found in small parties of a dozen or two in open grassy, sandy or gravel grounds where they camouflaged. Food comprises of seeds of grass and weed and insects.

Family HIRUNDINIDAE

46. **Hirundo daurica nipalensis** Hodgson
(Himalayan Striated or Redrumped Swallow)

Hirundo Nipalensis Hodgson, 1836, *J. Asiat. Soc. Beng.*, 5 : 780 (Nepal).

Material : 1 ♂, Barsoor, 6 Feb 1979.

Measurements : 1 ♂ : Wing 123, tail 85, bill 11.

Weight : 16.

Gonads : Testes minute, measuring 1.0×0.5 .

Field notes : Very common, found in very large flocks closely perched on telegraph wires in long rows of several hundreds, probably congregated for outward migration.

Family LANIIDAE

47. **Lanius cristatus cristatus** Linnaeus
(Brown Shrike)

Lanius cristatus Linnaeus, 1758, *Syst. Nat.*, 10 *ed.*, 1 : 93 (Benghala).

Material : 1 ♂, Kutumsar, 23 Jan 1979 ; 1 ♂, Barsoor, 5 Feb 1979.

Measurements 2 ♂ : Wing 87(2), tail 80, 87, bill 19(2).

Weights : 2 ♂ 24, 30.

Gonads : Testes slightly swollen, measuring 1.5×1.0 and 3.0×1.0 .

Field notes : Not very uncommon ; usually seen singly ; perches most of the times on exposed bush-top. Food comprises of coleoptera, orthoptera, etc.

Family ORIOLIDAE

48. **Oriolus oriolus kundoo** Sykes
(Indian Golden Oriole)

Oriolus kundoo Sykes, 1832, *Proc. zool. Soc. Lond.* : 87 (Dukhun = Deccan).

Material : 1 ♀, Barsoor, 5 Feb 1979.

Measurements : 1 ♀ : Wing 144, tail 91, bill 29+.

Weight : 65.

Local name : *Peelak*.

Gonad : Ovary somewhat enlarged, measuring 5.0×4.0 , largest ovum being 1.5 in diameter.

Field notes : Rather common ; found singly or pairs, feeding on figs (*Ficus* sp.) and insects.

49. ***Oriolus xanthornus maderaspatanus* Franklin**
(South Indian Blackheaded Oriole)

Oriolus maderaspatanus Franklin, 1831, *Proc. zool. Soc. Lond.* : 118 (Ganges between Calcutta and Benares, and in the Vindhyan Hills, etc., restricted to Jabalpur by Whistler & Kinnear, 1934, *J. Bombay nat. Hist. Soc.*, 36 : 575).

Material : 1 ♂, Barsoor, 3 Feb 1979 ; 1 ♀, Chhotedongar, 17 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	136	88	32
1 ♀	132	84	29

Weights : 1 ♂ 56 ; 1 ♀ 60.

Local name : *Peelak*.

Gonads : Gonads somewhat enlarged each testes measuring 5.0×3.0 and ovary 9.0×5.0 , the largest ovum being 2.0 in diameter.

Field notes : Habits and habitats are very similar to those of the preceding species.

Remarks : Baker (1926) considers the whole population of Indian Blackheaded Oriole as one subspecies, *Oriolus xanthornus xanthornus* Linnaeus, Biswas (1947), Rand and Fleming (1957) and Ripley (1981) supported Baker's view. Ali and Ripley (1972) upheld *Oriolus xanthornus maderaspatanus* as a distinct subspecies. Recently, Majumdar (1981) reviewed the taxonomic status of *Oriolus xanthornus maderaspatanus* Franklin by taking measurements of yellow spots on secondaries 6, 7 and 8 (from outside), and accepted it as a valid subspecies.

Family DICRURIDAE

50. ***Dicrurus adsimilis macrocercus* Vieillot**
(South Indian Black Drongo or King Crow)

Dicrurus macrocercus Vieillot, 1817, *Nouv. Dict. Hist. Nat.*, nouv. ed., 9 : 588, based on 'le Drongolon' of Levaillant, 1805, *Ois. Afr.* 4, Pl, 174 : 72 (India, restricted to Orissa by Bakar, 1924, *FBI* 2 : 356).

Material : 1 ♂ and 1 ♀, Barsoor, 4 and 5 Feb 1979.

<i>Measurement</i> :	Wing	Tail	Bill
1 ♂	146	102/157	25
1 ♀	137	104/138	24

Weights : 1 ♂ 46 ; 1 ♀ 38.

Gonads : Both the testes and ovary somewhat enlarged, each testes measuring 4.0×2.5 and ovary 5.0×3.0 .

Field notes : Very common throughout the district. Usually seen singly, perched on telegraph wires or leafless tree-tops, on backs of grazing cattle, fence posts, etc. Feeds on insects, predominantly beetles, ants, termites, grasshoppers and bugs.

Remarks : The female specimen does not appear to be fully adult. Its upper body plumage has very little gloss and under wing coverts are edged with white.

51. ***Dicrurus caerulescens caerulescens*** (Linnaeus)
(Indian Whitebellied Drongo)

Lanius caerulescens Linnaeus, 1758, *Syst. Nat.*, 10 ed., 1 ; 95.
(Benghala).

Material : 1 ♀, Barsoor, 4 Feb 1979.

Measurements : 1 ♀ : Wing 123, Tail 90/124, Bill 24.

Weight : 38.

Local name : *Dhapri*.

Gonad : Ovary slightly swollen, measuring 6.0×4.0 .

Field notes : Not very common ; found in small parties of six or seven ; quarrelsome ; aggressive to intruders. Feeds on insects, mainly termites, grasshoppers, and sometimes moths.

52. ***Dicrurus paradiseus grandis*** (Gould)
(Northern Large Racket-tailed Drongo)

Edolius grandis Gould, 1836, *Proc. Zool. Soc. Lond.* : 5 (Nepalia).

Material : 1 ♀, Kutumsar, 21 Jan 1979 ; 1 ♀, Sukma, 9 Feb 1979.

Measurements : 2 ♀ : Wing 158, 161 ; tail 155/338, 155/348 ; bill 37, 39.

Weights : 2 ♀ 70. 76.

Local name : *Bhringraj*.

Gonads : Ovaries in both the females somewhat enlarged, measuring 5.0×3.0 and 7.0×3.5 .

Field notes : Found in small parties. Feeds on insects, mainly beetles, termites and moths.

Family STURNIDAE

53. *Sturnus malabaricus malabaricus* (Gmelin)
(Greyheaded Myna)

Turdus malabaricus Gmelin, 1789, *Syst. Nat.*, 13 ed., 1 : 816 (Malabar Coast).

Material : 2 ♂, Barsoor, 4 Feb 1979.

Measurements : 2 ♂ : Wing 104, 105 ; tail 63, 64 ; bill 22, 24.

Weights : 2 ♂ 42, 46.

Local name : Pawei.

Gonads : Testes slightly swollen, each pair of testes measuring 3.0×1.5 and 2.5×1.5 .

Field notes : Very common, seen throughout the district, frequents open forest. Found in flocks, upto two dozen or so. Feeds on wild figs of Peepul, Banyan (*Ficus religiosa*, *Ficus bengalensis*), etc., and insects. Occasionally, it feeds along with other species, namely *Sturnus pagodarum* (Gmelin) on the same tree.

54. *Sturnus pagodarum* (Gmelin)
(Blackheaded or Brahminy Myna)

Turdus pagodarum Gmelin, 1789, *Syst. Nat.*, 13 ed., 1 : 816 (Malabar).

Material : 1 ♂, Sukma, 11 Feb 1979.

Measurements : 1 ♂ : Wing 105, tail 66, bill 22.

Weight : 48.

Local name : Kalasir myna.

Gonads : Testes slightly swollen each measuring 4.0×3.0 .

Field notes : Quite common everywhere. Habits and habitats are similar to those of preceding species.

55. *Sturnus contra contra* Linnaeus
(Indian Pied Myna)

Sturnus contra Linnaeus, 1758, *Syst. Nat.*, 10 ed., 1 : 167 (India).

Material : 4 ♂, Barsoor, 5 Feb 1979,

Measurements : 4 ♂ : Wing 116, 117, 118, 125 ; tail 67, 68, 70(2) ; bill 32, 34(3).

Weights : 4 ♂ 76, 84, 86, 90.

Local name : *Ablaki myna*.

Gonads : Testes slightly swollen measuring 3.5×2.0 ; 4.0×2.0 ; 4.0×2.5 and 4.0×3.0 .

Field notes : Found in large flocks. Feeds mainly on wild figs (*Ficus* spp.) and insects.

56. *Gracula religiosa intermedia* A. Hay
(Northern Hill Myna)

Gracula intermedia A. Hay, 1844, *Madras J. Lit. Sci.*, 13 : 157 (Cachar).

Material : 4 ♀ , Kutumsar, 19 Jan 1979.

Measurements : 4 ♀ : Wing 161, 162(2), 164 ; tail 71(2), 73, 78 ; bill 30, 31(3).

Weights : 4 ♀ 170, 182, 194, 196.

Local name : *Pahari Myna*.

Gonads : Ovaries very minute.

Field notes : Not very common ; seen in pairs, sometimes in groups. Food comprises of nectar from the flowers of *Simul*, *Palas*, wild figs (*Ficus* sp.) etc.

Remarks : Recently Majumdar (1981) has synonymized *Gracula religiosa peninsularis* Whistler & Kinnear with *Gracula religiosa intermedia* A. Hay on the basis of size and measurement of bill.

Family CORVIDAE

57. *Dendrocitta vagabunda vagabunda* (Latham)
(Northeastern Tree Pie)

Coracias vagabunda Latham, 1790, *Index Orn.*, 1 : 171 (India, restricted to Calcutta by Ticehurst, 1922, *Ibis* : 537).

Material : 1 ♂ , Toinar, 1 Feb 1979 ; 1 ♀ , Sukma, 9 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	149	225	33
1 ♀	150	204	32

Weights : 1 ♂ 106 ; 1 ♀ 102.

Local name : *Mahalat*.

Gonads : Testes minute, measuring 2.0×1.0 ; ovary enlarged, measuring 8.0×6.0 .

Field notes : Very common ; seen in pairs throughout the district. Food comprises of wild figs (*Ficus* spp.) and insects.

Family CAMPEPHAGIDAE

58. ***Tephrodornis pondicerianus pondicerianus*** (Gmelin)
(Indian Wood Shrike)

Muscicapa pondiceriana Gmelin, 1789, *Syst. Nat.*, 13 ed., 1 : 939. (Coromandel).

Material : 3 ♂ and 5 ♀ , Toinar, 28 and 31 Jan and 1 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
3 ♂	86 (2), 88	62, 64, 65	22 (2), 23
5 ♀	84, 85 (2), 86 (2)	62 (4), 67	20, 21 (2), 23, 24

Weights : 3 ♂ 18 (3) ; 5 ♀ 18 (4), 20.

Local name : *Karoula*.

Gonads : Testes in two specimens (28 Jan, 1 Feb) very minute and each pair measured 1.5×1.0 and 2.0×1.5 , and in another specimen (31 Jan) slightly swollen, measuring 3.0×2.0 . Ovary in three specimens (28 Jan) very minute, in the fourth slightly swollen measuring 6.0×4.0 and in the fifth (31 Jan) enlarged and granular, measuring 6.5×4.0 ; largest ovum being 1.0 in diameter.

Field notes : Rather common, usually found in pairs or in small groups of four to five individuals. Feeds mainly on beetles and caterpillars.

59. ***Coracina novaehollandiae macei*** (Lesson)
(Indian Large Cuckoo-Shrike)

Graculus macei Lesson, 1830, *Traite Orn.*, livr. 1 : 349 (Calcutta : Bengal)

Material : 1 ♀ , Barsoor, 4 Feb 1979.

Measurements : 1 ♀ : Wing 163, tail 131, bill 28.

Weight : 82.

Local name : *Kasya*.

Gonad : Ovary incipient.

Field notes : Usually seen in pairs. Feeds on insects mainly crickets and bugs.

60. **Coracina melanoptera sykesi** (Strickland)
(Peninsular Blackheaded Cuckoo-Shrike)

Lalage sykesi Strickland, 1844, *Ann. Mag. nat. Hist.* 13 : 36
[Dukhun, based on Sykes's (1832, *Proc. zool. Soc. Lond.*, pl, 2 : 77, 87)
material from Dukhun ; Calcutta as Type-locality given by Baker
(1924, *Faun. Brit. India*, Bds, 2 : 340) is therefore, an error.]

Material : 1 ♂, Toinar, 1 Feb 1979.

Measurements : 1 ♂ : Wing 103, tail 78, bill 19.

Weight : 28.

Local name : *Jungli Kasya*.

Gonads : Testes minute, each measuring 1.5×1.0.

Field notes : Rather uncommon, found singly or in pair. Feeds mostly on insects and some wild fruits.

61. **Pericrocotus flammeus semiruber** Whistler & Kinnear
(East Indian Scarlet Minivet)

Pericrocotus speciosus semiruber Whistler & Kinnear, 1933, *J. Bombay nat. Hist. Soc.*, 36 : 340. (Sankrametta, Vizagapatam Dist., Andhra Pradesh).

Material : 1 ♀, Chhotedongar, 14 Feb 1979.

Measurements : 1 ♀ : Wing 101, tail 100, bill 19.

Weight : 26.

Gonad : Ovary slightly enlarged, measuring 8.0×5.0.

Field notes : Not uncommon, found singly or in pairs. Feeds on insects.

62. **Pericrocotus cinnamomeus cinnamomeus** (Linnaeus)
(Southern Small Minivet)

Motacilla cinnamomea Linnaeus, 1766, *Syst. Nat.*, 12 ed., 1 : 335
(Ceylon).

Material : 2 ♂, Toinar, 27 and 31 Jan 1979.

Measurement : 2 ♂ : Wing 70 (2), tail 71, 72, bill 14, (-).

Weights : 2 ♂ 6, 7.

Local name : *Rajalal*.

Gonads : Testes of one specimen (27 Jan) minute (2.0×1.0), and of another specimen (31 Jan) slightly swollen (3.0×1.5).

Field notes : Common, found singly or in pairs ; behaves similar to the preceding bird.

Family IRENIDAE

63. *Aegithina tiphia humei* Baker
(Central Indian Iora)

Aegithina tiphia humei Baker, 1922, *Faun. Brit. India*, Birds (2nd ed.) 1 : 342 (Raipur, M. P.).

Material : 2 ♂ and 1 ♀, Kutumsar, 24 Jan 1979 ; 4 ♂, Toinar, 27, 29 and 30 Jan 1979.

<i>Measurements</i> :	Wing	Tail	Bill
6 ♂	65, 66, 67, 68(3)	45, 48, 49(3), 52	18(3), 19(3)
1 ♀	63	49	19

Weights : 6 ♂ 10(3), 12(3) ; 1 ♀ 10.

Local name : *Shaubeega*.

Gonads : Testes in four specimens (collected from Toinar), very minute, and in two specimens (from Kutumsar) slightly swollen (2.0 × 1.5) and (3.0 × 5.0). Ovary enlarged (6.0 × 2.5).

Field notes : Fairly common throughout the district ; usually seen in paris. Feeds on arthropods of all kinds.

64. *Chloropsis cochinchinensis jerdoni* (Blyth)
(Jerdon's Chloropsis)

Phyllornis jerdoni Blyth, 1844, *J. Asiat. Soc. Beng.*, 13 : 392 (Central India).

Material : 1 ♂, Toinar, 28 Jan 1979.

Measurements : 1 ♂ : Wing 96; tail 73, bill 25.

Weight : 24.

Local name : *Harewa*.

Gonads : Testes in the non-breeding condition, measuring 3.0 × 2.0.

Field notes : Not very common, found singly. Feeds on insects and wild figs (*Ficus* spp.).

Family PYCNONOTIDAE

65. *Pycnonotus melanicterus flaviventris* (Tickell)
(Blackcrested Yellow Bulbul)

Vanga flaviventris Tickell, 1833, *J. Asiat. Soc. Beng.*, 2 : 573
(Dampara in Dholbhum).

Material : 1 ♂ and 1 ♀, Kutumsar, 19 and 20 Jan 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	93	84	17
1 ♀	92	84	16

Weights : 1 ♂ 26 ; 1 ♀ 24.

Local name : Zard bulbul.

Gonads : Testes incipient ; ovary enlarged and granular, measuring 6.0×4.0 , largest ovum being 1.0 in diameter.

Field notes : Not very common ; seen only in eastern part occupying bushes. Usually met with singly or in pairs. Feeds on insects and wild fruits.

66. *Pycnonotus cafer humayuni* Deignan
(Central Indian Redvented Bulbul)

Pycnonotus cafer humayuni Deignan, 1951, *Auk*, 68 : 110 (Deesa).

Material : 3 ♂ and 3 ♀, Kutumsar, 22, 23 and 25 Jan 1979.

<i>Measurement</i> :	Wing	Tail	Bill
3 ♂	88, 92, 96	80, 83, 86	19, 21 (2)
3 ♀	88, 91 (2)	81 (2), 82	18, 19 (2)

Weights : 3 ♂ 20, 28, 30 ; 3 ♀ 20, 26, 28.

Local name : Kala bulbul.

Gonads : Testes in one specimen (23 Jan) very minute, while in the other two (22 and 25 Jan) slightly swollen measuring 1.0×1.0 and 1.5×1.0 ; ovary in one (23 Jan) incipient and in other two (22 and 25 Jan) enlarged, measuring 6.0×3.0 and 5.0×4.0 .

Field notes : Fairly common throughout the district in cultivated fields and gardens. Feeds largely on insects and wild fruits.

Family MUSCICAPIDAE

Subfamily TIMALINAE

67. *Pellorneum ruficeps ruficeps* Swainson
(Peninsular Spotted Babbler)

Pellorneum ruficeps Swainson, 1832, *Faun. Boreali-Americana*, 487

(India = Coonoor, Nilgiris, restricted by Deignan, 1947. *Smithson. Misc. Coll.*, 107.

Material : 1 ♂, Kutumsar, 25 Jan 1979.

Measurements : 1 ♂ : Wing 76, tail 68, bill 20.

Weight : 22.

Gonads : Testes in non-breeding condition ; similar but unequal, the right one smaller (1.0×0.5) than the left (3.0×2.0).

Field notes : Rather uncommon, found in scrub and secondary forests. Crop contained some small beetles.

68. ***Macronous gularis rubricapilla*** (Tickell)
(Yellow breasted Babbler)

Motacilla rubricapilla Tickell, 1833, *J. Asiat. Soc. Beng.*, 2 : 576 (Borabhum).

Material : 2 ♀, Kutumsar, 20 and 24 Jan 1979 : 2 ♂ and 1 ♀, Barsoor, 6 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
2 ♂	61 (2)	54, 58	16 (2)
3 ♀	58, 59, 60	50, 51, 52	14, 15 (2)

Weights : 2 ♂ 8, 10 ; 3 ♀ 6, 8, 10.

Gonads : Gonads in non-breeding condition. Testes slightly swollen measuring 6.0×4.0 . Ovaries in two specimens (20 and 24 Jan) also slightly swollen measuring 2.25×2.0 and 4.0×3.0 but in the third (6 Feb) incipient.

Field notes : Not very common ; seen in bushes or in grassy and scrubby ground. Feeds on various kinds of insects.

69. ***Chrysomma sinense sinense*** Gmelin
(Yellow-eyed Babbler)

Parus sinensis Gmelin, 1789, *Syst. Nat.*, 13 ed., 1 : 1012 (China).

Material : 1 ♀, Barsoor, 4 Feb 1979.

Measurements : 1 ♀ : Wing 65, tail 87, bill 15.

Weight : 14.

Local name : *Gulab Chashm.*

Gonad : Ovary enlarged and measured 4.0×3.0 .

Field notes : Not very common ; seen singly or in pairs. Feeds principally on grasshoppers, caterpillars and other small insects.

70. **Turdoides striatus orientalis** (Jerdón)
(Peninsular Jungle Babbler)

Malacocircus orientalis Jerdon, 1847, *Ill. Indian Orn.* Text to pl. 19 ("Jungles of the Carnatic, and....Eastern Ghauts").

Material : 1 ♂ and 2 ♀, Toinar, 31 Jan 1979 ; 3 ♂ and 2 ♀, Barsoor, 4 and 5 Feb 1979 ; 1 ♂, Sukma, 10 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
5 ♂	97, 105(2), 106, 110	100, 110(2), 112(2)	24(3), 25, 26
4 ♀	102(2), 103, 109	100, 105, 109(2)	25(2), 26(2)

Weights : 5 ♂ 52, 56, 58 (2), 62 ; 4 ♀ 54, 58, 62, 64.

Local name : *Satbhai*.

Gonads : Testes of one (10 Feb) minute (1.0×0.5), another (31 Jan) slightly swollen and unequal, right one 4.0×2.5 and left 4.0×3.0 ; others (4 and 5 Feb) enlarged and measured 4.5×4.0 , 6.0×3.5 and 6.0×4.0 . Ovaries of two (5 Feb) minute while others (31 Jan) enlarged and granular measuring 13.0×5.0 and 13.0×6.0 .

Field notes : Very common, found on small parties on lower branches of trees as well as on ground. Moves in flocks of six or seven or even more ; noisy quarrelsome. Food comprises of small insects, spiders, etc.

71. **Alcippe poioicephala brucei** Hume
(Bombay Quaker Babbler)

Alcippe brucei Hume, 1870, *J. Asiat. Soc. Beng.*, 39 : 122 (Mahabaleshwar).

Material : 1 ♂ and 2 ♀, Kutumsar, 20 and 25 Jan 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	72	68	16
2 ♀	70, 73	64, 65	16, 17

Weights : 1 ♂ 16 ; 2 ♀ 14 (2).

Gonads : Testes slightly swollen (5.0×3.5) ; ovaries enlarged (6.0×4.0 and 4.0×3.0).

Field notes : Very common, usually found on lower branches and also in bushes ; feed—principally on insects.

Subfamily MUSCICAPINAE

72. *Muscicapa subrubra* Hartert & Steinbacher
(Kashmir Redbreasted Flycatcher)

Muscicapa parva subrubra Hartert & Steinbacher, 1934, *Vog. pal. Fauna, Ergänzungsband*, 233, New name for *Siphia hyperythra*. Cabanis, 1866, *J. Orn.* 14 : 391 (Ceylon) not *Muscicapa hyperythra* Blyth.

Material : 1 ♀, Toinar, 31 Jan 1979.

Measurements : 1 ♀ : Wing 68, tail 47, bill 13.

Weight : 6.

Gonad : Ovary incipient.

Field notes : Not very common. Crop contained some insect larvae, nymphs and beetles.

Remarks : Breeds in north-west Himalayas during summer and migrates to Sri Lanka through the Peninsula in September and October. My specimen is obviously a bird in passage, and is recorded here for the first time from Madhya Pradesh.

73. *Muscicapa tickelliae tickelliae* (Blyth)
(Tickell's Redbreasted Blue Flycatcher)

C. (yornis) Tickelliae Blyth, 1843, *J. Asiat. Soc. Beng.*, 12 : 941 (Central India = Borabhum).

Material : 2 ♀, Kutumsar, 21 and 22 Jan 1979 ; 2 ♀, Toinar, 29 and 30 Jan 1979.

<i>Measurements</i> :	Wing	Tail	Bill
4 ♀ :	69, 71(2), 74	56, 57(2), 58	15(2), 16(2)

Weights : 4 ♀ 10(3), 12.

Gonads : Ovaries of two specimens (29 and 30 Jan) slightly swollen (2.0×1.0 and 3.0×3.0) and of the other two enlarged (5.0×2.0 and 5.0×3.0).

Field notes : Very common ; generally found in shady places, singly or in pairs, sometimes in parties of five or six. Crop of one specimen (22 Jan) contained a few beetles.

74. *Muscicapa thalassina thalassina* Swainson
(Verditer Flycatcher)

Muscicapa thalassina Swainson, 1838, *Nat. Library, Flycatchers*, 21 : 252 (India).

Material : 1 ♀, Toinar, 28 Jan 1979.

Measurements : 1 ♀ : Wing 87, tail 66, bill 14.

Weight : 16.

Gonad : Ovary somewhat enlarged measuring 5.0×3.0 .

Field notes : The habits and habitats are more or less similar to those of the preceding one. Crop contained small winged insects.

Subfamily MONARCHINAE

75. *Hypothymis azurea styani* (Hartlaub)
(Indian Blacknaped Flycatcher)

Siphia styani Hartlaub, 1898, *Abh. Nat. Ver. Bremen*, 16 : 248.
(Harhow, Hainan).

Material : 1 ♂, Kutumsar, 20 Jan 1979 ; 1 ♂, Sukma, 10 Feb 1979.

Measurements : 2 ♂ : Wing 71, 72 ; tail 70, 72 ; bill 16(2).

Weights : 2 ♂ 6, 10.

Gonads : Testes in non-breeding condition ; in one specimen (20 Jan) it is incipient and in another (10 Feb) slightly swollen, measuring 1.0×0.5 .

Field notes : Rather common, usually found singly or in pairs ; crop contained flying insects.

Subfamily SYLVIINAE

76. *Prinia sylvatica sylvatica* Jerdon
(Peninsular Jungle Wren-Warbler)

Prinia sylvatica Jerdon, 1840, *Madras J. Lit. Sci.*, 11 : 4 (Seegore Ghat, Nilgiris).

Material : 1 ♂, Toinar, 31 Jan 1979.

Measurements : 1 ♂ : Wing 61, tail 66, bill 16.

Weight : 12.

Local name : Tot-pungi.

Gonads : Testes slightly swollen each measuring 1.5×1.0 .

Field notes : Rather uncommon, found singly or in pairs. Feeds on insects.

77. *Orthotomus sutorius guzuratus* (Latham)
(Indian Tailor Bird)

Sylvia guzurata Latham, 1790, *Index Orn.*, 2 : 554 (Guzerat).

Material : 1 ♂, Kutumsar, 23 Jan 1979.

Measurements : 1 ♂ : Wing 51, tail 64, bill 17.

Weight : 6.

Gonads : Testes in the non-breeding condition, very minute, each measuring 1.0×1.0 .

Field notes : Very common ; found singly or in pairs. Crop contained some mutilated beetles.

78. ***Acrocephalus dumetorum*** Blyth
(Blyth's Reed Warbler)

Acrocephalus dumetorum Blyth, 1849, *J. Asiat. Soc. Beng.*, 18 : 815
(No locality = Calcutta, see Biswas, 1962, *JBNHS* 59 : 410).

Material : 1 ♀, Kutumsar, 20 Jan 1979 ; 1 ♂, Barsoor, 4 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	64	53	18
1 ♀	68	52	18

Weights : 1 ♂ 8 ; 1 ♀ 8.

Local name : *Tiktiki*.

Gonads : Testes in the non-breeding condition, each measuring 1.0×0.5 ; ovary somewhat enlarged, measuring 4.0×2.5 .

Field notes : Rather uncommon ; occupies cultivated sugarcane crop and reed grass ; keeps singly or in pairs, sometime in small parties. Feeds largely on insects.

Subfamily TURDINAE

79. ***Copsychus saularis saularis*** (Linnaeus)
(Indian Magpie-Robin)

Gracula saularis Linnaeus, 1758, *Syst. Nat.*, 10 ed., 1 : 109 (Asia = Bengal).

Material : 2 ♂, Kutumsar, 19 and 23 Jan 1979 ; 1 ♂, Toinar, 31 Jan 1979 ; 1 ♀, Barsoor, 4 Feb 1979 : 1 ♂ and 1 ♀, Sukma, 11 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
4 ♂	98, 102, 105, 107	85(2), 86, 89	22, 23, 24(2)
2 ♀	94, 101	78, 80	23, (--)

Weights : 4 ♂ ; 30, 32(2), 36 ; 2 ♀, 26, 32.

Local name : *Dhaiyal*.

Gonads : Gonads of three males (19, 31 Jan and 11 Feb) very minute whereas those of another male (23 Jan) slightly swollen each measuring 2.0×1.5 . Ovaries of females enlarged, measuring 6.0×3.0 and 7.0×3.0 .

Field notes : Very common, found singly or in pairs, sometime in small parties occupying scrubby bushes and groves. Crop contents mainly insects.

80. **Copsychus malabaricus indicus** (Baker)
(Indian Shama)

Kittacincla malabarica indica Baker, 1924, *Fauna Brit. Ind.*, Birds, 2 : 118 (Bhutan Duars).

Material : 1 ♀, Kutumsar, 20 Jan 1979.

Measurements : 1 ♀ : Wing 87, tail 90 (+), bill from feathers 16.

Weight : 26.

Local name : Shama.

Gonad : Ovary slightly enlarged, measuring 5.0×2.0 .

Field notes : Very common, widely distributed throughout the district. Seen singly or in pairs. Feeds largely on adult and immature insects.

81. **Saxicoloides fulicata intermedia** Whistler & Kinnear
(Daccan Black Robin)

Saxicoloides fulicata intermedia, Whistler & Kinnear, 1932, *J. Bombay Nat. Hist. Soc.*, 36 : 73 (Rahuri, Ahmednagar).

Material : 2 ♂ and 5 ♀, Toinar, 27, 29 and 31 Jan 1979 ; 1 ♂, Sukma, 9 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
3 ♂	70, 73(2)	63, 66, 67	16(3)
5 ♀	66, 68, 69, 70, 71	60, 61(2), 62, 66	15(2), 16(3)

Weights : 3 ♂ 14(2), 16 ; 5 ♀ 10, 14(2), 16, 18.

Local name : Kalchuri.

Gonads : Gonads in the non-breeding condition ; testes incipient ; ovaries in two (29 Jan) slightly swollen, while in the other three (27, 31 Jan) somewhat more so (6.0×3.0 and 3.0×2.0).

Field notes : Fairly common throughout the district, found in open countryside and on the edges of secondary forest. Lives largely on insects.

82. **Monticola cinclorhynchus** (Vigors)
(Blueheaded Rock Thrush)

Petrocincla cinclorhyncha Vigors, 1832, *Proc. zool. Soc. Lond.* : 172 (Himalayan Mountains = Simla).

Material : 1 ♂, Kutumsar, 23 Jan 1979.

Measurements : 1 ♂ : Wing 103, tail 68, bill 24.

Weight : 32.

Gonads : Testes in the non-breeding condition, each measuring 4.0 × 1.0.

Field notes : Not very common ; found in pairs ; lives in shady places. Crop contained some mutilated beetles.

Remarks : Hewetson (1956) sighted this species as a winter visitor in Central India. Ali and Ripley (1973) extends its winter distribution up to M. P. on the basis of Hewetson's observation. Majumdar (1979) recorded it from Orissa. My specimen from Bastar district constitutes the first one taken in Madhya Pradesh.

83. **Zoothera citrina cyanotus** (Jardine & Selby)
(Whitethroated Ground Thrush)

Turdus cyanotus Jardine & Selby, 1828, *Ill. Orn.*, 1, pl. 46 (Bangalore, India).

Material : 2 ♂, Toinar, 29 and 21 Jan 1979 ; 1 ♂ Sukma 10 Feb 1979.

Measurements : 3 ♂ : Wing 112, 113, 115 ; tail 72, 75, 76 ; bill 24, 25(2).

Weights : 3 ♂ 48, 50, 52.

Gonads : Testes in two males (29 and 30 Jan) very minute, measuring 1.5 × 1.0 and 2.0 × 1.0, while in the third (10 Feb) slightly swollen 3.0 × 1.0.

Field notes : Rather common ; lives in shady places, skulking through bushes. Feeds on insects and worms.

Family PARIDAE
Subfamily PARINAE

84. **Parus major stupae** Koelz
(Indian Grey Tit)

Parus major stupae Koelz, 1939, *Proc. biol. Soc.*, Washington, 52 : 61 (Sanchi, Bhopal).

Material : 1 ♀, Toinar, 27 Jan 1979.

Measurements : 1 ♀ : Wing 61, tail 50, bill 11.

Weight : 8.

Gonad : Ovary very minute.

Field notes : Found in pairs or in a small groups of four or five, in small bushes or in creepers on the edges of clearings. Feeds on insects and small wild fruits and berries.

85. **Parus xanthogenys aplonotus** Blyth
(Central Indian Yellowcheeked Tit)

P. (arus) aplonotus Blyth, 1847, *J. Asiat. Soc. Beng.*, 16 ; 444 (Mountains of Central India, restricted to Chaibasa Singhbhum, Bihar, by Whistler & Kinnear, 1932, *J. Bombay nat. Hist. Soc.*, 35 : 519-21).

Material : 1 ♂ and 1 ♀, Kutumsar, 20 Jan 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	72	57	13
1 ♀	71	51	13

Weights : 1 ♂ 10 ; 1 ♀ 10.

Gonads : Gonads in the non-breeding condition ; testes slightly swollen each measuring 2.0 × 1.5, while ovary very minute.

Field notes : Rather common ; seen in open countryside as well as on the edges of secondary forest. Feeds on insects and insect larvae.

Family SITTIDAE
Subfamily SITTINAE

86. **Sitta castanea castanea** Lesson
(Peninsular Chestnutbellied Nuthatch)

Sitta castanea Lesson, 1830, *Traitè Orn., Livr. 1* : 316 (Bengal).

Material : 2 ♂, Toinar, 1 Feb 1979 ; 1 ♀, Barsoor, 6 Feb 1979.

<i>Measurements :</i>	Wing	Tail	Bill
2 ♂	76(2)	39, 40	21(2)
1 ♀	77	39	20

Weights : 2 ♂ 12, 14 ; 1 ♀ 12.

Local name : *Siri*.

Gonads : Testes in the non-breeding condition, very minute ; ovary enlarged measuring 6.0×4.0 .

Field notes : Rather common throughout the district ; found in pairs, tapping the fissured bark and old trees ; lives on insects, particularly beetles and ants.

87. ***Sitta frontalis frontalis*** Swainson
(Velvetfronted Nuthatch)

Sitta frontalis Swainson, 1820, *Zool. Ill.* (1), pl. 2 (Ceylon).

Material : 1 ♀, Kutumsar, 24 Jan 1979.

Measurements : 1 ♀ : Wing 70, tail 39, bill 15.

Weight : 10.

Gonad : Ovary in the non-breeding condition, minute, measuring 2.0×1.0 .

Field notes : Not very common ; usually found in pairs, creeping among branches of tall trees, sometimes on bushes also. Crop contained some mutilated insects, mainly beetles.

Family MOTACILLIDAE

88. ***Anthus hodgsoni hodgsonii*** Richmond
(Indian Tree Pipit)

Anthus trivialis hodgsoni Richmond, 1907, in Blackwelder, *Res. in China*, (2) : 493, new name for *Anthus maculatus* Jerdon, 1864, *Bds, India* 3. 873.

Material : 1 ♂, Toinar, 1 Feb 1979.

Measurements : 1 ♂ : Wing 90, tail 65, bill 15.

Weight : 22.

Local name : *Musarichi*.

Gonads : Testes in the non-breeding condition, slightly swollen, measuring 2.0×1.0 .

Field notes : Common ; usually found in pairs and sometimes in flocks ; moves about on ground to forage ; when disturbed it perches on branches of tall trees. Crop contents grass seeds.

89. **Anthus novaeseelandiae rufulus** Vieillot
(Indian Paddyfield Pipit)

Anthus rufulus Vieillot, 1818, *Nouv. Dict. Hist. Nat.*, 26 : 494
(Bengal)

Material : 1 ♂, Sukma, 11 Feb 1979.

Measurement : 1 ♂, : Wing 82, tail 58, bill 18.

Weight : 18.

Local name : Charchari.

Gonads : Testes enlarged, each measuring 9.0 × 5.0.

Field notes : Rather common ; affects harvested rice fields, also preferring patches of short grass surrounded by bushes. During feeding hours the bird spends more of its time on the ground and when flushed it flies to a distance to settle down again on the ground. Food consists of grass and other seeds as well as insects.

90. **Motacilla cinerea cinerea** Tunstall
(Grey Wagtail)

Motacilla cinerea Tunstall, 1771, *Orn. Brit.* : 2 (England).

Material : 1 ♂, Kutumsar, 22 Jan 1979.

Measurements : 1 ♂ : Wing 82, tail 89, bill 17.

Weight : 14.

Gonads : Testes in the non-breeding condition, very minute, measuring 1.0 × 1.0.

Field notes : Not very common ; found singly in harvested rice fields and by the side of water source wherefrom it picks up insects to feed on. Crop contained some gryllids.

Family DICAEDIDAE

91. **Dicaeum agile agile** (Tickell)
(Indian Thickbilled Flowerpecker)

Fringilla Agilis Tickell, 1833, *J. Asiat. Soc. Beng.*, 2 : 578. (Borabhum and Dholbhum).

Material : 1 ♀, Sukma, 11 Feb 1979.

Measurements : 1 ♀ : Wing 60, tail 28, bill 10.

Weight : 8.

Gonad : Ovary enlarged, measuring 7.0 × 5.0.

Field notes : Very common ; found usually singly or in pairs. Feeds on wild figs of Peepul (*Ficus religiosa*), Banyan (*Ficus bengalensis*) ; juicy flesh of Mohua (*Madhuca latifolia*) and spiders and insects from wild Mango (*Mangifera indica*) trees.

92. ***Dicaeum erythrorhynchos erythrorhynchos*** (Latham)
(Tickell's Flowerpecker)

Certhia erythrorhynchos Latham, 1790, *Index Orn.*, 1 : 299 (India, restricted to Bombay by Baker, 1926, *Faun. Brit. India*, Birds (2nd ed.), 3 : 432.

Material : 2 ♂ and 1 ♀, Toinar, 28, 29 and 31 Jan 1979.

<i>Measurements</i> :	Wing	Tail	Bill
2 ♂	53, 54	24, 26	11(2)
1 ♀	48	24	12

Weights : 2 ♂ 5, 8 ; 1 ♀ 4.

Gonads : Testes of one (29 Jan) slightly swollen (2.0×1.5), while that of the other (28 Jan) somewhat more so (3.5×2.5). Ovary somewhat enlarged, measuring (3.5×3.0).

Field notes : Rather common. inhabits gardens, orchards and scrub jungles ; found singly or in pairs and sometimes in groups of four to six. Occasionally seen in association with *Nectarinia asiatica asiatica* (Latham). Food is chiefly wild berries and nectar of flowers.

Family NECTARINIIDAE

93. ***Nectarinia asiatica asiatica*** (Latham)
(Indian Purple Sunbird)

Certhia asiatica Latham, 1790, *Index. Orn.*, 1 : 288 (India = Gurgaon).

Material : 1 ♂ and 1 ♀, Toinar, 28 and 30 Jan 1979 ; 3 ♂, Barsoor, 6 Feb 1979 ; 1 ♂, Sukma, 9 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
5 ♂	57, 58, 59(3),	32, 34(3), 36	19, 21, 22(3)
1 ♀	54	32	20

Weights : 5 ♂ 5, 6(4) ; 1 ♀ 6.

Gonads : Testes enlarged each pair measuring 6.0×4.0 , $6.0 \times 5.0(2)$, 5.0×4.0 and 7.0×4.5 , while ovary very minute measuring 2.0×1.0 .

Field notes : Common, found singly or in pairs in orchards and secondary jungles. In the field, it is observed that the male appears to

be commoner than female, probably because it is more conspicuous in colouration. Feeds on nectar of wild flowers.

Family PLOCEIDAE
Subfamily PASSERINAE

94. **Petronia xanthocollis xanthocollis** (Burton)
(Indian Yellowthroated Sparrow)

Fringilla xanthocollis Burton, 1838, *Cat. Bds. Mus. Fort Pitt*, : Chatham : 23, new name for *Fringilla flavicollis* Franklin, 1831, *Nec. F. flavicollis* Gmelin, 1789 (Ganges between Calcutta and Benares).

Material : 2 ♂, Barsoor, 6 Feb 1979.

Measurements : 2 ♂ : Wing 78, 83 ; tail 49, 50 ; bill 16 (2).

Weights : 2 ♂ 16 (2).

Local name : *Jangli-Chiria*.

Gonads : Testes in the non-breeding condition, in one male slightly swollen, measuring 2.0×1.0 ; while in the other somewhat more so, measuring 4.0×3.0 .

Field notes : Very common throughout the district. Found mainly in cultivated tracts ; gregarious ; flocks consist of 10 to 15, sometimes upto 40. Food is chiefly paddy from stubble, seeds of grass and weeds, as well as some insects.

Subfamily ESTRILDINAE

95. **Lonchura punctulata punctulata** (Linnaeus)
(Indian Spotted Munia)

Loxia punctulata Linnaeus, 1758, *Syst. Nat.*, 10 ed., 1 : 173 (Asia = Calcutta).

Material : 3 ♂ and 4 ♀, Barsoor, 4 and 5 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
3 ♂	56 (2), 58	35 (2), 36	13 (3)
4 ♀	53, 56, 59 (2)	36 (2), 38 (2)	13 (4)

Weights : 3 ♂ 10, 13, 14 ; 4 ♀ 12 (2), 13, 14.

Local name : *Telia munia*.

Gonads : Testes in the non-breeding condition, very minute while ovaries enlarged, measuring 3.0×2.0 , 4.0×3.0 and 5.0×3.0 (2).

Field notes : Rather common ; gregarious, flocks of 30 to 40 are sometimes met with ; generally occupies cultivated fields. Feeds on grains and also on bamboo seeds in forested areas.

96. *Lonchura malacca malacca* (Linnaeus)
(Southern Blackheaded Munia)

Loxia malacca Linnaeus, 1766, *Syst. Nat.* 12 ed., (1) : 302. (China, Java and Malacca *errors* = Belgaum, restricted by Baker, 1926, *Faun. Brit. India*, Birds, 2nd ed., 3 : 78).

Material : 1 ♂ and 1 ♀, Barsoor, 6 Feb 1979.

<i>Measurements</i> :	Wing	Tail	Bill
1 ♂	55	38	14.
1 ♀	54	38	14

Weights : 1 ♂ 10 ; 1 ♀ 10.

Local name : *Pora munia*.

Gonads : Gonads in the non-breeding condition, testes minute each measuring 1.0×0.5 , while ovary incipient.

Field notes : Very common ; found in a flock consisting of 10 to 15 individuals in open areas near cultivated fields. Food is mostly bamboo seeds and paddy.

Family FRINGILLIDAE
Subfamily CARDUELINAE

97. *Carpodacus erythrinus roseatus* (Blyth)
(Indian Rosefinch)

Pyrrhula roseata 'Tickell' = Blyth, 1842, *J. Asiat. Soc. Beng.*, 11 : 461 ('sold...in Calcutta').

Material : 2 ♂ and 2 ♀, Toinar, 29 Jan 1979.

<i>Measurements</i> :	Wing	Tail	Bill
2 ♂	82, 86	57, 60	15 (2)
2 ♀	80, 84	57, 58	15 (2)

Weights : 2 ♂ 18 (2) ; 2 ♀ 20 (2).

Local name : *Lal tuti*.

Gonads : Gonads in the non-breeding condition and incipient.

Field notes : Not very common, found in Toinar only ; seen in jowar fields ; gregarious ; flocks of 20 to 25 individuals are met with. Feeds on jowar seeds (*Sorghum vulgare*) and rice ; also invades the jowar crop along with the parakeets and munias.

DISCUSSION

Through the curtesy of Dr. S. D. Ripley I have received a list of birds from Dr. Salim Ali which were collected by him during December, 1948—January, 1949 of the then 'native' states of Bastar and Kanker.

The following species and subspecies which were not collected by me but sighted by Dr. Salim Ali are given below : (1) *Nettapus coromandelianus* (Gmelin), (2) *Spilornis cheela* (Latham),** (3) *Galloperdix spadicea* (Gmelin), (4) *Turnix tanki* Blyth, (5) *Vanellus indicus* (Boddaert), (6) *Tringa hypoleucos* Linnaeus,** (7) *Sterna acuticauda* J. E. Gray, (8) *Columba punicea* Blyth, (9) *Streptopelia decaocto* (Frivaldszky), (10) *Cacomantis sonneratii* (Latham),** (11) *Taccocua leschenaultii* Lesson, (12) *Harpactes fasciatus* (Pennant), (13) *Alcedo atthis* (Linnaeus),** (14) *Nyctyornis athertoni* (Jardine & Selby), (15) *Upupa epops* Linnaeus, (16) *Jynx torquilla* Linnaeus,** (17) *Picumnus innominatus* Burton, (18) *Picus chlorolophus*, Vieillot, (19) *Dryocopus javensis* (Horsfield), (20) *Hemicircus canente* (Lesson), (21) *Ammomanes phoenicurus* (Franklin), (22) *Lanius schach* Linnaeus, (23) *Dicrurus leucophaeus* Vieillot, (24) *Dicrurus aeneus* Vieillot, (25) *Corvus splendens* Vieillot, (26) *Corvus macrorhynchos* Wagler, (27) *Hemipus picatus* (Sykes), (28) *Tephrodornis virgatus* (Temminck), (29) *Coracina melaschistos* (Hodgson),** (30) *Pericrocotus roseus* (Vieillot), (31) *Pycnonotus jocosus* (Linnaeus), (32) *Pycnonotus luteolus* (Lesson), (33) *Pomatorhinus horsfieldii* Sykes, (34) *Dumetia hyperythra* (Franklin), (35) *Muscicapa parva* Bechstein, (36) *Muscicapa superciliaris* Jerdon, (37) *Culicicapa ceylonensis* (Swainson), (38) *Rhipidura aureola* Lesson, (39) *Rhipidura albicollis* (Vieillot), ** (40) *Cisticola juncidis* (Rafinesque),** (41) *Prinia subflava* (Gmelin), (42) *Prinia socialis* Sykes, (43) *Acrocephalus agricola* (Jerdon), ** (44) *Phylloscopus inornatus* (Blyth),** (45) *Phylloscopus trochiloides* (Sundevall),** (46) *Phylloscopus occipitalis* (Blyth), ** (47) *Seicercus xanthoschistos* (Gray), (48) *Phoenicurus ochruros* (Gmelin), (49) *Saxicola torquata* (Linnaeus), (50) *Salpornis spilonotus* (Franklin), (51) *Anthus trivialis* (Linnaeus), (52) *Motacilla alba* Linnaeus, (53) *Nectarinia zeylonica* (Linnaeus), (54) *Zosterops palpebrosa* (Temminck), (55) *Estrilda amandava* (Linnaeus), (56) *Estrilda formosa* (Latham), (57) *Lonchura striata* (Linnaeus).

Excepting some of the above mentioned specimens (marked**), most of them were observed by me in the field. Since the present paper is based on a collection of specimens from that area, the species which were only sighted were not included.

However, the following species and subspecies are new records from Bastar district, Madhya Pradesh.

(1) *Bubulcus ibis coromandus* (Boddaert), (2) *Pernis ptilorhynchus ruficollis* Lesson, (3) *Coturnix coromandelica* (Gmelin), (4) *Turnix suscitator taigoor* (Sykes), (5) *Fulica atra atra* Linnaeus, (6) *Hydro-*

phasianus chirurgus (Scopoli), (7) *Metopidius indicus* (Latham), (8) *Vanellus malabaricus* (Boddaert), (9) *Tringa ochropus* Linnaeus, (10) *Burhinus oedicephalus indicus* (Salvadori), (11) *Ducula aenea sylvatica* (Tickell), (12) *Psittacula krameri borealis* (Neumann), (13) *Eudynamis scolopacea scolopacea* (Linnaeus), (14) *Otus bakkamoena marathae* Ticehurst (15) *Ninox scutulata lugubris* (Tickell), (16) *Caprimulgus affinis monticola* Franklin, (17) *Merops leschenaulti leschenaulti* Vieillot, (18) *Picus myrmecophoneus* Stresemann, (19) *Eremopterix grisea* (Scopoli) (20) *Sturnus malabaricus malabaricus* (Gmelin), (21) *Sturnus pagodarum* (Gmelin), (22) *Pycnonotus cafer humayuni* Deignan, (23) *Muscicapa subrubra* Hartert & Steinbacher, (24) *Prinia sylvatica sylvatica* Jerdon, (25) *Copsychus malabaricus indicus* (Baker), (26) *Anthus novaeseelandiae rufulus* Vieillot, (27) *Lonchura malacca malacca* (Linnaeus).

The birds which were not sighted either by me or by Dr. Salim Ali may be due to deforestation and subsequent affect of monotonous planting of a single species and the extension of agricultural field. It has been noticed that after a lapse of even 30 years, there is no marked change in the faunal pattern. Further studies in this aspect should be continued to analyse the population status of some apparently rare species of birds.

SUMMARY

(1) A list of 97 species and subspecies based on a collection of 219 birds belonging to 74 genera and 38 families from Bastar district is given.

(2) The family Muscicapidae with 17 species and subspecies forms the largest group in the bird fauna of Bastar district.

(3) Two birds, namely, *Muscicapa subrubra* Hartert & Steinbacher and *Monticola cinclorhynchus* (Vigors) are recorded for the first time from Madhya Pradesh.

(4) In the systematic account, the notes on ecology and behaviour of the birds, condition of gonads, food and feeding habits etc., of all the subspecies are given. In some species, the taxonomic status are also discussed.

(5) Twenty seven species were recorded for the first time from Bastar District, Madhya Pradesh.

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