

## Avifaunal Diversity of Ajmer Aravallis

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**Abstract:** Ajmer is located in the center of Rajasthan (INDIA) between 25° 38' " and 26° 58' " north Latitude and 73° 54' " and 75° 22' " east longitude covering a geographical area of about 8481sq km hemmed in all sides by Aravalli hills. About 7 miles from the city is Pushkar lake created by the touch of lord Brahma. The Dargah of khawaja Moinuddin chisti is holiest shrine next to Mecca in the world. The temperature varies from 6 0 C in winters and above 45 0 C in summers.the annual rainfall is 529mm. Around 5.56% of total area available for land utilization is covered under forest. Anasagar lake is situated in the center of city. It is a perennial lake. It harbors several kinds of birds.Grasslands, fields, herbs, shrubs and trees are located in the area that also provide food and shelter to the birds. Total 47 species belonging to 7 orders were recorded. Passeriformes is dominant order of birds. But future of this avifauna is in danger due to mining and urbanization.

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### I. Introduction

Ajmer is centrally located in Rajasthan which is the western state of India.

Ajmer is surrounded all sides by Aravalli hills, which are the oldest ones of the world. India is very rich in Biodiversity out of more than 9000 birds of the world 1,300 species are in India. Avifauna are important part of ecosystem sometimes they are scavengers, Pollinators, predators of insect pests, play important part in seed dispersal.

Singh J.P. et al studied the ecology of birds of kawar lake in Bihar, studied the Ecology of birds Kokkare-Bellur, ornithological aspects of Gudavi bird Sanctuary, Koshi Barrage area in Nepal, Birds of Chimdi lake Nepal and worked on birds of Kurukshetra .The present study is carried out to find occurrence of Birds in Ajmer and need for their conservation.

### II. Methods

The investigation site Ajmer retains a primeval grandeur of Aravallis, The oldest mountain Ranges. It harbours an amazing variety of life and habitats. Variety of vegetation and birds can be seen here. The present study was carried out between February 2012 to December 2013.

The biodiversity is measured by studying the species within the given area.

Anasagar is perennial water body located in the center of Ajmer. Ajmer and Anasagar show great Avian biodiversity which attract attention of bird watcher and ornithologist.

### Observations

House sparrow *Passer domesticus*, Common myna (*Sturnidae*) *Acridotheres tristis*, Bank Myna *Acridotheres ginginianus*, Pied Myna *Sturnus contra*, Brahminy Myna *Sturnus pagodarum*, Purple Sunbird *Nectarine asiatica*, Coppersmith (*capitonidae*) *Megalaima haemacephala*, Baya weaver (*Ploceidae*) *Ploceus philippinus*, Indian Robin (*Muscicapidae*) *Sexicola caprata*, Jungle Babbler *Turdoides striatus*, Red vented bulbul (*Pycnonotidae*) *Pycnonotus cafer*, Black Drongo (*Dicruridae*) *Dicrurus adsimilis*, House crow (*Corvidae*) *Corvus splendens*, Grey Hornbill *Ocyroceros birostris*, Hoopoe (*Upupidae*) *Upupa epops*, Small green bee-eater (*Meropidae*) *Merops orientalis*, Indian Roller (*Coraciidae*) *Coracias benghalensis*, White breasted Kingfisher (*Alcedinidae*) *Halycon smyrnensis*, Common Kingfisher (*Alcedinidae*) *Alcedo atthis*, Coucal (*cuculidae*) *Centropus sinensis*, Koel (*cuculidae*) *Eudynamis scolopacea*, Brainfever bird (*Cuculidae*) *Cuculus varius*, Tree pie (*Corvidae*) *Dendrocitta vagabunda*, Pariah Kite (*Accipitridae*) *Milvus migrans*, Spotted owl (*Strigidae*) *Athene brama*, Pea fowl (*Phasianidae*) *Pavo cristatus*, Red wattle Lapwing (*Charadriidae*) *Vanellus indica*, Black winged stilt (*Recurvirostridae*) *Himantopus himantopus*, Rose ringed parakeet (*Psittacidae*) *Psittacula krameri*. Grey francolin *Francolinus pondicerianu.*, Great Indian bustard *Ardeotis nigriceps*, Common coot *Fulica atra*, Green munia *Amandava formosa*, White wagtail *Motacilla alba*, Oriental tree pipit *Anthus hodgson*, common tailor bird *Orthotomus sutorius*, large grey babbler *Turdoides malcolmi*, House swift *Apus affinis*, Plum headed parakeet *Psittacula cyanocephala*, Blue rock pidgeon *Columba livia*, Eurasian collared dove *Streptopelia decaocto*, Little brown dove *Streptopelia senegalensis*, Common Redshank *Tringa tetanus*, pied avocet *Recurvirostra avosetta*, Moorhen

Gallinula chloropus , Pond heron Ardeola grayii, Little cormorant Phalacrocorax niger, ( found near water bodies ).

Table 1 shows order wise birds of Ajmer.

Table 1.

S.No.	order	Species	Common Name	habit
1.	Passeriformes	Passer domesticus	House sparrow	R
2.		Acridotheres tristis	Common myna	R
3.		Acridotheres ginginianus	Bank myna	R
4.		Sturnus contra	Pied myna	R
5.		Sturnus pagodarum	Brahminy myna	R
6.		Nectarina asiatica	Purple sunbird	R
7.		Ploceus philippinus	Baya weaver	M
8.		Sexicola caprata	Indian Robin	R
9.		Turdoides striatus	Jungle babbler	R
10.		T. malcolmi	Large grey babbler	R
11.		Pycnotus cafer	Red vented bulbul	R
12.		Dicrurus adsimilis	Black drongo	R
13.		Corvus splendens	House crow	R
14.		Dendrocitta vagabunda	Tree pie	R
15.		Ocyeros birostris	Grey hornbill	R
16.		Upopa epops	Hoope	R
17.		Motacilla alba	White wagtail	R
18.		Amandava formosa	Green munia	R
19.		Anthus hodgson	Tree pipit	R
20.		Orthotomus sutorius	Tailor bird	R
21.		Appus affinis	Swift	R
22.	Cuculiformes	Centropus sinensis	Coucal	R
23.		Eudynamys scolopacea	koel	R
24.		Cuculus varius	Brain fever bird	R
25.	Ciconiiformes	Vanellus indicus	Red Wattled lapwing	R
26.		Himantopus himantopus	Black winged stilt	M
27.		Bubulcus ibis	Cattle Egret	R
28.		Ardeola grayii	Pond heron	M
29.		Tringa gareola	Sand piper	R
30.		Phalacrocorax niger	Little cormorant	R
31.		Tringa tetanus	Red shank	R
32.		Athene brama	Spotted owl	R
33.	Coraciiformes	Coracias benghalensis	Indian Roller	R
34.		Halycon smyrnensis	White breasted Kingfisher	R
35.		Alcedo atthis	Common kingfisher	R
36.		Milvus migrans	kite	R
37.	Columbiformes	Columba livia	Rock pegin	R
38.		Streptopelia decocta	Eurasian collard dove	R
39.		S. senegalensis	Little dove	R
40.	Gruiformes	Fulica atra	Coot	R
41.		Gallinus chloropus	moorhen	R
42.		Ardeotis nigriceps	Great Indian bustard	R
43.		Francolinus pondicerianus	Grey francolin	R
44.		Pavo cristatus	Pea fowl	R
45.		Recurvirostra avosetta	Pied avosetta	R
46.	Psittaciformes	Psittacula krameri	Rose ringed parakeet	R
47.		Psittacula cyanocephala	Plum headed parakeet	R

R –Resident ,M-Migratory.

### III. Results and Discussion

Total of 47 species belonging to 7 orders were recorded from Ajmer (Table 1). This shows quite good avian diversity. Variety of birds visit and some permanently dwell in this area.

It is due to water body and food available in this area for birds. Most of the avian species are Resident and some are migratory.

Birds belonging to orders Passeriformes is dominant with maximum number of species. The second order is Ciconiformes with 8 species. The third order is Gruiformes with 6 species.

Aravalli Mountains are Marvellous to be viewed, since these are oldest Mountains of the world. But the avifaunal diversity is rapidly decreasing, due to mining and fast rate of urbanisation. Zinc mining and cutting of mountains to obtain rock for building houses and buildings is the main cause for loss of biodiversity. Fast steps should be taken and hard laws should be introduced to stop the loss of biodiversity.

### **Suggestions**

Strict laws should be imposed to stop minning and mountain cutting, since Aravallis are the oldest mountains of the world and habitat of many Birds like peacocks and godawans. Habitat loss will lead to biodiversity loss.

The local people should be educated and made aware of effects and consequences of Biodiversity loss.

Documentation of biodiversity is an urgent requirement as latest statistics and data on floral and faunal biodiversity has not been compiled and documented.

Degradation / Fragmentation of habitat extinction of species and destruction of unique habitat need to be monitored.

A programme "Eco -development" for in situ conservation of biological diversity involving local communities has been initiated in recent years, for sustained conservation of ecosystem by involving the local communities with maintainance of earmarked regions surrounding protected areas.

Increase allocation of financial resources for conservation of biodiversity.

To conserve representative ecosystem, a biosphere reserve programme should be implemented.

Aravallis should also be included in Biosphere reserves.

Major central acts relevant to biodiversity include forest act, and wildlife protection act, 1972, Forest conservation act 1980 and environment protection act 1986.

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