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## PEOPLE PERCEPTION ABOUT AVIFAUNA AND ATTITUDE TOWARD WILDLIFE CONSERVATION IN PATNA PAKSHI VIHAR

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*"together we can and we will make a difference"*

# PEOPLE PERCEPTION ABOUT AVIFAUNA AND ATTITUDE TOWARD WILDLIFE CONSERVATION IN PATNA PAKSHI VIHAR

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## ABSTRACT

Conservation of biodiversity needs both scientific justification and public interest. To know people perception of avifauna and wildlife attitude, data were gathered between August 2022 to March 2023 to collect information on respondents' socioeconomic and demographic characteristics, experiences with crop damage and livestock predation by wild animals and attitudes towards wildlife conservation. Our findings revealed that most respondents understand the relevance of birds to ecological balance and have a generally positive attitude towards most bird species. The concept of environmental perception attempts to incorporate a variety of characteristics, and understanding these human-biodiversity links is crucial for successfully guiding governmental policies, urban planning interventions, and environmental education programmes. We suggest that future public education efforts that incorporate private forest land values and culture into their programmes may foster a more robust knowledge of bird conservation in students

*Keywords: Public perception, Avifauna, wildlife, biodiversity.*

## INTRODUCTION

Birds are conspicuous, ubiquitous, and arguably the best-studied vertebrate group on the planet [1]. However, many bird species and population numbers are in decline, primarily due to habitat loss and pollution [2]. Public perception plays an instrumental role in the successful conservation of biodiversity, particularly in settings where human communities interact closely with natural habitats. As a flourishing hub of bird diversity, the Patna Pakshi Vihar Sanctuary serves not only as an essential conservation site but also as a locus of human-avian interaction. A study of people's perception of the avifauna of this sanctuary can provide valuable insights into attitudes towards conservation and local community engagement with avian biodiversity.

Research in environmental education has indicated that helping individuals interact with nature and learn about wildlife boosts the perceived value of nature and conservation initiatives [3]. Public perception of avifauna can be multifaceted, varying from individual to individual. For some, birds may hold aesthetic value, seen as symbols of beauty or freedom. Others may value birds for their ecological roles as pollinators or pest controllers. Still, others may view certain bird species as nuisances, particularly if they interfere with human activities or properties.

To better comprehend these perceptions, it is

necessary to explore local community interactions with the Patna Pakshi Vihar Sanctuary's avifauna, as well as their beliefs, attitudes, and experiences. For example, landowners who have a positive attitude towards wildlife are more likely to learn about birds and bird-friendly forestry [4].

Understanding people's perception of the avifauna of Patna Pakshi Vihar Sanctuary can provide pivotal information for conservation initiatives and sanctuary management. If local communities appreciate and value the avifauna, they are more likely to support conservation efforts. Conversely, if negative perceptions exist, it could indicate potential conflicts that need to be addressed to promote the sanctuary's long-term success and the preservation of its avian biodiversity. Information about endangered wildlife has also been found to increase the likelihood that the public will support species conservation [5,6].

In this study, we want to know how people perceive birds in Patna Pakshi Vihar. Understanding how humans view animals is critical to understanding today's human-nature relationship. Filling this information gap is critical for planning habitats where humans and animals interact and gaining widespread support for biodiversity conservation in urban areas [7, 8, 9]. Several studies have found that more personal interaction with nature increases people's

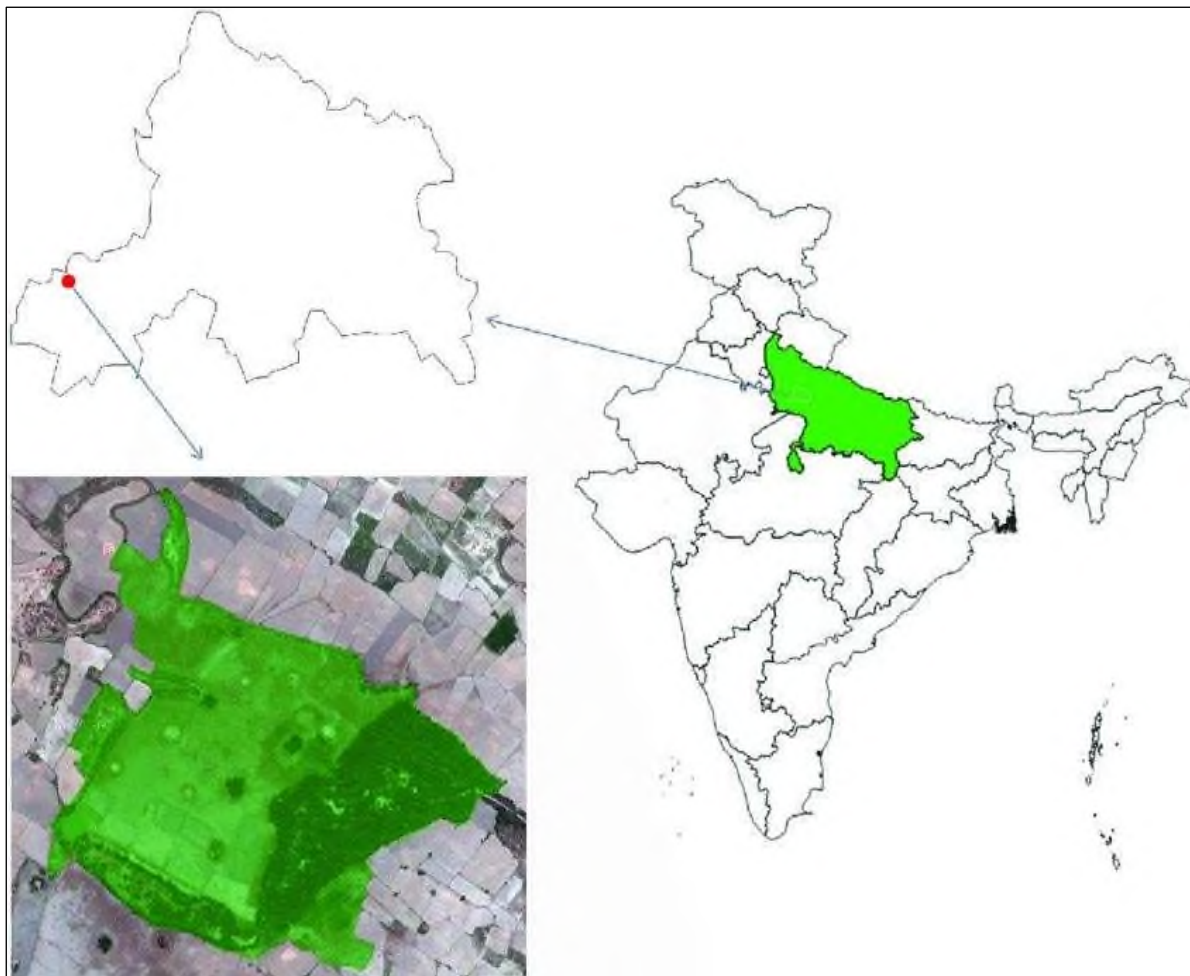
tolerance for biodiversity and willingness to protect it [10, 11].

## MATERIALS AND METHODS

### Study area

Patna Pakshi Vihar Bird Sanctuary is a protected sanctuary in the Jalesar sub division of Etah district in

Uttar Pradesh Fig. 1. It covers an area of 108 hectares and was founded in 1991 under the Wildlife (Protection) Act 1972(12). It is the smallest bird sanctuary in Uttar Pradesh, with a wetland area of only 1 km<sup>2</sup>.



Source: etah.nic.in

Location map of study area

### Flora and fauna of the Patna bird sanctuary

The flora of the Patna Bird Sanctuary includes a range of plant species that benefit the ecology and provide habitat for the bird population. The sanctuary contains a diverse range of water plants, wetland vegetation, and terrestrial vegetation.

Wetland vegetation such as reeds, grasses, sedges, and rushes are present in the sanctuary because they provide refuge, nesting grounds, and food for birds. These plants also contribute to the ecological balance and water quality of the sanctuary. Furthermore, trees and shrubs in the nearby areas may provide perching and roosting spots for birds.

### Methods

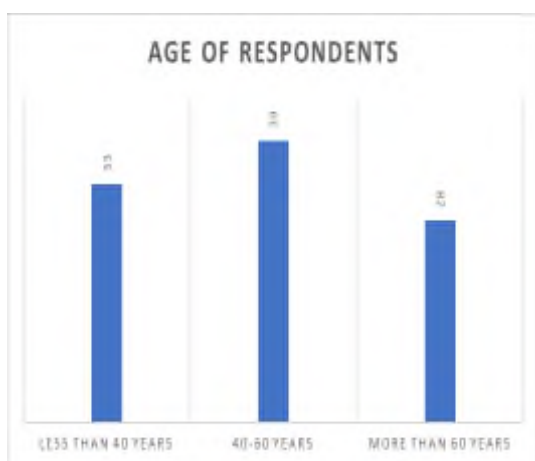
To know people's perception toward avifauna and wildlife conservation. We carried out an opinion survey between August 2022 and March 2023 with the use of an online questionnaire created by Google Forms tool [10]. Questionnaires were prepared with open and choice structured questions: open responses are those in which the respondent answers in their own words, while choice structured questions are structured in the form of a choice of some answer alternatives [13]. The questionnaire was designed to collect information on respondents' socioeconomic and demographic characteristics (education, livestock holdings, land ownership, income sources, and

economic losses), experiences with crop damage and livestock predation by wild animals and attitudes towards wildlife conservation (whether or not wildlife should be conserved).

### RESULTS

Socioeconomic Characteristics and Attitudes towards Wildlife Conservation.

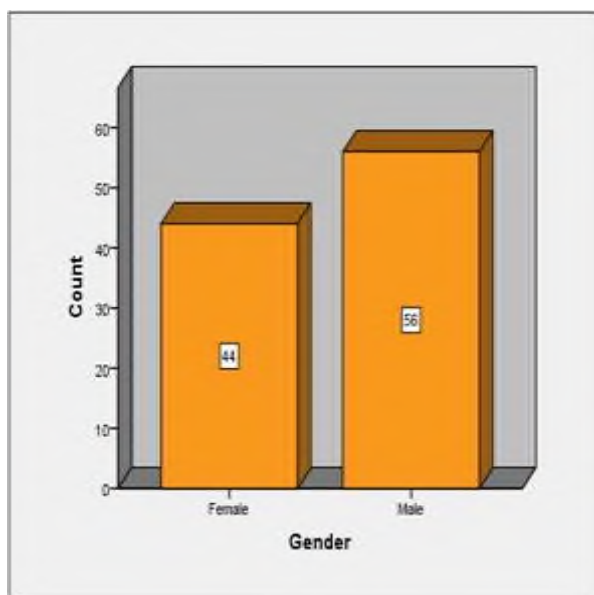
#### AGE



#### Interpretation

From the collected data on 100 respondents and using the above bar graph we can interpret that 33 out of 100 respondents having age less than 40 years, 39 out of 100 respondents having age between 40 to 60 years and the rest 28 out of 100 respondents having age more than 60 years.

#### GENDER

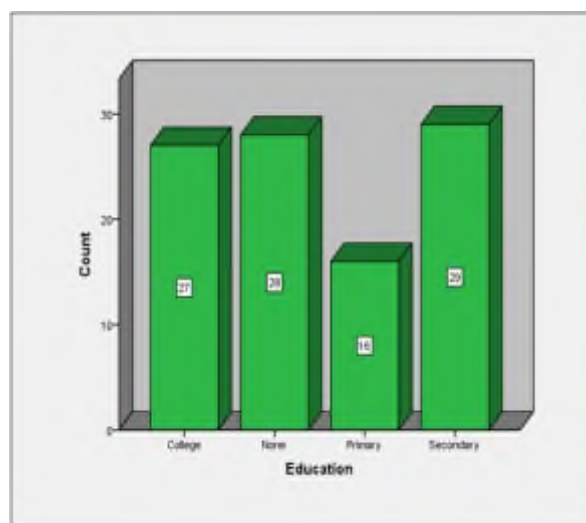


#### Interpretation

From the collected data on 100 respondents and

with help of the graph, we can interpret that 44 of 100 respondents are male and the rest 56 out of 100 respondents are female.

#### EDUCATION



#### Interpretation

From the collected data on 100 respondents and with help of the graph, we can interpret that 27 out of 100 respondents are in college, 16 out of 100 respondents are having education to the primary level, 29 out of 100 respondents are having education to the secondary level and the rest 28 out of 100 respondents are having no education.

#### LIVESTOCK HOLDINGS



#### Interpretation

From the collected data we can see that 27 respondents do not have any animal, 26 respondents are having 1 to 2 animals, 27 respondents are having 3 to 5 animals and the rest 20 respondents are having more than 5 animals.

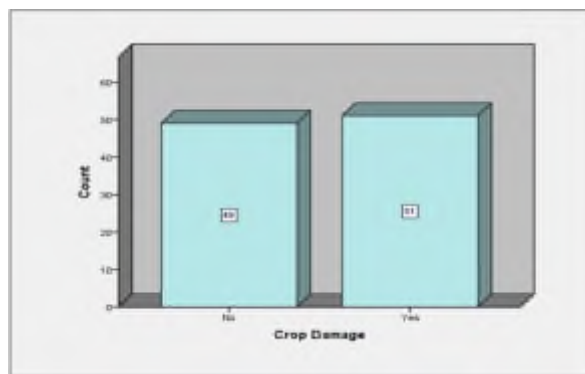
### LAND OWNERSHIP



#### Interpretation

From the collected data and using the above graph we can say that only 38% respondents are land owners, while the rest 62% respondents are not owner of any land.

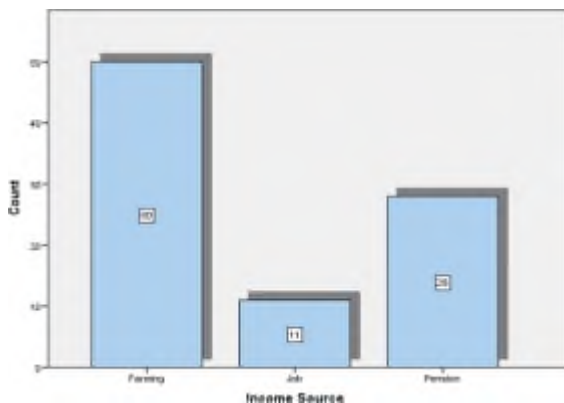
### CROP DAMAGE



#### Interpretation

From the collected data on 100 respondents and with help of the graph, we can interpret that 51 out of 100 respondents says that their crop damage by wild animals while the rest 49 out of 100 respondents says that their crop does not damage by wild animals.

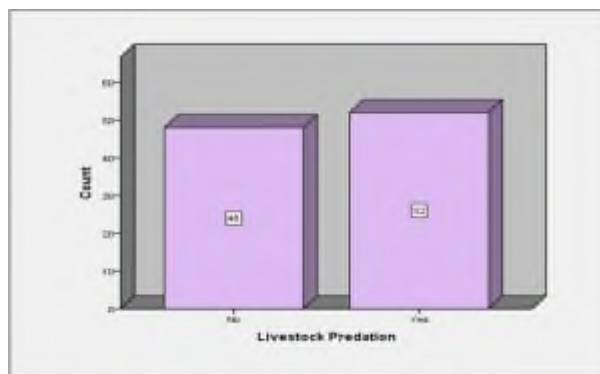
### INCOME SOURCE



#### Interpretation

From the collected data on 100 respondents and with help of the graph, we can interpret that 50 out of 100 respondents earn their livelihood from farming, 28 out of 100 respondents have pension as their income source and 11 out of 100 respondents earn from other jobs.

### LIVESTOCK PREDATION



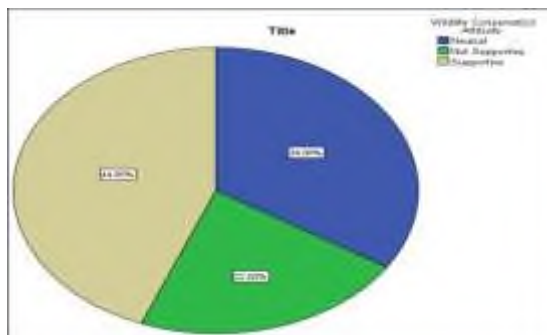
#### Interpretation

From the collected data on 100 respondents and with help of the graph, we can interpret that 52 out of 100 respondents says that they have faced livestock predation by wild animals while the rest 48 out of 100 respondents says that they have not faced livestock predation by wild animals.

### Experiences of Crop Damage and Livestock Predation.

### Attitudes towards Wildlife Conservation

### WILDLIFE CONSERVATION ATTITUDE



**Interpretation**

From the above graph we can interpret that 34% respondents are showing neutral attitude towards the wildlife conservation, 22% respondents are showing

negative attitude towards the wildlife conservation and the rest 44% respondents are showing positive attitude towards the wildlife conservation.

**DATA SHEET ABOUT PEOPLE PERCEPTION OF PATNA PAKSHI VIHAR**

Age category	Age	Gender	Education	Livestock	Land Ownership	Income Source	Crop Damage	Livestock Predation	Wildlife Conservation Attitude
2	40	Male	Secondary	8	Yes	Farming	No	No	Supportive
2	41	Male	Secondary	8	Yes	Farming	Yes	Yes	Neutral
1	39	Female	Secondary	7	No	Farming	Yes	No	Supportive
2	50	Male	Secondary	7	Yes	Farming	No	No	Supportive
2	50	Male	Secondary	7	Yes	Farming	Yes	No	Supportive
2	50	Male	Secondary	7	Yes	Farming	Yes	No	Supportive
2	51	Male	Secondary	7	Yes	Farming	Yes	Yes	Supportive
2	51	Male	Secondary	7	Yes	Farming	Yes	Yes	Supportive
2	53	Male	Secondary	7	No	Farming	Yes	No	Supportive
2	54	Male	Secondary	7	Yes	Farming	Yes	No	Supportive
1	38	Female	Secondary	6	Yes	Farming	Yes	Yes	Supportive
1	38	Female	Secondary	6	Yes	Farming	Yes	No	Supportive
1	39	Female	Secondary	6	No	Farming	Yes	Yes	Supportive
2	40	Female	Secondary	6	Yes	Farming	Yes	No	Supportive
2	41	Female	Secondary	6	Yes	Farming	Yes	Yes	Supportive
2	43	Female	Secondary	6	Yes	Farming	Yes	Yes	Supportive
2	43	Female	Secondary	6	Yes	Farming	Yes	Yes	Supportive
2	53	Male	Secondary	6	No	Farming	No	No	Supportive
2	55	Female	Secondary	6	Yes	Farming	No	No	Supportive
2	57	Female	Secondary	6	Yes	Farming	Yes	Yes	Supportive
1	37	Female	Secondary	5	Yes	Farming	Yes	No	Supportive
1	38	Male	Secondary	5	Yes	Farming	Yes	Yes	Not Supportive
2	44	Male	Primary	5	No	Farming	No	Yes	Supportive
2	47	Male	Primary	5	No	Farming	No	Yes	Supportive
2	52	Male	Secondary	5	No	Farming	Yes	No	Supportive
2	52	Male	Secondary	5	No	Farming	Yes	No	Supportive
2	54	Male	Secondary	5	No	Farming	Yes	Yes	Supportive
2	56	Male	Primary	5	No	Farming	Yes	No	Supportive
2	58	Female	Secondary	5	No	Farming	Yes	Yes	Supportive
1	26	Male	College	4	No	Job	Yes	No	Not Supportive
2	42	Female	Secondary	4	No	Farming	Yes	Yes	Neutral
2	43	Female	Secondary	4	No	Farming	Yes	Yes	Neutral
2	45	Male	Primary	4	No	Farming	No	No	Neutral
2	45	Male	Primary	4	No	Farming	No	No	Neutral
2	46	Male	Primary	4	No	Farming	No	No	Neutral
2	51	Male	Primary	4	No	Farming	Yes	Yes	Neutral
1	25	Male	College	3	No	Job	No	No	Neutral
1	25	Male	College	3	No	Job	No	No	Not Supportive
1	35	Male	College	3	Yes	Farming	Yes	No	Supportive
2	42	Female	Secondary	3	Yes	Farming	No	No	Supportive
2	46	Male	Primary	3	No	Farming	No	No	Not Supportive
2	47	Male	Primary	3	No	Farming	No	No	Not Supportive

2	47	Male	Primary	3	No	Farming	No	No	Not Supportive
2	48	Male	Primary	3	Yes	Farming	Yes	Yes	Not Supportive
2	48	Male	Primary	3	No	Farming	No	No	Not Supportive
2	49	Male	Primary	3	Yes	Farming	No	No	Not Supportive
2	49	Male	Primary	3	Yes	Farming	No	No	Not Supportive
1	25	Male	College	2	No	Job	Yes	Yes	Not Supportive
1	26	Male	College	2	No	Job	Yes	Yes	Not Supportive
1	27	Male	College	2	No	Job	Yes	Yes	Not Supportive
1	27	Male	College	2	No	Job	Yes	No	Not Supportive
1	27	Male	College	2	No	Job	Yes	Yes	Not Supportive
1	28	Male	College	2	No	Job	No	No	Not Supportive
1	28	Male	College	2	No	Job	Yes	Yes	Supportive
1	29	Male	College	2	No	Job	Yes	No	Not Supportive
1	30	Male	College	2	No	Job	Yes	No	Supportive
1	33	Male	College	2	No	Job	No	No	Supportive
1	33	Male	College	2	No	Job	Yes	No	Supportive
1	37	Male	College	2	No	Job	Yes	No	Supportive
2	47	Male	Primary	2	Yes	Farming	No	No	Not Supportive
3	60	Female	Primary	2	Yes	Farming	No	No	Supportive
1	29	Male	College	1	No	Job	Yes	No	Not Supportive
1	31	Male	College	1	Yes	Farming	Yes	Yes	Not Supportive
1	31	Male	College	1	Yes	Farming	No	No	Supportive
1	32	Male	College	1	Yes	Farming	No	No	Supportive
1	32	Male	College	1	Yes	Farming	No	No	Supportive
1	33	Male	College	1	No	Job	No	No	Supportive
1	34	Male	College	1	No	Job	No	No	Supportive
1	34	Male	College	1	No	Job	No	No	Supportive
1	34	Male	College	1	No	Job	No	No	Supportive
1	35	Male	College	1	No	Job	No	No	Supportive
1	36	Male	College	1	No	Job	No	No	Supportive
3	72	Female	None	1	No	Pension	No	No	Not Supportive
2	59	Female	None	0	Yes	Pension	No	No	Neutral
3	62	Female	None	0	Yes	Pension	No	No	Neutral
3	63	Female	None	0	No	Pension	Yes	Yes	Neutral
3	63	Female	None	0	No	Pension	No	No	Neutral
3	64	Female	None	0	No	Pension	No	No	Neutral
3	64	Female	None	0	No	Pension	No	No	Neutral
3	65	Female	None	0	No	Pension	Yes	No	Not Supportive
3	65	Female	None	0	No	Pension	No	No	Neutral
3	66	Female	None	0	No	Pension	No	No	Neutral
3	66	Female	None	0	No	Pension	No	No	Neutral

3	66	Female	None	0	No	Pension	No	No	Neutral
3	67	Female	None	0	No	Pension	Yes	Yes	Neutral
3	67	Female	None	0	No	Pension	No	No	Neutral
3	68	Female	None	0	No	Pension	Yes	Yes	Neutral
3	68	Female	None	0	No	Pension	No	No	Neutral
3	69	Female	None	0	Yes	Pension	Yes	No	Neutral
3	69	Female	None	0	No	Pension	Yes	No	Neutral
3	70	Female	None	0	No	Pension	No	No	Neutral
3	70	Female	None	0	No	Pension	Yes	No	Neutral
3	71	Female	None	0	Yes	Pension	No	No	Neutral
3	71	Female	None	0	Yes	Pension	No	No	Neutral
3	72	Female	None	0	Yes	Pension	Yes	No	Neutral
3	72	Female	None	0	Yes	Pension	Yes	No	Neutral
3	73	Female	None	0	No	Pension	No	No	Neutral
3	73	Female	None	0	Yes	Pension	No	No	Neutral
3	74	Female	None	0	No	Pension	No	No	Neutral
3	74	Female	None	0	Yes	Pension	Yes	No	Neutral

## DISCUSSION

Our findings indicated that most respondents understand the relevance of birds to ecological balance. When asked what benefits birds provide, the majority of responders mentioned seed distribution and biological control in Patna Pakshi Vihar. Birds have an important function as seed dispersers in human-altered landscapes, helping to sustain and restore plant ecosystems [14, 15, 16]. Flower pollination and ecological balance were other often highlighted benefits, demonstrating that most people with higher academic backgrounds recognise and comprehend the value of birds. We also discovered that respondents had a generally good view towards the majority of the bird species. Considering social

factors, most birds in Patna Pakshi Vihar and surrounding areas give humans with a link to nature, life, joy, beauty and well-being.

## CONCLUSION

We demonstrated that people with undergraduate backgrounds can identify the most common bird species and understand the ecological importance of birds to the balance of urban environments. We also discovered that most people associate most bird species with pleasant sensations and feelings like beauty, joy, well-being, and tranquilly. Environmental perception tries to encompass variables that influence the natural, physical, and humanised environment via attitudes, values, and worldviews [17-20]. Thus, recognising these human-biodiversity linkages must be successfully connected with public health by policymakers and practitioners

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