

Behavioral Aspects of *Pavo Cristatus* in Gulbarga University Campus: A Study on their Roosting, Mating, and Feeding Patterns

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Abstract: This research article presents a study on the behavioral aspects of peacock species in the Gulbarga University campus. Peacocks are known for their vibrant plumage and unique courtship displays. However, little is known about their behavior in specific habitats, such as university campuses. This study aims to investigate the roosting, mating, and feeding patterns of peacocks in the Gulbarga University campus. Observations were made over a period of 6 months to understand their behavior and social interactions. The findings of this study will contribute to our understanding of peacock behavior in urban environments and aid in the conservation efforts of this iconic species.

Keywords: Peacock, Behavior, Roosting, Mating, Feeding, Gulbarga University, Conservation, *Pavo cristatus*.

1. Introduction

Peacocks are large, colorful birds belonging to the pheasant family. They are known for their elaborate courtship displays and are considered a symbol of beauty and grace. However, their behavior in specific habitats, such as university campuses, remains relatively unexplored. Understanding their behavioral patterns in urban

environments can provide valuable campuses, remains relatively unexplored. Understanding their behavioral patterns in urban environments can provide valuable insights into their adaptation strategies and aid in their conservation.

2. Materials and Methods



Insights into their adaptation strategies and aid in their conservation.

2.1 Study Area

Kalaburagi district, formerly known as Gulbarga district, is one of the district of Karnataka state is southern India. The district is situated in North Karnataka between 76⁰: 0 4' and 77⁰: 42' East Longitude and 17⁰: and 17⁰: North Latitude, covering an area of 10, 951 km². Gulbarga receives about 104.74 millimeters (4.12 inches) of precipitation and has 116.96 rainy days annually, the warmest month is May with 40.48°C (14.86°F) and coldest month is December with 18.43°C (65.17°F), humidity is about 48.0%. Study area Includes: - a) Gulbarga University main campus. b) Near Govt. School in campus. c) Botanical Garden in campus. d) Buddha Vihar road in campus

2.2 Data Collection

The present study deals with the status and distribution of Indian peafowl in Gulbarga and the data used for study was mainly based on the observational method. The study area were covered by surveyed by foot and vehicle such as bicycle and motorcycle the capturing of the picture of the Indian peafowl was captured using Nikon D 7200 camera, all the sampling sites were explored by points counts methods. Counts were early in the morning from 6: 00 am to 9: 00 am for 3hours and evening from 5: 00 pm to 7: 00 pm for about 2 hours. Each samplings spot was surveyed every day for behaviour activity of the peacock was observed from about 30 minutes at each sampling plot. The photography was done in the morning and evening by the use of Nikon D7200 camera. It is a 24 - mega pixel APS - C digital single lens reflex camera. Its maximum resolution 6000x4000 (24 megapixels). The observations focused on

roosting patterns, courtship displays, feeding behavior, and social interactions.

3. Results and Discussion

The study documented various behavioral aspects of peacock species in the Gulbarga University campus. The results indicated specific roosting sites preferred by peacocks, with trees and elevated structures being their primary choices. Courtship displays were observed during the mating season, with males displaying their vibrant plumage and performing elaborate dances to attract females. Feeding observations revealed a preference for insects, seeds, and plant matter. Social interactions were observed, indicating the presence of hierarchical structures within peacock populations.

Peacock are omnivorous birds, and they mainly eats plants, fruits, seeds, flower petals, ants, ticks, insects, locust, bead and others scramids in the gardens and forests. Peacock also eats some reptiles such as young snakes, amphibians, butterflies, flies and chicken.

Weight and length: Male peacock weights around four to 6 kg, while females weight about 2.75 to 4 kg. the length of peacock is about 6 to 7 feet, while the peahens are about 3 to 3.5 feet in length.

Anatomy: The feathers of peacock possess microscopic 'Crystal like structure', which tend to reflect various wavelengths of lights based on their spacing.

Sound: The frequency of their calls increases during the monsoon. During the rainy season, these birds make a meowing sound indicating it's going to rain. A peafowl can make 11 different calls. They love to call out in the early morning and late evenings as a means of interacting with one another. Peacock sings during the making season to impress and attract the peahens. Peacock are polygamous in nature which means that a peacock mates with more than one female. A harem of the peahens comprises two to three of them. The lifespan of peacock is 15 to 20 years in the wild. However, it can live upto 40 years in captivity.

During the period of study only one species of peacock (*Pavo cristatus*) was found in Gulbarga University Campus, Kalaburagi. According to IUCN red list the peacock belongs to least concern category and are indeed thriving in the wild. During the time of study we have chosen Gulbarga University campus due to abundance of vegetation and wetland sources in University Campus. In University campus, study area include botanical garden, Buddha vihar road and near government school Campus. The Indian peafowl lives mainly on the ground in open place and on

the agriculture land where they forage for berries, grains but also prey on snakes, lizards and small rodents.

Roosting: At location the sites preferred by Indian peafowl were surveyed where they spent maximum time of day and night for roosting. There was maximum diversity of tree type so that they preferred tall tree with dense foliage or thorny trees for roosting. The roost height varied between 7m to 18 m.

Life span: *Pavo cristatus* can live up to 25 years in the wild but average is around 20 years to predation, electrocution from flying into power lines, pesticides poisoning and destruction of their natural habitat. In captivity, the maximum life span is 23.2 years, with an average around 16 years. These differences in lifespan between captivity and the wild can be due to the diet. In the wild, Peafowl have an entirely different lifestyle because they are always searching for food and must eat water ever they can find. In captivity, peafowl eat the feed that is given to them and do not have to search constantly for food. Because they are not burning off excessive protein and calcium, gout and kidney failure can shorten the life span of these captive birds. Those who decide to have pavo cristatus as pets need to worm the peafowl twice a year to get rid of any parasites and prevent disease. It was very surprising to observe that Indian peafowl preferred the leaves of certain plant species but were rarely found to feed on the flowers of same plant species. Indian blue peafowl help regulate the numbers of venomous snakes, abundant lizards, and insects to maintain a stable ecosystem. Peafowl are a carrier of lice and micro organisms. In one study, pavo cristatus was found to be a host for two core species, *Goniodes pavonis* and *Amyrisdea minuta*. Because males and females only come together to mate and there is no parental care by the father, louse distribution is largely continued from the mother to the offspring. The father can still pass on the lice secondarily by infecting the mother, Who them passes the lice to the peachicks.

Females avoid this situation by picking the favored nail because those mates most likely have the best parasite resistance and are less likely to pass on nay parasites during copulation. In another study of captive peafowl at three different zoos, scientists tested the birds for the presence of harmful microorganisms. All three zoos had peafowl that carried *Bordetella avium*, *mycoplasma synoviae*, *clostridium per fringes* and *Escherichia coli*. *Bordetella allium*, *mycoplasma synoviae* are contagious and can be passed on to other species, but do not result in high mortality rates. Under certain circumstances (like if the immune system is compromised by some other illness.)

Comparative study of feeding behaviour of peafowl in natural habitat and Gulbarga zoo.



Plate no 1: Feeding habit of peafowl in zoo

Table 1: Feeding habits of Peafowl in Mini Zoo of Kalaburgi.

Food Fodder	Grams (per bird)
Mixed grams	0.150
Soyabean meal	0.020
Apple	0.005
Lusarna	0.01
Poultry feed	0.1
Veg green	0.15
Egg (weakly 5 days)	0.01
Bajara	0.02
Seasonal fruits	0.5
Papaya	0.020
Maize	0.020
Garlic	0.005
bread	0.020

4. Implications for Conservation

Understanding the behavioral aspects of peacock species in urban environments is crucial for their conservation. The findings of this study can contribute to the development of conservation strategies, such as the preservation of suitable roosting sites, protection of mating habitats, and promotion of a diverse food supply. Additionally, raising awareness among the university community and implementing measures to minimize disturbances can help ensure the well-being of peacock populations in the Gulbarga University campus.

5. Conclusion

This study provides valuable insights into the behavioral aspects of peacock species in the Gulbarga University campus. The observations on roosting, mating, feeding, and social interactions contribute to our understanding of

peacock behavior in urban environments. The findings can aid in the conservation efforts of peacock populations and promote their coexistence with human activities. Further research is recommended to explore additional aspects of peacock behavior and their ecological interactions within the university campus.

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