

COMPARATIVE STUDY OF BIRD SPECIES OF JAMMU KASHMIR AND PUNJAB: A CASE STUDY

Jagdeep Singh,¹ Dharmendra Kumar²

^{1,2} Assistant Professor, Faculty of Agriculture and Life Sciences,
Desh Bhagat University, Mandi Gobindgarh, Punjab

Corresponding author: Dr Jagdeep Singh, Assistant Professor,
Faculty of Agriculture and Life Sciences,
Desh Bhagat University, Mandi Gobindgarh, Punjab

ABSTRACT

Wildlife study enables us to know about different animal species and other wild life species, how they interact with each other and with their ecosystem. It also enables us to know how important wildlife is for maintaining balance in ecosystem, their aesthetic value and scientific value. As part of the world's ecosystem, wildlife provides balance and stability to nature's processes. The goal of wildlife study is to ensure the survival of these species and to educate people on living sustainably with other species.

The present investigation is an attempt to study the comparison of wildlife of Jammu Kashmir and Punjab. The study includes the different species of wild animals of Punjab and Jammu and Kashmir, the comparison is based on species present within Jammu Kashmir and Punjab, for example, there are many differences between the birds found in Punjab and Jammu Kashmir.

Also, their classification, Morphology, distribution and habitats reveal the major differences among the wild animals of Punjab and J&K.

KeyWords: Wildlife Study, Species, Habitat, Morphology, Distribution, Classification

INTRODUCTION

Wildlife traditionally refers to undomesticated animal species, but has come to include all organisms that grow or live wild in an area without being introduced by humans. Wildlife can be found in all ecosystems, deserts, forests, rainforests, plains, grasslands and other areas, including the most developed urban areas, all have distinct forms of wildlife while the term in popular culture usually refers to animals that are untouched by human factors, most scientists agree that much wildlife is affected by human activities.

India is unique in having immense natural beauty, is its different lions and in possessing a rich and diverse wildlife. Indian wildlife is incomparable in its variety, for example, the Tiger, the Lion and the Leopard roam about in the same country, Elephants and the one horned Rhinoceros are found here in abundance. India had more types of the graceful deer and cats than any other country in the world. In fact, India includes more than 120 families of terrestrial vertebrates has been

estimated that there are more than 350 species of reptiles and more than 29,70,000 species of insects in India.

Humans have historically tended to separate civilization from wildlife in a number of ways, including the legal, social, and moral senses. Some animals however have adapted to suburban environments. This includes such animals as domesticated cats, dogs, mice and rats. Some religions declare certain animals to be sacred, and in modern times concern for the natural environment has provoked activists to protest against the exploitation of wildlife for human benefit or entertainment.

COMPARISON OF BIRD SPECIES FOUND IN J&K AND PUNJAB.

BIRD SPECIES FOUND IN J&K

The bird species found in J&K are Crimson Tragopan, Monal pheasant, Kashmir Flycatcher, Golden Eagle etc.

CRIMSON TRAGOPAN (TRAGOPAN SATYRA)



Fig.1 *Tragopansatyra*

Classification Kingdom : Animalia Phylum: Chordata Class : Aves
Order : Galliformes Family: Phasianidae Genus :
Tragopan Species : satyra

Morphology

visible when the bird is in flight. The tail feathers of the male are uniformly rufous, becoming darker towards the tip where as the lower tail coverts of females are white, barred with black and red.

Distribution

The Himalayan monals native range extends from Afghanistan and Pakistan through the Himalayas in India, Nepal, southern Tibet and Bhutan. In Pakistan, it is most common in the Khyber Pakhtunkhwa province and has also been recorded in Kaghan, Palas valley and Kashmir. [Jolli, V. and Pandit, M. K. (2011).]

KASHMIR FLYCATCHER (*FICEDULA SUBRUBRA*)

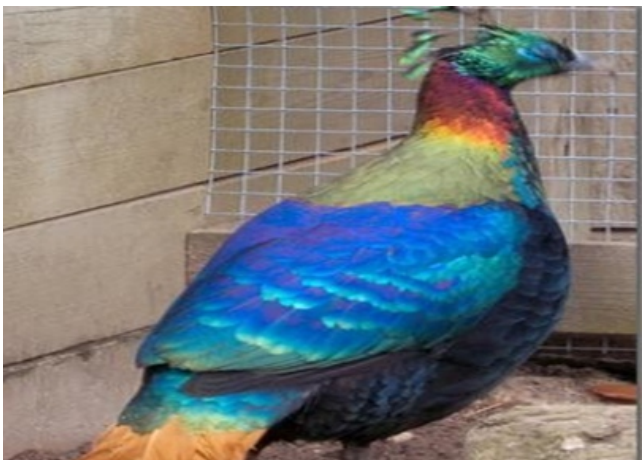


Fig.2 *Lophophorus impejanus*

Classification Kingdom : Animalia Phylum: Chordata Class : Aves

Order: Galliformes Family: Phasianidae Genus: *Lophophorus* Species: *impejanus*

Morphology

It is a relatively large sized pheasant. The adult male has plumage throughout, while the female, as in other pheasants, is more subdued in color. Notable features in the male include a long metallic green crest, coppery feathers on the back and neck and a prominent white rump that is most



Fig.3 *Ficedula subrubra*

Classification Kingdom : Animalia Phylum: Chordata Class : Aves

Order: Passeriformes Family : Muscicapidae Genus : Ficedula Species: subrubra Morphology

This species is 13 cm long. It is similar in shape to the slightly smaller red-breasted flycatcher. The male has a grey – brown back with an orange red throat, breast and flanks, bordered with black on the throat and breast. Females and first-winter birds have slightly browner upper parts, and the red of the under parts may be reduced to just a pinkish wash.

Distribution

This is an insectivores species which breeds in the north – west Himalayas in the Kashmir region of Indian subcontinent. It is migratory and winters in the hills of central Sri Lanka and the western Ghats of India. It is now declared as state bird of Jammu and Kashmir.

Habitat

The Kashmir flycatcher breeds in deciduous forests with dense undergrowth, nesting in a hole in a tree and laying 3-5 eggs which are incubated by the female. It with dense undergrowth, nesting in a hole in a tree and laying 3-5 eggs which are incubated by the female. It winters in gardens, tea estates, forest edges and open areas within forest, generally above 750m. Most individuals leave the breeding grounds in September, arriving in Sri Lanka in October and departing again in late March. One of the best places to see this rare species is Victoria Park in Eliya Nuwara. [Jobling, James A. (2010)]



Fig.4 *Aquila chrysaetos*

Classification Kingdom : Animalia Phylum: Chordata Class : Aves

Order: Accipitridae Genus : *Aquila* Species: *chrysaetos* Morphology

The Golden Eagle is a very large raptor, 66 to 102 centimeters in length. Its wings are broad and the wingspan is 1.8 to 2.34 meters. Adults of both sexes have similar plumage and are primarily dark brown, with some grey on the inner wing and tail and a paler, typically golden color on the back of the crown and nape that gives the species its common name.

Distribution

The Golden Eagle has one of the largest distributions of all eagles. It occurs over most of western North America from Alaska down to Mexico. In the old world, it occurs from western Europe eastwards to Japan.

Habitat

The Golden Eagle is fairly adaptable in habitat but often resides in areas with a few ecological characteristics. They are best suited to hunting in open and semi-open areas and search them out year around.

Golden Eagles favour. Partially or completely open country, especially around mountains, hills and cliffs. They use a variety of habitats ranging from arctic to desert, including tundra, shrubs and grasslands, coniferous forests, farmlands and areas along rivers and streams. [Peterson, Roger Tory (1998)]

BIRD SPECIES FOUND IN PUNJAB

The bird species found in Punjab are Rock dove, Northern shoveler, Partridge, Red jungle fowl etc.

ROCK DOVE (COLUMBALIVIA)



Fig.5 *Columbalivia*

Classification Kingdom : AnimaliaPhylum : chordata Class : Aves
Order : ColumbiformesFamily:ColumbidaeGenus : ColumbiaSpecies: livia

Morphology

The adult of the nominate species of the rock dove is 29 to 37 cm long with a 62 to 72 cm wingspan. It has a dark bluish-grey head, neck, and chest with glossy yellowish, greenish and reddish- purple iridescence along its neck and wing feathers. The iris is orange red or golden with a paler inner ring and the bare skin round the eye is bluish grey. The bill is grey black with a conspicuous off white cere, and the feet are purplish red.

Distribution

Rock pigeon probably occurred from the Faeroe and Shetland Islands, Scandinavia and Russia south to Ghana's, Niger, Central Chad, Sudan, Yemen, Pakistan and India; not clear owing to presence of feral pigeons.

Habitat

Wild rock doves nest in crevices along rocky seaside cliffs, close to agriculture or open shrub vegetation. Feral pigeons live in old farm buildings in rural areas. In cities, the skyscrapers and other buildings tend to take the place of their natural cliff surroundings. [Davis, J. Michael (1975)]

NORTHERN SHOVELER (SPATULA CLYPEATA)



Fig.6 Spatulaclypeata

Classification Kingdom : AnimaliaPhylum: ChordataClass :Aves

Order : AnseriformesFamily: AnatidaeGenus: SpatulaSpecies: clypeataMorphologyThis species is unmistakable in the northern hemisphere due to its large spatulate bill. The breeding drake has an iridescent dark green head, white breast and chestnut belly and flanks. In flight, pale blue forewing feathers are revealed, separated from the green speculum by a white border.

Distribution

The Northern Shovelers species is distributed in northern America, Europe and Asia. Wintering populations occur in southern Europe, Southern and Eastern Asia, Indian subcontinent, Africa and South America.

Habitat

Northern Shovelers use shallow wetlands with submerged vegetation during the breeding season, nesting along the margins and in the neighbouring grassy fields outside of the breeding season they forage in salt marshes, estuaries, lakes, flooded fields, wetlands, agricultural ponds and wastewater ponds. [Dunn, J.; Alderfer, J. (2006).]

Partridge (Alectoris chukar)

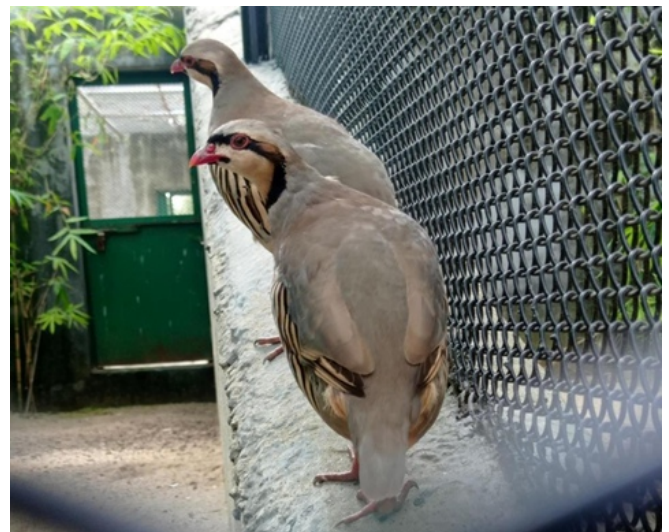


Fig.7 Alectorischukar

Classification Kingdom : AnimaliaPhylum: ChordataClass :Aves

Order : Galliformes Family: PhasianidaeGenus: AlectorisSpecies:chukarMorphology

These are medium sized birds, intermediate between the larger pheasants and the smaller quail. The grey partridge has a reddish face and tail grey breast, barred sides and a dark U shape on the belly; Sides look alike. The hen lays about 15

eggs in a grassy cup in grain fields or hedges.

Distribution

Partridges are native to Europe, Asia, Africa and the Middle east. Some species are found nesting on steppes or agricultural land, While other species prefer more forested areas. They nest on the ground and have a diet consisting of seeds, grapes and insects.

Habitat

Cultivated land, hedge groves, bushy pastures, meadows. Mostly lives in grasslands and agricultural fields. Farmland is excellent habitat as long as hedge rows and shelterbelts are left between fields. In winter often in suitable fields, moving into edges of woodlots in harsh weather. [Holmes, Richard (2013)]

RED JUNGLE FOWL (GALLUS GALLUS)



Fig.8 Gallus gallus

Classification Kingdom : Animalia **Phylum:** Chordata **Class:** Aves

Order : Galliformes **Family :** Phasianidae **Genus :** Gallus **Species:** gallus

Morphology

The nominate race of red Jungle fowl has a mix of feather colours, with orange, brown, red, gold, grey, white, olive and even metallic green plumage. The tail of the male roosters can grow up to 28 cm and the whole bird may be as long as 70 cm. There are 14 tail feathers. As moult in June changes the bird's plumage to an eclipse pattern, which lasts through October.

Distribution

The range of the wild form stretches from India eastwards across Indochina and southern China, into Malaysia, Singapore, the Philippines and Indonesia jungle fowl.

Habitat

Red jungle fowl prefer disturbed habitats and edges, both natural and human created. Apparently the forage and thick cover in these areas are attractive to jungle fowl, especially nesting females. Jungle Fowls use logged and regenerating forests and often are found near human settlement and areas regenerating from slash and burn cultivation. [Bump, G.; Bohl (1961)]

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