

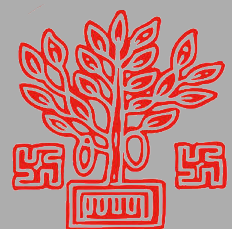
Department of Environment, Forest & Climate Change
Government of Bihar

ASIAN WATERBIRD CENSUS 2024



DEEPAK KUMAR

ANNUAL REPORT Bihar State Bird Count



बिहार सरकार

**Department of Environment, Forest & Climate Change
Government of Bihar**

**ASIAN WATERBIRD CENSUS
2024**

**ANNUAL REPORT
Bihar State Bird Count**



बिहार सरकार

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MESSAGE

Conservation of Wildlife, Sustainable living and caring for all life forms are important virtues of the people of Bihar. These virtues are deeply engraved in our tradition and cultural heritage from time immemorial.

Bihar's rich agricultural landscape, including diverse ecosystems like wetlands and chauras, serves as crucial stopover and wintering sites for resident and migratory birds. Identifying and safeguarding these sites through robust management strategies based on scientific data is essential for their preservation and the overall ecological balance.

I am delighted to express my appreciation to everyone who contributed to the successful conclusion of the Asian Waterbird Census (AWC) 2024 in Bihar. Your continuous and unwavering dedication to safeguarding our bird species and their habitats is admirable and demonstrates our joint pledge to environmental preservation.

I take this opportunity to congratulate all the forest officers of the Department of Environment Forest and Climate Change for conducting the AWC-2024 successfully with the support of the Bombay Natural History Society (BNHS), Mumbai, experts from various organizations/institutions, academicians, birdwatchers and volunteers across the state. I am happy to find that the Asian Waterbird Census – a citizen science initiative in the state has been successfully implemented for the last three years and a large citizen science group has been established to achieve this task and take the bird conservation initiatives in a big way in this state.

Let us continue working together to protect and preserve our avian species and their habitats for future generations.

Date:

Place: Patna

Prem Kumar

DR. PREM KUMAR



BANDANA PREYASHI, I.A.S.
Secretary
Environment, Forest & Climate Change
Government of Bihar



MESSAGE

Department of Environment, Forest and Climate Change, Govt of Bihar along with the support of the Bombay Natural History Society (BNHS) and other stakeholders, has initiated AWC in the year 2022 to study and collect valuable data from important wetlands habitats of Bihar. The continuation of this initiative with the AWC 2023 & 2024, covering a wider range of bird habitats across Bihar, is commendable. The comprehensive reports from AWC 2022 and 2023 undoubtedly contributed significantly to the formulation of effective bird conservation policies in our state.

I would like to express my sincere appreciation for the diligent efforts and dedication showcased by everyone involved in the successful completion of the Asian Waterbird Census (AWC) 2024 in Bihar. Your commitment to scientific research and conservation has been instrumental in furthering our understanding of sensitive wetland and avifaunal ecosystems and their vital role in maintaining ecological balance.

I extend my heartfelt congratulations to all department officers, field staff, BNHS scientists, experts, and volunteers who have played a pivotal role in gathering and disseminating scientific data through the AWC. Your contributions are invaluable in raising awareness and fostering a deeper understanding of the importance of bird conservation among the public and the scientific community.

We hope to continue our collaborative efforts toward preserving our natural heritage and ensuring a sustainable future for generations to come.

Date:

Place: Patna

BANDANA PREYASHI



PRABHAT KUMAR GUPTA, I.F.S.
Principal Chief Conservator of Forest-cum-
Chief Wildlife Warden
Bihar



FOREWORD

The findings of the third Asian Waterbird Census (AWC) conducted in Bihar from December to March 2024 fill me with great pride, satisfaction and a sense of accomplishment. This remarkable citizen-science initiative, spearheaded by the Department of Environment, Forest and Climate Change (DEF&CC), Government of Bihar, with technical expertise from the Bombay Natural History Society (BNHS), marks a significant milestone in our ongoing efforts to protect and conserve the rich avifaunal diversity of the State, particularly the migratory waterbirds along the Central Asian Flyway (CAF).

Building upon the momentum of the previous two bird census conducted in 2022 and 2023, this year's AWC has expanded in scope and participation, with over 180 dedicated individuals covering 85 wetlands across 28 districts. Their collective effort represents nearly 1,100 hours of fieldwork, demonstrating Bihar's growing commitment to biodiversity conservation, especially with regard to the winged visitors along the Central Asian Flyway and East Asian Australasian Flyway.

The success of AWC 2024 is a testament to the collective efforts of forest department officers, scientists, researchers, volunteers, students, local communities, and bird enthusiasts. Their passion and dedication are essential to secure a brighter future for Bihar's migratory and resident bird species.

As we move forward, the comprehensive data gathered through these censuses will serve as a vital resource for strategic conservation planning, aiding the State in its efforts to achieve the goals of the National Action Plan for Migratory Bird Conservation (2018-2023). This ongoing endeavor highlights the importance of collaboration, public involvement, and scientific research in preserving Bihar's natural heritage.

I extend my heartfelt appreciation to Shri S. Sudhakar, Conservator of Forests, Gaya Circle, whose leadership and unwavering commitment as the State Nodal Officer for this exercise have been instrumental in its success. The entire team of BNHS, forest department officials, field staff, veterinarians, volunteers, and local communities are also applauded and thanked for their invaluable contributions.

Together, we will continue to protect and conserve Bihar's wetlands and their avian inhabitants, ensuring that these magnificent birds continue to grace our skies for generations to come.

Date:
Place: Patna

PRABHAT KUMAR GUPTA



S. SUDHAKAR, I.F.S.

Conservator of Forests, Gaya Circle and
State Nodal Officer AWC, Bihar.

ACKNOWLEDGEMENT

We extend our heartfelt gratitude and appreciation to everyone who contributed to the success of the Asian Waterbird Census (AWC) in Bihar during the year 2024. AWC in Bihar is an annual census exercise conducted in the wetlands of Bihar. It is the first and largest Citizen Science Project of Bihar and its success depends upon the collaborative efforts and dedication of numerous individuals and organizations, whose active participation have been instrumental in this important conservation initiative.

Our state's commitment to safeguarding avian biodiversity and promoting sustainable conservation practices has been a cornerstone of our endeavours. The continuation of the AWC exercise for the 3rd year and the data continuity has not only aided us to comprehend the intricate dynamics of bird populations, their habitats, and the challenges they face but also guided us in our obligation to take our conservation efforts to the next level. These achievements led our department to the next milestone of wildlife conservation by conducting an International Workshop on Avian Conservation in 2024 at Patna. By inviting participants from various countries, this workshop served as a pivotal platform for experts, researchers, and stakeholders to converge and address pressing issues, particularly focusing on combating illegal wild-bird poaching and habitat conservation along the Central Asian Flyway.

First and foremost, we would like to express our sincere thanks to Smt. Bandana Preyashi IAS, Secretary, Environment, Forest and Climate Change Department, Govt of Bihar. Her unwavering support and encouragement have been a driving force for our team throughout this journey. A special mention goes to Shri. Ashutosh IFS, PCCF (Head of Forest Force) Bihar, for his continuous support, expert guidance, and insightful feedback that were crucial in steering our team towards success.

We are grateful to Shri. Prabhat Kumar Gupta IFS, PCCF cum Chief Wildlife Warden, Bihar, for his visionary leadership in initiating and overseeing the AWC exercise in our state. His dedication and regular reviews have been pivotal in ensuring the accuracy and precision of our census data and analysis. His constant guidance and regular interaction with the AWC participants have promoted and nurtured this teamwork which is a cornerstone for every Citizen science project. We would like to acknowledge the indispensable technical support and involvement of Dr P. Sathiyaselvam, Deputy Director, Bombay Natural History Society (BNHS), Mumbai, along with their team of scientists and research scholars at the Bird Ringing and Monitoring Centre, Bhagalpur, Bihar.

Our heartfelt thanks also go out to all the Divisional Forest Officers of Bihar and their field staff, Team Coordinators, various University and college Professors, Scientists, Student volunteers, and all members of the AWC 2024 team for their active participation, dedication, and enthusiasm during the census exercise.

We are deeply grateful to all stakeholders of the wetland ecosystems in Bihar, including Wetland Mitras, Dolphin Mitras, Ganga Praharis, Garud Saviours, fishermen, boatmen, and all others who provided essential ground support and assistance, ensuring the success and safety of the AWC 2024 exercise.

Finally, we extend our appreciation to the local communities, citizens, and organizations who have shown immense interest, cooperation, and commitment to the conservation of waterbirds and their habitats in Bihar. Your involvement is crucial in preserving our natural heritage for future generations. We express our deepest appreciation and gratitude to everyone mentioned above and all others who contributed to this endeavour.



S. SUDHAKAR

Date:

Place: Patna



DR. P. SATHIYASELVAM

Deputy Director, BNHS &
AWC - National Coordinator

FOREWORD

It is my pleasure to present to you the annual report of the state level waterbird count for the year 2023. This report presents a comprehensive overview of the waterbird populations observed across the state, including their distribution, abundance, and trends over time.

The Asian Waterbird Census (AWC) is an annual event organized by the Wetlands International and Asian Wetland Bureau to monitor the population of wintering waterbirds in the Asian region. The census involves counting waterbirds at wetland sites across Asia to provide a standardized, regional assessment of the distribution, population size, and trends of waterbirds.

The AWC is important because waterbirds are important indicators of the health of wetland ecosystems, which are essential for maintaining biodiversity and providing various ecosystem services. The data collected during the census is used for conservation planning, habitat management, and policy development. Waterbirds play a vital role in maintaining the ecological balance of our aquatic ecosystems. As such, it is crucial that we understand their populations and the factors that can impact their health and wellbeing. This report serves as an important tool for policy makers, conservationists, and researchers in making informed decisions about the management and conservation of these important species.

The coverage area of the AWC in India includes over 1,200 wetlands across the country, including national parks, wildlife sanctuaries, and other protected areas. India is one of the major wintering and breeding areas for waterbirds in the Asian region, and the AWC provides valuable information on the status and trends of waterbirds in the country.

The data presented in this report is the result of the dedicated efforts of trained volunteers and experts who have worked tirelessly to conduct surveys and collect data. Their efforts are a testament to the importance of citizen science and the power of collective action to address pressing environmental issues.

I invite you to explore the findings presented in this report and to join us in our efforts to conserve and protect the waterbird.

Date:

Place: Mumbai

Dr P. Sathiyaselvam

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EXECUTIVE SUMMARY

Asian Waterbird Census (AWC) 2024, the Bihar State bird count was conducted by the Department of Environment, Forest and Climate Change (DEF&CC) in collaboration with BNHS. For the third consecutive year, the AWC was conducted in Bihar to mark a significant milestone in the conservation and management of waterbirds and wetland habitats across Bihar. Totally, 84 wetlands spanning 28 districts in Bihar were covered, 285 participants 19 teams were involved in the census operation, and invaluable data on bird diversity, distribution and conservation priorities were obtained.

The primary objective of the AWC 2024 was to assess the numbers, distribution, and trends of waterbird species in Bihar while evaluating the status of wetland habitats and identifying potential threats to these ecosystems. The census was conducted from December 2023 to April 2024 in three phases: pre-census, main-census and post-census. The phase-wised approach allowed for a thorough assessment of bird populations in Bihar during the 2023-2024 migratory season.

The pre-census was conducted at six wetlands in four districts of Bihar, where a total of 7,146 individuals of 100 species belonging to 40 families were reported. Of them, 2,829 were migratory, 2,436 were local migratory, and 1,881 were resident birds.

During the AWC 2024 (main census), total 80,246 individuals of 226 species belonging to 65 families were documented from 84 wetlands in 28 districts of Bihar. Of them, 71,436 were waterbirds, 1,152 were wetland-dependent birds, and 7,634 were land birds. Long-distance migratory species comprised 37.50% of the overall birds counted during the AWC which underlined the importance and role played by the wetlands in Bihar for migratory bird populations. During the main census, 19 Threatened and Near-Threatened species were reported which emphasized the conservation significance of these habitats.

During the AWC 2024, it was observed that Bhagalpur, Jamui, and Katihar districts supported the highest bird counts, while Muzaffarpur reported the lowest. The Ghatora Wetland in Bhagalpur District emerged as an ornithologically important spot where 10,110 individuals of birds were reported. The highest number of species was reported from Gokul Jalashya (70 species) in Buxar District.

Seven of the twenty species prioritized in India's National Action Plan were recorded during AWC 2024, including two duck species and five wader species. Also 63 species prioritized in the Central Asian Flyway Conservation Concern list were reported during the main census.

Post-census was conducted in 12 wetlands in five districts. A total of 24,554 individuals of 145 species belonging to 50 families were documented. The noteworthy findings from the post-census were the identification of hotspot areas for birds in the Ganga River- Ranighat Chausabyasi Bridge and VGDS Barai to Bateshwar Nath Sthan, which hosted the highest numbers of individuals. Moreover, the highest number of species were reported from Ganga River stretch, Ranighat Chausabyasi Bridge. During the pre- and post-census phases of AWC 2024, a total of 15 globally Threatened and Near Threatened species were identified. This included two globally threatened endangered, three vulnerable, and 10 Near-Threatened species.

A total of 237 bird species were recorded in all phases of the census. It is noteworthy to mention it here that 11 species reported during pre- and post-census were not reported during the main census. During the post-census breeding activity of the sandbar nesting birds were reported in April 2024. During the three phases of the census, 19 threatened and Near-Threatened species were reported. Overall, the AWC 2024 data provided comprehensive insight into the bird diversity, migration patterns, and conservation priorities in Bihar.

The AWC in Bihar during the last three years, 2022, 2023 & 2024, revealed a remarkable diversity of bird species. A total of 267 species belonging to 79 families were reported during the last three years AWC. Among these, 141 species were recorded in all three years of AWC, highlighting their stable presence in the region. Overall 273 species have been reported during the census activities in Bihar.

In addition to the bird population, habitat and threat assessments were also carried out. The vegetation types, and their status, and threats to the wetlands surveyed such as pollution and human activities like over-fishing and agricultural expansion were also recorded. This comprehensive approach to understanding ecosystem health is useful to guide framing the conservation strategies in this state.

Overall, the AWC 2024 in Bihar showcased the dedication of volunteers, researchers, and local communities to monitoring and conserving bird populations and their habitats. The phased approach of the AWC allowed for detailed assessments of bird diversity and the role played by the wetlands during different periods in the same migratory season, providing insights into habitat dynamics and bird behaviour and revealing the interesting variations in bird sightings. The data collected during the AWCs will contribute to the site-specific conservation efforts and conservation actions at the state and national levels.

ASIAN WATERBIRD CENSUS, 2024

BIHAR STATE BIRD COUNT

SUMMARY REPORT

❖ Total wetlands covered	:	84 wetlands
❖ Total district	:	28 districts
❖ Total number of birds reported	:	80,246 individuals
❖ Total number of species reported	:	220 species
❖ Total number of families reported	:	65 families

BIRD COUNT

❖ Highest count	:	Ghatora, Bhagalpur	:	10,110 individuals
❖ Second highest count	:	Gogabeel, Katihar	:	7,068 individuals
❖ Highest number of species recorded	:	Gokul Jalashaya, Buxar	:	70 species
❖ 2 nd highest number of species recorded	:	Barai to Kahalgaon, Bhagalpur	:	59 species

DISTRICT-WISE BIRD COUNT

❖ Highest number of birds recorded	:	Bhagalpur district	:	18,608 individuals
❖ 2 nd highest number of birds recorded from	:	Jamui district	:	13,082 individuals

CATEGORIES OF BIRDS

❖ Total number of Waterbirds	:	71,436 individuals
❖ Total number of Wetland-dependent birds	:	1,176 individuals
❖ Total number of Land birds	:	7,634 individuals
❖ Total species of Waterbirds	:	90 species
❖ Total species of Wetland-dependent birds	:	26 species
❖ Total species of Land birds	:	104 species
❖ Total families of Waterbirds	:	16 families
❖ Total families of Wetland-dependent birds	:	7 families
❖ Total families of Land birds	:	38 families

ASIAN WATERBIRD CENSUS, 2024 ANNUAL REPORT

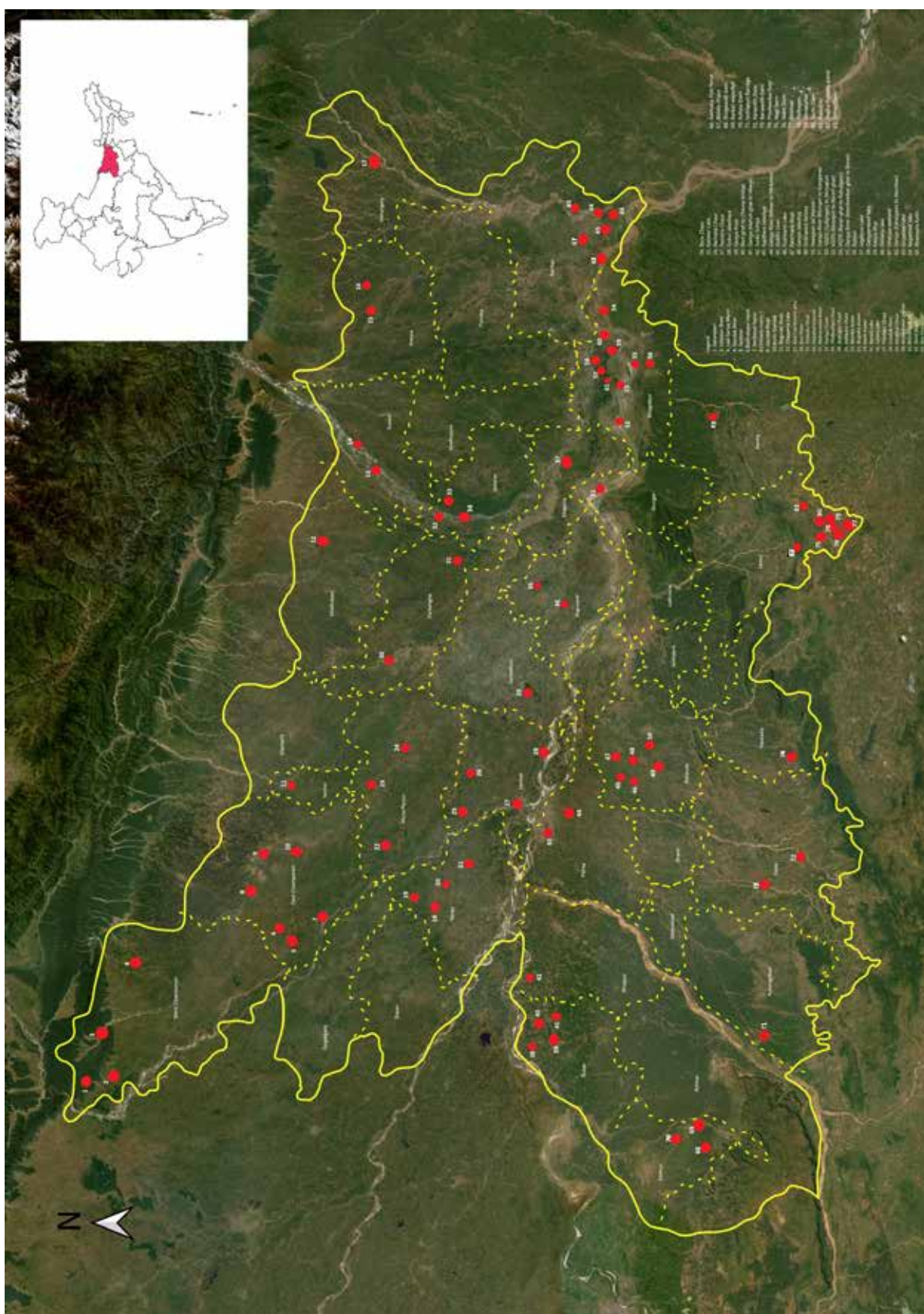
CHAPTER 1

INTRODUCTION

Birds serve as excellent indicators of environmental health and biodiversity due to their sensitivity to ecological changes, wide distribution, and role as ecological barometers. As highly mobile organisms occupying various habitats, birds are profoundly impacted by alterations in ecosystems caused by factors such as habitat loss, pollution, climate change, and human activities. Their responses to these changes, including shifts in population size, distribution patterns, and breeding behaviours, provide valuable insights into broader ecosystem dynamics. Moreover, birds occupy different trophic levels within food webs, making them sensitive indicators of ecosystem health and functioning. Additionally, birds are relatively easy to observe and monitor, allowing for systematic data collection and analysis over time. By studying bird populations and their interactions with the environment, scientists can assess the state of ecosystems, identify areas of concern, and develop targeted conservation strategies to mitigate environmental degradation and preserve biodiversity. With standardized monitoring protocols and extensive long-term datasets, birds offer a reliable means of tracking biodiversity trends and informing conservation policies. Moreover, bird monitoring fosters international collaboration and data sharing, facilitating a holistic approach to biodiversity conservation across borders. By focusing on bird monitoring in biodiversity conventions, policymakers can leverage this valuable information to better understand and address threats to biodiversity, prioritize conservation actions, ultimately safeguarding both avian species and the ecosystems they inhabit.

At a global level, bird monitoring initiatives have flourished, facilitated by advancements in technology, standardized methodologies, and international collaboration. Numerous programs and projects, such as the Global Big Day organized by eBird and the annual World Migratory Bird Day, engage citizen scientists and bird enthusiasts worldwide in recording bird sightings. These efforts contribute to extensive datasets on bird abundance, distribution, and phenology, allowing scientists to track population trends and assess the impacts of environmental change on avian biodiversity. Additionally, initiatives like the Global Biodiversity Information Facility (GBIF) provide a platform for sharing bird observation data on a global scale, facilitating data integration and analysis. Furthermore, partnerships between governments, non-governmental organizations, and research institutions have facilitated collaborative bird monitoring programs, such as the Global Avian Monitoring Network and the International Waterbird Census. Despite these advancements, challenges such as data gaps in certain regions and taxonomic groups persist, highlighting the need for continued investment in global bird monitoring efforts to inform evidence-based conservation policies and actions.

Birds hold a pivotal position in various international conventions and agreements due to their intrinsic role in ecosystems and susceptibility to environmental shifts. The Ramsar Convention, dedicated to wetland preservation, recognizes birds as vital indicators of wetland vitality, relying on these habitats for breeding, feeding, and refuge. CITES incorporates numerous avian species due to threats like habitat degradation and illegal trade, aiming to safeguard them from exploitation. Migratory birds, central to the Convention on Migratory Species (CMS), necessitate transnational collaboration for habitat preservation throughout their expansive routes. Under the Convention on Biological Diversity (CBD), birds symbolize biodiversity and ecosystem health, necessitating habitat conservation to achieve equitable resource



Map 1. Locations of all wetlands covered during AWC 2024

sharing. Furthermore, birds' contributions align with multiple Sustainable Development Goals (SDGs), including poverty alleviation and climate action, underlining their indispensable role in sustaining ecosystem services essential for human well-being. Considering their vulnerability to climate change, integrating bird conservation into climate strategies is imperative for bolstering ecosystem resilience and biodiversity preservation on a global scale.

The International Waterbird Census (IWC) and Asian Waterbird Census (AWC) are vital initiatives aimed at monitoring waterbird populations and their habitats across the globe and specifically in Asia, respectively. These annual censuses involve volunteers, scientists, and conservation organizations conducting standardized counts of waterbirds in wetlands, rivers, lakes, and coastal areas. The data collected through these censuses provide valuable insights into the distribution, abundance, and trends of waterbird populations, as well as the status of their habitats. The outcomes of these censuses serve multiple purposes, including informing conservation and management strategies, identifying key sites for protection, assessing the effectiveness of conservation actions, and raising awareness about the importance of wetland habitats for biodiversity conservation. Additionally, the data collected from the IWC and AWC contribute to international efforts such as the Ramsar Convention on Wetlands and the Convention on Migratory Species, aiding in the conservation of migratory waterbird species and their flyways. Overall, the IWC and AWC play a crucial role in advancing our understanding of waterbird ecology and supporting conservation efforts to safeguard these important avian populations and their habitats.

In 2022, in a pioneering initiative, the Department of Environment, Forest and Climate Change (DEF&CC), Government of Bihar, in collaboration with BNHS, initiated state-level bird monitoring through the AWC. Organized annually, this census involves volunteers, researchers, and local communities conducting standardized counts of waterbirds in wetlands, rivers, lakes, and other water bodies throughout Bihar. The primary objectives of the Bihar AWC are to assess the distribution, abundance, and trends of waterbird species, as well as to evaluate the status of wetland habitats in the region. The data collected during the census provide valuable insights into the ecological health of wetland ecosystems, the conservation status of waterbird species, and the potential impacts of human activities on these habitats. Furthermore, the Bihar AWC contributes to national and international efforts to conserve migratory waterbirds and their habitats, supporting initiatives such as the Ramsar Convention on Wetlands and the Convention on Migratory Species. Through community engagement, capacity building, and advocacy, the Bihar AWC aims to promote the conservation and sustainable management of wetlands for the benefit of both people and wildlife in the region.

The AWC in Bihar 2024, was conducted in January-February. This document reports bird recorded across 84 wetlands in Bihar (Map 1). Similar to the census in 2022 & 2023, habitat and threats to wetlands have also been recorded in the 2024 census.

CHAPTER 2

OBJECTIVES

Listed below are the objectives of the AWC Bihar, 2024:

1. Providing the basis for the estimates of the waterbird population in the state.
2. Monitoring the waterbird numbers and distribution by standardized counts of wetlands in the state.
3. Improving knowledge of little-known waterbird species and wetland sites.
4. Identifying and monitoring of sites that are important for waterbirds in general, and more specifically, identifying and monitoring sites that qualify as Wetlands of International Importance under the Ramsar Convention on Wetlands.
5. Providing information on the conservation status of waterbird species to the national database and international agreements.
6. Increasing awareness of the importance of waterbirds and their wetland habitats at local, national, and international levels.

Comparing waterbird abundance and habitat condition data from the 2024 census to that of the AWC 2022 & 2023 census.

CHAPTER 3

METHODOLOGY

a. Preparatory meetings

Preparatory meetings were held between November 2023 and January 2024 to organize the third State-level Bird Count and discuss strategies for conducting the AWC-2024 in Bihar, India. Led by Mr. Prabhat Kumar Gupta, IFS, Chief Wildlife Warden, Government of Bihar, and Mr. S. Sudhakar, IFS, Conservator of Forest, Gaya, six meetings were conducted with forest officials, bird experts, academicians, and volunteers to finalize teams (Chapter 25) and wetland sites based on potentiality, accessibility, and inventory of important wetlands.

In these preparatory meetings, following actions were supported and streamlined:

- Processes of selection of experts and volunteers for building the teams
- Training of the participants
- Finalizing the district-wise wetlands to be considered for wetland enumeration
- Explaining the technical process and procedures for bird counts
- Habitat evaluation procedures and protocols
- Discussing data formats
- Arranging for equipment and gadgets
- Administrative, logistics, and travel planning

b. Wetland sites

According to the National Wetland Atlas, Bihar has a total of 4,416 wetlands spanning an area of 3,85,627 ha. Based on the bird diversity, a total of 84 wetlands from 28 districts were finalised for conducting AWC 2024 (Map 1). A pre-census was conducted in six wetlands to ascertain their potential for conducting AWC and to pre-empt any problem that could arise at the time of the actual census.

c. Methods

Bird surveys were conducted over a period of 22 days, commencing from January 25 to February 15, 2024, across 84 wetlands with 19 teams. Surveys were executed using various methods, including boat surveys in reservoirs, large water bodies, and river systems, while small ponds and lakes were traversed on foot. Bird abundance and diversity were documented from randomly selected vantage points during the survey, employing binoculars and spotting scope. Additionally, the geographical coordinates of each survey site were recorded and photographs were also captured for further verification.

d. Data compilation

The electronically received data sheets, including bird count and habitat forms, were carefully examined and entered into Excel and the BRMS app. Entries deemed uncertain or questionable from each site were identified, and the survey coordinators were contacted to seek clarifications. Following this, data analysis and clustering were carried out as part of the subsequent steps in the process.

e. Habitat assessment

In addition to datasheet of bird count, habitat forms were also provided to the volunteers in which they could record the following parameters for each wetland site.

- GPS Coordinates of the wetland
- Wetland type
- Vegetation type
- Signs of pollution
- Water depth
- Precipitation
- Months in which the site experiences maximum flooding
- Protection status

These data were also compiled into an Excel sheet and further analysis were done. A map was also prepared with the coordinates recorded from the respective sites by the team.

CHAPTER 4 PRE-CENSUS

a. Wetlands covered

During AWC 2024, pre-census was conducted in six wetlands from four districts of Bihar, including three reservoirs namely, Nagi Dam, Garhi Dam, and Indrapuri Barrage, and three freshwater lakes. Among the lakes, the Kanwar Lake is a Ramsar Site, and Gogabeel Lake is a Community reservoir, (Table 1).

Table 1. Details of the wetlands covered during the pre-census, 2024

Sl. No.	District	Sl. No.	Wetland	Protection Status	Wetland Type
1	Aurangabad	1	Indrapuri Barrage	Non-Protected Area	Reservoir or Barrages
2	Begusarai	2	Kanwar Lake	Protected Area	Lake
3	Jamui	3	Nagi dam	Protected Area	Reservoir or Barrages
		4	Garhi dam	Non-Protected Area	Reservoir or Barrages
		5	Devanahar	Non-Protected Area	Lake
4	Katihar	6	Gogabeel Lake	Protected Area	Lake

b. Number of birds and species diversity

During the pre-census of AWC, 2024, a total of 7,146 individuals of 100 species belonging to 40 families were reported from six wetlands. Of them, 2,829 individuals of 32 species were migratory, 2,436 individuals of 21 species were local migratory, and 1,881 individuals of 47 species were resident (Figure 1 a & b).

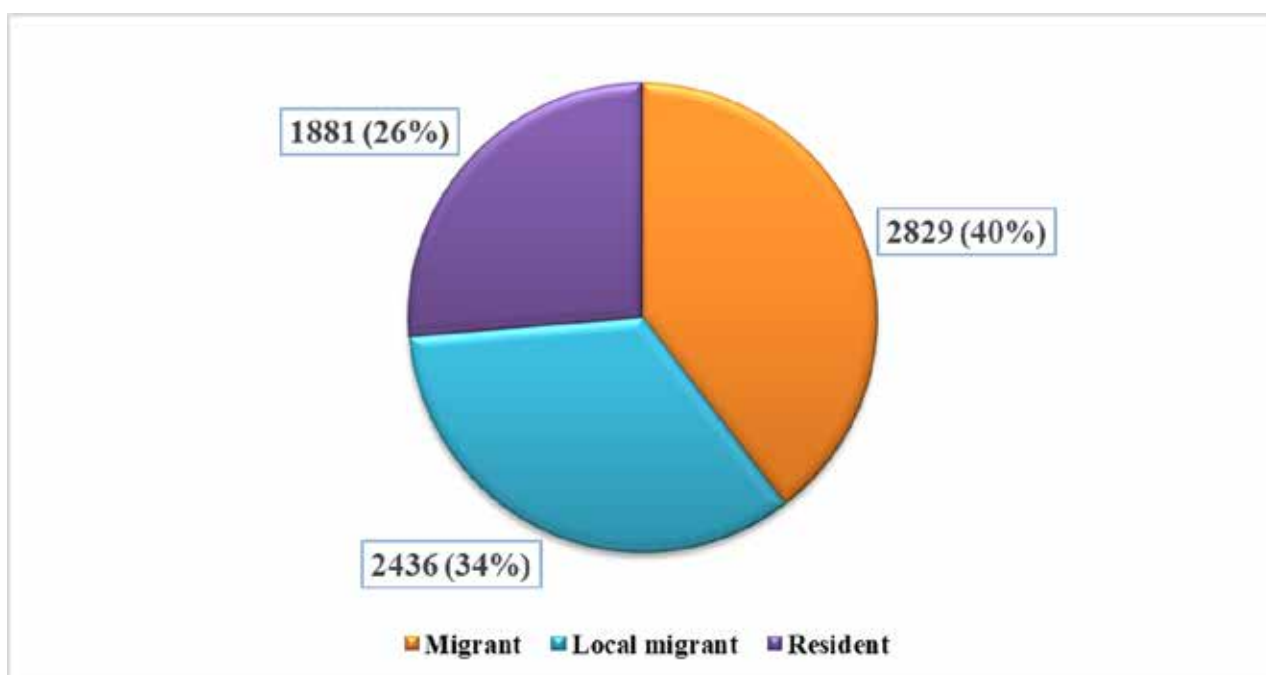


Figure 1a. Number of long-distance, local migratory and resident birds reported during pre-census of AWC 2024

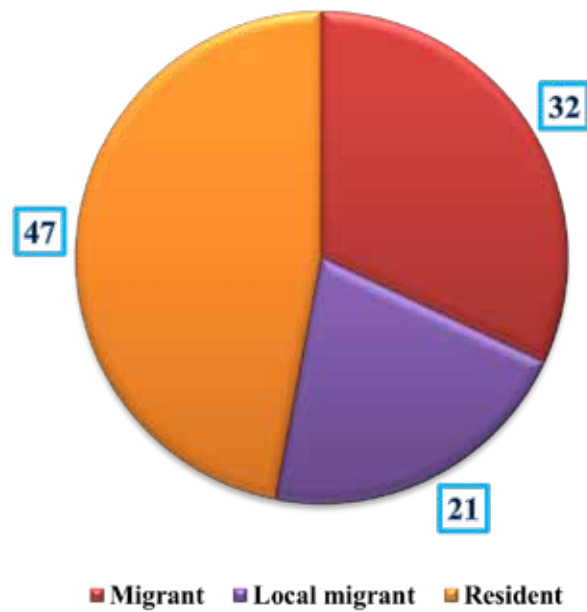


Figure 1b. Number of long-distance, local migratory and resident species reported during pre-census of AWC 2024

The highest number of individuals were reported from Gogabeel Lake (N=3,442 individuals) followed by Nagi Dam (N=1,465 individuals) and Garhi Dam (N=1,262 individuals). The maximum number of species were reported, from Nagi Dam (N=53 species) followed by Garhi Dam (N=45 species) (Figure 1c & d; Table 2).

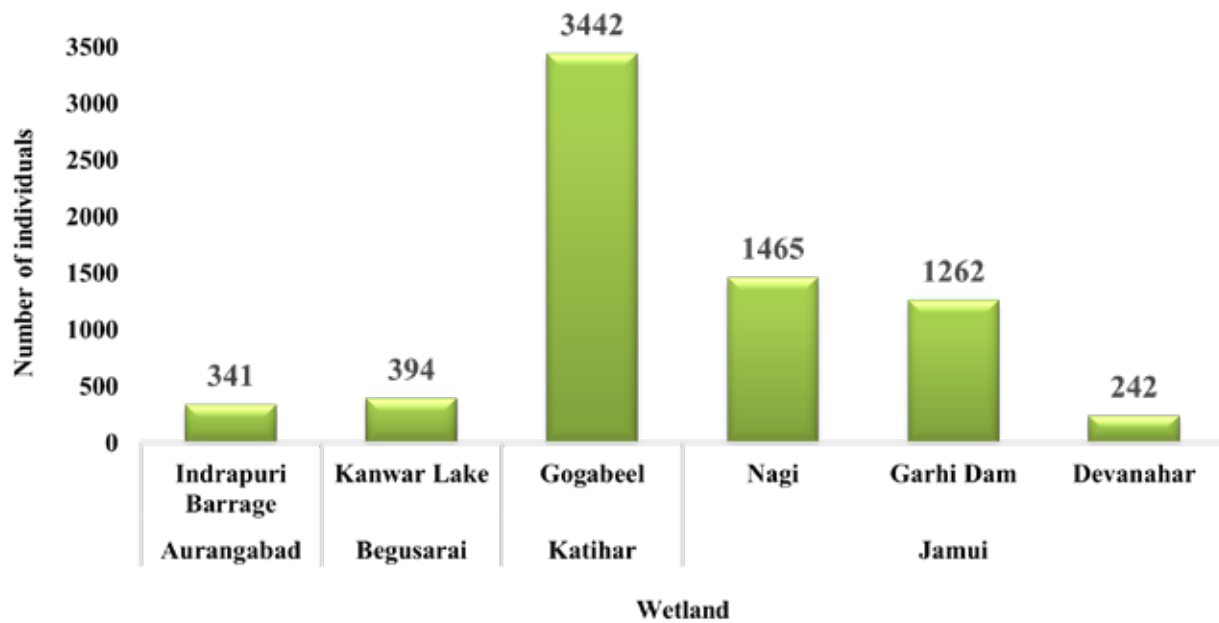


Figure 1c. Number of birds reported during pre-census of AWC 2024

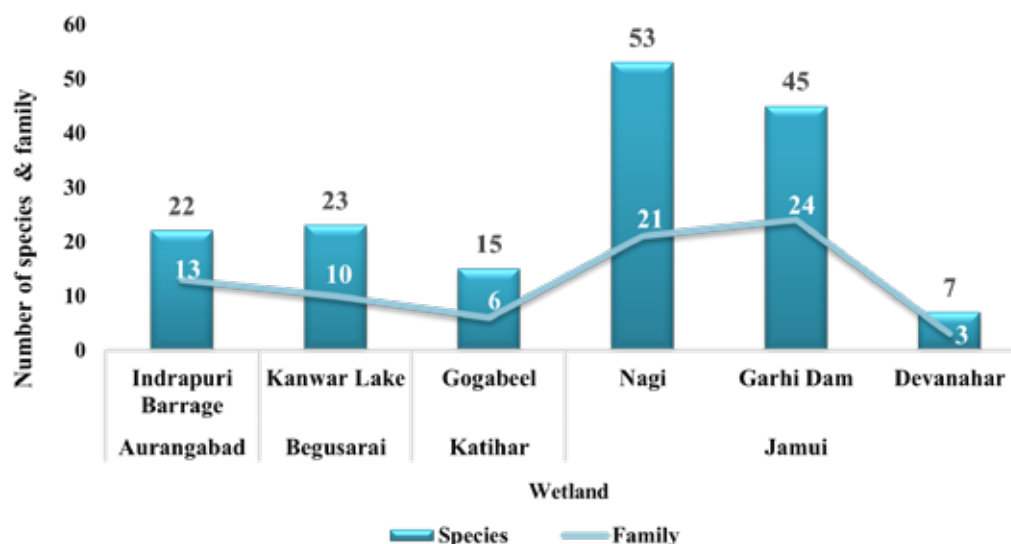


Figure 1d. Number of species and families reported during pre-census of AWC 2024

Table 2-. Number of birds, species, and families reported during the pre-census of AWC 2024

Sl. No.	District	Sl. No.	Wetland	Number of birds	Number of species	Number of Family
1	Aurangabad	1	Indrapuri Barrage	341	22	13
2	Begusarai	2	Kanwar Lake	394	23	10
3	Katihar	3	Gogabeel	3,442	15	6
4	Jamui	4	Nagi Dam	1,465	53	21
		5	Garhi Dam	1,262	45	24
		6	Devanahar	242	7	3
			Total	7,146	100	40

Furthermore, of 100 species reported in pre-census, 6,662 individuals of 50 species were waterbirds, 182 individuals of 14 species were wetland-dependent birds and 570 individuals of 38 species were land birds (Figure 1e & Table 3).

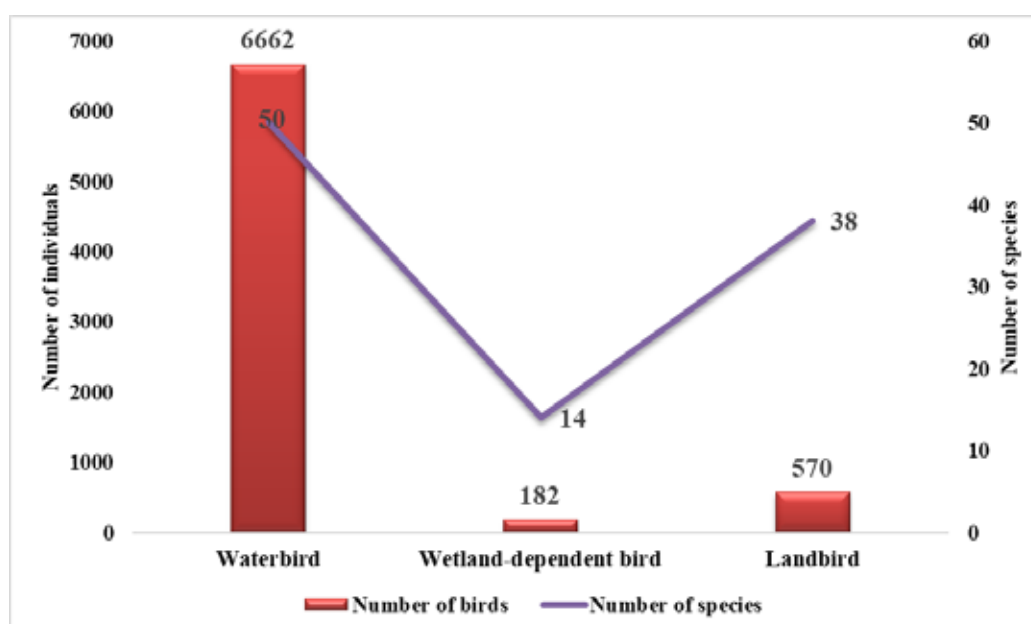


Figure 1e: Number of categories of birds reported during pre-census of AWC, 2024

Table 3: Species-wise bird counts reported in post-census of AWC, 2024

English name	Scientific name	Family	IUCN status	Migratory Status	Category	Number of birds
Lesser Whistling-duck	<i>Dendrocygna javanica</i>	Anatidae	LC	R	WB	608
Bar-headed Goose	<i>Anser indicus</i>	Anatidae	LC	M	WB	268
Greylag Goose	<i>Anser anser</i>	Anatidae	LC	M	WB	46
Ruddy Shelduck	<i>Tadorna ferruginea</i>	Anatidae	LC	M	WB	15
Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	Anatidae	LC	LM/R	WB	48
Red-crested Pochard	<i>Netta rufina</i>	Anatidae	LC	M	WB	1626
Common Pochard	<i>Aythya ferina</i>	Anatidae	VU	M	WB	288
Ferruginous Duck	<i>Aythya nyroca</i>	Anatidae	NT	M	WB	51
Tufted Duck	<i>Aythya fuligula</i>	Anatidae	LC	M	WB	32
Garganey	<i>Spatula querquedula</i>	Anatidae	LC	LM/R	WB	140
Northern Shoveler	<i>Spatula clypeata</i>	Anatidae	LC	M	WB	14
Gadwall	<i>Mareca strepera</i>	Anatidae	LC	LM/R	WB	953
Eurasian Wigeon	<i>Mareca penelope</i>	Anatidae	LC	M	WB	57
Mallard	<i>Anas platyrhynchos</i>	Anatidae	LC	M	WB	6
Northern Pintail	<i>Anas acuta</i>	Anatidae	LC	M	WB	84
Little Grebe	<i>Tachybaptus ruficollis</i>	Podicipedidae	LC	LM/R	WB	24
Great Crested Grebe	<i>Podiceps cristatus</i>	Podicipedidae	LC	LM/R	WB	11
Rock Dove	<i>Columba livia</i>	Columbidae	LC	R	LB	54
Eastern Spotted Dove	<i>Spilopelia chinensis</i>	Columbidae	LC	R	LB	3
Laughing Dove	<i>Spilopelia senegalensis</i>	Columbidae	LC	R	LB	7
Chestnut-bellied Sandgrouse	<i>Pterocles exustus</i>	Pteroclididae	LC	R	LB	5
Asian Palm-swift	<i>Cypsiurus balasensis</i>	Apodidae	LC	R	LB	250
Purple Swamphen	<i>Porphyrio porphyrio</i>	Rallidae	LC	R	WB	9
Common Moorhen	<i>Gallinula chloropus</i>	Rallidae	LC	R	WB	1
Common Coot	<i>Fulica atra</i>	Rallidae	LC	R	WB	1025
Grey Francolin	<i>Ortygornis pondicerianus</i>	Phasianidae	LC	R	LB	4

Table 3: Species-wise bird counts reported in post-census of AWC, 2024 (contd.)

English name	Scientific name	Family	IUCN status	Migratory Status	Category	Number of birds
Asian Openbill	<i>Anastomus oscitans</i>	Ciconiidae	LC	LM/R	WB	176
Black-headed Ibis	<i>Threskiornis melanocephalus</i>	Threskiornithidae	NT	LM/R	WB	21
Red-naped Ibis	<i>Pseudibis papillosa</i>	Threskiornithidae	LC	LM/R	WB	48
Cinnamon Bittern	<i>Ixobrychus cinnamomeus</i>	Ardeidae	LC	R	WB	1
Indian Pond-heron	<i>Ardeola grayii</i>	Ardeidae	LC	R	WB	5
Cattle Egret	<i>Bubulcus ibis</i>	Ardeidae	LC	LM/R	WB	60
Grey Heron	<i>Ardea cinerea</i>	Ardeidae	LC	R	WB	1
Purple Heron	<i>Ardea purpurea</i>	Ardeidae	LC	R	WB	7
Great White Egret	<i>Ardea alba</i>	Ardeidae	LC	LM/R	WB	52
Intermediate Egret	<i>Ardea intermedia</i>	Ardeidae	LC	LM/R	WB	29
Little Egret	<i>Egretta garzetta</i>	Ardeidae	LC	LM/R	WB	37
Little Cormorant	<i>Microcarbo niger</i>	Phalacrocoracidae	LC	LM/R	WB	665
Great Cormorant	<i>Phalacrocorax carbo</i>	Phalacrocoracidae	LC	LM/R	WB	10
Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	Phalacrocoracidae	LC	LM/R	WB	8
Oriental Darter	<i>Anhinga melanogaster</i>	Anhingidae	NT	LM/R	WB	18
Black-winged Stilt	<i>Himantopus himantopus</i>	Recurvirostridae	LC	LM/R	WB	7
Pacific Golden Plover	<i>Pluvialis fulva</i>	Charadriidae	LC	M	WB	27
Little Ringed Plover	<i>Charadrius dubius</i>	Charadriidae	LC	LM/R	WB	8
Kentish Plover	<i>Charadrius alexandrinus</i>	Charadriidae	LC	M	WB	16
Northern Lapwing	<i>Vanellus vanellus</i>	Charadriidae	NT	M	WB	42
Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	Charadriidae	LC	LM/R	WB	4
Red-wattled Lapwing	<i>Vanellus indicus</i>	Charadriidae	LC	LM/R	WB	12
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	Jacaniidae	LC	LM/R	WB	49
Eurasian Curlew	<i>Numenius arquata</i>	Scolopacidae	NT	M	WB	2
Temminck's Stint	<i>Calidris temminckii</i>	Scolopacidae	LC	M	WB	8
Common Sandpiper	<i>Actitis hypoleucos</i>	Scolopacidae	LC	M	WB	2
Green Sandpiper	<i>Tringa ochropus</i>	Scolopacidae	LC	M	WB	1

Table 3: Species-wise bird counts reported in post-census of AWC, 2024 (contd.)

English name	Scientific name	Family	IUCN status	Migratory Status	Category	Number of birds
Common Greenshank	<i>Tringa nebularia</i>	Scolopacidae	LC	M	WB	11
Wood Sandpiper	<i>Tringa glareola</i>	Scolopacidae	LC	M	WB	6
Black-headed Gull	<i>Larus ridibundus</i>	Laridae	LC	M	WB	23
Spotted Owlet	<i>Athene brama</i>	Strigidae	LC	R	LB	5
Osprey	<i>Pandion haliaetus</i>	Pandionidae	LC	M	WD	4
Oriental Honey-buzzard	<i>Pernis ptilorhynchus</i>	Accipitridae	LC	M	WD	1
Booted Eagle	<i>Hieraaetus pennatus</i>	Accipitridae	LC	R	WD	2
Western Marsh-harrier	<i>Circus aeruginosus</i>	Accipitridae	LC	R	WD	1
Shikra	<i>Accipiter badius</i>	Accipitridae	LC	R	WD	1
Black Kite	<i>Milvus migrans</i>	Accipitridae	LC	R	LB	5
Indian Grey Hornbill	<i>Ocyeros birostris</i>	Bucerotidae	LC	R	LB	2
Asian Green Bee-eater	<i>Merops orientalis</i>	Meropidae	LC	R	LB	9
Indian Roller	<i>Coracias benghalensis</i>	Coraciidae	LC	R	LB	3
Common Kingfisher	<i>Alcedo atthis</i>	Alcedinidae	LC	R	WD	1
Pied Kingfisher	<i>Ceryle rudis</i>	Alcedinidae	LC	R	WD	2
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	Alcedinidae	LC	R	WD	29
Coppersmith Barbet	<i>Psilopogon haemacephalus</i>	Megalaimidae	LC	R	LB	1
Black-rumped Flameback	<i>Dinopium benghalense</i>	Picidae	LC	R	LB	1
Common Kestrel	<i>Falco tinnunculus</i>	Falconidae	LC	R	WD	4
Rose-ringed Parakeet	<i>Alexandrinus krameri</i>	Psittacidae	LC	R	LB	2
Black-hooded Oriole	<i>Oriolus xanthornus</i>	Oriolidae	LC	R	LB	1
Black Drongo	<i>Dicrurus macrocercus</i>	Dicruridae	LC	R	LB	7
Brown Shrike	<i>Lanius cristatus</i>	Laniidae	LC	R	LB	1
Bay-backed Shrike	<i>Lanius vittatus</i>	Laniidae	LC	R	LB	1
Rufous Treepie	<i>Dendrocitta vagabunda</i>	Corvidae	LC	R	LB	1
House Crow	<i>Corvus splendens</i>	Corvidae	LC	R	LB	6
Large-billed Crow	<i>Corvus macrorhynchos</i>	Corvidae	LC	R	LB	1

Table 3: Species-wise bird counts reported in post-census of AWC, 2024 (contd.)

English name	Scientific name	Family	IUCN status	Migratory Status	Category	Number of birds
Ashy-crowned Sparrow-lark	<i>Eremopterix griseus</i>	Alaudidae	LC	R	LB	8
Rufous-tailed Lark	<i>Ammomanes phoenicura</i>	Alaudidae	LC	R	LB	2
Oriental Skylark	<i>Alauda gulgula</i>	Alaudidae	LC	R	LB	1
Common Tailorbird	<i>Orthotomus sutorius</i>	Cisticolidae	LC	R	LB	3
Barn Swallow	<i>Hirundo rustica</i>	Hirundinidae	LC	M	LB	75
Red-vented Bulbul	<i>Pycnonotus cafer</i>	Pycnonotidae	LC	R	LB	1
Jungle Babbler	<i>Argya striata</i>	Leiotrichidae	LC	R	LB	8
Rosy Starling	<i>Pastor roseus</i>	Sturnidae	LC	M	LB	36
Common Myna	<i>Acridotheres tristis</i>	Sturnidae	LC	R	LB	5
Indian Robin	<i>Copsychus fuscatus</i>	Muscicapidae	LC	R	LB	4
Black Redstart	<i>Phoenicurus ochruros</i>	Muscicapidae	LC	M	LB	4
Brown Rockchat	<i>Oenanthe fusca</i>	Muscicapidae	LC	M	LB	2
Red Avadavat	<i>Amandava amandava</i>	Estrildidae	LC	M	LB	2
Indian Silverbill	<i>Euodice malabarica</i>	Estrildidae	LC	R	LB	6
Scaly-breasted Munia	<i>Lonchura punctulata</i>	Estrildidae	LC	R	LB	2
House Sparrow	<i>Passer domesticus</i>	Passeridae	LC	R	LB	20
Paddyfield Pipit	<i>Anthus rufulus</i>	Motacillidae	LC	R	LB	22
Grey Wagtail	<i>Motacilla cinerea</i>	Motacillidae	LC	M	WD	48
Citrine Wagtail	<i>Motacilla citreola</i>	Motacillidae	LC	M	WD	81
Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	Motacillidae	LC	M	WD	1
White-browed Wagtail	<i>Motacilla maderaspatensis</i>	Motacillidae	LC	R	WD	4
White Wagtail	<i>Motacilla alba</i>	Motacillidae	LC	R	WD	3
	Total					7,414

CHAPTER 5

ASIAN WATERBIRD CENSUS

a. **Wetlands covered**

The total area of the Bihar State is 94,163 sq. km. Of this 3,856.27 sq. km area is covered with wetlands, including a Ramsar Site. During AWC 2024, 84 wetlands from 28 districts of Bihar were surveyed, including five river systems (Ganga, Kosi, Gandak, Burhi Gandak, and Bagmati), 13 reservoirs, four fish ponds, 11 freshwater marshes, and 28 freshwater lakes. Of these wetlands, 10 are freshwater chaur. 12 out of the 84 wetlands covered for the AWC 2024 are Protected Areas (PAs) and the remaining are non-protected areas. Most of the wetlands surveyed are perennial (classified based on the water availability through the year), except the Pachaila Chaur in Begusarai District, Jhapaha Mann in Muzaffarpur District, and Khiroi Nadhi Tat in Darbhanga District (Table 4).

b. **Team building**

Totally, six preparatory meetings were conducted to plan for the better execution of the AWC 2024. The preparatory works were started from October 2023 (three months before the census). During the preparatory meetings, a total of 19 teams of 285 members were finalized for carrying out the count in 84 wetlands of 28 districts in Bihar. The team was led/supervised by 20 coordinators. Along with the volunteers, 49 forest staff were also involved in the census operation. Each team was constituted with the following combination:

- ❖ Coordinator,
- ❖ Spotter,
- ❖ Documenter,
- ❖ Photographer,
- ❖ Birder and
- ❖ Supporter

The coordinators were the team leaders, they were requested to take as coordinators based on their experience in bird identification. The bird guides of Bhagalpur and Jamui districts were also involved with the team in the bird count. *Dolphin Mitras* (Dolphin friends) and *Garur Saviours* (Adjutant saviours) were also involved in the bird count (Annexure 26)

Table 4. Details of the wetlands covered during the Asian Waterbird Census, 2024

District	Sl. No.	Wetland	Protection Status	Wetland Type
Araria	1	Trishulia ghat	Non-Protected Area	River
Araria	2	Dopahariya pond	Non-Protected Area	Fish Pond
Aurangabad	3	Indrapuri Barrage	Non-Protected Area	Reservoir or Barrages
Banka	4	Ohrni Dam	Non-Protected Area	Reservoir or Barrages
Begusarai	5	Kawar lake	Protected Area	Freshwater Marshes
Begusarai	6	Pachaila	Non-Protected Area	Freshwater Marshes
Bhagalpur	7	Jagatpur lake	Non-Protected Area	Lake
Bhagalpur	8	Gangaprasad Jheel	Non-Protected Area	Lake
Bhagalpur	9	Kataiya dhar	Non-Protected Area	River
Bhagalpur	10	Dimaha wetland	Non-Protected Area	Lake
Bhagalpur	11	Ganga river - Manik sarkar ghat - to Barari Ghat	Protected Area	River
Bhagalpur	12	VGDS- Barari ghat (Bhagalpur to Bateshwarsthan)	Protected Area	River
Bhagalpur	13	VGDS - Sultanganj to Mirzapur	Protected Area	River
Bhagalpur	14	VGDS - Mirzapur to Barari ghat Bhagalpur	Protected Area	River
Bhagalpur	15	"Ghatora wetland complex"	Non-Protected Area	Freshwater Marshes
Bhagalpur	16	Bhagalpur bypass	Non-Protected Area	Freshwater Marshes
Bhojpur	17	Sunki Suhiya - Shahpur	Non-Protected Area	Freshwater Marshes
Bhojpur	18	Ganges (Mahuli Ghat to Maner)	Non-Protected Area	River
Buxar	19	Gokul Jalashay	Non-Protected Area	Freshwater Marshes
Buxar	20	Vayasi Ghat to Bihari Ghat	Non-Protected Area	River
Buxar	21	Ganga Ranighat Chausabyasi Bridge	Non-Protected Area	River
Darbhangha	22	Kusheshwar Asthan	Protected Area	Freshwater Marshes
Darbhangha	23	Khiroi nadhi tat	Non-Protected Area	River
East Champaran	24	Sarotar Wetland	Non-Protected Area	Lake
East Champaran	25	Basmanpur mann	Non-Protected Area	Lake
East Champaran	26	Sonbarsa mann	Non-Protected Area	Lake
East Champaran	27	Chilraon Mann	Non-Protected Area	Lake

Table 4. Details of the wetlands covered during the Asian Waterbird Census, 2024 (contd.)

District	Sl. No.	Wetland	Protection Status	Wetland Type
East Champaran	28	Gandak river of East Champaran	Non-Protected Area	River
East Champaran	29	Burhi Gandak	Non-Protected Area	River
Gaya	30	Barandih dam	Non-Protected Area	River
Gaya	31	Barwadih dam	Non-Protected Area	River
Jamui	32	Nagi dam	Protected Area	Reservoir or Barrages
Jamui	33	Nakti dam	Protected Area	Reservoir or Barrages
Jamui	34	Belatar	Non-Protected Area	Reservoir or Barrages
Jamui	35	Pailbajan	Non-Protected Area	Lake
Jamui	36	Devanahar	Non-Protected Area	Reservoir or Barrages
Jamui	37	Garhi dam	Non-Protected Area	Reservoir or Barrages
Jamui	38	Jhajha railway pond	Non-Protected Area	Lake
Jamui	39	Dhamma Aahar	Non-Protected Area	Lake
Jamui	40	Raja ahar	Non-Protected Area	Reservoir or Barrages
Kaimur	41	Karanchak/Durgawati Dam	Non-Protected Area	Reservoir or Barrages
Kaimur	42	Karkat waterfall	Non-Protected Area	River
Kaimur	43	Kohira Dam	Non-Protected Area	Reservoir or Barrages
Katihar	44	Goga beel	Protected Area	Lake
Katihar	45	Bhanwra Kothi	Non-Protected Area	Lake
Katihar	46	Bagar beel	Non-Protected Area	Lake
Katihar	47	Kathotia fish pond	Non-Protected Area	Fish Pond
Katihar	48	Baldiya chaur	Non-Protected Area	Lake
Katihar	49	Kahalgoan to Manihari	Non-Protected Area	River
Khagaria	50	Pasraha Chaur	Non-Protected Area	Lake
Kishanganj	51	Mahananda river	Non-Protected Area	River
Madhubani	52	Chapaniya Lake	Non-Protected Area	Lake
Munger	53	Ganga river - Kashtarni ghat to Bariyarpura	Non-Protected Area	River
Muzaffarpur	54	Manika mann	Non-Protected Area	Lake
Muzaffarpur	55	Jhapaha mann	Non-Protected Area	Lake
Muzaffarpur	56	Kanti mann	Non-Protected Area	Lake

Table 4. Details of the wetlands covered during the Asian Waterbird Census, 2024 (contd.)

District	Sl. No.	Wetland	Protection Status	Wetland Type
Nalanda	57	Gidhi Lake	Non-Protected Area	Fish Pond
Nalanda	58	Pushkarni lake	Non-Protected Area	Fish Pond
Nalanda	59	Panchane River (behind Sanik sch.)	Non-Protected Area	Freshwater Marshes
Nalanda	60	Ganga Jalashay Rajgir	Non-Protected Area	Reservoir or Barrages
Nalanda	61	Pawapuri	Non-Protected Area	Reservoir or Barrages
Nalanda	62	Ordance Factory Pond	Non-Protected Area	Reservoir or Barrages
Nawada	63	Hardiya Dam (Phulwariya)	Non-Protected Area	Lake
Patna	64	Rajdhani Jalashay	Non-Protected Area	Lake
Patna	65	Ganga river - Maner to Mokama	Non-Protected Area	River
Saharsa	66	Simri jheel	Non-Protected Area	Freshwater Marshes
Saharsa	67	Arsi chaur	Non-Protected Area	Lake
Saharsa	68	Bora Chaur	Non-Protected Area	Lake
Supaul	69	Kosi catchment of Supaul & Saharsa	Non-Protected Area	River
Supaul	70	Kosi river (Birpur barrage to Kosi Mahasetu)	Non-Protected Area	River
Samastipur	71	Deokal Chaur	Non-Protected Area	Freshwater Marshes
Saran	72	Hariya Chaur Akilpur	Non-Protected Area	River
Saran	73	Bahiyara chaur	Non-Protected Area	Lake
Saran	74	Phulwariya chaur	Non-Protected Area	Lake
Saran	75	Atanagar chaur	Non-Protected Area	Lake
Sheohar	76	Bagmati river	Non-Protected Area	River
Vaishali	77	Baraila lake	Protected Area	Lake
Vaishali	78	Salaha lake	Non-Protected Area	Lake
Vaishali	79	Puraniya chaur	Non-Protected Area	River
Vaishali	80	Gandak river	Non-Protected Area	River
West Champaran	81	Darwabari wetland	Non-Protected Area	Freshwater Marshes
West Champaran	82	Udaipur Jheel/Wildlife Sanctuary	Protected Area	River
West Champaran	83	Lal Saraya mann	Non-Protected Area	River
West Champaran	84	Gandak river (Valmikinagar to near Madanpur)	Protected Area	River

c. **Human resources involved and effort invested**

A total of 19 teams were involved in the count. The number of members in the team varied depending on the sites and the availability. The smallest team was with 2 members that covered Bahiyara Chaur Lake in Saran District and the largest team with 12 members which covered the Nagi Dam in Jamui District. In total, 285 individuals contributed to the counts. Considering each volunteer effort per wetland, a total of 1,553 hours were spent across 84 wetlands for the census. Detailed information regarding the number of volunteers and hours spent per wetland site are given in Table 5.

Table 5: Details of team size and time to cover the area during AWC 2024

Sl. No	District	Wetland	Team size	Duration (minutes)	coordinator
1	Araria	Dopahariya Pond	8	173	Mr. Gyanchandra Gyani
2	Araria	Trishullia ghat	8	96	Mr. Gyanchandra Gyani
3	Aurangabad	Indrapuri barrage	6	350	Dr Ram Pratap Singh
4	Banka	Ohrni Dam	6	240	Dr D. N. Choudhary
5	Begusarai	Kanwar Lake	5	75	Dr P. Sathiyaselvam
6	Begusarai	Pachaila Chaur	4	96	Dr P. Sathiyaselvam
7	Bhagalpur	Gangaprasad lake	6	140	Dr D. N. Choudhary
8	Bhagalpur	Jagatpur lake	6	120	Dr D. N. Choudhary
9	Bhagalpur	Kataiya dhar	4	180	Mr. Gyanchandra Gyani
10	Bhagalpur	Dimaha wetland	6	120	Dr D. N. Choudhary
11	Bhagalpur	Ganga river - Maniksarkar ghat to Barari ghat	4	260	Mr. Vatan Kumar
12	Bhagalpur	VGDS- Sultanganj to Mirzapur	5	240	Mr. Gyanchandra Gyani
13	Bhagalpur	VGDS- Mirzapur to Barari ghat	5	135	Mr. Gyanchandra Gyani
14	Bhagalpur	VGDS- Barari ghat to Kahalgaon	5	130	Mr. Rahul Rohitashwa
15	Bhagalpur	Ghatora wetland	7	204	Mr. Deepak Kumar
16	Bhagalpur	Bhagalpur bypass	4	210	Dr Tapan Kumar Pan
17	Bhojpur	Sunki Suhiya - Shahpur	9	290	Mr. Arvind Mishra
18	Bhojpur	Ganga (Mahuli ghat to Maner)	8	310	Mr. Deepak Kumar
19	Buxar	Ganga river (chausa-ahirauli)	9	480	Mr. Arvind Mishra
20	Buxar	Gokul Jalashay	9	450	Mr. Arvind Mishra
21	Buxar	Vayasi to Bihari Ghat	3	234	Dr Ram Pratap Singh
22	Darbhanga	Kusheswar Asthan	9	235	Mr. Rahul Kumar
23	Darbhanga	Khiroi nadhi tat	7	30	Mr. Rahul Kumar
24	East Champaran	Chilraon Lake	2	308	Dr Niraj Kumar & Dr Kushagra Rajendra
25	East Champaran	Sarrotar lake	3	297	Dr Niraj Kumar & Dr Kushagra Rajendra
26	East Champaran	Basmanpur lake	3	290	Dr Niraj Kumar & Dr Kushagra Rajendra
27	East Champaran	Gandak river	6	240	Dr Niraj Kumar & Dr Kushagra Rajendra
28	East Champaran	Sonbarsa lake	3	338	Dr Niraj Kumar & Dr Kushagra Rajendra
29	East Champaran	Burhi gandak	3	290	Dr Niraj Kumar & Dr Kushagra Rajendra
30	Gaya	Barandih dam	10	75	Dr Ram Pratap Singh
31	Gaya	Barwadih dam	10	60	Dr Ram Pratap Singh

Table 5: Details of team size and time to cover the area during AWC 2024 (contd.)

Sl. No	District	Wetland	Team size	Duration (minutes)	coordinator
32	Jamui	Nagi dam	12	150	Mr. Arvind Mishra
33	Jamui	Nakti dam	9	120	Mr. Arvind Mishra
34	Jamui	Belatar	6	36	Mr. Arvind Mishra
35	Jamui	Pailbajan	4	50	Mr. Arvind Mishra
36	Jamui	Devanahar	4	50	Mr. Arvind Mishra
37	Jamui	Garhi dam	6	300	Mr. Arvind Mishra
38	Jamui	Jhajha railway pond	4	35	Mr. Arvind Mishra
39	Jamui	Raja ahar	4	90	Mr. Arvind Mishra
40	Jamui	Dhamna aahar	4	60	Mr. Arvind Mishra
41	Kaimur	Durgawati dam	6	150	Mr. Rahul Kumar
42	Kaimur	Karkat waterfall	4	190	Mr. Rahul Kumar
43	Kaimur	Kohira dam	4	40	Mr. Rahul Kumar
44	Katihar	Bagarbeel	3	80	Mr. Arvind Mishra
45	Katihar	Baldiya Chaur	3	75	Mr. Arvind Mishra
46	Katihar	Gogabeel lake	9	170	Mr. Arvind Mishra
47	Katihar	Kathotia fish pond	3	25	Mr. Arvind Mishra
48	Katihar	Bhanwra kothi	4	130	Mr. Arvind Mishra
49	Katihar	Ganga river (Bateshwarsthan to Manihari ghat)	5	300	Mr. Deepak Kumar
50	Khagaria	Pasraha Chaur	6	313	Mr. Gyanchandra Gyani
51	Kishanganj	Mahananda river	6	240	Mr. Gyanchandra Gyani
52	Madhubani	Chapaniya lake	7	113	Dr P. Sathiyaselvam
53	Munger	Ganga river - kashtarni ghat to bariyarpur	6	225	Dr P. Sathiyaselvam
54	Muzaffarpur	Manika lake	7	120	Mr. Bharat Chintapalli
55	Muzaffarpur	Jhapaha mann	7	30	Mr. Bharat Chintapalli
56	Muzaffarpur	Kanti mann	8	137	Mr. Bharat Chintapalli
57	Nalanda	Pawapuri lake	11	90	Mr. Rahul Kumar
58	Nalanda	Pushkarni lake	11	60	Mr. Rahul Kumar
59	Nalanda	Giddhi lake	11	90	Mr. Rahul Kumar
60	Nalanda	Gangaji Ragriha Jalashay	12	15	Mr. Rahul Kumar
61	Nalanda	Panchane river	11	150	Mr. Rahul Kumar
62	Nalanda	Ordinance factory	13	30	Mr. Rahul Kumar
63	Nawada	Hardiya dam (Phulwaria Reservoir)	12	325	Dr Ram Pratap Singh
64	Patna	Rajdhani Jalashay	7	175	Col. Amit Sinha
65	Patna	Ganga river (Maner to Fatuha)	5	155	Mr. Anand Kumar
66	Saharsa	Arsi chaur	4	120	Mr. Gyanchandra Gyani
67	Saharsa	Bora Chaur	4	120	Mr. Gyanchandra Gyani
68	Saharsa	Simri Jheel	6	106	Mr. Gyanchandra Gyani
69	Samastipur	Deokhal Chaur	5	240	Mr. Amir Rizwan Khan
70	Saran	Bahiyara chaur	2	305	Mr. Gyanchandra Gyani
71	Saran	Hariya chaur	4	180	Mr. Gyanchandra Gyani
72	Saran	Atanagar	3	180	Mr. Gyanchandra Gyani
73	Saran	Phulwaria chaur	2	120	Mr. Gyanchandra Gyani

Table 5: Details of team size and time to cover the area during AWC 2024 (contd.)

Sl. No	District	Wetland	Team size	Duration (minutes)	coordinator
74	Supaul	Kosi catchment area	3	480	Dr Gopal Sharma & Mr. Navin Kumar
75	Supaul	Kosi river (Birpur Barrage to Kosi Mahasetu)	3	385	Dr Gopal Sharma & Mr. Navin Kumar
76	Sheohar	Bagmati river	3	320	Dr Niraj Kumar & Dr Kushagra Rajendra
77	Vaishali	Baraila lake	8	120	Dr Satyendra Kumar
78	Vaishali	Puraniya Chaur	7	120	Dr Satyendra Kumar
79	Vaishali	Salaha Chaur	8	120	Dr Satyendra Kumar
80	Vaishali	Gandak river	5	360	Dr Satyendra Kumar
81	West Champaran	Gandak River System	6	240	Dr Kamlesh K Maurya
82	West Champaran	Lal Saraiya Mann	12	90	Dr Kamlesh K Maurya
83	West Champaran	Udaipur Lake	13	237	Dr Kamlesh K Maurya
84	West Champaran	Darwabari	7	130	Dr Kamlesh K Maurya
		Total	522	14,988	

CHAPTER 6

BIRD COUNT

All types of waterbirds sighted in each wetland, including grebes, cormorants, herons, egrets, storks, ibises, ducks, geese, rails, jacanas, shorebirds, gulls, and terns were counted. In addition to this, raptors, other wetland-dependent birds and land birds found in the wetlands were also documented during the survey. The bird counts data from each wetland was collected, collated, and analyzed.

A. Overall abundance and richness

During the AWC - 2024, a total of 80,246 individuals of 226 species belonging to 65 families were documented from 84 wetlands. Of these, 71,436 individuals of 90 species (16 families) were waterbirds, 1,176 individuals of 26 species (7 families) were wetland-dependent birds, and 7,634 individuals of 110 species (38 families) were landbirds (Fig. 2a & b).

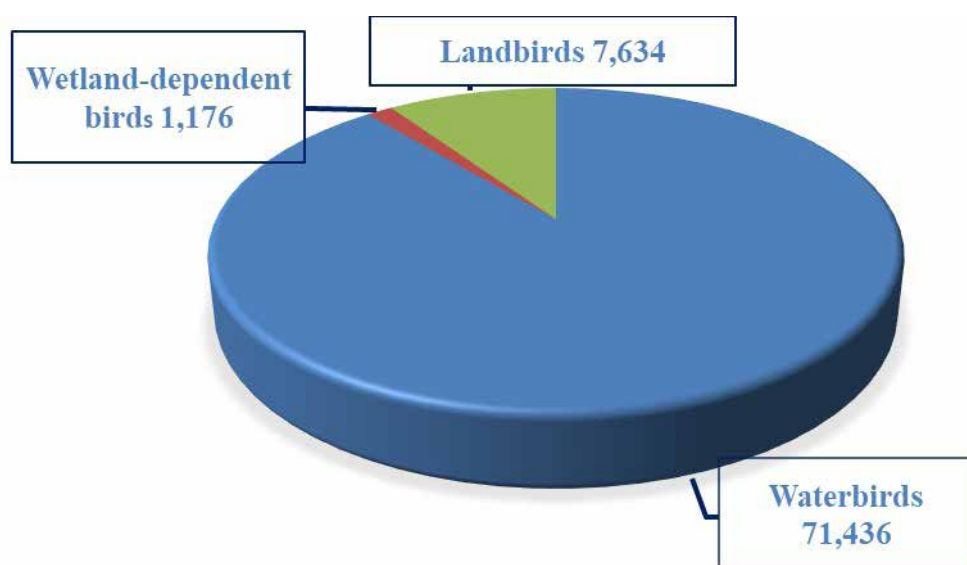


Figure 2a. Number of birds reported during AWC 2024

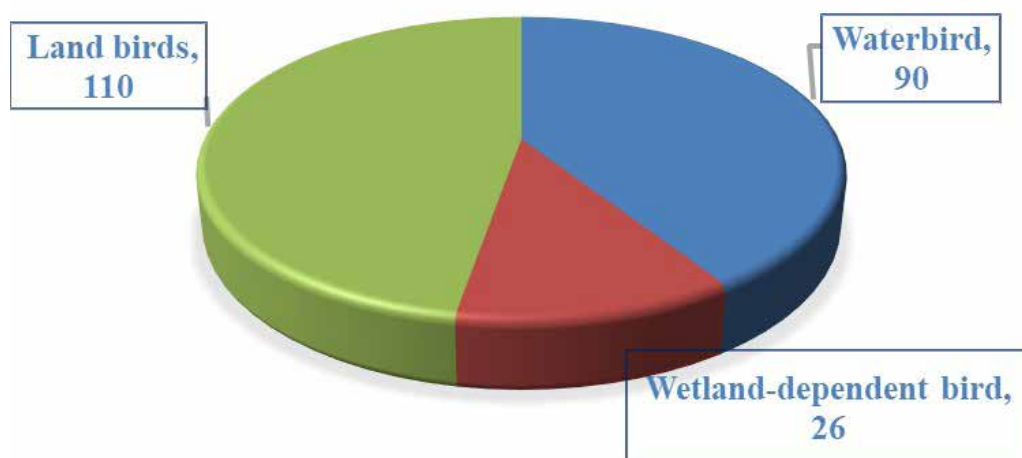


Figure 2b. Number of bird species reported during AWC 2024

During the AWC 2022, there were 45,173 individuals of 202 species belonging to 61 families were documented from 68 wetlands. Of them, 39,937 were waterbirds (81 species), 569 were wetland-dependent birds (23 species), and 5,630 were landbirds (101 species). During AWC 2023, a total of 69,935 individuals of 203 species belonging to 55 families were reported from 76 wetlands which included 61,957 individuals of waterbirds (87 species of 16 families), 1,243 individuals of wetland-dependent birds (26 species of 5 families), and 6,023 individuals of land birds (90 species of 36 families) (Figure 2c & d).

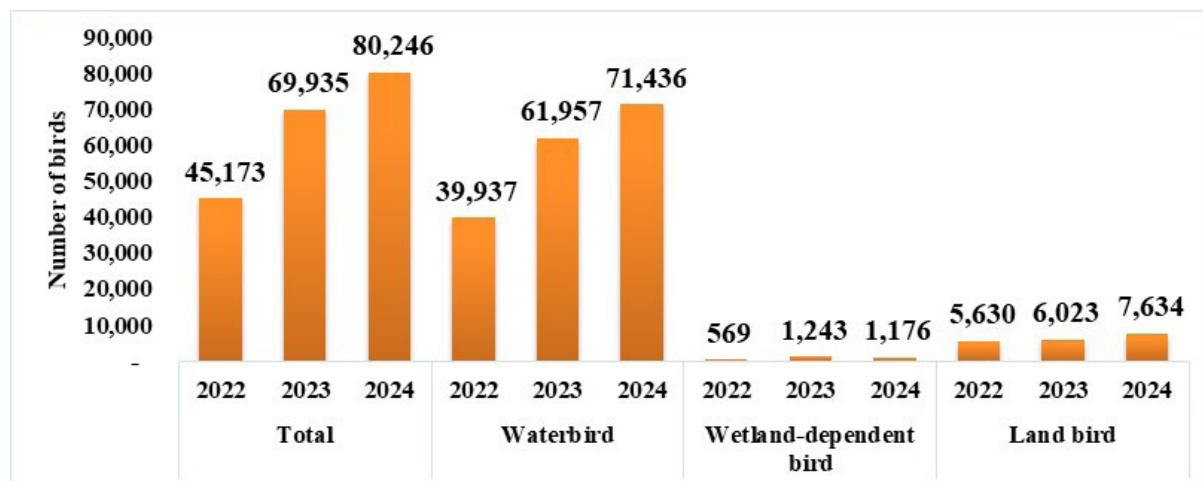


Figure 2c. Overall total and category-wise number of birds reported during AWC 2022, 2023 & 2024

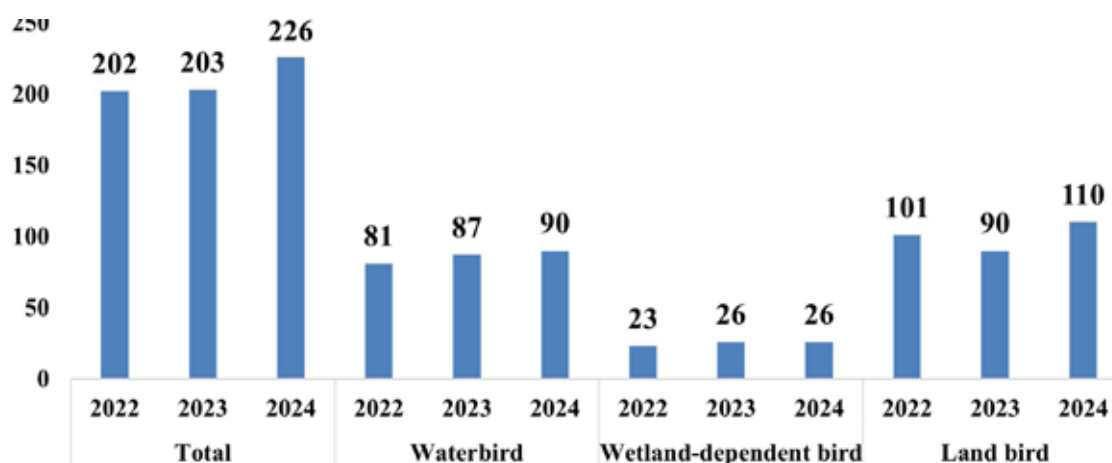


Figure 2d. Overall total and category-wise number of species reported during AWC 2022, 2023 & 2024

There was a notable increase in the number of birds reported from 2022 to 2023 and 2024. (Figure 2e). This is due to more coverage of wetlands during 2023 than in 2022. Likewise, more wetlands were covered during 2024 than in 2022 and 2023. A total of 68 wetlands were covered in 2022, 76 in 2023, and 84 in 2024. A huge congregation was recorded at the Ghatora wetland complex in the Bhagalpur District which was not covered in the previous two years AWC is also one of the reasons for a steep increase in the bird population during the AWC 2024. The overall number of waterbird species also increased from 2022 to 2024.

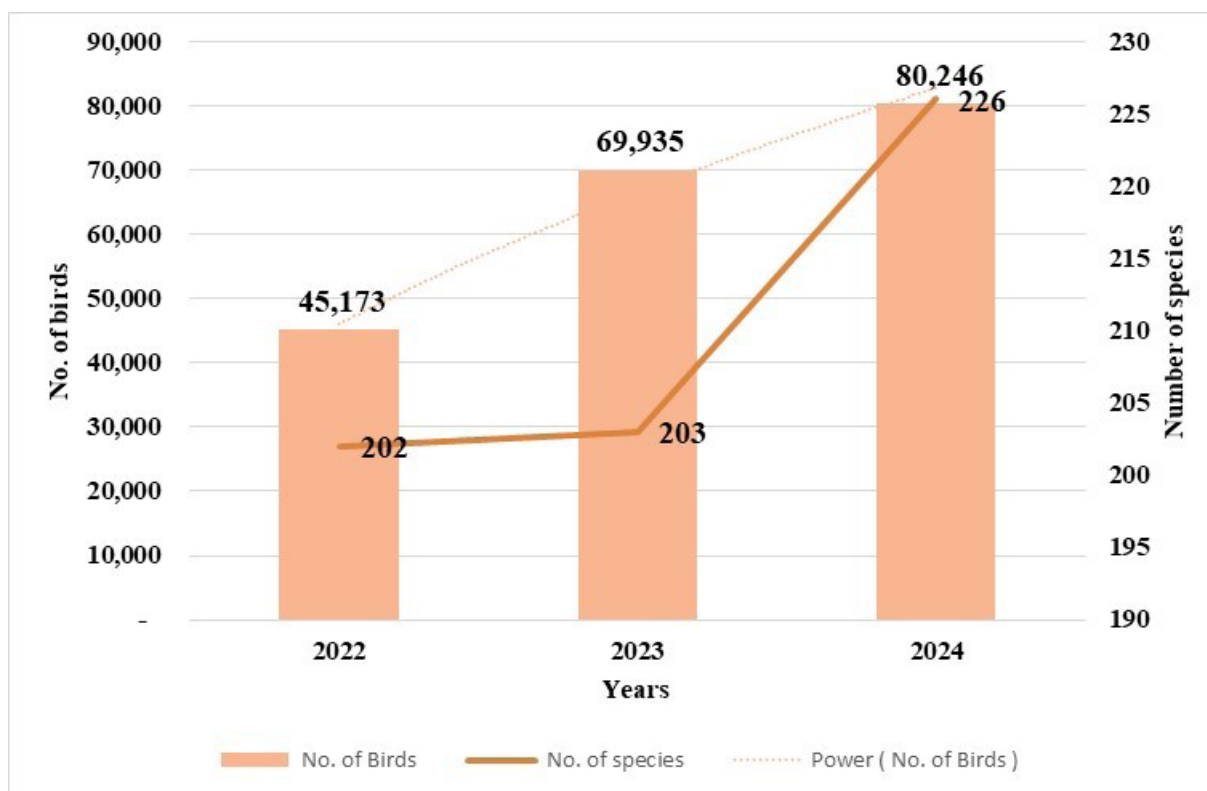


Figure 2e. Comparison of the number of birds and species reported in 2022, 2023 & 2024

B. District-wise bird abundance and richness

As far as district-wise bird counts are concerned, the highest number of birds was reported from Bhagalpur District, followed by Jamui and Katihar districts. A total of 18,608 birds were reported from Bhagalpur during the AWC 2024, while 13,082 birds from Jamui and 11,688 individuals from Katihar were reported. The lowest number of birds was reported from Muzaffarpur District. Only 162 birds were reported from this district during the AWC 2024 (Figure 3a).

The highest number of species was also reported from Bhagalpur District, followed by East Champaran and Buxar districts. Totally 143 species were documented in Bhagalpur district, while 112 and 101 species were recorded in the East Champaran and Buxar districts respectively (Figure 3b). Detailed district and wetland-wise bird count details are given in Annexures 1-14.

During the AWC 2022, the highest numbers of both birds and species, (7,544 birds of 97 species) were reported from Bhagalpur District, followed by Jamui District (7,351 birds from 91 species). During AWC 2023 a significant increase in bird counts was reported from both Jamui and Bhagalpur districts when compared to AWC 2022. The overall bird count during AWC 2023 was 2.5 times (251%) higher than that of AWC 2022 in Jamui District, while 1.2 times increase in the number was reported from Bhagalpur District during AWC 2023. Moreover, in 2024, the number of birds reported in Bhagalpur District more or less doubled (Table 3) due to the identification of a new ornithologically important wetland (the Ghatora Wetland), where 10,110 individuals of birds were recorded.

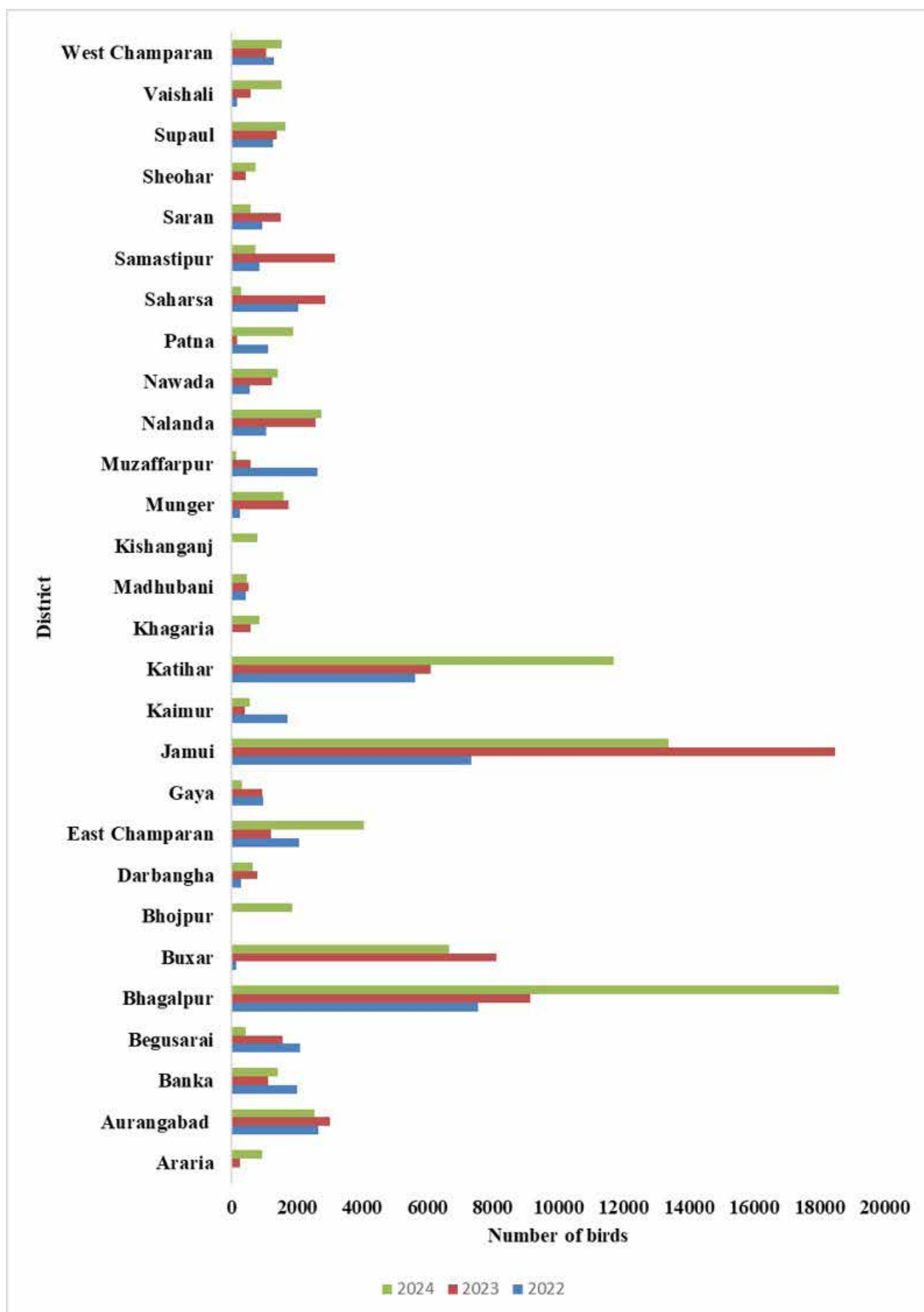


Figure 3a: District-wise total number of birds reported during the AWC 2022, 2023 and 2024

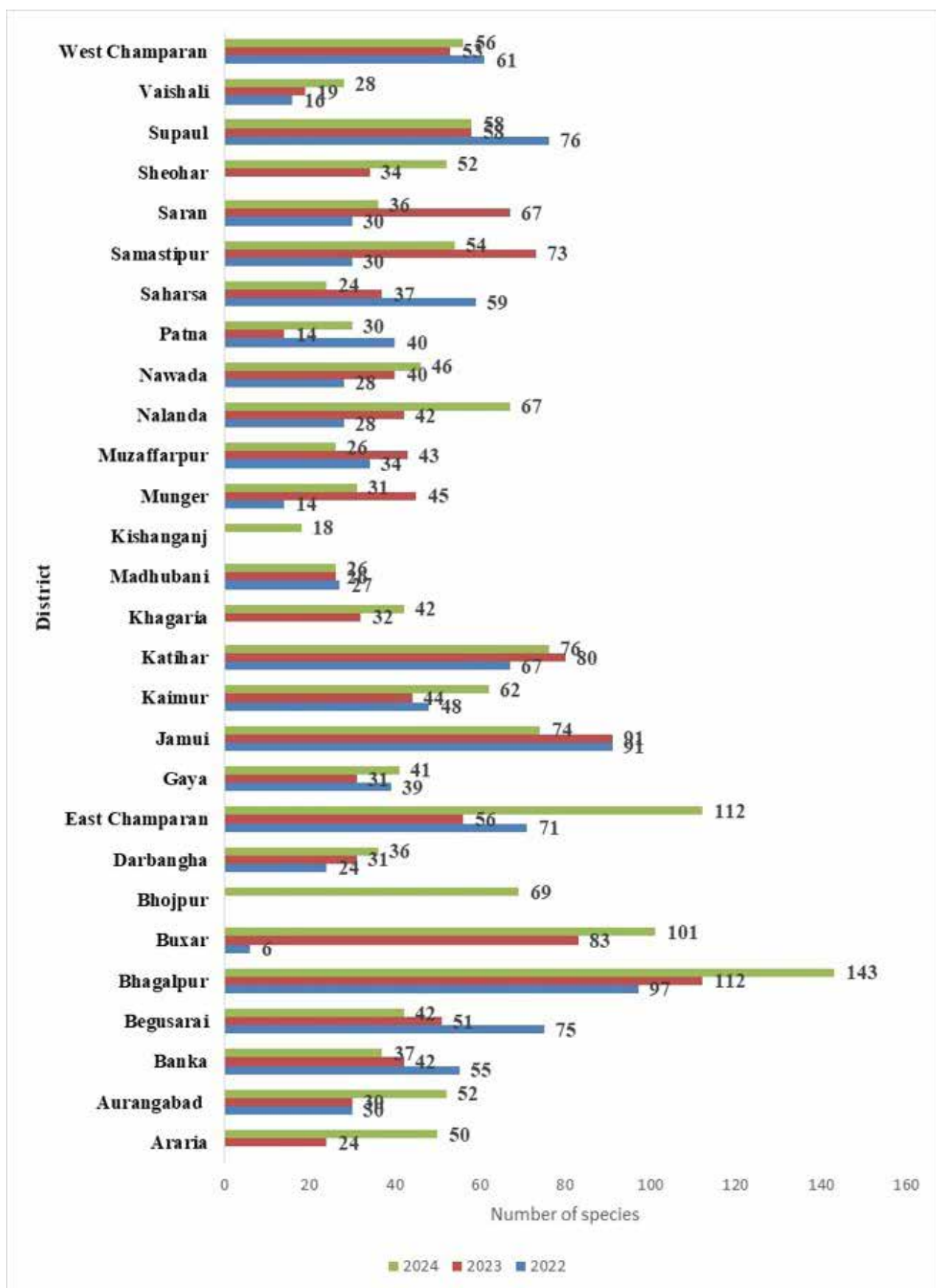


Figure 3b: District-wise total number of species reported during the AWC 2022, 2023 and 2024

Table 6. District-wise details of the number of wetlands covered, number of birds and species reported during AWC 2022, 2023 & 2024

Sl. No.	District	No. of wetlands covered			Number of Individuals			Number of Species		
		2022	2023	2024	2022	2023	2024	2022	2023	2024
1	Araria	NC	1	2	NC	275	938	NC	24	50
2	Aurangabad	1	1	1	2,657	3,021	2,541	30	30	52
3	Banka	1	1	1	2,003	1,128	1,419	55	42	37
4	Begusarai	2	1	2	2,105	1,584	436	75	51	42
5	Bhagalpur	6	9	10	7,544	9,165	18,608	97	112	143
6	Buxar	1	3	3	142	8,126	6,653	6	83	101
7	Bhojpur	NC	NC	2	NC	NC	1,853	NC	NC	69
8	Darbangha	2	1	2	306	793	763	24	31	36
9	East Champaran	2	5	6	2,063	1,217	3,736	71	56	112
10	Gaya	4	2	2	974	947	322	39	31	41
11	Jamui	7	8	8	7,351	18,480	13,082	91	91	74
12	Kaimur	3	1	3	1,705	423	575	48	44	62
13	Katihar	3	5	6	5,615	6,090	11,688	67	80	76
14	Khagaria	NC	1	1	NC	580	867	NC	32	42
15	Madhubani	NC	NC	1	434	542	480	27	26	26
16	Kishanganj	1	1	1	NC	NC	804	NC	NC	18
17	Munger	2	1	1	261	1,763	1,596	14	45	31
18	Muzaffarpur	7	4	3	2,648	589	162	34	43	26
19	Nalanda	4	6	6	1,062	2,571	2,751	28	42	67
20	Nawada	3	1	1	556	1,254	1,422	28	40	46
21	Patna	2	1	2	1,138	171	1,893	40	14	30
22	Saharsa	4	5	3	2,046	2,875	306	59	37	24
23	Samastipur	3	4	1	848	3,169	751	30	73	54
24	Saran	2	4	4	959	1,504	598	30	67	36
25	Sheohar	NC	1	1	NC	441	752	NC	34	52
26	Supaul	1	2	2	1,287	1,385	1,661	76	58	58
27	Vaishali	2	5	4	174	598	1,546	16	19	28
28	West Champaran	5	4	4	1,295	1,058	1,549	61	53	56
29	Total	68	78	84	45,173	69,749	80,246			

Note: NC- Not Covered

C. Wetland-wise bird population and species reported

The highest number of birds during the AWC 2024 was reported from Ghatora Wetland in Bhagalpur District, with a count of 10,110 individuals followed by Gogabeel with 7,068 individuals. During AWC 2022, the highest bird count was reported at Gogabeel in Katihar District with 4,992 individuals, and in 2023, the highest bird count was recorded in Nakti with 7,944 individuals.

The highest number of species was reported in Gokul Jalashaya in Buxar District with 70 bird species, followed by VGDS (Bhagalpur to Kahalgaon) in Bhagalpur and Ganga (Rani ghat to Chausa) in Buxar District with 59 and 58 species, respectively (Table 7).

Detailed wetland-wise bird counts, species, and families reported during the AWC 2022, 2023, and 2024 are given in Annexure 20 & 21.

Out of the 84 wetlands surveyed during the AWC 2024, more than 50 %, of the birds were recorded from eight wetlands in five districts. Of the 80,246 individuals of birds recorded during AWC 2024, 40,710 individuals were reported from these eight wetlands (Figure 4a). Over 50 bird species were reported from nine wetlands (Figure 4b)

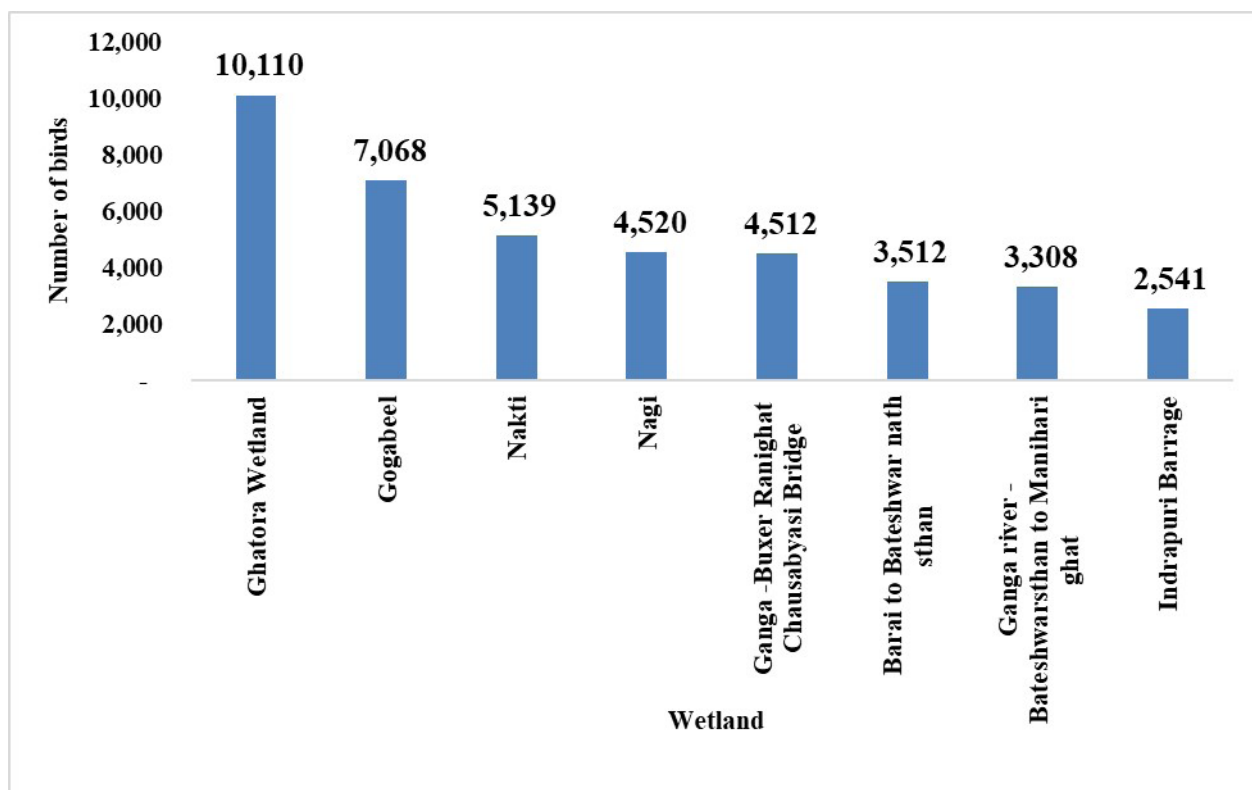


Figure 4a. Details of eight wetlands that contributed over 50% of the birds counted during AWC 2024

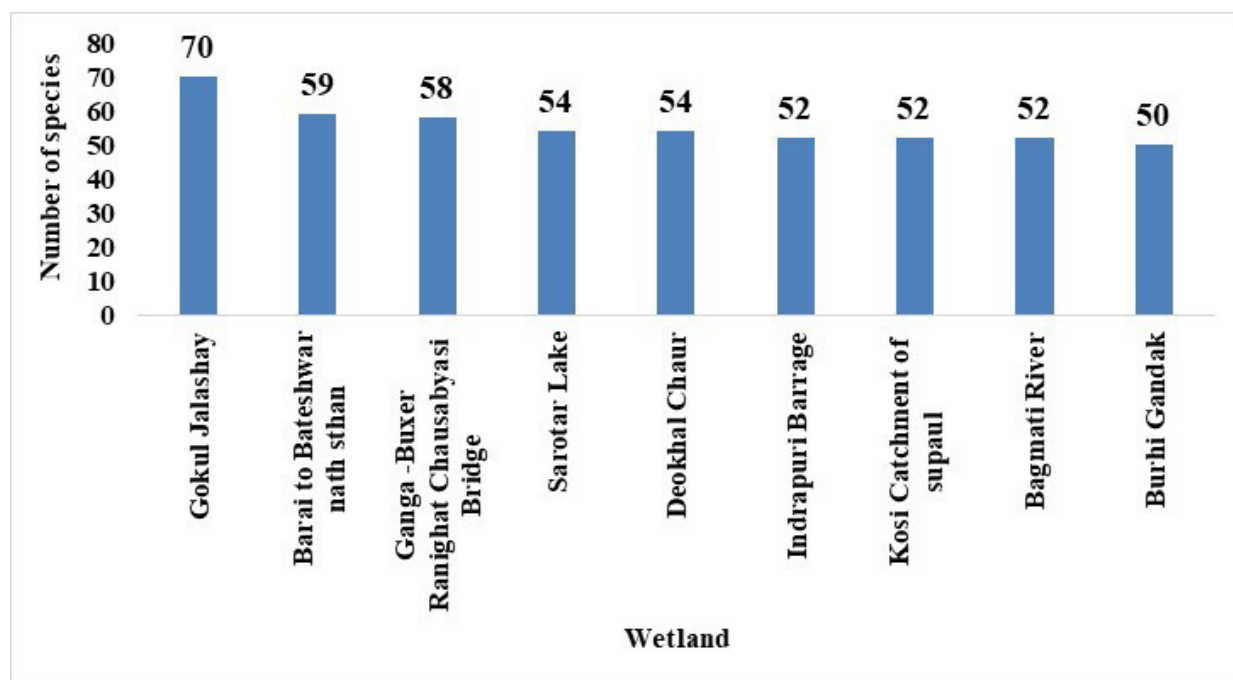


Figure 4b. Details of nine wetlands with the highest number of species (≥ 50) reported during AWC 2024

Table 7. Details of the number of birds, species, and families reported during the AWC 2024

Sl. No.	District	Sl. No.	Wetland	Number of Individuals	Number of Species	Number of Families
1	Aurangabad	1	Indrapuri Barrage	2,541	52	22
2	Araria	2	Trishulia Ghat	141	21	13
3	Banka	3	Dopahariya Pond	797	39	17
4	Begusarai	4	Odhni Dam	1,419	37	17
		5	Kanwar Lake	323	33	18
		6	Pachaila	113	20	13
5	Bhagalpur	7	Jagatpur	398	31	17
		8	Gangaprasad Jheel	448	23	23
		9	Kataiya Dhar	173	29	11
		10	Dimaha Wetland	355	22	13
		11	Ganga River- Maniksakar ghat-Barari ghat	460	46	22
		12	VGDS- Sulthanganj to Mirzapur	1,780	45	15
		13	VGDS- Mirzapur to Barari ghat	1,115	26	10
		14	Ghatora Wetland	10,110	37	19
		15	Barai to Bateshwar nath sthan	3,512	59	22
		16	Bhagalpur Bypass	257	39	19
6	Bhojpur	17	Sunki suhiya - Shahpur	605	38	23
		18	Ganges (Mahuli ghat to Maner)	1,248	47	24
7	Buxar	19	Vayasi ghat to Bihari ghat	1,175	40	21
		20	Ganga -Buxar Ranighat Chausabyasi Bridge	4,512	58	25
		21	Gokul Jalashay	966	70	31
8	Darbhanga	22	Kusheshwar Sthan	566	31	19
		23	Khirol nadhi tat	77	17	14

Table 7. Details of the number of birds, species, and families reported during the AWC 2024 (contd.)

Sl. No.	District	Sl. No.	Wetland	Number of Individuals	Number of Species	Number of Families
9	East Champaran	24	Gandak River	380	48	26
		25	Sarotar Lake	1,515	54	23
		26	Sonbarsa Lake	487	40	24
		27	Burhi Gandak	295	50	29
		28	Chilraon Mann	1,059	43	25
10	Gaya	29	Basmanpur	313	39	26
		30	Barwadih	84	19	8
11	Jamui	31	Barandih Wetland	238	34	22
		32	Bela Tand	267	30	18
		33	Devan Ahar	475	18	13
		34	Pailbajaan	36	8	7
		35	Garhi Dam	624	46	19
		36	Nagi Dam	4,520	40	19
		37	Jhajha railway pond	452	12	11
		38	Dhamna Aahar	567	26	12
		39	Raja Ahar	1,002	30	17
		40	Nakti	5,139	35	16
12	Kaimur	41	Durgawati dam	283	40	22
		42	Kohira Dam	99	24	16
		43	Karkat waterfall	193	36	22
13	Katihar	44	Baldia Chaur	136	23	15
		45	Ganga river - Bateshwarsthan to Manihari ghat	3,308	38	15
		46	Bhanwra Kothi	639	13	9
		47	Baghar Beel	401	27	14
		48	Gogabeel	7,068	42	22
		49	Kathotia Fish Pond	136	7	6

Table 7. Details of the number of birds, species, and families reported during the AWC 2024 (contd.)

Sl. No.	District	Sl. No.	Wetland	Number of Individuals	Number of Species	Number of Families
14	Khagaria	50	Pasraha Chaur	867	42	21
15	Kishanganj	51	Mahananda river	804	18	10
16	Madhubani	52	Chapaniya Lake	480	26	12
17	Munger	53	Ganga river- Kashtarni ghat to Bariyarpur	1,596	31	13
18	Muzaffarpur	54	Manika mann	57	14	12
		55	Jhapaha mann	18	8	6
		54	Kanti mann	87	17	13
19	Nalanda	57	Gangaji Rajgriha Jalashaya	83	7	6
		58	Pushpakarani tank	633	38	25
		59	Giddhi Lake (Begumpur)	434	34	15
		60	Ordhance factory	35	9	9
		61	Pawapari	628	22	15
20	Nawada	62	Panchane River, Sainik School	938	38	24
		63	Hardiya Dam	1,422	46	22
21	Patna	64	Rajdhani Jalashay	191	17	8
		65	Ganga river - Maner to Fatuha	1,702	20	9
22	Saharsa	66	Arsi Chaur	147	16	10
		67	Simri Chaur	139	15	10
		68	Bora Chaur	20	9	5
23	Samastipur	69	Deokhal Chaur	751	54	23
24	Saran	70	Atanagar	95	19	11
		71	Bahiyara Chaur	203	23	14
		72	Hariya Chaur	265	17	11
25	Sheohar	73	Phulwaria Chaur	35	11	8
26	Supaul	74	Bagmati River	752	52	22
		75	Kosi River (Birpur Barrage to Kosi Mahasetu)	421	24	12
		76	Kosi Catchment of supaul	1,240	52	22

Table 7. Details of the number of birds, species, and families reported during the AWC 2024 (contd.)

Sl. No.	District	Sl. No.	Wetland	Number of Individuals	Number of Species	Number of Families
27	Vaishali	77	Baraila Lake	1,176	21	13
		78	Purainiya Chaur	281	14	9
		79	Salaha lake	45	5	4
		80	Gandak river of Vaishali Dt	44	7	7
28	West Champaran	81	Udaipur Wildlife Sanctuary	717	27	13
		82	Lal Sariya Maan	22	6	5
		83	VTR (Darwabari wetland)	97	5	3
		84	Gandak River	713	37	21
			Total	80,246	226	65

CHAPTER 7

RIVER STRETCHES COVERED DURING AWC 2024

During AWC 2024, 84 wetlands from 28 districts in Bihar were surveyed including 28 sites in five river systems namely Ganga, Kosi, Gandak, Burhi Gandak, and Bagmati. Of these, 28 sites, 19 were river stretches rest of them were ghats. Among the 19 stretches, four stretches were part of Vikramshila Gangetic Dolphin Sanctuary (VGDS) in the Bhagalpur District and one was in Valmiki Tiger Reserve (VTR) in the West Champaran District of Bihar (Table 8).

Table 8. Details of the sites in the river systems covered during AWC, 2024

Sl. No.	District	Sl. No.	Site	River System	Protection Status
1	Buxar	1	Ranighat to Chausabyasi Bridge	Ganga	Non-Protected Area
		2	Vayasi ghat to Bihari ghat	Ganga	Non-Protected Area
2	Bhojpur	3	Sunki suhiya to Shahpur	Ganga	Non-Protected Area
		4	Mahuli ghat to Maner	Ganga	Non-Protected Area
3	Patna	5	Maner to Fatuha	Ganga	Non-Protected Area
4	Nalanda	6	Rajgriha Jalashaya	Ganga	Non-Protected Area
5	Munger	7	Kashtarni ghat to Bariyarpur	Ganga	Non-Protected Area
6	Bhagalpur	8	Sulthanganj to Mirzapur	Ganga	Protected Area
		9	Mirzapur to Barari ghat	Ganga	Protected Area
		10	Maniksakar ghat to Barari ghat	Ganga	Protected Area
		11	Barai to Bateshwar nath sthan	Ganga	Protected Area
7	Katihar	12	Bateshwarsthan to Manihari ghat	Ganga	Non-Protected Area
8	East Champaran	13	Burhi Gandak	Burhi Gandak	Non-Protected Area
9	Supaul	14	Birpur Barrage to Kosi Mahasetu	Kosi	Non-Protected Area
		15	Kosi Catchment	Kosi	Non-Protected Area
10	West Champaran	16	Gandak River	Gandak	Protected Area
11	East Champaran	17	Gandak River	Gandak	Non-Protected Area
12	Vaishali	18	Gandak river	Gandak	Non-Protected Area
13	Sheohar	19	Bagmati River	Bagmati	Non-Protected Area

Number of birds and species

A total of 24,949 individuals of 168 species were reported from all these river stretches. The highest number of birds were reported from Ganga with 21,105 individuals of 127 species (Table 9). The lowest number of birds was reported in Burhi Gandak with 295 individuals of 50 species (Figure 6a &b).

Table 9. Number of birds and species reported from rivers during AWC 2024

Sl. No	District	Sl. No.	Site	Number of birds	Number of species
1	Buxar	1	Ranighat to Chausabyasi Bridge	4,521	59
		2	Vayasi ghat to Bihari ghat	1,175	40
2	Bhojpur	3	Sunki suhiya to Shahpur	605	38
		4	Mahuli ghat to Maner	1,248	47
3	Patna	5	Maner to Fatuha	1,702	20
4	Nalanda	6	Rajgriha Jalashaya	83	7
5	Munger	7	Kashtarni ghat to Bariyarpur	1,596	31

Table 9. Number of birds and species reported from rivers during AWC 2024 (contd.)

Sl. No.	District	Sl. No.	Site	Number of birds	Number of species
6	Bhagalpur	8	Sultanganj to Mirzapur	1,780	45
		9	Mirzapur to Barari ghat	1,115	26
		10	Maniksakar ghat to Barari ghat	460	46
		11	Barai to Bateshwarsthan	3,512	59
7	Katihar	12	Bateshwarsthan to Manihari ghat	3,308	38
8	East Champaran	13	Burhi Gandak	295	50
9	Supaul	14	Birpur Barrage to Kosi Mahasetu	421	24
		15	Kosi Catchment	1,240	52
10	West Champaran	16	Gandak River	712	36
11	East Champaran	17	Gandak River	380	48
12	Vaishali	18	Gandak river	44	7
13	Sheohar	19	Bagmati River	752	52
			Total	24,949	

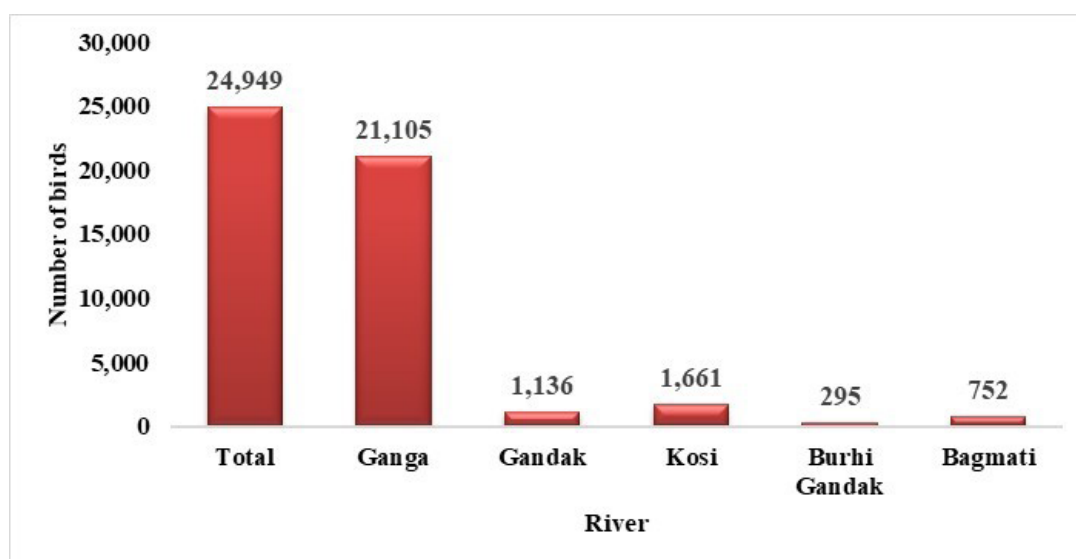


Figure 6a: Number of birds reported from rivers during AWC 2024

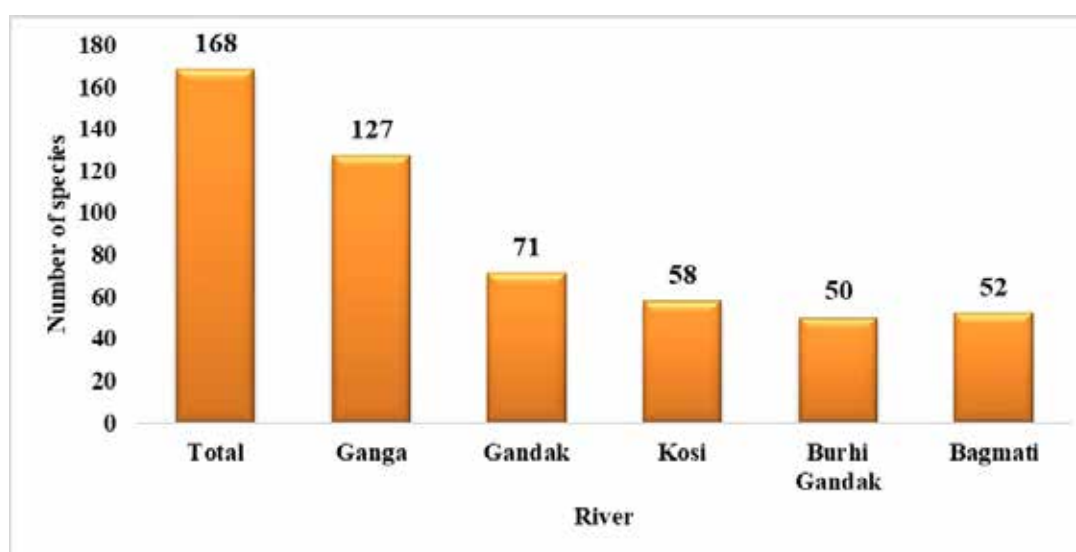


Figure 6b: Number of species reported from rivers in AWC 2024

Among the 24,949 individuals, 6,994 birds of 53 species were long-distance migrants, 14,153 individuals of 28 species were local migrants and 3,802 individuals of 87 species were residents (Figure 6c).

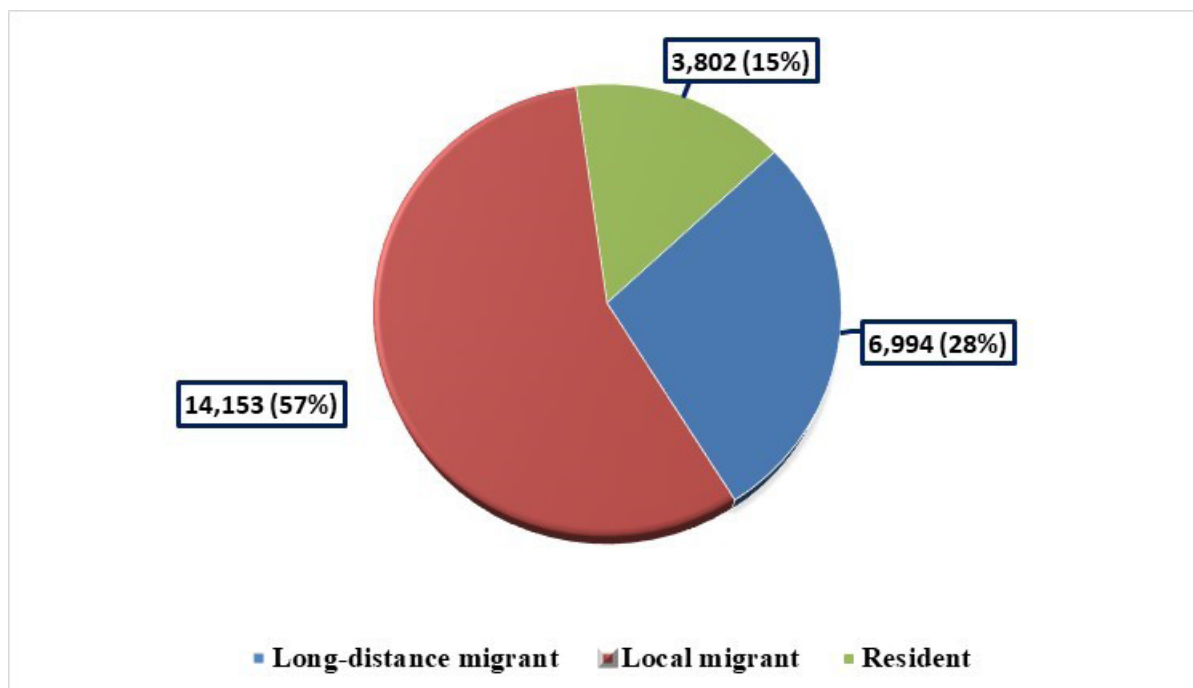


Figure 6c. Migratory status of birds reported from rivers during AWC 2024

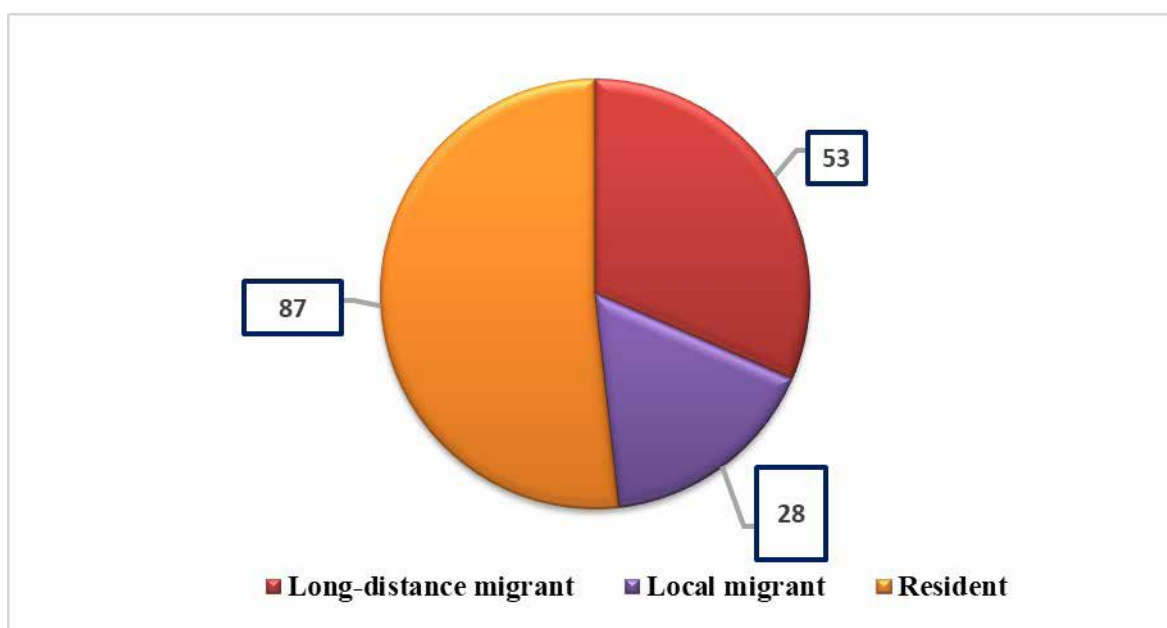


Figure 6d. Migratory status of species reported from rivers during AWC 2024

A total of, 12 globally Threatened and Near Threatened species were identified which included two globally threatened endangered species, two vulnerable species, and eight Near-Threatened species (Table 10).

Table 10. Details of Threatened and Near Threatened species reported from river systems during AWC 2024

Sl. No.	Common Name	Scientific Name	Family	IUCN Status	Migratory status	Number of birds
1	Greater Adjutant	<i>Leptoptilos dubius</i>	Ciconiidae	EN	R	45
2	Egyptian Vulture	<i>Neophron percnopterus</i>	Accipitridae	EN	LM/R	1
3	Common Pochard	<i>Aythya ferina</i>	Anatidae	VU	M	51
4	Lesser Adjutant	<i>Leptoptilos javanicus</i>	Ciconiidae	VU	R	59
5	Ferruginous Duck	<i>Aythya nyroca</i>	Anatidae	NT	M	93
6	Painted Stork	<i>Mycteria leucocephala</i>	Ciconiidae	NT	R	62
7	Asian Woollyneck	<i>Ciconia episcopus</i>	Ciconiidae	NT	R	44
8	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	Ciconiidae	NT	R	8
9	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	Threskiornithidae	NT	LM/R	540
10	River Lapwing	<i>Vanellus duvaucelii</i>	Charadriidae	NT	LM/R	225
11	Eurasian Curlew	<i>Numenius arquata</i>	Scolopacidae	NT	M	110
12	Himalayan Griffon	<i>Gyps himalayensis</i>	Accipitridae	NT	R	1

CHAPTER 8

IMPORTANT WETLANDS IN BIHAR BASED ON AWC 2022, 2023 & 2024

There were eight wetlands which accounted for 50.73% of the overall bird population reported during AWC 2024. The overall of bird populations supported by these wetlands was nearly 43% in 2023 and 33% in 2022. In AWC 2024, the highest number of birds were reported from the Ghatora wetland in Bhagalpur District. A total of 10,110 individuals were reported from this wetland. It is noteworthy to mention that this wetland was not covered in 2022 and 2023 (Table 11).

The highest number of birds was recorded from Gogabeel Lake in Katihar District during AWC 2022, with 4,992 individuals, and it stood as the third in 2023. In AWC 2024, the count at Gogabeel Lake was more than double when compared to the AWC 2023. During the AWC 2023, the highest numbers of birds were reported from Nakti Dam, with 7,844 individuals which had declined to 5,139 individuals in 2024. It could be understood that the number of birds utilizing these wetlands fluctuated over the years.

The fluctuations in bird numbers in these top eight wetlands underscore the critical importance of focusing on their management and incorporating them into state-level decision-making processes. There is a clear need for continuous monitoring of these sites to understand their significance for birds during both migratory and non-migratory seasons. Several wetlands have already been identified as potential Ramsar Sites and Important Bird Areas (IBAs) in the state, highlighting their ecological importance. The AWC data for the years 2022, 2023, and 2024 also through light on this line to identify the potential ornithologically important wetlands in this state.

The data gathered from AWC 2022, 2023, and 2024 sheds light on the current status of bird populations in these wetlands, indicating the necessity for further actions to designate them as wetlands of regional, national, and international significance.

Even though Kanwar Lake is a declared Ramsar Site and one of the bird sanctuaries in the states, the AWC data of the last three years (2002, 2023, and 2024) suggests that urgent management actions be taken for the rejuvenation of the wetland to bring back to its past glory. More than 2,000 individuals were reported from this wetland during the past three years. The Ghatora wetland in Bhagalpur District has emerged as a potential and the highest bird congregation area for both the migratory and resident species. Over 10,000 individuals of waterbirds were reported during the AWC 2024, which has further added that management intervention is needed for monitoring this wetland throughout the year and assess the role played by the wetlands for the waterbirds in the state, and also to initiate better protection and management of the non-protected wetland.

**Table 11: List of top eight wetlands with the highest number of birds reported during
AWC 2024, 2023 and 2022**

Sl. No.	Wetland	District	No. of birds reported		
			2024	2023	2022
1	Ghatora Wetland	Bhagalpur	10,110	NC	NC
2	Gogabeel Lake	Katihar	7,068	3,281	4,992

**Table 11: List of top eight wetlands with the highest number of birds reported during
AWC 2024, 2023 and 2022 (contd.)**

Sl. No.	Wetland	District	No. of birds reported		
			2024	2023	2022
4	Nagi Dam	Jamui	4,520	6,938	2,601
5	Ganga -Buxer Ranighat Chausabyasi Bridge	Buxar	4,512	5,703	NC
6	Barai to Bateshwar nath sthan	Bhagalpur	3,512	2,502	2,542
7	Ganga river - Bateshwarsthan to Manihari ghat	Katihar	3,308	1,139	NC
8	Indrapuri Barrage	Aurangabad	2,541	3,021	2,657
		Total	40,710	30,428	14,718

CHAPTER 9

BIRD SPECIES REPORTED IN AWC 2022, 2023 & 2024

A total of 267 species belonging to 79 families were recorded during AWC conducted for the years 2022, 2023, and 2024 (Table 12), which accounted for more than 50% of the state's bird diversity as documented in "Birds of Bihar Vol.1 & 2 (DEF&CC, 2014)". Of these, 141 species were common and recorded in all the years during AWC, 48 species were reported during two years (either during 2022 & 2023 or 2023 & 2024, or 2022 & 2024) and 78 species were recorded only once during these three years of AWC (Figure 7a).

Of these 267 species, 87 were long-distance migrants, 35 were local migrants, and 145 were resident species. Overall, 25 species were threatened and the Near-Threatened category.

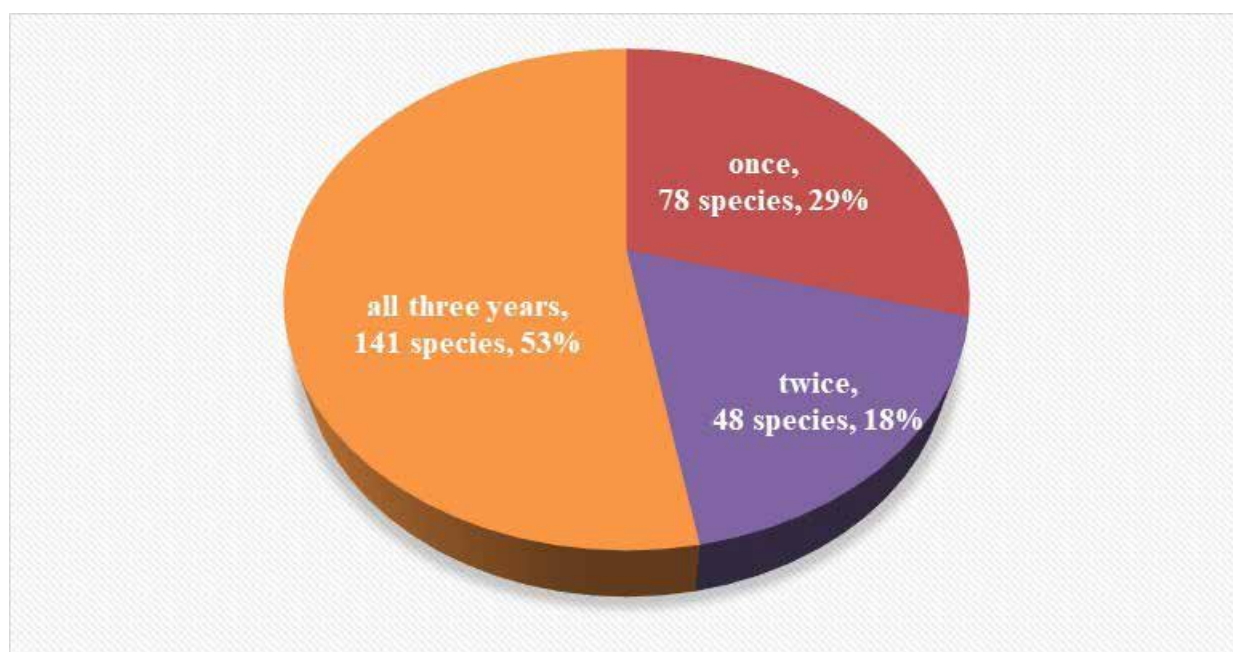


Figure 7a. Status of bird species recorded during the AWC 2022, 2023 and 2024

Table 12. List of bird species reported during the AWC 2022, 2023 & 2024

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	2022	2023	2024
1	Indian Peafowl	<i>Pavo cristatus</i>	Phasianidae	LC	R			P
2	Grey Francolin	<i>Orygornis pondicerianus</i>	Phasianidae	LC	R	P	P	P
3	Fulvous Whistling-duck	<i>Dendrocygna bicolor</i>	Anatidae	LC	R	P	P	P
4	Lesser Whistling-duck	<i>Dendrocygna javanica</i>	Anatidae	LC	R	P	P	P
5	Bar-headed Goose	<i>Anser indicus</i>	Anatidae	LC	M	P	P	P
6	Greylag Goose	<i>Anser anser</i>	Anatidae	LC	M	P	P	P
7	Goosander	<i>Mergus merganser</i>	Anatidae	LC	M		P	P
8	Common Shelduck	<i>Tadorna tadorna</i>	Anatidae	LC	M	P	P	P
9	Ruddy Shelduck	<i>Tadorna ferruginea</i>	Anatidae	LC	M	P	P	P
10	Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	Anatidae	LC	LM/R	P	P	P
11	Red-crested Pochard	<i>Netta rufina</i>	Anatidae	LC	M	P	P	P
12	Common Pochard	<i>Aythya ferina</i>	Anatidae	VU	M	P	P	P
13	Ferruginous Duck	<i>Aythya nyroca</i>	Anatidae	NT	M	P	P	P
14	Tufted Duck	<i>Aythya fuligula</i>	Anatidae	LC	M	P	P	P
15	Garganey	<i>Spatula querquedula</i>	Anatidae	LC	M	P	P	P
16	Northern Shoveler	<i>Spatula clypeata</i>	Anatidae	LC	M	P	P	P
17	Falcated Duck	<i>Mareca falcata</i>	Anatidae	NT	M	P	P	P
18	Gadwall	<i>Mareca strepera</i>	Anatidae	LC	M	P	P	P
19	Eurasian Wigeon	<i>Mareca penelope</i>	Anatidae	LC	M	P	P	P
20	Indian Spot-billed Duck	<i>Anas poecilorhyncha</i>	Anatidae	LC	R	P	P	
21	Mallard	<i>Anas platyrhynchos</i>	Anatidae	LC	M	P	P	
22	Northern Pintail	<i>Anas acuta</i>	Anatidae	LC	M	P	P	P
23	Common Teal	<i>Anas crecca</i>	Anatidae	LC	M	P	P	P
24	Little Grebe	<i>Tachybaptus ruficollis</i>	Podicipedidae	LC	LM/R	P	P	P
25	Great Crested Grebe	<i>Podiceps cristatus</i>	Podicipedidae	LC	LM/R	P	P	P
26	Rock Dove	<i>Columba livia</i>	Columbidae	LC	R		P	P
27	Eurasian Collared-dove	<i>Streptopelia decaocto</i>	Columbidae	LC	R	P	P	P

Table 12. List of bird species reported during the AWC 2022, 2023 & 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	2022	2023	2024
28	Red Turtle Dove	<i>Streptopelia tranquebarica</i>	Columbidae	LC	R		P	
29	Eastern Spotted Dove	<i>Spilopelia chinensis</i>	Columbidae	LC	R		P	P
30	Laughing Dove	<i>Spilopelia senegalensis</i>	Columbidae	LC	R	P	P	P
31	Emerald Dove	<i>Chalcophaps indica</i>	Columbidae	LC	R	P		
32	Yellow-footed Green-pigeon	<i>Treron phoenicopterus</i>	Columbidae	LC	R	P	P	P
33	Indian Night Jar	<i>Caprimulgus asiaticus</i>	Caprimulgidae	LC	R	P		
34	Asian Palm-swift	<i>Cypsiurus balasiensis</i>	Apodidae	LC	R	P	P	P
35	Little Swift	<i>Apus affinis</i>	Apodidae	LC	R	P	P	P
36	Greater Coucal	<i>Centropus sinensis</i>	Cuculidae	LC	R		P	P
37	Lesser Coucal	<i>Centropus bengalensis</i>	Cuculidae	LC	R		P	
38	Sirkeer Malkoha	<i>Taccocua leschenaultii</i>	Cuculidae	LC	R			P
39	Asian Koel	<i>Eudynamis scolopaceus</i>	Cuculidae	LC	R	P	P	
40	Common Hawk-cuckoo	<i>Hierococcyx varius</i>	Cuculidae	LC	R	P	P	P
41	Common Cuckoo	<i>Cuculus canorus</i>	Cuculidae	LC	R	P		
42	Brown Crane	<i>Zapornia akool</i>	Rallidae	LC	R			P
43	Rock Piegion	<i>Columba livia</i>	Columbidae	LC	R	P		
44	Bailon's Crane	<i>Zapornia pusilla</i>	Rallidae	LC	M	P	P	
45	White-breasted Waterhen	<i>Amauromis phoenicurus</i>	Rallidae	LC	R	P	P	P
46	Watercock	<i>Gallicrex cinerea</i>	Rallidae	LC	R	P		
47	Purple Swampphen	<i>Porphyrio porphyrio</i>	Rallidae	LC	R	P	P	P
48	Common Moorhen	<i>Gallinula chloropus</i>	Rallidae	LC	R	P	P	P
49	Common Coot	<i>Fulica atra</i>	Rallidae	LC	R	P	P	P
50	Sarus Crane	<i>Grus antigone</i>	Gruidae	VU	R	P	P	
51	Greater Adjutant	<i>Leptoptilos dubius</i>	Ciconiidae	EN	R	P	P	P
52	Lesser Adjutant	<i>Leptoptilos javanicus</i>	Ciconiidae	VU	R	P	P	P
53	Painted Stork	<i>Mycteria leucocephala</i>	Ciconiidae	NT	R	P	P	P
54	Asian Openbill	<i>Anastomus oscitans</i>	Ciconiidae	LC	LM/R	P	P	P

Table 12. List of bird species reported during the AWC 2022, 2023 & 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	2022	2023	2024
55	Black Stork	<i>Ciconia nigra</i>	Ciconiidae	LC	LM/R	P	P	P
56	Asian Woollyneck	<i>Ciconia episcopus</i>	Ciconiidae	NT	LM/R		P	P
57	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	Ciconiidae	NT	LM/R	P	P	P
58	Eurasian Spoonbill	<i>Platalea leucorodia</i>	Threskiornithidae	LC	M	P		P
59	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	Threskiornithidae	NT	LM/R	P	P	P
60	Red-naped Ibis	<i>Pseudibis papillosa</i>	Threskiornithidae	LC	LM/R	P	P	P
61	Glossy Ibis	<i>Plegadis falcinellus</i>	Threskiornithidae	LC	LM/R	P		P
62	Yellow Bittern	<i>Ixobrychus sinensis</i>	Ardeidae	LC	R	P		P
63	Cinnamon Bittern	<i>Ixobrychus minutus</i>	Ardeidae	LC	R		P	
64	Black Bittern	<i>Ixobrychus flavicollis</i>	Ardeidae	LC	R	P	P	P
65	Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	Ardeidae	LC	LM/R	P	P	P
66	Green-backed Heron	<i>Butorides striata</i>	Ardeidae	LC	LM/R			P
67	Indian Pond-heron	<i>Ardeola grayii</i>	Ardeidae	LC	R	P	P	P
68	Cattle Egret	<i>Bubulcus ibis</i>	Ardeidae	LC	R	P	P	P
69	Grey Heron	<i>Ardea cinerea</i>	Ardeidae	LC	R	P	P	P
70	Purple Heron	<i>Ardea purpurea</i>	Ardeidae	LC	R	P	P	P
71	Great White Egret	<i>Ardea alba</i>	Ardeidae	LC	LM/R	P	P	P
72	Intermediate Egret	<i>Ardea intermedia</i>	Ardeidae	LC	LM/R	P	P	P
73	Little Egret	<i>Egretta garzetta</i>	Ardeidae	LC	LM/R	P	P	P
74	Little Cormorant	<i>Microcarbo niger</i>	Phalacrocoracidae	LC	LM/R	P	P	P
75	Great Cormorant	<i>Phalacrocorax carbo</i>	Phalacrocoracidae	LC	LM/R	P	P	P
76	Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	Phalacrocoracidae	LC	LM/R	P	P	P
77	Oriental Darter	<i>Anhinga melanogaster</i>	Anhingidae	NT	LM/R	P	P	P
78	Indian Thick-knee	<i>Burhinus indicus</i>	Burhinidae	LC	LM/R			P
79	Pied Avocet	<i>Recurvirostra avosetta</i>	Recurvirostridae	LC	M		P	P
80	Black-winged Stilt	<i>Himantopus himantopus</i>	Recurvirostridae	LC	LM/R	P	P	P
81	Pacific Golden Plover	<i>Pluvialis fulva</i>	Charadriidae	LC	M		P	P

Table 12. List of bird species reported during the AWC 2022, 2023 & 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	2022	2023	2024
82	Little Ringed Plover	<i>Charadrius dubius</i>	Charadriidae	LC	LM/R	P	P	P
83	Kentish Plover	<i>Charadrius alexandrinus</i>	Charadriidae	LC	M	P	P	P
84	Lesser Sandplover	<i>Charadrius mongolus</i>	Charadriidae	LC	M		P	P
85	Northern Lapwing	<i>Vanellus vanellus</i>	Charadriidae	NT	M	P	P	P
86	River Lapwing	<i>Vanellus duvaucelii</i>	Charadriidae	NT	LM/R	P	P	P
87	Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	Charadriidae	LC	LM/R	P		P
88	Grey-headed Lapwing	<i>Vanellus cinereus</i>	Charadriidae	LC	M	P	P	P
89	Red-wattled Lapwing	<i>Vanellus indicus</i>	Charadriidae	LC	LM/R	P	P	P
90	Greater Painted-snipe	<i>Rostratula benghalensis</i>	Rostratulidae	LC	LM/R	P	P	P
91	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	Jacaniae	LC	LM/R	P	P	P
92	Bronze-winged Jacana	<i>Metopidius indicus</i>	Jacaniae	LC	LM/R	P	P	P
93	Whimbrel	<i>Numenius phaeopus</i>	Scolopacidae	LC	M			P
94	Eurasian Curlew	<i>Numenius arquata</i>	Scolopacidae	NT	M	P	P	P
95	Black-tailed Godwit	<i>Limosa limosa</i>	Scolopacidae	NT	M			P
96	Ruff	<i>Calidris pugnax</i>	Scolopacidae	LC	M		P	
97	Curlew Sandpiper	<i>Calidris ferruginea</i>	Scolopacidae	LC	M			P
98	Temminck's Stint	<i>Calidris temminckii</i>	Scolopacidae	LC	M	P	P	P
99	Dunlin	<i>Calidris alpina</i>	Scolopacidae	LC	M		P	P
100	Little Stint	<i>Calidris minuta</i>	Scolopacidae	LC	LM/R	P	P	P
101	Pintail Snipe	<i>Gallinago stenura</i>	Scolopacidae	LC	M		P	P
102	Common Snipe	<i>Gallinago gallinago</i>	Scolopacidae	LC	M	P	P	P
103	Common Sandpiper	<i>Actitis hypoleucos</i>	Scolopacidae	LC	M	P	P	P
104	Green Sandpiper	<i>Tringa ochropus</i>	Scolopacidae	LC	M	P	P	P
105	Spotted Redshank	<i>Tringa erythropus</i>	Scolopacidae	LC	M	P	P	P
106	Common Greenshank	<i>Tringa nebularia</i>	Scolopacidae	LC	M	P	P	P
107	Common Redshank	<i>Tringa totanus</i>	Scolopacidae	LC	M	P	P	P
108	Wood Sandpiper	<i>Tringa glareola</i>	Scolopacidae	LC	M	P	P	P

Table 12. List of bird species reported during the AWC 2022, 2023 & 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	2022	2023	2024
109	Marsh Sandpiper	<i>Tringa stagnatilis</i>	Scolopacidae	LC	M	P	P	P
110	Indian Courser	<i>Cursorius coromandelicus</i>	Glareolidae	LC	R	P		
111	Little Pratincole	<i>Glareola lactea</i>	Glareolidae	LC	LM/R	P	P	P
112	Brown-headed Gull	<i>Larus brunnicephalus</i>	Laridae	LC	M	P	P	P
113	Black-headed Gull	<i>Larus ridibundus</i>	Laridae	LC	M	P		P
114	Pallas's Gull	<i>Larus ichthyaetus</i>	Laridae	LC	M		P	P
115	Lesser Black-backed Gull	<i>Larus fuscus</i>	Laridae	LC	M			P
116	Caspian Gull	<i>Larus cachinnans</i>	Laridae	LC	M		P	
117	Little Tern	<i>Sternula albifrons</i>	Laridae	LC	LM/R		P	P
118	Caspian tern	<i>Hydroprogne caspia</i>	Laridae	LC	M		P	
119	Whiskered Tern	<i>Chlidonias hybrida</i>	Laridae	LC	LM/R		P	
120	River Tern	<i>Sterna aurantia</i>	Laridae	VU	LM/R	P	P	P
121	Spotted Owlet	<i>Athene brama</i>	Strigidae	LC	R	P	P	P
122	Indian Scops-owl	<i>Otus bakkamoena</i>	Strigidae	LC	R			P
123	Short-eared Owl	<i>Asio flammeus</i>	Strigidae	LC	R			P
124	Brown Fish-owl	<i>Ketupa zeylonensis</i>	Strigidae	LC	R	P		P
125	Osprey	<i>Pandion haliaetus</i>	Pandionidae	LC	M	P	P	P
126	Black-winged Kite	<i>Elanus caeruleus</i>	Elanidae	LC	R	P	P	P
127	Oriental Honey-buzzard	<i>Pernis ptilorhynchus</i>	Accipitridae	LC	M		P	P
128	Egyptian Vulture	<i>Neophron percnopterus</i>	Accipitridae	EN	LM/R			P
129	Crested Serpent-eagle	<i>Spilornis cheela</i>	Accipitridae	LC	R		P	P
130	Short-toed Snake Eagle	<i>Circus gallicus</i>	Accipitridae	LC	R		P	
131	Himalayan Griffon	<i>Gyps himalayensis</i>	Accipitridae	NT	R	P		P
132	Indian spotted Eagle	<i>Clanga hastata</i>	Accipitridae	VU		P		
133	Greater Spotted Eagle	<i>Clanga clanga</i>	Accipitridae	VU	R	P	P	P
134	Tawny Eagle	<i>Aquila rapax</i>	Accipitridae	VU	R	P		
135	Steppe Eagle	<i>Aquila nipalensis</i>	Accipitridae	EN	M		P	

Table 12. List of bird species reported during the AWC 2022, 2023 & 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	2022	2023	2024
136	Booted Eagle	<i>Hieraetus pennatus</i>	Accipitridae	LC	R	P	P	P
137	Western Marsh-harrier	<i>Circus aeruginosus</i>	Accipitridae	LC	R	P	P	P
138	Hen Harrier	<i>Circus cyaneus</i>	Accipitridae	LC	R			P
139	Pied Harrier	<i>Circus melanoleucos</i>	Accipitridae	LC	R	P	P	P
140	Montagu's Harrier	<i>Circus pygargus</i>	Accipitridae	LC	M	P		
141	Shikra	<i>Accipiter badius</i>	Accipitridae	LC	R	P	P	P
142	White-tailed Sea-eagle	<i>Haliaeetus albicilla</i>	Accipitridae	LC	R			P
143	Black Kite	<i>Milvus migrans</i>	Accipitridae	LC	R		P	P
144	White-eyed Buzzard	<i>Buteo teesa</i>	Accipitridae	LC	R		P	P
145	Common Buzzard	<i>Buteo buteo</i>	Accipitridae	LC	M	P		P
146	Long-legged Buzzard	<i>Buteo rufinus</i>	Accipitridae	LC	R	P	P	P
147	Indian Grey Hornbill	<i>Ocyrocus birostris</i>	Bucerotidae	LC	R	P	P	P
148	Oriental Pied Hornbill	<i>Anthracoceros albirostris</i>	Bucerotidae	LC	R	P		P
149	Common Hoopoe	<i>Upupa epops</i>	Upupidae	LC	R		P	P
150	Asian Green Bee-eater	<i>Merops orientalis</i>	Meropidae	LC	R	P	P	P
151	Indian Roller	<i>Coracias benghalensis</i>	Coraciidae	LC	R	P	P	P
152	Common Kingfisher	<i>Alcedo atthis</i>	Alcedinidae	LC	R	P	P	P
153	Pied Kingfisher	<i>Ceryle rudis</i>	Alcedinidae	LC	R	P	P	P
154	Stork-billed Kingfisher	<i>Pelargopsis capensis</i>	Alcedinidae	LC	R	P	P	P
155	White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	Alcedinidae	LC	R	P	P	P
156	Black-capped Kingfisher	<i>Halcyon pileata</i>	Alcedinidae	VU	R	P	P	P
157	Coppersmith Barbet	<i>Psilopogon haemacephalus</i>	Megalaimidae	LC	R	P	P	P
158	Brown-headed Barbet	<i>Psilopogon zeylanicus</i>	Megalaimidae	LC	R	P	P	P
159	Blue-throated Barbet	<i>Psilopogon asiaticus</i>	Megalaimidae	LC	R			P
160	Eurasian Wryneck	<i>Jynx torquilla</i>	Picidae	LC	R		P	P
161	Black-rumped Flameback	<i>Dinopium benghalense</i>	Picidae	LC	R			P
162	Lesser Kestrel	<i>Falco naumanni</i>	Falconidae	LC	M		P	

Table 12. List of bird species reported during the AWC 2022, 2023 & 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	2022	2023	2024
163	Common Kestrel	<i>Falco tinnunculus</i>	Falconidae	LC	R	P	P	P
164	Peregrine Falcon	<i>Falco peregrinus</i>	Falconidae	LC	M		P	P
165	Plum-headed Parakeet	<i>Himalayapsitta cyanocephala</i>	Psittacidae	LC	R		P	P
166	Red-breasted Parakeet	<i>Psittacula alexandri</i>	Psittaculidae	NT	R		P	
167	Rose-ringed Parakeet	<i>Alexandrinus krameri</i>	Psittacidae	LC	R	P	P	P
168	Alexandrine Parakeet	<i>Psittacula eupatria</i>	Psittaculidae	NT	R		P	
169	Black-hooded Oriole	<i>Oriolus xanthornus</i>	Oriolidae	LC	R	P	P	P
170	Indian Golden Oriole	<i>Oriolus kundoo</i>	Oriolidae	LC	R	P	P	P
171	Large Cuckooshrike	<i>Coracina javensis</i>	Campephagidae	LC	R	P	P	P
172	White-throated Fantail	<i>Rhipidura albicollis</i>	Rhipiduridae	LC	R	P	P	P
173	Black Drongo	<i>Dicrurus macrocercus</i>	Dicruridae	LC	R	P	P	P
174	Ashy Drongo	<i>Dicrurus leucophaeus</i>	Dicruridae	LC	R	P	P	P
175	Indian Paradise-flycatcher	<i>Terpsiphone paradisi</i>	Monarchidae	LC	R			P
176	Brown Shrike	<i>Lanius cristatus</i>	Laniidae	LC	R	P	P	P
177	Red-backed Shrike	<i>Lanius collurio</i>	Laniidae	LC	R			P
178	Isabelline Shrike	<i>Lanius isabellinus</i>	Laniidae	LC	M			P
179	Long-tailed Shrike	<i>Lanius schach</i>	Laniidae	LC	R	P	P	P
180	Grey-backed Shrike	<i>Lanius tephronotus</i>	Laniidae	LC	M		P	P
181	Rufous Treepie	<i>Dendrocitta vagabunda</i>	Corvidae	LC	R	P	P	P
182	House Crow	<i>Corvus splendens</i>	Corvidae	LC	R	P	P	P
183	Large-billed Crow	<i>Corvus macrorhynchos</i>	Corvidae	LC	R	P	P	P
184	Grey-headed Canary-flycatcher	<i>Culicicapa ceylonensis</i>	Stenostiridae	LC	M			P
185	Rufous-tailed Lark	<i>Ammomanes phoenicurus</i>	Alaudidae	LC	R	P		P
186	Ashy-crowned Sparrow-lark	<i>Eremopterix griseus</i>	Alaudidae	LC	R	P	P	P
187	Bengal Bushlark	<i>Mirafra assamica</i>	Alaudidae	LC	R		P	P
188	Indian Bushlark	<i>Mirafra erythroptera</i>	Alaudidae	LC	R		P	P
189	Sand Lark	<i>Aldadala raytal</i>	Alaudidae	LC	R	P	P	P

Table 12. List of bird species reported during the AWC 2022, 2023 & 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	2022	2023	2024
190	Oriente Skylark	<i>Alauda gulgula</i>	Alaudidae	LC	R		P	P
191	Zitting Cisticola	<i>Cisticola juncidis</i>	Cisticolidae	LC	R	P	P	P
192	Golden -headed Cisticola	<i>Cisticola exilis</i>	Cisticolidae	LC	R		P	
193	Jungle Prinia	<i>Pirina sylvatica</i>	Cisticolidae	LC	R	P		
194	Ashy Prinia	<i>Prinia socialis</i>	Cisticolidae	LC	R	P	P	P
195	Plain Prinia	<i>Prinia inornata</i>	Cisticolidae	LC	R	P	P	P
196	Common Tailorbird	<i>Orthotomus sutorius</i>	Cisticolidae	LC	R	P	P	P
197	Blyth's Reed-warbler	<i>Acrocephalus dumetorum</i>	Acrocephalidae	LC	M	P	P	P
198	Paddyfield Warbler	<i>Acrocephalus agricola</i>	Acrocephalidae	LC	M		P	
199	Clamorous Reed-warbler	<i>Acrocephalus stentoreus</i>	Acrocephalidae	LC	M	P	P	P
200	Pallas's Grasshopper-warbler	<i>Helopsaltes certhiola</i>	Locustellidae	LC	M			P
201	Striated Grassbird	<i>Megalurus palustris</i>	Locustellidae	LC	R			P
202	Red-rumped Swallow	<i>Cecropis daurica</i>	Hirundinidae	LC	M		P	P
203	House Swallow	<i>Hirundo rustica</i>	Hirundinidae	LC	R		P	
204	Barn Swallow	<i>Hirundo rustica</i>	Hirundinidae	LC	M	P	P	P
205	Wire-tailed Swallow	<i>Hirundo smithii</i>	Hirundinidae	LC	M	P		P
206	Dusky Crag Martin	<i>Ptyonoprogne concolor</i>	Hirundinidae	LC	M	P	P	P
207	Asian Plain Martin	<i>Riparia chinensis</i>	Hirundinidae	LC	M			P
208	Sand Martin	<i>Riparia riparia</i>	Hirundinidae	LC	R	P		
209	Pale Sand Martin	<i>Riparia diluta</i>	Hirundinidae	LC	R		P	
210	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	Pycnonotidae	LC	R	P	P	P
211	Himalayan Bulbul	<i>Pycnonotus leucogenys</i>	Pycnonotidae	LC	R		P	
212	Red-vented Bulbul	<i>Pycnonotus cafer</i>	Pycnonotidae	LC	R	P	P	P
213	Dusky Warbler	<i>Phylloscopus fuscatus</i>	Phylloscopidae	LC	M		P	
214	Smoky Warbler	<i>Phylloscopus fulgivent</i>	Pycnonotidae	LC	M			P
215	Tickell's Leaf-warbler	<i>Phylloscopus affinis</i>	Phylloscopidae	LC	M			P
216	Greenish Warbler	<i>Phylloscopus trochiloides</i>	Phylloscopidae	LC	M	P		P

Table 12. List of bird species reported during the AWC 2022, 2023 & 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	2022	2023	2024
217	Lesser Whitethroat	<i>Curruca curruca</i>	Sylviidae	LC	R			P
218	Orphen Warbler	<i>Curruca hortensis</i>	Sylviidae	LC	LM/R	P		
219	Yellow-eyed Babbler	<i>Chrysomma sinense</i>	Paradoxornithidae	LC	R		P	
220	Indian White-eye	<i>Zosterops palpebrosus</i>	Zosteropidae	LC	R			P
221	Chestnut-capped Babbler	<i>Timalia pileata</i>	Timaliidae	LC	R		P	
222	Large Grey Babbler	<i>Argya malcolmi</i>	Leiotrichidae	LC	R			P
223	Jungle Babbler	<i>Argya striata</i>	Leiotrichidae	LC	R	P	P	P
224	Striated Babbler	<i>Argya earlei</i>	Leiotrichidae	LC	R		P	P
225	Rosy Starling	<i>Pastor roseus</i>	Sturnidae	LC	M	P		
226	Indian Pied Starling	<i>Gracupica contra</i>	Sturnidae	LC	R	P	P	P
227	Brahminy Starling	<i>Sturnia pagodarum</i>	Sturnidae	LC	R	P	P	P
228	Chestnut-tailed Starling	<i>Sturnia malabarica</i>	Sturnidae	LC	M	P	P	P
229	Common Starling	<i>Sturnus vulgaris</i>	Sturnidae	LC	M	P		
230	Common Myna	<i>Acridotheres tristis</i>	Sturnidae	LC	R	P	P	P
231	Bank Myna	<i>Acridotheres ginginianus</i>	Sturnidae	LC	R	P	P	P
232	Jungle Myna	<i>Acridotheres fuscus</i>	Sturnidae	LC	R		P	
233	Oriental Magpie-robin	<i>Copsychus saularis</i>	Muscicapidae	LC	R	P	P	P
234	Indian Robin	<i>Copsychus fulicatus</i>	Muscicapidae	LC	R	P	P	P
235	Asian Brown Flycatcher	<i>Muscicapa dauurica</i>	Muscicapidae	LC	R		P	
236	Bluethroat	<i>Luscinia svecica</i>	Muscicapidae	LC	R	P	P	P
237	Red-throated Flycatcher	<i>Ficedula albicilla</i>	Muscicapidae	LC	M	P		P
238	Red-breasted Flycatcher	<i>Ficedula parva</i>	Muscicapidae	LC	M	P		
239	White-capped Water-redstart	<i>Phoenicurus leucocephalus</i>	Muscicapidae	LC	R		P	
240	Black Redstart	<i>Phoenicurus ochruros</i>	Muscicapidae	LC	M	P	P	P
241	Blue Rock Thrush	<i>Monticola solitarius</i>	Muscicapidae	LC	R		P	
242	Grey Bushchat	<i>Saxicola ferreus</i>	Muscicapidae	LC	R			P
243	Pied Bushchat	<i>Saxicola caprata</i>	Muscicapidae	LC	R	P	P	P

Table 12. List of bird species reported during the AWC 2022, 2023 & 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	2022	2023	2024
244	White-tailed Stonechat	<i>Saxicola leucurus</i>	Muscicapidae	LC	M			P
245	Common Stonechat	<i>Saxicola torquatus</i>	Muscicapidae	LC	M	P	P	P
246	Brown Rockchat	<i>Oenanthe fusca</i>	Muscicapidae	LC	M	P	P	P
247	Purple Sunbird	<i>Cinnyris asiaticus</i>	Nectariniidae	LC	R	P	P	P
248	Black-breasted Weaver	<i>Ploceus benghalensis</i>	Ploceidae	LC	R		P	
249	Baya Weaver	<i>Ploceus philippinus</i>	Ploceidae	LC	R	P		
250	Red Avadavat	<i>Amandava amandava</i>	Estrildidae	LC	M		P	P
251	Indian Silverbill	<i>Euodice malabarica</i>	Estrildidae	LC	R	P	P	P
252	Scaly-breasted Munia	<i>Lonchura punctulata</i>	Estrildidae	LC	R		P	P
253	Chestnut Munia	<i>Lonchura atricapilla</i>	Estrildidae	LC	R			P
254	House Sparrow	<i>Passer domesticus</i>	Passeridae	LC	R	P	P	P
255	Yellow Throated Sparrow	<i>Petronia xanthocollis</i>	Passeridae	LC	R	P		
256	Tree Pipit	<i>Anthus trivialis</i>	Motacillidae	LC	R			P
257	Olive-backed Pipit	<i>Anthus hodgsoni</i>	Motacillidae	LC	M			P
258	Rosy Pipit	<i>Anthus roseatus</i>	Motacillidae	LC	M	P	P	P
259	Richard Pipit	<i>Anthus richardi</i>	Motacillidae	LC	M		P	
260	Paddyfield Pipit	<i>Anthus rufulus</i>	Motacillidae	LC	R	P	P	P
261	Tawny Pipit	<i>Anthus campestris</i>	Motacillidae	LC	M	P		P
262	Grey Wagtail	<i>Motacilla cinerea</i>	Motacillidae	LC	M	P	P	P
263	Citrine Wagtail	<i>Motacilla citreola</i>	Motacillidae	LC	M	P	P	P
264	Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	Motacillidae	LC	M	P	P	P
265	White-browed Wagtail	<i>Motacilla maderaspatensis</i>	Motacillidae	LC	R	P	P	P
266	White Wagtail	<i>Motacilla alba</i>	Motacillidae	LC	R	P	P	P
267	Crested Bunting	<i>Emberiza lathami</i>	Emberizidae	LC	M	P		P

Note:

EN: Endangered; VU: Vulnerable; NT: Near Threatened; LC: Least Concern

M: Long-distance migrants; LM/R: Local migrants; R: Resident bird

WB: Waterbird; LB: Landbird; WD: Wetland dependent bird

CHAPTER 10

STATUS OF GLOBALLY THREATENED AND NEAR-THREATENED SPECIES

During AWC 2024, a total of 19 globally Threatened and Near Threatened species were recorded, consisting of two globally threatened endangered, five vulnerable, and 12 Near-Threatened species. Globally threatened and Near-Threatened species collectively represented 3.98% of the overall bird population reported during AWC 2024. Out of the 19 Threatened and Near Threatened bird species recorded, six were long-distance migrants, one was local migrants, and 12 were resident species (Table 13). Among these, the Black-tailed Godwit *Limosa limosa* and Egyptian Vulture *Neophron percnopterus* were reported for the first time during the AWCs that have been conducted in Bihar since 2022.

In AWC 2023 and 2022, a total of 21 and 20 Threatened and Near Threatened species were reported respectively. Steppe Eagle *Aquila nipalensis* and Alexandrine Parakeet *Palaeornis eupatria* which were reported in the past two AWCs (2023 and 2022) were not reported in 2024. Also, Himalayan Griffon *Gyps himalayensis* which was recorded in AWC 2022 was not recorded afterwards in AWC 2023 & 2024.

As far as numbers of threatened and Near-Threatened species are concerned, a total of 3,195 individuals of 19 species were reported in AWC 2024 (Figure 8a & b). Of these, 71 individuals of two endangered species namely Greater Adjutant *Leptoptilos dubius* and Egyptian Vulture *Neophron percnopterus* were reported from six districts. A total of 535 individuals of five vulnerable species and 2,589 individuals of 12 Near-Threatened species were reported during AWC 2024. The vulnerable species were reported from 15 districts of Bihar (Annexure 15).

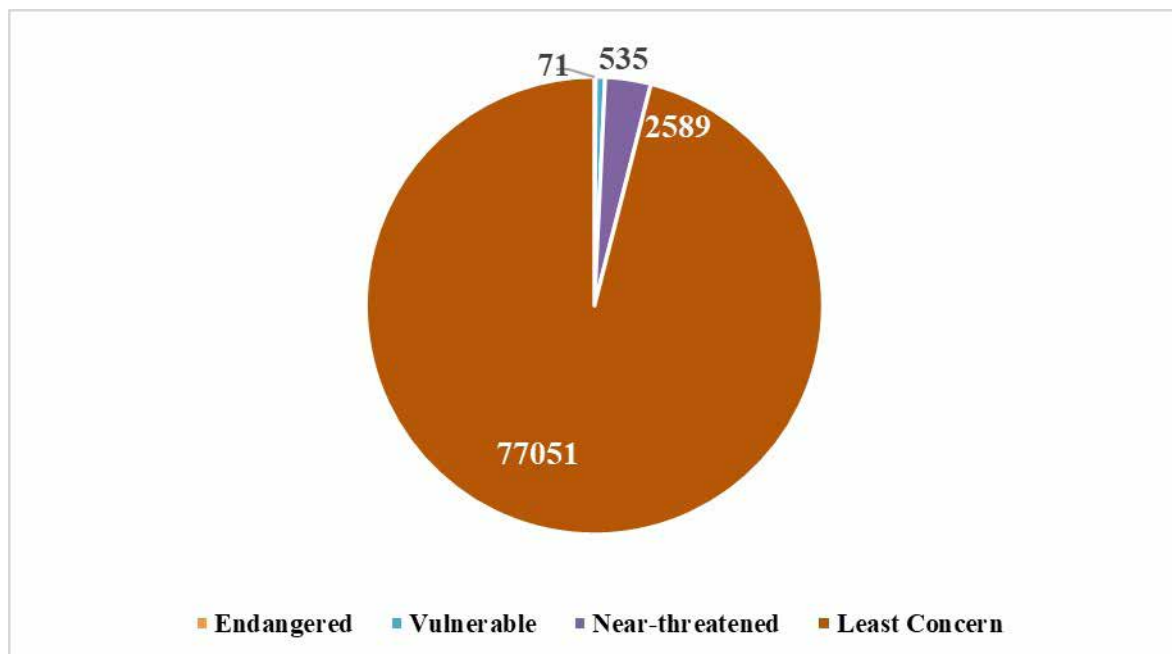


Figure 8a. Number of Threatened and Near Threatened birds recorded during the AWC 2024

Table 13: Details of Threatened and Near Threatened species reported during AWC 2024

SI No.	Common Name	Scientific Name	Family	IUCN Status	Migratory Status	Category	No. of birds		
							2024	2023	2022
1	Greater Adjutant	<i>Leptoptilos dubius</i>	Ciconiidae	EN	R	WB	69	62	2
2	Egyptian Vulture	<i>Neophron percnopterus</i>	Accipitridae	EN	LM/R	LB	2	NR	NR
3	Steppe Eagle	<i>Aquila nipalensis</i>	Accipitridae	EN	M	WD	NR	2	NR
4	Common Pochard	<i>Aythya ferina</i>	Anatidae	VU	M	WB	384	412	218
5	Sarus Crane	<i>Grus antigone</i>	Gruidae	VU	LM/R	WB	NR	2	2
6	Lesser Adjutant	<i>Leptoptilos javanicus</i>	Ciconiidae	VU	R	WB	133	162	55
7	River Tern	<i>Sterna aurantia</i>	Laridae	VU	R	WB	13	22	21
8	Greater Spotted Eagle	<i>Clanga clanga</i>	Accipitridae	VU	R	WD	4	4	4
9	Indian Spotted Eagle	<i>Aquila hastata</i>	Accipitridae	VU	M	WD	NR	NR	1
10	Tawny Eagle	<i>Aquila rapax</i>	Accipitridae	VU	M	WD	NR	NR	1
11	Black-capped Kingfisher	<i>Halcyon pileata</i>	Alcedinidae	VU	R	WD	1	1	1
12	Ferruginous Duck	<i>Aythya nyroca</i>	Anatidae	NT	M	WB	844	877	NR
13	Falcated Duck	<i>Mareca falcata</i>	Anatidae	NT	M	WB	4	5	2
14	Painted Stork	<i>Mycteria leucocephala</i>	Ciconiidae	NT	R	WB	130	170	35
15	Asian Woollyneck	<i>Ciconia episcopus</i>	Ciconiidae	NT	R	WB	58	29	35
16	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	Ciconiidae	NT	R	WB	12	9	3
17	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	Threskiornithidae	NT	R	WB	891	480	123
18	Oriental Darter	<i>Anhinga melanogaster</i>	Anhingidae	NT	R	WB	24	29	48
19	Northern Lapwing	<i>Vanellus vanellus</i>	Charadriidae	NT	M	WB	58	63	54
20	River Lapwing	<i>Vanellus duvaucelii</i>	Charadriidae	NT	R	WB	272	105	20
21	Eurasian Curlew	<i>Numenius arquata</i>	Scolopacidae	NT	M	WB	145	19	7
22	Black-tailed Godwit	<i>Limosa limosa</i>	Scolopacidae	NT	M	WB	150	NR	NR
23	Himalayan Griffon	<i>Gyps himalayensis</i>	Accipitridae	NT	R	LB	1	NR	19
24	Alexandrine Parakeet	<i>Palaeornis eupatria</i>	Psittacidae	NT	R	LB	NR	3	4
25	Red-breasted Parakeet	<i>Psittacula alexandri</i>	Psittacidae	NT	M	LB	NR	1	NR
					Total		3,195	4,480	2,677

Note:

EN: Endangered; VU: Vulnerable; NT: Near Threatened; M: long-distance migrants; LM/R: local migrants; R: Resident bird; WB: Waterbird; LB: Landbird; WD: Wetland-dependent bird; NR: Not Recorded

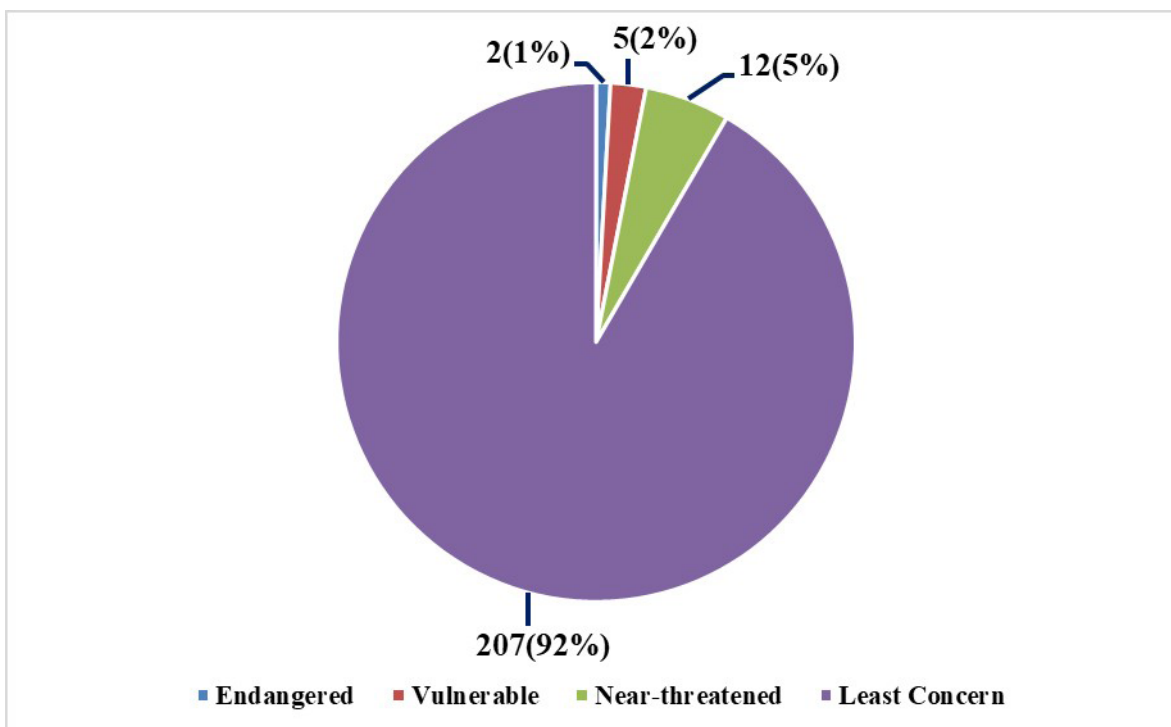


Figure 8b. Status of Threatened and Near Threatened bird species recorded during the AWC 2024

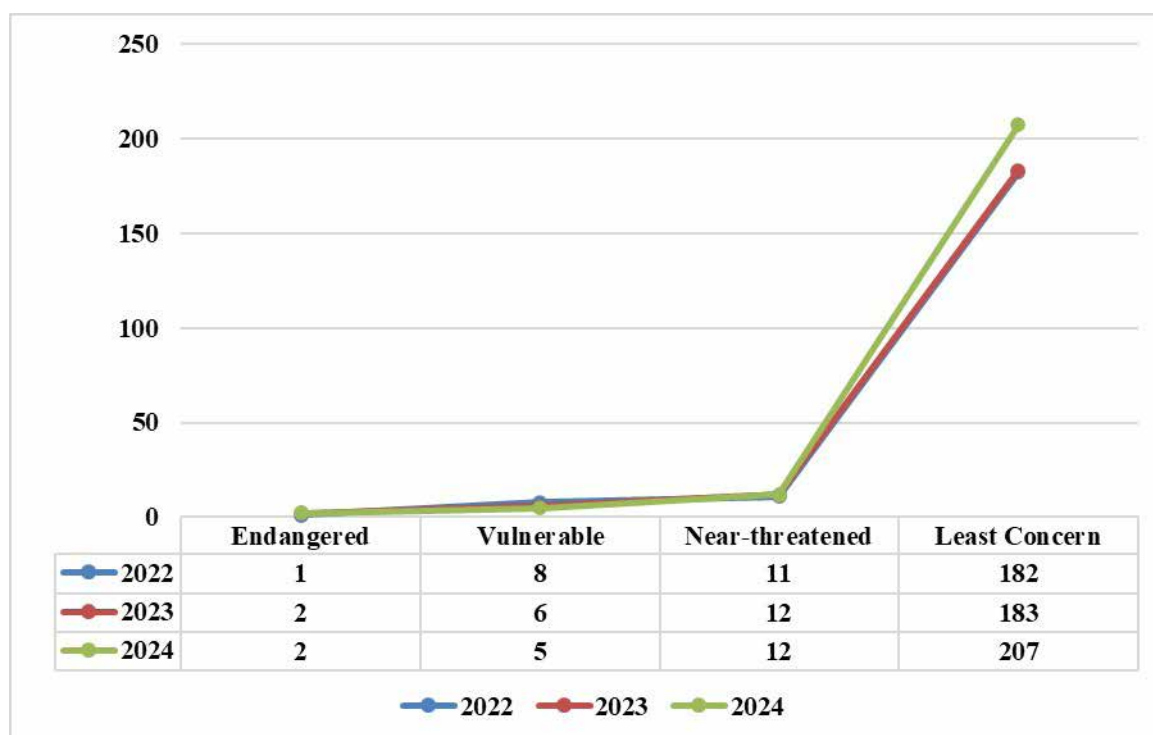


Figure 8c. Status of Threatened and Near Threatened bird species recorded during the AWC 2024, 2023 & 2022

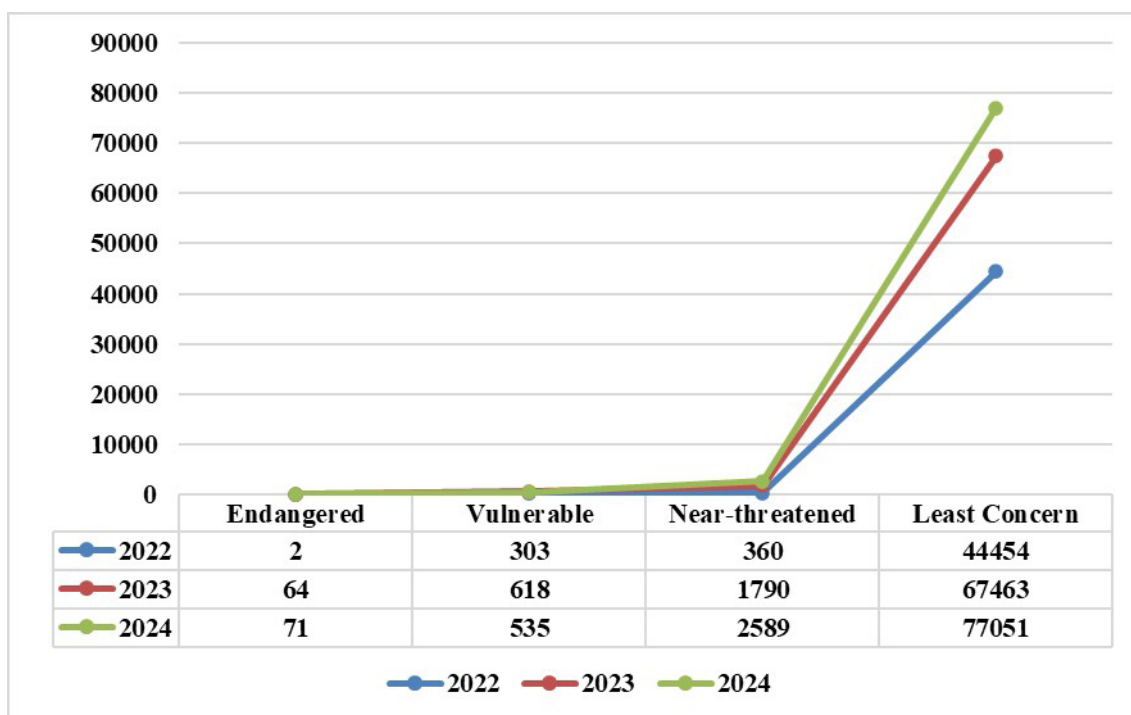


Figure 8d. Number of Threatened and Near Threatened birds recorded during the AWC 2024, 2023 & 2022

CHAPTER 11

STATUS OF THE SPECIES PRIORITIZED IN THE INDIA'S NATIONAL ACTION PLAN IN BIHAR BASED ON AWC

In India's National Action Plan for the Conservation of Migratory Birds and their Habitats along the Central Asian Flyway (2018–2023), twenty species have been prioritized for the Species Action Plan. Of them, seven species were recorded during AWC 2024 which includes two ducks and five wader species. The status of species prioritized in India's National Action Plan reported during the AWC 2022 to 2024 are given in the table 14. The populations of four species Common Pochard *Aythya ferina*, Ferruginous Duck *Aythya nyroca*, Eurasian Curlew *Numenius arquata* and Little Stint *Calidris minuta* have been reported in all the three years but their numbers fluctuate between the years. It is noteworthy to mention it here that the remaining three species Lesser Sandplover *Charadrius mongolus*, Black-tailed Godwit *Limosa limosa* and Curlew Sandpiper *Calidris ferruginea* were reported first time in 2024.

Table 14- Status of the species prioritized in the India's National Action Plan in Bihar based on AWCs

Sl. No.	Common Name	Scientific Name	2024	2023	2022
1	Common Pochard	<i>Aythya ferina</i>	384	449	218
2	Ferruginous Duck	<i>Aythya nyroca</i>	841	646	130
3	Lesser Sandplover	<i>Charadrius mongolus</i>	2	NR	NR
4	Eurasian Curlew	<i>Numenius arquata</i>	145	21	7
5	Black-tailed Godwit	<i>Limosa limosa</i>	150	NR	NR
6	Curlew Sandpiper	<i>Calidris ferruginea</i>	26	NR	NR
7	Little Stint	<i>Calidris minuta</i>	359	407	49

Note: NR- Not Reported

CHAPTER 12

STATUS OF SPECIES IN THE CAF CONSERVATION CONCERN LIST

Out of the 226 species reported during the AWC 2024, 63 species belonging to 13 families were listed under the Central Asian Flyway (CAF) conservation concern. Of these, the Greater Adjutant *Leptoptilos dubius* was Endangered species, two species Common Pochard *Aythya farina* and Lesser Adjutant *Leptoptilos javanicus* were Vulnerable, and six were Near Threatened (Table 15).

A total of 56,525 individuals from 63 species listed under the CAF conservation concern were reported from 84 wetlands in 28 districts of Bihar during the AWC 2024. Of them, 39,271 individuals (69.48%) of birds listed under CAF conservation concern were reported from 14 wetlands (Figure 9a). The highest count was recorded at Ghatora (9,826 individuals), followed by Gogabeel (6,124 individuals). Similarly, over 20 species of the birds listed under the CAF Conservation Concerns were reported from 16 wetlands, and a maximum of 30 species of each were reported from Indrapuri Barrage and VGDS (Barari to Bateshwar Asthan) (Figure 9b).

Table 15: Status of species listed under the Central Asian Flyway conservation concern

Sl. No.	English name	Scientific name	Family	IUCN Status	No. of Birds
1	Fulvous Whistling-duck	<i>Dendrocygna bicolor</i>	Anatidae	LC	162
2	Lesser Whistling-duck	<i>Dendrocygna javanica</i>	Anatidae	LC	8,683
3	Bar-headed Goose	<i>Anser indicus</i>	Anatidae	LC	1,260
4	Greylag Goose	<i>Anser anser</i>	Anatidae	LC	1,322
5	Common Shelduck	<i>Tadorna tadorna</i>	Anatidae	LC	3
6	Ruddy Shelduck	<i>Tadorna ferruginea</i>	Anatidae	LC	1,206
7	Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	Anatidae	LC	245
8	Red-crested Pochard	<i>Netta rufina</i>	Anatidae	LC	12,301
9	Common Pochard	<i>Aythya ferina</i>	Anatidae	VU	384
10	Ferruginous Duck	<i>Aythya nyroca</i>	Anatidae	NT	844
11	Tufted Duck	<i>Aythya fuligula</i>	Anatidae	LC	462
12	Garganey	<i>Spatula querquedula</i>	Anatidae	LC	1,251
13	Northern Shoveler	<i>Spatula clypeata</i>	Anatidae	LC	329
14	Falcated Duck	<i>Mareca falcata</i>	Anatidae	NT	4
15	Gadwall	<i>Mareca strepera</i>	Anatidae	LC	5,274
16	Eurasian Wigeon	<i>Mareca penelope</i>	Anatidae	LC	486
17	Northern Pintail	<i>Anas acuta</i>	Anatidae	LC	3,182
18	Little Grebe	<i>Tachybaptus ruficollis</i>	Podicipedidae	LC	686
19	Great Crested Grebe	<i>Podiceps cristatus</i>	Podicipedidae	LC	364
20	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	Rallidae	LC	71
21	Common Moorhen	<i>Gallinula chloropus</i>	Rallidae	LC	1,167
22	Common Coot	<i>Fulica atra</i>	Rallidae	LC	2,266
23	Greater Adjutant	<i>Leptoptilos dubius</i>	Ciconiidae	EN	69
24	Lesser Adjutant	<i>Leptoptilos javanicus</i>	Ciconiidae	VU	133
25	Asian Openbill	<i>Anastomus oscitans</i>	Ciconiidae	LC	5,601
26	Black Stork	<i>Ciconia nigra</i>	Ciconiidae	LC	18
27	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	Threskiornithidae	NT	891

Table 15: Status of species listed under the Central Asian Flyway conservation concern (contd.)

Sl. No.	English name	Scientific name	Family	IUCN Status	No. of Birds
28	Glossy Ibis	<i>Plegadis falcinellus</i>	Threskiornithidae	LC	2
29	Eurasian Spoonbill	<i>Platalea leucorodia</i>	Threskiornithidae	LC	2
30	Black Bittern	<i>Ixobrychus flavicollis</i>	Ardeidae	LC	7
31	Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	Ardeidae	LC	44
32	Cattle Egret	<i>Bubulcus ibis</i>	Ardeidae	LC	836
33	Grey Heron	<i>Ardea cinerea</i>	Ardeidae	LC	555
34	Purple Heron	<i>Ardea purpurea</i>	Ardeidae	LC	114
35	Great White Egret	<i>Ardea alba</i>	Ardeidae	LC	183
36	Little Egret	<i>Egretta garzetta</i>	Ardeidae	LC	1,200
37	Great Cormorant	<i>Phalacrocorax carbo</i>	Phalacrocoracidae	LC	835
38	Pied Avocet	<i>Recurvirostra avosetta</i>	Recurvirostridae	LC	73
39	Black-winged Stilt	<i>Himantopus himantopus</i>	Recurvirostridae	LC	290
40	Pacific Golden Plover	<i>Pluvialis fulva</i>	Charadriidae	LC	71
41	Little Ringed Plover	<i>Charadrius dubius</i>	Charadriidae	LC	406
42	Kentish Plover	<i>Charadrius alexandrinus</i>	Charadriidae	LC	71
43	Lesser Sandplover	<i>Charadrius mongolus</i>	Charadriidae	LC	2
44	Northern Lapwing	<i>Vanellus vanellus</i>	Charadriidae	NT	58
45	Grey-headed Lapwing	<i>Vanellus cinereus</i>	Charadriidae	LC	306
46	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	Jacanidae	LC	214
47	Whimbrel	<i>Numenius phaeopus</i>	Scolopacidae	LC	7
48	Eurasian Curlew	<i>Numenius arquata</i>	Scolopacidae	NT	145
49	Black-tailed Godwit	<i>Limosa limosa</i>	Scolopacidae	NT	150
50	Curlew Sandpiper	<i>Calidris ferruginea</i>	Scolopacidae	LC	26
51	Temminck's Stint	<i>Calidris temminckii</i>	Scolopacidae	LC	305
52	Dunlin	<i>Calidris alpina</i>	Scolopacidae	LC	11
53	Little Stint	<i>Calidris minuta</i>	Scolopacidae	LC	359
54	Pintail Snipe	<i>Gallinago stenura</i>	Scolopacidae	LC	6
55	Common Snipe	<i>Gallinago gallinago</i>	Scolopacidae	LC	175
56	Green Sandpiper	<i>Tringa ochropus</i>	Scolopacidae	LC	110
57	Spotted Redshank	<i>Tringa erythropus</i>	Scolopacidae	LC	40
58	Common Greenshank	<i>Tringa nebularia</i>	Scolopacidae	LC	357
59	Common Redshank	<i>Tringa totanus</i>	Scolopacidae	LC	751
60	Wood Sandpiper	<i>Tringa glareola</i>	Scolopacidae	LC	93
61	Marsh Sandpiper	<i>Tringa stagnatilis</i>	Scolopacidae	LC	17
62	Brown-headed Gull	<i>Larus brunnicephalus</i>	Laridae	LC	34
63	Lesser Black-backed Gull	<i>Larus fuscus</i>	Laridae	LC	6
			Total		56,525

Note:

EN: Endangered; VU: Vulnerable; NT: Near Threatened; LC: Least Concern

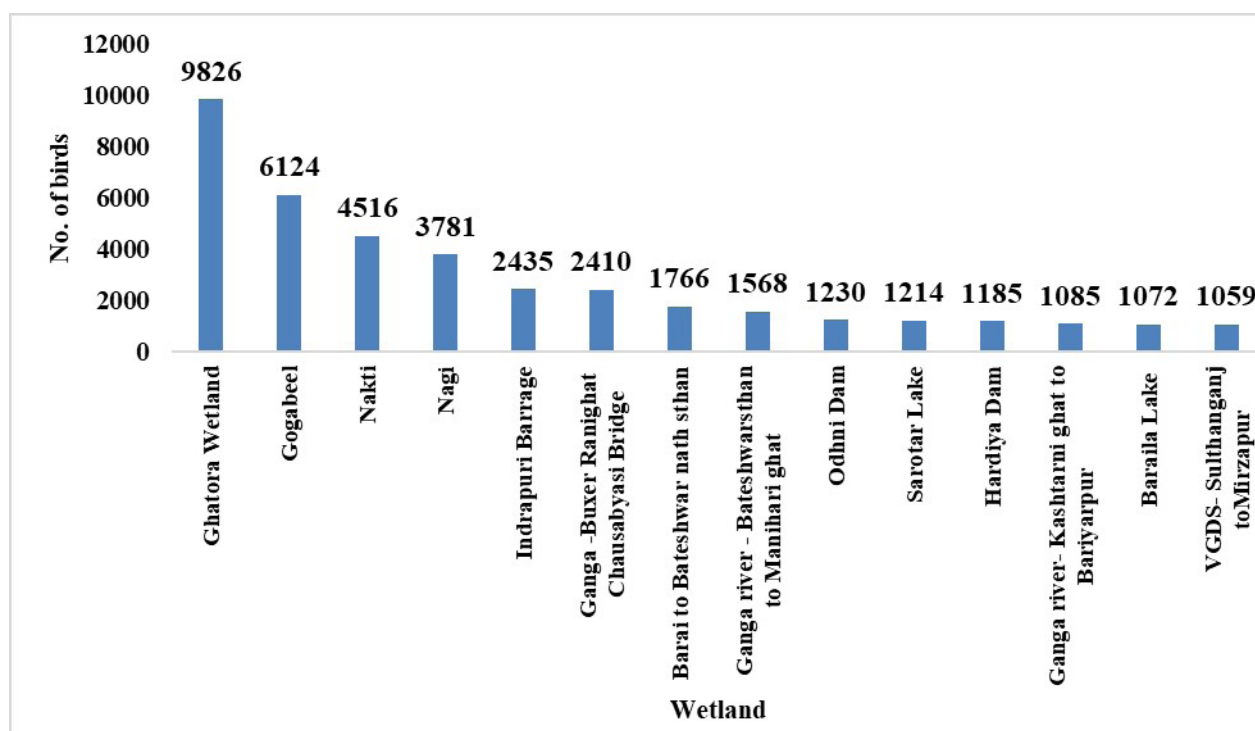


Figure 9a. Details of 14 wetlands with the highest number of species listed under CAF conservation concern reported during AWC 2024

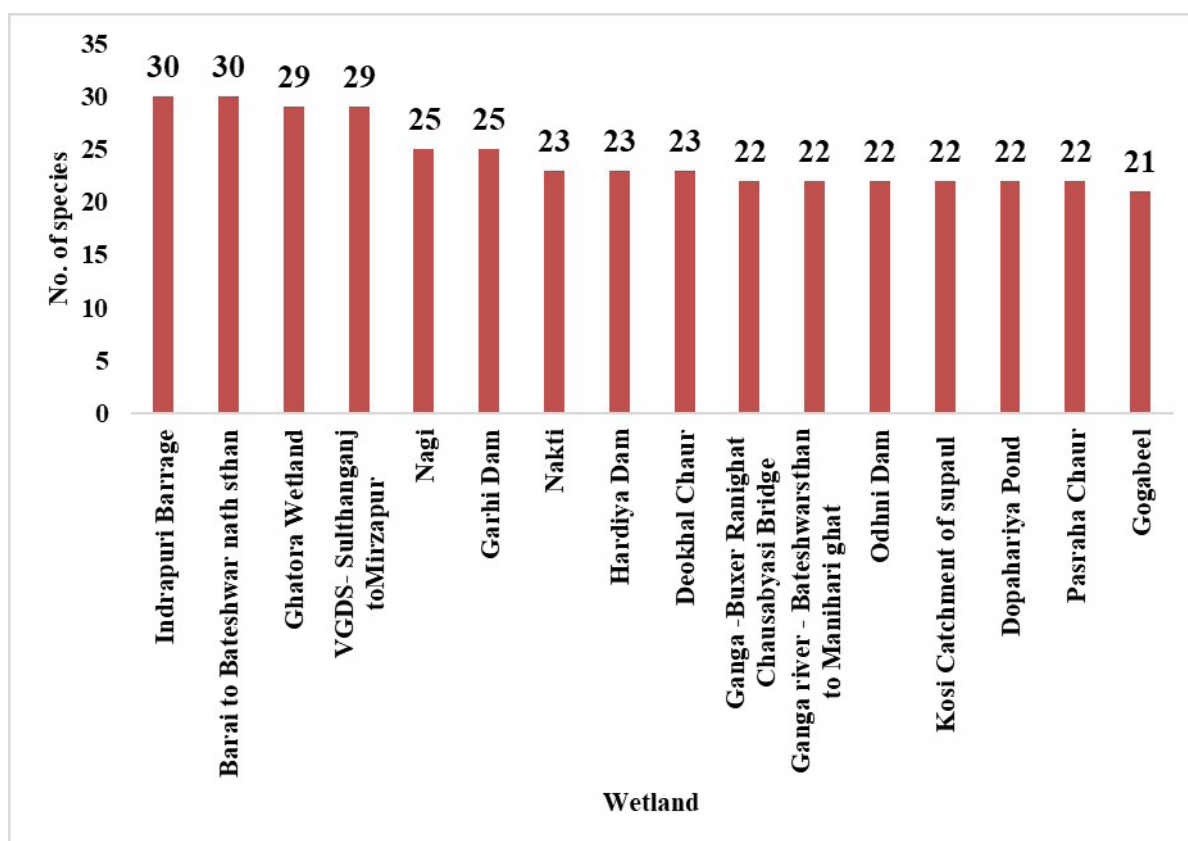


Figure 9b. Details of 16 wetlands in which the highest number of species (more than 20) listed under the CAF conservation concern were reported during AWC 2024

CHAPTER 13

DISTRICT-LEVEL ENUMERATION

During AWC 2024, 15 new wetlands were surveyed which were not covered in 2022 & 2023. At the same time, nine wetlands that were covered during 2023 were excluded during 2024 as they were not potential bird sites. Overall, 84 wetlands from 28 districts were surveyed in 2024, with the addition of Bhojpur and Kishanganj districts from that of AWC 2023.

The number of wetlands covered varied in each district. A maximum of ten wetlands were covered in Bhagalpur District followed by nine wetlands in Jamui District during the AWC 2024. One wetland was covered from nine districts. (Table 16).

Table 16: Number of wetlands covered during AWC 2022, 2023 & 2024

Sl. No.	District	Number of wetlands covered		
		2022	2023	2024
1.	Aurangabad	NC	1	2
2.	Araria	1	1	1
3.	Banka	1	1	1
4.	Begusarai	2	1	2
5.	Bhagalpur	6	9	10
6.	Bhojpur	1	3	3
7.	Buxar	NC	NC	2
8.	Darbhanga	2	1	2
9.	East Champaran	2	5	6
10.	Gaya	4	2	2
11.	Jamui	7	8	9
12.	Kaimur	3	1	3
13.	Katihar	3	5	6
14.	Khagaria	NC	1	1
15.	Kishanganj	NC	NC	1
16.	Madhubani	1	1	1
17.	Munger	2	1	1
18.	Muzaffarpur	7	4	3
19.	Nalanda	4	6	6
20.	Nawada	3	1	1
21.	Patna	2	1	2
22.	Saharsa	4	5	3
23.	Samastipur	3	4	1
24.	Saran	2	4	4
25.	Sheohar	NC	1	1
26.	Supaul	1	2	2
27.	Vaishali	2	5	4
28.	West Champaran	5	4	4
Total		68	78	84

Note: NC: Not Covered

The bird species reported during AWC 2024 were categorized into waterbirds, wetland-dependent birds, and land birds. While all three categories were documented, the primary emphasis was given to reporting the waterbirds. Therefore, the efforts to count the other two categories of birds were not equal, leading to an under-representation of wetland-dependent and land birds during the AWC 2024.

During the AWC 2024, a total of 80,246 individuals were recorded. Of them, 89.02% were waterbirds, 1.45%, were wetland-dependent birds and 9.51% were land birds (Table 17).

Table 17. Categories-wise number of birds recorded from each district during AWC 2024

Sl. No.	District	Number of individuals			Total No. of Birds
		Waterbird	Wetland-dependent bird	Land bird	
1.	Aurangabad	2,490	14	37	2,541
2.	Araria	763	35	140	938
3.	Banka	1,391	13	15	1,419
4.	Begusarai	299	89	48	436
5.	Bhagalpur	17,571	128	909	18,608
6.	Bhojpur	1,368	57	428	1,853
7.	Buxar	5,045	148	1,460	6,653
8.	Darbhanga	214	34	395	643
9.	East Champaran	2,753	120	1,178	4,051
10.	Gaya	246	4	72	322
11.	Jamui	12,965	32	385	13,382
12.	Kaimur	124	18	433	575
13.	Katihar	11,163	75	450	11,688
14.	Khagaria	836	13	18	867
15.	Kishanganj	743	35	26	804
16.	Madhubani	472	7	1	480
17.	Munger	1,507	4	85	1,596
18.	Muzaffarpur	131	15	16	162
19.	Nalanda	2,337	42	372	2,751
20.	Nawada	1,358	4	60	1,422
21.	Patna	1,861	32	-	1,893
22.	Saharsa	274	31	1	306
23.	Samastipur	458	22	271	751
24.	Saran	542	54	2	598
25.	Sheohar	294	49	409	752
26.	Supaul	1,326	36	299	1,661
27.	Vaishali	1,435	31	80	1,546
28.	West Champaran	1,470	34	44	1,548
	Total	71,436	1,176	7,634	80,246

A. Total number of Waterbirds

A total of 71,436 waterbirds of 90 species belonging to 16 families were counted from 28 districts of Bihar during the AWC 2024. Of them, 84.45% (57,692) of birds were counted from nine districts. They are further categorized as follows:

- ❖ Over 58.37% (41,699) of waterbirds reported during AWC 2024 were from three districts namely Bhagalpur (17,571), Jamui (12,965), and Katihar (11,163).
- ❖ 10.91% (7,798) of waterbirds were reported from two districts namely Buxar (5,045) and East Champaran (2,753).
- ❖ 7.98% (7,705) of waterbirds were reported from four districts, namely Aurangabad (2,490), Nalanda (2,337), Patna (1,861) and Munger (1,507).

During the AWC 2024, the highest number of waterbirds was recorded in Bhagalpur District. A total of 17,571 birds of 58 species belonging to 16 families were reported from this district (Figure 10a). The lowest number of waterbirds was recorded in Muzaffarpur district (162 individuals).

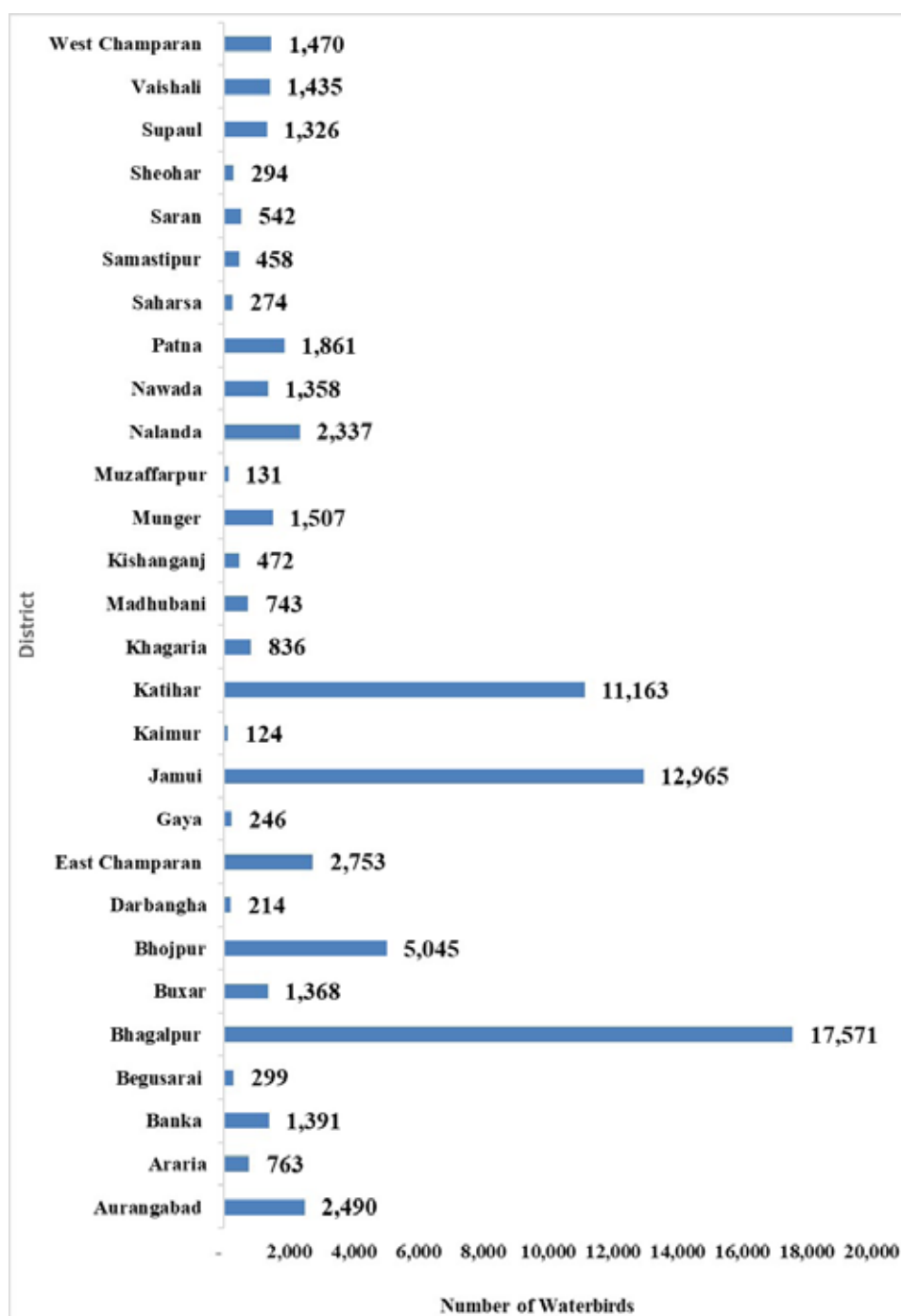


Figure 10a: Details of district-wise number of waterbirds reported during the AWC 2024

B. Wetland-dependent birds

A total of 1,152 wetland-dependent birds were counted from 28 districts of Bihar. The highest number of wetland-dependent birds was recorded in Buxar (N= 148 individuals) followed by East Champaran (N= 129 individuals) and Bhagalpur (N= 128 individuals) districts. The lowest number of wetland-dependent birds, only four individuals were recorded each from, Munger, Nawada and Gaya districts (Figure 10b).

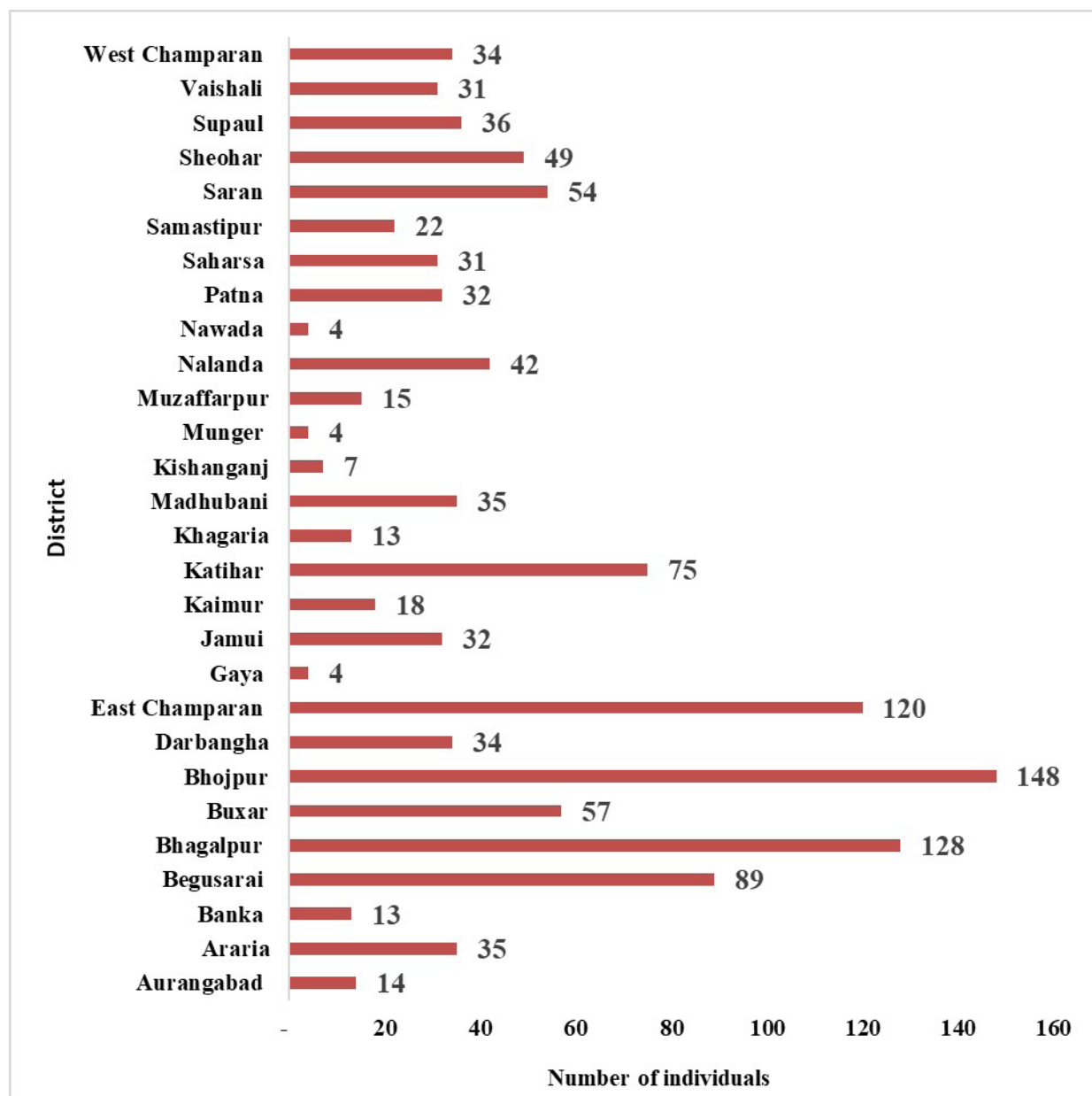


Figure 10b. Details of district-wise number of wetland-dependent birds reported during the AWC 2024

C. Land birds

During the AWC 2024, a total of 7,634 land birds were observed from 28 districts in Bihar. The highest number of land birds was reported from Buxar District, with 1,460 individuals, East Champaran district ranked second with 1,178 individuals of land birds and Bhagalpur stood third with 909 individuals of land birds. Notably, no land birds were documented in Patna, where the team focused solely counting on waterbirds (Figure 10c).

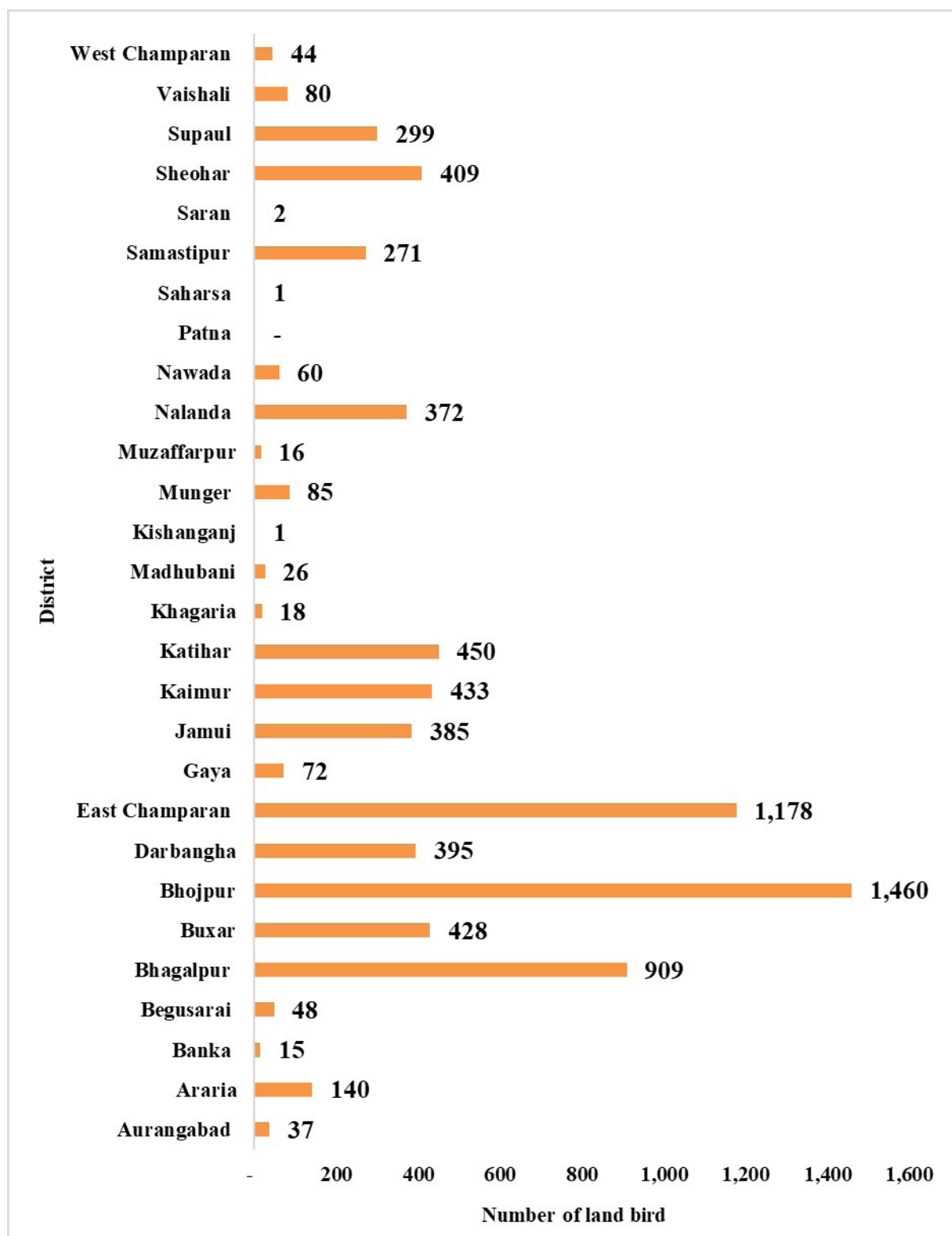


Figure 10c: Details of district-wise the number of land birds reported during AWC 2024

CHAPTER 14

POST-CENSUS

To understand the role played by the wetlands in Bihar for migratory birds, it was decided to conduct a post-census in April 2024. In this regard, a meeting was organized with all census coordinators, and detailed discussions were held to plan and conduct the post-census. As concluded in the meeting, four coordinators and their teams conducted the post-census from 1st to 10th April 2024.

A. Wetlands covered for the post census

It was decided in the meeting that the post-census would be conducted in nine wetlands where more than 2000 birds and over 10 migratory species were recorded during the AWC 2024. During the post-census, it was decided to include three more wetlands that had potential. Therefore, the post-census was conducted in 12 wetlands from five districts of Bihar. It included five sites along the river Ganges. Four reservoirs and three freshwater lakes. The details are given in the Table 18.

Table 18. Details of the wetlands covered during the post-census, 2024

Sl. No.	District	Sl. No.	Wetland	Protection Status	Wetland Type
1	Aurangabad	1	Indrapuri Barrage	Non-Protected Area	Reservoir or Barrages
2	Bhagalpur	2	Ghatora Wetland	Non-Protected Area	Lake
		3	VGDS- Sultanganj to Mirzapur	Protected Area	River
		4	VGDS- Mirzapur to Barari	Protected Area	River
		5	VGDS- Barai to Bateshwar nath sthan	Protected Area	River
3	Buxar	6	Ganga -Buxar Ranighat Chausabyasi Bridge	Non-Protected Area	River
		7	Gokul Jalashya	Non-Protected Area	Lake
4	Jamui	8	Nagi Dam	Protected Area	Reservoir or Barrages
		9	Nakti Dam	Protected Area	Reservoir or Barrages
		10	Garhi Dam	Non-Protected Area	Reservoir or Barrages
5	Katihar	11	Gogabeel Lake	Protected Area	Lake
		12	Ganga river - Bateshwarsthan to Manihari ghat	Non-Protected Area	River

a. Bird abundance and richness

During the post-census, a total of 24,554 individuals of 145 species belonging to 50 families were reported from 12 wetlands. Of them, 4,933 individuals of 39 species were migratory, 15,025 individuals of 30 species were local migratory, and 4,596 individuals of 76 species were resident (Figure 11 a & b).

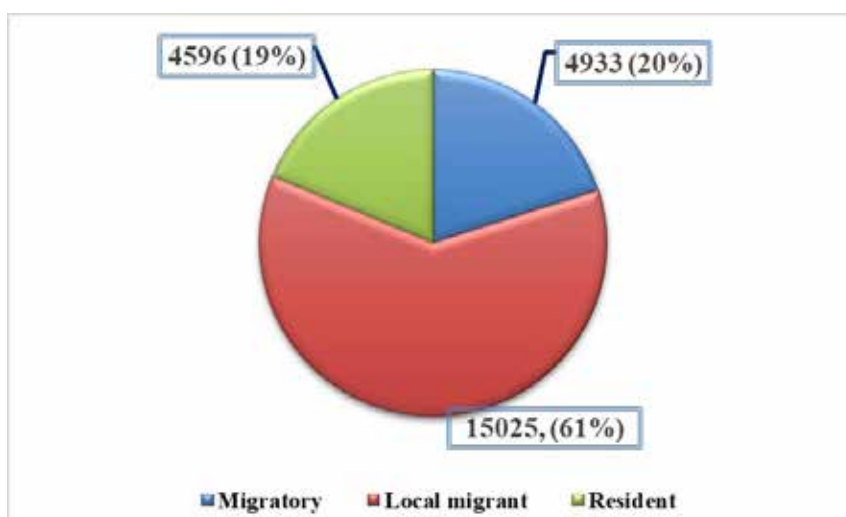


Figure 11a. Number of long-distance, local migratory, and resident birds reported during post-census

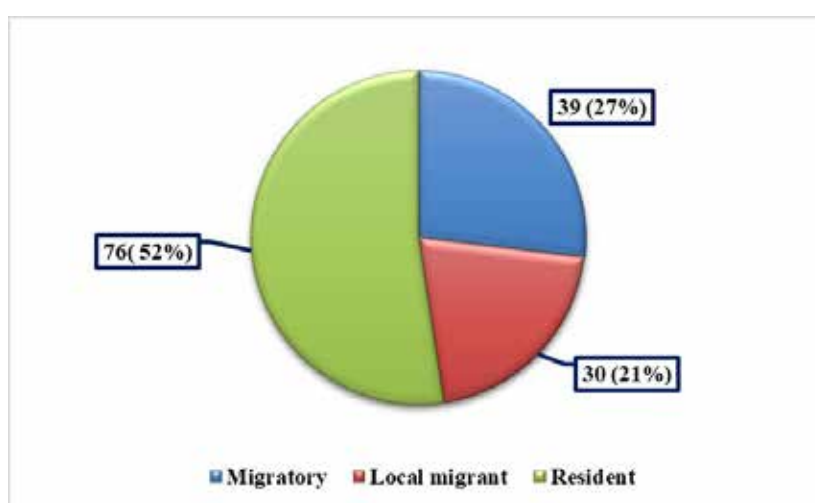


Figure 11b. Number of long-distance, local migratory, and resident species reported during post-census of AWC 2024

The highest number of individuals were reported from the Ganga River- Ranighat Chausabyasi Bridge (N=6,271 individuals) followed by VGDS Barai to Bateshwar nath sthan (N=3,342 individuals). The maximum number of species was also reported from the Ganga River- Ranighat Chausabyasi Bridge (N=63 species) followed by Gokul Jalashya (N=58 species) (Figure 11c & d).

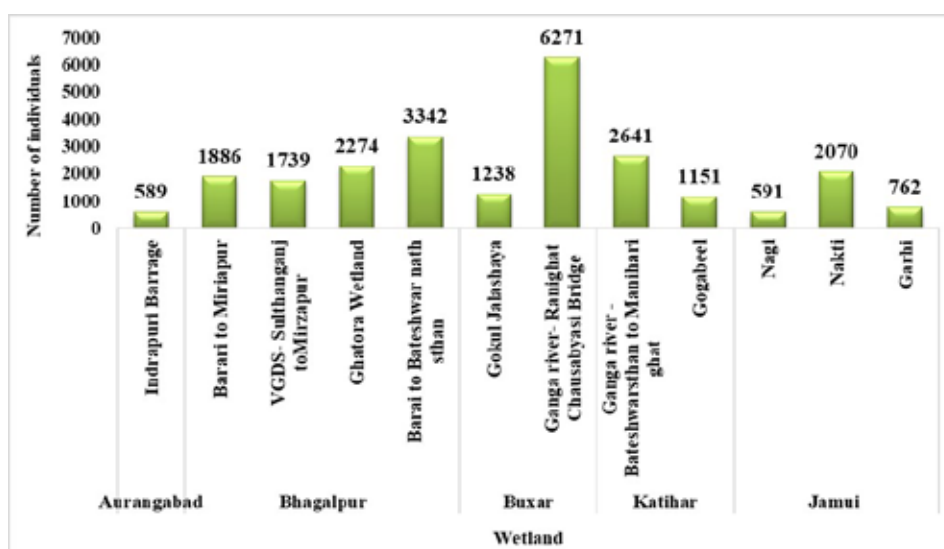


Figure 11c. Number of birds reported during post-census

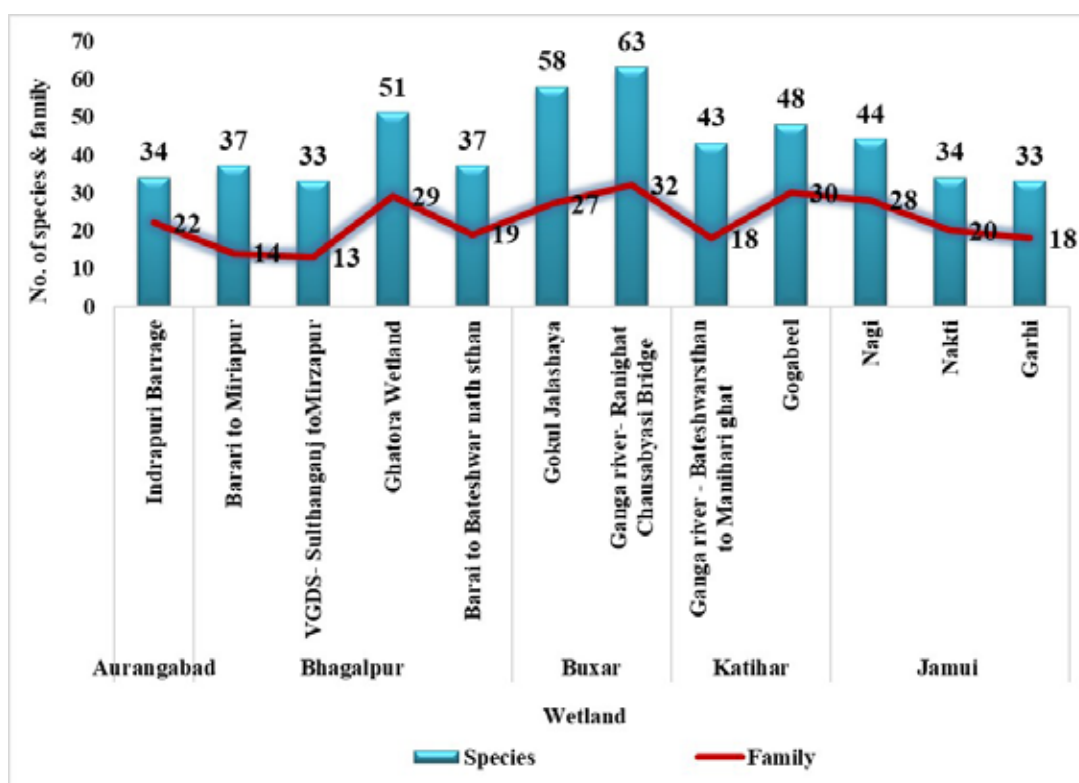


Figure 11d. Number of species and families reported during post-census

Table 19. Details of the number of birds, species, and families reported during the post-census

District	Wetland	Individuals	Species	Family
Aurangabad	Indrapuri Barrage	589	34	22
Bhagalpur	VGDS- Barari to Miriapur	1,886	37	14
	VGDS- Sultanganj to Mirzapur	1,739	33	13
	Ghatora Wetland	2,274	51	29
	VGDS- Barai to Bateshwarsthan	3,342	37	19
Buxar	Gokul Jalashaya	1,238	58	27
	Ganga river- Ranighat Chausabyasi Bridge	6,271	63	32
Katihar	Ganga river - Bateshwarsthan to Manihari ghat	2,641	43	18
	Gogabeel	1,151	48	30
Jamui	Nagi Dam	591	44	28
	Nakti Dam	2,070	34	20
	Garhi Dam	762	33	18
	Total	24,554		

Furthermore, of 145 species reported in post-census, 21,572 individuals of 71 species were waterbirds, 158 individuals of 12 species were wetland-dependent birds and 2,824 individuals of 62 species were land birds (Figure 11e & Table 20).

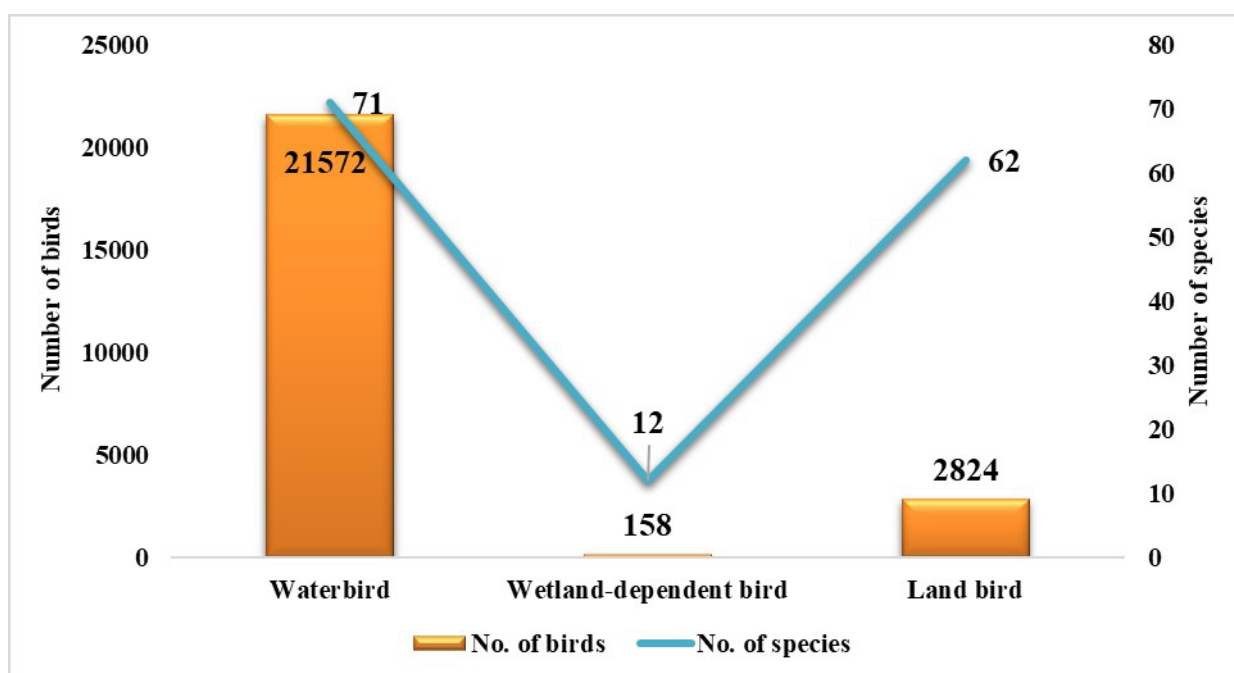


Figure 11e: Number of categories of birds reported during post-census of AWC, 2024

Table 20: Species-wise bird counts reported in post-census of AWC, 2024

S. No.	English name	Scientific name	Family	IUCN	Migratory Status	Category	No. of birds
1	Lesser Whistling-duck	<i>Dendrocygna javanica</i>	Anatidae	LC	R	WB	2531
2	Common Shelduck	<i>Tadorna tadorna</i>	Anatidae	LC	M	WB	9
3	Ruddy Shelduck	<i>Tadorna ferruginea</i>	Anatidae	LC	M	WB	134
4	Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	Anatidae	LC	LM/R	WB	240
5	Red-crested Pochard	<i>Netta rufina</i>	Anatidae	LC	M	WB	60
6	Common Pochard	<i>Aythya ferina</i>	Anatidae	VU	M	WB	19
7	Ferruginous Duck	<i>Aythya nyroca</i>	Anatidae	NT	M	WB	33
8	Tufted Duck	<i>Aythya fuligula</i>	Anatidae	LC	M	WB	8
9	Garganey	<i>Spatula querquedula</i>	Anatidae	LC	LM/R	WB	299
10	Northern Shoveler	<i>Spatula clypeata</i>	Anatidae	LC	M	WB	59
11	Gadwall	<i>Mareca strepera</i>	Anatidae	LC	LM/R	WB	69
12	Eurasian Wigeon	<i>Mareca penelope</i>	Anatidae	LC	M	WB	69
13	Northern Pintail	<i>Anas acuta</i>	Anatidae	LC	M	WB	55
14	Little Grebe	<i>Tachybaptus ruficollis</i>	Podicipedidae	LC	LM/R	WB	413
15	Great Crested Grebe	<i>Podiceps cristatus</i>	Podicipedidae	LC	LM/R	WB	11
16	Rock Dove	<i>Columba livia</i>	Columbidae	LC	R	LB	79
17	Red Turtle-dove	<i>Streptopelia tranquebarica</i>	Columbidae	LC	R	LB	1
18	Eurasian Collared-dove	<i>Streptopelia decaocto</i>	Columbidae	LC	R	LB	25
19	Eastern Spotted Dove	<i>Spilopelia chinensis</i>	Columbidae	LC	R	LB	1
20	Laughing Dove	<i>Spilopelia senegalensis</i>	Columbidae	LC	R	LB	6
21	Yellow-footed Green-pigeon	<i>Treron phoenicopterus</i>	Columbidae	LC	R	LB	1
22	Chestnut-bellied Sandgrouse	<i>Pterocles exustus</i>	Pteroclididae	LC	R	LB	8
23	Asian Palm-swift	<i>Cypsiurus balasiensis</i>	Apodidae	LC	R	LB	14

Table 20: Species-wise bird counts reported in post-census of AWC, 2024 (contd.)

S. No.	English name	Scientific name	Family	IUCN	Migratory Status	Category	No. of birds
24	Greater Coucal	<i>Centropus sinensis</i>	Cuculidae	LC	R	LB	3
25	Western Koel	<i>Eudynamys scolopaceus</i>	Cuculidae	LC	R	LB	5
26	Ruddy-breasted Crake	<i>Zapornia fusca</i>	Rallidae	LC	R	LB	1
27	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	Rallidae	LC	R	WB	6
28	Purple Swampphen	<i>Porphyrio porphyrio</i>	Rallidae	LC	R	WB	169
29	Common Moorhen	<i>Gallinula chloropus</i>	Rallidae	LC	R	WB	77
30	Common Coot	<i>Fulica atra</i>	Rallidae	LC	R	WB	116
31	Grey Francolin	<i>Ortygornis pondicerianus</i>	Phasianidae	LC	R	LB	20
32	Indian Peafowl	<i>Pavo cristatus</i>	Phasianidae	LC	R	LB	1
33	Greater Adjutant	<i>Leptoptilos dubius</i>	Ciconiidae	EN	R	WB	44
34	Lesser Adjutant	<i>Leptoptilos javanicus</i>	Ciconiidae	VU	R	WB	16
35	Painted Stork	<i>Mycteria leucocephala</i>	Ciconiidae	NT	R	WB	13
36	Asian Openbill	<i>Anastomus oscitans</i>	Ciconiidae	LC	LM/R	WB	2799
37	Asian Woollyneck	<i>Ciconia episcopus</i>	Ciconiidae	NT	R	WB	35
38	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	Ciconiidae	NT	R	WB	27
39	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	Threskiornithidae	NT	LM/R	WB	593
40	Red-naped Ibis	<i>Pseudibis papillosa</i>	Threskiornithidae	LC	LM/R	WB	259
41	Glossy Ibis	<i>Plegadis falcinellus</i>	Threskiornithidae	LC	R	WB	32
42	Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	Ardeidae	LC	LM/R	WB	16
43	Green-backed Heron	<i>Butorides striata</i>	Ardeidae	LC	LM/R	WB	19
44	Indian Pond-heron	<i>Ardeola grayii</i>	Ardeidae	LC	R	WB	39
45	Cattle Egret	<i>Bubulcus ibis</i>	Ardeidae	LC	LM/R	WB	1190
46	Grey Heron	<i>Ardea cinerea</i>	Ardeidae	LC	R	WB	115
47	Purple Heron	<i>Ardea purpurea</i>	Ardeidae	LC	R	WB	27
48	Great White Egret	<i>Ardea alba</i>	Ardeidae	LC	LM/R	WB	89
49	Intermediate Egret	<i>Ardea intermedia</i>	Ardeidae	LC	LM/R	WB	199
50	Little Egret	<i>Egretta garzetta</i>	Ardeidae	LC	LM/R	WB	219
51	Little Cormorant	<i>Microcarbo niger</i>	Phalacrocoracidae	LC	LM/R	WB	3744
52	Great Cormorant	<i>Phalacrocorax carbo</i>	Phalacrocoracidae	LC	LM/R	WB	153
53	Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	Phalacrocoracidae	LC	LM/R	WB	1
54	Oriental Darter	<i>Anhinga melanogaster</i>	Anhingidae	NT	LM/R	WB	23
55	Indian Thick-knee	<i>Burhinus indicus</i>	Burhinidae	LC	LM/R	WB	7
56	Pied Avocet	<i>Recurvirostra avosetta</i>	Recurvirostridae	LC	M	WB	88
57	Black-winged Stilt	<i>Himantopus himantopus</i>	Recurvirostridae	LC	LM/R	WB	181
58	Pacific Golden Plover	<i>Pluvialis fulva</i>	Charadriidae	LC	M	WB	40
59	Little Ringed Plover	<i>Charadrius dubius</i>	Charadriidae	LC	LM/R	WB	244
60	Kentish Plover	<i>Charadrius alexandrinus</i>	Charadriidae	LC	M	WB	715
61	Lesser Sandplover	<i>Charadrius mongolus</i>	Charadriidae	LC	M	WB	172
62	River Lapwing	<i>Vanellus duvaucelii</i>	Charadriidae	NT	LM/R	WB	130
63	Grey-headed Lapwing	<i>Vanellus cinereus</i>	Charadriidae	LC	M	WB	75
64	Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	Charadriidae	LC	LM/R	WB	3

Table 20: Species-wise bird counts reported in post-census of AWC, 2024 (contd.)

S. No.	English name	Scientific name	Family	IUCN	Migratory Status	Category	No. of birds
65	Red-wattled Lapwing	<i>Vanellus indicus</i>	Charadriidae	LC	LM/R	WB	303
66	Greater Painted-snipe	<i>Rostratula benghalensis</i>	Rostratulidae	LC	LM/R	WB	5
67	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	Jacanidae	LC	LM/R	WB	58
68	Bronze-winged Jacana	<i>Metopidius indicus</i>	Jacanidae	LC	LM/R	WB	63
69	Eurasian Curlew	<i>Numenius arquata</i>	Scolopacidae	NT	M	WB	10
70	Black-tailed Godwit	<i>Limosa limosa</i>	Scolopacidae	NT	M	WB	202
71	Temminck's Stint	<i>Calidris temminckii</i>	Scolopacidae	LC	M	WB	292
72	Little Stint	<i>Calidris minuta</i>	Scolopacidae	LC	LM/R	WB	214
73	Common Snipe	<i>Gallinago gallinago</i>	Scolopacidae	LC	M	WB	2
74	Common Sandpiper	<i>Actitis hypoleucos</i>	Scolopacidae	LC	M	WB	25
75	Green Sandpiper	<i>Tringa ochropus</i>	Scolopacidae	LC	M	WB	37
76	Spotted Redshank	<i>Tringa erythropus</i>	Scolopacidae	LC	M	WB	150
77	Common Greenshank	<i>Tringa nebularia</i>	Scolopacidae	LC	M	WB	119
78	Common Redshank	<i>Tringa totanus</i>	Scolopacidae	LC	M	WB	21
79	Wood Sandpiper	<i>Tringa glareola</i>	Scolopacidae	LC	M	WB	40
80	Little Pratincole	<i>Glareola lactea</i>	Glareolidae	LC	LM/R	WB	3479
81	Black-headed Gull	<i>Larus ridibundus</i>	Laridae	LC	M	WB	44
82	Pallas's Gull	<i>Larus ichthyæus</i>	Laridae	LC	M	WB	11
83	Whiskered Tern	<i>Chlidonias hybrida</i>	Laridae	LC	M	WB	539
84	Little Tern	<i>Sternula albifrons</i>	Laridae	LC	M	WB	274
85	Spotted Owlet	<i>Athene brama</i>	Strigidae	LC	R	LB	2
86	Osprey	<i>Pandion haliaetus</i>	Pandionidae	LC	M	WD	10
87	Black-winged Kite	<i>Elanus caeruleus</i>	Elanidae	LC	R	WD	1
88	Greater Spotted Eagle	<i>Clanga clanga</i>	Accipitridae	VU	R	WD	1
89	Shikra	<i>Accipiter badius</i>	Accipitridae	LC	R	WD	1
90	Black Kite	<i>Milvus migrans</i>	Accipitridae	LC	R	LB	23
91	Egyptian Vulture	<i>Neophron percnopterus</i>	Accipitridae	EN	LM/R	LB	2
92	Indian Grey Hornbill	<i>Ocyrceros birostris</i>	Bucerotidae	LC	R	LB	1
93	Common Hoopoe	<i>Upupa epops</i>	Upupidae	LC	R	LB	4
94	Blue-tailed Bee-eater	<i>Merops philippinus</i>	Meropidae	LC	M	LB	1036
95	Asian Green Bee-eater	<i>Merops orientalis</i>	Meropidae	LC	R	LB	47
96	Indian Roller	<i>Coracias benghalensis</i>	Coraciidae	LC	R	LB	3
97	Common Kingfisher	<i>Alcedo atthis</i>	Alcedinidae	LC	R	WD	1
98	Pied Kingfisher	<i>Ceryle rudis</i>	Alcedinidae	LC	R	WD	70
99	White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	Alcedinidae	LC	R	WD	25
100	Coppersmith Barbet	<i>Psilopogon haemacephalus</i>	Megalaimidae	LC	R	LB	5
101	Brown-headed Barbet	<i>Psilopogon zeylanicus</i>	Megalaimidae	LC	R	LB	1
102	Black-rumped Flameback	<i>Dinopium benghalense</i>	Picidae	LC	R	LB	1
103	Peregrine Falcon	<i>Falco peregrinus</i>	Falconidae	LC	M	WD	4
104	Indian Golden Oriole	<i>Oriolus kundoo</i>	Oriolidae	LC	R	LB	5
105	Common Iora	<i>Aegithina tiphia</i>	Aegithinidae	LC	R	LB	1

Table 20: Species-wise bird counts reported in post-census of AWC, 2024 (contd.)

S. No.	English name	Scientific name	Family	IUCN	Migratory Status	Category	No. of birds
106	Black Drongo	<i>Dicrurus macrocercus</i>	Dicruridae	LC	R	LB	34
107	Long-tailed Shrike	<i>Lanius schach</i>	Laniidae	LC	R	LB	2
108	Rufous Treepie	<i>Dendrocitta vagabunda</i>	Corvidae	LC	R	LB	1
109	House Crow	<i>Corvus splendens</i>	Corvidae	LC	R	LB	213
110	Large-billed Crow	<i>Corvus macrorhynchos</i>	Corvidae	LC	R	LB	15
111	Ashy-crowned Sparrow-lark	<i>Eremopterix griseus</i>	Alaudidae	LC	R	LB	50
112	Bengal Bushlark	<i>Mirafra assamica</i>	Alaudidae	LC	R	LB	10
113	Sand Lark	<i>Alaudala raytal</i>	Alaudidae	LC	R	LB	12
114	Oriental Skylark	<i>Alauda gulgula</i>	Alaudidae	LC	R	LB	26
115	Plain Prinia	<i>Prinia inornata</i>	Cisticolidae	LC	R	LB	20
116	Barn Swallow	<i>Hirundo rustica</i>	Hirundinidae	LC	M	LB	169
117	Dusky Crag Martin	<i>Ptyonoprogne concolor</i>	Hirundinidae	LC	M	LB	270
118	Asian Plain Martin	<i>Riparia chinensis</i>	Hirundinidae	LC	M	LB	100
119	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	Pycnonotidae	LC	R	LB	7
120	Red-vented Bulbul	<i>Pycnonotus cafer</i>	Pycnonotidae	LC	R	LB	8
121	Large Grey Babbler	<i>Argya malcolmi</i>	Leiotrichidae	LC	R	LB	90
122	Jungle Babbler	<i>Argya striata</i>	Leiotrichidae	LC	R	LB	7
123	Striated Babbler	<i>Argya earlei</i>	Leiotrichidae	LC	R	LB	7
124	Rosy Starling	<i>Pastor roseus</i>	Sturnidae	LC	R	LB	100
125	Indian Pied Starling	<i>Gracupica contra</i>	Sturnidae	LC	R	LB	38
126	Brahminy Starling	<i>Sturnia pagodarum</i>	Sturnidae	LC	R	LB	4
127	Common Myna	<i>Acridotheres tristis</i>	Sturnidae	LC	R	LB	29
128	Bank Myna	<i>Acridotheres inginiatus</i>	Sturnidae	LC	R	LB	155
129	Oriental Magpie-robin	<i>Copsychus saularis</i>	Muscicapidae	LC	R	LB	2
130	Red-throated Flycatcher	<i>Ficedula albicilla</i>	Muscicapidae	LC	M	LB	1
131	Indian Robin	<i>Copsychus fulicatus</i>	Muscicapidae	LC	R	LB	8
132	Black Redstart	<i>Phoenicurus ochruros</i>	Muscicapidae	LC	M	LB	3
133	Pied Bushchat	<i>Saxicola caprata</i>	Muscicapidae	LC	R	LB	2
134	Common Stonechat	<i>Saxicola torquatus</i>	Muscicapidae	LC	M	LB	10
135	Purple Sunbird	<i>Cinnyris asiaticus</i>	Nectariniidae	LC	R	LB	5
136	Striated Grassbird	<i>Megalurus palustris</i>	Locustellidae	LC	R	LB	22
137	Scaly-breasted Munia	<i>Lonchura punctulata</i>	Estrildidae	LC	R	LB	2
138	Indian Silverbill	<i>Euodice malabarica</i>	Estrildidae	LC	R	LB	26
139	Chestnut-shouldered Bush-sparrow	<i>Gymnoris xanthocollis</i>	Passeridae	LC	R	LB	2
140	House Sparrow	<i>Passer domesticus</i>	Passeridae	LC	R	LB	25
141	Paddyfield Pipit	<i>Anthus rufulus</i>	Motacillidae	LC	R	LB	53
142	Citrine Wagtail	<i>Motacilla citreola</i>	Motacillidae	LC	M	WD	9
143	Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	Motacillidae	LC	M	WD	19
144	White-browed Wagtail	<i>Motacilla maderaspatensis</i>	Motacillidae	LC	R	WD	9
145	White Wagtail	<i>Motacilla alba</i>	Motacillidae	LC	R	WD	8
		Total Number of Individuals					24,554

CHAPTER 15

GLOBALLY THREATENED AND NEAR-THREATENED SPECIES REPORTED DURING PRE & POST CENSUS

During the pre- and post-census of AWC 2024, a total of 15 globally Threatened and Near Threatened species were identified. This included two globally threatened endangered species, three vulnerable species, and 10 Near-Threatened species (Table 21).

In the pre-census, a total of 398 individuals of six globally Threatened and Near Threatened species were recorded. Conversely, during the post-census, 1,148 birds of 14 globally Threatened and Near Threatened species were reported. Notably, all the threatened and near-threatened species observed in the pre-census were also encountered in the post-census except the Northern Lapwing *Vanellus vanellus*.

Table 21: Details of Threatened and Near Threatened species reported during pre and post-census of AWC 2024

Sl. No.	Common name	Scientific name	Family	IUCN status	Migratory status	Category	Pre-census	Post-census
1	Greater Adjutant	<i>Leptoptilos dubius</i>	Ciconiidae	EN	R	WB	NR	44
2	Egyptian Vulture	<i>Neophron percnopterus</i>	Accipitridae	EN	LM/R	LB	NR	2
3	Common Pochard	<i>Aythya ferina</i>	Anatidae	VU	M	WB	264	19
4	Lesser Adjutant	<i>Leptoptilos javanicus</i>	Ciconiidae	VU	R	WB	NR	16
5	Greater Spotted Eagle	<i>Clanga clanga</i>	Accipitridae	VU	R	WD	NR	1
6	Ferruginous Duck	<i>Aythya nyroca</i>	Anatidae	NT	M	WB	51	33
7	Painted Stork	<i>Mycteria leucocephala</i>	Ciconiidae	NT	R	WB	NR	13
8	Asian Woollyneck	<i>Ciconia episcopus</i>	Ciconiidae	NT	R	WB	NR	35
9	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	Ciconiidae	NT	R	WB	NR	27
10	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	Threskiornithidae	NT	LM/R	WB	21	593
11	Oriental Darter	<i>Anhinga melanogaster</i>	Anhingidae	NT	LM/R	WB	18	23
12	River Lapwing	<i>Vanellus duvaucelii</i>	Charadriidae	NT	LM/R	WB	NR	130
13	Northern Lapwing	<i>Vanellus vanellus</i>	Charadriidae	NT	M	WB	42	NR
14	Eurasian Curlew	<i>Numenius arquata</i>	Scolopacidae	NT	M	WB	2	10
15	Black-tailed Godwit	<i>Limosa limosa</i>	Scolopacidae	NT	M	WB	NR	202

Note:

EN: Endangered; VU: Vulnerable; NT: Near Threatened; M: long-distance migrants; LM/R: local migrants; R: Resident bird;

WB: Waterbird; LB: Land bird; WD: Wetland-dependent bird; NR: Not Recorded

CHAPTER 16

STATUS OF SPECIES PRIORITIZED IN INDIA'S NATIONAL ACTION PLAN IN BIHAR BASED ON PRE & POST CENSUS

As mentioned elsewhere in the report, twenty species have been prioritized in India's National Action Plan for the Conservation of Migratory Birds and their Habitats along the Central Asian Flyway (2018–2023) for developing Species Action Plan and further taking management actions for conserving those species. During the pre- & post-census of AWC 2024, six species including two duck species and five wader species were recorded.

All six species were observed in the post-census., On the contrary, only three namely, Common Pochard *Aythya ferina*, Ferruginous Duck *Aythya nyroca*, and Eurasian Curlew *Numenius arquata* were recorded during the pre-census. The number of individuals reported fluctuated between the pre-and post-census (Table 22).

Table 22- Status of the species prioritized in the India's National Action Plan in Bihar based on AWCs

Sl. No.	Common Name	Scientific Name	Pre-census	Post-census
1	Common Pochard	<i>Aythya ferina</i>	264	19
2	Ferruginous Duck	<i>Aythya nyroca</i>	51	33
3	Lesser Sandplover	<i>Charadrius mongolus</i>	NR	172
4	Eurasian Curlew	<i>Numenius arquata</i>	2	10
5	Black-tailed Godwit	<i>Limosa limosa</i>	NR	202
6	Little Stint	<i>Calidris minuta</i>	NR	214

Note: NR- Not Reported

CHAPTER 17. STATUS OF SPECIES IN THE CAF CONSERVATION CONCERN LIST IN PRE- AND CENSUS

Out of the 160 species reported during the pre & post-census, 51 species belonging to 11 families were listed under the Central Asian Flyway (CAF) conservation concern. Of these, the Greater Adjutant *Leptoptilos dubius* was an Endangered species, two species Common Pochard *Aythya farina* and Lesser Adjutant *Leptoptilos javanicus* were Vulnerable, and five were Near Threatened (Table 23).

Table 23: Status of species listed under CAF conservation concern report in pre- & post census, 2024

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	Pre-census	Post-census
1	Lesser Whistling-duck	<i>Dendrocygna javanica</i>	Anatidae	LC	R	P	P
2	Bar-headed Goose	<i>Anser indicus</i>	Anatidae	LC	M	P	P
3	Greylag Goose	<i>Anser anser</i>	Anatidae	LC	M	P	P
4	Ruddy Shelduck	<i>Tadorna ferruginea</i>	Anatidae	LC	M	P	P
5	Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	Anatidae	LC	LM/R	P	P
6	Red-crested Pochard	<i>Netta rufina</i>	Anatidae	LC	M	P	P
7	Common Pochard	<i>Aythya ferina</i>	Anatidae	VU	M	P	P
8	Ferruginous Duck	<i>Aythya nyroca</i>	Anatidae	NT	M	P	P
9	Tufted Duck	<i>Aythya fuligula</i>	Anatidae	LC	M	P	P
10	Garganey	<i>Spatula querquedula</i>	Anatidae	LC	LM/R	P	P
11	Northern Shoveler	<i>Spatula clypeata</i>	Anatidae	LC	M	P	P
12	Gadwall	<i>Mareca strepera</i>	Anatidae	LC	LM/R	P	P
13	Eurasian Wigeon	<i>Mareca penelope</i>	Anatidae	LC	M	P	P
14	Northern Pintail	<i>Anas acuta</i>	Anatidae	LC	M	P	P
15	Little Grebe	<i>Tachybaptus ruficollis</i>	Podicipedidae	LC	LM/R	P	P
16	Great Crested Grebe	<i>Podiceps cristatus</i>	Podicipedidae	LC	LM/R	P	P
17	Common Moorhen	<i>Gallinula chloropus</i>	Rallidae	LC	R	P	P
18	Greater Adjutant	<i>Leptoptilos dubius</i>	Ciconiidae	EN	R		P
19	Lesser Adjutant	<i>Leptoptilos javanicus</i>	Ciconiidae	VU	R		P
20	Asian Openbill	<i>Anastomus oscitans</i>	Ciconiidae	LC	LM/R	P	P
21	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	Threskiornithidae	NT	LM/R	P	P
22	Glossy Ibis	<i>Plegadis falcinellus</i>	Threskiornithidae	LC	R		P
23	Cinnamon Bittern	<i>Ixobrychus minutus</i>	Ardeidae	LC	R	P	
24	Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	Ardeidae	LC	LM/R		P
25	Cattle Egret	<i>Bubulcus ibis</i>	Ardeidae	LC	LM/R	P	P
26	Grey Heron	<i>Ardea cinerea</i>	Ardeidae	LC	R	P	P
27	Purple Heron	<i>Ardea purpurea</i>	Ardeidae	LC	R	P	P
28	Great White Egret	<i>Ardea alba</i>	Ardeidae	LC	LM/R	P	P
29	Little Egret	<i>Egretta garzetta</i>	Ardeidae	LC	LM/R	P	P
30	Great Cormorant	<i>Phalacrocorax carbo</i>	Phalacrocoracidae	LC	LM/R	P	P
31	Pied Avocet	<i>Recurvirostra avosetta</i>	Recurvirostridae	LC	M		P
32	Black-winged Stilt	<i>Himantopus himantopus</i>	Recurvirostridae	LC	LM/R	P	P
33	Pacific Golden Plover	<i>Pluvialis fulva</i>	Charadriidae	LC	M	P	P
34	Little Ringed Plover	<i>Charadrius dubius</i>	Charadriidae	LC	LM/R	P	P
35	Kentish Plover	<i>Charadrius alexandrinus</i>	Charadriidae	LC	M	P	
36	Lesser Sandplover	<i>Charadrius mongolus</i>	Charadriidae	LC	M		P
37	Northern Lapwing	<i>Vanellus vanellus</i>	Charadriidae	NT	M	P	
38	Eurasian Curlew	<i>Numenius arquata</i>	Scolopacidae	NT	M	P	P
39	Black-tailed Godwit	<i>Limosa limosa</i>	Scolopacidae	NT	M		P

Table 23: Status of species listed under CAF conservation concern report in pre- & post census, 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	Pre-census	Post-census
40	Temminck's Stint	<i>Calidris temminckii</i>	Scolopacidae	LC	M	P	P
41	Little Stint	<i>Calidris minuta</i>	Scolopacidae	LC	LM/R		P
42	Common Snipe	<i>Gallinago gallinago</i>	Scolopacidae	LC	M		P
43	Common Sandpiper	<i>Actitis hypoleucos</i>	Scolopacidae	LC	M	P	P
44	Green Sandpiper	<i>Tringa ochropus</i>	Scolopacidae	LC	M	P	P
45	Spotted Redshank	<i>Tringa erythropus</i>	Scolopacidae	LC	M		P
46	Common Greenshank	<i>Tringa nebularia</i>	Scolopacidae	LC	M	P	P
47	Common Redshank	<i>Tringa totanus</i>	Scolopacidae	LC	M		P
48	Wood Sandpiper	<i>Tringa glareola</i>	Scolopacidae	LC	M	P	P
49	Black-headed Gull	<i>Larus ridibundus</i>	Laridae	LC	M	P	P
50	Little Tern	<i>Sternula albifrons</i>	Laridae	LC	M		P
51	Whiskered Tern	<i>Chlidonias hybrida</i>	Laridae	LC	M		P

CHAPTER 18

STATUS OF BIRDS REPORTED IN PRE-CENSUS, MAIN-CENSUS, AND POST-CENSUS OF AWC 2024

The AWC 2024 survey consisted of three phases: pre-census during the arrival of migratory birds (November to December), main census during peak migratory season (January to February), and post-census in April.

During the pre-census phase, six wetlands across four districts were covered. Similarly, in the post-census phase, 12 wetlands spanning five districts were visited. In the main-census phase, a total of 84 wetlands in 28 districts were surveyed. Notably, four wetlands - Indrapuri Barrage, Gogabeel Lake, Nagi Dam, and Garhi Dam - were included in all three censuses.

Of these four wetlands, apart from Garhi Dam, the highest number of birds were recorded during the main census, which coincides with peak migration time. However, Garhi Dam reported the maximum bird count during the pre-census phase. Interestingly, except for Indrapuri Barrage, bird sightings were consistently higher during the pre-census phase compared to the post-census phase across all three wetlands (Figure 12a).

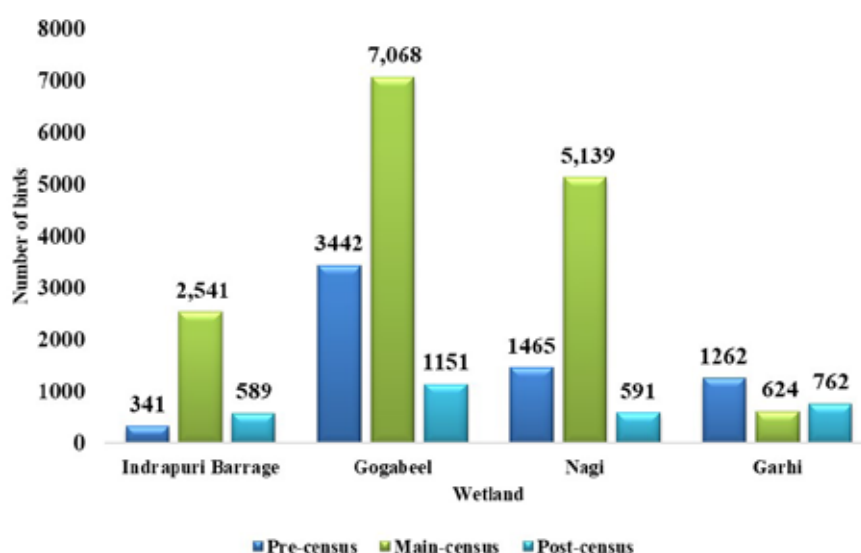


Figure 12a. Comparison in Number of birds reported during pre-census, main-census and post census of AWC 2024

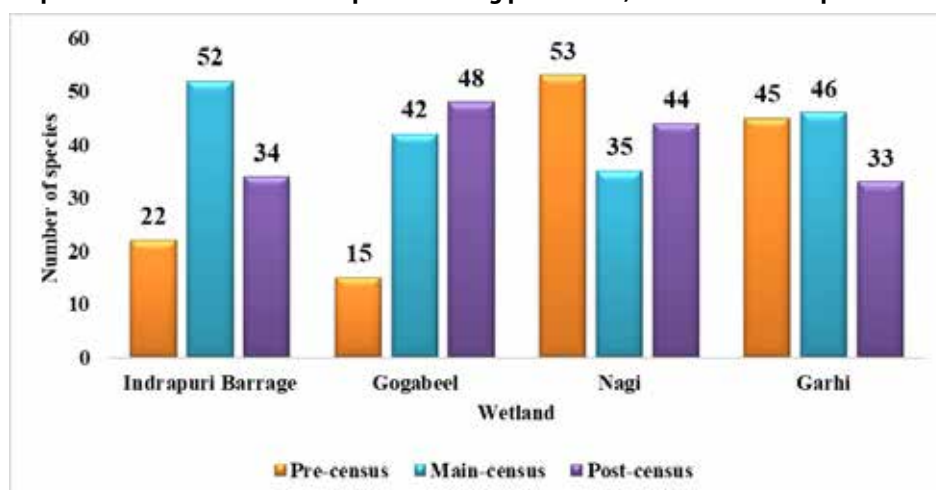


Figure 12b. Comparison in Number of birds reported during pre-census, main-censuses and post census of AWC 2024

There was an interesting observation regarding the species reported from these four wetlands during different phases. Surprisingly, no distinct pattern was observed in the variation of species across the phases (Figure 12b).

A total of 276 species belonging to 79 families were documented during the AWC spanning 2022, 2023, and 2024, encompassing all phases in 2024: pre-census, main census, and post-census. Specifically, for AWC 2024, including all phases, 237 species were recorded, with 226 species reported during the main census, 100 during pre-census, and 143 during post-census (Table 24).

There were 11 species observed during both the pre-census (four species) and post-census (eight species) phases that were not reported in the main census. Among these, five species— Red Turtle Dove *Streptopelia tranquebarica* Blue-tailed Bee-eater *Merops philippinus*, Whiskered Tern *Chlidonias hybrida*, Common Iora *Aegithina tiphia* and Yellow Throated Sparrow *Petronia xanthocollis* are known to breed locally during summer.

Specifically, two species, the Chestnut-bellied Sandgrouse *Pterocles exustus* and Rosy Starling *Pastor roseus*, were recorded during both the pre and post-census phases but were not documented in the main census.

Out of the 237 species documented in AWC 2024, 78 were long-distance migrants, 34 were local migrants, and 125 were resident species (Figure 12c). Overall, 19 species were threatened or Near-Threatened categories, including two endangered species, six Vulnerable species, and 11 Near-Threatened species (Table 25).

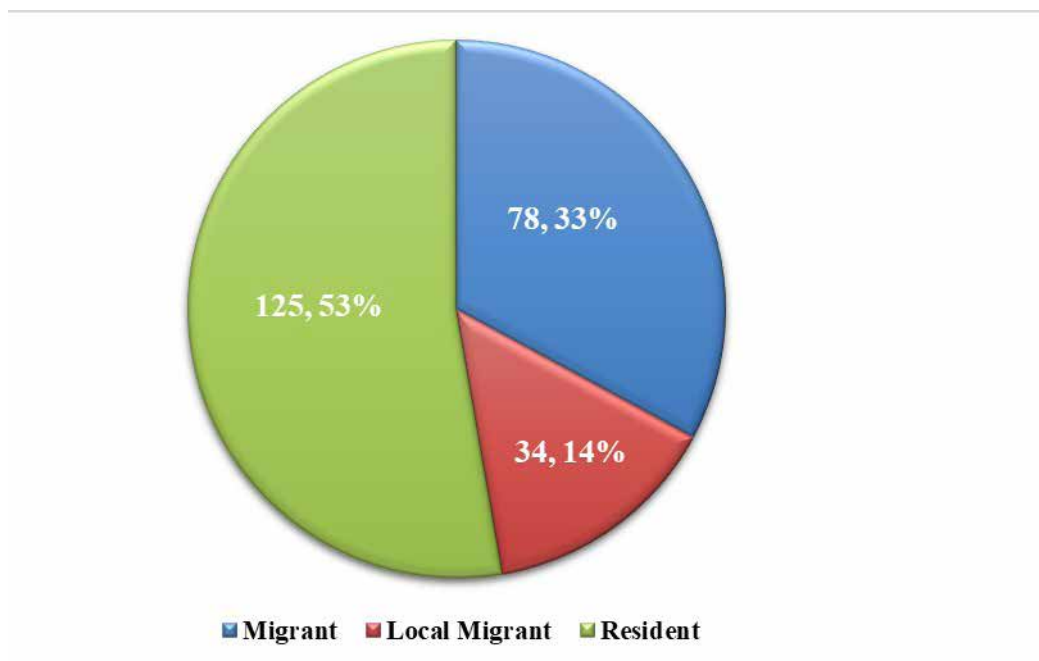


Figure 12c. Status of bird species recorded during the pre-census, main-census and post-census of AWC 2024

Table 24. List of bird species reported during the pre-census, main-census, and post-census of AWC 2024

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	Pre-Census	Main-census	Post-Census
1	Indian Peafowl	<i>Pavo cristatus</i>	Phasianidae	LC	R	NR	P	P
2	Grey Francolin	<i>Ortygornis pondicerianus</i>	Phasianidae	LC	R	P	P	P
3	Fulvous Whistling-duck	<i>Dendrocygna bicolor</i>	Anatidae	LC	R	NR	P	NR
4	Lesser Whistling-duck	<i>Dendrocygna javanica</i>	Anatidae	LC	R	P	P	P
5	Bar-headed Goose	<i>Anser indicus</i>	Anatidae	LC	M	P	P	NR
6	Greylag Goose	<i>Anser anser</i>	Anatidae	LC	M	P	P	NR
7	Common Merganser	<i>Mergus merganser</i>	Anatidae	LC	M	P	P	NR
8	Common Shelduck	<i>Tadorna tadorna</i>	Anatidae	LC	M	NR	P	P
9	Ruddy Shelduck	<i>Tadorna ferruginea</i>	Anatidae	LC	M	P	P	P
10	Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	Anatidae	LC	LM/R	P	P	P
11	Red-crested Pochard	<i>Netta rufina</i>	Anatidae	LC	M	P	P	P
12	Common Pochard	<i>Aythya ferina</i>	Anatidae	VU	M	P	P	P
13	Ferruginous Duck	<i>Aythya nyroca</i>	Anatidae	NT	M	P	P	P
14	Tufted Duck	<i>Aythya fuligula</i>	Anatidae	LC	M	P	P	P
15	Garganey	<i>Spatula querquedula</i>	Anatidae	LC	M	P	P	P
16	Northern Shoveler	<i>Spatula clypeata</i>	Anatidae	LC	M	P	P	P
17	Falcated Duck	<i>Mareca falcata</i>	Anatidae	NT	M	NR	P	NR
18	Gadwall	<i>Mareca strepera</i>	Anatidae	LC	M	P	P	P
19	Eurasian Wigeon	<i>Mareca penelope</i>	Anatidae	LC	M	P	P	P
20	Mallard	<i>Anas platyrhynchos</i>	Anatidae	LC	M	P	NR	NR
21	Northern Pintail	<i>Anas acuta</i>	Anatidae	LC	M	P	P	P
22	Common Teal	<i>Anas crecca</i>	Anatidae	LC	M	NR	P	NR
23	Little Grebe	<i>Tachybaptus ruficollis</i>	Podicipedidae	LC	LM/R	P	P	P
24	Great Crested Grebe	<i>Podiceps cristatus</i>	Podicipedidae	LC	LM/R	P	P	P
25	Rock Dove	<i>Columba livia</i>	Columbidae	LC	R	P	P	P
26	Eurasian Collared-dove	<i>Streptopelia decaocto</i>	Columbidae	LC	R	NR	P	P
27	Red Turtle Dove	<i>Streptopelia tranquebarica</i>	Columbidae	LC	R	NR	NR	P
28	Eastern Spotted Dove	<i>Spilopelia chinensis</i>	Columbidae	LC	R	P	P	P
29	Laughing Dove	<i>Spilopelia senegalensis</i>	Columbidae	LC	R	P	P	P
30	Yellow-footed Green-pigeon	<i>Treron phoenicopterus</i>	Columbidae	LC	R	NR	P	P

Table 24. List of bird species reported during the pre-census, main-census, and post-census of AWC 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	Pre-Census	Main-census	Post-Census
31	Asian Palm-swift	<i>Cypsiurus balaisensis</i>	Apodidae	LC	R	P	P	P
32	Little Swift	<i>Apus affinis</i>	Apodidae	LC	R	NR	P	NR
33	Greater Coucal	<i>Centropus sinensis</i>	Cuculidae	LC	R	NR	P	P
34	Sirkeer Malkoha	<i>Taccocua leschenaultii</i>	Cuculidae	LC	R	NR	P	NR
35	Asian Koel	<i>Eudynamys scolopaceus</i>	Cuculidae	LC	R	NR	P	P
36	Common Hawk-cuckoo	<i>Hierococcyx varius</i>	Cuculidae	LC	R	NR	P	NR
37	Brown Crane	<i>Zapornia akool</i>	Rallidae	LC	R	NR	P	NR
38	Ruddy-breasted Crane	<i>Zapornia fusca</i>	Rallidae	LC	R	NR	NR	P
39	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	Rallidae	LC	R	NR	P	P
40	Purple Swamphen	<i>Porphyrio porphyrio</i>	Rallidae	LC	R	P	P	P
41	Common Moorhen	<i>Gallinula chloropus</i>	Rallidae	LC	R	P	P	P
42	Common Coot	<i>Fulica atra</i>	Rallidae	LC	R	P	P	P
43	Greater Adjutant	<i>Leptoptilos dubius</i>	Ciconiidae	EN	LM/R	NR	P	P
44	Lesser Adjutant	<i>Leptoptilos javanicus</i>	Ciconiidae	VU	LM/R	NR	P	P
45	Painted Stork	<i>Mycteria leucocephala</i>	Ciconiidae	NT	R	NR	P	P
46	Asian Openbill	<i>Anastomus oscitans</i>	Ciconiidae	LC	LM/R	P	P	P
47	Black Stork	<i>Ciconia nigra</i>	Ciconiidae	LC	LM/R	NR	P	NR
48	Asian Woollyneck	<i>Ciconia episcopus</i>	Ciconiidae	NT	LM/R	NR	P	P
49	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	Ciconiidae	NT	LM/R	NR	P	NR
50	Eurasian Spoonbill	<i>Platalea leucorodia</i>	Threskiornithidae	LC	M	NR	P	NR
51	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	Threskiornithidae	NT	LM/R	P	P	P
52	Red-naped Ibis	<i>Pseudibis papillosa</i>	Threskiornithidae	LC	LM/R	P	P	P
53	Glossy Ibis	<i>Plegadis falcinellus</i>	Threskiornithidae	LC	LM/R	NR	P	P
54	Yellow Bittern	<i>Ixobrychus sinensis</i>	Ardeidae	LC	R	NR	P	NR
55	Cinnamon Bittern	<i>Ixobrychus minutus</i>	Ardeidae	LC	R	P	NR	NR
56	Black Bittern	<i>Ixobrychus flavicollis</i>	Ardeidae	LC	R	NR	P	NR
57	Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	Ardeidae	LC	LM/R	NR	P	P
58	Green-backed Heron	<i>Butorides striata</i>	Ardeidae	LC	LM/R	NR	P	P
59	Indian Pond-heron	<i>Ardeola grayii</i>	Ardeidae	LC	R	P	P	P
60	Cattle Egret	<i>Bubulcus ibis</i>	Ardeidae	LC	R	P	P	P
61	Grey Heron	<i>Ardea cinerea</i>	Ardeidae	LC	R	P	P	P

Table 24. List of bird species reported during the pre-census, main-census, and post-census of AWC 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	Pre-Census	Main-census	Post-Census
62	Purple Heron	<i>Ardea purpurea</i>	Ardeidae	LC	R	P	P	P
63	Great White Egret	<i>Ardea alba</i>	Ardeidae	LC	LM/R	P	P	P
64	Intermediate Egret	<i>Ardea intermedia</i>	Ardeidae	LC	LM/R	P	P	P
65	Little Egret	<i>Egretta garzetta</i>	Ardeidae	LC	LM/R	P	P	P
66	Little Cormorant	<i>Microcarbo niger</i>	Phalacrocoracidae	LC	LM/R	P	P	P
67	Great Cormorant	<i>Phalacrocorax carbo</i>	Phalacrocoracidae	LC	LM/R	P	P	P
68	Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	Phalacrocoracidae	LC	LM/R	P	P	P
69	Oriental Darter	<i>Anhinga melanogaster</i>	Anhingidae	NT	LM/R	P	P	P
70	Indian Thick-knee	<i>Burhinus indicus</i>	Burhinidae	LC	LM/R	NR	P	P
71	Pied Avocet	<i>Recurvirostra avosetta</i>	Recurvirostridae	LC	M	NR	P	P
72	Black-winged Stilt	<i>Himantopus himantopus</i>	Recurvirostridae	LC	LM/R	P	P	P
73	Pacific Golden Plover	<i>Pluvialis fulva</i>	Charadriidae	LC	M	P	P	P
74	Little Ringed Plover	<i>Charadrius dubius</i>	Charadriidae	LC	LM/R	P	P	P
75	Kentish Plover	<i>Charadrius alexandrinus</i>	Charadriidae	LC	LM/R	P	P	P
76	Lesser Sandplover	<i>Charadrius mongolus</i>	Charadriidae	LC	M	NR	P	P
77	Northern Lapwing	<i>Vanellus vanellus</i>	Charadriidae	NT	M	P	P	NR
78	River Lapwing	<i>Vanellus duvaucelii</i>	Charadriidae	NT	LM/R	NR	P	P
79	Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	Charadriidae	LC	LM/R	P	P	P
80	Grey-headed Lapwing	<i>Vanellus cinereus</i>	Charadriidae	LC	M	NR	P	P
81	Red-wattled Lapwing	<i>Vanellus indicus</i>	Charadriidae	LC	LM/R	P	P	P
82	Greater Painted-snipe	<i>Rostratula benghalensis</i>	Rostratulidae	LC	LM/R	NR	P	P
83	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	Jacanidae	LC	LM/R	P	P	P
84	Bronze-winged Jacana	<i>Metopidius indicus</i>	Jacanidae	LC	LM/R	NR	P	P
85	Whimbrel	<i>Numenius phaeopus</i>	Scolopacidae	LC	M	NR	P	NR
86	Eurasian Curlew	<i>Numenius arquata</i>	Scolopacidae	NT	M	P	P	P
87	Black-tailed Godwit	<i>Limosa limosa</i>	Scolopacidae	NT	M	NR	P	P
88	Ruff	<i>Calidris pugnax</i>	Scolopacidae	NT	M	NR	P	NR
89	Curlew Sandpiper	<i>Calidris ferruginea</i>	Scolopacidae	LC	M	NR	P	NR
90	Temminck's Stint	<i>Calidris temminckii</i>	Scolopacidae	LC	M	P	P	P
91	Dunlin	<i>Calidris alpina</i>	Scolopacidae	LC	M	NR	P	NR

Table 24. List of bird species reported during the pre-census, main-census, and post-census of AWC 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	Pre-Census	Main-census	Post-Census
92	Little Stint	<i>Calidris minuta</i>	Scolopacidae	LC	LM/R	NR	P	P
93	Pintail Snipe	<i>Gallinago stenura</i>	Scolopacidae	LC	M	NR	P	NR
94	Common Snipe	<i>Gallinago gallinago</i>	Scolopacidae	LC	M	NR	P	P
95	Common Sandpiper	<i>Actitis hypoleucos</i>	Scolopacidae	LC	M	P	P	P
96	Green Sandpiper	<i>Tringa ochropus</i>	Scolopacidae	LC	M	P	P	P
97	Spotted Redshank	<i>Tringa erythropus</i>	Scolopacidae	LC	M	NR	P	P
98	Common Greenshank	<i>Tringa nebularia</i>	Scolopacidae	LC	M	P	P	P
99	Common Redshank	<i>Tringa totanus</i>	Scolopacidae	LC	M	NR	P	P
100	Wood Sandpiper	<i>Tringa glareola</i>	Scolopacidae	LC	M	P	P	P
101	Marsh Sandpiper	<i>Tringa stagnatilis</i>	Scolopacidae	LC	M	NR	P	NR
102	Little Pratincole	<i>Glareola lactea</i>	Glareolidae	LC	LM/R	NR	P	P
103	Black-headed Gull	<i>Larus ridibundus</i>	Laridae	LC	M	P	P	P
104	Brown-headed Gull	<i>Larus brunnicephalus</i>	Laridae	LC	M	NR	P	NR
105	Pallas's Gull	<i>Larus ichthyaeus</i>	Laridae	LC	M	NR	P	P
106	Little Tern	<i>Sternula albifrons</i>	Laridae	LC	LM/R	NR	P	P
107	Whiskered Tern	<i>Chlidonias hybrida</i>	Laridae	LC	LM/R	NR	NR	P
108	River Tern	<i>Sterna aurantia</i>	Laridae	VU	LM/R	NR	P	NR
109	Spotted Owlet	<i>Athene brama</i>	Strigidae	LC	R	P	P	P
110	Indian Scops-owl	<i>Otus bakkamoena</i>	Strigidae	LC	R	NR	P	NR
111	Short-eared Owl	<i>Asio flammeus</i>	Strigidae	LC	R	NR	P	NR
112	Brown Fish-owl	<i>Ketupa zeylonensis</i>	Strigidae	LC	R	NR	P	NR
113	Osprey	<i>Pandion haliaetus</i>	Pandionidae	LC	M	P	P	P
114	Black-winged Kite	<i>Elanus caeruleus</i>	Elanidae	LC	R	NR	P	P
115	Oriental Honey-buzzard	<i>Pernis ptilorhynchus</i>	Accipitridae	LC	M	P	P	NR
116	Egyptian Vulture	<i>Neophron percnopterus</i>	Accipitridae	EN	LM/R	NR	P	P
117	Crested Serpent-eagle	<i>Spilornis cheela</i>	Accipitridae	LC	R	NR	P	NR
118	Himalayan Griffon	<i>Gyps himalayensis</i>	Accipitridae	NT	R	NR	P	NR
119	Indian spotted Eagle	<i>Clanga hastata</i>	Accipitridae	VU	LM/R	NR	P	NR
120	Greater Spotted Eagle	<i>Clanga clanga</i>	Accipitridae	VU	R	NR	P	P
121	Booted Eagle	<i>Hieraetus pennatus</i>	Accipitridae	LC	R	P	P	NR

Table 24. List of bird species reported during the pre-census, main-census, and post-census of AWC 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	Pre-Census	Main-census	Post-Census
122	Western Marsh-harrier	<i>Circus aeruginosus</i>	Accipitridae	LC	R	P	P	NR
123	Hen Harrier	<i>Circus cyaneus</i>	Accipitridae	LC	R	NR	P	NR
124	Pied Harrier	<i>Circus melanoleucos</i>	Accipitridae	LC	R	NR	P	NR
125	Shikra	<i>Accipiter badius</i>	Accipitridae	LC	R	P	P	P
126	White-tailed Sea-eagle	<i>Haliaeetus albicilla</i>	Accipitridae	LC	R	NR	P	NR
127	Black Kite	<i>Milvus migrans</i>	Accipitridae	LC	R	P	P	P
128	White-eyed Buzzard	<i>Butastur teesa</i>	Accipitridae	LC	R	NR	P	NR
129	Common Buzzard	<i>Buteo buteo</i>	Accipitridae	LC	M	NR	P	NR
130	Long-legged Buzzard	<i>Buteo rufinus</i>	Accipitridae	LC	R	NR	P	NR
131	Indian Grey Hornbill	<i>Ocyroceros birostris</i>	Bucerotidae	LC	R	P	P	P
132	Oriental Pied Hornbill	<i>Anthracoceros albirostris</i>	Bucerotidae	LC	R	NR	P	NR
133	Common Hoopoe	<i>Upupa epops</i>	Upupidae	LC	R	NR	P	P
134	Asian Green Bee-eater	<i>Merops orientalis</i>	Meropidae	LC	R	P	P	P
135	Blue-tailed Bee-eater	<i>Merops philippinus</i>	Meropidae	LC	M	NR	NR	P
136	Indian Roller	<i>Coracias benghalensis</i>	Coraciidae	LC	R	P	P	P
137	Common Kingfisher	<i>Alcedo atthis</i>	Alcedinidae	LC	R	P	P	P
138	Pied Kingfisher	<i>Ceryle rudis</i>	Alcedinidae	LC	R	P	P	P
139	Stork-billed Kingfisher	<i>Pelargopsis capensis</i>	Alcedinidae	LC	R	NR	P	NR
140	White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	Alcedinidae	LC	R	P	P	P
141	Black-capped Kingfisher	<i>Halcyon pileata</i>	Alcedinidae	VU	R	NR	P	NR
142	Coppersmith Barbet	<i>Psilopogon haemacephalus</i>	Megalaimidae	LC	R	P	P	P
143	Brown-headed Barbet	<i>Psilopogon zeylanicus</i>	Megalaimidae	LC	R	NR	P	P
144	Blue-throated Barbet	<i>Psilopogon asiaticus</i>	Megalaimidae	LC	R	NR	P	NR
145	Eurasian Wryneck	<i>Jynx torquilla</i>	Picidae	LC	R	NR	P	NR
146	Black-rumped Flameback	<i>Dinopium benghalense</i>	Picidae	LC	R	P	P	P
147	Lesser Kestrel	<i>Falco naumanni</i>	Falconidae	LC	M	NR	P	NR
148	Common Kestrel	<i>Falco tinnunculus</i>	Falconidae	LC	R	P	P	NR
149	Peregrine Falcon	<i>Falco peregrinus</i>	Falconidae	LC	M	NR	P	P
150	Plum-headed Parakeet	<i>Himalayapsitta cyanocephala</i>	Psittacidae	LC	R	NR	P	NR
151	Rose-ringed Parakeet	<i>Alexandrinus krameri</i>	Psittacidae	LC	R	P	P	NR

Table 24. List of bird species reported during the pre-census, main-census, and post-census of AWC 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	Pre-Census	Main-census	Post-Census
152	Black-hooded Oriole	<i>Oriolus xanthornus</i>	Oriolidae	LC	R	P	P	NR
153	Indian Golden Oriole	<i>Oriolus kundoo</i>	Oriolidae	LC	R	NR	P	P
154	Large Cuckooshrike	<i>Coracina javensis</i>	Campephagidae	LC	R	NR	P	NR
155	Chestnut-bellied Sandgrouse	<i>Pterocles exustus</i>	Pteroclididae	LC	R	P	NR	P
156	White-throated Fantail	<i>Rhipidura albigollis</i>	Rhipiduridae	LC	R	NR	P	NR
157	Ashy Drongo	<i>Dicrurus leucophaeus</i>	Dicruridae	LC	R	NR	P	NR
158	Black Drongo	<i>Dicrurus macrocerus</i>	Dicruridae	LC	R	P	P	P
159	Indian Paradise-flycatcher	<i>Terpsiphone paradisi</i>	Monarchidae	LC	R	NR	P	NR
160	Brown Shrike	<i>Lanius cristatus</i>	Laniidae	LC	R	P	P	NR
161	Red-backed Shrike	<i>Lanius collurio</i>	Laniidae	LC	R	NR	P	NR
162	Isabelline Shrike	<i>Lanius isabellinus</i>	Laniidae	LC	M	NR	P	NR
163	Long-tailed Shrike	<i>Lanius schach</i>	Laniidae	LC	R	NR	P	P
164	Grey-backed Shrike	<i>Lanius tephronotus</i>	Laniidae	LC	M	NR	P	NR
165	Rufous Treepie	<i>Dendrocitta vagabunda</i>	Corvidae	LC	R	P	P	P
166	House Crow	<i>Corvus splendens</i>	Corvidae	LC	R	P	P	P
167	Large-billed Crow	<i>Corvus macrorhynchos</i>	Corvidae	LC	R	P	P	P
168	Grey-headed Canary-flycatcher	<i>Culicicapa ceylonensis</i>	Stenostiridae	LC	M	NR	P	NR
169	Rufous-tailed Lark	<i>Ammomanes phoenicura</i>	Alaudidae	LC	R	P	P	NR
170	Ashy-crowned Sparrow-lark	<i>Eremopterix griseus</i>	Alaudidae	LC	R	P	P	P
171	Bengal Bushlark	<i>Mirafra assamica</i>	Alaudidae	LC	R	NR	P	P
172	Indian Bushlark	<i>Mirafra erythroptera</i>	Alaudidae	LC	R	NR	P	NR
173	Sand Lark	<i>Aldadala raytal</i>	Alaudidae	LC	R	NR	P	P
174	Oriental Skylark	<i>Alda gulgula</i>	Alaudidae	LC	R	P	P	P
175	Zitting Cisticola	<i>Cisticola juncidis</i>	Cisticolidae	LC	R	NR	P	NR
176	Ashy Prinia	<i>Prinia socialis</i>	Cisticolidae	LC	R	NR	P	NR
177	Plain Prinia	<i>Prinia inornata</i>	Cisticolidae	LC	R	NR	P	P
178	Common Tailorbird	<i>Orthotomus sutorius</i>	Cisticolidae	LC	R	P	P	NR
179	Blyth's Reed-warbler	<i>Acrocephalus dumetorum</i>	Acrocephalidae	LC	M	NR	P	NR
180	Clamorous Reed-warbler	<i>Acrocephalus stentoreus</i>	Acrocephalidae	LC	M	NR	P	NR

Table 24. List of bird species reported during the pre-census, main-census, and post-census of AWC 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	Pre-Census	Main-census	Post-Census
181	Pallas's Grasshopper-warbler	<i>Helopsaltes certhiola</i>	Locustellidae	LC	M	NR	P	NR
182	Orphen Warbler	<i>Curruca hortensis</i>	Sylviidae	LC	LM/R	NR	P	NR
183	Striated Grassbird	<i>Megalururus palustris</i>	Locustellidae	LC	R	NR	P	P
184	Red-rumped Swallow	<i>Cecropis daurica</i>	Hirundinidae	LC	M	NR	P	NR
185	Barn Swallow	<i>Hirundo rustica</i>	Hirundinidae	LC	M	P	P	P
186	Dusky Crag Martin	<i>Ptyonoprogne concolor</i>	Hirundinidae	LC	M	NR	P	P
187	Asian Plain Martin	<i>Riparia chinensis</i>	Hirundinidae	LC	M	NR	P	P
188	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	Pycnonotidae	LC	R	NR	P	P
189	Red-vented Bulbul	<i>Pycnonotus cafer</i>	Pycnonotidae	LC	R	P	P	P
190	Dusky Warbler	<i>Phylloscopus fuscatus</i>	Phylloscopidae	LC	M	NR	P	NR
191	Smoky Warbler	<i>Phylloscopus fulgiventris</i>	Pycnonotidae	LC	M	NR	P	NR
192	Tickell's Leaf-warbler	<i>Phylloscopus affinis</i>	Phylloscopidae	LC	M	NR	P	NR
193	Greenish Warbler	<i>Phylloscopus trochiloides</i>	Phylloscopidae	LC	M	NR	P	NR
194	Lesser Whitethroat	<i>Curruca curruca</i>	Sylviidae	LC	R	NR	P	NR
195	Indian White-eye	<i>Zosterops palpebrosus</i>	Zosteropidae	LC	R	NR	P	NR
196	Large Grey Babbler	<i>Argya malcolmi</i>	Leiotrichidae	LC	R	NR	P	P
197	Jungle Babbler	<i>Argya striata</i>	Leiotrichidae	LC	R	NR	P	P
198	Striated Babbler	<i>Argya earlei</i>	Leiotrichidae	LC	R	NR	P	P
199	Rosy Starling	<i>Pastor roseus</i>	Sturnidae	LC	M	P	NR	P
200	Indian Pied Starling	<i>Gracupica contra</i>	Sturnidae	LC	R	NR	P	P
201	Common Starling	<i>Sturnus vulgaris</i>	Sturnidae	LC	LM/R	NR	NR	NR
202	Brahminy Starling	<i>Sturnia pagodarum</i>	Sturnidae	LC	R	NR	P	P
203	Chestnut-tailed Starling	<i>Sturnia malabarica</i>	Sturnidae	LC	M	NR	P	NR
204	Common Myna	<i>Acridotheres tristis</i>	Sturnidae	LC	R	P	P	P
205	Bank Myna	<i>Acridotheres ginginianus</i>	Sturnidae	LC	R	NR	P	P
206	Jungle Myna	<i>Acridotheres fuscus</i>	Sturnidae	LC	R	NR	P	NR
207	Oriental Magpie-robin	<i>Copsychus saularis</i>	Muscicapidae	LC	R	NR	P	P
208	Indian Robin	<i>Copsychus fulicatus</i>	Muscicapidae	LC	R	P	P	P
209	Asian Brown Flycatcher	<i>Muscicapa dauurica</i>	Muscicapidae	LC	R	NR	P	NR

Table 24. List of bird species reported during the pre-census, main-census, and post-census of AWC 2024 (contd.)

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	Pre-Census	Main-census	Post-Census
210	Bluethroat	<i>Luscinia svecica</i>	Muscicapidae	LC	R	NR	P	NR
211	Red-throated Flycatcher	<i>Ficedula albicilla</i>	Muscicapidae	LC	M	NR	P	P
212	Black Redstart	<i>Phoenicurus ochruros</i>	Muscicapidae	LC	M	P	P	P
213	Blue Rock Thrush	<i>Monticola solitarius</i>	Muscicapidae	LC	R	NR	P	NR
214	Grey Bushchat	<i>Saxicola ferreus</i>	Muscicapidae	LC	R	NR	P	NR
215	Pied Bushchat	<i>Saxicola caprata</i>	Muscicapidae	LC	R	NR	P	P
216	White-tailed Stonechat	<i>Saxicola leucurus</i>	Muscicapidae	LC	M	NR	P	NR
217	Common Stonechat	<i>Saxicola torquatus</i>	Muscicapidae	LC	M	NR	P	P
218	Brown Rockchat	<i>Oenanthe fusca</i>	Muscicapidae	LC	M	P	P	NR
219	Purple Sunbird	<i>Cinnyris asiaticus</i>	Nectariniidae	LC	R	NR	P	P
220	Common lora	<i>Aegithina tiphia</i>	Aegithinidae	LC	R	NR	NR	P
221	Red Avadavat	<i>Amandava amandava</i>	Estrildidae	LC	M	P	P	NR
222	Indian Silverbill	<i>Euodice malabarica</i>	Estrildidae	LC	R	P	P	P
223	Scaly-breasted Munia	<i>Lonchura punctulata</i>	Estrildidae	LC	R	P	P	P
224	Chestnut Munia	<i>Lonchura atricapilla</i>	Estrildidae	LC	R	NR	P	NR
225	House Sparrow	<i>Passer domesticus</i>	Passeridae	LC	R	NR	P	P
226	Yellow Throated Sparrow	<i>Petronia xanthocolis</i>	Passeridae	LC	R	NR	NR	P
227	Tree Pipit	<i>Anthus trivialis</i>	Motacillidae	LC	R	NR	P	NR
228	Olive-backed Pipit	<i>Anthus hodgsoni</i>	Motacillidae	LC	M	NR	P	NR
229	Rosy Pipit	<i>Anthus roseatus</i>	Motacillidae	LC	M	NR	P	NR
230	Paddyfield Pipit	<i>Anthus rufulus</i>	Motacillidae	LC	R	P	P	P
231	Tawny Pipit	<i>Anthus campestris</i>	Motacillidae	LC	M	NR	P	NR
232	Grey Wagtail	<i>Motacilla cinerea</i>	Motacillidae	LC	M	P	P	NR
233	Citrine Wagtail	<i>Motacilla citreola</i>	Motacillidae	LC	M	P	P	P
234	Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	Motacillidae	LC	M	P	P	P
235	White-browed Wagtail	<i>Motacilla maderaspatensis</i>	Motacillidae	LC	R	P	P	P
236	White Wagtail	<i>Motacilla alba</i>	Motacillidae	LC	R	P	P	P
237	Crested Bunting	<i>Emberiza lathami</i>	Emberizidae	LC	M	NR	P	NR

Note: EN: Endangered; VU: Vulnerable; NT: Near Threatened; LC: Least Concern; M/R: Long-distance migrants; M/R: Local migrants; R: Resident bird; WB: Waterbird; LB: Landbird; WD: Wetland-dependent bird; NR: Not Recorded

Table 25: Details of Threatened and Near Threatened species reported during the pre-census, main-census and post-census of AWC 2024

Sl. No.	English name	Scientific name	Family	IUCN status	Migratory Status	Pre-census	Main-census	Post Census
1	Greater Adjutant	<i>Leptoptilos dubius</i>	Ciconiidae	EN	LM/R	NR	P	P
2	Egyptian Vulture	<i>Neophron percnopterus</i>	Accipitridae	EN	LM/R	NR	P	P
3	Common Pochard	<i>Aythya ferina</i>	Anatidae	VU	M	P	P	P
4	Lesser Adjutant	<i>Leptoptilos javanicus</i>	Ciconiidae	VU	LM/R	NR	P	P
5	River Tern	<i>Sterna auranita</i>	Laridae	VU	LM/R	NR	P	NR
6	Greater Spotted Eagle	<i>Clanga clanga</i>	Accipitridae	VU	R	NR	P	P
7	Black-capped Kingfisher	<i>Halcyon pileata</i>	Alcedinidae	VU	R	NR	P	NR
8	Ferruginous Duck	<i>Aythya nyroca</i>	Anatidae	NT	M	P	P	P
9	Falcated Duck	<i>Mareca falcata</i>	Anatidae	NT	M	NR	P	NR
10	Painted Stork	<i>Mycteria leucocephala</i>	Ciconiidae	NT	R	NR	P	P
11	Asian Woollyneck	<i>Ciconia episcopus</i>	Ciconiidae	NT	LM/R	NR	P	P
12	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	Ciconiidae	NT	LM/R	NR	P	P
13	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	Threskiornithidae	NT	LM/R	P	P	P
14	Oriental Darter	<i>Anhinga melanogaster</i>	Anhingidae	NT	LM/R	P	P	P
15	Northern Lapwing	<i>Vanellus vanellus</i>	Charadriidae	NT	M	P	P	NR
16	River Lapwing	<i>Vanellus duvaucelii</i>	Charadriidae	NT	LM/R	NR	P	P
17	Eurasian Curlew	<i>Numenius arquata</i>	Scolopacidae	NT	M	P	P	P
18	Black-tailed Godwit	<i>Limosa limosa</i>	Scolopacidae	NT	M	NR	P	P
19	Himalayan Griffon	<i>Gyps himalayensis</i>	Accipitridae	NT	R	NR	P	NR

Note: EN: Endangered; VU: Vulnerable; NT: Near Threatened; M: Long-distance migrants; LM/R: Local migrants; R: Resident bird
WB: Waterbird; LB: Landbird; WD: Wetland-dependent bird; NR: Not Recorded

CHAPTER 19

HABITAT ASSESSMENT

a. Wetland Type

During AWC 2024, 84 wetlands from 28 districts of Bihar were surveyed, which includes 28 sites of five river systems (Ganga, Kosi, Gandak, Burhi Gandak, and Bagmati), 13 reservoirs, four fish ponds, 11 freshwater marshes, and 28 freshwater lakes. Based on the water availability, the wetlands surveyed were categorized into perennial and temporary wetlands. Most of the surveyed wetlands were permanent, except Pachaila Chaur in Begusarai district, Jhapaha Mann in Muzaffarpur district and Khiroi Nadhi Tat in Darbhanga district (Table 26, Figure 13a).

Table 26. Details of district-wise wetland types

District	Sl. No.	Wetland	River	Freshwater marshes	Freshwater Lakes	Reservoir, Barrages	Fish ponds	Grassland	Freshwater Swamp
Araria	1	Trishullia ghat	✓						
Araria	2	Dopahariya pond					✓		
Aurangabad	3	Indrapuri Barrage				✓			
Banka	4	Ohrni Dam				✓			
Begusarai	5	Kawar lake		✓					
Begusarai	6	Pachela		✓					
Bhagalpur	7	Jagatpur lake			✓				
Bhagalpur	8	Gangaprasad Jheel			✓				
Bhagalpur	9	Kataiya dhar	✓	✓					
Bhagalpur	10	Dimaha wetland			✓				
Bhagalpur	11	Ganga river - Manik sarkar ghat to Barari Ghat	✓	✓				✓	
Bhagalpur	12	VGDS- Barari ghat Bhagalpur to Bateshwarsthan	✓						
Bhagalpur	13	VGDS - Sultanganj to Mirzapur	✓						
Bhagalpur	14	VGDS - Mirzapur to Barari ghat Bhagalpur	✓	✓					
Bhagalpur	15	Ghatora wetland		✓					
Bhagalpur	16	Bhagalpur bypass		✓					
Bhojpur	17	Sunki Suhiya - Shahpur	✓						
Bhojpur	18	Ganges (Mahuli Ghat to Maner)			✓				
Buxar	19	Gokul Jalashay	✓						
Buxar	20	Ganga Vayasi Ghat to Bihari Ghat		✓	✓				
Buxar	21	Ranighat Chausabyasi Bridge	✓						
Darbhangha	22	Kusheshwar asthan	✓						
Darbhangha	23	Khiroi nadhi tat		✓					
East Champaran	24	Sarotar Wetland	✓						
East Champaran	25	Basmanpur mann			✓				
East Champaran	26	Sonbarsa mann			✓				
East Champaran	27	Chilraon Mann			✓				

Table 26. Details of district-wise wetland types (contd.)

District	Sl. No.	Wetland	River	Freshwater marshes	Freshwater Lakes	Reservoir, Barrages	Fish ponds	Grassland	Freshwater Swamp
East Champaran	28	Gandak river of East champaran			✓				
East Champaran	29	Burhi Gandak	✓						
Gaya	30	Barandih dam	✓						
Gaya	31	Barwadih dam	✓						
Jamui	32	Nagi dam	✓						
Jamui	33	Nakti dam				✓			
Jamui	34	Belatar				✓			
Jamui	35	Pailbajan				✓			
Jamui	36	Devanahar			✓				
Jamui	37	Garhi dam			✓	✓			
Jamui	38	Jhajha railway pond				✓			
Jamui	39	Dhamma Aahar			✓				
Jamui	40	Raja ahar				✓			
Kaimur	41	Karanchak/Durgawati Dam				✓			
Kaimur	42	Karkat waterfall	✓						
Kaimur	43	Kohira Dam				✓			
Katihar	44	Goga beel			✓				
Katihar	45	Bhanwra Kothi			✓				
Katihar	46	Bagar beel			✓				
Katihar	47	Kathotia fish pond					✓		
Katihar	48	Baldiya chaur			✓				
Katihar	49	Kahalgoan to Manihari			✓		✓		
Khagaria	50	Pasraha Chaur	✓						
Kishanganj	51	Mahananda river			✓			✓	
Madhubani	52	Chapaniya Lake	✓						
Munger	53	Ganga river - Kashtarni ghat to Bariyarpura			✓				
Muzaffarpur	54	Manika mann			✓				
Muzaffarpur	55	Jhapaha mann			✓				
Muzaffarpur	56	Kanti mann			✓		✓		
Nalanda	57	Gidhi Lake			✓		✓		
Nalanda	58	Pushkarni lake		✓					
Nalanda	59	Panchane River (behind Sanik sch.)				✓			
Nalanda	60	Ganga Jalashay Rajgir				✓			
Nalanda	61	Pawapuri				✓			
Nalanda	62	Ordance Factory Pond			✓				
Nawada	63	Hardiya Dam (Phulwariya)			✓				
Patna	64	Rajdhani Jalashay	✓						
Patna	65	Ganga river - Maner to Mokhama		✓				✓	
Saharsa	66	Simri jheel	✓	✓	✓			✓	
Saharsa	67	Arsi chaur	✓						

Table 26. Details of district-wise wetland types (contd.)

District	Sl. No.	Wetland	River	Freshwater marshes	Freshwater Lakes	Reservoir, Barrages	Fish ponds	Grassland	Freshwater Swamp
Saharsa	68	Bora Chaur	✓	✓					✓
Supaul	69	Kosi catchment of Supaul & Saharsa	✓						
Supaul	70	Kosi river (Birpur barrage to Kosi Mahasetu)		✓	✓		✓		
Samastipur	71	Deokal Chaur	✓						
Saran	72	Hariya Chaur Akilpur			✓				
Saran	73	Bahiyara chaur							
Saran	74	Phulwariya chaur			✓				
Saran	75	Atanagar chaur	✓						
Sheohar	76	Bagmati river							
Vaishali	77	Baraila lake							
Vaishali	78	Salaha lake	✓						
Vaishali	79	Puraniya chaur							
Vaishali	80	Gandak river		✓					
West Champaran	81	Darwabari wetland	✓						
West Champaran	82	Udaipur Jheel/WLS	✓						
West Champaran	83	Lal Saraya mann	✓						
West Champaran	84	Gandak river (Valmikinagar to near Madanpur)							

b. Vegetation type

A total of five major categories of vegetation were reported from the wetlands covered during the AWC 2024. Of them, 10 wetlands had all five types of vegetation (Table 27). The vegetation cover of the wetlands was also recorded during the AWC 2024. The vegetation status was reported in four categories namely the wetland devoid of vegetation, wetlands with vegetation to 50% of the area, vegetation coverage in the whole of the wetlands, and the vegetation which had been removed from the wetland as part of management practice or local customs.

Table 27. Details of site-wise vegetation cover and type reported during the AWC 2024

District	Site	Vegetation cover of wetland					Vegetation type					
		None	Half	Complete	Recently cleared	Unknown	On Bank	Submerged	Free Floating	Emergent	Floating leaved-rooted	Unknown
Araria	Trishullia ghat						✓	✓	✓		✓	
	Dopahariya pond				✓		✓	✓	✓		✓	
Aurangabad	Indrapuri Barrage		✓				✓					
Banka	Ohrni Dam					✓	✓					
Begusarai	Kawar lake			✓			✓	✓	✓	✓	✓	
	Pachela			✓							✓	

Table 27. Details of site-wise vegetation cover and type reported during the AWC 2024 (contd.)

District	Site	Vegetation cover of wetland					Vegetation type					
		None	Half	Complete	Recently cleared	Unknown	On Bank	Submerged	Free Floating	Emergent	Floating leaved-rooted	Unknown
Bhagalpur	Jagatpur lake		✓				✓			✓		
	Gangaprasad Jheel		✓				✓	✓				
	Kataiya dhar	✓					✓	✓			✓	
	Dimaha wetland		✓				✓			✓		
	Ganga river - Manik sarkar ghat - to Barari Ghat		✓				✓	✓	✓			
	VGDS- Barari ghat Bhagalpur to Bateshwarsthan	✓					✓					
	VGDS - Sultanganj to Mirzapur	✓					✓					
	VGDS - Mirzapur to Barari ghat Bhagalpur						✓					
	Ghatora wetland		✓									
	Bhagalpur bypass		✓				✓	✓	✓	✓	✓	
Bhagalpur	Kahalgoan to Manihari	✓										
Bhojpur	Sunki Suhiya - Shahpur			✓			✓	✓	✓	✓	✓	
	Ganges (Mahuli Ghat to Maner)	✓										✓
Buxar	Gokul Jalashay		✓				✓	✓	✓	✓	✓	
Buxar	Vayasi Ghat to Bihari Ghat	✓					✓					
Buxar	Ranighat Chausabyasi Bridge						✓	✓				
Darbhanga	Kusheshwar asthan		✓				✓		✓			
	Khiroli nadhi tat	✓										✓
East Champaran	Sarotar Wetland		✓				✓	✓	✓		✓	
	Basmanpur mann		✓				✓	✓	✓		✓	
	Sonbarsa mann		✓				✓	✓		✓		
	Chilraon Mann	✓					✓					
	Gandak river of East champaran	✓										✓
	Burhi Gandak	✓						✓				
Gaya	Barandih dam	✓					✓					
	Barwadih dam		✓				✓					
Jamui	Nagi dam		✓				✓	✓				
	Nakti dam		✓				✓	✓				
	Belatar		✓				✓	✓	✓	✓	✓	
	Pailbajan			✓			✓	✓	✓	✓	✓	
	Devanahar		✓				✓	✓				
	Garhi dam		✓				✓	✓				
	Jhajha railway pond			✓			✓	✓	✓	✓	✓	
	Raja ahar			✓			✓	✓	✓	✓	✓	

Table 27. Details of site-wise vegetation cover and type reported during the AWC 2024 (contd.)

District	Site	Vegetation cover of wetland					Vegetation type					
		None	Half	Complete	Recently cleared	Unknown	On Bank	Submerged	Free Floating	Emergent	Floating leaved-rooted	Unknown
	Damna aahar			✓			✓	✓				
Kaimur	Karanchak/Durgawati Dam	✓										✓
	Karkat waterfall	✓										✓
	Kohira Dam	✓										✓
Katihar	Goga beel			✓			✓	✓	✓	✓		
	Bhanwra Kothi					✓						
	Bagar beel			✓			✓	✓	✓	✓	✓	
	Kathotia fish pond					✓						✓
	Baldiya chaur			✓			✓	✓	✓	✓	✓	
Khagaria	Pasraha Chaur							✓				
Kishanganj	Mahananda river	✓					✓					
Madhubani	Chapaniya Lake		✓				✓					
Munger	Ganga river - Kashtarni ghat to Bariyarpura											
Muzaffarpur	Manika mann				✓				✓			
	Jhapaha mann		✓						✓			
	Kanti mann		✓						✓			
Nalanda	Gidhi Lake			✓			✓	✓	✓			
	Pushkarni lake		✓				✓		✓			
	Panchane River		✓				✓					
	Ganga Jalashay Rajgir	✓										✓
	Pawapuri				✓		✓					
	Ordance Factory Pond		✓				✓					
Nawada	Hardiya Dam (Phulwariya)	✓					✓					
Patna	Rajdhani Jalashay		✓						✓		✓	
	Ganga river - Maner to Mokama		✓									✓
Saharsa	Simri jheel		✓				✓	✓				✓
	Arsi chaur			✓				✓			✓	
	Bora Chaur			✓								✓
Supaul	Kosi catchment of Supaul & Saharsa		✓				✓	✓				
	Kosi river (Birpur barrage to Kosi Mahasetu)											
Samastipur	Deokal Chaur						✓	✓				
Saran	Hariya Chaur Akilpur	✓					✓	✓				
	Bahiyara chaur											
	Phulwariya chaur			✓							✓	
	Atanagar chaur		✓				✓	✓	✓		✓	

Table 27. Details of site-wise vegetation cover and type reported during the AWC 2024 (contd.)

District	Site	Vegetation cover of wetland					Vegetation type					
		None	Half	Complete	Recently cleared	Unknown	On Bank	Submerged	Free Floating	Emergent	Floating leaved-rooted	Unknown
Sheohar	Bagmati river	✓					✓	✓				
Vaishali	Baraila lake						✓	✓				
	Salaha lake						✓	✓		✓	✓	
	Puraniya chaur		✓				✓					
	Gandak river		✓									
West Champaran	Darwabari wetland							✓				
	Udaipur Jheel/WLS		✓				✓	✓	✓		✓	
	Lal Saraya mann		✓				✓					
	Gandak river (Valmikinagar to near Madanpur)						✓					

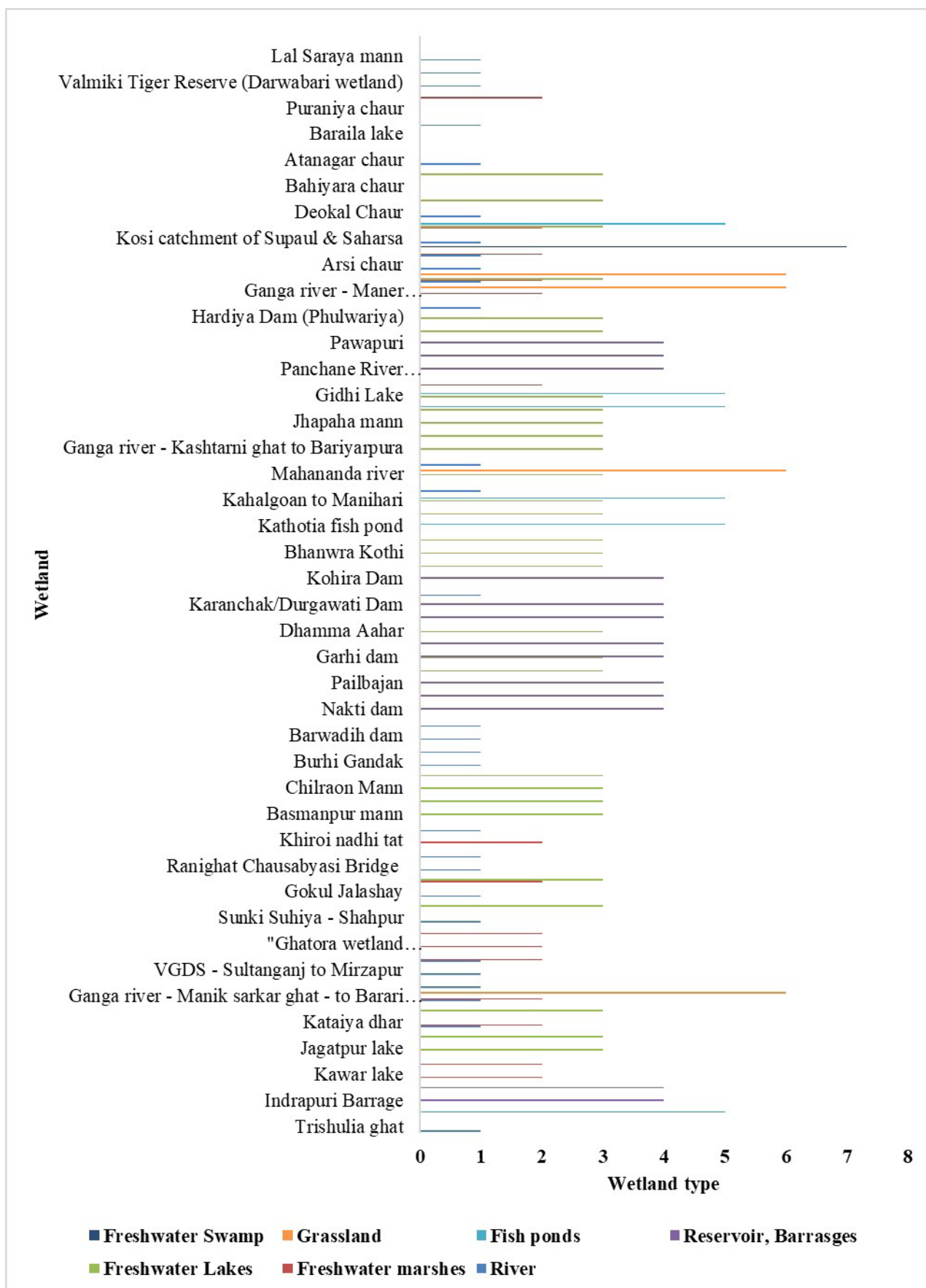


Figure 13a. Wetland types

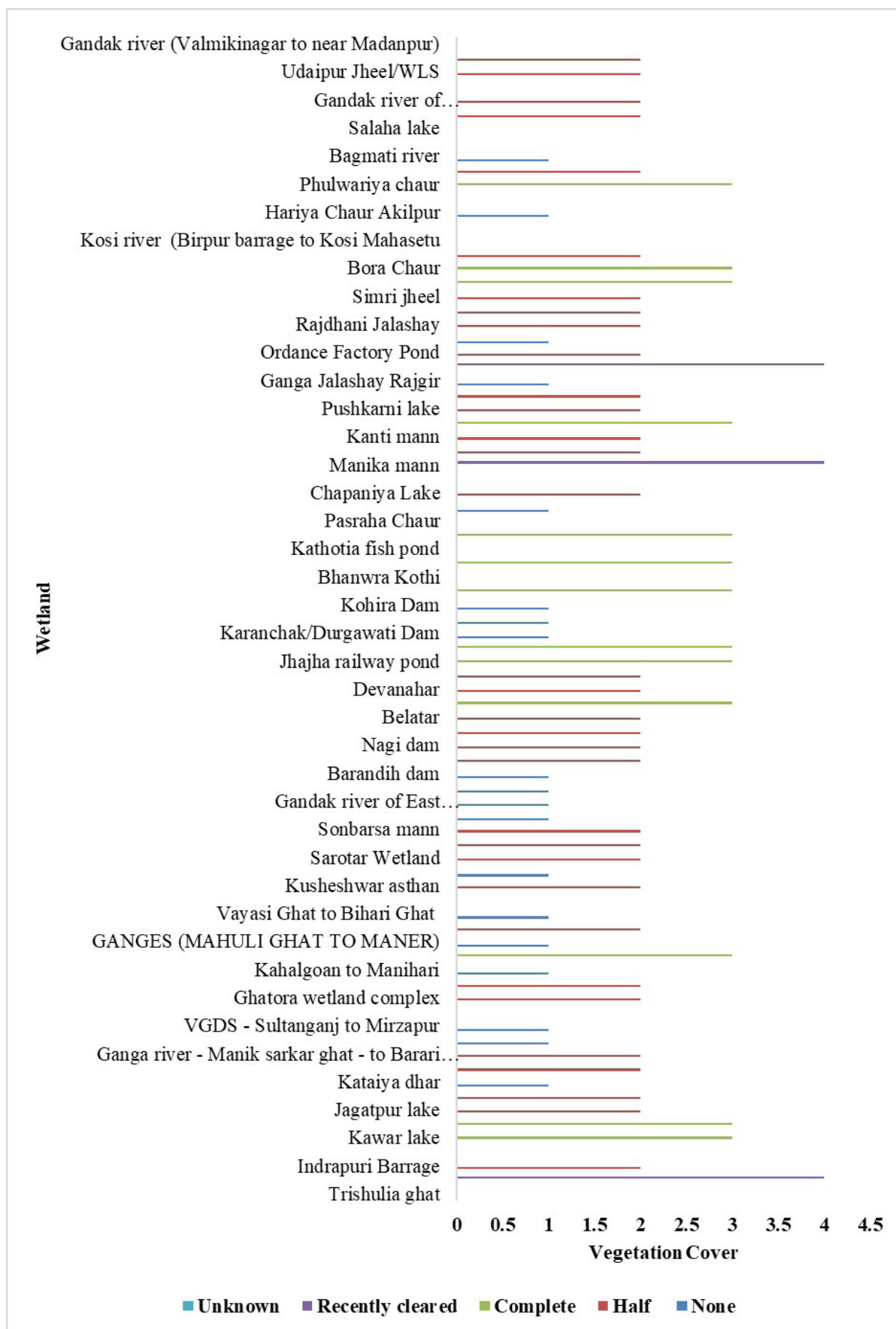


Figure 13b. Wetland-wise details of vegetation Cover

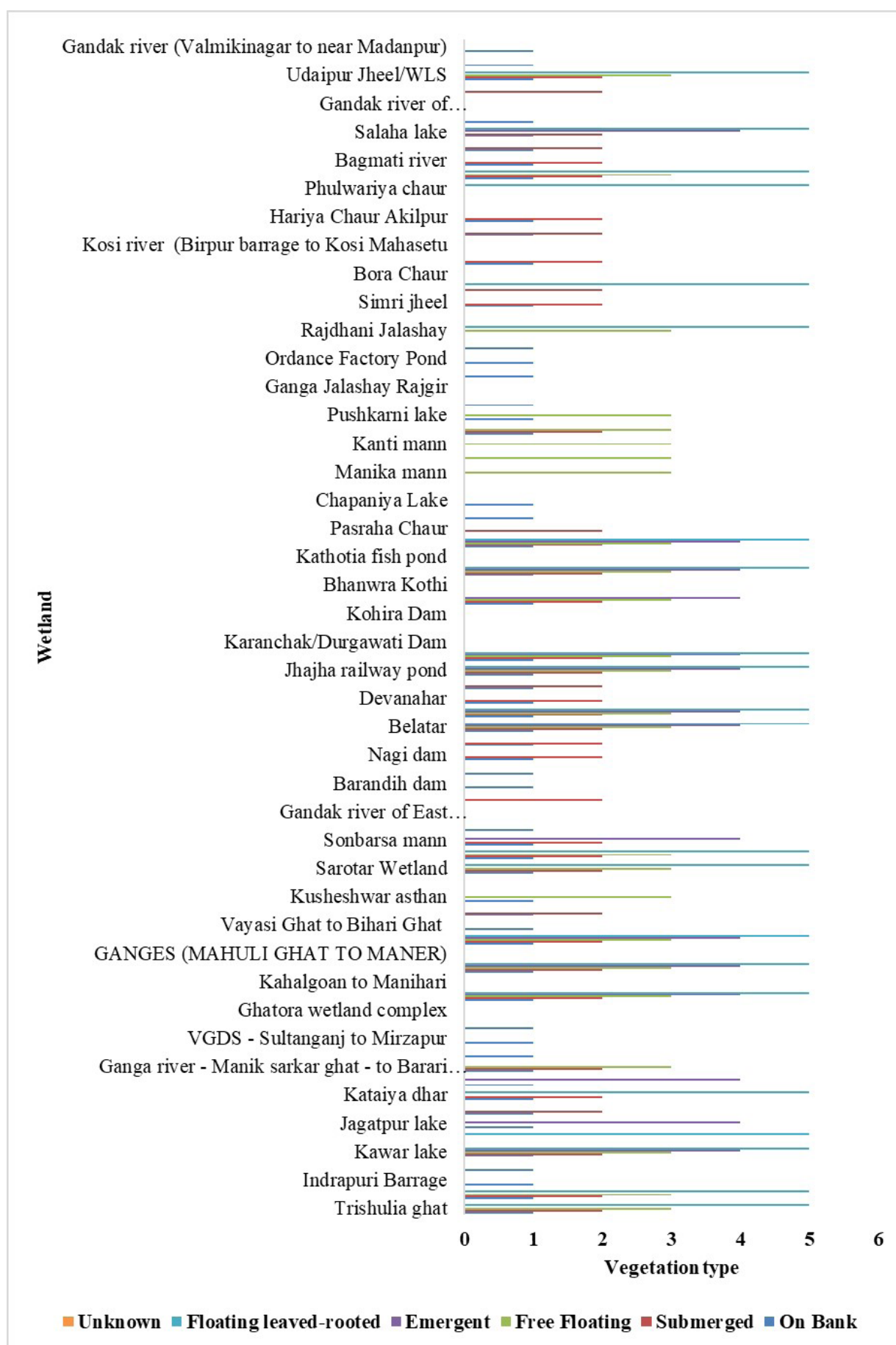


Figure 13c. Wetland-wise details of vegetation type

CHAPTER 20

THREATS AND ISSUES

The threats to each wetland site were recorded by the census teams in habitat forms (Table 28). The following were the threats reported from the wetlands.

a. **Fishing**

The status of fishing was reported for 78 wetlands out of 84 wetlands covered during AWC 2024. Fishing was observed in 77% of the wetlands (60 out of 78 wetlands). Intensive fishing was observed from 35 wetlands, moderate fishing was observed from 19 wetlands and low-intensity of fishing was reported from six wetlands. Fishing was not observed from 18 wetlands (Figure 14a).

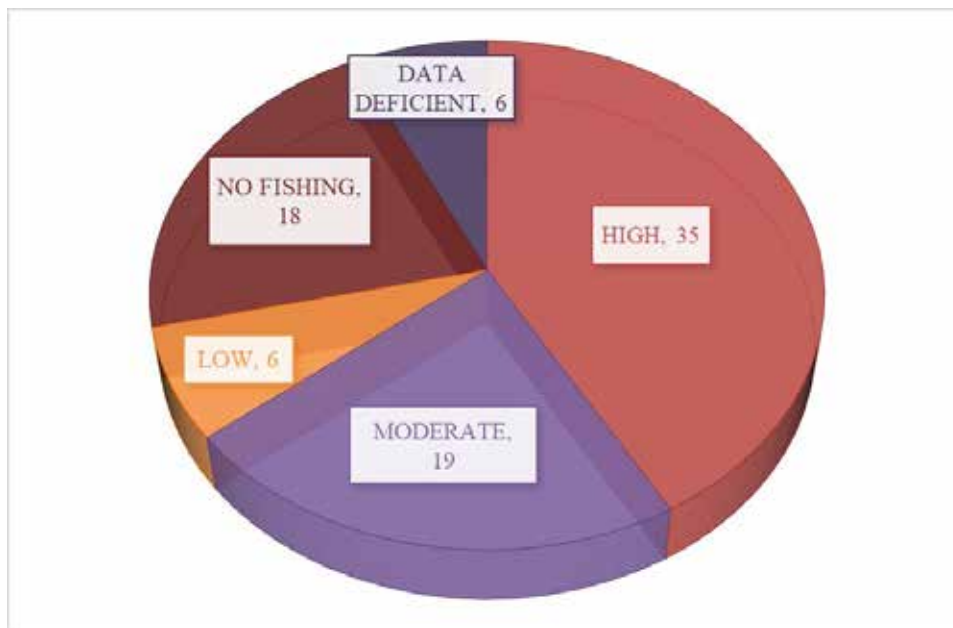


Figure 14a. Status of the fishing reported from wetlands covered during the AWC 2024

b. **Bird Poaching**

The Status of bird poaching was reported for 61 wetlands out of 84 wetlands covered during the AWC 2024. Bird poaching was reported from 61% of the wetlands (37 out of 61 wetlands) for which the data is available). Intensive poaching was reported from nine wetlands, moderate and low-intensity of poaching was observed from 14 wetlands each. Bird poaching was not reported from 24 wetlands (Figure 14b).

c. **Pollution**

A total of 38 wetlands showed signs of pollution due to the following reasons:

- Dumping of solid wastes and plastics
- Open defecation
- Washing laundry
- Colourful foam
- Plastic wastes
- Domestic waste
- Cremation waste
- Construction waste

Pollution data was not noted by the AWC participants for 44 wetlands.

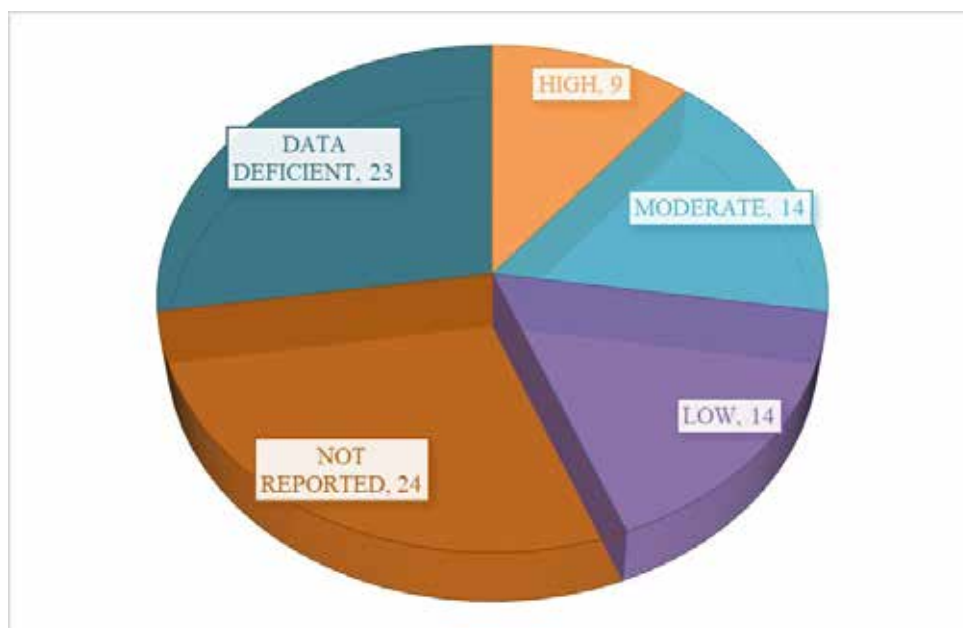


Figure 14b. Status of bird poaching recorded in wetlands covered during AWC 2024

d. **Other issues and concerns:** The following activities which are the concerns for the wetlands management were reported during the AWC 2024.

i) **Cattle grazing:** The status of cattle grazing was reported from 75 wetlands that were covered in 2024. Extensive cattle grazing was reported in 18 wetlands, moderate cattle grazing was reported in 26 wetlands, and low-intensity cattle grazing was reported in 24 wetlands. No cattle grazing was observed in seven wetlands, while data on cattle grazing was not reported in nine wetlands (Figure 14c).

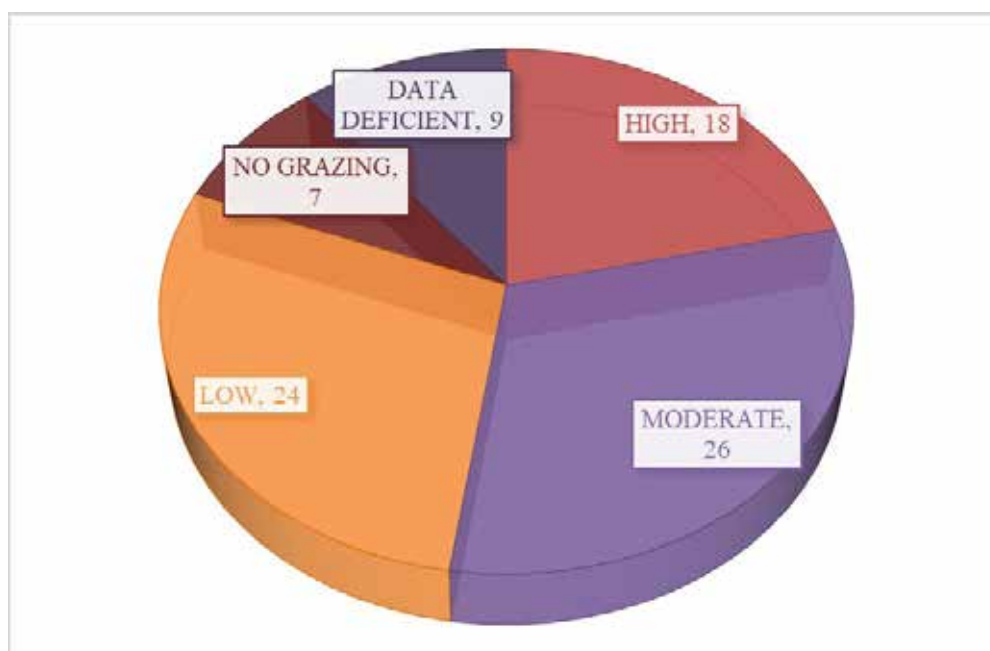


Figure 14c. Cattle grazing reported from the wetlands covered during the AWC 2024

ii) **Agriculture activities:** The status of agriculture activities for 77 wetlands were reported by the AWC 2024 participants. Of them, the agriculture activities were reported from 88% of the (68) wetlands. Extensive agriculture was reported in 39 wetlands, moderate agriculture was reported in 19 wetlands, while low-intensity agriculture practices were reported in 10 wetlands. No agriculture was observed in nine wetlands (Figure 14d).

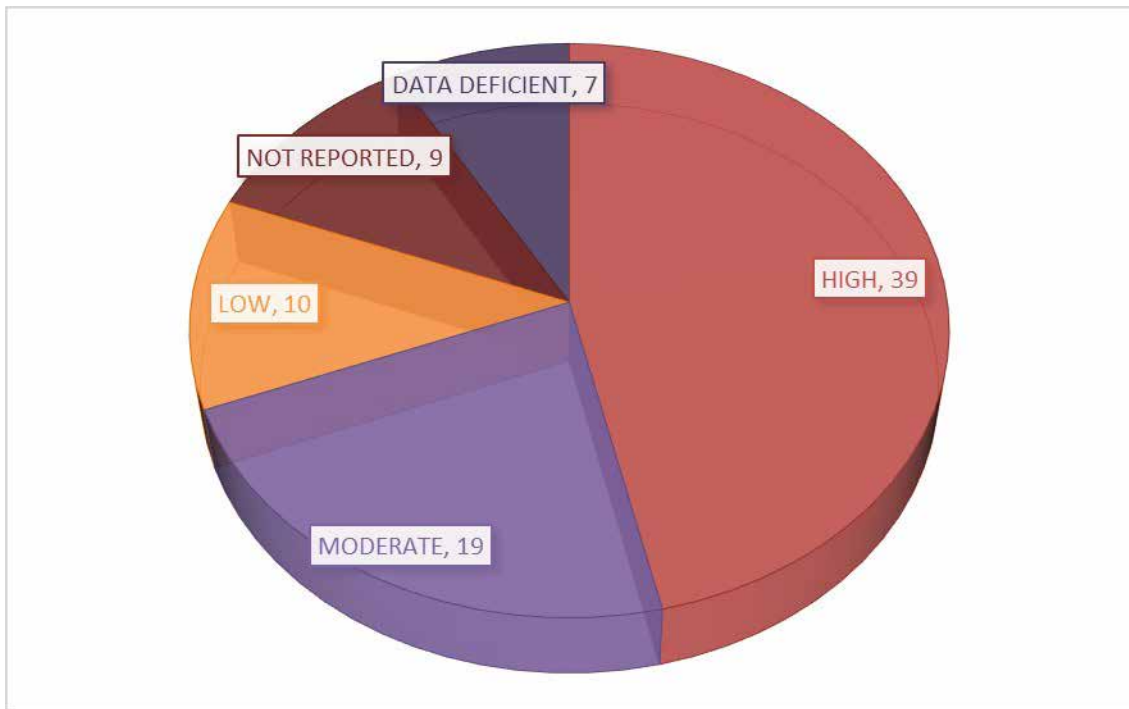


Figure 14d. Agriculture practices reported from wetlands covered during the AWC 2024

Table 28. Details of threats and issues reported from the wetlands covered during the AWC 2024 (contd.)

DISTRICT	SITE	FISHING					BIRD POACHING					AGRICULTURE				CATTLE GRAZING				Pollution
		None	Little	Moderate	Large	Unknown	None	Little	Moderate	Large	Unknown	None	Little	Moderate	Large	None	Little	Moderate	Large	
Aaria	Trishulia ghat			✓		✓									✓		✓			✓
	Dopahariya pond			✓			✓										✓			
Aurangabad	Indrapuri Barrage			✓							✓							✓		✓
	Ohmi Dam							✓					✓				✓			
Banka	Kawar lake				✓					✓					✓				✓	
	Pachela				✓					✓					✓		✓			
Begusarai	Jagatpur lake			✓				✓					✓				✓			
	Gangaprasad Jheel			✓				✓					✓					✓		
Bhagalpur	Kataiya dhar				✓					✓					✓					
	Dimaha wetland			✓				✓					✓				✓			
	Ganga river - Manik sarkar ghat to Barari Ghat			✓						✓					✓					✓
	VGDS- Barari ghat Bhagalpur to Bateshwarsthan				✓															✓
	VGDS - Sultanganj to Mirzapur			✓											✓					
	VGDS - Mirzapur to Barari ghat		✓					✓									✓			✓
	Ghatora				✓										✓		✓			
	Bhagalpur bypass			✓				✓									✓			✓
	Kahalgoan to Manihari			✓											✓				✓	
	Sunki Suhiya - Shahpur				✓													✓		✓

Table 28. Details of threats and issues reported from the wetlands covered during the AWC 2024 (contd.)

DISTRICT	SITE	FISHING				BIRD POACHING				AGRICULTURE				CATTLE GRAZING				Pollution
		None	Little	Moderate	Large	Unknown	None	Little	Moderate	Large	None	Little	Moderate	Large				
Buxar	Gokul Jalashay				✓			✓					✓			✓	✓	
Buxar	Vayasi Ghat to Bihari Ghat				✓						✓				✓			
Buxar	Ranighat Chausabyasi Bridge				✓					✓			✓			✓	✓	
Darbhanga	Kusheshwar asthan			✓		✓							✓					
	Khiroi nadhi tat	✓										✓						
East Champaran	Sarotar Wetland				✓				✓				✓					
	Basmanpur mann				✓			✓					✓				✓	
	Sonbarsa mann				✓				✓				✓			✓	✓	
	Chilraon Mann				✓				✓				✓			✓	✓	
	Gandak river of East champaran				✓								✓			✓	✓	
Gaya	Burhi Gandak			✓									✓				✓	
	Barandilh dam	✓									✓							
Jamui	Barwadih dam	✓										✓						
	Nagi dam		✓										✓				✓	
	Nakti dam		✓										✓				✓	
	Belatar		✓					✓									✓	
	Pailbajan	✓										✓					✓	
	Devanahar				✓							✓					✓	
	Garhi dam				✓								✓				✓	
	Jhajha railway pond	✓												✓			✓	
Kaimur	Raja ahar				✓												✓	
	Karanchak/ Durgawati Dam	✓									✓							
	Karkat waterfall	✓										✓						
Kaimur	Kohira Dam			✓									✓					

Table 28. Details of threats and issues reported from the wetlands covered during the AWC 2024 (contd.)

DISTRICT	SITE	FISHING					BIRD POACHING				AGRICULTURE				CATTLE GRAZING				Pollution	
		None	Little	Moderate	Large	Unknown	None	Little	Moderate	Large	Unknown	None	Little	Moderate	Large	None	Little	Moderate		Large
Katihar	Gogabeel					✓		✓							✓				✓	✓
	Bhanwra Kothi					✓						✓				✓				
	Bagar beel					✓												✓		✓
	Kathotia fish pond					✓										✓				✓
Khagaria	Baldiya chaur					✓												✓		✓
	Pasraha Chaur					✓									✓					✓
	Mahananda river					✓			✓						✓					✓
Kishanganj	Chapaniya Lake	✓							✓					✓						
Munger	Ganga river - Kashtarni ghat to Bariyarpura			✓																✓
	Manika mann					✓									✓				✓	✓
Muzaffarpur	Jhapaha mann					✓													✓	✓
	Kanti mann					✓												✓		✓
Nalanda	Gidhi Lake					✓														
	Pushkarni lake			✓					✓						✓				✓	
	Panchane River			✓					✓						✓					
	Ganga Jalashay Rajgir	✓														✓				
	Pawapuri	✓													✓					
	Ordance Factory Pond	✓														✓				
Nawada	Hardiya Dam (Phulwariya)	✓																✓		
Patna	Rajdhani Jalashay	✓																	✓	
	Ganga river - Maner to Mokhama				✓									✓						
Saharsa	Simri jheel			✓															✓	✓
	Arsi chaur	✓																		
	Bora Chaur	✓																	✓	✓

Table 28. Details of threats and issues reported from the wetlands covered during the AWC 2024 (contd.)

DISTRICT	SITE	FISHING				BIRD POACHING				AGRICULTURE				CATTLE GRAZING				Pollution	
		None	Little	Moderate	Large	Unknown	None	Little	Moderate	Large	None	Little	Moderate	Large					
Supaul	Kosi catchment of Supaul & Saharsa		✓								✓			✓					
	Kosi river (Birpur barrage to Kosi Mahasetu)	✓																	
Samastipur	Deokal Chaur				✓									✓				✓	
Saran	Hariya Chaur Akilpur				✓			✓			✓					✓			
	Bahiyara chaur										✓					✓			
	Phulwariya chaur	✓					✓								✓				
	Atanagar chaur				✓						✓								
Sheohar	Bagmati river				✓		✓							✓				✓	
Vaishali	Baraila lake			✓						✓				✓					
	Salaha lake																		
	Puraniya chaur																		
	Gandak river of																		
West Champaran	Darwabari wetland				✓					✓			✓						
	Udaipur Jheel/WLS	✓									✓					✓			
	Lal Saraya mann				✓			✓					✓					✓	
	Gandak river (Valmikinagar to near Madanpur)			✓								✓					✓		
	Total	18	6	19	35	1	24	14	14	9	10	9	10	19	39	7	24	26	18

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Annexure 1: Details of Birds reported during AWC-2024 in Araria, Aurangabad, Banka and Begusarai districts

Common name	Scientific name	IUCN status	Araria			Aurangabad	Banka	Begusarai		
			Trishullia Ghat	Dopahariya Pond	Total			Kanwar Lake	Pachaila	Total
Fulvous Whistling-duck	<i>Dendrocygna bicolor</i>	LC					100			
Lesser Whistling-duck	<i>Dendrocygna javanica</i>	LC		310	310	48	500	33		33
Bar-headed Goose	<i>Anser indicus</i>	LC					25			
Ruddy Shelduck	<i>Tadorna ferruginea</i>	LC				2				
Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	LC					20		1	1
Red-crested Pochard	<i>Netta rufina</i>	LC		4	4	430	300			
Common Pochard	<i>Aythya ferina</i>	VU		2	2	134	3			
Ferruginous Duck	<i>Aythya nyroca</i>	NT		38	38	4	18	3		3
Tufted Duck	<i>Aythya fuligula</i>	LC				160				
Garganey	<i>Spatula querquedula</i>	LC		6	6					
Northern Shoveler	<i>Spatula clypeata</i>	LC				20				
Gadwall	<i>Mareca strepera</i>	LC		4	4	980				
Eurasian Wigeon	<i>Mareca penelope</i>	LC		18	18	72				
Northern Pintail	<i>Anas acuta</i>	LC		34	34	110	20			
Common Teal	<i>Anas crecca</i>	LC		26	26		20			
Little Grebe	<i>Tachybaptus ruficollis</i>	LC		3	3	4	5	4	2	6
Great Crested Grebe	<i>Podiceps cristatus</i>	LC				27	2			
Rock Dove	<i>Columba livia</i>	LC				11				
Eastern Spotted Dove	<i>Spilopelia chinensis</i>	LC	15	7	22					
Asian Palm-swift	<i>Cypsiurus balaisiensis</i>	LC				1		6		6
Greater Coucal	<i>Centropus sinensis</i>	LC				2				
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC		1	1					
Purple Swamphen	<i>Porphyrio porphyrio</i>	LC				17			3	3
Common Moorhen	<i>Gallinula chloropus</i>	LC				1	11			
Common Coot	<i>Fulica atra</i>	LC					150	1	25	26
Lesser Adjutant	<i>Leptoptilos javanicus</i>	VU		8	8			3		3

Annexure 1: Details of Birds reported during AWC-2024 in Araria, Aurangabad, Banka and Begusarai districts (contd.)

Common name	Scientific name	IUCN status	Araria			Aurangabad	Banka	Begusarai		
			Trishullia Ghat	Dopahariya Pond	Total			Kanwar Lake	Pachaila	Total
Asian Openbill	<i>Anastomus oscitans</i>	LC	12	39	51	154	2	70		70
Asian Woollyneck	<i>Ciconia episcopus</i>	NT		2	2					
Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT					4	1		1
Red-naped Ibis	<i>Pseudibis papillosa</i>	LC					1	3	2	5
Glossy Ibis	<i>Plegadis falcinellus</i>	LC				2				
Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	LC		13	13					
Indian Pond-heron	<i>Ardeola grayii</i>	LC	4		4	1	6		4	4
Cattle Egret	<i>Bubulcus ibis</i>	LC		7	7	20	1	1	3	4
Grey Heron	<i>Ardea cinerea</i>	LC		1	1	8	2	2	25	26
Purple Heron	<i>Ardea purpurea</i>	LC		2	2	13		2		2
Great White Egret	<i>Ardea alba</i>	LC				9				
Intermediate Egret	<i>Ardea intermedia</i>	LC				6	3	8	3	11
Little Egret	<i>Egretta garzetta</i>	LC	5	8	13	70	2	1		1
Little Cormorant	<i>Microcarbo niger</i>	LC	6	76	82	29	120	12	7	19
Great Cormorant	<i>Phalacrocorax carbo</i>	LC				11	40	4		4
Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	LC						5		5
Oriental Darter	<i>Anhinga melanogaster</i>	NT		6	6					
Pacific Golden Plover	<i>Pluvialis fulva</i>	LC		42	42					
Little Ringed Plover	<i>Charadrius dubius</i>	LC	2	4	6	18	10			
Kentish Plover	<i>Charadrius alexandrinus</i>	LC					1			
River Lapwing	<i>Vanellus duvaucelii</i>	NT	2		2					
Grey-headed Lapwing	<i>Vanellus cinereus</i>	LC		20	20					
Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	LC		2	2					
Red-wattled Lapwing	<i>Vanellus indicus</i>	LC	2		2					
Greater Painted-snipe	<i>Rostratula benghalensis</i>	LC						1		1
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	LC				2		35	1	36

Annexure 1: Details of Birds reported during AWC-2024 in Araria, Aurangabad, Banka and Begusarai districts (contd.)

Common name	Scientific name	IUCN status	Araria			Aurangabad	Banka	Kanwar Lake	Begusarai	Total
			Trishullia Ghat	Dopahariya Pond	Total					
Temminck's Stint	<i>Calidris temminckii</i>	LC		6	6	8				
Little Stint	<i>Calidris minuta</i>	LC	7		7	55				
Common Snipe	<i>Gallinago gallinago</i>	LC	3	6	9					
Common Sandpiper	<i>Actitis hypoleucos</i>	LC	9		9	1		17		17
Green Sandpiper	<i>Tringa ochropus</i>	LC				4				
Common Greenshank	<i>Tringa nebularia</i>	LC				51	12			
Common Redshank	<i>Tringa totanus</i>	LC				8				
Wood Sandpiper	<i>Tringa glareola</i>	LC				4	2	17		17
Marsh Sandpiper	<i>Tringa stagnatilis</i>	LC				6				
Little Tern	<i>Sternula albifrons</i>	LC					2			
River Tern	<i>Sterna aurantia</i>	VU					9			
Osprey	<i>Pandion haliaetus</i>	LC					1			
Black-winged Kite	<i>Elanus caeruleus</i>	LC						1		1
Greater Spotted Eagle	<i>Clanga clanga</i>	VU		1	1					
Shikra	<i>Accipiter badius</i>	LC						1		1
Black Kite	<i>Milvus migrans</i>	LC	5	2	7	2	7	1		1
Asian Green Bee-eater	<i>Merops orientalis</i>	LC				1	3			
Indian Roller	<i>Coracias benghalensis</i>	LC				1			2	2
Common Kingfisher	<i>Alcedo atthis</i>	LC	1	2	3					
Pied Kingfisher	<i>Ceryle rudis</i>	LC	3		3		3	1		
Stork-billed Kingfisher	<i>Pelargopsis capensis</i>	LC								
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC	5	4	9	2	3	4	1	1
Common Kestrel	<i>Falco tinnunculus</i>	LC	1		1	1			2	2
Black Drongo	<i>Dicrurus macrocerus</i>	LC	5		5	1	4	1		1
Indian Paradise-flycatcher	<i>Terpsiphone paradisi</i>	LC								
Brown Shrike	<i>Lanius cristatus</i>	LC		1	1					

Annexure 1: Details of Birds reported during AWC-2024 in Araria, Aurangabad, Banka and Begusarai districts (contd.)

Common name	Scientific name	IUCN status	Araria			Aurangabad	Banka	Begusarai		
			Trishullia Ghat	Dopahariya Pond	Total			Kanwar Lake	Pachaila	Total
House Crow	<i>Corvus splendens</i>	LC				6			4	4
Large-billed Crow	<i>Corvus macrorhynchos</i>	LC						4		4
Oriental Skylark	<i>Alauda gulgula</i>	LC				2				
Zitting Cisticola	<i>Cisticola juncidis</i>	LC	2		2					
Plain Prinia	<i>Prinia inornata</i>	LC		2	2					
Barn Swallow	<i>Hirundo rustica</i>	LC	36		36				12	12
Indian Pied Starling	<i>Gracupica contra</i>	LC		50	50					
Common Myna	<i>Acridotheres tristis</i>	LC						3		3
Bank Myna	<i>Acridotheres ginginianus</i>	LC							6	6
Black Redstart	<i>Phoenicurus ochruros</i>	LC					1			
Common Stonechat	<i>Saxicola torquatus</i>	LC		1	1	3		3		3
Paddyfield Pipit	<i>Anthus rufulus</i>	LC	10		10	7		1	5	6
Grey Wagtail	<i>Motacilla cinerea</i>	LC						2		2
Citrine Wagtail	<i>Motacilla citreola</i>	LC				1		72	1	73
Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	LC				1				
White-browed Wagtail	<i>Motacilla maderaspatensis</i>	LC				9				
White Wagtail	<i>Motacilla alba</i>	LC	6	12	18		6		4	4

Annexure 2: Details of Birds reported during AWC-2024 in Bhagalpur district

Common name	Scientific name	IUCN	A	B	C	D	E	F	VGDS				Total
									G	H	I	J	
Fulvous Whistling-duck	<i>Dendrocygna bicolor</i>	LC										2	2
Lesser Whistling-duck	<i>Dendrocygna javanica</i>	LC		6		15	150					130	301
Bar-headed Goose	<i>Anser indicus</i>	LC					15			26	20		61
Greylag Goose	<i>Anser anser</i>	LC					200						200
Common Shelduck	<i>Tadorna tadorna</i>	LC										1	1
Ruddy Shelduck	<i>Tadorna ferruginea</i>	LC								154		142	436
Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	LC		2									2
Red-crested Pochard	<i>Netta rufina</i>	LC					3900			17	22	200	4139
Common Pochard	<i>Aythya ferina</i>	VU	20			22				34		2	78
Ferruginous Duck	<i>Aythya nyroca</i>	NT	50	3			4			64			121
Garganey	<i>Spatula querquedula</i>	LC					1000			80	40	30	1150
Northern Shoveler	<i>Spatula clypeata</i>	LC								7			7
Gadwall	<i>Mareca strepera</i>	LC	6				1300			30	35	20	1391
Eurasian Wigeon	<i>Mareca penelope</i>	LC					300			39			339
Northern Pintail	<i>Anas acuta</i>	LC					1900			130	30	80	2140
Common Teal	<i>Anas crecca</i>	LC	100	110			100			26	70	10	416
Little Grebe	<i>Tachybaptus ruficollis</i>	LC		5	3	7	150		48			10	223
Great Crested Grebe	<i>Podiceps cristatus</i>	LC							2	8			10
Eurasian Collared-dove	<i>Streptopelia decaocto</i>	LC				1	2		1				4
Eastern Spotted Dove	<i>Spilopelia chinensis</i>	LC		2		1			2				5
Laughing Dove	<i>Spilopelia senegalensis</i>	LC						10					10
Yellow-footed Green-pigeon	<i>Treron phoenicopterus</i>	LC										5	5
Greater Coucal	<i>Centropus sinensis</i>	LC						1					1
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC			2								2
Purple Swamphen	<i>Porphyrion porphyrio</i>	LC	122			122							244
Common Moorhen	<i>Gallinula chloropus</i>	LC		4			7						11

Annexure 2: Details of Birds reported during AWC-2024 in Bhagalpur district (contd.)

Common name	Scientific name	IUCN	A	B	C	D	E	F	VGDS				Total
									G	H	I	J	
Greater Adjutant	<i>Leptoptilos dubius</i>	EN	1	2	4	1	3	1	16	15		1	44
Lesser Adjutant	<i>Leptoptilos javanicus</i>	VU		2	5	4	5	2	4	14		2	38
Painted Stork	<i>Mycteria leucocephala</i>	NT			8					38		3	49
Asian Openbill	<i>Anastomus oscitans</i>	LC	7	15	19	62	37	34	26	91	10	265	566
Asian Woollyneck	<i>Ciconia episcopus</i>	NT			2					4		19	25
Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	NT	1				3			2			6
Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT	5			76	5	7		32	24	332	481
Red-naped Ibis	<i>Pseudibis papillosa</i>	LC	5	5	10	7	18	8	1	16	8	294	372
Eurasian Spoonbill	<i>Platalea leucorodia</i>	LC								2			2
Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	LC									15		15
Indian Pond-heron	<i>Ardeola grayii</i>	LC	6		11		2	7	5			10	41
Cattle Egret	<i>Bubulcus ibis</i>	LC		59			3	15	1			17	95
Grey Heron	<i>Ardea cinerea</i>	LC	10	6	3	2	12	1	1	21	20	21	97
Purple Heron	<i>Ardea purpurea</i>	LC	3	6	1	1	4	1					16
Great White Egret	<i>Ardea alba</i>	LC		5	3		4	1	1	15	4	4	37
Intermediate Egret	<i>Ardea intermedia</i>	LC	1	2			4		1			2	10
Little Egret	<i>Egretta garzetta</i>	LC	2	3	11				50		9	20	95
Little Cormorant	<i>Microcarbo niger</i>	LC	9	108	6	18	100	13	37	178	3	1010	1482
Great Cormorant	<i>Phalacrocorax carbo</i>	LC					3			47	76	265	391
Oriental Darter	<i>Anhinga melanogaster</i>	NT		2									2
Indian Thick-knee	<i>Burhinus indicus</i>	LC							4				4
Pied Avocet	<i>Recurvirostra avosetta</i>	LC					15			35		2	52
Black-winged Stilt	<i>Himantopus himantopus</i>	LC		1			13	15	30				59
Little Ringed Plover	<i>Charadrius dubius</i>	LC		1	6			8	1	24	5	10	55
Kentish Plover	<i>Charadrius alexandrinus</i>	LC								32			32

Annexure 2: Details of Birds reported during AWC-2024 in Bhagalpur district (contd.)

Common name	Scientific name	IUCN	A	B	C	D	E	F	VGDS				Total
									G	H	I	J	
River Lapwing	<i>Vanellus duvaucelii</i>	NT		1	6				12	13	8	150	192
Grey-headed Lapwing	<i>Vanellus cinereus</i>	LC			12						18		30
Red-wattled Lapwing	<i>Vanellus indicus</i>	LC	2	3	9	2	10	9	15	7	7	8	62
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	LC		5									5
Bronze-winged Jacana	<i>Metopidius indicus</i>	LC	12	11									23
Eurasian Curlew	<i>Numenius arquata</i>	NT					28			32			60
Black-tailed Godwit	<i>Limosa limosa</i>	NT					150						150
Temminck's Stint	<i>Calidris temminckii</i>	LC						12	2	20		32	66
Dunlin	<i>Calidris alpina</i>	LC								7			7
Little Stint	<i>Calidris minuta</i>	LC	2	2	14	1		4	1	14	13	50	101
Common Snipe	<i>Gallinago gallinago</i>	LC			4		6						10
Common Sandpiper	<i>Actitis hypoleucos</i>	LC		1	3		5	13	1	8		2	33
Green Sandpiper	<i>Tringa ochropus</i>	LC						10	1			1	12
Spotted Redshank	<i>Tringa erythropus</i>	LC								29		10	39
Common Greenshank	<i>Tringa nebularia</i>	LC		1	16	1				16	26	5	65
Common Redshank	<i>Tringa totanus</i>	LC	2				550		6	24	28	1	611
Wood Sandpiper	<i>Tringa glareola</i>	LC		1			1	1	1			1	5
Marsh Sandpiper	<i>Tringa stagnatilis</i>	LC										10	10
Little Pratincole	<i>Glareola lactea</i>	LC								406	83	70	559
Black-headed Gull	<i>Larus ridibundus</i>	LC										1	1
Lesser Black-backed Gull	<i>Larus fuscus</i>	LC					6						6
Osprey	<i>Pandion haliaetus</i>	LC	1	2						2		10	15
Black-winged Kite	<i>Elanus caeruleus</i>	LC		1									1
Oriental Honey-buzzard	<i>Pernis ptilorhynchus</i>	LC	1										1
Greater Spotted Eagle	<i>Clanga clanga</i>	VU			1								1
Western Marsh-harrier	<i>Circus aeruginosus</i>	LC										1	1

Annexure 2: Details of Birds reported during AWC-2024 in Bhagalpur district (contd.)

Common name	Scientific name	IUCN	A	B	C	D	E	F	VGDS					Total
									G	H	I	J		
Hen Harrier	<i>Circus cyaneus</i>	LC					1						1	
Shikra	<i>Accipiter badius</i>	LC							1			1	2	
White-tailed Sea-eagle	<i>Haliaeetus albicilla</i>	LC								1			1	
Black Kite	<i>Milvus migrans</i>	LC	2					5	20				27	
White-eyed Buzzard	<i>Butastur teesa</i>	LC										1	1	
Himalayan Griffon	<i>Gyps himalayensis</i>	NT								1			1	
Common Hoopoe	<i>Upupa epops</i>	LC						2					2	
Asian Green Bee-eater	<i>Merops orientalis</i>	LC		3									3	
Indian Roller	<i>Coracias benghalensis</i>	LC						5					5	
Common Kingfisher	<i>Alcedo atthis</i>	LC	1	1	1								3	
Pied Kingfisher	<i>Ceryle rudis</i>	LC	1	2	2	2		3	1	4	1	9	25	
Stork-billed Kingfisher	<i>Pelargopsis capensis</i>	LC												
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC	2	3	3		5	5	2			4	24	
Brown-headed Barbet	<i>Psilopogon zeylanicus</i>	LC										1	1	
Common Kestrel	<i>Falco tinnunculus</i>	LC							1				1	
Peregrine Falcon	<i>Falco peregrinus</i>	LC	1							1			2	
Black-hooded Oriole	<i>Oriolus xanthornus</i>	LC						1				1	2	
Black Dr ongo	<i>Dicrurus macrocercus</i>	LC	2				10	8					18	
Long-tailed Shrike	<i>Lanius schach</i>	LC	1	1									2	
Rufous Treepie	<i>DenDr ocitta vagabunda</i>	LC						1					1	
House Crow	<i>Corvus splendens</i>	LC		13					20			11	44	
Large-billed Crow	<i>Corvus macrorhynchos</i>	LC							10				10	
Bengal Bushlark	<i>Mirafra assamica</i>	LC					2						2	
Sand Lark	<i>Alaudala raytal</i>	LC							3				3	
Ashy Prinia	<i>Prinia socialis</i>	LC		2									2	
Plain Prinia	<i>Prinia inornata</i>	LC						3	4				7	

Annexure 2: Details of Birds reported during AWC-2024 in Bhagalpur district (contd.)

Common name	Scientific name	IUCN	A	B	C	D	E	F	VGDS				Total
									G	H	I	J	
Dusky Crag Martin	<i>Ptyonoprogne concolor</i>	LC										110	110
Asian Plain Martin	<i>Riparia chinensis</i>	LC							1				1
Red-vented Bulbul	<i>Pycnonotus cafer</i>	LC						6					6
Jungle Babbler	<i>Argya striata</i>	LC						8					8
Striated Babbler	<i>Argya earlei</i>	LC					5		11				16
Indian Pied Starling	<i>Gracupica contra</i>	LC		7		5		8					20
Common Myna	<i>Acridotheres tristis</i>	LC		15		3		9	10			4	41
Bank Myna	<i>Acridotheres ginginianus</i>	LC				1							1
Oriental Magpie-robin	<i>Copsychus saularis</i>	LC						1					1
Red-throated Flycatcher	<i>Ficedula albicilla</i>	LC					1	2					3
Common Stonechat	<i>Saxicola torquatus</i>	LC					2		5				7
White-tailed Stonechat	<i>Saxicola leucurus</i>	LC							1				1
Purple Sunbird	<i>Cinnyris asiaticus</i>	LC										2	2
Striated Grassbird	<i>Megalurus palustris</i>	LC					11						11
House Sparrow	<i>Passer domesticus</i>	LC							8				8
Rosy Pipit	<i>Anthus roseatus</i>	LC		1	2								3
Tawny Pipit	<i>Anthus campestris</i>	LC						1					1
Paddyfield Pipit	<i>Anthus rufulus</i>	LC						11	3				14
Grey Wagtail	<i>Motacilla cinerea</i>	LC										2	2
Citrine Wagtail	<i>Motacilla citreola</i>	LC						5	3			1	9
Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	LC			2								2
White-browed Wagtail	<i>Motacilla maderaspatensis</i>	LC							1			2	3
White Wagtail	<i>Motacilla alba</i>	LC	2	2	4	1	3		5	14		2	33

Note:

A: Jagatpur; B: Gangaprasad; C: Katiya dhar; D: Dimaha Dhar; E: Ghatara; F: Bhagalpur Bypass; G: VGDS (Maniksakar ghat- Barari ghat); H: VGDS (Sultanganj to Mirzapur); I: VGDS (Mirzapur to Barari ghat) & J: VGDS (Barai to Bateshwar nath sthan)

Annexure 3: Details of Birds reported during AWC-2024 in Bhojpur and Buxar districts

Common name	Scientific name	IUCN	Bhojpur			Buxar			
			Ganges-Mahuli ghat to Maner	Sunki suhiya - Shahpur	Total	Ganga- Vayasi ghat to Bihari	Ganga -Buxar Ranighat Chausabyasi Bridge	Gokul Jalashay	Total
Lesser Whistling-duck	<i>Dendrocygna javanica</i>	LC		146	146			313	313
Greylag Goose	<i>Anser anser</i>	LC						22	22
Common Shelduck	<i>Tadorna tadorna</i>	LC	1		1		1		1
Ruddy Shelduck	<i>Tadorna ferruginea</i>	LC	62		62	50	44		94
Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	LC						27	27
Red-crested Pochard	<i>Netta rufina</i>	LC					375	2	377
Northern Shoveler	<i>Spatula clypeata</i>	LC				10	200		210
Gadwall	<i>Mareca strepera</i>	LC	1		1	300	700		1,000
Eurasian Wigeon	<i>Mareca penelope</i>	LC					2		2
Northern Pintail	<i>Anas acuta</i>	LC	2		2	20	50	5	75
Common Teal	<i>Anas crecca</i>	LC						22	22
Little Grebe	<i>Tachybaptus ruficollis</i>	LC	1	13	14	3	66	2	71
Great Crested Grebe	<i>Podiceps cristatus</i>	LC	24		24	36	178		214
Rock Dove	<i>Columba livia</i>	LC	4		4		20		20
Eurasian Collared-dove	<i>Streptopelia decaocto</i>	LC		2	2	2	2	2	6
Eastern Spotted Dove	<i>Spilopelia chinensis</i>	LC		3	3		2	1	3
Laughing Dove	<i>Spilopelia senegalensis</i>	LC						1	1
Yellow-footed Green-pigeon	<i>Treron phoenicopterus</i>	LC						50	50
Asian Palm-swift	<i>Cypsiurus balasienis</i>	LC	56		56				-
Greater Coucal	<i>Centropus sinensis</i>	LC	1		1		1		1
Common Hawk-cuckoo	<i>Hierococcyx varius</i>	LC			-			4	4
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC			-			4	4
Purple Swampfen	<i>Porphyrio porphyrio</i>	LC		9	9			59	59
Common Moorhen	<i>Gallinula chloropus</i>	LC		8	8			40	40

Annexure 3: Details of Birds reported during AWC-2024 in Bhojpur and Buxar districts (contd.)

Common name	Scientific name	IUCN	Bhojpur			Buxar			Total
			Ganges-Mahuli ghat to Maner	Sunki suhiya - Shahpur	Total	Ganga -Buxar Ranighat Chausabyasi Bridge	Gokul Jalashay	Total	
Grey Francolin	<i>Ortygornis pondicerianus</i>	LC				10	1	1	12
Lesser Adjutant	<i>Leptoptilos javanicus</i>	VU		1	1				-
Asian Openbill	<i>Anastomus oscitans</i>	LC	315	5	320	350	416	111	877
Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT		2	2			1	1
Red-naped Ibis	<i>Pseudibis papillosa</i>	LC	17	2	19	12	37	5	54
Yellow Bittern	<i>Ixobrychus sinensis</i>	LC						1	1
Indian Pond-heron	<i>Ardeola grayii</i>	LC		7	7	1	4	9	14
Cattle Egret	<i>Bubulcus ibis</i>	LC	1	3	4		16	30	46
Grey Heron	<i>Ardea cinerea</i>	LC	14	3	17	2	14		16
Purple Heron	<i>Ardea purpurea</i>	LC		3	3			1	1
Great White Egret	<i>Ardea alba</i>	LC						1	1
Intermediate Egret	<i>Ardea intermedia</i>	LC	3	3	6	3	2	3	8
Little Egret	<i>Egretta garzetta</i>	LC	12	2	14	15	148	11	174
Little Cormorant	<i>Microcarbo niger</i>	LC	5	25	30	4	200	19	223
Great Cormorant	<i>Phalacrocorax carbo</i>	LC	23		23	8	43		51
Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	LC	1		1				-
Black-winged Stilt	<i>Himantopus himantopus</i>	LC		112	112				-
Little Ringed Plover	<i>Charadrius dubius</i>	LC	35		35	13	8		21
Kentish Plover	<i>Charadrius alexandrinus</i>	LC	12		12		6		6
River Lapwing	<i>Vanellus duvaucelii</i>	NT				2	20		22
Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	LC	3		3				
Red-wattled Lapwing	<i>Vanellus indicus</i>	LC		9	9	2	1	7	10
Greater Painted-snipe	<i>Rostratula benghalensis</i>	LC		1	1				

Annexure 3: Details of Birds reported during AWC-2024 in Bhojpur and Buxar districts (contd.)

Common name	Scientific name	IUCN	Bhojpur			Buxar			
			Ganges-Mahuli ghat to Maner	Sunki suhiya - Shahpur	Total	Ganga- Vayasi ghat to Bihari	Ganga -Buxar Ranighat Chausabyasi Bridge	Gokul Jalashay	Total
Bronze-winged Jacana	<i>Metopidius indicus</i>	LC						18	18
Curlew Sandpiper	<i>Calidris ferruginea</i>	LC	5		5				
Temminck's Stint	<i>Calidris temminckii</i>	LC	43		43		34	1	35
Dunlin	<i>Calidris alpina</i>	LC	4		4				
Little Stint	<i>Calidris minuta</i>	LC	47		47		2		2
Common Snipe	<i>Gallinago gallinago</i>	LC		2	2			5	5
Common Sandpiper	<i>Actitis hypoleucos</i>	LC	5		5	12	3		15
Green Sandpiper	<i>Tringa ochropus</i>	LC						2	2
Common Greenshank	<i>Tringa nebularia</i>	LC					49		49
Common Redshank	<i>Tringa totanus</i>	LC	1		1		55		55
Wood Sandpiper	<i>Tringa glareola</i>	LC					2	4	6
Marsh Sandpiper	<i>Tringa stagnatilis</i>	LC					1		1
Little Pratincole	<i>Glareola lactea</i>	LC	340		340		780		780
Black-headed Gull	<i>Larus ridibundus</i>	LC	2		2				
Pallas's Gull	<i>Larus ichthyaetus</i>	LC	1		1				
Osprey	<i>Pandion haliaetus</i>	LC	3		3	1	3		4
Black-winged Kite	<i>Elanus caeruleus</i>	LC					1	1	2
Booted Eagle	<i>Hieraaetus pennatus</i>	LC					1		1
Western Marsh-harrier	<i>Circus aeruginosus</i>	LC		2	2				
Black Kite	<i>Milvus migrans</i>	LC	1		1				
Long-legged Buzzard	<i>Buteo rufinus</i>	LC				1	1		2
Indian Grey Hornbill	<i>Ocyroceros birostris</i>	LC						4	4
Common Hoopoe	<i>Upupa epops</i>	LC				2	1	5	8
Asian Green Bee-eater	<i>Merops orientalis</i>	LC						4	4

Annexure 3: Details of Birds reported during AWC-2024 in Bhojpur and Buxar districts (contd.)

Common name	Scientific name	IUCN	Bhojpur			Buxar		
			Ganges-Mahuli ghat to Maner	Sunki suhiya - Shahpur	Total	Ganga- Vayasi ghat to Bihari	Ganga -Buxar Ranighat Chausabyasi Bridge	Gokul Jalashay
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC	2	2	4	2	2	6
Peregrine Falcon	<i>Falco peregrinus</i>	LC	4		4		1	1
Indian Golden Oriole	<i>Oriolus kundoo</i>	LC					1	3
Black Drongo	<i>Dicurus macrocerus</i>	LC				2		5
Brown Shrike	<i>Lanius cristatus</i>	LC						3
Rufous Treepie	<i>DenDr ocitta vagabunda</i>	LC						1
House Crow	<i>Corvus splendens</i>	LC	36	15	51		20	15
Large-billed Crow	<i>Corvus macrorhynchos</i>	LC	2		2		43	11
Ashy-crowned Sparrow-lark	<i>Eremopterix griseus</i>	LC					1	2
Sand Lark	<i>Alaudala raytal</i>	LC				39	5	44
Oriental Skylark	<i>Alauda gulgula</i>	LC	2		2			
Zitting Cisticola	<i>Cisticola juncidis</i>	LC				6		6
Plain Prinia	<i>Prinia inornata</i>	LC		1	1	20		20
Clamorous Reed-warbler	<i>Acrocephalus stentoreus</i>	LC		50	50			
Barn Swallow	<i>Hirundo rustica</i>	LC	28	5	33		350	10
Dusky Crag Martin	<i>Ptyonoprogne concolor</i>	LC				100		100
Asian Plain Martin	<i>Riparia chinensis</i>	LC		100	100		550	550
Red-vented Bulbul	<i>Pycnonotus cafer</i>	LC						9
Greenish Warbler	<i>Phylloscopus trochiloides</i>	LC						1
Lesser Whitethroat	<i>Curruca curruca</i>	LC				4		1
Eastern Orphean Warbler	<i>Curruca crassirostris</i>	LC						3
Large Grey Babbler	<i>Argya malcolmi</i>	LC						6
Jungle Babbler	<i>Argya striata</i>	LC						10
Indian Pied Starling	<i>Gracupica contra</i>	LC	2	6	8		5	5
								10

Annexure 3: Details of Birds reported during AWC-2024 in Bhojpur and Buxar districts (contd.)

Common name	Scientific name	IUCN	Bhojpur			Buxar			
			Ganges-Mahuli ghat to Maner	Sunki suhiya - Shahpur	Total	Ganga- Vayasi ghat to Bihari	Ganga -Buxar Ranighat Chausabyasi Bridge	Gokul Jalashay	Total
Common Myna	<i>Acridotheres tristis</i>	LC					9	5	14
Bank Myna	<i>Acridotheres ginginianus</i>	LC	79	20	99	30	7	10	47
Oriental Magpie-robin	<i>Copsychus saularis</i>	LC				1		1	2
Red-throated Flycatcher	<i>Ficedula albicilla</i>	LC						1	1
Bluethroat	<i>Luscinia svecica</i>	LC		1	1		1	1	2
Black Redstart	<i>Phoenicurus ochruros</i>	LC				4		4	8
Pied Bushchat	<i>Saxicola caprata</i>	LC				6		1	7
Common Stonechat	<i>Saxicola torquatus</i>	LC	3	3	6				
Brown Rockchat	<i>Oenanthe fusca</i>	LC						2	2
Purple Sunbird	<i>Cinnyris asiaticus</i>	LC						4	4
Striated Grassbird	<i>Megalurus palustris</i>	LC		1	1				
Indian Silverbill	<i>Euodice malabarica</i>	LC						1	1
House Sparrow	<i>Passer domesticus</i>	LC	7		7	21	3	2	26
Rosy Pipit	<i>Anthus roseatus</i>	LC						1	1
Paddyfield Pipit	<i>Anthus rufulus</i>	LC				2	2	3	7
Citrine Wagtail	<i>Motacilla citreola</i>	LC	9	5	14	40	3	10	53
Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	LC	1		1	4			4
White-browed Wagtail	<i>Motacilla maderaspatensis</i>	LC	3		3	3	1		4
White Wagtail	<i>Motacilla alba</i>	LC	21		21	33	17	4	54

Annexure 4: Details of Birds reported during AWC-2024 in Darbhanga and Gaya districts

Common name	Scientific name	IUCN	Darbhanga			Gaya		
			Kusheshwar Sthan	Khirol nadhi tat	Total	Barwadih	Barandih Wetland	Total
Lesser Whistling-duck	<i>Dendrocygna javanica</i>	LC					114	114
Red-crested Pochard	<i>Netta rufina</i>	LC					4	4
Gadwall	<i>Mareca strepera</i>	LC					1	1
Little Grebe	<i>Tachybaptus ruficollis</i>	LC	10	2	12		1	1
Eurasian Collared-dove	<i>Streptopelia decaocto</i>	LC					3	3
Eastern Spotted Dove	<i>Spilopelia chinensis</i>	LC					2	2
Yellow-footed Green-pigeon	<i>Treron phoenicopterus</i>	LC					12	12
Greater Coucal	<i>Centropus sinensis</i>	LC					2	2
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC		1	1		3	3
Common Moorhen	<i>Gallinula chloropus</i>	LC					2	2
Grey Francolin	<i>Ortygornis pondicerianus</i>	LC	1		1			
Asian Openbill	<i>Anastomus oscitans</i>	LC	34	15	49	14	2	16
Red-naped Ibis	<i>Pseudibis papillosa</i>	LC	1	7	8		2	2
Indian Pond-heron	<i>Ardeola grayii</i>	LC	4		4	1		1
Cattle Egret	<i>Bubulcus ibis</i>	LC	33	17	50	7	1	9
Great White Egret	<i>Ardea alba</i>	LC	1		1			
Intermediate Egret	<i>Ardea intermedia</i>	LC	10		10	3	1	4
Little Egret	<i>Egretta garzetta</i>	LC	7	2	9	3	1	4
Little Cormorant	<i>Microcarbo niger</i>	LC	19	2	21		2	2
Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	LC	3		3			
Black-winged Stilt	<i>Himantopus himantopus</i>	LC				20	6	26
Little Ringed Plover	<i>Charadrius dubius</i>	LC				2	2	4
Red-wattled Lapwing	<i>Vanellus indicus</i>	LC	21	10	31	8	9	17
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	LC	3		3			
Bronze-winged Jacana	<i>Metopidius indicus</i>	LC	2	1	3			
Temminck's Stint	<i>Calidris temminckii</i>	LC		2	2	4		4

Annexure 4: Details of Birds reported during AWC-2024 in Darbhanga and Gaya districts (contd.)

Common name	Scientific name	IUCN	Darbhanga			Gaya		
			Kusheshwar Sthan	Khirol nadhi tat	Total	Barwadih	Barandih Wetland	Total
Common Snipe	<i>Gallinago gallinago</i>	LC	4		4			
Common Sandpiper	<i>Actitis hypoleucos</i>	LC	3		3	5	3	8
Green Sandpiper	<i>Tringa ochropus</i>	LC				1		1
Common Greenshank	<i>Tringa nebularia</i>	LC				3	1	4
Common Redshank	<i>Tringa totanus</i>	LC					10	10
Wood Sandpiper	<i>Tringa glareola</i>	LC				2	2	4
Spotted Owllet	<i>Athene brama</i>	LC		1	1			
Osprey	<i>Pandion haliaetus</i>	LC	1		1			
Shikra	<i>Accipiter badius</i>	LC					1	1
Indian Grey Hornbill	<i>Ocyeros birostris</i>	LC					20	20
Common Hoopoe	<i>Upupa epops</i>	LC	2		2			
Indian Roller	<i>Coracias benghalensis</i>	LC				1	4	5
Pied Kingfisher	<i>Ceryle rudis</i>	LC	3	2	5			
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC	8	2	10		1	1
Rose-ringed Parakeet	<i>Alexandrinus krameri</i>	LC					9	9
Black Drongo	<i>Dicrurus macrocerus</i>	LC	2		2	1	2	3
House Crow	<i>Corvus splendens</i>	LC	62	4	66			
Large-billed Crow	<i>Corvus macrorhynchos</i>	LC		2	2			
Indian Bushlark	<i>Mirafra erythroptera</i>	LC	120		120			
Plain Prinia	<i>Prinia inornata</i>	LC	15		15			
Barn Swallow	<i>Hirundo rustica</i>	LC	110		110		8	8
Indian Pied Starling	<i>Gracupica contra</i>	LC	20		20			
Common Myna	<i>Acridotheres tristis</i>	LC					2	2
Bank Myna	<i>Acridotheres ginginianus</i>	LC	21	6	27			
Indian Robin	<i>Copsychus fulicatus</i>	LC		1	1		2	2
Black Redstart	<i>Phoenicurus ochruros</i>	LC					1	1

Annexure 4: Details of Birds reported during AWC-2024 in Darbhanga and Gaya districts (contd.)

Common name	Scientific name	IUCN	Darbhanga			Gaya		
			Kusheshwar Sthan	Khirol nadhi tat	Total	Barwadih	Barandih Wetland	Total
Striated Grassbird	<i>Megalurus palustris</i>	LC	11		11			
Paddyfield Pipit	<i>Anthus rufulus</i>	LC	17		17	1		1
Grey Wagtail	<i>Motacilla cinerea</i>	LC						
Citrine Wagtail	<i>Motacilla citreola</i>	LC	9		9			
White-browed Wagtail	<i>Motacilla maderaspatensis</i>	LC				1		1
White Wagtail	<i>Motacilla alba</i>	LC	9		9	1		1

Annexure 5: Details of Birds reported during AWC-2024 in East Champaran district

Common name	Scientific name	IUCN	East Champaran						Total
			Basmanpur Lake	Gandak River	Sarotar Lake	Sonbarsa Lake	Burhi Gandak	Chilraon Mann	
Lesser Whistling-duck	<i>Dendrocygna javanica</i>	LC			208	157		201	566
Bar-headed Goose	<i>Anser indicus</i>	LC		4					4
Ruddy Shelduck	<i>Tadorna ferruginea</i>	LC		37					37
Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	LC			2				2
Common Merganser	<i>Mergus merganser</i>	LC		6					6
Red-crested Pochard	<i>Netta rufina</i>	LC			356				356
Ferruginous Duck	<i>Aythya nyroca</i>	NT			53	4		34	91
Gadwall	<i>Mareca strepera</i>	LC		22	42				64
Northern Pintail	<i>Anas acuta</i>	LC		5					5
Little Grebe	<i>Tachybaptus ruficollis</i>	LC			4	5		8	17
Great Crested Grebe	<i>Podiceps cristatus</i>	LC			3	2			5
Rock Dove	<i>Columba livia</i>	LC	30	24	12	14	18	26	124
Eurasian Collared-dove	<i>Streptopelia decaocto</i>	LC	2	2	2				6
Eastern Spotted Dove	<i>Spilopelia chinensis</i>	LC		8	3		2	5	18
Asian Palm-swift	<i>Gypsiurus balaisensis</i>	LC					2		2
Little Swift	<i>Apus affinis</i>	LC					7		7
Greater Coucal	<i>Centropus sinensis</i>	LC	2			1	2	2	7
Western Koel	<i>Eudynamys scolopaceus</i>	LC	1						1
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC	2					2	4
Purple Swamphen	<i>Porphyrio porphyrio</i>	LC			2				2
Common Moorhen	<i>Gallinula chloropus</i>	LC			3			2	5
Common Coot	<i>Fulica atra</i>	LC			280				280
Asian Openbill	<i>Anastomus oscitans</i>	LC	5	8	180	8	6	296	503
Red-naped Ibis	<i>Pseudibis papillosa</i>	LC					3		3
Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	LC		3	5				8

Annexure 5: Details of Birds reported during AWC-2024 in East Champaran district (contd.)

Common name	Scientific name	IUCN	East Champaran						Total
			Basmanpur Lake	Gandak River	Sarotar Lake	Sonbarsa Lake	Burhi Gandak	Chilraon Mann	
Indian Pond-heron	<i>Ardeola grayii</i>	LC	7	11	6	7	5	13	49
Cattle Egret	<i>Bubulcus ibis</i>	LC		3					3
Grey Heron	<i>Ardea cinerea</i>	LC		24	3	3		44	74
Purple Heron	<i>Ardea purpurea</i>	LC			3	3			6
Great White Egret	<i>Ardea alba</i>	LC			43				43
Intermediate Egret	<i>Ardea intermedia</i>	LC		5		9		5	19
Little Egret	<i>Egretta garzetta</i>	LC	13	18	17	32	12		92
Little Cormorant	<i>Microcarbo niger</i>	LC	16	19	29	36	7	61	168
Great Cormorant	<i>Phalacrocorax carbo</i>	LC		2	2				4
Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	LC		4	3	2	2		11
Pied Avocet	<i>Recurvirostra avosetta</i>	LC				20			20
Little Ringed Plover	<i>Charadrius dubius</i>	LC			6				6
River Lapwing	<i>Vanellus duvaucelii</i>	NT	3	3		5	3	8	22
Grey-headed Lapwing	<i>Vanellus cinereus</i>	LC	20			28		99	147
Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	LC			1	12			13
Red-wattled Lapwing	<i>Vanellus indicus</i>	LC	5		2	19	6	16	48
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	LC	16			12			28
Bronze-winged Jacana	<i>Metopidius indicus</i>	LC				2			2
Common Snipe	<i>Gallinago gallinago</i>	LC			1				1
Common Sandpiper	<i>Actitis hypoleucos</i>	LC		4	7		2	7	20
Green Sandpiper	<i>Tringa ochropus</i>	LC				2	1		3
Common Greenshank	<i>Tringa nebularia</i>	LC	1				4		4
Wood Sandpiper	<i>Tringa glareola</i>	LC			3		3	3	9
Little Pratincole	<i>Glareola lactea</i>	LC		1					1
Spotted Owlet	<i>Athene brama</i>	LC				1	2		3

Annexure 5: Details of Birds reported during AWC-2024 in East Champaran district (contd.)

Common name	Scientific name	IUCN	East Champaran						Total
			Basmanpur Lake	Gandak River	Sarotar Lake	Sonbarsa Lake	Burhi Gandak	Chilraon Mann	
Brown Fish-owl	<i>Ketupa zeylonensis</i>	LC						1	1
Osprey	<i>Pandion haliaetus</i>	LC		5				1	6
Black-winged Kite	<i>Elanus caeruleus</i>	LC		1					1
Shikra	<i>Accipiter badius</i>	LC	1				1	2	4
Black Kite	<i>Milvus migrans</i>	LC					1	4	5
Egyptian Vulture	<i>Neophron percnopterus</i>	EN		1					1
Common Buzzard	<i>Buteo buteo</i>	LC					2		2
Long-legged Buzzard	<i>Buteo rufinus</i>	LC					1		1
Common Hoopoe	<i>Upupa epops</i>	LC					1		1
Indian Roller	<i>Coracias benghalensis</i>	LC	3		2	2	1	1	9
Common Kingfisher	<i>Alcedo atthis</i>	LC				1			1
Pied Kingfisher	<i>Ceryle rudis</i>	LC		5			3		8
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC	3		2	4	3	5	17
Black-rumped Flameback	<i>Dinopium benghalense</i>	LC	2				1		3
Rufous Woodpecker	<i>Micropternus brachyurus</i>	LC					2		2
Fulvous-breasted Woodpecker	<i>Dendrocopos macei</i>	LC	1						1
Indian Pygmy Woodpecker	<i>Picoides nanus</i>	LC	1				2		3
Common Kestrel	<i>Falco tinnunculus</i>	LC		1					1
Rose-ringed Parakeet	<i>Alexandrinus krameri</i>	LC	2	2			2	2	8
Black-hooded Oriole	<i>Oriolus xanthornus</i>	LC	5				2		2
Indian Golden Oriole	<i>Oriolus kundoo</i>	LC					2		2
Large Cuckooshrike	<i>Coracina javensis</i>	LC	1				1		1
Ashy Dr ongo	<i>Dicrurus leucophaeus</i>	LC			2		2		4
Black Dr ongo	<i>Dicrurus macrocerus</i>	LC	15	5	9	10	38	20	97
Brown Shrike	<i>Lanius cristatus</i>	LC	1		2	3		1	7

Annexure 5: Details of Birds reported during AWC-2024 in East Champaran district (contd.)

Common name	Scientific name	IUCN	East Champaran						Total
			Basmanpur Lake	Gandak River	Sarotar Lake	Sonbarsa Lake	Burhi Gandak	Chilraon Mann	
Rufous Treepie	<i>DenDr ocitta vagabunda</i>	LC	3			3	38	2	43
House Crow	<i>Corvus splendens</i>	LC	13	26	28	9	10	6	78
Large-billed Crow	<i>Corvus macrorhynchos</i>	LC		13	5		10	22	50
Cinereous Tit	<i>Parus cinereus</i>	LC	1				2		3
Oriental Skylark	<i>Alauda gulgula</i>	LC			1				1
Zitting Cisticola	<i>Cisticola juncidis</i>	LC	1		1				1
Ashy Prinia	<i>Prinia socialis</i>	LC	5	4	5	2			16
Plain Prinia	<i>Prinia inornata</i>	LC	1	2	4		5		12
Common Tailorbird	<i>Orthotomus sutorius</i>	LC	3	2					5
Wire-tailed Swallow	<i>Hirundo smithii</i>	LC	9	8	10		3	10	40
Barn Swallow	<i>Hirundo rustica</i>	LC	21	18	17	27	16	25	124
Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	LC					2		2
Red-vented Bulbul	<i>Pycnonotus cafer</i>	LC		3		1	4		8
Tickell's Leaf-warbler	<i>Phylloscopus affinis</i>	LC					1		1
Common Chiffchaff	<i>Phylloscopus collybita</i>	LC			1				1
Indian White-eye	<i>Zosterops palpebrosus</i>	LC	2						2
Jungle Babbler	<i>Argya striata</i>	LC	12	10			22	10	54
Brahminy Starling	<i>Sturnia pagodarum</i>	LC					7		7
Chestnut-tailed Starling	<i>Sturnia malabarica</i>	LC				2			2
Common Myna	<i>Acridotheres tristis</i>	LC	23	8	8	12	8	8	67
Oriental Magpie-robin	<i>Copsychus saularis</i>	LC	3	1					4
Red-throated Flycatcher	<i>Ficedula albicilla</i>	LC					1		1
Bluethroat	<i>Luscinia svecia</i>	LC	2	1	4				7
Grey Bushchat	<i>Saxicola ferreus</i>	LC	2					1	3
Common Stonechat	<i>Saxicola torquatus</i>	LC	3		6	5		3	17
Purple Sunbird	<i>Cinnyris asiaticus</i>	LC	2	2					4

Annexure 5: Details of Birds reported during AWC-2024 in East Champaran district (contd.)

Common name	Scientific name	IUCN	East Champaran						Total
			Basmanpur Lake	Gandak River	Sarotar Lake	Sonbarsa Lake	Burhi Gandak	Chiraon Mann	
Chestnut Munia	<i>Lonchura atricapilla</i>	LC			11				11
Scaly-breasted Munia	<i>Lonchura punctulata</i>	LC		2	8		3		13
Indian Silverbill	<i>Euodice malabarica</i>	LC		12	16				28
House Sparrow	<i>Passer domesticus</i>	LC		4	8				12
Crested Bunting	<i>Emberiza lathami</i>	LC		8					8
Rosy Pipit	<i>Anthus roseatus</i>	LC						7	7
Tree Pipit	<i>Anthus trivialis</i>	LC	2		11				13
Olive-backed Pipit	<i>Anthus hodgsoni</i>	LC					2		2
Paddyfield Pipit	<i>Anthus rufulus</i>	LC	53	10	50	2	12	37	164
Grey Wagtail	<i>Motacilla cinerea</i>	LC			5				5
Citrine Wagtail	<i>Motacilla citreola</i>	LC			4			8	12
Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	LC			8			6	14
White-browed Wagtail	<i>Motacilla maderaspatensis</i>	LC						8	8
White Wagtail	<i>Motacilla alba</i>	LC		12	9	6	3	11	41

Annexure 6: Details of Birds reported during AWC-2024 in Jamui district

Common name	Scientific name	IUCN	Jamui									Total
			Bela Tand	Devan Ahar	Pail bajaan	Garhi Dam	Nagi	Jhajha railway pond	Dhamna Aahar	Raja Ahar	Nakti	
Lesser Whistling-duck	<i>DenDr ocygna javanica</i>	LC	38			7		330	16	50		441
Bar-headed Goose	<i>Anser indicus</i>	LC					645		12	14	50	721
Greylag Goose	<i>Anser anser</i>	LC		80			550			470		1100
Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	LC	5	33	7	10	10		13	22		100
Red-crested Pochard	<i>Netta rufina</i>	LC		124		372	1100	8	162	168	2500	4434
Common Pochard	<i>Aythya ferina</i>	VU	25			14	50		2		40	131
Ferruginous Duck	<i>Aythya nyroca</i>	NT	52	17		5					30	104
Tufted Duck	<i>Aythya fuligula</i>	LC				18	8				20	46
Garganey	<i>Spatula querquedula</i>	LC					50				20	70
Northern Shoveler	<i>Spatula clypeata</i>	LC	12						14	12	12	50
Gadwall	<i>Mareca strepera</i>	LC		110		69	18		146	68	500	911
Eurasian Wigeon	<i>Mareca penelope</i>	LC					10				10	20
Northern Pintail	<i>Anas acuta</i>	LC	4			38	230		14	38	250	574
Common Teal	<i>Anas crecca</i>	LC	9			10	300		14		50	383
Little Grebe	<i>Tachybaptus ruficollis</i>	LC	4	20		10	48	4	24		34	144
Great Crested Grebe	<i>Podiceps cristatus</i>	LC				1	2				20	23
Eastern Spotted Dove	<i>Spilopelia chinensis</i>	LC				2						2
Laughing Dove	<i>Spilopelia senegalensis</i>	LC	2			2						4
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC							1			1
Common Moorhen	<i>Gallinula chloropus</i>	LC	20		5			5	4		950	984
Common Coot	<i>Fulica atra</i>	LC	37	12	2	62	1000		4	8		1125
Asian Openbill	<i>Anastomus oscitans</i>	LC	2	4		28	6		15	11	2	68
Black Stork	<i>Ciconia nigra</i>	LC					3					3
Asian Woollyneck	<i>Ciconia episcopus</i>	NT					2					2

Annexure 6: Details of Birds reported during AWC-2024 in Jamui district (contd.)

Common name	Scientific name	IUCN	Jamui									Total
			Bela Tand	Devan Ahar	Pail bajaan	Garhi Dam	Nagi	Jhajha railway pond	Dhamna Aahar	Raja Ahar	Nakti	
Red-naped Ibis	<i>Pseudibis papillosa</i>	LC	6	4					12	6	2	10
Indian Pond-heron	<i>Ardeola grayii</i>	LC				1			6			7
Cattle Egret	<i>Bubulcus ibis</i>	LC		26	5	3	5	12	12	50	52	165
Grey Heron	<i>Ardea cinerea</i>	LC					2				1	3
Purple Heron	<i>Ardea purpurea</i>	LC					1					1
Intermediate Egret	<i>Ardea intermedia</i>	LC	2			4	28			6	80	120
Little Egret	<i>Egretta garzetta</i>	LC				4	8		2	2	1	17
Little Cormorant	<i>Microcarbo niger</i>	LC	16	8	10	56	323		54	26	300	793
Great Cormorant	<i>Phalacrocorax carbo</i>	LC				12	3					15
Black-winged Stilt	<i>Himantopus himantopus</i>	LC				1	2			2		5
Pacific Golden Plover	<i>Pluvialis fulva</i>	LC				29						29
Little Ringed Plover	<i>Charadrius dubius</i>	LC				5	4			2	10	21
Kentish Plover	<i>Charadrius alexandrinus</i>	LC				2	8					10
Lesser Sandplover	<i>Charadrius mongolus</i>	LC									2	2
River Lapwing	<i>Vanellus duvaucelii</i>	NT		3								3
Red-wattled Lapwing	<i>Vanellus indicus</i>	LC				9	1		2	4		16
Bronze-winged Jacana	<i>Metopidius indicus</i>	LC	5		3			2		4		14
Temminck's Stint	<i>Calidris temminckii</i>	LC				30			9		1	40
Common Snipe	<i>Gallinago gallinago</i>	LC				1						1
Common Sandpiper	<i>Actitis hypoleucos</i>	LC				1			1			2
Green Sandpiper	<i>Tringa ochropus</i>	LC	1							2		3
Spotted Redshank	<i>Tringa erythropus</i>	LC				1						1
Common Greenshank	<i>Tringa nebularia</i>	LC				22	6				6	34
Wood Sandpiper	<i>Tringa glareola</i>	LC	1	1		2				1	2	7
Little Pratincole	<i>Glareola lactea</i>	LC				1	50				50	101

Annexure 6: Details of Birds reported during AWC-2024 in Jamui district (contd.)

Common name	Scientific name	IUCN	Jamui									
			Bela Tand	Devan Ahar	Pail bajaan	Garhi Dam	Nagi	Jhajha railway pond	Dhamna Aahar	Raja Ahar	Nakti	Total
Osprey	<i>Pandion haliaetus</i>	LC					1					1
Black-winged Kite	<i>Elanus caeruleus</i>	LC				1						1
Greater Spotted Eagle	<i>Clanga clanga</i>	VU				1						1
Black Kite	<i>Milvus migrans</i>	LC				4	1		2	2	2	11
Common Hoopoe	<i>Upupa epops</i>	LC	1									1
Asian Green Bee-eater	<i>Merops orientalis</i>	LC	2	12	2							16
Indian Roller	<i>Coracias benghalensis</i>	LC				1				1		2
Common Kingfisher	<i>Alcedo atthis</i>	LC	1									1
Pied Kingfisher	<i>Ceryle rudis</i>	LC		2		1						3
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC	1	4		1	1			1		8
Coppersmith Barbet	<i>Psilopogon haemacephalus</i>	LC						2				2
Common Kestrel	<i>Falco tinnunculus</i>	LC	1			2	1					4
Rose-ringed Parakeet	<i>Alexandrinus krameri</i>	LC									2	2
Indian Golden Oriole	<i>Oriolus kundoo</i>	LC						1				1
Black Drongo	<i>Dicrurus macrocercus</i>	LC			2		2	2	2	4	1	13
Brown Shrike	<i>Lanius cristatus</i>	LC	1									1
House Crow	<i>Corvus splendens</i>	LC						35				35
Ashy-crowned Sparrow-lark	<i>Eremopterix griseus</i>	LC	1				6				26	32
Barn Swallow	<i>Hirundo rustica</i>	LC	5			20	20			13	100	158
Asian Plain Martin	<i>Riparia chinensis</i>	LC	6									6
Jungle Babbler	<i>Argya striata</i>	LC						21				21
Indian Pied Starling	<i>Gracupica contra</i>	LC		12				30		12		54
Common Myna	<i>Acridotheres tristis</i>	LC							2			2
Indian Robin	<i>Copsychus fulicatus</i>	LC								1		1

Annexure 6: Details of Birds reported during AWC-2024 in Jamui district (contd.)

Common name	Scientific name	IUCN	Jamui									
			Bela Tand	Devan Ahar	Pail bajaan	Garhi Dam	Nagi	Jhajha railway pond	Dhamna Aahar	Raja Ahar	Nakti	Total
Indian Silverbill	<i>Euodice malabarica</i>	LC								1		1
Paddyfield Pipit	<i>Anthus rufulus</i>	LC	3			4					8	15
Grey Wagtail	<i>Motacilla cinerea</i>	LC				1						1
Citrine Wagtail	<i>Motacilla citreola</i>	LC	4					2				6
White-browed Wagtail	<i>Motacilla maderaspatensis</i>	LC				4		1				5
White Wagtail	<i>Motacilla alba</i>	LC								1		1

Annexure 7: Details of Birds reported during AWC-2024 in Kaimur and Khagaria districts

Common name	Scientific name	IUCN	Kaimur				Khagaria	
			Durgawati dam	Kohira Dam	karkat waterfall	Total	Pasraha Chaur	
Lesser Whistling-duck	<i>Dendrocygna javanica</i>	LC					65	
Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	LC					8	
Ferruginous Duck	<i>Aythya nyroca</i>	NT					53	
Little Grebe	<i>Tachybaptus ruficollis</i>	LC	2			2	9	
Great Crested Grebe	<i>Podiceps cristatus</i>	LC					1	
Rock Dove	<i>Columba livia</i>	LC	31	8		39		
Eurasian Collared-dove	<i>Streptopelia decaocto</i>	LC	8	4	6	18		
Eastern Spotted Dove	<i>Spilopelia chinensis</i>	LC	4	2	10	16		
Laughing Dove	<i>Spilopelia senegalensis</i>	LC	8		23	31		
Greater Coucal	<i>Centropus sinensis</i>	LC		1	1	2		
Common Hawk-cuckoo	<i>Hierococcyx varius</i>	LC			1	1		
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC	1	1	1	3		
Purple Swampphen	<i>Porphyrio porphyrio</i>	LC	2			2		
Common Moorhen	<i>Gallinula chloropus</i>	LC	15			15	7	
Common Coot	<i>Fulica atra</i>	LC	3			3	2	
Grey Francolin	<i>Ortygornis pondicerianus</i>	LC	2		6	8		
Indian Peafowl	<i>Pavo cristatus</i>	LC			7	7		
Greater Adjutant	<i>Leptoptilos dubius</i>	EN					9	
Lesser Adjutant	<i>Leptoptilos javanicus</i>	VU					11	
Asian Openbill	<i>Anastomus oscitans</i>	LC	1			1	204	
Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT					12	
Red-naped Ibis	<i>Pseudibis papillosa</i>	LC					5	
Indian Pond-heron	<i>Ardeola grayii</i>	LC	2		1	3	34	
Cattle Egret	<i>Bubulcus ibis</i>	LC						
Grey Heron	<i>Ardea cinerea</i>	LC	3			3	10	
Purple Heron	<i>Ardea purpurea</i>	LC					8	

Annexure 7: Details of Birds reported during AWC-2024 in Kaimur and Khagaria districts (contd.)

Common name	Scientific name	IUCN	Kaimur				Khagaria
			Durgawati dam	Kohira Dam	karkat waterfall	+	
Intermediate Egret	<i>Ardea intermedia</i>	LC	5			5	Pasraha Chaur
Little Egret	<i>Egretta garzetta</i>	LC	13			13	38
Little Cormorant	<i>Microcarbo niger</i>	LC	28		2	30	250
Great Cormorant	<i>Phalacrocorax carbo</i>	LC	25			25	26
Oriental Darter	<i>Anhinga melanogaster</i>	NT	3			3	1
Black-winged Stilt	<i>Himantopus himantopus</i>	LC					18
Grey-headed Lapwing	<i>Vanellus cinereus</i>	LC					2
Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	LC			4	4	
Red-wattled Lapwing	<i>Vanellus indicus</i>	LC	8	2		10	10
Bronze-winged Jacana	<i>Metopidius indicus</i>	LC	2			2	12
Eurasian Curlew	<i>Numenius arquata</i>	NT					7
Little Stint	<i>Calidris minuta</i>	LC					13
Pintail Snipe	<i>Gallinago stenura</i>	LC					6
Wood Sandpiper	<i>Tringa glareola</i>	LC					4
Osprey	<i>Pandion haliaetus</i>	LC	1			1	
Crested Serpent-eagle	<i>Spilornis cheela</i>	LC			2	2	
Pied Harrier	<i>Circus melanoleucos</i>	LC					1
Shikra	<i>Accipiter badius</i>	LC	1			1	
Indian Grey Hornbill	<i>Ocyrceros birostris</i>	LC			1	1	
Common Hoopoe	<i>Upupa epops</i>	LC	1			1	1
Asian Green Bee-eater	<i>Merops orientalis</i>	LC	2		4	6	
Indian Roller	<i>Coracias benghalensis</i>	LC		5		5	
Common Kingfisher	<i>Alcedo atthis</i>	LC	1			1	2
Pied Kingfisher	<i>Ceryle rudis</i>	LC	3			3	
Stork-billed Kingfisher	<i>Pelargopsis capensis</i>	LC			2	2	
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC	2	1	2	5	3

Annexure 7: Details of Birds reported during AWC-2024 in Kaimur and Khagaria districts (contd.)

Common name	Scientific name	IUCN	Kaimur				Khagaria
			Durgawati dam	Kohira Dam	karkat waterfall	Total	
Peregrine Falcon	<i>Falco peregrinus</i>	LC					1
Plum-headed Parakeet	<i>Himalayapsitta cyanocephala</i>	LC			24	24	
Rose-ringed Parakeet	<i>Alexandrinus krameri</i>	LC		2	14	16	
Black-hooded Oriole	<i>Oriolus xanthornus</i>	LC					1
Brown Shrike	<i>Lanius cristatus</i>	LC					1
Red-backed Shrike	<i>Lanius collurio</i>	LC			7	7	
Rufous Treepie	<i>DenDr ocitta vagabunda</i>	LC		2		2	
House Crow	<i>Corvus splendens</i>	LC		3	6	9	
Large-billed Crow	<i>Corvus macrorhynchos</i>	LC		1	2	3	
Ashy-crowned Sparrow-lark	<i>Eremopterix griseus</i>	LC	14	6		20	
Bengal Bushlark	<i>Mirafra assamica</i>	LC			1	1	
Rufous-tailed Lark	<i>Ammomanes phoenicura</i>	LC	6	2	2	10	
Ashy Prinia	<i>Prinia socialis</i>	LC			2	2	
Plain Prinia	<i>Prinia inornata</i>	LC			3	3	11
Red-rumped Swallow	<i>Cecropis daurica</i>	LC	26			26	
Barn Swallow	<i>Hirundo rustica</i>	LC		5		5	
Dusky Crag Martin	<i>Ptyonoprogne concolor</i>	LC	6			6	
Red-vented Bulbul	<i>Pycnonotus cafer</i>	LC	8	3	7	18	
Jungle Babbler	<i>Argya striata</i>	LC		16	11	27	
Indian Pied Starling	<i>Gracupica contra</i>	LC		2		2	
Brahminy Starling	<i>Sturnia pagodarum</i>	LC			4	4	
Common Myna	<i>Acridotheres tristis</i>	LC		24	12	36	
Red-throated Flycatcher	<i>Ficedula albicilla</i>	LC	2		1	3	1
Indian Robin	<i>Copsychus fulicatus</i>	LC	1		3	4	
Bluethroat	<i>Luscinia svecica</i>	LC					1
Black Redstart	<i>Phoenicurus ochruros</i>	LC	2	3	8	13	

Annexure 7: Details of Birds reported during AWC-2024 in Kaimur and Khagaria districts (contd.)

Common name	Scientific name	IUCN	Kaimur				Khagaria	
			Durgawati dam	Kohira Dam	karkat waterfall	Total	Pasraha Chaur	
Common Stonechat	<i>Saxicola torquatus</i>	LC		1		1	1	
Brown Rockchat	<i>Oenanthe fusca</i>	LC	6			6		
Purple Sunbird	<i>Cinnyris asiaticus</i>	LC	9	2		11		
House Sparrow	<i>Passer domesticus</i>	LC	23		6	29		
Paddyfield Pipit	<i>Anthus rufulus</i>	LC		2	5	7		
White-browed Wagtail	<i>Motacilla maderaspatensis</i>	LC	2		1	3	2	
White Wagtail	<i>Motacilla alba</i>	LC					4	

Annexure 8: Details of Birds reported during AWC-2024 in Katihar district

Common name	Scientific name	IUCN	Katihar						Total
			Baldia Chaur	Ganga river – Bateswarsthan to Manihari	Bhanwra Kothi	Baghar Beel	Gogabeel	Kathotia Fish Pond	
Fulvous Whistling-duck	<i>Dendrocygna bicolor</i>	LC					60		60
Lesser Whistling-duck	<i>Dendrocygna javanica</i>	LC			550		2500		3050
Bar-headed Goose	<i>Anser indicus</i>	LC		70					70
Ruddy Shelduck	<i>Tadorna ferruginea</i>	LC		200					200
Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	LC				5			5
Red-crested Pochard	<i>Netta rufina</i>	LC				29	2200		2229
Ferruginous Duck	<i>Aythya nyroca</i>	NT		10	26	89	200		325
Garganey	<i>Spatula querquedula</i>	LC					10		10
Northern Shoveler	<i>Spatula clypeata</i>	LC					8		8
Gadwall	<i>Mareca strepera</i>	LC		150			150		300
Eurasian Wigeon	<i>Mareca penelope</i>	LC		10			9		19
Northern Pintail	<i>Anas acuta</i>	LC		15			50		65
Little Grebe	<i>Tachybaptus ruficollis</i>	LC	8			7	12		27
Great Crested Grebe	<i>Podiceps cristatus</i>	LC		10					10
Eurasian Collared-dove	<i>Streptopelia decaocto</i>	LC					1		1
Greater Coucal	<i>Centropus sinensis</i>	LC	1		1			1	3
Purple Swamphen	<i>Porphyrio porphyrio</i>	LC	16			90	52		158
Common Coot	<i>Fulica atra</i>	LC	4			14	400		418
Greater Adjutant	<i>Leptoptilos dubius</i>	EN		1					1
Lesser Adjutant	<i>Leptoptilos javanicus</i>	VU	2	8		5	5		20
Painted Stork	<i>Mycteria leucocephala</i>	NT		21					21
Asian Openbill	<i>Anastomus oscitans</i>	LC	5	300		13	183		501
Asian Woollyneck	<i>Ciconia episcopus</i>	NT		16					16
Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT		100			116		216
Red-naped Ibis	<i>Pseudibis papillosa</i>	LC	4	50		1	30		85

Annexure 8: Details of Birds reported during AWC-2024 in Katihar district (contd.)

Common name	Scientific name	IUCN	Katihar						Total
			Baldia Chaur	Ganga river – Bateshwarsthan to Manihari	Bhanwra Kothi	Baghar Beel	Gogabeel	Kathotia Fish Pond	
Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	LC	1						1
Indian Pond-heron	<i>Ardeola grayii</i>	LC	1		3	18	6		28
Cattle Egret	<i>Bubulcus ibis</i>	LC	28				5	45	78
Grey Heron	<i>Ardea cinerea</i>	LC	1	160		6	40		207
Purple Heron	<i>Ardea purpurea</i>	LC		4		3	14		21
Great White Egret	<i>Ardea alba</i>	LC				1	20		21
Intermediate Egret	<i>Ardea intermedia</i>	LC	1	2		2	192		197
Little Egret	<i>Egretta garzetta</i>	LC		20		5	72	2	99
Little Cormorant	<i>Microcarbo niger</i>	LC	25	500	14	25	556	10	1130
Great Cormorant	<i>Phalacrocorax carbo</i>	LC	14	50					64
Oriental Darter	<i>Anhinga melanogaster</i>	NT	4			3	4		11
Little Ringed Plover	<i>Charadrius dubius</i>	LC		130					130
Northern Lapwing	<i>Vanellus vanellus</i>	NT					40		40
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	LC					30		30
Bronze-winged Jacana	<i>Metopidius indicus</i>	LC	10			45	66		121
Eurasian Curlew	<i>Numenius arquata</i>	NT		60					60
Temminck's Stint	<i>Calidris temminckii</i>	LC		55					55
Little Stint	<i>Calidris minuta</i>	LC		120					120
Common Sandpiper	<i>Actitis hypoleucos</i>	LC		3					3
Green Sandpiper	<i>Tringa ochropus</i>	LC		25	30				55
Common Greenshank	<i>Tringa nebularia</i>	LC		10					10
Common Redshank	<i>Tringa totanus</i>	LC		60					60
Wood Sandpiper	<i>Tringa glareola</i>	LC			7				7
Little Pratincole	<i>Glareola lactea</i>	LC		800					800
Osprey	<i>Pandion haliaetus</i>	LC		5			1		6

Annexure 8: Details of Birds reported during AWC-2024 in Katihar district (contd.)

Common name	Scientific name	IUCN	Katihar						Total
			Baldia Chaur	Ganga river – Bateshwarsthan to Manihari	Bhanwra Kothi	Baghar Beel	Gogabeel	Kathotia Fish Pond	
Booted Eagle	<i>Hieraetus pennatus</i>	LC		1			1		2
Black Kite	<i>Milvus migrans</i>	LC	1	2		1			4
Oriental Honey-buzzard	<i>Pernis ptilorhynchus</i>	LC			1				1
Long-legged Buzzard	<i>Buteo rufinus</i>	LC					1		1
Common Kingfisher	<i>Alcedo atthis</i>	LC	2		1	1			4
Pied Kingfisher	<i>Ceryle rudis</i>	LC		8		1	4		13
Stork-billed Kingfisher	<i>Pelargopsis capensis</i>	LC			1				1
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC		2		4	9		15
Blue-throated Barbet	<i>Psilopogon asiaticus</i>	LC			2				2
Common Kestrel	<i>Falco tinnunculus</i>	LC	1				1		2
Black-hooded Oriole	<i>Oriolus xanthonus</i>	LC			1				1
Black Drongo	<i>Dicrurus macrocercus</i>	LC	3			7	3	2	15
Indian Paradise-flycatcher	<i>Terpsiphone paradisi</i>	LC			2				2
Brown Shrike	<i>Lanius cristatus</i>	LC					1	1	2
Long-tailed Shrike	<i>Lanius schach</i>	LC					1		1
Rufous Treepie	<i>Dendrocitta vagabunda</i>	LC	1						1
Sand Lark	<i>Alaudala raytal</i>	LC		5					5
Oriental Skylark	<i>Alauda gulgula</i>	LC		2					2
Plain Prinia	<i>Prinia inornata</i>	LC					1		1
Barn Swallow	<i>Hirundo rustica</i>	LC		300		20	10		330
Indian Pied Starling	<i>Gracupica contra</i>	LC					3	75	78
Paddyfield Pipit	<i>Anthus rufulus</i>	LC				1			1
Citrine Wagtail	<i>Motacilla citreola</i>	LC				1			1
White Wagtail	<i>Motacilla alba</i>	LC	2	23		4			29

Annexure 9: Details of Birds reported during AWC-2024 in Kishanganj, Madhubani, Munger, and Muzaffarpur districts

Common name	Scientific name	IUCN	Kishanganj	Madhubani	Munger	Muzaffarpur		
			Mahananda river	Chapaniya Lake	Ganga river- Kashtarni ghat to Bariyarpur	Manika Mann	Jhapaha Mann	Kanti Mann
Lesser Whistling-duck	<i>Dendrocygna javanica</i>	LC		18				
Bar-headed Goose	<i>Anser indicus</i>	LC			6			
Ruddy Shelduck	<i>Tadorna ferruginea</i>	LC	8		143			
Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	LC		48				
Red-crested Pochard	<i>Netta rufina</i>	LC			25			
Common Pochard	<i>Aythya ferina</i>	VU			15			
Ferruginous Duck	<i>Aythya nyroca</i>	NT		65				
Tufted Duck	<i>Aythya fuligula</i>	LC			10			
Gadwall	<i>Mareca strepera</i>	LC		82	187			
Eurasian Wigeon	<i>Mareca penelope</i>	LC		16				
Northern Pintail	<i>Anas acuta</i>	LC			82			
Common Teal	<i>Anas crecca</i>	LC	22		2			
Little Grebe	<i>Tachybaptus ruficollis</i>	LC		30				1
Great Crested Grebe	<i>Podiceps cristatus</i>	LC			18			
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC		8				
Purple Swamphen	<i>Porphyrio porphyrio</i>	LC					1	1
Common Moorhen	<i>Gallinula chloropus</i>	LC		22				
Greater Adjutant	<i>Leptoptilos dubius</i>	EN		1	12			
Lesser Adjutant	<i>Leptoptilos javanicus</i>	VU		1	8			
Asian Openbill	<i>Anastomus oscitans</i>	LC		9	331	15		25
Asian Woollyneck	<i>Ciconia episcopus</i>	NT			1			
Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT		2	50			
Red-naped Ibis	<i>Pseudibis papillosa</i>	LC			254	2		2
Indian Pond-heron	<i>Ardeola grayii</i>	LC			1	2	1	
Cattle Egret	<i>Bubulcus ibis</i>	LC		10	10			10
Grey Heron	<i>Ardea cinerea</i>	LC			8		2	1
								3
								10
								3
								4
								3
								10
								3

Annexure 9: Details of Birds reported during AWC-2024 in Kishanganj, Madhubani, Munger, and Muzaffarpur districts (contd.)

Common name	Scientific name	IUCN	Kishanganj Mahananda river	Madhubani Chapaniya Lake	Munger Ganga river- Kashitarni ghat to Bariyarpur	Muzaffarpur		
						Manika Mann	Jhapaha Mann	Kanti Mann
Great White Egret	<i>Ardea alba</i>	LC			1			
Little Egret	<i>Egretta garzetta</i>	LC		15	35	13	4	
Little Cormorant	<i>Microcarbo niger</i>	LC	7	12	60	11	3	25
Great Cormorant	<i>Phalacrocorax carbo</i>	LC			13			
Little Ringed Plover	<i>Charadrius dubius</i>	LC	16		4			
Kentish Plover	<i>Charadrius alexandrinus</i>	LC	6					
Northern Lapwing	<i>Vanellus vanellus</i>	NT	18					
River Lapwing	<i>Vanellus duvaucellii</i>	NT	12					2
Grey-headed Lapwing	<i>Vanellus cinereus</i>	LC		2				
Red-wattled Lapwing	<i>Vanellus indicus</i>	LC		12				
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	LC		20				
Bronze-winged Jacana	<i>Metopidius indicus</i>	LC		18			5	2
Eurasian Curlew	<i>Numenius arquata</i>	NT			18			
Common Snipe	<i>Gallinago gallinago</i>	LC	22	71				
Common Sandpiper	<i>Actitis hypoleucos</i>	LC		4	104			2
Common Greenshank	<i>Tringa nebularia</i>	LC			109			
Wood Sandpiper	<i>Tringa glareola</i>	LC		4				
Little Pratincole	<i>Glareola lactea</i>	LC	632					
Short-eared Owl	<i>Asio flammeus</i>	LC	1					
Osprey	<i>Pandion haliaetus</i>	LC	3					
Black-winged Kite	<i>Elanus caeruleus</i>	LC						1
Black Kite	<i>Milvus migrans</i>	LC			5			
White-eyed Buzzard	<i>Butastur teesa</i>	LC				1	1	
Pied Kingfisher	<i>Ceryle rudis</i>	LC		2	1			2
White-breasted Kingfisher	<i>Halcyon smymensis</i>	LC	5	5		2	1	3
Eurasian Wryneck	<i>Jynx torquilla</i>	LC		1				

Annexure 9: Details of Birds reported during AWC-2024 in Kishanganj, Madhubani, Munger, and Muzaffarpur districts (contd.)

Common name	Scientific name	IUCN	Kishanganj	Madhubani	Munger		Muzaffarpur		
			Mahananda river	Chapaniya Lake	Ganga river- Kashtarni ghat to Bariyarpur	Manika Mann	Jhapaha Mann	Kanti Mann	Total
House Crow	<i>Corvus splendens</i>	LC				1			1
Large-billed Crow	<i>Corvus macrorhynchos</i>	LC				1			1
Sand Lark	<i>Alaudala raytal</i>	LC	13						
Barn Swallow	<i>Hirundo rustica</i>	LC			80				
Jungle Babbler	<i>Argya striata</i>	LC				3			3
Common Myna	<i>Acridotheres tristis</i>	LC				2			2
Red-throated Flycatcher	<i>Ficedula albicilla</i>	LC				1			1
Purple Sunbird	<i>Cinnyris asiaticus</i>	LC				1			1
Paddyfield Pipit	<i>Anthus rufulus</i>	LC	12						
Grey Wagtail	<i>Motacilla cinerea</i>	LC	3						
Citrine Wagtail	<i>Motacilla citreola</i>	LC	6						
Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	LC	4						
White-browed Wagtail	<i>Motacilla maderaspatensis</i>	LC						2	2
White Wagtail	<i>Motacilla alba</i>	LC	14		2			2	2

Annexure 10: Details of Birds reported during AWC-2024 in Nalanda and Nawada districts

Common name	Scientific name	IUCN	Nalanda						Nawada	
			Gangaji Rajgriha Jalashaya	Pushpakarani tank	Giddhi Lake	Ordnance factory	Pawapari	Panchane River	Total	Hardiya Dam
Lesser Whistling-duck	<i>Dendrocygna javanica</i>	LC		350	200		350	500	1400	48
Bar-headed Goose	<i>Anser indicus</i>	LC								372
Ruddy Shelduck	<i>Tadorna ferruginea</i>	LC						10	10	22
Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	LC			13		8		21	
Common Pochard	<i>Aythya ferina</i>	VU								20
Tufted Duck	<i>Aythya fuligula</i>	LC								246
Garganey	<i>Spatula querquedula</i>	LC			4				4	
Northern Shoveler	<i>Spatula clypeata</i>	LC					14		14	
Gadwall	<i>Mareca strepera</i>	LC			24		180	18	222	4
Northern Pintail	<i>Anas acuta</i>	LC			14		2	6	22	19
Common Teal	<i>Anas crecca</i>	LC			32			8	40	21
Little Grebe	<i>Tachybaptus ruficollis</i>	LC		3	8		4	6	21	22
Great Crested Grebe	<i>Podiceps cristatus</i>	LC	1						1	11
Eurasian Collared-dove	<i>Streptopelia decaocto</i>	LC		4	1		2	8	15	
Eastern Spotted Dove	<i>Spilopelia chinensis</i>	LC		2	1		2	5	10	
Laughing Dove	<i>Spilopelia senegalensis</i>	LC						28	28	
Asian Palm-swift	<i>Cypsiurus balasensis</i>	LC						23	23	6
Greater Coucal	<i>Centropus sinensis</i>	LC						1	1	
Common Hawk-cuckoo	<i>Hierococyx varius</i>	LC	1	4		1			6	
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC		2	1		3	2	8	
Purple Swamphen	<i>Porphyrio porphyrio</i>	LC			25		6		31	
Common Moorhen	<i>Gallinula chloropus</i>	LC			11				11	
Common Coot	<i>Fulica atra</i>	LC			6		6	10	22	6
Grey Francolin	<i>Ortygornis pondicerianus</i>	LC	1	6				2	9	

Annexure 10: Details of Birds reported during AWC-2024 in Nalanda and Nawada districts (contd.)

Common name	Scientific name	IUCN	Nalanda						Nawada	
			Gangaji Rajgriha Jalashaya	Pushpakarani tank	Giddhi Lake	Ordnance factory	Pawapari	Panchane River	Total	Hardiya Dam
Asian Woollyneck	<i>Ciconia episcopus</i>	NT								4
Red-naped Ibis	<i>Pseudibis papillosa</i>	LC								9
Indian Pond-heron	<i>Ardeola grayii</i>	LC		6	1		2	4	13	12
Cattle Egret	<i>Bubulcus ibis</i>	LC		3	24			7	34	8
Grey Heron	<i>Ardea cinerea</i>	LC		1	1				2	7
Purple Heron	<i>Ardea purpurea</i>	LC		1	1				2	
Great White Egret	<i>Ardea alba</i>	LC			2			4	6	6
Intermediate Egret	<i>Ardea intermedia</i>	LC		6	5				11	12
Little Egret	<i>Egretta garzetta</i>	LC		2	2	2		2	8	14
Little Cormorant	<i>Microcarbo niger</i>	LC	70	32	9	15	2	134	262	78
Great Cormorant	<i>Phalacrocorax carbo</i>	LC		12					12	25
Indian Thick-knee	<i>Burhinus indicus</i>	LC								3
Black-winged Stilt	<i>Himantopus himantopus</i>	LC		22					22	48
Little Ringed Plover	<i>Charadrius dubius</i>	LC								37
Grey-headed Lapwing	<i>Vanellus cinereus</i>	LC		4					4	1
Red-wattled Lapwing	<i>Vanellus indicus</i>	LC		5	4	2		3	14	8
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	LC			6				6	
Bronze-winged Jacana	<i>Metopidius indicus</i>	LC		2	4	2	18	4	30	
Temminck's Stint	<i>Calidris temminckii</i>	LC			2			14	16	12
Common Sandpiper	<i>Actitis hypoleucos</i>	LC						4	4	19
Common Redshank	<i>Tringa totanus</i>	LC								6
Wood Sandpiper	<i>Tringa glareola</i>	LC								1
Black-headed Gull	<i>Larus ridibundus</i>	LC								7
Brown-headed Gull	<i>Larus brunnicephalus</i>	LC								34
Spotted Owllet	<i>Athene brama</i>	LC						3	3	

Annexure 10: Details of Birds reported during AWC-2024 in Nalanda and Nawada districts (contd.)

Common name	Scientific name	IUCN	Nalanda						Nawada	
			Gangaji Rajgriha Jalashaya	Pushpakarani tank	Giddhi Lake	Ordhance factory	Pawapari	Panchane River	Total	Hardiya Dam
Shikra	<i>Accipiter badius</i>	LC			1		1		2	1
Black Kite	<i>Milvus migrans</i>	LC						1	1	3
Asian Green Bee-eater	<i>Merops orientalis</i>	LC				6			6	
Indian Roller	<i>Coracias benghalensis</i>	LC			1			3	4	5
Common Kingfisher	<i>Alcedo atthis</i>	LC								
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC		1	3		1		5	
Coppersmith Barbet	<i>Psilopogon haemacephalus</i>	LC								
Brown-headed Barbet	<i>Psilopogon zeylanicus</i>	LC		2			1		3	
Black-rumped Flameback	<i>Dinopium benghalense</i>	LC		1				4	5	
Rose-ringed Parakeet	<i>Alexandrinus krameri</i>	LC		12					12	10
Indian Golden Oriole	<i>Oriolus kundoo</i>	LC		3					3	
Black Drongo	<i>Dicrurus macrocercus</i>	LC		3				16	19	5
Brown Shrike	<i>Lanius cristatus</i>	LC		1					1	
Rufous Treepie	<i>DenDr ocitta vagabunda</i>	LC		2					2	
House Crow	<i>Corvus splendens</i>	LC		42		2	8	22	74	21
Rufous-tailed Lark	<i>Ammomanes phoenicurus</i>	LC	2					2	4	
Plain Prinia	<i>Prinia inornata</i>	LC						2	2	
Blyth's Reed-warbler	<i>Acrocephalus dumetorum</i>	LC		1					1	
Barn Swallow	<i>Hirundo rustica</i>	LC		20	20				40	
Dusky Crag Martin	<i>Ptyonoprogne concolor</i>	LC		12					12	
Red-vented Bulbul	<i>Pycnonotus cafer</i>	LC								2
Jungle Babbler	<i>Argya striata</i>	LC		18			5		23	
Indian Pied Starling	<i>Gracupica contra</i>	LC						15	15	
Common Myna	<i>Acridotheres tristis</i>	LC		10		4		16	30	

Annexure 10: Details of Birds reported during AWC-2024 in Nalanda and Nawada districts (contd.)

Common name	Scientific name	IUCN	Nalanda						Nawada	
			Gangaji Rajgruha Jalashaya	Pushpakarani tank	Giddhi Lake	Ordhance factory	Pawapari	Panchane River	Total	Hardiya Dam
Red-throated Flycatcher	<i>Ficedula albicilla</i>	LC		2			1		3	
Brown Rockchat	<i>Oenanthe fusca</i>	LC		1				2	3	2
Paddyfield Pipit	<i>Anthus rufulus</i>	LC			3			11	14	5
Grey Wagtail	<i>Motacilla cinerea</i>	LC			1				1	
Citrine Wagtail	<i>Motacilla citreola</i>	LC		1				15	16	
Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	LC	2	2					4	
White-browed Wagtail	<i>Motacilla maderaspatensis</i>	LC			1		1		2	2
White Wagtail	<i>Motacilla alba</i>	LC	6		2			4	12	

Annexure 11: Details of Birds reported during AWC-2024 in Patna, Saharsa, Samastipur and Sheohar districts

Common name	Scientific name	IUCN status	Patna		Saharsa				Total	Samastipur	Sheohar
			Rajdhani Jalashay	Ganga river (Maner to Fatuha)	Arsi Chaur	Simri Chaur	Bora Chaur				
Lesser Whistling-duck	<i>Dendrocygna javanica</i>	LC	69						69	27	
Ruddy Shelduck	<i>Tadorna ferruginea</i>	LC		12					12		4
Garganey	<i>Spatula querquedula</i>	LC	8						8	3	
Northern Shoveler	<i>Spatula clypeata</i>	LC	13						13		
Falcated Duck	<i>Mareca falcata</i>	NT	4						4		
Gadwall	<i>Mareca strepera</i>	LC	18	2					20		
Common Teal	<i>Anas crecca</i>	LC	25						25	11	
Little Grebe	<i>Tachybaptus ruficollis</i>	LC	4			3	3		4	7	
Great Crested Grebe	<i>Podiceps cristatus</i>	LC								1	
Rock Dove	<i>Columba livia</i>	LC									43
Eurasian Collared-dove	<i>Streptopelia decaocto</i>	LC									2
Eastern Spotted Dove	<i>Spilopelia chinensis</i>	LC									2
Laughing Dove	<i>Spilopelia senegalensis</i>	LC									1
Little Swift	<i>Apus affinis</i>	LC									25
Greater Coucal	<i>Centropus sinensis</i>	LC									2
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC	11	1	12			2	2	5	
Purple Swamphen	<i>Porphyrio porphyrio</i>	LC					33		33	9	
Common Moorhen	<i>Gallinula chloropus</i>	LC	12		12					4	
Common Coot	<i>Fulica atra</i>	LC	7		7					1	
Greater Adjutant	<i>Leptoptilos dubius</i>	EN						2	2		
Lesser Adjutant	<i>Leptoptilos javanicus</i>	VU				7	7			14	
Painted Stork	<i>Mycteria leucocephala</i>	NT									
Asian Openbill	<i>Anastomus oscitans</i>	LC		10	10	13	10	1	24	210	12
Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT								19	

Annexure 11: Details of Birds reported during AWC-2024 in Patna, Saharsa, Samastipur and Seohar districts (contd.)

Common name	Scientific name	IUCN status	Patna			Saharsa				Samastipur	Sheohar
			Rajdhani Jalashay	Ganga river (Maner to Fatuha)	Total	Arsi Chaur	Simri Chaur	Bora Chaur	Total		
Black Bittern	<i>Ixobrychus flavicollis</i>	LC								1	
Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	LC		3	3					2	
Indian Pond-heron	<i>Ardeola grayii</i>	LC	4		4	12	8	5	25	17	8
Cattle Egret	<i>Bubulcus ibis</i>	LC		20	20	32		3	35	56	
Grey Heron	<i>Ardea cinerea</i>	LC		1	1	3	4	2	9	1	1
Purple Heron	<i>Ardea purpurea</i>	LC					7	1	8	1	
Great White Egret	<i>Ardea alba</i>	LC		6	6					5	5
Intermediate Egret	<i>Ardea intermedia</i>	LC	1	3	4					16	13
Little Egret	<i>Egretta garzetta</i>	LC		13	13	9	6		15	1	30
Little Cormorant	<i>Microcarbo niger</i>	LC	3	85	88	13	15	3	31		46
Great Cormorant	<i>Phalacrocorax carbo</i>	LC		14	14					2	4
Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	LC	1		1					11	
Oriental Darter	<i>Anhinga melanogaster</i>	NT								1	
Little Ringed Plover	<i>Charadrius dubius</i>	LC								3	34
Kentish Plover	<i>Charadrius alexandrinus</i>	LC									4
River Lapwing	<i>Vanellus duvaucelii</i>	NT									6
Grey-headed Lapwing	<i>Vanellus cinereus</i>	LC					13		13	1	
Red-wattled Lapwing	<i>Vanellus indicus</i>	LC				6	4		10	4	24
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	LC				18			18	7	
Bronze-winged Jacana	<i>Metopidius indicus</i>	LC	4		4		16		16	3	
Temminck's Stint	<i>Calidris temminckii</i>	LC		4	4					1	13
Little Stint	<i>Calidris minuta</i>	LC								6	
Common Snipe	<i>Gallinago gallinago</i>	LC				13			13		3
Common Sandpiper	<i>Actitis hypoleucos</i>	LC	3	300	303					6	31
Green Sandpiper	<i>Tringa ochropus</i>	LC									23

Annexure 11: Details of Birds reported during AWC-2024 in Patna, Saharsa, Samastipur and Seohar districts (contd.)

Common name	Scientific name	IUCN status	Patna			Saharsa				Samastipur	Sheohar
			Rajdhani Jalashay	Ganga river (Maner to Fatuha)	Total	Arsi Chaur	Simri Chaur	Bora Chaur	Total		
Wood Sandpiper	<i>Tringa glareola</i>	LC									20
Little Pratincole	<i>Glareola lactea</i>	LC		1,200	1,200						
River Tern	<i>Sterna aurantia</i>	VU								2	
Spotted Owllet	<i>Athene brama</i>	LC									3
Osprey	<i>Pandion haliaetus</i>	LC								1	
Black-winged Kite	<i>Elanus caeruleus</i>	LC								3	2
Pied Harrier	<i>Circus melanoleucos</i>	LC				1			1		
Shikra	<i>Accipiter badius</i>	LC									2
Black Kite	<i>Milvus migrans</i>	LC								4	1
Common Buzzard	<i>Buteo buteo</i>	LC									1
Long-legged Buzzard	<i>Buteo rufinus</i>	LC								1	1
Indian Roller	<i>Coracias benghalensis</i>	LC								5	1
Common Kingfisher	<i>Alcedo atthis</i>	LC				1			1		3
Pied Kingfisher	<i>Ceryle rudis</i>	LC		2	2						16
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC	4	1	5	5	4		9	3	6
Common Kestrel	<i>Falco tinnunculus</i>	LC								2	
Peregrine Falcon	<i>Falco peregrinus</i>	LC					1		1	2	
Rose-ringed Parakeet	<i>Alexandrinus krameri</i>	LC									2
Black Drongo	<i>Dicrurus macrocercus</i>	LC								10	17
Long-tailed Shrike	<i>Lanius schach</i>	LC									1
Rufous Treepie	<i>Dendrocyitta vagabunda</i>	LC									3
House Crow	<i>Corvus splendens</i>	LC								9	28
Large-billed Crow	<i>Corvus macrorhynchos</i>	LC								2	169
Bengal Bushlark	<i>Mirafra assamica</i>	LC									2
Zitting Cisticola	<i>Cisticola juncidis</i>	LC								2	

Annexure 11: Details of Birds reported during AWC-2024 in Patna, Saharsa, Samastipur and Seohar districts (contd.)

Common name	Scientific name	IUCN status	Patna			Saharsa				Samastipur	Sheohar
			Rajdhani Jalashay	Ganga river (Maner to Fatuha)	Total	Arsi Chaur	Simri Chaur	Bora Chaur	Total		
Plain Prinia	<i>Prinia inornata</i>	LC								3	
Wire-tailed Swallow	<i>Hirundo smithii</i>	LC									4
Barn Swallow	<i>Hirundo rustica</i>	LC								200	73
Indian Pied Starling	<i>Gracupica contra</i>	LC								12	
Common Myna	<i>Acridotheres tristis</i>	LC									18
Oriental Magpie-robin	<i>Copsychus saularis</i>	LC									2
Bluethroat	<i>Luscinia svecica</i>	LC									1
Common Stonechat	<i>Saxicola torquatus</i>	LC									3
Grey-headed Canary-flycatcher	<i>Culicicapa ceylonensis</i>	LC						1	1		
Paddyfield Pipit	<i>Anthus rufulus</i>	LC								22	5
Grey Wagtail	<i>Motacilla cinerea</i>	LC				6			6		
Citrine Wagtail	<i>Motacilla citreola</i>	LC		3	3					1	
Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	LC									4
White-browed Wagtail	<i>Motacilla maderaspatensis</i>	LC		6	6					2	1
White Wagtail	<i>Motacilla alba</i>	LC		16	16	5	8		13	7	14

Annexure 12: Details of Birds reported during AWC-2024 in Saran and Supaul districts

Common name	Scientific name	IUCN	Saran					Supaul		
			Atanagar	Bahiyara Chaur	Hariya Chaur	Phulwaria Chaur	Total	Kosi River	Kosi Catchment	Total
Lesser Whistling-duck	<i>Dendrocygna javanica</i>	LC		14	13				254	254
Ruddy Shelduck	<i>Tadorna ferruginea</i>	LC						111	2	113
Common Merganser	<i>Mergus merganser</i>	LC						25		25
Ferruginous Duck	<i>Aythya nyroca</i>	NT							19	19
Northern Shoveler	<i>Spatula clypeata</i>	LC							7	7
Gadwall	<i>Mareca strepera</i>	LC						27	12	39
Northern Pintail	<i>Anas acuta</i>	LC			33		33			
Little Grebe	<i>Tachybaptus ruficollis</i>	LC	5	3	3	4	15		19	19
Great Crested Grebe	<i>Podiceps cristatus</i>	LC			2		2		2	2
Eurasian Collared-dove	<i>Streptopelia decaocto</i>	LC							1	1
Yellow-footed Green-pigeon	<i>Treron phoenicopterus</i>	LC							2	2
Common Hawk-cuckoo	<i>Hierococcyx varius</i>	LC							1	1
Sirkeer Malkoha	<i>Taccocua leschenaultii</i>	LC							1	1
Brown Crane	<i>Zapornia akool</i>	LC	1				1			
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC	2	2		4	8			
Common Moorhen	<i>Gallinula chloropus</i>	LC	4			6	10		20	20
Common Coot	<i>Fulica atra</i>	LC							2	2
Lesser Adjutant	<i>Leptoptilos javanicus</i>	VU						9	12	21
Painted Stork	<i>Mycteria leucocephala</i>	NT		59			59			
Asian Openbill	<i>Anastomus oscitans</i>	LC	25		81	1	107		48	48
Black Stork	<i>Ciconia nigra</i>	LC						15		15
Asian Woollyneck	<i>Ciconia episcopus</i>	NT		4			4			
Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	NT							6	6
Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT		7	8		15			
Red-naped Ibis	<i>Pseudibis papillosa</i>	LC							24	24
Black Bittern	<i>Ixobrychus flavicollis</i>	LC		1			1	3		3

Annexure 12: Details of Birds reported during AWC-2024 in Saran and Supaul districts (contd.)

Common name	Scientific name	IUCN	Saran					Supaul		
			Atanagar	Bahiyara Chaur	Hariya Chaur	Phulwaria Chaur	Total	Kosi River	Kosi Catchment	Total
Cattle Egret	<i>Bubulcus ibis</i>	LC						15	156	171
Grey Heron	<i>Ardea cinerea</i>	LC	3	4	2	1	10	5	5	10
Purple Heron	<i>Ardea purpurea</i>	LC	2	1	1	2	6	5	9	14
Great White Egret	<i>Ardea alba</i>	LC	5	6			11		17	17
Little Egret	<i>Egretta garzetta</i>	LC	8	17			25		109	109
Little Cormorant	<i>Microcarbo niger</i>	LC	8	8	80	1	97	72	12	84
Great Cormorant	<i>Phalacrocorax carbo</i>	LC			23		23	20	44	64
Little Ringed Plover	<i>Charadrius dubius</i>	LC							5	5
River Lapwing	<i>Vanellus duvaucelii</i>	NT						5	2	7
Grey-headed Lapwing	<i>Vanellus cinereus</i>	LC		12			12		65	65
Red-wattled Lapwing	<i>Vanellus indicus</i>	LC	3				3	9	3	12
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	LC							5	5
Bronze-winged Jacana	<i>Metopidius indicus</i>	LC				5	5		32	32
Whimbrel	<i>Numenius phaeopus</i>	LC							7	7
Curlew Sandpiper	<i>Calidris ferruginea</i>	LC							21	21
Little Stint	<i>Calidris minuta</i>	LC		2			2			
Common Snipe	<i>Gallinago gallinago</i>	LC	6	23		4	33			
Common Sandpiper	<i>Actitis hypoleucos</i>	LC	2	5	6		13	26	27	53
Green Sandpiper	<i>Tringa ochropus</i>	LC						5		5
Osprey	<i>Pandion haliaetus</i>	LC		1			1	1		1
Greater Spotted Eagle	<i>Clanga clanga</i>	VU	1				1			
Western Marsh-harrier	<i>Circus aeruginosus</i>	LC	2				2			
Pied Harrier	<i>Circus melanoleucos</i>	LC		1	3		4	1		1
Shikra	<i>Accipiter badius</i>	LC							2	2
Black Kite	<i>Milvus migrans</i>	LC						5	12	17

Annexure 12: Details of Birds reported during AWC-2024 in Saran and Supaul districts (contd.)

Common name	Scientific name	IUCN	Saran					Supaul		
			Atanagar	Bahiyara Chaur	Hariya Chaur	Phulwaria Chaur	Total	Kosi River	Kosi Catchment	Total
Common Kingfisher	<i>Alcedo atthis</i>	LC							2	2
Pied Kingfisher	<i>Ceryle rudis</i>	LC			2		2	10	1	11
Stork-billed Kingfisher	<i>Pelargopsis capensis</i>	LC								
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC	3	3	1	1	8	9	8	17
Common Kestrel	<i>Falco tinnunculus</i>	LC							1	1
Peregrine Falcon	<i>Falco peregrinus</i>	LC		1			1			
Black-hooded Oriole	<i>Oriolus xanthornus</i>	LC							1	1
Black Drongo	<i>Dicrurus macrocercus</i>	LC						12	102	114
Isabelline Shrike	<i>Lanius isabellinus</i>	LC			1		1			
Rufous Treepie	<i>Dendrocitta vagabunda</i>	LC							2	2
House Crow	<i>Corvus splendens</i>	LC						4	23	27
Large-billed Crow	<i>Corvus macrorhynchos</i>	LC							69	69
Oriental Skylark	<i>Alauda gulgula</i>	LC						20	1	21
Red-vented Bulbul	<i>Pycnonotus cafer</i>	LC							18	18
Smoky Warbler	<i>Phylloscopus fuligiventer</i>	LC	1				1			
Indian Pied Starling	<i>Gracupica contra</i>	LC							4	4
Brahminy Starling	<i>Sturnia pagodarum</i>	LC								
Chestnut-tailed Starling	<i>Sturnia malabarica</i>	LC							2	2
Common Myna	<i>Acridotheres tristis</i>	LC							14	14
Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	LC		6	2		8			
White Wagtail	<i>Motacilla alba</i>	LC	7	16	4		27		1	1

Annexure 13: Details of Birds reported during AWC-2024 in Vaishali district

Common name	Scientific name	IUCN	Vaishali				
			Baraila Lake	Purainiya Chaur	Salaha lake	Gadak river	Total
Red-crested Pochard	<i>Netta rufina</i>	LC	2				
Little Grebe	<i>Tachybaptus ruficollis</i>	LC	4	6	10		20
Purple Swampphen	<i>Porphyrio porphyrio</i>	LC	2				2
Asian Openbill	<i>Anastomus oscitans</i>	LC	1,000				1,000
Asian Woollyneck	<i>Ciconia episcopus</i>	NT				4	4
Red-naped Ibis	<i>Pseudibis papillosa</i>	LC	2			4	6
Yellow Bittern	<i>Ixobrychus sinensis</i>	LC	10				10
Indian Pond-heron	<i>Ardeola grayii</i>	LC	10	4			14
Grey Heron	<i>Ardea cinerea</i>	LC	10	2	2	20	34
Purple Heron	<i>Ardea purpurea</i>	LC	4				4
Great White Egret	<i>Ardea alba</i>	LC	2				2
Intermediate Egret	<i>Ardea intermedia</i>	LC	6	10			16
Little Egret	<i>Egretta garzetta</i>	LC	50	200	20		270
Little Cormorant	<i>Microcarbo niger</i>	LC	20	10	5		35
Great Cormorant	<i>Phalacrocorax carbo</i>	LC		10		6	16
Black Kite	<i>Milvus migrans</i>	LC				6	6
Common Kingfisher	<i>Alcedo atthis</i>	LC	2	2			4
Pied Kingfisher	<i>Ceryle rudis</i>	LC				2	2
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC		1			1
Black Drongo	<i>Dicrurus macrocercus</i>	LC	20	20			40
House Crow	<i>Corvus splendens</i>	LC		2			2
Bengal Bushlark	<i>Mirafra assamica</i>	LC	2				2
Indian Pied Starling	<i>Gracupica contra</i>	LC	20				20
Common Myna	<i>Acridotheres tristis</i>	LC	2	2			4
Black Redstart	<i>Phoenicurus ochruros</i>	LC		2			2
Common Stonechat	<i>Saxicola torquatus</i>	LC	2				2
Paddyfield Pipit	<i>Anthus rufulus</i>	LC	2				2
White Wagtail	<i>Motacilla alba</i>	LC	4	10	8	2	24

Annexure 14: Details of Birds reported during AWC-2024 in West Champaran district

Common name	Scientific name	IUCN	West Champaran				
			Udaipur Wildlife Sanctuary	Lal Sariya Maan	Darwabari	Gandak River	Total
Lesser Whistling-duck	<i>Dendrocygna javanica</i>	LC	500			450	500
Ruddy Shelduck	<i>Tadorna ferruginea</i>	LC	30			32	62
Cotton Pygmy-goose	<i>Nettapus coromandelianus</i>	LC	10				10
Common Merganser	<i>Mergus merganser</i>	LC				53	53
Common Pochard	<i>Aythya ferina</i>	VU	1				1
Gadwall	<i>Mareca strepera</i>	LC	66				66
Great Crested Grebe	<i>Podiceps cristatus</i>	LC	11				11
Eastern Spotted Dove	<i>Spilopelia chinensis</i>	LC				1	1
Greater Coucal	<i>Centropus sinensis</i>	LC	1	2			3
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	LC	6			1	7
Common Moorhen	<i>Gallinula chloropus</i>	LC	2				2
Common Coot	<i>Fulica atra</i>	LC	34			4	38
Indian Peafowl	<i>Pavo cristatus</i>	LC				5	5
Lesser Adjutant	<i>Leptoptilos javanicus</i>	VU			7	1	8
Asian Openbill	<i>Anastomus oscitans</i>	LC	4	5	60	73	142
Indian Pond-heron	<i>Ardeola grayii</i>	LC	4	2	15		21
Purple Heron	<i>Ardea purpurea</i>	LC	1				1
Intermediate Egret	<i>Ardea intermedia</i>	LC	3	2	11		16
Little Egret	<i>Egretta garzetta</i>	LC	2				2
Little Cormorant	<i>Microcarbo niger</i>	LC		1			1
Great Cormorant	<i>Phalacrocorax carbo</i>	LC	6				6
Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	LC	2				2
River Lapwing	<i>Vanellus duvaucelii</i>	NT				1	1
Grey-headed Lapwing	<i>Vanellus cinereus</i>	LC	2			4	6
Red-wattled Lapwing	<i>Vanellus indicus</i>	LC	1				1
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	LC		10			10
Bronze-winged Jacana	<i>Metopidius indicus</i>	LC	22			3	25
Common Sandpiper	<i>Actitis hypoleucos</i>	LC				8	8
Common Greenshank	<i>Tringa nebularia</i>	LC				2	2
Little Pratincole	<i>Glareola lactea</i>	LC				18	18
Osprey	<i>Pandion haliaetus</i>	LC	1			3	4
Crested Serpent-eagle	<i>Spilornis cheela</i>	LC	1				1
Shikra	<i>Accipiter badius</i>	LC				1	1
Oriental Pied Hornbill	<i>Anthraceroceros albirostris</i>	LC				1	1
Common Kingfisher	<i>Alcedo atthis</i>	LC	1				1
Pied Kingfisher	<i>Ceryle rudis</i>	LC				11	11
Stork-billed Kingfisher	<i>Pelargopsis capensis</i>	LC	3				3
White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	LC	1		4	4	9
Black-capped Kingfisher	<i>Halcyon pileata</i>	VU	1				1

Annexure 14: Details of Birds reported during AWC-2024 in West Champaran district (contd.)

Common name	Scientific name	IUCN	West Champaran				
			Udaipur Wildlife Sanctuary	Lal Sariya Maan	Darwabari	Gandak River	Total
Rose-ringed Parakeet	<i>Alexandrinus krameri</i>	LC				1	1
White-throated Fantail	<i>Rhipidura albicollis</i>	LC				1	1
Grey-backed Shrike	<i>Lanius tephronotus</i>	LC				1	1
Rufous Treepie	<i>Dendrocitta vagabunda</i>	LC				1	1
Large-billed Crow	<i>Corvus macrorhynchos</i>	LC				8	8
Zitting Cisticola	<i>Cisticola juncidis</i>	LC				1	1
Ashy Prinia	<i>Prinia socialis</i>	LC				3	3
Common Tailorbird	<i>Orthotomus sutorius</i>	LC				4	4
Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	LC				1	1
Red-vented Bulbul	<i>Pycnonotus cafer</i>	LC				2	2
Bluethroat	<i>Luscinia svecica</i>	LC				1	1
Pied Bushchat	<i>Saxicola caprata</i>	LC				6	6
Common Stonechat	<i>Saxicola torquatus</i>	LC				1	1
Pallas's Grasshopper-warbler	<i>Helopsaltes certhiola</i>	LC				2	2
Citrine Wagtail	<i>Motacilla citreola</i>	LC				1	1
White Wagtail	<i>Motacilla alba</i>	LC				2	2

Annexure 15. Site-wise details of long, short-distance migratory, and resident species recorded during the AWC 2024

District	Wetland	No. of individuals	No. of species	No. of families	Number of birds			Number of species		
					Migrant	Local Migrant	Resident	Migrant	Local Migrant	Resident
Bhagalpur	Ghatora Wetland	10110	26	10	8538	1324	248	19	10	18
Aurangabad	Indrapuri Barrage	2541	47	24	2054	258	229	20	8	24
Khagaria	Pasraha Chaur	867	42	21	90	536	241	10	11	21
Muzaffarpur	Kanti mann	87	17	13	2	55	30	1	5	11
Muzaffarpur	Manika mann	57	14	12	1	28	28	1	3	10
Muzaffarpur	Jhapaha mann	18	8	6	0	3	15	0	1	7
Araria	Dopahariya Pond	797	39	17	201	147	449	12	7	20
Araria	Trishullia Ghat	141	21	13	55	22	64	4	4	13
Banka	Odhni Dam	1419	52	22	563	308	548	13	12	12
Begusarai	Kanwar Lake	323	37	17	115	108	100	7	9	17
Begusarai	Pachaila	113	33	18	38	15	60	3	5	12
Bhagalpur	VGDS- Sultanganj to Mirzapur	1780	46	22	717	957	106	22	13	10
Bhagalpur	VGDS- Mirzapur to Barari ghat	1115	45	15	802	276	37	11	11	4
Bhagalpur	VGDS- Barai to Bateshwar nath sthan	3512	37	19	793	2445	274	23	14	22
Bhagalpur	Ganga River- Maniksakar ghat-Bharari ghat	460	22	13	102	149	209	11	11	24
Bhagalpur	Jagatpur	398	20	13	201	28	169	10	6	15
Bhagalpur	Gangaprasad Jheel	448	31	17	142	148	158	9	11	23
Bhagalpur	Kataiya Dhar	173	23	23	53	57	63	7	8	14
Bhagalpur	Bhagalpur Bypass	257	59	22	48	72	137	8	7	24
Bhagalpur	Dimaha Wetland	355	29	11	24	171	160	3	6	13
Bhojpur	Ganges (Mahuli ghat to Maner)	1248	38	23	222	776	250	18	11	18
Bhojpur	Sunki suhiya - Shahpur	605	39	19	169	51	385	7	7	24
Buxar	Ganga -Buxar Ranighat Chausabyasi Bridge	4512	58	25	2425	1756	340	19	11	29
Buxar	Gokul Jalashay	957	70	31	97	169	691	16	8	46
Darbhanga	Kusheshwar Sthan	566	31	19	127	78	361	5	7	19

Annexure 15. Site-wise details of long, short-distance migratory, and resident species recorded during the AWC 2024 (contd.)

District	Wetland	No. of individuals	No. of species	No. of families	Number of birds			Number of species		
					Migrant	Local Migrant	Resident	Migrant	Local Migrant	Resident
East Champaran	Sarotar Lake	1515	54	23	792	277	448	13	10	32
East Champaran	Chilraon Mann	1059	43	25	229	378	452	12	5	26
East Champaran	Gandak River	380	48	26	117	47	216	10	10	28
East Champaran	Sonbarsa Lake	487	40	24	101	67	319	8	7	25
East Champaran	Basmanpur Lake (Maun)	313	39	22	54	24	235	5	3	31
East Champaran	Burhi Gandak	295	50	29	35	21	239	10	5	35
Gaya	Barandih Wetland	238	34	22	30	10	198	8	6	20
Gaya	Barwadih	84	19	8	21	19	44	6	3	10
Jamui	Nagi	4520	40	19	3940	547	33	14	13	13
Jamui	Nakti	5139	35	16	3575	521	1043	16	10	9
Jamui	Raja Ahar	1002	30	17	794	73	135	10	6	14
Jamui	Garhi Dam	624	46	19	695	180	49	17	11	18
Jamui	Dhamna Aahar	567	26	12	378	140	49	10	6	10
Jamui	Devan Ahar	475	18	13	344	72	59	6	6	6
Jamui	Bela Tand	267	30	18	156	35	76	11	6	12
Jamui	Jhajha railway pond	452	12	11	8	4	440	1	1	10
Jamui	Pailbajaan	36	8	7	2	17	17	1	2	5
Kaimur	Durgawati dam	283	40	22	46	64	173	7	6	27
Kaimur	karkat waterfall	193	36	22	9	2	182	2	1	33
Katihar	Gogabeel	7068	42	22	3068	1183	2817	10	10	22
Katihar	Ganga river - Bateshwarsthan to Manihari ghat	3308	38	15	1093	1943	272	15	10	13
Katihar	Baghar Beel	401	27	14	153	57	191	5	8	14
Katihar	Bhanwra Kothi	639	13	9	63	14	562	3	1	9
Katihar	Baldia Chaur	136	23	15	4	62	70	1	8	14
Katihar	Kathotia Fish Pond	136	7	6	0	10	126	0	1	6

Annexure 15. Site-wise details of long, short-distance migratory, and resident species recorded during the AWC 2024 (contd.)

District	Wetland	No. of individuals	No. of species	No. of families	Number of birds			Number of species		
					Migrant	Local Migrant	Resident	Migrant	Local Migrant	Resident
Madhubani	Chapaniya Lake	480	26	12	244	102	134	7	6	13
Munger	Ganga river- Kashtarni ghat to Bariyarpur	1596	31	13	782	743	71	13	9	9
Nalanda	Pawapari	628	22	15	203	25	400	5	4	13
Nalanda	Giddhi Lake (Begumpur)	434	34	15	99	42	293	7	7	20
Nalanda	Panchane River, Sainik School	938	38	24	87	163	688	9	4	25
Nalanda	Pushpakarani tank	633	38	25	43	85	505	8	5	25
Nalanda	Gangaji Rajgriha Jalashaya	83	7	6	2	71	10	1	2	4
Nalanda	Ordnance factory	35	9	9	0	16	19	0	2	7
Nawada	Hardiya Dam	1422	46	22	794	419	209	18	10	18
Patna	Ganga river - Maner to Fatuha	1702	20	9	321	1321	60	5	7	8
Patna	Rajdhani Jalashay	191	17	8	70	17	104	6	5	6
Saharsa	Arsi Chaur	147	16	10	19	29	99	2	3	11
Saharsa	Simri Chaur	139	15	10	14	28	97	2	3	10
Saharsa	Bora Chaur	20	9	5	1	6	13	1	3	5
Samastipur	Deokhal Chaur	751	54	23	233	293	225	12	13	29
Saran	Bahiyara Chaur	203	23	14	50	24	129	7	4	12
Saran	Hariya Chaur	265	17	11	42	197	26	4	6	7
Saran	Atanagar	95	19	11	9	43	43	3	4	12
Saran	Phulwaria Chaur	35	11	8	4	6	25	1	3	7
Sheohar	Bagmati River	752	52	22	192	124	436	12	8	32
Supaul	Kosi River (Birpur Barrage to Kosi Mahasetu)	421	24	12	195	112	114	6	4	14
Supaul	Kosi Catchment	1240	52	22	164	173	903	10	9	33
Vaishali	Baraila Lake	1176	21	13	4	1034	138	2	6	13
Vaishali	Purainiya Chaur	281	14	9	2	36	243	1	4	9

Annexure 15. Site-wise details of long, short-distance migratory, and resident species recorded during the AWC 2024 (contd.)

District	Wetland	No. of individuals	No. of species	No. of families	Number of birds			Number of species		
					Migrant	Local Migrant	Resident	Migrant	Local Migrant	Resident
Vaishali	Gandak river	44	7	7	0	10	34	0	2	5
West Champaran	Udaipur Wildlife Sanctuary	717	27	13	134	36	547	6	6	15
West Champaran	Gandak River	713	37	21	111	92	509	11	3	22
West Champaran	Lal Sariya Maan	22	6	5	0	8	14	0	3	3
West Champaran	Darwabari wetland	97	5	3	0	71	26	0	2	3

Annexure 16: Details of number of threatened and near-threatened species recorded during AWC 2024

Common name	Greater Adjutant	Egyptian Vulture	Common Pochard	Black-capped Kingfisher	Lesser Adjutant	River Tern	Greater Spotted Eagle	Ferruginous Duck	Falcated Duck	Painted Stork	Asian Woollyneck	Black-necked Stork	Black-headed Ibis	Oriental Darter	Northern Lapwing	River Lapwing	Eurasian Curlew	Black-tailed Godwit	Himalayan Griffon
Scientific name	<i>Leptoptilos dubius</i>	<i>Neophron percnopterus</i>	<i>Aythya ferina</i>	<i>Hayon pileata</i>	<i>Leptoptilos javanicus</i>	<i>Sterna aurantia</i>	<i>Clanga clanga</i>	<i>Aythya nyroca</i>	<i>Mareca faata</i>	<i>Mycteria leucocephala</i>	<i>Ciconia episcopus</i>	<i>Ephippiorhynchus asiaticus</i>	<i>Threskiornis melanocephalus</i>	<i>Anhinga melanogaster</i>	<i>Vanellus vanellus</i>	<i>Vanellus duvaucelli</i>	<i>Numenius arquata</i>	<i>Limosa limosa</i>	<i>Gyps himalayensis</i>
IUCN status	EN	EN	VU	VU	VU	VU	VU	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Trishullia Ghat																2			
Dopahariya Pond			2		8		1	38			2			6					
InDr apuri Barrage			134					4		1									
Odhni Dam			3			9		18					4						
Kanwar Lake					3			3					1						
Pachaila																			
Jagatpur	1		20					50				1	5						
Gangaprasad Jheel	2				2			3						2		1			
Kataiya Dhar	4				5		1			8	2					6			
Dimaha Wetland	1		22		4								76						
Ganga River- Maniksakar ghat-Barari ghat	16				4											12			
VGDS- Sultanganj to Mirzapur	15		34		14			64		38	4	2	32			13	32		1
VGDS- Mirzapur to Barari ghat													24			8			

Annexure 16: Details of number of threatened and near-threatened species recorded during AWC 2024 (contd.)

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Annexure 16: Details of number of threatened and near-threatened species recorded during AWC 2024 (contd.)

Common name	Scientific name	IUCN status	Hardiya Dam	Barwadih	Barandih Wetland	Durgawati dam	Kohira Dam	karkat waterfall	Chapaniya Lake	Gangajai Rajgriha Jalashaya	Ghora Katora Forest trail	Pushpakarani tank	Gidddhi Lake (Begumpur)	Ordnance factory	Pawapari
Greater Adjutant	<i>Leptoptilos dubius</i>	EN							1						
Egyptian Vulture	<i>Neophron percnopterus</i>	EN													
Common Pochard	<i>Aythya ferina</i>	VU	20												
Black-capped Kingfisher	<i>Halcyon pileata</i>	VU													
Lesser Adjutant	<i>Leptoptilos javanicus</i>	VU							1						
River Tern	<i>Sterna aurantia</i>	VU													
Greater Spotted Eagle	<i>Clanga clanga</i>	VU													
Ferruginous Duck	<i>Aythya nyroca</i>	NT							65						
Falcated Duck	<i>Mareca faata</i>	NT													
Painted Stork	<i>Mycteria leucocephala</i>	NT													
Asian Woollyneck	<i>Ciconia episcopus</i>	NT	4												
Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	NT													
Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT							2						
Oriental Darter	<i>Anhinga melanogaster</i>	NT				3									
Northern Lapwing	<i>Vanellus vanellus</i>	NT													
River Lapwing	<i>Vanellus duvaucelii</i>	NT													
Eurasian Curlew	<i>Numenius arquata</i>	NT													
Black-tailed Godwit	<i>Limosa limosa</i>	NT													
Himalayan Griffon	<i>Gyps himalayensis</i>	NT													

Annexure 16: Details of number of threatened and near-threatened species recorded during AWC 2024 (contd.)

[illegible]

Annexure 16: Details of number of threatened and near-threatened species recorded during AWC 2024 (contd.)

Common name	Scientific name	IUCN status	Atanagar	Bahiyara Chaur	Hariya Chaur	Phulwaria Chaur	Bagmati River	Ganga river- Kashtarni ghat to Bariyarpur	Total
Greater Adjutant	<i>Leptoptilos dubius</i>	EN						12	69
Egyptian Vulture	<i>Neophron percnopterus</i>	EN							1
Common Pochard	<i>Aythya ferina</i>	VU						15	384
Black-capped Kingfisher	<i>Halcyon pileata</i>	VU							1
Lesser Adjutant	<i>Leptoptilos javanicus</i>	VU						8	133
River Tern	<i>Sterna aurantia</i>	VU	1						4
Greater Spotted Eagle	<i>Clanga clanga</i>	VU							4
Ferruginous Duck	<i>Aythya nyroca</i>	NT							841
Falcated Duck	<i>Mareca fadata</i>	NT							4
Painted Stork	<i>Mycteria leucocephala</i>	NT		59					130
Asian Woollyneck	<i>Ciconia episcopus</i>	NT		4				1	58
Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	NT							12
Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT		7	8			50	891
Oriental Darter	<i>Anhinga melanogaster</i>	NT							24
Northern Lapwing	<i>Vanellus vanellus</i>	NT							58
River Lapwing	<i>Vanellus duvaucelii</i>	NT					6		267
Eurasian Curlew	<i>Numenius arquata</i>	NT						18	145
Black-tailed Godwit	<i>Limosa limosa</i>	NT							150
Himalayan Griffon	<i>Gyps himalayensis</i>	NT							1

Note: N- Endangered; NT- Near Threatened; VU- Vulnerable

Annexure 17: District-wise details of number of individuals and species reported during the AWC-2024

S. No.	District	Wetland	Number of Individuals	Number of Species	Number of Families	Coordinator
1	Araria	Trishullia Ghat	141	21	13	Mr. Gyanchandra Gyani
2	Araria	Dopahariya Pond	797	37	17	Mr. Gyanchandra Gyani
3	Aurangabad	Indrapuri Barrage	2541	52	22	Dr Ram Pratap Singh
4	Banka	Odhni Dam	1419	37	17	Dr D N Choudhary
5	Begusarai	Kanwar Lake	323	33	18	Dr P. Sathiyaselvam & Mr S. Sivakumar
6	Begusarai	Pachaila	113	20	13	Dr P. Sathiyaselvam & Mr S. Sivakumar
7	Bhagalpur	Jagatpur	398	31	17	Dr D N Choudhary
8	Bhagalpur	Gangaprasad Jheel	448	23	23	Dr D N Choudhary
9	Bhagalpur	Kataiya Dhar	173	29	11	Mr. Gyanchandra Gyani
10	Bhagalpur	Dimaha Wetland	355	22	13	Dr D N Choudhary
11	Bhagalpur	Ganga River- Maniksakar ghat-Barari ghat	460	46	22	Mr. Vatan Kumar
12	Bhagalpur	VGDS- (Sultanganj to Mirzapur)	1780	45	15	Mr. Gyanchandra Gyani
13	Bhagalpur	VGDS- (Mirzapur to Barari ghat)	1115	26	10	Mr. Gyanchandra Gyani
14	Bhagalpur	Ghatora Wetland	10110	47	19	Mr. Gyanchandra Gyani
15	Bhagalpur	Barai to Bateshwar nath	3512	59	22	Mr. Rahul Rohitashwa
16	Bhagalpur	Bhagalpur Bypass	257	39	19	Mr. Tapan Kumar Pan
17	Bhojpur	Sunki suhiya - Shahpur	605	38	23	Mr. Arvind Mishra
18	Bhojpur	Ganges (Mahuli ghat to Maner)	1248	47	24	Dr Ram Pratap Singh
19	Buxar	Vayasi ghat to Bihari ghat	1179	41	22	Mr. Deepak Kumar
20	Buxar	Ganga -Buxar Ranighat Chausabyasi Bridge	4521	59	25	Mr. Arvind Mishra
21	Buxar	Gokul Jalashay	960	71	31	Dr Ram Pratap Singh
22	Darbhanga	Kusheshwar Sthan	566	31	19	Mr. Rahul Kumar
23	Darbhanga	Khirol nadhi tat	77	17	14	Mr. Rahul Kumar
24	East Champaran	Gandak River	380	48	26	Dr Niraj Kumar& Dr Kushagra Rajendra
25	East Champaran	Sarotar Lake	1516	55	24	Dr Niraj Kumar& Dr Kushagra Rajendra
26	East Champaran	Sonbarsa Lake	487	40	24	Dr Niraj Kumar & Dr Kushagra Rajendra

Annexure 17: District-wise details of number of individuals and species reported during the AWC-2024 (contd.)

S. No.	District	Wetland	Number of Individuals	Number of Species	Number of Families	Coordinator
27	East Chamaparan	Burhi Gandak	302	53	31	Dr Niraj Kumar & Dr Kushagra Rajendra
28	East Chamaparan	Chilraon Mann	1059	43	25	Dr Niraj Kumar & Dr Kushagra Rajendra
29	East Chamaparan	Basmanpur	319	44	26	Dr Niraj Kumar & Dr Kushagra Rajendra
30	Gaya	Barwadih	84	19	8	Dr Ram Pratap Singh
31	Gaya	Barandih Wetland	238	34	22	Dr Ram Pratap Singh
32	Jamui	Bela Tand	267	29	18	Mr. Arvind Mishra & Mr. Deepak Kumar
33	Jamui	Devan Ahar	475	18	13	Mr. Arvind Mishra & Mr. Deepak Kumar
34	Jamui	Pailbajaan	36	8	7	Mr. Arvind Mishra & Mr. Deepak Kumar
35	Jamui	Garhi Dam	924	46	19	Mr. Arvind Mishra & Mr. Deepak Kumar
36	Jamui	Nagi Dam	4520	40	19	Mr. Arvind Mishra & Mr. Deepak Kumar
37	Jamui	Jhajha railway pond	452	12	11	Mr. Arvind Mishra & Mr. Deepak Kumar
38	Jamui	Dhamna Aahar	567	26	12	Mr. Arvind Mishra & Mr. Deepak Kumar
39	Jamui	Raja Ahar	1002	30	17	Mr. Arvind Mishra & Mr. Deepak Kumar
40	Jamui	Nakti Dam	5139	35	16	Mr. Arvind Mishra & Mr. Deepak Kumar
41	Kaimur	Durgawati dam	283	40	22	Mr. Rahul Kumar
42	Kaimur	Kohira Dam	99	24	16	Mr. Rahul Kumar
43	Kaimur	Karkat waterfall	193	36	22	Mr. Rahul Kumar
44	Katihar	Baldia Chaur	136	23	15	Mr. Arvind Mishra
45	Katihar	Ganga river - Bateshwarsthan to Manihari ghat	3308	38	15	Mr. Deepak Kumar
46	Katihar	Bhanwra Kothi	639	13	9	Mr. Arvind Mishra
47	Katihar	Baghar Beel	401	27	14	Mr. Arvind Mishra
48	Katihar	Gogabeel	7068	43	22	Mr. Arvind Mishra
49	Katihar	Kathotia Fish Pond	136	7	6	Mr. Arvind Mishra

Annexure 17: District-wise details of number of individuals and species reported during the AWC-2024 (contd.)

S. No.	District	Wetland	Number of Individuals	Number of Species	Number of Families	Coordinator
50	Khagaria	Pasraha Chaur	867	42	21	Mr. Gyanchandra Gyani
51	Kishanganj	Mahananda river	804	18	10	Mr. Gyanchandra Gyani
52	Madhubani	Chapaniya Lake	480	26	12	Dr P. Sathiyaselvam
53	Munger	Ganga river- Kashtarni ghat to Bariyarpur	1596	31	13	Dr P. Sathiyaselvam
54	Muzaffarpur	Manika mann	57	14	12	Mr. Bharat Chintapalli
55	Muzaffarpur	Jhapaha mann	18	8	6	Mr. Bharat Chintapalli
56	Muzaffarpur	Kanti mann	87	17	13	Mr. Bharat Chintapalli
57	Nalanda	Gangaji Rajgriha Jalashaya	83	7	6	Mr. Rahul Kumar
58	Nalanda	Pushpakarani tank	633	38	25	Mr. Rahul Kumar
59	Nalanda	Giddhi Lake (Begumpur)	434	34	15	Mr. Rahul Kumar
60	Nalanda	Ordnance factory	35	9	9	Mr. Rahul Kumar
61	Nalanda	Pawapari	628	22	15	Mr. Rahul Kumar
62	Nalanda	Panchane River, Sainik School	938	38	24	Mr. Rahul Kumar
63	Nawada	Hardiya Dam	1422	46	22	Dr Ram Pratap Singh
64	Patna	Rajdhani Jalashay	191	17	8	Col. Amit Sinha
65	Patna	Ganga river - Maner to Fatuha	1702	20	9	Mr. Anand Kumar
66	Saharsa	Arsi Chaur	147	16	10	Mr. Gyanchandra Gyani
67	Saharsa	Simri Chaur	139	15	10	Mr. Gyanchandra Gyani
68	Saharsa	Bora Chaur	20	9	5	Mr. Gyanchandra Gyani
69	Samastipur	Deokhal Chaur	751	54	23	Mr. Amir Rizwan Khan
70	Saran	Atanagar	95	19	11	Mr. Gyanchandra Gyani
71	Saran	Bahiyara Chaur	203	23	14	Mr. Gyanchandra Gyani
72	Saran	Hariya Chaur	265	17	11	Mr. Gyanchandra Gyani

Annexure 17: District-wise details of number of individuals and species reported during the AWC-2024 (contd.)

S. No.	District	Wetland	Number of Individuals	Number of Species	Number of Families	Coordinator
73	Saran	Phulwaria Chaur	35	11	8	Mr. Gyanchandra Gyani
74	Sheohar	Bagmati River	752	52	22	Dr Niraj Kumar & Dr Kushagra Rajendra
75	Supaul	Kosi River (Birpur Barrage to Kosi Mahasetu)	421	24	12	Dr Gopal Sharma & Mr. Navin Kumar
76	Supaul	Kosi Catchment of Supaul	1240	52	22	Dr Gopal Sharma & Mr. Navin Kumar
77	Vaishali	Barailla Lake	1176	21	13	Dr Satayendra Kumar
78	Vaishali	Purainiya Chaur	281	14	9	Dr Satayendra Kumar
79	Vaishali	Salaha lake	45	5	4	Dr Satayendra Kumar
80	Vaishali	Gadakh river	44	7	7	Dr Satayendra Kumar
81	West Champaran	Udaipur Wildlife Sanctuary	717	27	13	Dr Kamlesh K Maurya
82	West Champaran	Lal Sariya Maan	22	6	5	Dr Kamlesh K Maurya
83	West Champaran	Darwabari wetland	97	5	3	Dr Kamlesh K Maurya
84	West Champaran	Gandakh River	712	36	21	Dr Kamlesh K Maurya

Annexure 18: Details of the wetland-wise number of individuals reported during the AWC 2024

S. No	Wetland	District	Number of Individuals	Number of Species	Number of Families	Coordinator
1	Arsi Chaur	Saharsa	147	16	10	Mr. Gyanchandra Gyani
2	Atanagar	Saran	95	19	11	Mr. Gyanchandra Gyani
3	Baghar Beel	Katihar	401	27	14	Mr. Arvind Mishra
4	Bagmati River	Sheohar	752	52	22	Dr Niraj Kumar & Dr Kushagra Rajendra
5	Bahiyara Chaur	Saran	203	23	14	Mr. Gyanchandra Gyani
6	Baldia Chaur	Katihar	136	23	15	Mr. Arvind Mishra
7	Barai to Bateshwar nath	Bhagalpur	3512	59	22	Mr. Rahul Rohitashwa
8	Baraila Lake	Vaishali	1176	21	13	Dr Satyendra Kumar
9	Barandih Wetland	Gaya	238	34	22	Dr Ram Pratap Singh
10	Barwadih	Gaya	84	19	8	Dr Ram Pratap Singh
11	Basmanpur	East Champaran	319	44	26	Dr Niraj Kumar & Dr Kushagra Rajendra
12	Bela Tand	Jamui	267	30	18	Mr. Arvind Mishra & Mr. Deepak Kumar
13	Bhagalpur Bypass	Bhagalpur	257	39	19	Mr. Tapan Kumar Pan
14	Bhanwra Kothi	Katihar	639	13	9	Mr. Arvind Mishra
15	Bora Chaur	Saharsa	20	9	5	Mr. Gyanchandra Gyani
16	Burhi Gandak	East Champaran	302	53	31	Dr Niraj Kumar & Dr Kushagra Rajendra
17	Chapaniya Lake	Madhubani	480	26	12	Dr P. Sathiyaselvam
18	Chilraon Mann	East Champaran	1059	43	25	Dr Niraj Kumar & Dr Kushagra Rajendra
19	Darwabari wetland	West Champaran	97	5	3	Dr Kamlesh K Maurya
20	Deokhal Chaur	Samastipur	751	54	23	Mr. Amir Rizwan Khan
21	Devan Ahar	Jamui	475	18	13	Mr. Arvind Mishra & Mr. Deepak Kumar
22	Dhamna Ahar	Jamui	567	26	12	Mr. Arvind Mishra & Mr. Deepak Kumar
23	Dimaha Wetland	Bhagalpur	355	22	13	Dr D N Choudhary
24	Dopahariya Pond	Araria	797	39	17	Mr. Gyanchandra Gyani
25	Durgawati dam	Kaimur	283	40	22	Mr. Rahul Kumar
26	Gadak river	Vaishali	44	7	7	Dr Satyendra Kumar
27	Gandak River	East Champaran	380	48	26	Dr Niraj Kumar & Dr Kushagra Rajendra
28	Gandak River	West Champaran	713	37	21	Dr Kamlesh K Maurya
29	Ganga -Buxar Ranighat Chausabyasi Bridge	Buxar	4512	58	25	Mr. Arvind Mishra

Annexure 18: Details of the wetland-wise number of individuals reported during the AWC 2024

S. No.	Wetland	District	Number of Individuals	Number of Species	Number of Families	Coordinator
30	Ganga river - Bateshwarsthan to Manihari ghat	Katihar	3308	38	15	Mr. Deepak Kumar
31	Ganga river - Maner to Fatuha	Patna	1702	20	9	Mr. Anand Kumar
32	Ganga river- Kashtarni ghat to Bariyarpur	Munger	1596	31	13	Dr P. Sathiyaselvam
33	Ganga River- Maniksakar ghat-Barari ghat	Bhagalpur	460	46	22	Mr. Vatan Kumar
34	Gangaji Rajgriha Jalashaya	Nalanda	83	7	6	Mr. Rahul Kumar
35	Gangaprasad Jheel	Bhagalpur	448	23	23	Dr DN Choudhary
36	Ganges (Mahuli ghat to Maner)	Bhojpur	1248	47	24	Dr Ram Pratap Singh
37	Garhi Dam	Jamui	624	46	19	Mr. Arvind Mishra & Mr. Deepak Kumar
38	Ghatora Wetland	Bhagalpur	10110	37	19	Mr. Gyanchandra Gyani
39	Gidhi Lake (Begumpur)	Nalanda	434	34	15	Mr. Rahul Kumar
40	Gogabeel	Katihar	7068	42	22	Mr. Arvind Mishra
41	Gokul Jalashay	Buxar	960	71	31	Dr Ram Pratap Singh
42	Hardiya Dam	Nawada	1422	46	22	Dr Ram Pratap Singh
43	Hariya Chaur	Saran	265	17	11	Mr. Gyanchandra Gyani
44	Indrapuri Barrage	Aurangabad	2541	52	22	Dr Ram Pratap Singh
45	Jagatpur	Bhagalpur	398	31	17	Dr DN Choudhary
46	Jhajha railway pond	Jamui	452	12	11	Mr. Arvind Mishra & Mr. Deepak Kumar
47	Jhapaha mann	Muzaffarpur	18	8	6	Mr. Bharat Chintapalli
48	Kanti mann	Muzaffarpur	87	17	13	Mr. Bharat Chintapalli
49	Kanwar Lake	Begusarai	323	33	18	Dr P. Sathiyaselvam & Mr S. Sivakumar
50	Karkat waterfall	Kaimur	193	36	22	Mr. Rahul Kumar
51	Kataiya Dhar	Bhagalpur	173	29	11	Mr. Gyanchandra Gyani
52	Kathotia Fish Pond	Katihar	136	7	6	Mr. Arvind Mishra
53	Khirol nadhi tat	Darbhanga	77	17	14	Mr. Rahul Kumar
54	Kohira Dam	Kaimur	99	24	16	Mr. Rahul Kumar
55	Kosi Catchment of Supaul	Supaul	1240	52	22	Dr Gopal Sharma & Mr. Navin Kumar
56	Kosi River (Birpur Barrage to Kosi Mahasetu)	Supaul	421	24	12	Dr Gopal Sharma & Mr. Navin Kumar
57	Kusheshwar Sthan	Darbhanga	566	31	19	Mr. Rahul Kumar
58	Lal Sariya Maan	West Champaran	22	6	5	Dr Kamlesh K Maurya

Annexure 18: Details of the wetland-wise number of individuals reported during the AWC 2024

S. No.	Wetland	District	Number of Individuals	Number of Species	Number of Families	Coordinator
59	Mahananda river	Kishanganj	804	18	10	Mr. Gyanchandra Gyani
60	Manika mann	Muzaffarpur	57	14	12	Mr. Bharat Chintapalli
61	Nagi Dam	Jamui	4520	40	19	Mr. Arvind Mishra & Mr. Deepak Kumar
62	Nakti	Jamui	5139	35	16	Mr. Arvind Mishra & Mr. Deepak Kumar
63	Odhni Dam	Banka	1419	37	17	Dr D N Choudhary
64	Ordinance factory	Nalanda	35	9	9	Mr. Rahul Kumar
65	Pachaila	Begusarai	113	20	13	Dr P. Sathiyaselvam & Mr S. Sivakumar
66	Pailbajaan	Jamui	36	8	7	Mr. Arvind Mishra & Mr. Deepak Kumar
67	Panchane River, Sainik School	Nalanda	938	38	24	Mr. Rahul Kumar
68	Pasraha Chaur	Khagaria	867	42	21	Mr. Gyanchandra Gyani
69	Pawapari	Nalanda	628	22	15	Mr. Rahul Kumar
70	Phulwaria Chaur	Saran	35	11	8	Mr. Gyanchandra Gyani
71	Purainiya Chaur	Vaishali	281	14	9	Dr Satyendra Kumar
72	Pushpakarani tank	Nalanda	633	38	25	Mr. Rahul Kumar
73	Raja Ahar	Jamui	1002	30	17	Mr. Arvind Mishra & Mr. Deepak Kumar
74	Rajdhani Jalashay	Patna	191	17	8	Col. Amit Sinha
75	Salaha lake	Vaishali	45	5	4	Dr Satyendra Kumar
76	Sarotar Lake	East Champaran	1516	55	24	Dr Niraj Kumar & Dr Kushagra Rajendra
77	Simri Chaur	Saharsa	139	15	10	Mr. Gyanchandra Gyani
78	Sonbarsa Lake	East Champaran	487	40	24	Dr Niraj Kumar & Dr Kushagra Rajendra
79	Sunki suhiya - Shahpur	Bhojpur	605	38	23	Mr. Arvind Mishra
80	Trishullia Ghat	Araria	141	21	13	Mr. Gyanchandra Gyani
81	Udaipur Wildlife Sanctuary	West Champaran	717	27	13	Dr Kamlesh K Maurya
82	Vayasi ghat to Bihari ghat	Buxar	1179	41	22	Mr. Deepak Kumar
83	VGDS- (Mirzapur to Barari ghat)	Bhagalpur	1115	26	10	Mr. Gyanchandra Gyani
84	VGDS- (Sultanganj to Mirzapur)	Bhagalpur	1780	45	15	Mr. Gyanchandra Gyani

Annexure 19: Details of the wetland-wise number of species reported during the AWC 2024

S. No.	Wetland	District	Number of Species	Number of Individuals	Number of Families	Coordinator
1	Arsi Chaur	Saharsa	16	147	10	Mr. Gyanchandra Gyani
2	Atanagar	Saran	19	95	11	Mr. Gyanchandra Gyani
3	Baghar Beel	Katihar	27	401	14	Mr. Arvind Mishra
4	Bagmati River	Sheohar	52	752	22	Dr Niraj Kumar & Dr Kushagra Rajendra
5	Bahiara Chaur	Saran	23	203	14	Mr. Gyanchandra Gyani
6	Baldia Chaur	Katihar	23	136	15	Mr. Arvind Mishra
7	Barai to Bateshwar nath	Bhagalpur	59	3512	22	Mr. Rahul Rohitashwa
8	Baraila Lake	Vaishali	21	1176	13	Dr Satyendra Kumar
9	Barandih Wetland	Gaya	34	238	22	Dr Ram Pratap Singh
10	Barwadih	Gaya	19	84	8	Dr Ram Pratap Singh
11	Basmanpur	East Champaran	44	319	26	Dr Niraj Kumar & Dr Kushagra Rajendra
12	Bela Tand	Jamui	30	267	18	Mr. Arvind Mishra & Mr. Deepak Kumar
13	Bhagalpur Bypass	Bhagalpur	39	257	19	Dr Tapan Kumar Pan
14	Bhanwra Kothi	Katihar	13	639	9	Mr. Arvind Mishra
15	Bora Chaur	Saharsa	9	20	5	Mr. Gyanchandra Gyani
16	Burhi Gandak	East Champaran	53	302	31	Dr Niraj Kumar & Dr Kushagra Rajendra
17	Chapaniya Lake	Madhubani	26	480	12	Dr P. Sathiyaselvam
18	Chilraon Mann	East Champaran	43	1059	25	Dr Niraj Kumar & Dr Kushagra Rajendra
19	Darwabari wetland	West Champaran	5	97	3	Dr Kamlesh K Maurya
20	Deokhal Chaur	Samastipur	54	751	23	Mr. Amir Rizwan Khan
21	Devan Ahar	Jamui	18	475	13	Mr. Arvind Mishra & Mr. Deepak Kumar
22	Dhamna Aahar	Jamui	26	567	12	Mr. Arvind Mishra & Mr. Deepak Kumar
23	Dimaha Wetland	Bhagalpur	22	355	13	Dr D N Choudhary
24	Dopahariya Pond	Araria	39	797	17	Mr. Gyanchandra Gyani
25	Durgawati dam	Kaimur	40	283	22	Mr. Rahul Kumar
26	Gadak river	Vaishali	7	44	7	Dr Satyendra Kumar
27	Gandak River	East Champaran	48	380	26	Dr Niraj Kumar & Dr Kushagra Rajendra
28	Gandak River	West Champaran	37	713	21	Dr Kamlesh K Maurya
29	Ganga -Buxar Ranighat Chausabyasi Bridge	Buxar	58	4512	25	Mr. Arvind Mishra

Annexure 19: Details of the wetland-wise number of species reported during the AWC 2024 (contd.)

S. No.	Wetland	District	Number of Species	Number of Individuals	Number of Families	Coordinator
30	Ganga river - Bateshwarsthan to Manihari ghat	Katihar	38	3308	15	Mr. Deepak Kumar
31	Ganga river - Maner to Fatuha	Patna	20	1702	9	Mr. Anand Kumar
32	Ganga river- Kashtarni ghat to Bariyarpur	Munger	31	1596	13	Dr P. Sathiyaselvam
33	Ganga River- Maniksakar ghat-Barari ghat	Bhagalpur	46	460	22	Mr. Vatan Kumar
34	Gangajji Rajgriha Jalashaya	Nalanda	7	83	6	Mr. Rahul Kumar
35	Gangaprasad Jheel	Bhagalpur	23	448	23	Dr D N Choudhary
36	Ganges (Mahuli ghat to Maner)	Bhojpur	47	1248	24	Dr Ram Pratap Singh
37	Garhi Dam	Jamui	46	624	19	Mr. Arvind Mishra & Mr. Deepak Kumar
38	Ghatora Wetland	Bhagalpur	37	10110	19	Mr. Gyanchandra Gyani
39	Gidhi Lake (Begumpur)	Nalanda	34	434	15	Mr. Rahul Kumar
40	Gogabeel	Katihar	42	7068	22	Mr. Arvind Mishra
41	Gokul Jalashay	Buxar	71	960	31	Dr Ram Pratap Singh
42	Hardiya Dam	Nawada	46	1422	22	Dr Ram Pratap Singh
43	Hariya Chaur	Saran	17	265	11	Mr. Gyanchandra Gyani
44	Indrapuri Barrage	Aurangabad	52	2541	22	Dr Ram Pratap Singh
45	Jagatpur	Bhagalpur	31	398	17	Dr D N Choudhary
46	Jhajha railway pond	Jamui	12	452	11	Mr. Arvind Mishra & Mr. Deepak Kumar
47	Jhapaha mann	Muzaffarpur	8	18	6	Mr. Bharat Chintapalli
48	Kanti mann	Muzaffarpur	17	87	13	Mr. Bharat Chintapalli
49	Kanwar Lake	Begusarai	33	323	18	Dr P. Sathiyaselvam & Mr S. Sivakumar
50	Karkat waterfall	Kaimur	36	193	22	Mr. Rahul Kumar
51	Kataiya Dhar	Bhagalpur	29	173	11	Mr. Gyanchandra Gyani
52	Kathotia Fish Pond	Katihar	7	136	6	Mr. Arvind Mishra
53	Khirol nadhi tat	Darbhanga	17	77	14	Mr. Rahul Kumar
54	Kohira Dam	Kaimur	24	99	16	Mr. Rahul Kumar
55	Kosi Catchment of supaul	Supaul	52	1240	22	Dr Gopal Sharma & Mr. Navin Kumar
56	Kosi River (Birpur Barrage to Kosi Mahasetu)	Supaul	24	421	12	Dr Gopal Sharma & Mr. Navin Kumar
57	Kusheshwar Sthan	Darbhanga	31	566	19	Mr. Rahul Kumar
58	Lal Sariya Maan	West Champaran	6	22	5	Dr Kamlesh K Maurya

Annexure 19: Details of the wetland-wise number of species reported during the AWC 2024 (contd.)

S. No.	Wetland	District	Number of Species	Number of Individuals	Number of Families	Coordinator
59	Mahananda river	Kishanganj	18	804	10	Mr. Gyanchandra Gyani
60	Manika mann	Muzaffarpur	14	57	12	Mr. Bharat Chintapalli
61	Nagi Dam	Jamui	40	4520	19	Mr. Arvind Mishra & Mr. Deepak Kumar
62	Nakti	Jamui	35	5139	16	Mr. Arvind Mishra & Mr. Deepak Kumar
63	Odhni Dam	Banka	37	1419	17	Dr D N Choudhary
64	Ordhance factory	Nalanda	9	35	9	Mr. Rahul Kumar
65	Pachaila	Begusarai	20	113	13	Dr P. Sathiyaselvam & Mr S. Sivakumar
66	Pailbajaan	Jamui	8	36	7	Mr. Arvind Mishra & Mr. Deepak Kumar
67	Panchane River, Sainik School	Nalanda	38	938	24	Mr. Rahul Kumar
68	Pasraha Chaur	Khagaria	42	867	21	Mr. Gyanchandra Gyani
69	Pawapari	Nalanda	22	628	15	Mr. Rahul Kumar
70	Phulwaria Chaur	Saran	11	35	8	Mr. Gyanchandra Gyani
71	Purainiya Chaur	Vaishali	14	281	9	Dr Satyendra Kumar
72	Pushpakarani tank	Nalanda	38	633	25	Mr. Rahul Kumar
73	Raja Ahar	Jamui	30	1002	17	Mr. Arvind Mishra & Mr. Deepak Kumar
74	Rajdhani Jalashay	Patna	17	191	8	Col. Amit Sinha
75	Salaha lake	Vaishali	5	45	4	Dr Satyendra Kumar
76	Sarotar Lake	East Champaran	55	1516	24	Dr Niraj Kumar & Dr Kushagra Rajendra
77	Simri Chaur	Saharsa	15	139	10	Mr. Gyanchandra Gyani
78	Sonbarsa Lake	East Champaran	40	487	24	Dr Niraj Kumar & Dr Kushagra Rajendra
79	Sunki suhiya - Shahpur	Bhojpur	38	605	23	Mr. Arvind Mishra
80	Trishullia Ghat	Araria	21	141	13	Mr. Gyanchandra Gyani
81	Udaipur Wildlife Sanctuary	West Champaran	27	717	13	Dr Kamlesh K Maurya
82	Vayasi ghat to Bihari ghat	Buxar	41	1179	22	Mr. Deepak Kumar
83	VGDS- (Mirzapur to Barari ghat)	Bhagalpur	26	1115	10	Mr. Gyanchandra Gyani
84	VGDS- (Sultanganj to Mirzapur)	Bhagalpur	45	1780	15	Mr. Gyanchandra Gyani

Annexure 20: Details of the number individuals reported during the AWC-2024

Wetland	District	Number of Individuals	Number of Species	Number of Families	Coordinator
Ghatora Wetland	Bhagalpur	10,110	47	19	Mr. Gyanchandra Gyani
Gogabeel	Katihar	7,068	43	22	Mr. Arvind Mishra
Nakti Dam	Jamui	5,139	35	16	Mr. Arvind Mishra & Mr. Deepak Kumar
Ganga -Buxar Ranighat Chausabyasi Bridge	Buxar	4,521	59	25	Mr. Arvind Mishra
Nagi Dam	Jamui	4,520	40	19	Mr. Arvind Mishra & Mr. Deepak Kumar
Barai to Bateshwar nath	Bhagalpur	3,512	59	22	Mr. Rahul Rohitashwa
Ganga river - Bateshwarsthan to Manihari ghat	Katihar	3,308	38	15	Mr. Deepak Kumar
Indrapuri Barrage	Aurangabad	2,541	52	22	Dr Ram Pratap Singh
VGDS- (Sultanganj to Mirzapur)	Bhagalpur	1,780	45	15	Mr. Gyanchandra Gyani
Ganga river - Maner to Fatuha	Patna	1,702	20	9	Mr. Anand Kumar
Ganga river- Kashtarni ghat to Bariyarpur	Munger	1,596	31	13	Dr P. Sathiyaselvam
Sarotar Lake	East Chamaparan	1,516	55	24	Dr Niraj Kumar& Dr Kushagra Rajendra
Hardiya Dam	Nawada	1,422	46	22	Dr Ram Pratap Singh
Odhni Dam	Banka	1,419	37	17	Dr D N Choudhary
Ganges (Mahuli ghat to Maner)	Bhojpur	1,248	47	24	Dr Ram Pratap Singh
Kosi Catchment of supaul	Supaul	1,240	52	22	Dr Gopal Sharma & Mr. Navin Kumar
Vayasi ghat to Bihari ghat	Buxar	1,179	41	22	Mr. Deepak Kumar
Baraila Lake	Vaishali	1,176	21	13	Dr Satyendra Kumar
VGDS- (Mirzapur to Barari ghat)	Bhagalpur	1,115	26	10	Mr. Gyanchandra Gyani
Chillaon Mann	East Chamaparan	1,059	43	25	Dr Niraj Kumar& Dr Kushagra Rajendra a
Raja Ahar	Jamui	1,002	30	17	Mr. Arvind Mishra & Mr. Deepak Kumar
Gokul Jalashay	Buxar	960	71	31	Dr Ram Pratap Singh
Panchane River, Sainik School	Nalanda	938	38	24	Mr. Rahul Kumar

Annexure 20: Details of the number individuals reported during the AWC-2024 (contd.)

Wetland	District	Number of Individuals	Number of Species	Number of Families	Coordinator
Garhi Dam	Jamui	924	46	19	Mr. Arvind Mishra & Mr. Deepak Kumar
Pasraha Chaur	Khagaria	867	42	21	Mr. Gyanchandra Gyani
Mahananda river	Kishanganj	804	18	10	Mr. Gyanchandra Gyani
Dopahariya Pond	Araria	797	37	17	Mr. Gyanchandra Gyani
Bagmati River	Sheohar	752	52	22	Dr Niraj Kumar & Dr Kushagra Rajendra
Deokhal Chaur	Samastipur	751	54	23	Mr. Amir Rizwan Khan
Udaipur Wildlife Sanctuary	West Champaran	717	27	13	Dr Kamlesh K Maurya
Gandak River	West Champaran	712	36	21	Dr Kamlesh K Maurya
Bhanwra Kothi	Katihar	639	13	9	Mr. Arvind Mishra
Pushpakarani tank	Nalanda	633	38	25	Mr. Rahul Kumar
Pawapari	Nalanda	628	22	15	Mr. Rahul Kumar
Sunki suhiya - Shahpur	Bhojpur	605	38	23	Mr. Arvind Mishra
Dhamna Aahar	Jamui	567	26	12	Mr. Arvind Mishra & Mr. Deepak Kumar
Kusheshwar Sthan	Darbhanga	566	31	19	Mr. Rahul Kumar
Sonbarsa Lake	East Champaran	487	40	24	Dr Niraj Kumar & Dr Kushagra Rajendra
Chapaniya Lake	Madhubani	480	26	12	Dr P. Sathiyaselvam
Devan Ahar	Jamui	475	18	13	Mr. Arvind Mishra & Mr. Deepak Kumar
Ganga River- Maniksakar ghat-Barari ghat	Bhagalpur	460	46	22	Mr. Vatan Kumar
Jhajha railway pond	Jamui	452	12	11	Mr. Arvind Mishra & Mr. Deepak Kumar
Gangaprasad Jheel	Bhagalpur	448	23	23	Dr D N Choudhary
Giddhi Lake (Begumpur)	Nalanda	434	34	15	Mr. Rahul Kumar
Kosi River (Birpur Barrage to Kosi Mahasetu)	Supaul	421	24	12	Dr Gopal Sharma & Mr. Navin Kumar

Annexure 20: Details of the number individuals reported during the AWC-2024 (contd.)

Wetland	District	Number of Individuals	Number of Species	Number of Families	Coordinator
Baghar Beel	Katihar	401	27	14	Mr. Arvind Mishra
Jagatpur	Bhagalpur	398	31	17	Dr D N Choudhary
Gandak River	East Champaran	380	48	26	Dr Niraj Kumar & Dr Kushagra Rajendra
Dimaha Wetland	Bhagalpur	355	22	13	Dr D N Choudhary
Kanwar Lake	Begusarai	323	33	18	Dr P. Sathiyaselvam & Mr S. Sivakumar
Basmanpur	East Champaran	319	44	26	Dr Niraj Kumar & Dr Kushagra Rajendra
Burhi Gandak	East Champaran	302	53	31	Dr Niraj Kumar & Dr Kushagra Rajendra
Durgawati dam	Kaimur	283	40	22	Mr. Rahul Kumar
Purainiya Chaur	Vaishali	281	14	9	Dr Satyendra Kumar
Bela Tand	Jamui	267	29	18	Mr. Arvind Mishra & Mr. Deepak Kumar
Hariya Chaur	Saran	265	17	11	Mr. Gyanchandra Gyani
Bhagalpur Bypass	Bhagalpur	257	39	19	Mr. Tapan Kumar Pan
Barandih Wetland	Gaya	238	34	22	Dr Ram Pratap Singh
Bahiyara Chaur	Saran	203	23	14	Mr. Gyanchandra Gyani
Karkat waterfall	Kaimur	193	36	22	Mr. Rahul Kumar
Rajdhani Jalashay	Patna	191	17	8	Col. Amit Sinha
Kataiya Dhar	Bhagalpur	173	29	11	Mr. Gyanchandra Gyani
Arsi Chaur	Saharsa	147	16	10	Mr. Gyanchandra Gyani
Trishullia Ghat	Araria	141	21	13	Mr. Gyanchandra Gyani
Simri Chaur	Saharsa	139	15	10	Mr. Gyanchandra Gyani
Baldia Chaur	Katihar	136	23	15	Mr. Arvind Mishra
Kathotia Fish Pond	Katihar	136	7	6	Mr. Arvind Mishra
Pachaila	Begusarai	113	20	13	Dr P. Sathiyaselvam & Mr S. Sivakumar

Annexure 20: Details of the number individuals reported during the AWC-2024 (contd.)

Wetland	District	Number of Individuals	Number of Species	Number of Families	Coordinator
Kohira Dam	Kaimur	99	24	16	Mr. Rahul Kumar
Darwabari wetland	West Champaran	97	5	3	Dr Kamlesh K Maurya
Atanagar	Saran	95	19	11	Mr. Gyanchandra Gyani
Kanti mann	Muzaffarpur	87	17	13	Mr. Bharat Chintapalli
Barwadih	Gaya	84	19	8	Dr Ram Pratap Singh
Gangaji Rajgriha Jalashaya	Nalanda	83	7	6	Mr. Rahul Kumar
Khirol nadhi tat	Darbhanga	77	17	14	Mr. Rahul Kumar
Manika mann	Muzaffarpur	57	14	12	Mr. Bharat Chintapalli
Salaha lake	Vaishali	45	5	4	Dr Satyendra a Kumar
Gadakh river	Vaishali	44	7	7	Dr Satyendra a Kumar
Pailbajaan	Jamui	36	8	7	Mr. Arvind Mishra & Mr. Deepak Kumar
Ordinance factory	Nalanda	35	9	9	Mr. Rahul Kumar
Phulwaria Chaur	Saran	35	11	8	Mr. Gyanchandra Gyani
Lal Sariya Maan	West Champaran	22	6	5	Dr Kamlesh K Maurya
Bora Chaur	Saharsa	20	9	5	Mr. Gyanchandra Gyani
Jhapaha mann	Muzaffarpur	18	8	6	Mr. Bharat Chintapalli

Annexure 21: Details of wetland-wise species richness reported during AWC 2024

Wetland	District	Number of Species	Number of Individuals	Number of Families	Coordinator
Gokul Jalashay	Buxar	71	960	31	Dr Ram Pratap Singh
Ganga-Buxar Ranighat Chausabyasi Bridge	Buxar	59	4,521	25	Mr. Arvind Mishra
Barai to Bateshwar nath	Bhagalpur	59	3512	22	Mr. Rahul Rohitashwa
Sarotar Lake	East Chamaparan	55	1516	24	Dr Niraj Kumar & Dr Kushagra Rajendra
Deokhal Chaur	Samastipur	54	751	23	Mr. Amir Rizwan Khan
Burhi Gandak	East Chamaparan	53	302	31	Dr Niraj Kumar & Dr Kushagra Rajendra
InDr apuri Barrage	Aurangabad	52	2541	22	Dr Ram Pratap Singh
Kosi Catchment of supaul	Supaul	52	1240	22	Dr Gopal Sharma & Mr. Navin Kumar
Bagmati River	Sheohar	52	752	22	Dr Niraj Kumar & Dr Kushagra Rajendra
Gandak River	East Chamaparan	48	380	26	Dr Niraj Kumar& Dr Kushagra Rajendra
Ganges (Mahuli ghat to Maner)	Bhojpur	47	1248	24	Dr Ram Pratap Singh
Ghatora Wetland	Bhagalpur	47	10110	19	Mr. Gyanchandra Gyani
Hardiya Dam	Nawada	46	1422	22	Dr Ram Pratap Singh
Garhi Dam	Jamui	46	924	19	Mr. Arvind Mishra & Mr. Deepak Kumar
Ganga River- Maniksakar ghat-Barari ghat	Bhagalpur	46	460	22	Mr. Vatan Kumar
VGDS- (Sultanganj to Mirzapur)	Bhagalpur	45	1780	15	Mr. Gyanchandra Gyani
Basmanpur	East Chamaparan	44	319	26	Dr Niraj Kumar & Dr Kushagra Rajendra
Gogabeel	Katihar	43	7068	22	Mr. Arvind Mishra
Chilraon Mann	East Chamaparan	43	1059	25	Dr Niraj Kumar & Dr Kushagra Rajendra
Pasraha Chaur	Khagaria	42	867	21	Mr. Gyanchandra Gyani
Vayasi ghat to Bihari ghat	Buxar	41	1179	22	Mr. Deepak Kumar
Nagi Dam	Jamui	40	4520	19	Mr. Arvind Mishra & Mr. Deepak Kumar
Sonbarsa Lake	East Chamaparan	40	487	24	Dr Niraj Kumar& Dr Kushagra Rajendra a

Annexure 21: Details of wetland-wise species richness reported during AWC 2024 (contd.)

Wetland	District	Number of Species	Number of Individuals	Number of Families	Coordinator
Durgawati dam	Kaimur	40	283	22	Mr. Rahul Kumar
Bhagalpur Bypass	Bhagalpur	39	257	19	Mr. Tapan Kumar Pan
Ganga river - Bateswarthan to Manihari ghat	Katihar	38	3308	15	Mr. Deepak Kumar
Panchane River, Sainik School	Nalanda	38	938	24	Mr. Rahul Kumar
Pushpakarani tank	Nalanda	38	633	25	Mr. Rahul Kumar
Sunki suhiya - Shahpur	Bhojpur	38	605	23	Mr. Arvind Mishra
Odhni Dam	Banka	37	1419	17	Dr D N Choudhary
Dopahariya Pond	Araria	37	797	17	Mr. Gyanchandra Gyani
Gandak River	West Champaran	36	712	21	Dr Kamlesh K Maurya
Karkat waterfall	Kaimur	36	193	22	Mr. Rahul Kumar
Nakti	Jamui	35	5139	16	Mr. Arvind Mishra & Mr. Deepak Kumar
Gidhi Lake (Begumpur)	Nalanda	34	434	15	Mr. Rahul Kumar
Barandih Wetland	Gaya	34	238	22	Dr Ram Pratap Singh
Kanwar Lake	Begusarai	33	323	18	Dr P. Sathiyaselvam & Mr S. Sivakumar
Ganga river- Kashtarni ghat to Bariyarpur	Munger	31	1596	13	Dr P. Sathiyaselvam
Kusheshwar Sthan	Darbhanga	31	566	19	Mr. Rahul Kumar
Jagatpur	Bhagalpur	31	398	17	Dr D N Choudhary
Raja Ahar	Jamui	30	1002	17	Mr. Arvind Mishra & Mr. Deepak Kumar
Bela Tand	Jamui	29	267	18	Mr. Arvind Mishra & Mr. Deepak Kumar
Kataiya Dhar	Bhagalpur	29	173	11	Mr. Gyanchandra Gyani
Udaipur Wildlife Sanctuary	West Champaran	27	717	13	Dr Kamlesh K Maurya
Baghar Beel	Katihar	27	401	14	Mr. Arvind Mishra
VGDS- (Mirzapur to Barari ghat)	Bhagalpur	26	1115	10	Mr. Gyanchandra Gyani

Annexure 21: Details of wetland-wise species richness reported during AWC 2024 (contd.)

Wetland	District	Number of Species	Number of Individuals	Number of Families	Coordinator
Dhamna Aahar	Jamui	26	567	12	Mr. Arvind Mishra & Mr. Deepak Kumar
Chapaniya Lake	Madhubani	26	480	12	Dr P. Sathiyaselvam
Kosi River (Birpur Barrage to Kosi Mahasetu)	Supaul	24	421	12	Dr Gopal Sharma & Mr. Navin Kumar
Kohira Dam	Kaimur	24	99	16	Mr. Rahul Kumar
Gangaprasad Jheel	Bhagalpur	23	448	23	Dr D N Choudhary
Bahiyara Chaur	Saran	23	203	14	Mr. Gyanchandra Gyani
Baldia Chaur	Katihar	23	136	15	Mr. Arvind Mishra
Pawapari	Nalanda	22	628	15	Mr. Rahul Kumar
Dimaha Wetland	Bhagalpur	22	355	13	Dr D N Choudhary
Baraila Lake	Vaishali	21	1176	13	Dr Satyendra Kumar
Trishullia Ghat	Araria	21	141	13	Mr. Gyanchandra Gyani
Ganga river - Maner to Fatuha	Patna	20	1702	9	Mr. Anand Kumar
Pachaila	Begusarai	20	113	13	Dr P. Sathiyaselvam & Mr S. Sivakumar
Atanagar	Saran	19	95	11	Mr. Gyanchandra Gyani
Barwadih	Gaya	19	84	8	Dr Ram Pratap Singh
Mahananda river	Kishanganj	18	804	10	Mr. Gyanchandra Gyani
Devan Ahar	Jamui	18	475	13	Mr. Arvind Mishra & Mr. Deepak Kumar
Hariya Chaur	Saran	17	265	11	Mr. Gyanchandra Gyani
Rajdhani Jalashay	Patna	17	191	8	Col. Amit Sinha
Kanti mann	Muzaffarpur	17	87	13	Mr. Bharat Chintapalli
Khirol nadhi tat	Darbhanga	17	77	14	Mr. Rahul Kumar
Arsi Chaur	Saharsa	16	147	10	Mr. Gyanchandra Gyani
Simri Chaur	Saharsa	15	139	10	Mr. Gyanchandra Gyani

Annexure 21: Details of wetland-wise species richness reported during AWC 2024 (contd.)

Wetland	District	Number of Species	Number of Individuals	Number of Families	Coordinator
Purainiya Chaur	Vaishali	14	281	9	Dr Satyendra Kumar
Manika mann	Muzaffarpur	14	57	12	Mr. Bharat Chintapalli
Bhanwra Kothi	Katihar	13	639	9	Mr. Arvind Mishra
Jhajha railway pond	Jamui	12	452	11	Mr. Arvind Mishra & Mr. Deepak Kumar
Phulwaria Chaur	Saran	11	35	8	Mr. Gyanchandra Gyani
Ordnance factory	Nalanda	9	35	9	Mr. Rahul Kumar
Bora Chaur	Saharsa	9	20	5	Mr. Gyanchandra Gyani
Pailbajaan	Jamui	8	36	7	Mr. Arvind Mishra & Mr. Deepak Kumar
Jhapaha mann	Muzaffarpur	8	18	6	Mr. Bharat Chintapalli
Kathotia Fish Pond	Katihar	7	136	6	Mr. Arvind Mishra
Gangaji Rajgriha Jalashaya	Nalanda	7	83	6	Mr. Rahul Kumar
Gadak river	Vaishali	7	44	7	Dr Satyendra Kumar
Lal Sariya Maan	West Champaran	6	22	5	Dr Kamlesh K Maurya
Darwabari wetland	West Champaran	5	97	3	Dr Kamlesh K Maurya
Salaha lake	Vaishali	5	45	4	Dr Satyendra Kumar

Annexure 22: Wetland-wise Bird population range reported during AWC 2024

District	Wetland	Number of Individuals	Bird Population range
Bhagalpur	Ghatora Wetland	10,110	>10,000
Katihar	Gogabeel	7,068	7000-7999
Jamui	Nakti	5,139	5000-5999
Jamui	Nagi Dam	4,520	4000-4999
Buxar	Ganga -Buxar Ranighat Chausabyasi Bridge	4,512	4000-4999
Bhagalpur	Barai to Bateshwar nath	3,512	3000-3999
Katihar	Ganga river - Bateshwarsthan to Manihari ghat	3,308	3000-3999
Aurangabad	Indrapuri Barrage	2,541	2000-2999
Bhagalpur	VGDS- (Sulthanganj to Mirzapur)	1,780	1000-1999
Patna	Ganga river - Maner to Fatuha	1,702	1000-1999
Munger	Ganga river- Kashtarni ghat to Bariyarpur	1,596	1000-1999
East Chamaparan	Sarotar Lake	1,516	1000-1999
Nawada	Hardiya Dam	1,422	1000-1999
Banka	Odhni Dam	1,419	1000-1999
Bhojpur	Ganges (Mahuli ghat to Maner)	1,248	1000-1999
Supaul	Kosi Catchment of Supaul	1,240	1000-1999
Buxar	Vayasi ghat to Bihari ghat	1,179	1000-1999
Vaishali	Baraila Lake	1,176	1000-1999
Bhagalpur	VGDS- (Mirzapur to Barari ghat)	1,115	1000-1999
East Chamaparan	Chilraon Mann	1,059	1000-1999
Jamui	Raja Ahar	1,002	1000-1999
Buxar	Gokul Jalashay	960	800-999
Nalanda	Panchane River, Sainik School	938	800-999
Jamui	Garhi Dam	924	800-999
Khagaria	Pasraha Chaur	867	800-999
Kishanganj	Mahananda river	804	800-999
Araria	Dopahariya Pond	797	600-799
Sheohar	Bagmati River	752	600-799
Samastipur	Deokhal Chaur	751	600-799
West Champaran	Udaipur Wildlife Sanctuary	717	600-799
West Champaran	Gandak River	712	600-799
Katihar	Bhanwra Kothi	639	600-799
Nalanda	Pushpakarani tank	633	600-799
Nalanda	Pawapari	628	600-799
Bhojpur	Sunki suhiya - Shahpur	605	600-799
Jamui	Dhamna Aahar	567	400-599
Darbhanga	Kusheshwar Sthan	566	400-599
East Chamaparan	Sonbarsa Lake	487	400-599
Madhubani	Chapaniya Lake	480	400-599
Jamui	Devan Ahar	475	400-599
Bhagalpur	Ganga River- Maniksakar ghat-Barari ghat	460	400-599
Jamui	Jhajha railway pond	452	400-599
Bhagalpur	Gangaprasad Jheel	448	400-599
Nalanda	Giddhi Lake (Begumpur)	434	400-599
Supaul	Kosi River (Birpur Barrage to Kosi Mahasetu)	421	400-599
Katihar	Baghar Beel	401	400-599
Bhagalpur	Jagatpur	398	200-399
East Chamaparan	Gandak River	380	200-399
Bhagalpur	Dimaha Wetland	355	200-399
Begusarai	Kanwar Lake	323	200-399
East Chamaparan	Basmanpur	319	200-399
East Chamaparan	Burhi Gandak	302	200-399
Kaimur	Durgawati dam	283	200-399

Annexure 22: Wetland-wise Bird population range reported during AWC 2024 (contd.)

District	Wetland	Number of Individuals	Bird Population range
Vaishali	Purainiya Chaur	281	200-399
Jamui	Bela Tand	267	200-399
Saran	Hariya Chaur	265	200-399
Bhagalpur	Bhagalpur Bypass	257	200-399
Gaya	Barandih Wetland	238	200-399
Saran	Bahiyara Chaur	203	200-399
Kaimur	Karkat waterfall	193	100-199
Patna	Rajdhani Jalashay	191	100-199
Bhagalpur	Kataiya Dhar	173	100-199
Saharsa	Arsi Chaur	147	100-199
Araria	Trishullia Ghat	141	100-199
Saharsa	Simri Chaur	139	100-199
Katihar	Baldia Chaur	136	100-199
Katihar	Kathotia Fish Pond	136	100-199
Begusarai	Pachaila	113	100-199
Kaimur	Kohira Dam	99	60-99
West Champaran	Darwabari wetland	97	60-99
Saran	Atanagar	95	60-99
Muzaffarpur	Kanti mann	87	60-99
Gaya	Barwadih	84	60-99
Nalanda	Gangaji Rajgriha Jalashaya	83	60-99
Darbhanga	Khirol nadhi tat	77	60-99
Muzaffarpur	Manika mann	57	1-59
Vaishali	Salaha lake	45	1-59
Vaishali	Gadak river	44	1-59
Jamui	Pailbajaan	36	1-59
Nalanda	Ordnance factory	35	1-59
Saran	Phulwaria Chaur	35	1-59
West Champaran	Lal Sariya Maan	22	1-59
Saharsa	Bora Chaur	20	1-59
Muzaffarpur	Jhapaha mann	18	1-59

Annexure 23: Wetland-wise Bird species size reported during AWC 2024

District	Wetland	Number of Individuals	Bird Population range
Buxar	Gokul Jalashay	71	71-75
Bhagalpur	Barai to Bateshwar nath	59	56-60
Buxar	Ganga -Buxar Ranighat Chausabyasi Bridge	59	56-60
East Chamaparan	Sarotar Lake	55	51-55
Samastipur	Deokhal Chaur	54	51-55
East Chamaparan	Burhi Gandak	53	51-55
Aurangabad	Indrapuri Barrage	52	51-55
Supaul	Kosi Catchment of Supaul	52	51-55
Sheohar	Bagmati River	52	51-55
East Chamaparan	Gandak River	48	46-50
Bhojpur	Ganges (Mahuli ghat to Maner)	47	46-50
Bhagalpur	Ghatora Wetland	47	46-50
Nawada	Hardiya Dam	46	46-50
Jamui	Garhi Dam	46	46-50
Bhagalpur	Ganga River- Maniksakar ghat-Barari ghat	46	46-50
Bhagalpur	VGDS- (Sultanganj to Mirzapur)	45	41-45
East Chamaparan	Basmanpur	44	41-45
East Chamaparan	Chilraon Mann	43	41-45
Katihar	Gogabeel	43	41-45
Khagaria	Pasraha Chaur	42	41-45
Buxar	Vayasi ghat to Bihari ghat	41	41-45
Jamui	Nagi Dam	40	36-40
East Chamaparan	Sonbarsa Lake	40	36-40
Kaimur	Durgawati dam	40	36-40
Bhagalpur	Bhagalpur Bypass	39	36-40
Katihar	Ganga river - Bateshwarsthan to Manihari ghat	38	36-40
Nalanda	Panchane River, Sainik School	38	36-40
Nalanda	Pushpakarani tank	38	36-40
Bhojpur	Sunki suhiya - Shahpur	38	36-40
Araria	Dopahariya Pond	37	36-40
Banka	Odhni Dam	37	36-40
West Champaran	Gandak River	36	36-40
Kaimur	Karkat waterfall	36	36-40
Jamui	Nakti	35	31-35
Nalanda	Giddhi Lake (Begumpur)	34	31-35
Gaya	Barandih Wetland	34	31-35
Begusarai	Kanwar Lake	33	31-35
Munger	Ganga river- Kashtarni ghat to Bariyarpur	31	31-35
Darbhanga	Kusheshwar Sthan	31	31-35
Bhagalpur	Jagatpur	31	31-35
Jamui	Raja Ahar	30	26-30
Jamui	Bela Tand	29	26-30
Bhagalpur	Kataiya Dhar	29	26-30
West Champaran	Udaipur Wildlife Sanctuary	27	26-30
Katihar	Baghar Beel	27	26-30
Bhagalpur	VGDS- (Mirzapur to Barari ghat)	26	26-30
Jamui	Dhamna Aahar	26	26-30
Madhubani	Chapaniya Lake	26	26-30
Supaul	Kosi River (Birpur Barrage to Kosi Mahasetu)	24	21-25
Kaimur	Kohira Dam	24	21-25
Bhagalpur	Gangaprasad Jheel	23	21-25
Saran	Bahiyara Chaur	23	21-25
Katihar	Baldia Chaur	23	21-25

Annexure 23: Wetland-wise Bird species size reported during AWC 2024 (contd.)

District	Wetland	Number of Individuals	Bird Population range
Nalanda	Pawapari	22	21-25
Bhagalpur	Dimaha Wetland	22	21-25
Vaishali	Baraila Lake	21	21-25
Araria	Trishullia Ghat	21	21-25
Patna	Ganga river - Maner to Fatuha	20	16-20
Begusarai	Pachaila	20	16-20
Saran	Atanagar	19	16-20
Gaya	Barwadih	19	16-20
Kishanganj	Mahananda river	18	16-20
Jamui	Devan Ahar	18	16-20
Saran	Hariya Chaur	17	16-20
Patna	Rajdhani Jalashay	17	16-20
Muzaffarpur	Kanti mann	17	16-20
Darbhanga	Khirol nadhi tat	17	16-20
Saharsa	Arsi Chaur	16	16-20
Saharsa	Simri Chaur	15	11-15
Vaishali	Purainiya Chaur	14	11-15
Muzaffarpur	Manika mann	14	11-15
Katihar	Bhanwra Kothi	13	11-15
Jamui	Jhajha railway pond	12	11-15
Saran	Phulwaria Chaur	11	11-15
Nalanda	Ordinance factory	9	6-10
Saharsa	Bora Chaur	9	6-10
Jamui	Pailbajaan	8	6-10
Muzaffarpur	Jhapaha mann	8	6-10
Katihar	Kathotia Fish Pond	7	6-10
Nalanda	Gangaji Rajgriha Jalashaya	7	6-10
Vaishali	Gadak river	7	6-10
West Champaran	Lal Sariya Maan	6	6-10
West Champaran	Darwabari wetland	5	1-5
Vaishali	Salaha lake	5	1-5

Annexure 24. Number of Individuals and Species Reported during AWC 2022, 2023 & 2024

District	Number of Individuals			Number of Species		
	2022	2023	2024	2022	2023	2024
Araria	NC	275	938	NC	24	50
Aurangabad	2,657	3,021	2,541	30	30	52
Banka	2,003	1,128	1,419	55	42	37
Begusarai	2,105	1,584	436	75	51	42
Bhagalpur	7,544	9,165	18,608	97	112	143
Buxar	142	8,126	6,653	6	83	101
Bhojpur	NC	NC	1,853	NC	NC	69
Darbangha	306	793	643	24	31	36
East Champaran	2,063	1,217	4,051	71	56	112
Gaya	974	947	322	39	31	41
Jamui	7,351	18,480	13,382	91	91	74
Kaimur	1,705	423	575	48	44	62
Katihar	5,615	6,090	11,688	67	80	76
Khagaria	NC	580	867	NC	32	42
Madhubani	434	542	480	27	26	26
Kishanganj	NC	NC	804	NC	NC	18
Munger	261	1,763	1,596	14	45	31
Muzaffarpur	2,648	589	162	34	43	26
Nalanda	1,062	2,571	2,751	28	42	67
Nawada	556	1,254	1,422	28	40	46
Patna	1,138	171	1,893	40	14	30
Saharsa	2,046	2,875	306	59	37	24
Samastipur	848	3,169	751	30	73	54
Saran	959	1,504	598	30	67	36
Sheohar	NC	441	752	NC	34	52
Supaul	1,287	1,385	1,661	76	58	58
Vaishali	174	598	1,546	16	19	28
West Champaran	1,295	1,058	1,548	61	53	56
	45,173	69,749	80,246			

Note: NC- Not Covered

Annexure 25. Number of Individuals and Species of Waterbird, wetland-dependent bird and land bird reported during AWC 2024

District	Wetland	Number of individuals			Number of species		
		WB	WD	LB	WB	WD	LB
Araria	Trishullia Ghat	52	16	73	10	5	6
	Dopahariya Pond	711	19	67	28	4	7
Aurangabad	Indrapuri Barrage	2,490	14	37	36	5	11
Banka	Odhni Dam	1,391	13	15	29	4	4
Begusarai	Kanwar Lake	223	81	19	20	6	7
	Pachaila	76	8	29	11	4	5
Bhagalpur	Jagatpur	366	9	23	20	7	4
	Gangaprasad Jheel	393	11	44	29	6	8
	Kataiya Dhar	158	13	2	22	6	1
	Dimaha Wetland	341	3	11	15	2	5
	Ganga River-Maniksakar ghat-Barari ghat	267	14	179	24	7	15
	VGDS- Sultanganj toMirzapur	1,757	22	1	39	5	1
	VGDS- Mirzapur to Barari ghat	714	1	400	24	1	1
	Ghatora Wetland	10,068	9	33	37	3	7
	Barai to Bateshwar nath sthan	3,345	33	134	42	10	7
	Bhagalpur Bypass	162	13	82	19	3	17
Bhojpur	Sunki suhiya - Shahpur	388	10	207	22	4	12
	Ganges (Mahuli ghat to Maner)	980	47	221	27	8	12
Buxar	Vayasi ghat to Bihari ghat	843	87	245	18	8	14
	Ganga -Buxar Ranighat Chausabyasi Bridge	3,457	40	1024	30	10	19
	Gokul Jalashay	745	21	191	29	4	37
Darbhanga	Kusheshwar Sthan	155	30	381	15	5	11
	Khirol nadhi tat	59	4	14	10	2	5
East Champaran	Basmanpur Lake (Maun)	88	4	221	10	2	27
	Gandak River	180	24	176	19	5	24
	Sarotar Lake	1,264	28	225	26	5	24
	Sonbarsa Lake	368	11	108	20	3	17
	Burhi Gandak	54	11	230	12	5	33
	Chilraon Mann	799	42	218	15	8	20
Gaya	Barwadih	79	2	3	14	2	3
	Barandih Wetland	167	2	69	19	2	13
Jamui	Bela Tand	239	7	21	17	4	8
	Devan Ahar	442	6	27	13	2	3
	Pailbajaan	32	0	4	6	0	2
	Garhi Dam	879	11	34	32	7	7
	Nagi	4,485	6	29	31	5	4
	Jhajha railway pond	361	0	91	6	0	6
	Dhamna Aahar	561	0	6	23	0	3
	Raja Ahar	966	2	34	21	2	7
	Nakti	5,000	0	139	29	0	6
Kaimur	Durgawati dam	113	10	160	15	6	19
	Kohira Dam	3	1	95	2	1	21
	Karkat waterfall	8	7	178	4	4	28

Annexure 25. Number of Individuals and Species of Waterbird, wetland-dependent bird and land bird reported during AWC 2024 (contd.)

District	Wetland	Number of individuals			Number of species		
		WB	WD	LB	WB	WD	LB
Muzaffarpur	Manika mann	43	3	11	5	2	7
	Jhapaha mann	16	2	0	6	2	0
	Kanti mann	72	10	5	11	5	1
Munger	Ganga river- Kashtarni ghat to Bariyarpur	1,507	4	85	26	3	2
Nalanda	Gangaji Rajgriha Jalashaya	71	8	4	2	2	3
	Pushpakarani tank	483	4	146	16	3	19
	Giddhi Lake (Begumpur)	400	8	26	24	5	5
	Ordnance factory	22	0	13	5	0	4
	Pawapari	606	3	19	13	3	6
	Panchane River, Sainik School	755	19	164	18	2	18
Nawada	Hardiya Dam	1,358	4	60	33	3	10
Saharsa	Arsi Chaur	129	18	0	11	5	0
	Simri Chaur	126	13	0	12	3	0
	Bora Chaur	19	0	1	8	0	1
Samastipur	Deokhal Chaur	458	22	271	34	9	11
Sheohar	Bagmati River	294	49	409	19	9	24
Saran	Atanagar	81	13	1	14	4	1
	Bahiyara Chaur	175	28	0	17	6	0
	Hariya Chaur	252	12	1	11	5	1
	Phulwaria Chaur	34	1	0	10	1	0
Supaul	Kosi River (Birpur Barrage to Kosi Mahasetu)	359	21	41	16	4	4
	Kosi Catchment of Supaul	967	15	258	30	6	16
Katihar	Baldia Chaur	125	5	6	16	3	4
	Ganga river - Bateshwarsthan to Manihari ghat	2,960	39	309	29	5	4
	Bhanwra Kothi	630	2	7	6	2	5
	Baghar Beel	361	11	29	18	5	4
	Gogabeel	7,030	18	20	28	7	7
	Kathotia Fish Pond	57	0	79	3	0	4
Khagaria	Pasraha Chaur	836	13	18	28	6	8
Kishanganj	Mahananda river	743	35	26	9	6	3
Patna	Rajdhani Jalashay	187	4	0	16	1	0
	Ganga river - Maner to Fatuha	1,674	28	0	15	5	0
Vaishali	Baraila Lake	1,122	6	48	13	2	6
	Purainiya Chaur	242	13	26	7	3	4
	Salaha lake	37	8	0	4	1	0
	Gadak river of Vaishali District	34	4	6	4	2	1
West Champaran	Udaipur Wildlife Sanctuary	707	8	2	19	6	2
	Lal Sariya Maan	20	0	2	5	0	1
	Darwabari wetland	93	4	0	4	1	0
	Gandak River	650	22	40	13	6	17
		71,436	1,176	7,634			

Annexure 26. List of people involved in AWC 2024

District	Wetland	DFOs Details	Coordinators Details	Participants Details	Role	Mail ID of the Participant
Araria	Trishulia ghat	Ms. Megha Yadav	Mr. Gyanchandra Gyani gyanchandragyani@gmail.com	Ratnesh Kumar	Birder	ratneshKumar735@gmail.com
-do-	Dopahariya Pond	-do-	-do-	Chandan Kumar	Bird Guide	morychandan735@gmail.com
-do-	-do-	-do-	-do-	Ankit Kumar Gupta	Court Forester	wbhankit2001@gmail.com
-do-	-do-	-do-	-do-	Govind Prajapati	Forest Guard	govind140195@gmail.com
-do-	-do-	-do-	-do-	Gaurav Kumar	Forest Guard	gauravKumar.257099@gmail.com
-do-	-do-	-do-	-do-	Amran Asgar	Forest Guard	amranasgar@gmail.com
-do-	-do-	-do-	-do-	Priyanka Kumari	Forest Guard	priyankasingh21051997@gmail.com
Aurangabad	Indrapuri Barrage	Ms. Ruchi Singh	Dr Ram Pratap Singh rampratap@cusb.ac.in	Shri S Sudhakar	-do-	-do-
-do-	-do-	-do-	-do-	Ms. Ruchi Singh	-do-	-do-
-do-	-do-	-do-	-do-	Shri Ajay Kumar Radha Kumari	-do-	-do-
-do-	-do-	-do-	-do-	SK Imran	-do-	si46625@gmail.com
-do-	-do-	-do-	-do-	Trisha Mondal	-do-	t.mondal.trisha@gmail.com
-do-	-do-	-do-	-do-	Divya Kumari	-do-	divyaKumari21994@gmail.com
-do-	-do-	-do-	-do-	Manisha Kumari	-do-	01manisha98@gmail.com
-do-	-do-	-do-	-do-	Sampad Samrat Senapaty	-do-	s.samratsenapaty@gmail.com
Banka	Orhni Dam	Mr. Neeraj Narayan	Dr D N Choudhary dncgopa108@gmail.com	Mr. Sumit Kumar Sum	Birder	sumitsum@gmail.com
-do-	-do-	-do-	-do-	Mr. Pintu Kumar Azad	Birder	pintu5091Kumar@gmail.com
-do-	-do-	-do-	-do-	Mr. Bijay Bharat	Birder	bijaybharat72@gmail.com
-do-	-do-	-do-	-do-	Mr. Jay Kumar Jay	Birder	jaykrjay2505@gmail.com
-do-	-do-	-do-	-do-	Mr. Anand Kumar	Birder	anandKumar86749@gmail.com
Begusarai	Kanwar Lake	Mr. Abhishek Kumar	Dr P. Sathiyaselvam bnhs.sathiyaselvam@bnhs.org & Mr S. Sivakumar s.sivakumar@bnhs.org	S. Sivakumar	Spotter	s.swaminathan@gmail.com
-do-	-do-	-do-	-do-	Vertika Patel	Spotter	v.patel@bnhs.org
-do-	-do-	-do-	-do-	Abilash. R	Spotter	abilash.r@bnhs.org

Annexure 26. List of people involved in AWC 2024 (contd.)

District	Wetland	DFOs Details	Coordinators Details	Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Abhay Rai	Spotter	abhaywild.1117@gmail.com
-do-	-do-	-do-	-do-	Sharon Christina	Recorder	sharonchristina652@gmail.com
-do-	Pachaila	-do-	-do-	Vertika Patel	Spotter	vpatel@bnhs.org
-do-	-do-	-do-	-do-	Abilash. R	Spotter	abilash.r@bnhs.org
-do-	-do-	-do-	-do-	Abhay Rai	Spotter	abhaywild.1117@gmail.com
-do-	-do-	-do-	-do-	Sharon Christina	Recorder	sharonchristina652@gmail.com
Bhagalpur	Jagatpur lake	Ms. Sweta Kumari	Dr D N Choudhary dncgopa108@gmail.com	Mr. Sumit Kumar Sum	Birder	sumitsum@gmail.com
-do-	-do-	-do-	-do-	Mr. Pintu Kumar Azad	Birder	pintu5091Kumar@gmail.com
-do-	-do-	-do-	-do-	Mr. Bijay Bharat	Birder	bijaybharat72@gmail.com
-do-	-do-	-do-	-do-	Mr. Jay Kumar Jay	Photographer	jaykriay2505@gmail.com
-do-	Gangaprasad Jheel	-do-	-do-	Mr. Anand Kumar	Documenter	anandKumar86749@gmail.com
-do-	Kataiya dhar	-do-	Mr. Gyanchandra Gyani gyanchandragyani@gmail.com	Chandan Kumar	Bird Guide	morychandan735@gmail.com
-do-	-do-	-do-	-do-	Rahul Kumar	-do-	herprahul@gmail.com
-do-	Dimaha wetland	-do-	Dr D N Choudhary dncgopa108@gmail.com	Prithvi Nath Singh	-do-	-do-
-do-	Ganga river - Manik sarkar ghat - to Barari Ghat	-do-	Mr.Vatan Kumar kvatan12398@gmail.com	Ashutosh Kumar	-do-	-do-
-do-	-do-	-do-	-do-	Prashant Kumar	-do-	-do-
-do-	VGDS- Barari ghat Bhagalpur to Bateshwarsthan	-do-	Mr. Rahul Rohitashwa gene7.rahul@gmail.com	Vikramjeet Singh	Birder	vikramjeetsingh55340@gmail.com
-do-	-do-	-do-	-do-	Md. Shahwaz Hasan	Birder	mdshahwazhasan@gmail.com
-do-	VGDS - Sultanganj to Mirzapur	-do-	Mr. Gyanchandra Gyani gyanchandragyani@gmail.com	Navin Kumar	-do-	Kumarnavin853204@gmail.com
-do-	-do-	-do-	-do-	Rupesh Kumar	Birder	Kumarrupesh7288@gmail.com
-do-	VGDS - Mirzapur to Barari ghat Bhagalpur	-do-	Mr. Gyanchandra Gyani gyanchandragyani@gmail.com	Subhash Kumar	Forester	-do-

Annexure 26. List of people involved in AWC 2024 (contd.)

District	Wetland	DFOs Details	Coordinators Details	Participants Details	Role	Mail ID of the Participant
-do-	"Ghatora wetland complex"	-do-	-do-	Gaurav Kumar	Birder	gauravsinhaaa.1990@gmail.com
-do-	-do-	-do-	-do-	Rajeev Kumar Ranjan	Birder	rrajeevKumar84@gmail.com
-do-	-do-	-do-	-do-	Amrash Kumar	-do-	-do-
-do-	-do-	-do-	-do-	Kanhaiya Nandha Kishor	-do-	-do-
-do-	-do-	-do-	-do-	Akhtar Hussain	-do-	-do-
-do-	-do-	-do-	-do-	Mukesh Kr. Choudhary	Bird Guide	mkc9931@gmail.com
-do-	Bhagalpur bypass	-do-	Mr. Tapan Kumar Pan tkpan.botany@gmail.com	Dev Raj	-do-	-do-
-do-	-do-	-do-	-do-	Bittu Kumar	Msc Student	bittukr.nnaa@gmail.com
-do-	Kahalgaoan to Manihari	-do-	Mr. Deepak Kumar dk05365@gmail.com	-do-	-do-	-do-
Bhojpur	Sunki Suhiya - Shahpur	Mr. Vikas Ahlawat	Mr. Arvind Mishra mncarvind@hotmail.com	Vatan Kumar	Birder	kvatan12398@gmail.com
-do-	-do-	-do-	-do-	Ranjan Kumar Sharma	ROF, Ara	sharmaranjanmth1974@gmail.com
-do-	-do-	-do-	-do-	Anjali Kumari	Forester	sinhakanjali@gmail.com
-do-	-do-	-do-	-do-	Asha Kumari	Forester	ashaKumarib99@gmail.com
-do-	-do-	-do-	-do-	Anuj Kumar	Forester	anujk0940@gmail.com
-do-	-do-	-do-	-do-	Harshit Ranjan	Student	sharmavarsha@gmail.com
-do-	-do-	-do-	-do-	Hare Krishna Upadhyay	Driver	-do-
-do-	GANGES (MAHULI GHAT TO MANER)	-do-	Dr Ram Pratap Singh rampratap@cusb.ac.in	Ms. Anjali Kumar	Forester	anjaliKumarijamui2016@gmail.com
-do-	-do-	-do-	-do-	Mrs. Asha Kumari	Forest Guard	ashaKumarib99@gmail.com
-do-	-do-	-do-	-do-	Mr. Rajesh Kumar	Forest Guard	rk762707@gmail.cpm
-do-	-do-	-do-	-do-	SK Imran	-do-	si46625@gmail.com
-do-	-do-	-do-	-do-	Trisha Mondal	-do-	t.mondal.trisha@gmail.com
-do-	-do-	-do-	-do-	Divya Kumari	-do-	divyaKumari21994@gmail.com
-do-	-do-	-do-	-do-	Manisha Kumari	-do-	01manisha98@gmail.com
-do-	-do-	-do-	-do-	Sampad Samrat Senapaty	-do-	s.samratsenapaty@gmail.com
Buxar	Gokul Jalashay	Mr. Vikas Ahlawat	Dr Ram Pratap Singh rampratap@cusb.ac.in	Shailesh Kumar Rai	Birder	shaileshKumarrai478@gmail.com

Annexure 26. List of people involved in AWC 2024 (contd.)

District	Wetland	DFOs Details	Coordinators Details	Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Nitish Kumar	Birder	nkmp2017@gmail.com
-do-	-do-	-do-	-do-	Amitabh Saurabh	Birder	amitpallu837@gmail.com
-do-	-do-	-do-	-do-	Raj Kumar Paswan	Birder	rajKumarrf4291@gmail.com
-do-	Vayasi Ghat to Bihari Ghat	-do-	Mr. Deepak Kumar dk05365@gmail.com	Pratibha Kumari	Birder	pratibhakumari763487@gmail.com
-do-	-do-	-do-	-do-	Shiv Nandan Choudhary	Birder	-do-
-do-	-do-	-do-	-do-	Gaurav Kumar	Birder	gauravsinhaaa.1990@gmail.com
-do-	-do-	-do-	-do-	Rajeev Kumar Ranjan	Birder	rrajeevKumar84@gmail.com
-do-	-do-	-do-	-do-	Mahima Ram Kumar	Birder	-do-
-do-	-do-	-do-	-do-	Anuj Kumar	Birder	-do-
-do-	-do-	-do-	-do-	Ranjan Kumar Yadav	Birder	ranjankppas@gmail.com
-do-	Ranighat Chausabyasi Bridge	-do-	Mr. Arvind Mishra mncarvind@hotmail.com	Vatan Kumar	Birder	kvatan12398@gmail.com
-do-	-do-	-do-	-do-	Anish Kumar	Forest Guard	anishbkj8022@gmail.com
Darbhangha	Kusheshwar asthan	Mr. Bhaskar Chandra Bharati	Mr. Rahul Kumar herprahul@gmail.com	Rishi Upadhayay	Birder	-do-
-do-	-do-	-do-	-do-	Chandan Kumar	Birder	morychandani735@gmail.com
-do-	-do-	-do-	-do-	Kailash Yadav	Forest Guard	-do-
-do-	-do-	-do-	-do-	Arvind Kumar Dubey	ROF	-do-
-do-	-do-	-do-	-do-	Shwetha Mishra	Forester	-do-
-do-	-do-	-do-	-do-	Vidya Nath Jha	Botanist	-do-
-do-	-do-	-do-	-do-	Fuio Mukhiya	Forest Guard	-do-
-do-	Khironi nadhi tat	-do-	-do-	Mugal Kamath	-do-	-do-
East Champaran	Sarotar Wetland	Mr. RajKumar Sharma	Dr Niraj Kumar Dr.kniraj@gmail.com	Guddu Kumar	Student	krghuddu055@gmail.com
-do-	-do-	-do-	Dr Kushagra Rajendra kRajendra@ggn.amity.edu	Mr. Indrajit Kumar	-do-	-do-
-do-	-do-	-do-	-do-	Mr. Dhananjay Kumar	Forest Guard	-do-
-do-	-do-	-do-	-do-	Mr. Pappu Kumar Singh	Driver	-do-
-do-	-do-	-do-	-do-	Shri Gulshan Kumar	Boatman	-do-

Annexure 26. List of people involved in AWC 2024 (contd.)

District	Wetland	DFOs Details	Coordinators Details	Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Shri Bhagirath Sahn	Boatman	-do-
-do-	Basmanpur mann	-do-	-do-	Shri Vikash Sahn	Boatman	-do-
-do-	-do-	-do-	-do-	Mr. Om Prakash Patel	Forest Guard	-do-
-do-	-do-	-do-	-do-	Shri Binod Yadav	Driver	-do-
-do-	Sonbarsa mann	-do-	-do-	Shri Mahadev Sahn	Cattle Guard	-do-
-do-	Chilraon Mann	-do-	-do-	Mr. Dharmendr a Kumar	Forest Guard	-do-
-do-	-do-	-do-	-do-	Mr. Lav Kumar	Forest Guard	-do-
-do-	-do-	-do-	-do-	Mr. Rajendra a Yadav	Cattle Guard	-do-
-do-	-do-	-do-	-do-	Mr. Shibu Yadav	Driver	-do-
-do-	-do-	-do-	-do-	Mr. Amit Kumar	Cattle Guard	-do-
-do-	Gandak river of East champaran	-do-	-do-	Mr. Sachin Kumar	Driver	-do-
-do-	Burhi Gandak	-do-	-do-	Shri Lalan Sahn	Boatman	-do-
-do-	-do-	-do-	-do-	Mr. Md. Abid Hussain	Forest Guard	-do-
-do-	-do-	-do-	-do-	Mr. Harendra Paswan,	Cattle Guard	-do-
-do-	-do-	-do-	-do-	Mr. Sinehi Rai	Cattle Guard	-do-
-do-	-do-	-do-	-do-	Mr. Basisth Narain Tiwari	Cattle Guard	-do-
-do-	-do-	-do-	-do-	Mr. Krishna Sahn	Boatman	-do-
-do-	-do-	-do-	-do-	Mr. Vyas Sahn	Boatman	-do-
Gaya	Barandih dam	Mr. Shashikant Kumar	Dr Ram Pratap Singh rampratap@cusb.ac.in	Mr. Devanand Kumar	Forest Guard	iamnitesh1997@gmail.com
-do-	-do-	-do-	-do-	Mr. Nitesh Kumar	Forest Guard	iamnitesh1997@gmail.com
-do-	-do-	-do-	-do-	Mr. Krishna Yadav	Caretaker	iamnitesh1997@gmail.com
-do-	-do-	-do-	-do-	Mr. Naresh Yadav	Caretaker	iamnitesh1997@gmail.com
-do-	-do-	-do-	-do-	SK Imran	-do-	si46625@gmail.com
-do-	-do-	-do-	-do-	Trisha Mondal	-do-	t.mondal.trisha@gmail.com
-do-	-do-	-do-	-do-	Divya Kumari	-do-	divyakumari21994@gmail.com
-do-	-do-	-do-	-do-	Manisha Kumari	-do-	01manisha98@gmail.com
-do-	Barwadih dam	-do-	-do-	Sampad Samrat Senapathy	-do-	s.samratsenapty@gmail.com

Annexure 26. List of people involved in AWC 2024 (contd.)

District	Wetland	DFOs Details	Coordinators Details	Participants Details	Role	Mail ID of the Participant
Jamui	Nagi dam	Mr. Tejas Jaiswal	Mr. Arvind Mishra mncarvind@hotmail.com	Asad R Rahmani	BNHS	rahmani1.asad@gmail.com
-do-	-do-	-do-	Deepak Kumar dk05365@gmail.com	Vatan Kumar	Birder	kvatan12398@gmail.com
-do-	Nakti dam	-do-	-do-	-do-	-do-	-do-
-do-	-do-	-do-	-do-	Manish Kumar Yadav	Bird Guide	mY3819988@gmail.com
-do-	-do-	-do-	-do-	Sandeep Kumar	Bird Guide	sandeep98pkjaje@gmail.com
-do-	-do-	-do-	-do-	Pradeep Kumar	Bird Guide	yadubansiraipremdeep@gmail.com
-do-	-do-	-do-	-do-	Ravindra Kumar	Bird Guide	k.k9684@gmail.com
-do-	-do-	-do-	-do-	Abdresh Kumar	Bird Guide	abdreshkhairan@gmail.com
-do-	-do-	-do-	-do-	Bambam Kumar	Bird Guide	bkr12062001@gmail.com
-do-	-do-	-do-	-do-	Pintu Kumar yadav	Bird Guide	pintuKumary534@gmail.com
-do-	-do-	-do-	-do-	Sahdeo Yadav	Bird Guide	sahdeo7061320747@gmail.com
-do-	Belatar	-do-	-do-	Manoranjan Kumar	Bird Guide	manoranjan9395@gmail.com
-do-	Pailbajan	-do-	-do-	Anish Kumar	Bird Guide	franishfr@gmail.com
-do-	Devanahar	-do-	-do-	Vicky Kumar Manjhi	Forest Guard	vickymanjhi151196@gmail.com
-do-	Garhi dam	-do-	-do-	Aklesh Kumar	Forest Guard	akubgp147@gmail.com
-do-	Jhajha railway pond	-do-	-do-	S. Sudhakar	CF	-do-
-do-	Raja ahar	-do-	-do-	Pankaj Kumar	Forest Guard	pkanhauil1996@gmail.com
Kaimur	Durgawati Dam	Mr. Chanchal Prakasham	Mr. Rahul Kumar rahul@gmail.com	Rishi Upadhyay	Birder	rishiupadhyays41@gmail.com
-do-	-do-	-do-	-do-	Amarjeet Kumar	Forest Guard	amarjeet18Kumar@gmail.com
-do-	-do-	-do-	-do-	Bheem Kumar	Forest Guard	bheemamarkr94@gmail.com
-do-	Karkat waterfall	-do-	-do-	Purushottam Kumar	Forest Guard	-do-
-do-	Kohira Dam	-do-	-do-	Sriram Kumar Mahato	Forest Guard	sriramKumar824@gmail.com
-do-	-do-	-do-	-do-	Mithilesh Kumar Yadav	Forest Guard	mithileshmth945@gmail.com
-do-	-do-	-do-	-do-	Mukesh Kumar	Forest Guard	mukeshKumarbgs006@gmail.com
Katihar	Goga beel	Mr. Rajeev Ranjan	Mr. Arvind Mishra mncarvind@hotmail.com	Amresh Kumar	Farm Owner	-do-
-do-	Bhanwra Kothi	-do-	-do-	Deepak Kumar	Birder	dk05365@gmail.com

Annexure 26. List of people involved in AWC 2024 (contd.)

District	Wetland	DFOs Details	Coordinators Details	Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Rajiv Kumar Ranjan	Bird Guide	rrrajeevkumar84@gmail.com
-do-	-do-	-do-	-do-	Hare Ram pandey	Member Conservation Reserve Committee	-do-
-do-	Bagar beel	-do-	-do-	Ajit Pragy Kumar	Member Conservation Reserve Committee	-do-
-do-	Kathotia fish pond	-do-	-do-	Md. Raisuddin	Member Conservation Reserve Committee	-do-
-do-	Baldiya chaur	-do-	-do-	Ramai	Boatman	-do-
-do-	Ganga river - Bateshwarthan to Manihari ghat	-do-	-do-	Sitabuddin	Bird Monitor	-do-
Khagaria	Pasraha Chaur	Mr. Abhishek Kumar	Mr. Gyanchandra Gyani GyanchandraGyani@gmail.com	Priyram Kr. Priyanshu	Documenter	-do-
-do-	-do-	-do-	-do-	Rajkishor Kumar	Birder	rajkishorkumar654@gmail.com
-do-	-do-	-do-	-do-	Chandan Kumar	Birder	moryachandan735@gmail.com
-do-	-do-	-do-	-do-	Abhinav Kumar	Spotter	-do-
-do-	-do-	-do-	-do-	Abdhesh Kumar	Forest Guard	-do-
Kishanganj	Mahananda river	Ms. Megha	Mr. Gyanchandra Gyani GyanchandraGyani@gmail.com	Chandan Kumar	Forest Guard	moryachandan735@gmail.com
-do-	-do-	-do-	-do-	Ratnesh Kumar	Birder	ratneshkumar735@gmail.com
-do-	-do-	-do-	-do-	Anil Kumar	Forest Guard	anil7108599@gmail.com
-do-	-do-	-do-	-do-	Amran Khan	Forest Guard	mdarmank491@gmail.com
-do-	-do-	-do-	-do-	Rohit Kumar	Forest Guard	rohitkroynwd@gmail.com
Madhubani	Chapaniya Lake	Mr. Bhaskar Chandra Bharati	Dr P. Sathiyaselvam sathiyaselvam@bnhs.org	Abhay Rai	Spotter	abhaywild.1117@gmail.com
-do-	-do-	-do-	-do-	Vertika Patel	Spotter	v.patel@bnhs.org

Annexure 26. List of people involved in AWC 2024 (contd.)

District	Wetland	DFOs Details	Coordinators Details	Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Kr. Jyoti	-do-	-do-
-do-	-do-	-do-	-do-	Dharameen Kr	-do-	-do-
-do-	-do-	-do-	-do-	Kundan Kr	-do-	-do-
-do-	-do-	-do-	-do-	Manish	-do-	-do-
-do-	-do-	-do-	-do-	Vishal	-do-	-do-
Munger	Ganga river - Kashitarni ghat to Bariyarpura	Ambarish Mall	Dr P. Sathiyaselvam bnhs. sathiyaselvam@bnhs.org	Vertika Patel	Spotter	v.patel@bnhs.org
-do-	-do-	-do-	-do-	Abilash. R	Spotter	abilash.r@bnhs.org
-do-	-do-	-do-	-do-	Abhay Rai	Spotter	abhaywild.1117@gmail.com
-do-	-do-	-do-	-do-	Sharon Christina	Recorder	sharonchristina652@gmail.com
Muzaffarpur	Manika mann	Mr. Bharat Chintapalli	Mr. Bharat Chintapalli	Pallavi Pushpa	-do-	pallavipusha9@gmail.com
-do-	-do-	-do-	-do-	Saloni Kumari	-do-	salonike2017@gmail.com
-do-	-do-	-do-	-do-	Raushan Kumar	-do-	mr.raushanbgs1998@gmail.com
-do-	-do-	-do-	-do-	Santhosh Kumar	-do-	santhoshkumar9579@gmail.com
-do-	-do-	-do-	-do-	Binod Kumar	-do-	binodkumar01k@gmail.com
-do-	Jhapaha mann	-do-	-do-	Uma Shankar Roy	-do-	-do-
-do-	-do-	-do-	-do-	Md Amman	-do-	-do-
-do-	-do-	-do-	-do-	Robinsh Kumar	-do-	-do-
-do-	-do-	-do-	-do-	Arun Kumar Sinha	-do-	-do-
-do-	-do-	-do-	-do-	Md. Maksood	-do-	-do-
-do-	Kanti mann	-do-	-do-	Subhi Kumari	-do-	-do-
Nalanda	Gidhi Lake	Mr. RajKumar	Mr. Rahul Kumar herprahul@gmail.com	Vijaya Bharti	Student	vijaya98965bbharti@gmail.com
-do-	-do-	-do-	-do-	Sowmya Aditari	Student	sowmya.modild@gmail.com
-do-	Pushkarni lake	-do-	-do-	Surya Prakash	Student	smartyasurya222@gmail.com
-do-	-do-	-do-	-do-	Pratyusha Manjhi	Student	linumajhi2003@gmail.com
-do-	-do-	-do-	-do-	Chenjerai Ziti	Student	chenjeriaiziti@gmail.com
-do-	-do-	-do-	-do-	Pravin Kumar	Student	pravinbahiyasedeghar@gmail.com

Annexure 26. List of people involved in AWC 2024 (contd.)

District	Wetland	DFOs Details	Coordinators Details	Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Aisha Mahapatra	Student	aishamahapatra2017@gmail.com
-do-	-do-	-do-	-do-	Diwakar Kumar	Student	diwakarupsc2024@gmail.com
-do-	-do-	-do-	-do-	Esther Akoth	student	estherakothee@gmail.com
-do-	Panchane River (behind Sanik sch.)	-do-	-do-	Subham Kumar	Forest Guard	shurajab@gmail.com
-do-	Ganga Jalashay Rajgir	-do-	-do-	Chandan Kumar	Student	moryachandan735@gmail.com
-do-	Pawapuri	-do-	-do-	Rishi Upadhyay	Student	rishiupadhyays41@gmail.com
-do-	Ordance Factory Pond	-do-	-do-	-do-	-do-	-do-
Nawada	Hardiya Dam (Phulwariya)	Mr. Sanjeev Ranjan	Dr Ram Pratap Singh rampratap@cusb.ac.in	Sri Ambesh Kisor	ACF	kishoramesh@gmail.com
-do-	-do-	-do-	-do-	Shri Shresth Kumar Krishna	DFO (probation)	shresth.kumar@gmail.com
-do-	-do-	-do-	-do-	Mr. Gautam Kumar Ojha	Forest Guard	gautamKumarohja97@gmail.com
-do-	-do-	-do-	-do-	Mr. Ranjan Kumar	Forest Guard	gautamKumarohja97@gmail.com
-do-	-do-	-do-	-do-	Mr. Sanjeet Kumar	Forest Guard	gautamKumarohja97@gmail.com
-do-	-do-	-do-	-do-	Mr. Raju Kumar Sharma	Caretaker	gautamKumarohja97@gmail.com
-do-	-do-	-do-	-do-	SK Imran	-do-	si46625@gmail.com
-do-	-do-	-do-	-do-	Trisha Mondal	-do-	t.mondal.trisha@gmail.com
-do-	-do-	-do-	-do-	Divya Kumari	-do-	divyaKumari21994@gmail.com
-do-	-do-	-do-	-do-	Manisha Kumari	-do-	01manisha98@gmail.com
-do-	-do-	-do-	-do-	Sampad Samrat Senapathy	-do-	s.samratsenapthy@gmail.com
Patna	Rajdhani Jalashay	Mr. Subodh Kumar Gupta	Col. Amit Sinha kunwarj25@ yahoo.co.in	Shahla Yasmin	-do-	-do-
-do-	-do-	Gaurav Ojha	-do-	Ahbar Alam	-do-	-do-
-do-	-do-	-do-	-do-	MD Shahbaz	-do-	-do-
-do-	-do-	-do-	-do-	Shivani Jaiswal	-do-	-do-
-do-	-do-	-do-	-do-	Saloni	-do-	-do-
-do-	Ganga river - Maner to Mokama	-do-	Mr. Anand Kumar anandKumar86749@gmail.com	Dr Gopal Sharma	-do-	-do-

Annexure 26. List of people involved in AWC 2024 (contd.)

District	Wetland	DFOs Details	Coordinators Details	Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Navin Kumar	-do-	-do-
Saharsa	Simri Jheel	Mr. R K Sinha	Mr. Gyanchandra Gyani GyanchandraGyani@gmail.com	Rajkishor Kumar	Birder	rajkishorKumar654@gmail.com
-do-	-do-	-do-	-do-	Chandan Kumar	Bird Guide	moryachandan735@gmail.com
-do-	-do-	-do-	-do-	Dinesh Kumar Singh	Birder	-do-
-do-	-do-	-do-	-do-	Ratnesh Kumar	-do-	ratneshKumar735@gmail.com
-do-	-do-	-do-	-do-	Abhinav Kumar	-do-	-do-
-do-	Arsi chaur	-do-	-do-	Satish Kumar	Forest Guard	satisbhimpur2022@gmail.com
-do-	Bora Chaur	-do-	-do-	-do-	-do-	-do-
Supaul	Kosi catchment of Supaul & Saharsa	Mr. Pratik Anand	Dr Gopal Sharma gopal_dolphinboy@rediffmail.com	Mr. Shil Asheesh	-do-	-do-
-do-	Kosi river (Birpur barrage to Kosi Mahasetu)	-do-	Mr. Navin Kumar naveenKumaribcn@gmail.com	-do-	-do-	-do-

प्रभात खबर

पटना, रविवार
14.04.2024

PRO @ CUB.AC.IN
Central University of South Bihar

पहल. सूबे के गया, औरंगाबाद, नवादा व आरा में हुई गणना जीवन विज्ञान विभाग ने पांच हजार से अधिक पक्षियों की पहचान की

सीयूएसबी

करीब संवाददाता, गया

पिछले कुछ महीनों के प्रयास के बाद सीयूएसबी के जीवन विज्ञान विभाग ने एशियाई जलपक्षी जनगणना (एडब्ल्यूसी) का आयोजन किया। सीयूएसबी के पीआरओ मोहम्मद मुदस्सीर आलम ने बताया कि यह सर्वेक्षण लाइफ साइंस के प्रमुख डॉ राम प्रताप सिंह की देखरेख में विभाग के शोधकर्ताओं की एक टीम द्वारा किया गया था। बिहार के चार जिलों गया, औरंगाबाद, नवादा और आरा में की गयी जनगणना में पक्षियों की लगभग 200 प्रजातियों के साथ 5538 पक्षियों की पहचान की गयी। एडब्ल्यूसी एशियाई क्षेत्र में विंटरिंग वॉटरबर्ड्स की आबादी की निगरानी के लिए वेटलैंड इंटरनेशनल और एशियन वेटलैंड ब्यूरो द्वारा आयोजित एक वार्षिक कार्यक्रम है। इस अभियान के तहत बिहार सरकार के पर्यावरण, वन और जलवायु परिवर्तन विभाग ने एडब्ल्यूसी को एक विशेष अभियान के रूप में लेते हुए बिहार के लगभग



गणना करनेवाली टीम.

75 वेटलैंड्स (आर्द्रभूमियों) को कवर करने का प्रयास किया गया। सीयूएसबी से डॉ राम प्रताप सिंह को एडब्ल्यूसी-2024 के लिए समन्वयकों में से एक के रूप में जिम्मेदारी सौंपी गयी थी, जिन्होंने अपने शोधार्थियों के साथ गया, औरंगाबाद, नवादा और आरा में सर्वेक्षण किया।

गया में 53 प्रजातियां व 322 पक्षियों की हुई पहचान : विस्तृत जानकारी देते हुए डॉ राम प्रताप सिंह ने बताया कि नवादा में हरदिया बांध पर सर्वेक्षण किया गया, जहाँ 47 प्रजातियां और 1425 पक्षियों को दर्ज किया गया। औरंगाबाद में सर्वेक्षण तीन चरणों में

इंद्रपुरी बैराज वेटलैंड में आयोजित किया गया था। पूर्व सर्वेक्षण में 24 प्रजातियां और 378 पक्षियों को दर्ज किया गया। मुख्य गणना में 54 प्रजातियां व 2543 पक्षियों को दर्ज किया गया और सर्वेक्षण के बाद की गिनती में 35 प्रजातियां व 594 पक्षियों को दर्ज किया गया। गया में सर्वेक्षण दो वेटलैंड्स (आर्द्रभूमियों) में किया गया। बरवाडीह वेटलैंड में 19 प्रजातियां और 84 पक्षियों को दर्ज किया गया। बरंडीह वेटलैंड में 34 प्रजातियां और 238 पक्षियों को दर्ज किया गया। भोजपुर (आरा) जिले में सर्वेक्षण महुली घाट से मनेर तक किया

गया, जहाँ 47 प्रजातियां व 1248 पक्षियों को दर्ज किया गया। सर्वेक्षण के दौरान लंबी दूरी के प्रवासी पक्षियों को दर्ज किया गया, जिनमें ब्रार हेडेड गूज, रेड क्रैस्टेड पोचार्ड, गैडवाल, नॉर्दन पिन्टेल, यूरोशियन कलैव, रूडी शेलडक, कॉमन पोचार्ड, ब्लैक टेलड गॉडविट, ब्लू नेक्ड स्टार्क, कॉमन रेडशैंक और कई अन्य शामिल हैं। जीवन विज्ञान विभाग के शोधार्थियों एसके इमरान, दिव्या कुमारी, तृषा मंडल, मनीषा कुमारी व संपद सम्राट सेनापति (जेआरएफ) ने बर्ड स्पॉटर्स के रूप में एडब्ल्यूसी 2024 में सक्रिय रूप से भाग लिया। सर्वेक्षण में आधार पर एशियाई जलपक्षी जनगणना (एडब्ल्यूसी) ने यह निष्कर्ष साझा किया कि बिहार में अच्छी संख्या में प्रवासी पक्षियों की प्रजातियां हैं, जो अंतरराष्ट्रीय महत्व के मध्य एशियाई फ्लाईवे (सीएएफ) और पूर्वी एशियाई ऑस्ट्रेलियन फ्लाईवे (ईएएएफ) दोनों को कवर करती हैं।



इस खबर से जुड़ी और जानकारी के लिए क्यूआर कोड स्कैन करें

ਭਾਰਤ ਦੇ ਹਿੰਦੂ ਚੀਫ਼ ਮੰਤਰੀ, ਕਾਮਰੇਡਾਂ ਨੂੰ ਸ਼ਾਨ।

भागलपुर से कहलगांव तक प्रवासी एवं स्थानीय पक्षियों की गणना

जासं, भागलपुर : पक्षी प्रेमियों एवं नेचर एक्टिविस्टों की टीम ने विक्रमशिला गंगेटिक डॉल्फिन रिजर्व में भागलपुर से कहलगांव तक प्रवासी एवं स्थानीय पक्षियों की गणना और अध्ययन किया। पक्षी विशेषज्ञ राहुल रोहिताश्व ने कहा कि 30 किलोमीटर के दायरे में प्रवासी पक्षियों का अध्ययन किया गया।

अतिथि वन, क्लाइमेट चेंज विभाग और बॉम्बे नेचुरल हिस्ट्री सोसायटी ने की प्रवासी व स्थानीय पक्षियों की गणना

प्रवासी पक्षियों के कलरव से गुंजा विक्रमशिला डॉल्फिन रिजर्व

नई खान, खरीप संवाददाता।

भागलपुर। बिहार सरकार के पर्यावरण, वन एवं क्लाइमेट चेंज विभाग एवं बॉम्बे नेचुरल हिस्ट्री सोसायटी के संयुक्त आयोजन में पक्षी प्रेमियों एवं नेचर एक्टिविस्टों की टीम ने भागलपुर से कहलगांव तक प्रवासी एवं स्थानीय पक्षियों की गणना और अध्ययन किया। इस टीम का नेतृत्व भागलपुर के युवा पक्षी विशेषज्ञ एवं पक्षीरस बोद्धा राहुल रोहिताश्व कर रहे थे। राहुल ने बताया कि यह गणना भागलपुर के टर्नमिनल कॉलेज प्लॉट से शुरू होकर कहलगांव तक लगभग 30 किलोमीटर के दायरे में मिलने



प्रवासी पक्षी।

वाले प्रवासी पक्षियों का अध्ययन किया गया। इस बार पिछले वर्ष से गंगा में बर्ड टायरसिटी अधिक देखी गई, हालांकि पक्षियों की कम संख्या देखकर एक चिंता का

विषय है तथा साथ ही साथ टीम ने गंगीय डॉल्फिन की गतिविधि भी देखा। जिससे पक्षी प्रेमियों में काफी खुशी देखा गया। गंगा में मिलने वाले प्रमुख प्रवासी पक्षियों में रेड

क्रोस्टेड पोचार्ड, ब्रॉमन पोचार्ड, पिन्टेल डक, वार हेडेड गूज या रानहंस, गडवाल डक, लैंगर विमलिंग डक या छोटी सिल्ली, फुलबॉस विमलिंग डक या बड़ी सिल्ली, रूडी रोल्डक हैं।

क्रोस्टेड पोचार्ड, ब्रॉमन पोचार्ड, पिन्टेल डक, वार हेडेड गूज या रानहंस, गडवाल डक, लैंगर विमलिंग डक या छोटी सिल्ली, फुलबॉस विमलिंग डक या बड़ी सिल्ली, रूडी रोल्डक इत्यादि कलरवें बड़ी मात्रा में दिखे। साली खास असा पाइड अलोसेट पक्षी। वहीं इस बार पक्षी प्रेमियों ने लगातार दूसरे बार डॉल्फिन रिजर्व में कॉमन रोल्डक देखा जो एक संकटाग्रस्त प्रजाति है

तथा बालरों के दूध में काफी कफार हो दिखाई दे। राहुल ने बताया कि इस बालरव को उन्होंने पिछले बार सन 2020 में हुए भागलपुर बर्ड फेस्टिवल के उत्सवध्व में गंगा में देखा था जिस पल को वह नेतृत्व कर रहे थे। उन्होंने बताया कि इस बार गंगा में कई सालों बाद पाइड अलोसेट पक्षी भी मिली जिससे देखकर पक्षी प्रेमियों का हर्षित हुए हैं। वहीं दूसरी ओर टीम ने भी पक्षियों को देखा जैसे बूटेड ईगल, ऑस्से या मछरक, पैरिडन परलफन, मार्गो हैरिस, ब्लैक काईट, ब्रॉमन इंडियन प्रोविन्सल, रोड मार्क, टेम्पल फिट, विंटेल्ड स्विट, कॉमन रोडपापर, मार्गो रोडपापर, ग्रीन रोडपापर, डारुसी जेग मार्टिन, बॉम स्केले इत्यादि हैं। वहीं स्थानीय

पक्षियों में इस बार गंगा में शिबिलि क्योरेट, लार्न क्योरेट, लिटिल डब्ले, रिबर लेन्सिंग, रेड वॉल्टेज लेन्सिंग, इंटरमीडिएट इरो, ब्रॉमन ड्रो, जंगल ड्रो, व्हाइट पैन्टेल, ग्रे पैन्टेल, डे हेरोन, एशियन ओपनबिल स्टार्क, वूली नेकड स्टार्क, बड़ा मरुड, छोटा मरुड, रेड नेकड आर्किड, व्हाइट आर्किड, लिटिल ग्रीन प्लेकर, व्हाइट फ्रिजिलेयर, व्हाइट चरेटड बिमलिलर इत्यादि पक्षी काफी मात्रा में दिखे। इस टीम का नेतृत्व राहुल रोहिताश्व कर रहे थे। इस टीम में उनके अलावा विक्रमशिला रिजर्व, मोहम्मद शहाबाब, गंगा प्रहरी रिसर्च स्कॉलर जयकुमार जय, अर्जुन कुमार, डॉल्फिन रिजर्व एवं वन विभाग के कई सदस्य शामिल थे।

ठंड आते ही नवगछिया में विदेशी पक्षियों ने डाला डेरा

संयु. नवगछिया। ठंड आने के साथ ही विदेशी मेगमान पक्षियों का नवगछिया पहुंचना तेज हो गया है। पिछले कई वर्षों से विभिन्न किस्मों के प्रवासी पक्षी ठंड के मौसम में अपने देश से यहां आ जाते हैं। यहां के नदी, तालाब, खेत, जंगल आदि में उन्हें पर्याप्त भोजन मिलता है। यहां अंडे या बच्चे देने के लिए भी उन्हें अनुकूल मौसम मिलता है। अबतक यहां लगभग दो दर्जन किस्मों के सैलानी पक्षी यहां पहुंच चुके हैं। संभवतः को भागलपुर टोएनबो कॉलेज की जंतु विज्ञान के प्रोफेसर टीएन सिंह चौधरी पक्षीविद् राहुल कुमार, विशेषज्ञ ज्ञानचंद ज्ञानी एवं जय कुमार ने संयुक्त रूप से शील का निरीक्षण किया। उन्होंने यहां आया दर्जन से अधिक विदेशी पक्षियों को पहचाना की। यहां आने वाले पक्षी नार, बच्चों के बड़े होने पर उन्हें अपने साथ लेकर अपने देश चले जाते हैं। यहां अत्यधिक ठंड पड़ने वाले

अवकाल दो दर्जन किस्मों के सैलानी पक्षी पहुंच चुके हैं नवगछिया



नवगछिया में पक्षीयों की तस्वीर लेते पक्षी प्रेमी

क्षेत्र सड़बोरिया, मंगोलिया सहित अन्य कड़क की ठंड पड़ने वाले देशों से सैलानी पक्षी आते हैं। ठंड में बर्फबारी होने से यहां के पेड़ों पर टनका रह पाता व भोजन मिलना

आप दर्जन से ज्यादा विदेशी मेगमान पक्षी, पक्षी प्रेमियों में खुशी



नवगछिया में कलरव करते विदेशी पक्षी

कठिन हो जाता है। ऐसे में वे यहां से उड़कर कुछ समय के लिए भारत सहित कम ठंड पड़ने वाले अन्य देशों में प्रवास करने चले आते हैं। ज्ञानचंद ज्ञानी ने बताया कि यहां पर ग्रीन परलफन,

भागलपुर से पक्षी देखने पहुंचे वे गंगा ब्रसाद झील

पक्षियों के संरक्षण के लिए जागरूकता अभियान चलाया गया

इन विदेशी प्रवासी पक्षियों को किसी तरह का नुकसान न पहुंचे इससे लिए पक्षी विशेषज्ञों एवं प्रेमियों द्वारा स्थानीय लोगों के बीच जागरूकता अभियान भी चलाया गया है। वन विभाग भी इससे लिए चौकसी बरतती है। उनके प्रवास से पक्षियों पर हमला करने वाली एवं उन्हें नुकसान पहुंचाने वाली पर मजबूर रखा जा रही है। इन पक्षियों को जाल में फसकर पतवार पर बंधने वाली के खिलाफ वन विभाग के अधिकारी कार्रवाई भी करते हैं।

जंतु विज्ञान के प्रोफेसर ने बताया कि इस वर्ष बारिश कम होने से कुछ जगहों पर जलस्तर कम है। लेकिन फिर भी निरपेक्षता समय पर कई तरह के पक्षियों का यहां पहुंचना आवश्यक है।

प्रवासी पक्षियों के कलरव से गुंजायमान है डॉल्फिन सेंचुरी



पक्षियों की गणना करती टीम

□ 15 फरवरी तक चलेगी पक्षियों की गणना

भागलपुर. बिहार के पर्यावरण, वन एवं जलवायु परिवर्तन विभाग और बांबे नेचुरल हिस्ट्री सोसाइटी के संयुक्त तत्वाधान जिले में एशियन वाटरबर्ड सेंसस यानी पक्षी गणना काम जारी है। पक्षी गणना की टीम ने भागलपुर से कहलगांव के बीच गंगा नदी में विक्रमशिला गंगेटिक डॉल्फिन सेंचुरी में पक्षियों की गणना व अध्ययन किया। भागलपुर इंजीनियरिंग कॉलेज घाट से कहलगांव तक लगभग 30 किलोमीटर के दायरे गणना हुई। पिछले वर्ष की तुलना में इस बार गंगा नदी में पक्षियों की संख्या कम दिखी। टीम ने गंगेय डॉल्फिन की गतिविधि भी देखी। पक्षी गणना का काम 15 फरवरी तक चलेगा। इधर, कटिहार स्थित गंगाबिल पक्षी अभ्यारण्य में पिछले साल की तुलना में दोगुना पक्षी दिखे। भागलपुर के नारायणपुर में घटोरा वेटलैंड में बहुत ज्यादा पक्षी



प्रवास कर रहे हैं। टीम का नेतृत्व भागलपुर के पक्षी विशेषज्ञ व पर्यावरण योद्धा राहुल रोहिताश्व ने किया। साथ में विक्रमजीत सिंह, मोहम्मद शहबाज, जय कुमार जय, आनंद कुमार समेत डॉल्फिन मित्र व वन विभाग के कई कर्मी थे।

कौन-कौन सी पक्षी दिखी: गंगा नदी में प्रवासी पक्षियों में रेड क्रेस्टेड पोचार्ड, कॉमन पोचार्ड, पिनटेल डक, बार हेडेड गूज या राजहंस, गडवाल डक, लेसर विसलिंग डक या छोटी सिल्ली, फुलवॉस विसलिंग डक या बड़ी सिल्ली, रूडी शैल्डक इत्यादि काफी दिखे। संकटग्रस्त प्रजाति कॉमन शैल्डक का झुंड भी दिखा। यह पक्षी पिछली बार 2020 में भागलपुर बर्ड फेस्टिवल दौरान दिखा था।

डॉल्फिन रिजर्व एरिया में कॉमन शैल्डक पक्षी दिखा

सिटी रिपोर्टर | भागलपुर

वन विभाग और बांबे नेचुरल हिस्ट्री सोसाइटी की टीम ने संयुक्त रूप से प्रवासी पक्षियों व अन्य जलीय जीवों का अवलोकन किया। टीम का नेतृत्व पक्षी विशेषज्ञ राहुल रोहिताश्व ने किया। उन्होंने बताया कि यह गणना भागलपुर के इंजीनियरिंग कॉलेज घाट से कहलगांव तक की गई।

इस बार गंगा में मिलने वाले प्रमुख प्रवासी पक्षियों में रेड क्रेस्टेड पोचार्ड, कॉमन पोचार्ड, पिनटेल डक, बार हेडेड गूज या राजहंस, गडवाल डक, लेसर विसलिंग डक या छोटी सिल्ली, फुलवॉस विसलिंग डक या बड़ी सिल्ली, रूडी शैल्डक मिले हैं। वहीं डॉल्फिन रिजर्व क्षेत्र में कॉमन शैल्डक भी दिखा जो एक संकटग्रस्त प्रजाति है। यह बत्तखों के झुंड में कभी-कभार ही दिखता है। राहुल ने बताया कि इस बत्तख को पिछली बार 2020 में देखा गया था। टीम में विक्रमजीत सिंह, मोहम्मद शहबाज, गंगा प्रहरी, रिसर्च स्कॉलर जयकुमार जय, आनंद कुमार, डॉल्फिन मित्र व वन विभाग के जवान शामिल थे। अवलोकन करने के बाद टीम अपनी रिपोर्ट तैयार करेगी और वन विभाग, बांबे नेचुरल हिस्ट्री सोसाइटी को सौंपेगी, ताकि रिकॉर्ड रखा जा सके कि साल दर साल पक्षियों की संख्या में कितनी वृद्धि या कमी आई है। दरअसल, डीएफओ श्वेता कुमारी ने पर्यावरणविदों को पक्षियों व जलीय जीवों के अवलोकन को लेकर अलग-अलग टीम वन विभाग की ओर से उपलब्ध कराया था।

गणना: कम हो रही पक्षियों की संख्या चिंताजनक

भागलपुर, वरीय संवाददाता। बीएनएचएस (बांबे नेचुरल हिस्ट्री सोसाइटी), नेचर एक्टिविस्ट्स व वन विभाग की संयुक्त टीम ने सोमवार को सुबह से लेकर शाम तक विक्रमशिला गंगेटिक डॉल्फिन रिजर्व यानी भागलपुर से लेकर कहलगांव तक गंगा किनारे डेरा डाले पक्षियों की गणना की।

टीम ने अपनी गणना में जहां पक्षियों की कम हो रही संख्या पर चिंता जताई तो वहीं संकटग्रस्त पक्षी की श्रेणी में शामिल कॉमन शैल्डक देखकर टीम खुश हो गई। राहत की बात ये है कि कई साल के बाद पाइड आवोसेट पक्षी भी

दिखा है। टीम में शामिल राहुल रोहिताश्व ने बताया कि पिछले साल की तुलना में इस साल गंगा क्षेत्र में बर्ड डायवर्सिटी अधिक देखी गई। टीम ने गंगेय डॉल्फिन की गतिविधि भी देखी। सोमवार को हुई गणना व अध्ययन में गंगा क्षेत्र में रेड क्रेस्टेड पोचार्ड, कॉमन पोचार्ड, पिनटेल डक, बार हेडेड गूज या राजहंस, गडवाल डक, लेसर विसलिंग डक या छोटी सिल्ली, फुलवॉस विसलिंग डक या बड़ी सिल्ली, रूडी शैल्डक बड़ी संख्या में दिखे। टीम में विक्रमजीत सिंह, मो. शहबाज, जय कुमार, आनंद कुमार आदि शामिल रहे।

सर्वेक्षण में मिले प्रवासी पक्षी

[illegible]

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अलास्का से 5000 किमी दूर भागलपुर पहुंचे मशहूर शिकारी पक्षी ओस्प्रे

[illegible]

अलास्का का पक्षी ऑस्प्रे ओढ़नी डैम में कर रहा मछलियों का शिकार

- आरम्भान घुने वाला हेडिड गूज का शिकार भी ओढ़नी डैम में कर रहा है विचरण
- बांधे नेचुरल हिस्ट्री सोसायटी व पर्यावरण व जलवायु परिवर्तन के कुशलध्यान में एशियाई पक्षी गणना के तम में टीम को ओढ़नी जलाशय में दिखे दुर्लभ प्रवासी पक्षी

प्रतिनिधि, बांका

ओढ़नी जलाशय पर्यटकों के साथ प्रवासी पक्षियों के लिए भी उपयुक्त केंद्र बन गया है. मंगलवार को हुए एशियाई पक्षी गणना के दौरान यहां कई दुर्लभ प्रजाति के प्रवासी पक्षियों को देखा गया. टीम ने खास तौर पर अलास्का की शिकारी पक्षी ऑस्प्रे को भी यहां मछलियों का शिकार करते हुए पाया. साथ ही मोरिल्ला व अलास्का के प्रवासी पक्षी चार हेडिड गूज का शिकार भी यहां नजर आया. यह पक्षी सर्वोच्च



प्रवासी पक्षी.

उंचाई पर उड़ान भर सकता है. इसके अलावा लालसर खिलत अन्य पक्षियों को भी विचरण करते हुए पाया, जिससे गणना टीम उत्साह से भर गयी. बगहाल, सभी जिलों में इन दिनों स्थानीय एवं प्रवासी पक्षियों की गणना की जा रही है. बीते दिनों बांधे नेचुरल हिस्ट्री सोसायटी व पर्यावरण एवं

जलवायु परिवर्तन के संयुक्त तत्वावधान में एशियाई पक्षी गणना के क्रम में टीम ओढ़नी जलाशय पहुंची. टीम में एडवन्सरी कोऑर्डिनेटर डा. होस्त चौधरी मुख्य रूप से इसका नेतृत्व कर रहे थे. यह सर्वे तैयारी चार को जा रही है. करीब 80 वेटलैंड्स में पक्षियों की गणना की जायेगी. उन्होंने

कहा कि पक्षियों के साथ, सर्वेक्षण तथा संरक्षण से जुड़े हुए इस कार्यक्रम में वा गणना अधिक में पक्षी विज्ञान के क्षेत्र में गीत का फलर शामिल होगा. टीम में सुमित कुमार, जय कुमार जय, पिंटू कुमार आजाद, विजय शर्मा व आनंद कुमार झा प्रमुख रूप से शामिल थे.

पिछले वर्षों की तुलना में बड़ी पक्षियों की संख्या

2022 में भी यह सर्वे हुआ था. टीम के मुखिया, विगत वर्ष की तुलना प्रवासी पक्षियों में वृद्धि हुई है. खास बात यह है कि विविध प्रजाति के पक्षी यहां पाए जा रहे हैं. प्रवासी पक्षी डैम के अलावा आकरा में भी उड़ान भरते हैं. साथ ही अपने कतार से सोना बढ़ा रहे हैं सर्वेक्षण दल के साथी सदस्य इन पक्षियों को देखकर काफी उत्साह से भर उठे. उनसे मुताबिक, इस टीम ने भागलपुर में भी सर्वे किया, जिसमें पक्षियों की संख्या कम पायी गयी. परंतु ओढ़नी डैम में अच्छी-खासी संख्या ने उनके कार्यों को सार्थक कर दिया.

Wednesday, February 7, 2024
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Gaya District

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शुरुआत

प्रवासी पक्षियों एवं वेटलैंड पर आश्रित पक्षियों की होगी गणना

वेटलैंड्स में तीसरे एशियन वाटरबर्ड की होगी सेन्सस

बीएनएम@गोविंदगढ़ी

पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, बिहार सरकार के द्वारा वेटलैंड इंटरनेशनल साउथ एशिया एवं बोम्बे नेचुरल हिस्ट्री सोसाइटी, मुंबई के सहयोग से सम्पूर्ण बिहार में आज 25 जनवरी से आगामी 10 फरवरी 2024 तक तीसरे एशियन वाटरबर्ड सेन्सस (गणना) किया जाएगा।

मोतिहारी शहर के लक्ष्मी नारायण दुबे महाविद्यालय के जन्तुविज्ञान विभाग के सहायक प्राध्यापक, बर्ड-मैन डॉ. चम्पारण और एशियन वाटरबर्ड सेन्सस के स्टेट कोऑर्डिनेटर डॉ. नीरज कुमार के अनुसार पूर्वी चम्पारण, शिवहर एवं मुजफ्फरपुर जिला में अवस्थित झीलों एवं नदियों में भी मोतिहारी वन प्रमंडल, मुजफ्फरपुर वन प्रमंडल एवं सीतामढ़ी (शिवहर) वन प्रमंडल के सहयोग

से प्रवासी पक्षियों एवं वेटलैंड पर आश्रित पक्षियों एवं उनके अधिवास के विस्तृत अध्ययन के लिए एशियन वाटरबर्ड सेन्सस होने जा रहा है।

इन तीनों जिलों में दिनांक 26 जनवरी से 2 फरवरी 2024 तक प्रवासी पक्षियों एवं वेटलैंड पर आश्रित पक्षियों का गणना किया जाएगा। डॉ. नीरज कुमार एवं डॉ. कुशाग्र राजेन्द्र के नेतृत्व में पूर्वी चम्पारण, शिवहर एवं मुजफ्फरपुर जिला के चयनित 7 झीलों, 3 नदियों एवं मेहसी प्रखण्ड स्थित भीमलपुर जंगल का एशियन वाटरबर्ड का गणना एवं अध्ययन किया जाएगा।

डॉ. कुमार के द्वारा तीसरे एशियन वाटरबर्ड सेन्सस (गणना) के लिए पूर्वी चम्पारण जिला के सरोवर मन, बसमानपुर मन, चिलराओं मन, सोनबरसा मन, गंडक नदी, बूढ़ी गंडक नदी भीमलपुर जंगल; शिवहर जिला में

चागमती नदी एवं मुजफ्फरपुर जिले के कांटी मन, झांझा मन और मनिका मन का अनुमोदन किया है।

एशियन वाटरबर्ड सेन्सस (गणना) के बाद प्राप्त डाटा (रेपोर्ट) को पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, बिहार सरकार को समर्पित किया जाएगा एवं उसके बाद उसका डाटा एनालिसिस कर के एशियन वाटरबर्ड सेन्सस के वार्षिक रिपोर्ट में प्रकाशित किया जाएगा। अब तक हुए दोनों एशियन वाटरबर्ड सेन्सस का ऐन्यूअल रिपोर्ट पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, बिहार सरकार के द्वारा प्रकाशित किया जा चुका है।

एशियन वाटरबर्ड सेन्सस के स्टेट कोऑर्डिनेटर डॉ. नीरज कुमार ने बताया कि बिहार में वर्ष 2022 में पहली बार हुए एशियन वाटरबर्ड सेन्सस में राज्य के 23 जिलों के कुल 68 एवं वर्ष 2023 में हुए दूसरे एशियन

वाटरबर्ड सेन्सस में 26 जिलों के कुल 72 चयनित झीलों, सरोवरों, नदियों एवं अन्य महत्वपूर्ण जलाशयों में प्रवासी पक्षियों एवं वेटलैंड पर आश्रित पक्षियों का गणना किया गया था।

इस वर्ष पूरे बिहार में 87 चयनित झीलों, सरोवरों, नदियों एवं अन्य महत्वपूर्ण जलाशयों में प्रवासी पक्षियों एवं वेटलैंड पर आश्रित पक्षियों का गणना तथा प्रवासी एवं जलीये पक्षियों के अधिवास का भी अध्ययन किया जाएगा। इस अध्ययन के लिए अत्याधुनिक डीएसएलआर कैमरा, दूरबीन, जीपीएस इत्यादि का उपयोग किया जाएगा। डॉ. नीरज कुमार एवं डॉ. कुशाग्र राजेन्द्र (एग्मिटी यूनिवर्सिटी हरियाणा) के अलावे प्रशंत कुमार (काल्मीकिनगर), गुडू कुमार (इनवाबा, पहाड़पुर) एवं वन विभाग के सदस्य भी इस गणना में शामिल होंगे।

Buxar District

गोकुल जलाशय में 71 प्रजाति के एक हजार प्रवासी पक्षी

बक्सर, हिन्दुस्तान प्रतिनिधि। जिला का अमूल्य धरोहर गोकुल जलाशय और गंगा नदी में वन विभाग द्वारा वन प्रमंडल पदाधिकारी, भोजपुर के दिशा-निर्देश पर पक्षी वैज्ञानिक अरविन्द मिश्र के नेतृत्व में जिले में पक्षी गणना कराया गया। गोकुल जलाशय में 71 प्रजाति के लगभग 01 हजार स्थानीय और प्रवासी पक्षी पाया गया।

वहीं गंगा नदी में चौसा के रानी घाट से ब्रह्मपुर के बिहारी घाट तक 65 प्रजाति के लगभग 05 हजार पक्षी पाये गये। पक्षी गणना के क्रम में गंगा नदी में दो लुप्तप्राय प्रजाति के पक्षी कौमन

■ जैव विविधता बचाने के लिए पक्षी का संरक्षण आवश्यक

शेलडक, पेरिग्रीन फाल्कन भी देखने को मिला। इस संबंध में वन प्रक्षेत्र पदाधिकारी एसएन चौधरी ने बताया कि पक्षी भी हमारे खाद्य श्रृंखला का प्रमुख अंग है। इस कार्यक्रम को सफल बनाने में नमामि गंगे के डीपीएम शैलेश कुमार राय, वनकमी अमिताभ सौरभ, नीतीश कुमार, राजकुमार, महिमा राम, अनिश कुमार, प्रतिमा कुमारी व रंजन कुमार यादव ने सहायनीय योगदान दिया।

Jamui District

अंतरराष्ट्रीय पक्षी वैज्ञानिक डॉ अशद रहमानी पहुंचे नागी पक्षी आश्रयणी, किया अवलोकन

□ पक्षी विशेषज्ञ अरविंद मिश्र के साथ कर रहे हैं पक्षियों का अवलोकन

प्रतिनिधि, झाड़

अगामी 17 से 19 फरवरी तक होने वाले द्विदिन नाम पक्षी मोतोसव को सफलता को लेकर वन विभाग सफाई कई तरह के कार्यक्रम का आयोजन कर रहा है, बुधवार को अंतरराष्ट्रीय पक्षी वैज्ञानिक डॉ अशद रहमानी कोरुपुल्लस व मंदर नेपर के पक्षी विशेषज्ञ अरविंद मिश्र के साथ नागी व नकटी पक्षी आश्रयणी पहुंचे, धूम-धूम कर पक्षियों का जलवा ले रहे हैं, इस दौरान उन्होंने साधारण पक्षियों का एक-एक कर अवलोकन किया व उसके बारे में विस्तार पूर्वक जानकारी ली, उन्होंने स्वदेशी पक्षियों के बारे में जानकारी ली व उसकी माला का भी अध्ययन किया, पूरे दिन पक्षी विशेषज्ञों ने व उनके पक्षियों का मुआयना किया, चर्चित पक्षियों के रान-सान व उनकी विशेषताओं का भी अध्ययन किया, वैज्ञानिक डॉ रहमानी ने कहा कि नागी व नकटी पक्षी आश्रयणी व उनके पक्षियों के लिए विशेष स्थान है, चर्चित पक्षी विशेषज्ञ, जल विशेषज्ञ, मृग विशेषज्ञ, पर्यावरणविद् समेत अन्य वैज्ञानिकों के लिए भी अद्भुत जगह है, इस जगह पर व उनके विभिन्न प्रकार के साधारण व स्वदेशी पक्षियों की माला है, चर्चित वार्डों में वैज्ञानिक छाटा भी लगे हैं जो अपनी ओर आकर्षित कर रही हैं, उन्होंने कहा कि यह नागी-नकटी पक्षी आश्रयणी को लोक टंग में संरक्षित किया जाएगा तो इसे पाले दिने में यह ठोस ही पक्षी आश्रयणी वैज्ञानिकों के लिए एक बुकबुलार रिसर्च सेंटर बनकर खड़ा हो जाएगा, जहां वैज्ञानिकों के लिए असीम संभावनाएं हैं, उन्होंने वार्डों के अधिकाधिक, खासकर मंदर नेपर सह कोरुपुल्लस मुहूर्त के पक्षी विशेषज्ञ अरविंद मिश्र का अपार स्वागत करते हुए कहा कि जिस दिन वे वार्डों के पक्षियों की अपनी सफाई देखकर 2021 में पक्षी मोतोसव "कारनाम" के रूप में करण, पक्षियों के लक्षण अवलोकन के बाद अब दूसरी पक्षी मोतोसव का आयोजन होने जा रहा है, स्वदेशी पक्षियों के लिए यह खुशखबरी का समय है, उन्होंने स्वदेशी वन विभाग के



नागी- नकटी का अवलोकन करते पक्षी वैज्ञानिक व अन्य,

नागी पक्षी महोत्सव के आयोजन को लेकर चला जागरूकता अभियान



डॉ. अशद रहमानी टीम को स्वागत करते अधिकारी,

□ नुककड़ नाटक के माध्यम से लोगों को किया जागरूक

झाड़, अगामी 17 से 19 फरवरी तक आयोजित नागी पक्षी मोतोसव की सफलता को लेकर वन विभाग सफाई कई तरह के कार्यक्रम का आयोजन कर रहा है, बुधवार को अंतरराष्ट्रीय पक्षी वैज्ञानिक डॉ अशद रहमानी कोरुपुल्लस व मंदर नेपर के पक्षी विशेषज्ञ अरविंद मिश्र के साथ नागी व नकटी पक्षी आश्रयणी पहुंचे, धूम-धूम कर पक्षियों का जलवा ले रहे हैं, इस दौरान उन्होंने साधारण पक्षियों का एक-एक कर अवलोकन किया व उसके बारे में विस्तार पूर्वक जानकारी ली, उन्होंने स्वदेशी पक्षियों के बारे में जानकारी ली व उसकी माला का भी अध्ययन किया, पूरे दिन पक्षी विशेषज्ञों ने व उनके पक्षियों का मुआयना किया, चर्चित पक्षियों के रान-सान व उनकी विशेषताओं का भी अध्ययन किया, वैज्ञानिक डॉ रहमानी ने कहा कि नागी व नकटी पक्षी आश्रयणी व उनके पक्षियों के लिए विशेष स्थान है, चर्चित पक्षी विशेषज्ञ, जल विशेषज्ञ, मृग विशेषज्ञ, पर्यावरणविद् समेत अन्य वैज्ञानिकों के लिए भी अद्भुत जगह है, इस जगह पर व उनके विभिन्न प्रकार के साधारण व स्वदेशी पक्षियों की माला है, चर्चित वार्डों में वैज्ञानिक छाटा भी लगे हैं जो अपनी ओर आकर्षित कर रही हैं, उन्होंने कहा कि यह नागी-नकटी पक्षी आश्रयणी को लोक टंग में संरक्षित किया जाएगा तो इसे पाले दिने में यह ठोस ही पक्षी आश्रयणी वैज्ञानिकों के लिए एक बुकबुलार रिसर्च सेंटर बनकर खड़ा हो जाएगा, जहां वैज्ञानिकों के लिए असीम संभावनाएं हैं, उन्होंने वार्डों के अधिकाधिक, खासकर मंदर नेपर सह कोरुपुल्लस मुहूर्त के पक्षी विशेषज्ञ अरविंद मिश्र का अपार स्वागत करते हुए कहा कि जिस दिन वे वार्डों के पक्षियों की अपनी सफाई देखकर 2021 में पक्षी मोतोसव "कारनाम" के रूप में करण, पक्षियों के लक्षण अवलोकन के बाद अब दूसरी पक्षी मोतोसव का आयोजन होने जा रहा है, स्वदेशी पक्षियों के लिए यह खुशखबरी का समय है, उन्होंने स्वदेशी वन विभाग के



नुककड़ नाटक करते कलाकर,

को पक्षी मोतोसव के माध्यम जागरूकता किया जायेगा, उन्होंने बताया कि कार्यक्रम को सफल बनाने को लेकर पर्यावरण, वन व जलवायु परिकल्पना विभाग द्वारा भी कई तरह का कार्यक्रम किया जा रहा है, इसके अलावा मेरठन चौड़, खेलकूद प्रतियोगिता, विद्यालय के छात्र-छात्राओं के बीच किंबदं, नागी प्रमाण समेत अन्य कई तरह का कार्यक्रम करण जा रहा है,

अधिकारी, जलजीवीपक्षी व अन्य पक्षियों को और अधिक मन से काम करने की अपील की, मौके पर

लोक कुमार, कानन कुमार, मनीष कुमार यादव, सौरभ कुमार, प्रदीप कुमार, अरविंद मिश्र

अलावा परेक्टर अनीश कुमार, सहायक सचिव सौरभ चौधरी भी थे,

मध्य शीतकालीन जल पक्षी गणना की वार्षिक कवायद शुरू जलपक्षियों की गणना में सरार-लालसर का दीदार

नागी-नकटी

झाड़ा, निज संवाददाता। जमुई जिले के जलाशयों में मिड विंटर वाटर बर्ड्स सेंसस (एडब्ल्यूसी) यानि जलपक्षियों की गणना की वार्षिक कवायद बुधवार से परवान चढ़ गई है। पटना में पक्षियों पर तीन दिवसीय अंतर्राष्ट्रीय कार्यशाला के तुरंत बाद शुरू हुई मध्य शीतकालीन जल पक्षी गणना की उक्त वार्षिक कवायद के तहत जमुई जिले के विभिन्न हिस्सों में अवस्थित जलाशयों में विचरण कर रहे देसी व प्रवासी जल पक्षियों की गणना की मैराथन कवायद जारी है। सुबे के पर्यावरण, वन एवं जलवायु परिवर्तन विभाग एं बॉम्बे नेचुरल हिस्ट्री सोसाइटी (बीएनएचएस) के तत्वाधान में एडब्ल्यूसी, वेटलैंड्स इंटरनेशनल के स्टेट कॉर्डिनेटर एवं जाने-माने पक्षी विशेषज्ञ अरविंद मिश्रा की अगुवाई में जिले में चल रही इस साल की एडब्ल्यूसी की बड़ी बात यह रही कि इस बार इस टीम को इतेफाक वश वैश्विक ख्याति प्राप्त पक्षी वैज्ञानिक डॉ. असद रहमानी का भी सान्निध्य व मार्ग दर्शन नसीब हुआ। डॉ. रहमानी नागी एवं बेलाटांड में जलपक्षी गणना में न सिर्फ शरीक हुए अपितु भागलपुर से आए टीम सदस्यों यथा दीपक कु. झुनूं व वतन कुमार समेत स्थानीय बर्ड गाइड संदीप कुमार, मनिष कु. यादव व प्रदीप कुमार आदि को एडब्ल्यूसी के तरीके एवं पक्षियों को पहचानने के गुर भी सिखाए। बता दें कि डॉ. रहमानी करीब 18 वर्षों तक बीएनएचएस के निदेशक भी रह चुके हैं। इस टीम को जमुई के नव पदस्थापित डीएफओ आईएफएस तेजस जायसवाल का भी सरोहनीय सहयोग रहा है। एसीएफ राजीव कुमार तथा वनपाल अनिश कुमार, बर्ड गाइड संदीप व प्रदीप व मनीष व सहदेव यादव समेत कई बर्ड गाइड एवं वनकर्मी भी सहयोगी की भूमिका में दिखे।

■ विभाग को तितलियों के पार्क का भी दिया सुझाव

■ कई तरह के प्रवासी पक्षी अटखेलियां करते दिखे



नागी पक्षी अभ्यारण्य में पक्षियों की गणना में मशगुल वन विभाग की टीम। • हिन्दुस्तान

स्टॉक सुरमा ल समेत कई प्रजातियों के प्रवासी मेहमान मिले

इस सीजन में नागी व कटी जलाशयों में जलस्तर पर्याप्त देखा गया। बताया कि उक्त दोनों जलाशयों में चली एडब्ल्यूसी की दो दिनी कवायद के क्रम में दोनों पक्षी आश्रयणियों में विभिन्न प्रजातियों के 5-5 हजार पक्षी देखे गए हैं। इनमें सबसे अधिक तादाद लालसर एवं सरार नामक पक्षियों की पाई गई है। नागी में राजहंस (बार हेडेड गुज) के अलावा ग्रे लेग गुज भी खासी संख्या में अटखेलियां करते मिले हैं। जबकि तीन अदद स्टॉक सुरमाल भी दिखे।

नागी-नकटी को देख पक्षी वैज्ञानिक गदगद

उधर नागी, नकटी को देख खासे खुश व गदगद नजर आए डॉ. रहमानी ने कहा कि इन जलाशयों में पक्षियों का इतनी तादाद में व इतने करीब से दीदार होने का मतलब है कि यहां पक्षियों के जीवन को किसी प्रकार का खतरा नहीं है। पक्षी विज्ञानी डॉ. रहमान ने विभाग को यहां तितलियों का भी एक पार्क बनाने का मशवरा दिया है। जबकि श्री मिश्रा ने नागी में नौकायन से पक्षियों के सुकून में खलल पड़ने व इसके मद्देनजर उनके दूर जा सिमटने की बात को रेखांकित किया।

एशिया उप महाद्वीप स्तर पर बनती हैं नीतियां

विशेषज्ञ अरविंद मिश्रा का कहना था कि मिड विंटर वाटर बर्ड्स यानि मध्य शीतकालीन जल पक्षी गणना की उक्त वार्षिक कवायद एशिया उप महाद्वीप स्तर पर हर साल होती आई है। बीते साल भी 8 जनवरी से उक्त कवायद शुरू हुई थी कवायद के क्रम में प्रजातिवार पक्षियों की गणना के अलावा उनके आवागमन के रूट, प्रवास के हाल-हालातों पर विस्तृत अध्ययन करते हुए उनकी संख्या में कमी-वृद्धि समेत उनकी प्रकृति-प्रवृत्ति का भी गहराई से जायजा लिया जाता है।

नागी पक्षी महोत्सव 2024. कई विद्यालयों के छात्र-छात्राओं के बीच विज्ञ व पेंटिंग प्रतियोगिता का आयोजन

चला जागरूकता अभियान, बच्चों ने ली जानकारी



मध्य प्रदेश की राजधानी के बारे में जानना ही है तो मध्य प्रदेश की राजधानी



पुनर्विचार के अतिरिक्त १९७७-७८ वर्ष के अन्त

पेंटिंग प्रतियोगिता में
शिवम ने मारी बाजी

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1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 26

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इस बात पर बहुत ही अच्छे ढंग से जासूसीय ध्यान है, लेकिन पक्षी पशुनाम को एक खटपट भरापत्र जो बर्फ, अतिथिपत्रों ने बताया कि डिप्टिफ पक्षी पशुनाम को मालातः व खटपट भरी है, किन्तु यह बात खर खटपटकारी

नागी में नौकायन से पक्षियों को होता है व्यवधान : अरविंद मिश्रा



विशेषज्ञ अर्थविदः निष्कर्षः कृतः

हुआ। बिहार के माधव प्रीतमजी ने जल पक्षी गाना एक बार्ड पर चढ़ाया है जिसे मैं सुन रहा हूँ, जिसका नेतृत्व श्रीमान्महोदय जी ने किया है।

समस्या प्रत्येक बिंदुओं पर काम कर रही है, वहीं नयी की और अधिक विकसित करने के लिए जिने के प्रत्येक अंशों को इसके बारे में

विश्वविद्यालयीन शिक्षण क्षेत्र में देश के अंतरराष्ट्रीय स्तर पर ख्याति पाने वाली महिला डॉ. अमरावत रावानी ने इस जलपरीक्षण में न सिर्फे शिक्षण, बल्कि अपनी पाली अभ्यास

जानकारी दी जा रही है, खुले तौर पर
लोकसभों के बीच कई तरह
की जांचें हो रही हैं, मुकदमों
के द्वारा नयी की भाव को मि

अंतरराष्ट्रीय पक्षी वैज्ञानिक ने नागी का शिवा जायजा

[illegible]

पूरीक बलबल जे राहै, उन्ही बलबल
कि जिल के बिलेटल, तौने, जल
बलबलबल, बलबल, बिलबलबल
बल बलबल पर बलबल बलबल

[illegible]

सकल आयेजन्त क्रिया ज्ञाता
इसके माध्यम से होती है।
अध्यायी के बारे में विस्तार
जानकारी दी जा रही है।

[illegible]

भक्ति विवाद में हिस्सा लें

यह आधीन काल का है।
इसके लिए यद्यपि नतीजा
है कि अन्तर्गत का वह
काय का रहे है।

य. आधा दर्शन घाटल, एक

भूमि विवाद में हिलक झड़प, आधा दर्जन घाटा, एक रेक्टर

जायजा • नागी में राजहंस के साथ ग्रे लैंग गूज की भी छासी संख्या देखी, 5 हजार कई प्रजातियों के पक्षी मिले
नागी आश्रयणी में तितलियों का पार्क बनाने का सुझाव

भास्कर न्यूज इंडिया

नागों पक्षी आश्रयणी केंद्र सहित अन्य जलशाय स्थलों पर विदेशी मेमाना पक्षियों की गणना कार्य की जा रही है। जिसका नेतृत्व पक्षी विशेषज्ञ अरविंद मिश्रा कर रहे हैं। पक्षी गणना में देश के अंतरराष्ट्रीय स्तर के पक्षी विशेषज्ञ डॉ. असद रहमानी ने भी शामिल हैं। पक्षी विशेषज्ञ ने बताया कि यहां जल पक्षी गणना का कार्य पटना में आयोजित पक्षियों पर तीन दिवसीय अंतरराष्ट्रीय कार्यशाला के तुरंत बाद शुरू हुआ जिसका आयोजन बिहार के पर्यावरण, वन एवं जलशाय परिवारित विभाग और बॉम्बे नेचुरल हिस्ट्री सोसाइटी के



गुरुवार को नागों पक्षी आश्रयणी में पक्षियों के गणना में जुटे पक्षी विशेषज्ञ।

संयुक्त तत्वावधान में हुआ। वन प्रमंडल के वन प्रमंडल पदाधिकारी तेजस जायसवाल का इस कार्यक्रम में मुख्य सहयोग रहा तथा वनपाल अनीश राठौर की जहायता से सारी व्यवस्था की

गई। पिछले दो दिनों में नागी और नकटी पक्षी अभयारण्य में जल पक्षियों की गणना की गई। इस वर्ष नागी-नकटी अभयारण्यो में जल का स्तर अच्छा देखा गया। नागी और नकटी में विभिन्न प्रजातियों के

5-5 हजार पक्षी देखे गए। जिनमें सबसे ज्यादा संख्या लातमर और सरार पक्षियों की थी। नागी में राजहंस (बार हेडेड गूज) के साथ ग्रे लैंग गूज की भी खासी संख्या देखी गई। प्रवासी स्टोर्ज

सुरमात् को भी उड़ते देखा गया। इसके अलावा चैदा, छोटी मुगांभी, गिरी और मछरणा जैसे पक्षियों को देखना भी काफ़ी सुखद रहा। डॉ. रमणी ने कहा कि नागी-नकरी में पक्षियों को इतने नजदीक से देख पाने का मौल्य है कि इस इलाके में पक्षियों का रिकॉर्ड भी होता। कहा कि यहां के जलाशयों का जल भी अत्यंत स्वच्छ है और जलकुम्भी जैसी घातक वनस्पतियाँ मुक्त हैं। उन्होंने नागी में तितलियों का पाक बनाने का भी सुझाव दिया। अखंड मिश्रा ने बताया कि नागी में पर्यटकों को कराई जले खले नौकायन के कारण यहां पक्षियों को व्यवधान हो रहा है और और वे दूर जाकर सिमट रहे हैं।

Nalanda District

नालंदा जिले में 70 प्रजातियों के 50 परिवारों में बंटे 2,576 पक्षी मिले

खास
बिहार-राज्य, कार्यालय संवाददाता। पक्षी गणना 2023 पूरी कर ली गयी है। नालंदा जिले में 70 प्रजातियों के 50 परिवारों में बंटे 2,576 पक्षी मिले हैं। वर्ष 2022 की पक्षी गणना से 33 प्रजातियाँ और 28 परिवारों के 1,514 पक्षी अधिक मिले हैं। सबसे खास बात यह कि पक्षियों के लिए ये नये स्थल बने हैं। इनमें राजमहल मंदगी जलाशय (हर घर गंगाजल के तिर के तट) और जंझरपुरीय मल्लिक विद्यापीठ में बने गये स्थल शामिल हैं।
एशियन जलीय पक्षी गणना, एडवेंचर पक्षी के समन्वयक राहुल

एशियन जलीय पक्षी गणना वर्ष 2022 से पर्यावरण वन एवं जलवायु परिवर्तन विभाग काई संस्थाओं और बाई बांधों को मदद से जलीय पक्षियों की गणना सफलतापूर्वक कर रहा है। इसका मुख्य उद्देश्य अधिकतर प्रजातियों को मै-प्रजनन अवधि

नालंदा में पक्षी गणना के लिए बनी टीम में शामिल सीडर राहुल कुमार और अन्य। •संवाददाता



(टंड का मौसम) के दौरान भंडापुरी और नदी क्षेत्र में जलपक्षी आवासी के मूलखंडन और पक्षियों की आबादी का अनुसंधान करना है। 1987 में हुई शुरुआत: भारतीय उपमहाद्वीप में एशियाई जलीय पक्षी गणना की शुरुआत वर्ष 1987 में की गयी थी। इससे पहले देश में पक्षियों के प्रमुख क्षेत्रों में अनुसंधान करने के लिए पक्षी गणना, विशेष रूप से एशिया और आस्ट्रेलिया तक फैल गयी है। इस प्रकार, इस गणना में संयुक्त पक्षी गणना-ऑस्ट्रेलियाई

इन लोगों ने की गणना

एशियाई जलीय पक्षी गणना में बाई बांध राहुल कुमार, नालंदा विश्वविद्यालय के विद्यापीठ प्रमुख, कुमार, सीन अद्विती, विजय शर्मा, दिवाकर कुमार, प्रमोद मंडी, सुनील प्रकाश, योगेश्वर झा, अजय शर्मा, राहुल कुमार, अशोक, वाराणसी सुभद्रा कुमार, पक्षी वैद्य श्रीमती उषा शर्मा मौजूद थे।

प्रति उनकी टीम को सहायता करने में मदद किया जाता है। जिले में जलीय पक्षी गणना में पक्षी वैद्य और नालंदा विश्वविद्यालय के छात्र-छात्राओं ने भी बड़ी-बड़कर विस्तार दिया।
यहाँ मिले प्रवासी पक्षियों के झुंड : गणना के दौरान टीम ने पावापुरी जल बांध में महुआ, नौदल खोखना, बार्न स्कोर, कॉटन टील, ग्रेट ग्रेट, ग्रेट ग्रेट और ग्रेट ग्रेट जलाशयों में नौदल पिपेट, नौदल शोवर, गार्मरी, जे-बेरेड लार्ग, बार्न स्कोर, टोन विंग टील, ग्रेट ग्रेट, टोना प्लेफिकार, ब्लैक रेडस्टार्ट, ब्लाकपथ रिड बार्न, बूट, रिट्रीन वैपेट, जे बैकटेल, ब्लाट वैपेट, पर्पल हेडर, जे हेरॉन आदि पक्षियों देखने को मिले।

Patna District

THE TIMES OF INDIA

SUNDAY TIMES OF INDIA, PATNA
APRIL 14, 2024

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Central University of South Bihar

Waterbird census reveals growth in species

5,538 Waterbirds Of 200 Species Identified In Gaya, Aurangabad, Nawada & Bhojpur

B K Mishra / TSS

Patna: In a significant development, the Asian Waterbird Census (AWC), conducted in Gaya, Aurangabad, Nawada and Bhojpur districts by research scholars of life science department of Central University of South Bihar (CUSB), has identified 5,538 waterbirds of 200 species, regis-

15% RISE IN POPULATION

ring a rise of 10-15% in their population.

The AWC is an annual event organized by the Wetland International and Asian Wetland Bureau to monitor the population of waterbirds in the Asian region. In the survey, a good number of long-distance migratory birds were recorded. These migratory birds, inclu-



The AWC indicated that Bihar is home to a good number of migratory birds

de Bar-headed goose, Red-crested pochard, Gadwall, Northern pintail, Eurasian Curlew, Ruddy shelduck, Common Pochard, Black-tailed godwit, Woolly-necked stork, and Common redshank.

"The state environment, forest and climate change department had taken the waterbird census as a special task and tried to cover nearly 75 wetlands of Bihar. As one of the coordinators I was assigned the responsibility covering the survey under AWC-2024 in four districts of the state," said Ram Pratap Singh, head of life science department, CUSB.

According to Singh, in Nawada district, the survey was conducted in Hardiya Dam where 1,425 waterbirds of 47 species were found. In Aurangabad, the survey was conducted at Indrapuri barrage wetland in three phases. In the main count, 2,543 birds of 34 species were recorded. In Gaya district, the survey was carried out in two wetlands — in Barwadih wetland and Barandih wetland. While 84 birds of 19 species

were spotted in the former, 238 birds of 34 species were recorded in the latter. In Bhojpur district, the survey was carried out from Mahuli Ghat to Maner where 1,243 birds of 47 species were recorded.

"The AWC indicated that Bihar is home to a good number of migratory birds which cover both Central Asian Flyway (CAF) and East Asian Australasian Flyway (EAAF) of international importance and these wetland habitats provide a rich biodiversity along with the livelihood supports to millions of people living in and around these wetlands," Singh added.

The team of research scholars who actively participated in the survey as bird spotters included S K Imran, Divya Kumari, Trisha Mondal, Manisha Kumari and Sampad Samrat Senapaty.

राजधानी जलाशय में प्रवासी पक्षियों की हुई गणना



राजधानी जलाशय में एशियन जलीय पक्षियों की गणना की गई। प्रवासी पक्षियों में मुख्य रूप से गडवाल, सैंड पीपर, नौदल शोवर, कॉमन टील, गरगेनी, लेसर विसलिंग टील, फेरुजिनस डक व स्थानीय पक्षियों की संख्या 250 संख्या पाई गई है।

हिन्दुस्तान

पटना से गयी तीन सदस्यीय टीम ने नेपाल सीमा से कोसी क्षेत्र तक पक्षियों की गणना की कोसी के चौर में 53 प्रजाति के देसी-विदेशी पक्षियों का प्रवास

खुशखबरी

रंजीत

सहरसा। कोसी नदी का चौर (वेटलैंड) पक्षियों की कलरव के गुंज रहा है। अब यह क्षेत्र प्रवासी पक्षियों का नया बसेरा बन चुका है। पटना से आई तीन सदस्यीय विशेषज्ञों की टीम ने नेपाल सीमा से कोसी क्षेत्र तक शनिवार की देर शाम तक पक्षियों की गणना की। जिसमें कोसी नदी किनारे आद्र भूमि में स्थित चटर (चौर) क्षेत्र में 53 प्रजातियों के 1237 देशी व विदेशी पक्षी विशेषज्ञों को दिखे। जल पर निर्भर 366 और पानी में रहने वाले 871 पक्षियों को देखा गया। चार प्रकार की ऐसी पक्षियों को देखा गया जो पिछले साल नहीं नजर आई थीं।

व्हाइट आई पोचर्ड, करलू सैंडपाइपर, रिवर लेफ्टविंग, विम्ब्ले

1237 पक्षी देसी और विदेशी कोसी के वेटलैंड में विचरते आये नजर

08 सौ 71 पानी में रहने वाले व 366 जल पर निर्भर पक्षी दिखे व चार प्रकार के पक्षी पिछले साल नहीं दिखे थे

जैसे कई ऐसी संकटग्रस्त प्रजाति के पक्षियों को देखा गया जो विश्व में कम नजर आता है और विलुप्ति की कगार पर है। बिहार सरकार के वन पर्यावरण एवं जलवायु परिवर्तन विभाग के सौजन्य से की गई पक्षी गणना सर्वे में पक्षी विशेषज्ञ सह बम्बई नेचुरल हिस्ट्री सोसायटी के सदस्य व इंडियन बर्ड कंजर्वेशन नेटवर्क के सदस्य नवीन कुमार, पटना स्थित जूलॉजिकल सर्वे ऑफ इंडिया भारत सरकार के संयुक्त निदेशक सह वरीय वैज्ञानिक डॉ. गोपाल



■ व्हाइट आई पोचर्ड, करलू सैंडपाइपर, नॉर्डन शोभलर जैसी विदेशी पक्षी दिखे

शर्मा और आशीष सोल थे। टीम का सहयोग सहरसा-सुपौल के डीएफओ प्रतीक नारायण ने किया।

51 किमी तक पक्षियों की गणना वरीय वैज्ञानिक डॉ. गोपाल शर्मा ने कहा कि नेपाल बॉर्डर (सीमा) वीरपुर बराज से कोसी महासेतु तक 51 किमी की दूरी में कोसी नदी किनारे वेट भूमि में स्थित चौर में शनिवार की देर शाम तक पक्षी गणना की गई। पिछले साल पहली बार दिखी रेड क्रेस्टेड पोचर्ड पक्षी इस बार नहीं मिली। पक्षी विशेषज्ञ नवीन

कुमार ने कहा कि यूरोप तरफ से आने वाली संकटग्रस्त प्रजाति की पक्षी करलू सैंडपाइपर कोसी महासेतु से पांच किमी आगे बढ़ने पर 21 की संख्या में मिली। वीरपुर बराज से दस किमी पहले तीन की संख्या में रिवर लेफ्टविंग पक्षी दिखी।

यूरोपिया व एशियन देश के पश्चिम भाग से आने वाली व्हाइट आई पोचर्ड पक्षियों की करीब 20 की संख्या में भूपतिवाही के पास देखा गया। इसके अलावा विम्ब्ले, यूरोप की नॉर्डन शोभलर, यूरेशिया की गैडवॉल और देशी पक्षी लिटिल रिंग्ड प्लोवर, रेड नेफ आईडी (करलुल) सहित अन्य पक्षियों को देखा गया। कोसी क्षेत्र की आबोहवा पक्षियों के अनुकूल है। इस कारण यहां हर साल बड़ी संख्या में विदेशी पक्षी आते हैं। विशेषज्ञ का कहना है कि कोसी नदी किनारे की आद्र भूमि में स्थित चटर पर्यावरण और जलस्रोत के खराब से पक्षियों के अनुकूल है।

हिन्दुस्तान

पटना से आए तीन सदस्यीय विशेषज्ञों की टीम ने नेपाल सीमा से कोसी क्षेत्र तक पक्षियों की गणना की कोसी चौर: 53 प्रजाति के पक्षियों का प्रवास

हि एक्सप्लूरेटिव

रंजीत

सहरसा। पटना से आई तीन सदस्यीय विशेषज्ञों की टीम ने नेपाल सीमा से कोसी क्षेत्र तक शनिवार की देर शाम तक पक्षियों की गणना की। जिसमें कोसी नदी किनारे आद्र भूमि में स्थित चटर (चौर) क्षेत्र में 53 प्रजातियों के 1237 देशी व विदेशी पक्षी विशेषज्ञों को दिखे।

जल पर निर्भर 366 और पानी में रहने वाले 871 पक्षियों को देखा गया। चार प्रकार की ऐसी पक्षियों को देखा गया जो पिछले साल नहीं नजर आई थीं। व्हाइट आई पोचर्ड, करलू सैंडपाइपर, रिवर लेफ्टविंग, विम्ब्ले जैसी कई ऐसी संकटग्रस्त प्रजाति के पक्षियों को देखा गया जो विश्व में कम नजर आता है और विलुप्ति की कगार पर है। बिहार सरकार के वन पर्यावरण एवं जलवायु परिवर्तन विभाग के सौजन्य से की गई पक्षी गणना सर्वे में पक्षी विशेषज्ञ सह बम्बई नेचुरल हिस्ट्री सोसायटी के सदस्य व इंडियन बर्ड कंजर्वेशन नेटवर्क के सदस्य नवीन कुमार, पटना स्थित जूलॉजिकल सर्वे ऑफ इंडिया भारत सरकार के संयुक्त

012 सौ 37 पक्षी देसी और विदेशी 366 जल पर निर्भर पक्षी दिखे

008 सौ 71 पानी में रहने वाले और 366 जल पर निर्भर पक्षी दिखे

■ व्हाइट आई पोचर्ड, करलू सैंडपाइपर, नॉर्डन शोभलर जैसी विदेशी पक्षी दिखी

कोसी नदी के चौर क्षेत्र में पक्षियों को देखने में मदद करने दिखेगा।



निदेशक सह वरीय वैज्ञानिक डॉ. गोपाल शर्मा और आशीष सोल थे। टीम का सहयोग सहरसा-सुपौल के डीएफओ प्रतीक नारायण ने किया।

वरीय वैज्ञानिक डॉ. गोपाल शर्मा ने कहा कि नेपाल बॉर्डर (सीमा) वीरपुर बराज से कोसी महासेतु तक 51 किमी की दूरी में कोसी नदी किनारे वेट भूमि में स्थित चौर में शनिवार की देर शाम तक पक्षी गणना की गई।

पिछले साल पहली बार दिखी रेड क्रेस्टेड पोचर्ड पक्षी इस बार नहीं मिली। पक्षी विशेषज्ञ नवीन कुमार ने कहा कि यूरोप तरफ से आने वाली संकटग्रस्त प्रजाति की पक्षी करलू

सैंडपाइपर कोसी महासेतु से पांच किमी आगे बढ़ने पर 21 की संख्या में मिली। वीरपुर बराज से दस किमी पहले तीन की संख्या में रिवर लेफ्टविंग पक्षी दिखी। यूरोपिया व एशियन देश के पश्चिम भाग से आने वाली व्हाइट आई पोचर्ड पक्षियों की करीब 20 की संख्या में भूपतिवाही के पास देखा गया। इसके अलावा विम्ब्ले, यूरोप की नॉर्डन शोभलर, यूरेशिया की गैडवॉल और देशी पक्षी लिटिल रिंग्ड प्लोवर, रेड नेफ आईडी (करलुल) सहित अन्य पक्षियों को देखा गया।

संकटग्रस्त पक्षियों को सुरक्षा नहीं मिली तो कुछ सालों में ही जावोकी

कीटनाशक का प्रयोग नहीं करने की सलाह

वेटलैंड्स धनी आद्र भूमि जल पर निर्भर और पानी में रहने वाली पक्षियों का बसेरा बनता है। रक्षा और बाढ़ की कमी यहां होती है और यह बाढ़ व सूखे से निपटने में सहायक होता है। लेकिन जलरी कटाव और कृषि भूमि के विस्तार की खाद पड़ने से यहां की पक्षी जनसंख्या के बीच घटन और कीटनाशकों के अत्यधिक प्रयोग से इनका जनसंख्या घटने में पड़ता जा रहा है।

कोसी नदी किनारे की आद्र भूमि (वेटलैंड क्षेत्र) में स्थित चटर पर्यावरण और जलस्रोत के खराब से पक्षियों के अनुकूल है। अगर उन्हें सुरक्षा प्रदान किया जाय तो इनके दृष्टिकोण स्वच्छ पर्यावरण बनने के साथ-साथ रोजगार का जन्म बनेगा।

गणना रिपोर्ट वन विभाग को सौंपेगी: पक्षियों की गणना से संबंधित रिपोर्ट विशेषज्ञों की टीम वन पर्यावरण एवं जलवायु परिवर्तन विभाग पटना को सौंपेगी। सौराज्य है कि पिछले साल कोसी के चटर में 52 प्रजाति की 1500 देशी व विदेशी पक्षी दिखी थी।

कोसी के चौर में 53 प्रजाति के देसी-विदेशी पक्षियों का प्रवास

खुशखबरी

■ रंजीत

सहरसा। कोसी नदी का चौर (वेटलैंड) पक्षियों की कलरव के गुंजर रहा है। अब यह क्षेत्र प्रवासी पक्षियों का नया बसेरा बन चुका है। पटना से आई तीन सदस्यीय विशेषज्ञों की टीम ने नेपाल सीमा से कोसी क्षेत्र तक शनिवार की देर शाम तक पक्षियों की गणना की। जिसमें कोसी नदी किनारे आद्र भूमि में स्थित चउर (चौर) क्षेत्र में 53 प्रजातियों के 1237 देशी व विदेशी पक्षी विशेषज्ञों को दिखे। जल पर निर्भर 366 और पानी में रहने वाले 871 पक्षियों को देखा गया। चार प्रकार की ऐसी पक्षियों को देखा गया जो पिछले साल नहीं नजर आईं थे।

व्हाइट आई पोचर्ड, करलू सैंडपाइपर, रिवर लेफ्टविंग, व्हिम्ब्रेल जैसी कई ऐसी संकटग्रस्त प्रजाति के पक्षियों को देखा गया जो विश्व में कम नजर आता है और विलुप्ति की कगार पर है। बिहार सरकार के वन पर्यावरण एवं जलवायु परिवर्तन विभाग के सौजन्य से की गई पक्षी गणना सर्वे में पक्षी विशेषज्ञ सह



■ व्हाइट आई पोचर्ड, करलू सैंडपाइपर, नॉर्दर्न शोमलर जैसी विदेशी पक्षी दिखे

1237 पक्षी देसी और विदेशी कोसी के वेटलैंड में विचरते आये नजर

08 सौ 71 पानी में रहने वाले व 366 जल पर निर्भर पक्षी दिखे व चार प्रकार के पक्षी पिछले साल नहीं दिखे थे

बम्बई नेचुरल हिस्ट्री सोसायटी के सदस्य व इंडियन बर्ड कंजर्वेशन नेटवर्क के सदस्य नवीन कुमार, पटना स्थित जूलॉजिकल सर्वे ऑफ इंडिया भारत सरकार के संयुक्त निदेशक सह वरीय वैज्ञानिक डॉ. गोपाल शर्मा और आशीष सील थे। टीम का सहयोग सहरसा-सुपौल के डीएफओ प्रतीक नारायण ने किया।

Vaishali District

वैशाली में प्रवासी पक्षियों व वेटलैंड पर आश्रित पक्षियों की होगी गणना

हाजीपुर. बिहार के 80 से ज्यादा वेटलैंड में प्रवासी पक्षियों एवं वेटलैंड पर आश्रित पक्षियों की गणना पर्यावरण वन एवं जलवायु परिवर्तन विभाग, बिहार सरकार द्वारा कराया जा रहा है। यह गणना इंटरनेशनल साउथ एशिया एवं मुंबई नेचुरल हिस्ट्री सोसाइटी मुंबई के सहयोग से बिहार में 25 जनवरी से 15 फरवरी के बीच किया जना है। इसे लेकर एशियन वाटर बर्ड काउंट 2024 के कोऑर्डिनेटर एवं बर्ड एक्सपर्ट एसएनएस कॉलेज हाजीपुर के जंतु विज्ञान के विभागाध्यक्ष डॉ. सत्येंद्र कुमार के साथ वैशाली वन प्रमंडल पदाधिकारी अमित कुमार ने बैठक की। डीएफओ

अमित कुमार ने बताया कि वैशाली जिले के अंतर्गत चयनित तीन वेटलैंड एवं गंडक नदी में जलीय पक्षी की गणना की तिथि पर निर्णय लिया गया है। तीन एवं चार फरवरी को बरेला झील में, पांच फरवरी को सलाहा चंवर में, नौ फरवरी को लालगंज पुरनिया झील में तथा 10 फरवरी को गंडक नदी में जलीय पक्षी एवं प्रवासी पक्षी की गणना की जायेगी। वहीं वेटलैंड मैन डॉ. सत्येंद्र ने बताया कि गणना के बाद प्राप्त डाटा को पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार को सौंपा जायेगा। सरकार द्वारा डाटा एनालिसिस कर वाटर बर्ड गणना का वार्षिक रिपोर्ट प्रकाशित करेंगे। इस

गणना में बर्डर के रूप में देवचंद कॉलेज के रसायन विज्ञान के विभागाध्यक्ष डॉ. अजीत कुमार, पटना यूनिवर्सिटी के रिसर्च स्कॉलर कोमल, मगध विश्वविद्यालय की रिसर्च स्कॉलर अर्चना कुमारी, जेपी यूनिवर्सिटी के रिसर्च स्कॉलर राजेश कुमार एवं राजन कुमार, आरएन कॉलेज के छात्र पुष्कर कुमार सिंह एवं कुमार अनंत, एसएन एस कॉलेज की छात्रा खुशबू कुमारी एवं छोटी कुमारी भाग लेंगी। उन्होंने बताया कि बिहार में पहली बार वर्ष 2022 में, दूसरी बार वर्ष 2023 में वाटर बर्ड सेंसस कराया गया था और वर्ष 2024 में तीसरी बार होना है।





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बरैला झील में एशियन जलीय पक्षियों की गणना शुरू

हाजीपुर, निज संवाददाता। बिहार के बरैला झील सहित पूरे देश में एशियन जलीय पक्षियों की गणना शुरू हो गई है। इस अभियान के तहत पिछले दो दिनों से वैशाली जिले के बरैला झील में जलीय पक्षियों की गणना का काम जारी है। बरैला वेटलैंड के अंदर से चिड़ियों की चहचहाट लोगों को जहां आनंदित कर रही है।

वहीं आकाश में हजारों की संख्या में प्रवासी पक्षियों के मंडराने से झील का दृश्य मनमोहक हो गया है। गणना पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार एवं मुंबई नेचुरल हिस्ट्री सोसाइटी के तत्वाधान में की जा रही

है। इस एशियन जलीयपक्षी गणना 2024 के को-ऑर्डिनेटर सह हाजीपुर के एसएनएस कॉलेज के जंतु विज्ञान विभाग के विभागाध्यक्ष सह बर्ड एक्सपर्ट डॉ. सत्येंद्र कुमार बरैला झील में अपने टीम के साथ गणना कार्य में जुटे हुए हैं। टीम में मगध विश्वविद्यालय की जंतु विज्ञान की शोध छात्रा अर्चना कुमारी, जेपी विश्वविद्यालय के शोध छात्र राजन कुमार एवं राजेश कुमार, एसएनएस कॉलेज की जंतु विज्ञान की छात्रा खुशबू कुमारी, आरएन कॉलेज हाजीपुर के जंतु विज्ञान के छात्र कुमार अनंत तथा वन विभाग से वनरक्षी अजीत कुमार साथ में पक्षी मित्र सरोज कुमार,

- विदेशी चिड़ियों की आवाज गणनाकर्मियों को कर रहा आनंदित
- दुर्लभ पक्षियों के झील में मंडराने से दिख रहा मनमोहक दृश्य



जंतु विज्ञान विभाग के विभागाध्यक्ष सह बर्ड एक्सपर्ट डॉ. सत्येंद्र कुमार बरैला झील में टीम के साथ। • हिन्दुस्तान

रामबाबू सहानी, लालबहादुर, कुमोद चौधरी एवं नायिक अशोक कुमार शामिल हैं। टीम में शामिल

लोग चार घंटे तक बरैला झील में नाव से पक्षी की खोज करते रहे। इस दौरान इस झील में बहुत सारे

काफ़ी संख्या में पहुंची हैं विदेश चिड़ियां

बरैला झील में अभी पानी काफी है और विदेशी चिड़ियां भी काफी संख्या में पहुंची हैं। विदेशी पक्षियां आकाल में उड़ते नजर आते हैं। झील में हमेशा से विदेशी चिड़ियों का अन्न-जाना लगा रहता है। झील में अवैध रूप से जाल द्वारा पक्षी चिड़ियों को फंसाया जाता रहा है। गणना कार्य के दौरान झील में भ्रमण के दौरान एक भी जाल नजर नहीं आया। झील को जाल से मुक्त करने में पक्षी मित्र का सजगता काफी सराहनीय है।

पक्षी देखने को मिले। जिसकी रिपोर्ट कोऑर्डिनेटर डॉ. कुमार वन विभाग को सौंप देंगे।



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बरैला : दो वर्षों में बढ़ी प्रवासी पक्षियों की संख्या

झील के इलाके में यदि मोटे अनाज की खेती होने लगे तो प्रवासी पक्षी दिन में भी रुक सकेंगे, देसराज धान चाव से खाते थे पक्षी

हाजीपुर, मुख्य संवाददाता। झील बरैला में प्रवासी पक्षी पिछले दो वर्षों में बढ़े हैं और यह खंपण हो रहा है पक्षी मित्रों की बतौर। दो वर्षों में पक्षी मित्रों ने अनेकों जाल काटने का काम किया। इससे शिकारियों में भोड़ा डर आया और जागरूकता भी आई है। अब असहज के लोग भी शिकार करने से डरने लगे हैं।

पक्षियों का शिकार पहले से कम हो रहा है। यह कहता है को-ऑर्डिनेटर सह पक्षी विशेषज्ञ डॉ. सत्येंद्र कुमार वन। उन्होंने कहा कि यदि इस इलाके में मोटे अनाज की खेती हो तो प्रवासी पक्षी यहां दिन में भी रुकेंगे। उन्होंने उदाहरण देते हुए बताया कि पहले इस इलाके में देसराज धान की खेती होती थी, जो बड़े चाव से प्रवासी पक्षी खाते थे। इससे पक्षी संख्या घटती चली गई। इससे पक्षियों का अनाज बचता तो वे रुकते। अभी ये दिन में इस-उधर भोजन की तलाश में निकल जाते हैं और शाम में हजारों की संख्या में लौटते हैं तो मनमोहक दृश्य उभरता है। वैशाली जिले के झील बरैला में एशियन



झिले के झील बरैला में नरकट के बीच बेटे और कुछ उड़ते पक्षी। • हिन्दुस्तान

जलीयपक्षी गणना 2024 में टीम के साथ पहुंचे थे। बरैला झील में जलीयपक्षी गणना पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार एवं मुंबई नेचुरल हिस्ट्री सोसाइटी के तत्वाधान में यह गणना हुई। पहले दिन मगध विश्वविद्यालय की जंतु विज्ञान की शोध छात्रा अर्चना

कुमारी, जेपी विश्वविद्यालय के शोध छात्र राजन कुमार एवं राजेश कुमार और वन विभाग से वनरक्षी अजीत कुमार साथ में पक्षी मित्र सरोज कुमार, रामबाबू सहानी, लालबहादुर, कुमोद चौधरी एवं नायिक अशोक कुमार रहे। टीम ने चार घंटे तक बरैला झील में नाव से पक्षियों की खोज की। उन्होंने बताया

कि झील में अभी पानी काफी है और विदेशी चिड़िया भी काफी संख्या में आकाश में उड़ते दिखे। बोले कि चार घंटे के भ्रमण के दौरान एक भी जाल नजर नहीं आया। बरैला झील को जाल से मुक्त करने में पक्षीमित्र अहम भूमिका निभा रहे हैं।

इन पक्षियों को यहां पर देखा गया

- पक्षी सुक-सुक उड़ जाते हैं और दिनभर भोजन की तलाश के बाद शाम को लौटते हैं
- पक्षी विशेषज्ञ डॉ. सत्येंद्र कुमार टीम के साथ पहुंचे एशियन जलीयपक्षी गणना करने



झील बरैला के बीच में बना बाउंट (टीला) जिस पर लगे हैं पक्षी। • हिन्दुस्तान

: बोले कि पक्षी से परे झील में बहुत सारे पक्षी मिले, जिसमें प्रमुख है रेड क्रैस्टेड पोचार्ड, रे हेरोन, रेड नेपेड आर्किबस, एशियाई ओपन बिल, लिटिल कोर्बेट, बुरा लार्क, कटरन ईगल की दो प्रजातियां, साइबेरियन स्टोनपेट भी देखी गई।

चिड़ियों के चहचहाट कर रही

आनंदित: बरैला वेटलैंड के अंदर से चिड़ियों के चहचहाट लोगों को जहां आनंदित करती रही, वहीं ऊपर आकाश में हजारों की संख्या में प्रवासी पक्षियों के मंडराने से झील का दृश्य मनमोहक हो गया है। बरैला झील में पानी आसपास की कई नदियों से आता है, लेकिन उसका डरारण नहीं होता।

खबरें

सलहा वेटलैंड में कई तरह की पक्षी
प्रजाति देखी गई: डॉ सत्येंद्र

हाजीपुर/वैशाली (चौथी वाणी) हाजीपुर एशियन जलीवपक्षी गणना 2024 के तहत पांचवे दिन राजापाकड़ के सलहा चौध में जलीयपक्षी का गणना किया गया। यह गणना पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार



एवं मुंबई नेचुरल हिस्ट्री सोसाइटी के तत्वाधान में हुआ। एशियन जलीयपक्षी गणना 2024 के कोऑर्डिनेटर एस एन एस कॉलेज हाजीपुर के जंतु विज्ञान विभाग के विभागाध्यक्ष सह बर्ड एक्सपर्ट वेटलैंड मैन डॉ सत्येंद्र कुमार की टीम द्वारा गणना किया गया। सलह्रा चौड़ के अंदर टीम द्वारा भ्रमण कर पक्षी की गणना की गई। डॉ सत्येंद्र कुमार ने बताया कि सलह्रा चौर के जल में कई पक्षी तैरते नजर आए। इस चौर में पानी भी है और कई तरह की पक्षी की प्रजाति देखी गई है। इनके टीम में डी सी कॉलेज हाजीपुर के रसायन विज्ञान विभाग के विभागाध्यक्ष डॉ अजीत कुमार, जेपी विश्वविद्यालय के शोध छात्र राजेश कुमार,



हाजीपुर 11-02-2024

गंडक नदी में प्रवासी पक्षियों
के आगमन से दृश्य मनमोहक

विश्वी रिपोर्टर/ २५ अक्टूबर

एशियन जर्नीय पक्षी गणना 2024 के तहत आज जिला क्षेत्र में गंडक के पेरारती जिला क्षेत्र में जर्नीय पक्षी को गणना किया गया। यह गणना पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार एवं मुंबई नेचुरल हिस्ट्री सोसायटी के तत्वावधान में हुआ। इस एशियन जर्नीय पक्षी गणना 2024 के कोऑर्डीनेटर एवं एम एवं कॉलेज हाजीपुर के जंतु विज्ञान विभाग के विभागाध्यक्ष सह चार्ट एकाउंट एशियन जर्नीय पक्षी सर्वेक्षक कुमारी टीएम द्वारा गणना किया गया। इस गणना में पेरारती जिला में प्रमंडल के प्रमंडल प्रमुख(पर्यटन) अजय कुमार



गंडक नदी में पक्षियों का दृश्य एवं पक्षियों का गणना करने वाली टीम

भी भाग लिया। गंडक नदी के
अंदर लगभग चालीस किलोमीटर
तक टीम द्वारा प्रभाव कर पक्षी
की गणना की गई। डॉ. सत्येन्द्र कुमार ने
बताया कि जहाँ चिड़ियों के
चहलचढ़ाह लोगों को आकर्षित
करते हैं वहीं पक्षियों ने भी दृश्य
की मनमोहक बनाया है। इन्होंने
यह भी कहा कि गणना में गंडक

नदी में कई तरह की पक्षी की
प्रजाति देखी गई है। इनके टीम में
विद्वंस आनंद, जेजे
किरवाचवाल के साथ
पुष्कर कुमार, अरुण कर्तव्य
रामेश कुमार सिंह, वन विभाग से
हजीबुर रेह रजौत कुमार राय,
बनस्पत वैज्ञानिक कुमार सहित
कई लोगों साथ रहे।

बरैला झील में हुआ एशियन जलीयपक्षी गणना : डॉ सत्येंद्र

हाजीपुर। बिहार सहित पूरे देश में एशियन जलीयपक्षी गणना 2024 चल रहा है। इसी के तहत आज पहला दिन वैशाली जिला के बरैला झील में जलीयपक्षी का गणना किया गया। यह गणना पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार एवं मुंबई नेचुरल हिस्ट्री सोसाइटी के तत्वाधान में हुआ। इस एशियन जलीयपक्षी गणना 2024 के कोऑर्डिनेटर एस एन एस कॉलेज



पक्षियों का निरीक्षण व गणना करते सदस्य।

हाजीपुर के जंतु विज्ञान विभाग के विभागाध्यक्ष सह बर्ड एक्सपर्ट वेटलैंड मैन डॉ सत्येंद्र कुमार अपने टीम के साथ गणना किया। इनके टीम में मगध विश्वविद्यालय की जंतु विज्ञान की शोध छात्रा अर्चना कुमारी, जेपी विश्वविद्यालय के शोध छात्र राजन कुमार एवं राजेश कुमार, एस एन एस कॉलेज की जंतु विज्ञान की छात्रा खुशबू कुमारी, आर एन कॉलेज हाजीपुर के जंतु विज्ञान के छात्र कुमार अनंत तथा वन विभाग से वनरक्षी अजीत कुमार साथ में पक्षीमित्र सरोज कुमार, रामबाबू सहनी, लालबहादुर, कुमोद चौधरी एवम नाविक अशोक कुमार रहे। यह टीम लगातार चार घंटे तक बरैला झील में नाव से पक्षी की खोज करते रहे। इस झील में बहुत सारे पक्षी देखने को मिले जिसका रिपोर्ट कोऑर्डिनेटर डॉ कुमार वन विभाग को सौंप देंगे। वेटलैंड मैन डॉ सत्येंद्र कुमार ने बताया कि इस

बरैला झील में अभी पानी काफी है और विदेशी चिड़िया भी काफी संख्या में आकाश में उड़ते नजर आते हैं। इन्होंने यह भी बताया की इस झील में हमेशा से विदेशी चिड़िया का आना होता रहा है परंतु जाल द्वारा पूर्व में चिड़ियों को फसाया जाता रहा है लेकिन इस बार चार घंटे के भ्रमण के दौरान एक भी जाल नजर नहीं आया। इस बरैला झील को जाल से मुक्त करने में पक्षीमित्र का सजगता कारण है। चारों पक्षीमित्र एक नाभिक के साथ हमेशा झील का दौरा कर जाल न लगे इस पर निगरानी रखते हैं। गणना भ्रमण के बाद डॉ सत्येंद्र ने कहा कि बिहार के वेटलैंड प्रवासी प्रजातियों के पक्षियों का डेरा है साथ ही वेटलैंड एक समृद्ध जैव विविधता का परिचायक भी है, यही कारण है की वेटलैंड को बायोलॉजिकल सुपरमार्केट भी कहा जाता है।

वैशाली में प्रवासी पक्षियों एवं वेटलैंड पर आश्रित पक्षियों की होगी गणना : डॉ सत्येंद्र

दस्तक प्रभात प्रतिनिधि

पटना। पर्यावरण वन एवं जलवायु परिवर्तन विभाग, बिहार सरकार द्वारा पूरे बिहार के 80 से ज्यादा वेटलैंड में प्रवासी पक्षियों एवं वेटलैंड पर आश्रित पक्षियों की गणना होनी है। यह गणना इंटरनेशनल साउथ एशिया एवं मुंबई नेचुरल हिस्ट्री सोसाइटी मुंबई के सहयोग से बिहार में 25 जनवरी से 15 फरवरी के बीच किया जाएगा। एशियन वाटर बर्ड काउंट 2024 के कोऑर्डिनेटर एवम बर्ड एक्सपर्ट एस एन एस कॉलेज हाजीपुर के जंतु विज्ञान विभाग के विभागाध्यक्ष वेटलैंड मैनेज डॉ सत्येंद्र कुमार के साथ वैशाली वन प्रमंडल पदाधिकारी अमित कुमार ने बैठक की। बैठक के बाद डी एफ ओ अमित कुमार ने बताया कि वैशाली जिला के अंतर्गत चयनित तीन वेटलैंड एवं गंडक नदी में जलीय पक्षी की गणना के तिथि पर निर्णय लिया गया है। दिनांक 3 एवम 4 फरवरी को बरैला झील में, 5 फरवरी को सलहा चौर में, 9 फरवरी को लालगंज पुरैनिया झील में तथा 10 फरवरी को गंडक नदी में जलीय पक्षी एवं प्रवासी पक्षी की गणना की जाएगी। वेटलैंड मैनेज डॉ सत्येंद्र ने बताया कि गणना के बाद प्राप्त डाटा को पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार को समर्पित किया जाएगा जिसे सरकार द्वारा डाटा एनालिसिस कर वाटर बर्ड गणना का वार्षिक रिपोर्ट प्रकाशित होगी। इस गणना में बर्डर के रूप में देवचंद कॉलेज के रसायन विज्ञान के विभागाध्यक्ष डॉ अजीत कुमार, पटना यूनिवर्सिटी के रिसर्च स्कॉलर कोमल, मगध विश्वविद्यालय की रिसर्च स्कॉलर अर्चना कुमारी जे पी यूनिवर्सिटी के रिसर्च स्कॉलर राजेश कुमार एवम राजन कुमार, आर एन कॉलेज के छात्र पुष्कर कुमार सिंह एवम कुमार अनंत, एस एन एस कॉलेज की छात्रा खुशबू कुमारी एवम छोटी कुमारी भाग लेंगी। इसयह भी बताया की बिहार में पहली बार 2022 में, दूसरी बार 2023 में वाटर बर्ड सेंसस कराया गया था और 2024 में तीसरी बार होना है।

बरैला झील में हुई एशियन जलीय पक्षियों की गणना



बरैला झील में पक्षियों की गणना करती टीम।

हाजीपुर। पूरे देश में चल रहे एशियन जलीयपक्षी गणना 2024 के तहत वैशाली जिला में पहले दिन शनिवार को बरैला झील में जलीय पक्षी की गणना की गयी। यह गणना पर्यावरण, वन एवं जलवायु परिवर्तन विभाग र एवं मुंबई नेचुरल हिस्ट्री सोसाइटी के तत्वाधान में हुई। इस एशियन जलीय पक्षी गणना 2024 के कोऑर्डिनेटर एसएनएस कॉलेज हाजीपुर के जंतु विज्ञान विभाग के विभागाध्यक्ष सह बर्ड एक्सपर्ट डॉ सत्येंद्र कुमार अपने टीम के साथ गणना कर रहे हैं। इनकी टीम में मगध विश्वविद्यालय की जंतु विज्ञान की शोध छात्रा अर्चना कुमारी, जेपी विश्वविद्यालय के शोध छात्र राजन कुमार एवं राजेश कुमार, एसएनएस कॉलेज की जंतु विज्ञान की छात्रा खुशबू कुमारी, आरएन कॉलेज हाजीपुर के जंतु विज्ञान के छात्र कुमार अनंत तथा वन विभाग से

वनरक्षी अजीत कुमार साथ में पक्षीमित्र सरोज कुमार, रामबाबू सहनी, लालबहादुर, कुमोद चौधरी एवं नाविक अशोक कुमार शामिल हैं। इस टीम ने लगातार चार घंटे तक बरैला झील में नाव से पक्षी की खोज की। इस झील में बहुत सारे पक्षी देखने को मिले, जिसकी रिपोर्ट कोऑर्डिनेटर डॉ कुमार वन विभाग को सौंपेंगे। डॉ सत्येंद्र ने बताया कि इस बरैला झील में अभी पानी काफी है और विदेशी चिड़िया भी काफी संख्या में आकाश में उड़ती नजर आती है। इस झील क्षेत्र में हमेशा से विदेशी चिड़ियों का आना होता रहा है। गणना भ्रमण के बाद उन्होंने कहा कि बिहार के वेटलैंड प्रवासी प्रजातियों के पक्षियों का डेरा है। वेटलैंड एक समृद्ध जैव विविधता का परिचायक भी है। यही कारण है कि वेटलैंड को बायोलॉजिकल सुपर मार्केट भी कहा जाता है।

बरैला झील में एशियन जलीय पक्षियों की गणना

जागरण संवाददाता, हाजीपुर : बिहार सहित पूरे देश में एशियन जलीय पक्षी गणना 2024 चल रहा है। इसी के तहत शनिवार के दिन झिले के बरैला झील में जलीय पक्षियों की गणना की गई। यह गणना पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, बिहार सरकार एवं मुंबई नेचुरल हिस्ट्री सोसाइटी के तत्वाधान में हुआ। इस एशियन जलीय पक्षी गणना 2024 के कोऑर्डिनेटर एवं एसएनएस कॉलेज, हाजीपुर के जंतु विज्ञान विभाग के विभागाध्यक्ष सह बर्ड एक्सपर्ट डॉ सत्येंद्र कुमार ने अपनी टीम के साथ गणना की।

टीम में मगध विश्वविद्यालय की जंतु विज्ञान की शोध छात्रा अर्चना कुमारी, जेपी विश्वविद्यालय के शोध छात्र राजन कुमार एवं राजेश कुमार, एसएनएस कॉलेज की जंतु विज्ञान की छात्रा खुशबू कुमारी, आरएन कॉलेज हाजीपुर के जंतु विज्ञान के छात्र कुमार अनंत तथा वन विभाग से वनरक्षी अजीत कुमार के साथ में पक्षी मित्र सरोज कुमार, रामबाबू सहनी, लालबहादुर, कुमोद चौधरी एवं नाविक अशोक कुमार थे। यह

टीम लगातार चार घंटे तक बरैला झील में नाव से पक्षी की खोज करते रहे। इस झील में बहुत सारे पक्षी देखने को मिले, जिसकी रिपोर्ट कोऑर्डिनेटर डॉ कुमार वन विभाग को सौंप देंगे। उन्होंने बताया कि इस बरैला झील में अभी पानी काफी है और विदेशी चिड़िया भी काफी संख्या में आकाश में उड़ते नजर आते हैं। इस झील में हमेशा से विदेशी चिड़ियों का आना होता रहा है, परंतु जाल द्वारा पूर्व में चिड़ियों को फंसाया जाता रहा है, लेकिन इस बार चार घंटे के भ्रमण के दौरान एक भी जाल नजर नहीं आया।

बताया गया कि इस बरैला झील को जल से मुक्त करने में पक्षी मित्र की सजगता प्रमुख कारण है। चारों पक्षी मित्र एक नाविक के साथ हमेशा झील का दौरा कर जाल न लगे इस पर निगरानी रखते हैं। गणना भ्रमण के बाद डॉ सत्येंद्र ने कहा कि बिहार के वेटलैंड प्रवासी प्रजातियों के पक्षियों का डेरा है साथ ही वेटलैंड एक समृद्ध जैव विविधता का परिचायक भी है। यही कारण है कि इसे बायोलॉजिकल सुपर मार्केट भी कहा जाता है।



बरैला में एशियन जलीय पक्षियों की गणना के दौरान गणना टीम © अजयरा



हाजीपुर 31-01-2024

वैशाली में प्रवासी पक्षियों और वेटलैंड पर आश्रित पक्षियों की होगी गणना

सिटी रिपोर्टर | हाजीपुर

पर्यावरण वन एवं जलवायु परिवर्तन विभाग, बिहार सरकार द्वारा पूरे बिहार के 80 से ज्यादा वेटलैंड में प्रवासी पक्षियों एवं वेटलैंड पर आश्रित पक्षियों की गणना होनी है। यह गणना इंटरनेशनल साउथ एशिया एवं मुंबई नेचुरल हिस्ट्री सोसाइटी मुंबई के सहयोग से बिहार में 25 जनवरी से 15 फरवरी के बीच किया जाएगा। एशियन वाटर बर्ड काउंट 2024 के कोऑर्डिनेटर एवं बर्ड एक्सपर्ट एसएनएस कॉलेज हाजीपुर के जंतु विज्ञान विभाग के विभागाध्यक्ष वेटलैंड मैनेजिंग डॉ. सत्येंद्र कुमार के साथ आज वैशाली वन प्रमंडल पदाधिकारी

अमित कुमार ने बैठक की। बैठक के बाद डीएफओ अमित कुमार ने बताया कि वैशाली जिला के अंतर्गत चयनित तीन वेटलैंड एवं गंडक नदी में जलीय पक्षी की गणना के तिथि पर निर्णय लिया गया है। दिनांक 3 एवं 4 फरवरी को बरैला झील में, 5 फरवरी को सलहा चौर में, 9 फरवरी को लालगंज पुरैनिया झील में तथा 10 फरवरी को गंडक नदी में जलीय पक्षी एवं प्रवासी पक्षी की गणना की जाएगी। वेटलैंड मैनेजिंग डॉ. सत्येंद्र ने बताया कि गणना के बाद प्राप्त डाटा को पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार को समर्पित किया जाएगा। जिसे सरकार द्वारा डाटा एनालिसिस

कर वाटर बर्ड गणना का वॉल रिपोर्ट प्रकाशित होगी। इस गणना बर्डर के रूप में देवचंद कॉलेज रसायन विज्ञान के विभागाध्यक्ष अजीत कुमार, पटना यूनिवर्सिटी रिसर्च स्कॉलर कोमल, विश्वविद्यालय की रिसर्च स्कॉलर अर्चना कुमारी, जेपी यूनिवर्सिटी रिसर्च स्कॉलर राजेश कुमार राजन कुमार, आरएन कॉलेज छात्र पुष्कर कुमार सिंह एवं वु अनंत, एस एन एस कॉलेज छात्रा खुशबू कुमारी एवं डॉ. कुमारी भाग लेंगी। यह भी बर्ड की बिहार में पहली बार 2022 दूसरी बार 2023 में वॉटर बर्ड गणना कराया गया था और 2024 में तीसरी बार होना है।



हाजीपुर 11-02-2024

गंडक नदी में प्रवासी पक्षियों के आगमन से दृश्य मनमोहक

सिटी रिपोर्टर | हाजीपुर

एशियन जलीय पक्षी गणना 2024 के तहत आज चौथा दिन गंडक नदी के वैशाली जिला क्षेत्र में जलीय पक्षी की गणना किया गया। यह गणना पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार एवं मुंबई नेचुरल हिस्ट्री सोसाइटी के तत्वाधान में हुआ। इस एशियन जलीय पक्षी गणना 2024 के कोऑर्डिनेटर एस एन एस कॉलेज हाजीपुर के जंतु विज्ञान विभाग के विभागाध्यक्ष सह बर्ड एक्सपर्ट वेटलैंड मैनेजिंग डॉ. सत्येंद्र कुमार की टीम द्वारा गणना किया गया। इस गणना में वैशाली वन प्रमंडल के प्रमंडल पदाधिकारी अमित कुमार



गंडक नदी में पक्षियों का दृश्य एवं पक्षियों का गणना करने वाली टीम

भी भाग लिया। गंडक नदी के अंदर लगभग चालीस किलोमीटर तक टीम द्वारा भ्रमण कर पक्षी की गणना की गई। डॉ. सत्येंद्र कुमार ने बताया कि जहां चिड़ियों के चहचहाट लोगो को आनंदित करती है वहीं पक्षियों नदी के दृश्य को मनमोहक बनाता है। इन्होंने यह भी कहा कि गणना में गंडक

नदी में कई तरह की पक्षी की प्रजाति देखी गई है। इनके टीम में विकास आनंद, जेपी विश्वविद्यालय के शोध छात्र राजेश कुमार, आर एन कॉलेज के पुष्कर कुमार सिंह, वन विभाग से हाजीपुर रेंजर रंजीत कुमार राय, वनपाल रोशन कुमार सहित कई वनरक्षी साथ रहे।

बरैला झील में हुआ एशियन जलीयपक्षी गणना : डॉ सत्येंद्र

हाजीपुर। बिहार सहित पूरे देश में एशियन जलीयपक्षी गणना 2024 चल रहा है। इसी के तहत आज पहला दिन वैशाली जिला के बरैला झील में जलीयपक्षी का गणना किया गया। यह गणना पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार एवं मुंबई नेचुरल हिस्ट्री सोसाइटी के तत्वाधान में हुआ। इस एशियन जलीयपक्षी गणना 2024 के कोऑर्डिनेटर एस एन एस कॉलेज हाजीपुर के जंतु विज्ञान विभाग के विभागाध्यक्ष सह बर्ड एक्सपर्ट वेटलैंड मैनेजिंग डॉ. सत्येंद्र कुमार अपने टीम के साथ



पक्षियों का निरीक्षण व गणना करते सदस्य।

गणना किया। इनके टीम में मगध विश्वविद्यालय की जंतु विज्ञान की शोध छात्रा अर्चना कुमारी, जेपी विश्वविद्यालय के शोध छात्र

राजन कुमार एवं राजेश कुमार, एस एन एस कॉलेज की जंतु विज्ञान की छात्रा खुशबू कुमारी, आर एन कॉलेज हाजीपुर के जंतु विज्ञान के छात्र कुमार अनंत तथा वन विभाग से वनरक्षी अजीत कुमार साथ में पक्षीमित्र सरोज कुमार, रामबाबू सहनी, लालबहादुर, कुमोद चौधरी एवम नाविक अशोक कुमार रहे।

LAND BIRD



Bank Myna *Acridotheres ginginianu*
Pic by: Trish



Blue-tailed Bee-eater *Merops philippinus*
Pic by: Khushboo Rani



Chestnut-bellied Sandgrouse *Pterocles exustus*
Pic by: Arvind Mishra



Indian Scops Owl *Otus bakkamoena*
Pic by: Dr Niraj Kumarl



Indian Silverbill *Euodice malabarica*
Pic by: Khushboo Rani



Pheasant Coucal *Centropus phasianinus*
Pic by: Gyanchandra Gyani

LAND BIRD



Red Munia *Amandava amandava*
Pic by: Gyanchandra Gyani



Siberian Stonechat *Saxicola maurus*
Pic by: Gyanchandra Gyani



Zitting cisticola *Cisticola juncidis*
Pic by: Gyanchandra Gyani



Black-winged Kite *Elanus caeruleus*
Pic by: Khushboo Rani



Osprey *Pandion haliaetus*
Pic by: Khushboo Rani



White-eyed Buzzard *Butastur teesa*
Pic by: Khushboo Rani

WATERBIRD



Asian Woollyneck *Ciconia microscelis*
Pic by: Khushboo Rani



Black-crowned Night Heron *Nycticorax nycticorax*
Pic by: Arvind Mishra



Cotton Pygmy Goose *Nettapus coromandelianus*
Pic by: Khushboo Rani



Eurasian Spoonbill *Platalea leucorodia*
Pic by: Deepak Kumar



Falcated Duck *Mareca falcata*
Pic by: Deepak Kumar



Greater Adjutant *Leptoptilos dubius*
Pic by: Sumit Kr Sum

WATERBIRD



Grey Heron *Ardea cinerea*
Pic by: Khushboo Rani



Purple Heron *Ardea purpurea*
Pic by: Khushboo Rani



River Lapwing *Vanellus duvaucelii*
Pic by: Deepak Kumar



River Lapwing *Vanellus duvaucelii*
Pic by: Gyanchandra Gyani



Ruddy Shelduck
Pic by: Gyanchandra Gyani



Ruddy-breasted Crake *Zapornia fusca*
Pic by: Deepak Kumar

WATERBIRD



Bar-headed geese *Anser indicus*
Pic by: Samrat



Brown-headed Gull *Chroicocephalus brunnicephalus*
Pic by: Deepak Kumar



Common Coot *Fulica atra*
Pic by: Sumit Kr Sum



Common Greenshank *Tringa nebularia*
Pic by: Arvind Mishra



Common Shelduck *Tadorna tadorna*
Pic by: Deepak Kumar



Common Teal *Anas crecca*
Pic by: Khushboo Rani

WATERBIRD



Common Teal Female *Anas crecca*
Pic by: Khushboo Rani



Dunlin *Calidris alpina*
Pic by: Samrat



Eurasian Curlew *Numenius arquata*
Pic by: Khushboo Rani



Gadwall *Anas strepera*
Pic by: Khushboo Rani



Green Sandpiper *Tringa ochropus*
Pic by: Khushboo Rani



Greylag Goose *Anser anser*
Pic by: Khushboo Rani

WATERBIRD



Little Stint *Calidris minuta*
Pic by: Amit Sinha



Northern Pintail *Anas acuta*
Pic by: Khushboo Rani



Northern Pintail *Anas acuta*
Pic by: Khushboo Rani



Oriental Darter *Anhinga melanogaster*
Pic by: Khushboo Rani



Pied Avocet *Recurvirostra avosetta*
Pic by: Gyanchandra gyani



Red-crested Pochard *Netta rufina*
Pic by: Sumit Kr Sum

WATERBIRD



Ruddy Shelduck *Tadorna ferruginea*
Pic by: Gyanchandra gyani



Spotted Redshank *Tringa erythropus*
Pic by: Deepak Kumar



Wood Sandpiper *Tringa glareola*
Pic by: Arvind Mishra

WETLAND-DEPENDENT BIRD



Common Kingfisher *Alcedo atthis*
Pic by: Sumit Kr Sum



Indian Thick-knee *Burhinus indicus*
Pic by L Arvind Mishra



Little Tern *Sternula albifrons*
Pic by: Khushboo Rani



Little-ringed Plover *Charadrius dubius*
Pic by: Khushboo Rani



Gray-headed Lapwing *Vanellus cinereus*
Pic by: Khushboo Rani



Pacific Golden Plover *Pluvialis fulva*
Pic by: Arvind Mishra

HABITAT



Nagi Dam (Pic Arvind Mishra)



Sonbarsa Lake (Pic by Neeraj Kumar)



Chilraon (Pic by Neeraj Kumar)



Basmanpur (Pic by Neeraj Kumar)



Barandih Dam (Pic by Trish)



Bagmati River (Pic by Neeraj Kumar)

TEAM



Katiya Dhar, Bhagalpur



Burhi-Gandak, East Champaran



Ghatora wetland, Bhagalpur



Barari, Bhagalpur



Manihari, Katihar



Kahalgaon, Bhagalpur



Jagatpur, Bhaglpur



Orhni Dam, Banka



Gangaprasad, Bhagalpur



Kanwar Lake, Begusarai

ASIAN WATERBIRD CENSUS – 2024

1ST PREPARATORY MEETING



DATE: 14/10/2023



ASIAN WATERBIRD COUNT – 2024

1st Preparatory Meeting

Minutes of the Meeting

Venue- Zoom (Virtual)

Date: 14/10/2023

Time: 03:30 PM TO 05:10 PM

The first virtual meeting to initiate, prepare, and plan for the Annual Waterbird Census (AWC), 2024 in the selected wetlands of the State of Bihar was held on 14th October, 2023, the World Migratory Bird Day. The meeting was chaired by the Additional Principal Chief Conservator of Forests (WL)-cum-Chief Wildlife Warden (CWLW), Government of Bihar. The Forest Department officials involved / participated in the AWC-2023, census coordinators and volunteers of the AWC-2023, participated in the meeting. At the outset of the meeting, the Chairman welcomed all the participants and briefed the agenda of the meeting. The agenda for the meeting were,

1. Bird Ringing and Monitoring System (BRMS) – Use of mobile app for collecting the AWC data
2. Coordinators and other experts to be involved for the AWC 2024.
3. Suitable period for AWC 2024
4. AWC, 2024 State Nodal Officer nomination.

The CWLW congratulated everyone for their support and help for successful completion of the AWC, 2023. He summarized the AWC, 2023 findings that a total of 69,935 birds were recorded during the AWC, 2023. A total of 76 wetland sites from 26 districts of Bihar were covered and overall 203 bird species were recorded. He opined that the enthusiasm and remarkable achievements of the previous two AWCs should be carried forward in the AWC, 2024 also. World Migratory Bird Day greetings were exchanged.

CWLW informed the participants that he had informed the Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India officials regarding the AWC carried out in the Bihar State and the amount of data gathered in the last two years. They have congratulated the efforts taken by the Bihar state, he added. He emphasized that the AWC, 2024 should be more technology-based.

Dr. P. Sathiyaselvam, Deputy Director, BNHS and AWC – National Coordinator, took the meeting forward. He thanked everyone for their presence and also sought suggestions from everyone on the potential wetlands that need to be included in AWC, 2024.

1. BIRD RINGING AND MONITORING SYSTEM (BRMS) – THE MOBILE APP

- ❖ A power point on usage guidelines of BRMS app was displayed before the participants. The CWLW explained that the app would be used for three components:
 - Bird ringing,
 - Awareness and
 - AWC
- ❖ It was informed that the AWC component of the app was to be used during water-bird census.
- ❖ Mr. Manish Kumar from IT cell of the Department of Environment, Forest and Climate Change (DEFCC) confirmed that some of the general information in both Habitat and AWC form would be pre-filled in the BRMS app to make it easier and user friendly.
- ❖ Any of the information boxes in the Habitat and AWC count form should not be left blank. One needs to save data only after filling up all the boxes.
- ❖ The app is developed in such a way that it can be used in both online and offline mode.
- ❖ One can check their successful uploads by looking at their pending records. After uploading the data, one can finally click on upload to server option which will be followed by a 'Uploaded successfully' popup message on the screen.
- ❖ One can check their upload history through BRMS website by log-in into it.
- ❖ Mr. Arvind Mishra wanted to know about the auto-save option available in the app. Mr. Shambhu from IT department confirmed that the facility is existing in the app.
- ❖ Mr. Arvind Mishra also inquired about the total number of species included in the AWC form of the app. The chairman explained that the species listed in the AWC datasheet have been included in the app. In case of new bird records, it can be added under 'Others'. A separate option box is provided for that and it can be used to enter the new bird records.
- ❖ It was instructed that during the census, one needs to record everything on hardcopy of the datasheet and keep the app on offline mode while entering the data and can upload it to the server at the end of the census to avoid any loss of entry if any network issues of the internet in the field are encountered.

- ❖ Ms. Vertika Patel, Researcher from BNHS shared her experience and issues faced while checking the BRMS app during the field surveys in Kanwar Lake and Jagatpur Lake. She informed that she faced issues while using the app due to poor network. In response to that, it was instructed to all that they need not to go to online mode while entering data from the field. They should work in offline mode.
- ❖ It was made clear to everyone that the use of BRMS app is for only AWC coordinators and the Forest Department for data entry and it should not be shared with the local public at this point.
- ❖ It was decided in the meeting that the access to upload the data into the app will be made coordinator-specific to avoid duplicate entries. Each coordinator will have their ID and password through which the data can be uploaded. They can share their ID and password with their respective teams.
- ❖ The CWLW showed the BRMS website also. He asked the coordinators and AWC participants to share good quality bird photographs taken during past AWCs, bird ringing photos and brief contents to make the website more informative and resourceful. The credit will be given on the website, he further added.

2. COORDINATORS AND OTHER EXPERTS TO BE INVOLVED IN THE AWC 2024

- ❖ It was decided that coordinators and other experts to be involved in the AWC, 2024 will be discussed in detail during the next meeting.
- ❖ Mr. Deepak Kumar suggested to use ‘birder’ or ‘bird enthusiast’ term instead of the term ‘spotter’ as many people showed their disagreement last year and the same can be considered in the certificate too.
- ❖ CF, Gaya recollected that last time some confusion happened in Motihari due to a communication gap between the local department officials and AWC coordinators. He opined that this kind of communication could be averted and should not happen in the AWC, 2024. The CWLW instructed all the DFOs to inform this to their staff and keep them pre-informed about the event and event-related activities to avoid such communication gaps. It was also instructed to ensure the participation of all the frontline staff who participated in previous census to institutionalize and strengthen the system.

3. SUITABLE PERIOD FOR AWC, 2024

- ❖ A 10-day census period based on the weather conditions will be finalized **between 20th Jan – 20th Feb 2024** for the AWC, 2024. The period will be decided in the forthcoming meetings based on the weather forecast during that period.

4. NOMINATION OF STATE NODAL OFFICER OF AWC, 2024

The Chairman asked the opinion of the participants regarding the Nodal Officer for AWC, 2024. Shri. S. Sudhakar, CF Gaya was unanimously agreed upon by everyone and designated as the State Nodal Officer for AWC, 2024. He accepted the role by thanking all the participants.

5. OTHER POINTS DISCUSSED

- ❖ List of coordinators, wetlands covered (Annexure I) and wetlands with highest number of birds reported during AWC, 2022 & 2023 (Annexure II) to be shared in the AWC, Bihar 2024 WhatsApp group.
- ❖ Dr. P. Sathiyaselvam and the team were asked to give guidance on the conduction of AWC 2024 census. Dr. P. Sathiyaselvam informed that a total of ninety-four sites were covered collectively during AWC, 2022 and 2023. He opined that all the DFOs' and coordinators suggestions and input would be needed to decide on the sites should be covered during the AWC, 2024.
- ❖ The CWLW asked the coordinators to give suggestions on which wetland sites should and should not be included.
- ❖ Mr. Arvind Mishra asked for the list of the selected districts for the AWC, 2024. CWLW suggested that all the DFOs should look into it as no potential districts or sites should be left and also asked Dr. Sathiyaselvam to share the district list in the WhatsApp group. He also suggested that sites with insignificant bird counts reported during the last AWC, 2022 & 2023 can be excluded this year.
- ❖ DFO, Aurangabad asked if the hard copy of the AWC & Coffee Table book on Birds of the Bihar could be made available. The CWLW informed that it couldn't be done as limited copies were printed. However, the pdf is already shared with all the DFOs and Coordinators.
- ❖ DFO, Jamui suggested for conducting the census more than once in a year as to get a clear picture of the migratory waterbird population. The CWLW agreed and informed

that ideally it should be done three times but strengthening of the logistic facilities, experts' network, enough funds etc need to be kept in mind. CF Gaya suggested that it could be possible for important sites like Kanwar lake, Nagi-Nakti Bird Sanctuary and Gogabeel. Mr. Arvind Mishra suggested that pre and post-AWC census could be done for the sample cluster sites with the existing setup. Dr. P. Sathiyaselvam suggested that December, 2023 and March, 2024 will be suitable for pre and post-AWC census respectively. He further suggested that the pre and post-AWC census can be carried out in the sites where the highest numbers of birds were recorded during the AWC, 2022 & 2023. The Chairman asked to share a list of 9-10 priority sites for the pre and post AWC census. These were identified and are given in the Annexure – II.

- ❖ Ms. Khushboo Rani, Senior Researcher, BNHS suggested to cover the entire Ganga stretch during the AWC, 2024 to get the complete picture on the bird distribution and population data. The CWLW said that we can discuss and decide on this during the next meeting.
- ❖ Mr. Arvind Mishra suggested that one presentation on the ethics of the AWC should also be told to the participants. The CWLW asked Dr. P. Sathiyaselvam to prepare a presentation on AWC general guidelines for the next meeting.

6. ACTION AND DISCUSSIONS FOR THE FORTHCOMING MEETING

- ❖ Finalization of the wetlands.
- ❖ Finalization of the additional districts to be included in AWC, 2024.
- ❖ Finalization of the pre- and post-AWC census wetland list.
- ❖ Finalization of the 10-day census period between 20th Jan – 20th Feb 2024.
- ❖ AWC, 2024 general ethics and guidelines presentation by Dr. P. Sathiyaselvam.

The meeting ended with a vote of thanks by the Chairman.

Participants of the meeting:

1. Mr. Prabhat Kumar Gupta, CWLW, Bihar
2. Shri Abhay Kumar, IFS, RCCF Bhagalpur
3. Shri Abhay Kumar Diwedi, RCCF Muzaffarpur
4. Mr S. Sudhakar, CF, Gaya
5. Dr. S. Kumarasamy, CF Purnea
6. Dr. P. Sathiyaselvam, Deputy Director, BNHS
7. Mr Arvind Mishra, AWC State coordinator

8. Mr Bharat Chintapalli, DFO, Bhagalpur
9. Mr Gaurav Ojha, DFO, Munger
10. Mr. Tejas Jaiswal, DFO Aurangabad
11. Mr. Abhishek Kumar Singh, DFO Banka
12. Shri Praduman Gaurav, IFS, DFO VTR Division -1, Bettiah
13. Shri Neeraj Narayan, IFS, DFO VTR Division -2, Bettiah
14. Mr Chanchal Prakash, D.F.O. Kaimur
15. Mr Bhaskar Chandra Bharti, D.F.O., Purnea
16. Mr Rajeev Ranjan, DFO Gaya
17. Shri Ram Sundar, DFO Gopalganj
18. Shrimati. Ruchi Singh, DFO Mithila
19. Shri Sanjiv Ranjan, DFO Nawada
20. Shri Ambrish Kumar Mall, DFO Patna
21. Shri Manish Kumar Verma, DFO Rohtas
22. Shri Ramendra Kumar Sinha, DFO Saharsa
23. Ms. Amita Raj, DFO Sitamarhi
24. Shri Prateek Anand, DFO Supaul
25. Shri Piyush Barnwal, IFS, DFO Jamui
26. DFO Tirhut
27. Dr. Gopal Sharma, Regional Director, ZSI
28. Dr Satyendra Kumar, Head of Department, Zoology, Muzaffarpur
29. Dr Niraj Kumar, Assistant Professor, Motihari
30. Mr. Gyanchandra Gyani
31. Mr. Kamlesh
32. Forest Department, VTR
33. Ms. Khushboo Rani, SRF, BNHS
34. Ms. Vertika Patel, JPF, BNHS
35. Mr. Manish Kumar, IT Cell Patna
36. Mr. Vatan Kumar
37. Mr Deepak Kr Jhunnu
38. Mr. Dev Narayan Chaudhary

**ANNEXURE I: WETLANDS COVERED DURING THE ASIAN WATERBIRD
CENSUS 2022 & 2023**

SL. NO.	DISTRICT	WETLANDS	2022	2023
1	Araria	Kajra Dhar		YES
2	Aurangabad & Rohtas	Indrapuri Barrage	YES	YES
3	Banka	Odhni Dam	YES	YES
4	Begusarai	Kanwar Lake	YES	YES
5	Bhagalpur	VGDS	YES	YES
6	Bhagalpur	Jagatpur Lake	YES	YES
7	Bhagalpur	Ganga Prasad Lake, Gopalpur	YES	YES
8	Bhagalpur	Bahatra	YES	
9	Bhagalpur	Athaniya	YES	
10	Buxar	Sewage Marsh	YES	
11	Buxar-Bhojpur	Chausa-Ahirauli Ganga		YES
12	Buxar-Bhojpur	Gokul Jalashay	YES	YES
13	Buxar-Bhojpur	Sunki Suhiya		YES
14	Darbhangha	Kusheshwar Sthan	YES	YES
15	Darbhangha	Kalma Jheel	YES	
16	East Champaran	Basmanpur Lake (Maun)		YES
17	East Champaran	Bhoraha Lake		YES
18	East Champaran	Gandak River		YES
19	East Champaran	Sarotar Lake	YES	YES
20	East Champaran	Chilraon Lake	YES	
21	East Champaran	Sonbarsa Lake		YES
22	Gaya	Barwadih	YES	YES
23	Gaya	Barandih Wetland	YES	YES
24	Gaya	Mohanpur reservior	YES	
25	Gaya	Sita Dam	YES	
26	Jamui	Bela Tand	YES	YES
27	Jamui	Devan Ahar	YES	YES
28	Jamui	Pailbajaan	YES	YES
29	Jamui	Garhi Dam	YES	YES
30	Jamui	Nagi	YES	YES
31	Jamui	Rail Pond	YES	YES
32	Jamui	Raja Ahar		YES
33	Jamui	Nakti	YES	YES

34	Kaimur	Durgawati Jalashay	YES	YES
35	Kaimur	Dhraul Lake	YES	
36	Katihar	Baldia Chaur	YES	YES
37	Katihar	Baghar Beel	YES	YES
38	Katihar	Gogabeel	YES	YES
39	Katihar	Kathotia Fish Pond		YES
40	Katihar	Ganga (Kahalgaon to Manihari)		YES
41	Khagaria	Pasraha Chaur		YES
42	Madhubani	Chapaniya Lake	YES	YES
43	Munger	Ganga-Munger-Gagaria		YES
44	Munger	Kharagpur Lake	YES	
45	Munger	Kukurjhap Lake	YES	
46	Muzaffarpur	Manika Lake	YES	YES
47	Muzaffarpur	Bhoosara Lake		YES
48	Muzaffarpur	Bagmati River		YES
49	Muzaffarpur	Batraulia Chaur		YES
50	Muzaffarpur	Brahmapura Lake	YES	
51	Muzaffarpur	Narsan Chaur	YES	
52	Muzaffarpur	Basaitha Chaur	YES	
53	Muzaffarpur	Manikpur chaur	YES	
54	Muzaffarpur	Rewa ghat (Gandak River)	YES	
55	Nalanda	Gangaji Rajgriha Jalashaya		YES
56	Nalanda	Ghora Katora Forest trail		YES
57	Nalanda	Pushpakarani tank	YES	YES
58	Nalanda	Giddhi Lake (Begumpur)	YES	YES
59	Nalanda	Pavapuri Jal Mandir	YES	YES
60	Nalanda	Panchane River, Sainik School	YES	YES
61	Nalanda	Arm and Ammunition factory	YES	
62	Nawada	Phulwaria Reservoir	YES	
63	Nawada	Kulmahadev Dam	YES	
64	Nawada	Jabsalasaya Dam	YES	
65	Nawada	Hardiya Dam		YES
66	Patna	Rajdhani Jalashay	YES	YES
67	Patna	Patna Jalla	YES	
68	Saharsa	Arsi Chaur	YES	YES
69	Saharsa	Simri Chaur	YES	YES
70	Saharsa	Kosi River Catchment Area	YES	YES
71	Saharsa	Bora Chaur	YES	YES
72	Saharsa	Jalai Chaur	YES	
73	Samastipur	Deokhal Chaur		YES

74	Samastipur	Goela Chaur		YES
75	Samastipur	Garuara Chaur		YES
76	Samastipur	Klayanpur Chaur		YES
77	Saharsa	Jalai Chaur	YES	
78	Samastipur	Tajpur Chaur	YES	
79	Samastipur	Satanpur Chaur	YES	
80	Saran	Atanagar		YES
81	Saran	Bahiyara Chaur	YES	YES
82	Saran	Hariya Chaur	YES	YES
83	Saran	Phulwaria Chaur		YES
84	Sheohar	Bagmati River		YES
85	Supaul	Kosi River survey from raniganj to kosi mahasetu		YES
86	Supaul	Kosi Catchment		YES
87	Vaishali	Baraila Lake	YES	YES
88	Vaishali	Purainiya Chaur	YES	YES
89	Vaishali	Berai Chaur		YES
90	West Champaran	Udaipur Wildlife Sanctuary	YES	YES
91	West Champaran	Lal Sariya Maan	YES	YES
92	West Champaran	Daruabari Wetland	YES	YES
93	West Champaran	Gandak River	YES	YES
94	West Champaran	Dhobhaha (VTR)	YES	

**ANNEXURE II: List of wetlands from which highest number of birds reported during
AWC 2022 & 2023**

SL. NO.	DISTRICT	WETLAND
1	Aurangabad	Indrapuri Barrage
2	Banka	Odhni Dam
3	Begusarai	Kanwar Lake
4	Bhagalpur	VGDS
5	Bhagalpur	Jagatpur Lake
6	Jamui	Nagi dam Bird sanctuary
7	Jamui	Nakti Dam Bird sanctuary
8	Jamui	Gadhi dam
9	Katihar	Gogabeel Lake

पर्यावरण, वन एवं जलवायु परिवर्तन विभाग
प्रधान मुख्य वन संरक्षक, पटना का कार्यालय
(वन्यप्राणी संभाग)
राईडिंग रोड (पीर अली मार्ग), अरण्य भवन, चतुर्थ तल, पटना-800014
ई-मेल: cwlwbihar@rediffmail.com

पत्रांक: 738

पटना, दिनांक 24 नवम्बर, 2023 ई०।

प्रतिलिपि: सभी क्षेत्रीय मुख्य वन संरक्षक/ निदेशक, पारिस्थितिकी एवं पर्यावरण,
पटना/सभी वन संरक्षक/सभी वन प्रमण्डल पदाधिकारी/बैठक के सभी प्रतिभागियों को
सूचना एवं आवश्यक कार्रवाई हेतु प्रेषित।



अपर प्रधान मुख्य वन संरक्षक-सह-
मुख्य वन्यप्राणी प्रतिपालक, बिहार।

ASIAN WATERBIRD CENSUS – 2024

2nd PREPARATORY MEETING



DATE: 11/11/2023



ASIAN WATERBIRD CENSUS – 2024

2nd Preparatory Meeting

Minutes of the Meeting

Venue- Zoom (Virtual)

Date: 11/11/2023

Time: 03:30 PM TO 05:00 PM

A virtual meeting was held on 11th of November, 2023 for planning the Asian Waterbird Census (AWC), 2024 and select the important wetlands of Bihar for the AWC-2024. The meeting was chaired by Mr. S. Sudhakar, Conservator of Forests, Gaya Circle and the Nodal Officer for the AWC 2024. At the outset of the meeting, the Chairman welcomed all the participants and briefed the agenda of the meeting. Topics and proposed activities discussed in the meeting were summarized below.

1. Finalization of new wetlands to be covered for the AWC-2024. Details of the Coordinators and sites to be covered by each coordinator for the AWC 2024.
2. Presentation on AWC and the protocols to be followed during AWC
3. Finalization of the list of wetlands to be covered for pre- and post-AWC
4. Finalization of the additional districts to be included for AWC 2024
5. Bird Ringing and Monitoring System (BRMS) – The mobile app use for collecting the AWC data
6. Upcoming Bihar Bird Festival
7. Any other points

1. Finalization of new wetlands to be covered for the AWC-2024. Details of the Coordinators and sites to be covered by each coordinator for the AWC 2024.

Mr. S. Sudhakar briefed in his remarks that there are more than 4400 wetlands in Bihar with area >2.25 Ha. Of them, at least over 1000 wetlands of various types are important in the ecological point of view. Till now, we have covered not even 100 wetlands for AWC. Therefore, he requested all the experts and coordinators to suggest some potential wetlands for upcoming AWC-2024. This year we can have the target to cover at least 85 wetlands as we have covered 68 wetlands in AWC 2022 and 76 in AWC 2023, he added.

Some coordinators informed that they had already shared the details of the team members, and sites that they are planning to cover during the AWC-2024 in the WhatsApp group. The Chairman requested the others also to share the details at the earliest.

Dr D. N. Choudhary said that he had already shared the list of 8 members for covering the Bhagalpur and Odhni Dam of Banka. One or 2 more people will be joining in his team. He will update it later. Mr Sudhakar asked Dr. Choudhary to suggest some potential wetlands (satellite wetlands) around Odhni dam in consultation with the local team members to cover during AWC 2024.

Dr Choudhary suggested that a wetland near the Bhagalpur Bypass can be considered to include in the list. Though the waterbird diversity is poor in this wetland, the numbers of waterbirds are high. We can keep an eye on that wetland, he added. Mr Bharat Chintapalli, DFO, Bhagalpur informed that this wetland is very promising one because, approximately 500 Black-winged Stilt were sighted along with 50 Black-tailed Godwit recently. Some Falcon was also recorded from that site. It is a private land and may dry in upcoming months. If it is not dry, definitely it can be added in the census site list, he added. The CF Gaya suggested for preliminary survey in this wetland. He further informed that it can be covered even though it is a private land.

Dr Choudhary asked for the AWC 2023 participation certificate. The Chairman informed that he will look into the matter. He further asked all the DFOs to share the list of Forest guards from each division who are all to be involved in the upcoming AWC-2024.

Mr Navin Kr. talked about the Giddhi Lake of Nalanda, where Northern Pintail, Gadwall, Lesser-whistling Duck, Great-crested Pochard, Common Coot etc., were recorded earlier. This wetland had dried up during the AWC 2023. It is located 3 km southwest of Nalanda Ruin. It is dried because of the inlets of the wetland got disturbed due to human settlement in one side and developmental activities (metal road and school) in the other side. The water in the wetlands also used for irrigation purpose extensively, he added. Mr Sudhakar said that during the regular census, we can also know the unaccounted or unobserved factors for the deterioration of the wetlands. Mr Navin talked about another wetland in Patna, which is located 1-2 km away from the commissioner's office. The water stored in the wetland is supporting for summering birds. He predicted that it can also be potential for migratory birds during winter and can be taken as AWC site.

Dr Ram Pratap Singh will coordinate the sites in Gaya, Nawada and Aurangabad with his students. He requested all the census teams to collect the dropped feathers from the birds while carrying out the census. It will be helpful for many findings like the bird's distribution, origin etc.. he added

Mr Gyan Chandra Gyani informed that his team will cover the wetlands in Khagaria, Araria and Kishanganj. Ms Megha, DFO Araria informed that her team is keeping an eye on different wetlands in Araria. She will communicate with Mr Gyani about the potential wetlands to be covered during the AWC - 2024.

Mr Navin informed that he experienced that the Ganga River stretches between Buxar and Ara and Digha and Mahawar are very potential sites which can be included in the list. He further

informed that a large flock of Red-crested Pochard, Bar-headed and Graylag Geese were recorded from the site.

Dr Gopal Sharma suggested that the Gandak River stretch from Sattarghat to Hajipur (70-80 km stretch) can be covered for the census.

Dr Sathiyaselvam shared the list of wetlands where less than 10 bird species were reported during AWC – 2023 (Table 1), and asked the opinions of the census coordinators whether these areas should be included for the AWC 2024 or we can drop off.

Table 1. List of wetlands with less than 10 bird species reported during AWC 2023

Sl. No.	District	Wetland	No. of Species	No. of Individual
1	Vaishali	Gandak River	2	40
2	Vaishali	Salha chaur	4	32
3	Nalanda	Giddhi Lake	6	66
4	Saran	Hariya chaur	8	63
5	Saran	Phulwariya Chaur	9	26
6	West Champaran	Lal Saraiya Mann	10	54
7	Katihar	Kathotiya Fish Pond	10	220
8	Saharsa	Simri Jheel	10	266

2. Presentation on AWC and the protocols to be followed

The Chairman of the meeting invited Dr P. Sathiyaselvam for the presentation on AWC birds census technique and protocols to be followed during the census.

Dr Sathiyaselvam explained, in his lecture, about the bird migration, International Waterbird Census (IWC) and AWC. IWC is the largest citizen science initiatives in the world and works in partnership with many existing national waterbird census programmes, he added.

He explained about the objectives of AWC. Also expounded that the outcome of the AWC is useful for

- ❖ Providing the basis for estimates of waterbird populations
- ❖ Monitoring changes in waterbird numbers and distribution by regular, standardized counts of representative wetlands
- ❖ Improving knowledge of little-known waterbird species and wetland sites;

- ❖ Identifying and monitoring (networks of) sites that are important for waterbirds in general and monitoring sites that qualify as Ramsar Site
- ❖ Providing information on the conservation status of waterbird species, for use by international agreements
- ❖ Increasing awareness of the importance of waterbirds and their wetland habitats at local, national and international levels.
- ❖ IUCN Red List / BirdLife International's Global Species Programme
- ❖ Wetlands International's Waterbird Population Estimates (WPE) Programme
- ❖ Global Avian Influenza Network for Surveillance (GAINS) programme - Bio-safety and security
- ❖ Development of national wetland and waterbird conservation Action Plans
- ❖ Species and site conservation and research

He further talked about the importance of AWC for fulfilling the India's commitments to the following international convention.

- ❖ **Ramsar Convention** in identifying wetlands of international importance through regular monitoring of waterbird sites (1982)
- ❖ **Convention on Migratory Species (CMS)** by monitoring the status of migratory waterbirds and their habitats (1983)
- ❖ **Convention on Biological Diversity (CBD)** in its goal to conserve and use biodiversity sustainably (1994)
- ❖ The development and implementation of the EAAF Partnership and Central Asian Flyway Action Plan initiative

He explained about the census technique. He briefed about when we should go for accurate counting of waterbirds and for estimation.

He also talked about the general issues in Datasheets and data submission based on the experience gained from the AWC – the Bihar State Bird Count -2022 & 2023. The discussed issues are

- ❖ Timing of datasheet submission
- ❖ Discrepancy in data provided in the soft copies and hard copies of datasheet
- ❖ Not filling habitat form properly (Incomplete/insufficient data)
- ❖ Inaccurate GPS points
- ❖ Sending more than one datasheet of a single wetland
- ❖ Data verification and team members details

He requested all the Census coordinators to look into these matters before submitting the datasheet.

He also pointed out the report of some rare bird species like White-bellied Heron, Spotted Greenshank etc., – He explained that clear photos should be submitted for these kinds of rare birds whenever they are reported from any wetlands. Otherwise, it will be considered as a misidentification.

3. Finalization of the list of wetlands to be covered for pre- and post-AWC

Dr Sathiyaselvam shared the list of wetlands where highest number of birds reported during AWC 2023 and 2022 (Table 2). He opined that we can consider these wetlands for carrying out pre and post AWC.

Table 2. List of wetlands with highest number of individuals reported during AWC 2022 and 2023

S. No.	Wetland	District	Abundance	
			2022	2023
1	Gogabeel Lake	Katihar	4,992	3,281
2	Indrapuri Barrage	Aurangabad	2,657	3,021
3	Nagi dam Bird sanctuary	Jamui	2,601	6,938
4	VGDS (Sultanganj to Bhagalpur)	Bhagalpur	2,542	2,502
5	Odhni Dam	Banka	2,003	1,128
6	Jagatpur Lake	Bhagalpur	2,002	1,948
7	Nakti Dam Bird sanctuary	Jamui	1,926	7,844

4. Finalization of the additional districts to be included for AWC 2024

Dr Sathiyaselvam showed the list of districts which were not covered during AWC 2022 and 2023 (Table 3). During the upcoming AWC 2024, these districts shall be included in the list so that we can cover all the districts in Bihar.

Table 3. List of districts not covered in AWC 2022 & 2023

- | | |
|---------------|---------------|
| a. Arwal | g. Madhepura |
| b. Bhojpur | h. Purnia |
| c. Gopalganj | i. Rohtas |
| d. Jehanabad | j. Sheikhpura |
| e. Kishanganj | k. Sitamarhi |
| f. Lakhisarai | l. Siwan |

5. Bird Ringing and Monitoring System (BRMS) – The mobile app use for collecting the AWC data

Mr Sudhakar requested to all the coordinator to test the BRMS app in the field during their routine field visits and pre-surveys. This will be helpful to operationalize the app in full-fledged way for gathering and developing the avian database.

Dr Sharma said he is not much friendly with the app and will use hardcopy only.

6. Upcoming Bird festival

Mr Sudhakar informed the participants that the department is planning to celebrate 2nd State level bird festival in January 2024. He further informed that this year also probably it is going to be held at Nagi-Nakti Dam. He requested to suggest the suitable places to organize the state bird festival apart from Nagi-Nakti Dam. Mr Piyush, DFO Jamui opined that it can be conducted in Nagi-Nakti but, in other division can also work out the possibilities.

Mr Navin suggested that the festival can be celebrated in Valmiki Tiger Reserve (VTR) as there is good accommodation facilities available in the VTR. DFO Bettiah informed that the field director VTR is the competent authority so that it shall be consulted with him in this regard.

Dr Sharma agreed on the VTR and suggested for Gogabeel and VGDS sites. DFO Purnea Mr. Bhaskar Chandra Bharati explained about difficulties as there is a land issue in Gogabeel. All the lands around the lake are owned by private people. So, we cannot get the suitable vast areas for conducting the bird festival.

The DFO Bhagalpur Mr. Bharat Chintapalli also said the same as there is no Government land around VGDS for conducting such big festival.

7. Any other points

Mr Chintapalli, the DFO Bhagalpur shared information that Bihar crossed Jharkhand and Meghalaya on e-bird list which is one of the largest citizen science initiatives in the country.

The meeting ended with a vote of thanks

Participants of the meeting:

1. Mr S. Sudhakar, CF, Gaya
2. Dr. P. Sathiyaselvam, Deputy Director, BNHS
3. Mr Bharat Chintapalli, DFO, Bhagalpur
4. Ms Megha Rao, DFO, Araria
5. Shri Neeraj Narayan, IFS, DFO VTR Division -2, Bettiah
6. Mr Rajeev Ranjan, DFO Gaya
7. Mr Bhaskar Chandra Bharti, D.F.O., Purnea
8. DFO Bhojpur
9. DFO Samastipur
10. Ms. Amita Raj, DFO Sitamarhi

11. Shri Prateek Anand, DFO Supaul
12. Shri Sanjiv Ranjan, DFO Nawada
13. Shri Piyush Barnwal, IFS, DFO Jamui
14. Mr Navin Kumar
15. Dr. Gopal Sharma, Regional Director, ZSI
16. Dr Ram Pratap Singh, Prof., CUSB
17. Mr. Dev Narayan Chaudhary
18. Dr Satyendra Kumar, Head of Department, Zoology, Muzaffarpur
19. Dr Kushagra Rajendra
20. Ms. Khushboo Rani, SRF, BNHS
21. Ms. Vertika Patel, JPF, BNHS
22. Mr. Gyanchandra Gyani
23. Mr S. K. Imran
24. Ms. Divya Kumari
25. Ms. Manisha Kumari
26. Mr Rahul Kumar
27. Mr Rahul Rohitashwa
28. Mr. Vatan Kumar
29. Mr Deepak Kr Jhunnu
30. Gaurav Sinha

ANNEXURE I: List of wetlands from which highest number of birds reported during AWC
2022 & 2023

SL. NO.	DISTRICT	WETLAND
1	Aurangabad	Indrapuri Barrage
2	Banka	Odhni Dam
3	Begusarai	Kanwar Lake
4	Bhagalpur	VGDS
5	Bhagalpur	Jagatpur Lake
6	Jamui	Nagi dam Bird sanctuary
7	Jamui	Nakti Dam Bird sanctuary
8	Jamui	Gadhi
9	Katihar	Goga beel Lake

पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, बिहार।

कार्यालय— वन संरक्षक, गया अंचल, गया।

वन भवन, सेवा नगर, गया, बिहार दूरभाष एवं फैक्स —0631 2951633 / मो०—9430890989 email : cfgaya@gmail.com

ज्ञापांक—1487 / गया,

दिनांक—27/11 / 2023

प्रतिलिपि:— सभी क्षेत्रीय मुख्य वन संरक्षक/निदेशक, पारिस्थितिकी एवं पर्यावरण, पटना/सभी वन संरक्षक/सभी वन प्रमण्डल पदाधिकारी/बैठक के सभी प्रतिभागियों को सूचना एवं आवश्यक कार्रवाई हेतु प्रेषित।


वन संरक्षक—सह—नोडल पदाधिकारी,
Asian waterbird Census, Bihar

ASIAN WATERBIRD CENSUS – 2024

3rd PREPARATORY MEETING



DATE: 25/11/2023



ASIAN WATERBIRD CENSUS – 2024

3rd Preparatory Meeting

Minutes of the Meeting

Venue- Zoom (Virtual)

Date: 26/11/2023

Time: 03:30 PM TO 06:10 PM

A virtual meeting was held on 25th of November 2023 for planning and to finalize new wetlands' list to be included in Asian Waterbird Census (AWC), 2024 Bihar. The meeting was chaired by Mr. S. Sudhakar, Conservator of Forests, Gaya Circle and the Nodal Officer for the AWC 2024. At the outset of the meeting, the Chairman welcomed all the participants and briefed the agenda of the meeting. Topics and proposed activities discussed in the meeting are summarized below:-

1. Addition of new wetlands and districts to be included for AWC, 2024,
2. Discussion and Finalization of the list of wetlands to be covered pre and post AWC,
3. Bird Ringing and Monitoring System (BRMS) – Using mobile app for AWC data collection,
4. Any other issues.

1. **Addition of new wetlands and districts to be included for AWC 2024.**

The Nodal Officer requested all the experts and coordinators to suggest some potential wetlands for upcoming AWC, 2024. He has stated that at least 85-90 wetlands should be covered in this census.

Ms. Megha, DFO Araria suggested *Trishulia Ghat, Kathora & Kachudha* as potential wetland sites in **Araria district** for AWC, 2024. She would make a site visit within a week to assess the suitability. She also suggested that there are 2 or 3 potential wetland sites in **Kishanganj district**, especially the *Mahananda river* stretch, which may have avian winter visitors. Mr. Arvind Mishra suggested *Thakurganj to Kishanganj* area in between Mahananda river for AWC, 2024 as he has spotted Common Merganser there in previous surveys. The DFO was asked to assess suitability of these AWC locations for both Araria and Kishanganj districts and confirm it.

Dr Gopal Sharma also confirmed that the *Parmaan River catchment (Trishulia Ghat)* is a potential site and should be included in AWC, 2024.

DFO Aurangabad said that there are no new sites from **Aurangabad district**. The Nodal officer, AWC asked him to explore the area adjacent to the Indrapuri barrage which may have large population of local birds and possibly some migratory bird species. The *Son river banks* of **Arwal district** should also be explored for possible occurrence of bird habitats. Mr. Arvind Mishra suggested to check the sandbars and marshy areas that are close by Son river.

Ms. Khushboo Rani informed that there are no new sites from **Begusarai district**. Mr. Arvind Mishra suggested that ***Pachela and Sisauni*** could be included. Ms. Vertika Patel informed that the site has been mostly dried up and surrounding area has been converted into agricultural fields. Mr Arvind Mishra said that he had visited Pachela last year and the habitat appeared to be fragmented but still held a lot of potential for hosting bird species and so it should be included.

Ghatora Wetland and Bhagalpur Bypass roadside: These two new sites were suggested in **Bhagalpur district**. Mr Bharat Chintapalli, DFO, Bhagalpur said that Ghatora Wetland should be included as it has received so far more than 400 Greylag Goose, other migratory ducks and waders like Eurasian curlews, numerous sandpipers and Gulls in this year's migratory season. He added that Bhagalpur Bypass area has received approximately 500 Black-winged Stilt which were sighted by the birders along with about 50 Black-tailed Godwit recently. Some Falcons were also recorded from that site. Mr. Arvind Mishra suggested that ***Gauripur to Narayanpur*** area be included. Mr Gyan Chandra Gyani also suggested to include ***Ghatora wetland's 8 km stretch*** which later was supported by Mr. Deepak Kumar Jhunnu.

Mr Arvind Mishra recommended to contact Prof. Vidyanath Jha, also known as 'Makhaana Man of Bihar' to know about the potential sites in **Darbhanga district**. DFO Mithila Ms. Amita said she is in continuous contact with Prof. Vidyanath Jha. She said that there are some ponds within the Mithila University campus which could be potential sites. She added ***Hiroi Nadi Tat*** as the second potential site in Darbhanga for AWC, 2024.

DFO, Motihari suggested **Burhi Gandak** as a new site for AWC, 2024 in **East Champaran district**. Mr. Arvind Mishra suggested an ***oxbow lake – Karariya*** for inclusion. Dr. Gopal Sharma suggested that **Mahesi clusters in Burhi Gandak** could be included in the list.

Mr. S. Sudhakar requested them to do a site visit and confirm it.

Mr. S K Imran from Central University of South Bihar (CUSB) suggested ***University Pond*** as a potential site in **Gaya District**. Mr. S. Sudhakar, CF Gaya, requested the AWC team of Gaya and the DFO Gaya to explore the river beds and ***bank sites of Phalgu river*** and the area adjacent to ***Rubber dam*** for possible sites of migratory birds.

Mr. Arvind Mishra described the recent finding of Indian Skimmer bird in Nagi river, **Jamui district** by BNHS team and the importance of including the nearby river area in AWC, 2024 to assess the species diversity properly. Mr. S. Sudhakar asked to see more potential sites from Jamui for AWC, 2024. Mr. Arvind Mishra informed he has already asked the local Bird guide Mr. Sandeep and Mr. Manish to look for such areas. Mr. Deepak Kumar Jhunnu said with recent spotting of Chestnut bellied Sandgrouse and Indian Courser, the area has quite potential for the landbirds too and so such areas could also be included. Mr. S. Sudhakar said since the AWC is all about waterbirds census, we should leave those areas for general surveys only.

Hajipur to Lalganj river stretch was suggested as a new potential site from **Vaishali District**.

Dr. Satyendra Kumar suggested dividing Baraila lake in southern and northern part that can be covered by two teams as the area is large. He requested Mr. Arvind Mishra and Dr. Gopal Sharma to pay their visit to Baraila before AWC 2024. Mr. S. Sudhakar suggested everyone

to pay attention to photography as well during the census which can be helpful in identifying the unknown species later on. Ganga River stretch from ***Digha to Manehaar*** of Vaishali district is also suggested for inclusion in AWC 2024. Mr. S. Sudhakar asked DFO Vaishali to check the site and confirm it by next meeting.

Mr. Navin Kumar suggested ***Karkat waterfall*** as a potential site for AWC, 2024 from **Kaimur district**.

DFO, Purnea Mr. Bhaskar Chandra Bharati suggested ***Mahananda river stretch*** as a new potential site for AWC in **Purnea district**. He was requested to visit the site and confirm it by next meeting. He also informed that the passage in Gogabeel Jheel of **Kathihar district**, that was used by the fishermen for fishing has been barricaded. Fishing activities in this channel was a big disturbance to the migratory birds. Mr. Arvind Mishra suggested ***Singhiya Forest*** as a potential site.

Mr. Deepak Kumar Jhunnu suggested that as they have to cover 75-80 km Ganga stretch (***Kahalgaon to Manihari***), they can reach the starting point one day before in evening, stay the night and start the census by 8 am. For that Mr. S. Sudhakar directed the DFO, Purnea to make logistic arrangement for the team.

Dr P. Sathiyaselvam told that the BNHS team will be covering the ***Ganga River stretch from Munger to Bariarpur***. Due to recovery of satellite tagged Indian Skimmer from Bangladesh in **Munger district**, this part of Ganga River has been identified as one of the important sites for assessment and therefore the team shall ply both upstream and downstream for AWC exercise.

Mr Navin Kr. Suggested that ***Arms and Ammunition factory pond*** is a potential site in **Nalanda district** which has been included in AWC 2022 but not in 2023 due to official communication gap. He suggested that department can intimate the officers in advance to prevent last minute hiccups.

Mr. Kamlesh said that his team would be covering the Gandak stretch from ***Valmikinagar to Madanpur*** in **West Champaran district**. Mr. S. Sudhakar ensured that logistic arrangement will be provided for the AWC team in West Champaran.

Mr. Arvind Mishra suggested that new birders should be grouped with the experienced birders as they will learn more. Mr. Prabhat Kumar Gupta, Chief Wildlife Warden, Bihar said that it should happen within the same district to avoid the logistical problems.

Table 1: Tentative list of suggested new potential sites for AWC 2024:

SL. NO.	DISTRICT	PROPOSED NEW SITES OF AWC 2024
1	Araria	Trishulia Ghat, Kathora & Kachudha
2	Aurangabad	Country side of Indrapuri barrage, Son river bed
3	Arwal	Son river bed
4	Begusarai	Pachela and Sisauni

5	Bhagalpur	Ghatora Wetland, Bhagalpur Bypass and Gauripur to Narayanpur
6	Darbhanga	Mithila University campus pond and Hiroi Nadi Tat
7	Motihari	Budhi Gandak, Karariya, and Mahesi clusters in Gandak
8	Gaya	CUSB campus pond, Phalgu river bank
9	Jamui	Nagi river Area
10	Nalanda	Arms and Ammunitions factory pond
11	Vaishali	From Hajipur upto Lalganj river stretch and Digha to Manehaar river stretch
12	Kaimur	Karkat waterfall
13	Katihar	Mahananda river stretch & Singhia Forest area
14	West Champaran	Gandak stretch from <i>Valmikinagar to Madanpur</i>

2. Finalization of the list of wetlands to be covered for pre- and post-AWC

Mr. S. Sudhakar read the list of wetlands to be covered for pre- and post-AWC 2024. (Table 2)

SL. NO.	DISTRICT	WETLAND
1	Aurangabad	Indrapuri Barrage
2	Banka	Odhni Dam
3	Begusarai	Kanwar Lake
4	Bhagalpur	VGDS (Ganga river course)
5	Bhagalpur	Jagatpur Lake
6	Jamui	Nagi dam Bird sanctuary
7	Jamui	Nakti Dam Bird sanctuary
8	Jamui	Gadhi
9	Katihar	Gogabeel Lake

3. Bird Ringing and Monitoring System (BRMS) App

Dr. P. Sathiyaselvam, Deputy Director, BNHS, requested the forum to put forth any issues or difficulties faced while using the BRMS mobile app for AWC .

The meeting was joined by Mr. Prabhat Kumar Gupta, CWLW who suggested everyone to try the app during field visits and pre-survey to check the efficiency. He clarified the fact that all teams should enter the field observation data only in the manual datasheets that are provided during AWC exercise. After completion of the census, any computer savvy team member may upload the data from the datasheets to the server through BRMS

app. Data has to be uploaded only by the team led by the concerned coordinators. In no case the filled forms be sent to BNHS for uploading.

He also welcomed new members of AWC, 2024 from Central University of South Bihar (Mr. SK Imran, Ms. Divya Kumari, Ms Manisha Kumari and Ms. Trisha Mondal)

4. Any Other Points:

CWLW asked the Nodal officer AWC, 2024, Bihar to make sure that the teams are well equipped. He also asked him to prepare a model estimate of activities under AWC, 2024 and get it circulated to the DFOs for preparing budget demand for the exercise.

He informed that we are thinking of conducting the Bihar Bird Festival and International Conference on Bird Conservation and Illegal trade. The AWC, 2024 dates will be officially announced during these occasions.

Mr. Arvind Mishra suggested that certificates of AWC, 2023 be issued to the team coordinators and Birders. He suggested that it would be more convenient if certificates are given at the time of census. CWLW agreed to it and asked DFO, Bhagalpur to get AWC, 2023 certificates (printed separately for Team Coordinators and Birders) prepared in advance as it also needs to be sent to higher authorities for their signatures.

The meeting ended with a vote of thanks by the Nodal officer AWC, Bihar.

Participants of the meeting:

1. Mr. Prabhat Kumar Gupta, CWLW
2. Mr. Abhay Kumar, RCCF Bhagalpur
3. Mr S. Sudhakar, CF, Gaya and Nodal Officer, AWC Bihar
4. Dr. P. Sathiyaselvam, Deputy Director, BNHS
5. Mr Bharat Chintapalli, DFO, Bhagalpur
6. Ms Megha, DFO Araria
7. Mr Bhaskar Chandra Bharti, DFO Purnea
8. DFO Motihari
9. Ms. Amita, DFO Mithila
10. Mr. Tejas Jaiswal, DFO Aurangabad
11. Mr. Rajeev Ranjan, DFO Gaya
12. Mr. Manish Kumar, DFO Rohtas
13. DFO Vaishali
14. Mr. Prateek Anand, DFO Supaul
15. Mr. Sanjiv Ranjan, DFO Nawada
16. Mr Navin Kumar

17. Mr. Arvind Mishra, Mandar Nature Club
18. Dr. Gopal Sharma, Regional Director, ZSI
19. Dr Satyendra Kumar, Head of Department, Zoology, Muzaffarpur
20. Mr. Kamlesh Maurya, WWF
21. Mr. Gyanchandra Gyani
22. Mr Deepak Kr Jhunnu
23. Ms. Khushboo Rani, SRF, BNHS
24. Ms. Vertika Patel, JPF, BNHS
25. Mr. Abhay Rai, JPF, BNHS
26. Mr. Abilash, JPF, BNHS
27. Mr S. K. Imran, CUSB, Gaya
28. Ms. Divya Kumari, CUSB, Gaya
29. Ms. Manisha Kumari, CUSB, Gaya
30. Ms. Trisha Mondal, CUSB, Gaya
31. Ms. Soumya
32. Mr. Vatan Kumar

पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, बिहार।
कार्यालय—वन संरक्षक, गया अंचल, गया।

वन भवन, सेवा नगर, गया, बिहार मोबाईल— 9430890989 email-cfgaya@gmail.com

ज्ञापक—1543

दिनांक—6.12.2023

प्रतिलिपि सभी क्षेत्रीय मुख्य वन संरक्षक/निदेशक, पारिस्थितिकी एवं पर्यावरण, पटना/सभी वन संरक्षक/सभी वन प्रमण्डल पदाधिकारी/बैठक के सभी प्रतिभागियों को सूचना एवं आवश्यक कार्रवाई हेतु प्रेषित।



वन संरक्षक —सह— नोडल पदाधिकारी,
Asian waterbird Census, Bihar

ASIAN WATERBIRD CENSUS—2024

4th PREPARATORY MEETING



Date: 17/12/2023



ASIAN WATERBIRD COUNT – 2024

4th Preparatory Meeting

Minutes of the Meeting

Venue- Zoom (Virtual)

Date: 17/12/2023

Time: 03:30 PM TO 05:45 PM

A virtual meeting was held on 17th of December 2023 to finalize the budget of AWC, talked about outcome of pre-census of water bodies is included in Asian Waterbird Census (AWC) and what are the challenges faced in pre-census, 2024 Bihar. The meeting was chaired by Mr. Prabhakar Kumar Gupta, IFS (CWLW, Bihar). On the outset of the meeting, the Chairman welcomed all the participants and briefed the agenda of the meeting. Topics and proposed activities discussed in the meeting are summarized below.

1. Pre-census and discussion on the issues faced by surveyors
2. Discussion on Bird Ringing and Monitoring System (BRMS) app & it's use, issues faced in pre-census AWC 2024
3. Finalizing of Budget Estimate submission status by DFO of the census AWC
4. Discussion and Finalization of lists of wetlands and Volunteers for AWC 2024
5. Discussion about logistics and equipment required in AWC 2024

Before the start of agenda wise discussion, the BNHS scientist Mr. S. Sivakumar, and other new volunteer members introduced themselves to everyone:

1. Mr. Vidyasath Jha from Mithila University requested to join the coordinator Mr. Arvind Mishra pre-census where he could contribute to macrophytes
2. Mr. Ram Pratap Singh from the Central University of South Bihar (CUSB) introduced himself who also previously worked for the Salim Ali Centre for Ornithology and Natural History (SACON)
3. Mr. Dibyaranjan Giri from Nalanda University, has experience of working at Bhitarkanika and Chilika Lakes, also volunteered to join the AWC group and introduced himself.

The Chief Wildlife Warden expressed immense pleasure on joining of the new volunteers and emphasized that the expertise of the new members in the avian field would be qualitative addition to the AWC exercise. He, along with the existing members, welcomed the new members.

1. Pre-census and discussion on the issues faced by surveyors

The Chief Wildlife Warden, Bihar requested all the experts, coordinators, and birders to provide updates on the pre-census of the wetlands that are included in AWC 2024

Mr. S. Sudhakar said that the pre-census was finalized in nine wetland sites. Presently it is in progress in VGDS, Bhagalpur- Jagatpur Lake, Bhagalpur, Nagi-Nakti and Gadhi Dam in Jammu, Gogabeel, Katihar, Indrapuri Barrage, Aurangabad and Odhni Dam, Banka, etc.) He further added that new sites for AWC-2024 have been identified in some districts like Araria and Kishanganj that are very suitable for ducks and migratory birds. In some area like Navagaon and Hardiya, water level is very low and therefore it would be difficult to survey in motorboats. Coordinators raised similar issues of low water levels in various other wetlands.

CWLW said that this problem can be resolved by advance site visits to ascertain whether the hiring of motorboats or country boats in their place would be needed. Accordingly, budget estimate should be submitted. He also asked to Ms. Vertika Patel & Ms. Khushboo Rani from BNHS to include a separate chapter for pre/post census data in the AWC final report.

The CWLW asked DFOs, coordinators, and Birders for their suggestions, experience and difficulties faced in pre-census.

Mr. Deepak Kumar said that he had conducted pre-survey at Nagi & Nakti in November and the bird population is observed to be quite good. At present, the water level is high but this may be reduced by January. The lower water level could favour a large number of wader species in the sanctuary. He also added that Indian courser, Sandgrouse, and Northern lapwing were reported from Nagi-Nakti bird sanctuaries. He further added that the adjoining terrestrial habitat could be favoured breeding grounds for Sandgrouse.

Mr Gyanchandra Gyani said that Ghatona wetland in Bhagalpur is one of the most potential sites for migratory birds.

Dr Gopal Sharma said his team has visited Kaimur and Rohtas area, they found less bird congregation. Although in January, more number of birds is expected. They also have visited Ghona Katra where they found Painted sandgrouse which is a new species recorded for this area.

Dr. Kamlesh said that in Udaipur and Gandak, bird population was observed to be very less. In Gandak river, his team has observed some sporadic sightings of Ruddy shelduck and Bar-headed goose.

Mr. Ram Pratap Singh had visited Indrapuri Barrage, where his team has sighted Black-headed gull and Eurasian Curlews.

Mr. Arvind Mishra told that pre census is not done yet in Gadhi Dam and Nagi river of Jammu. He suggested that these sites could be included for census. CWLW replied that he could contact Mr. S Sudhakar, State Nodal Officer AWC Bihar for the resources required.

Mr. Arvind Mishra noted that his team has recorded 1500 plus Bar-headed goose in Nagi-Nakti but their groups (3-4 count) are generally seen everywhere and that Indian courser, Sandgrouse are not new species in Nagi-Nakti, but rosy starling and Northern Lapwing was a good find and new addition to this key habitat.

CWLW told everyone that the records of related publications and short notes on such new species found should be prepared and shared with the department. He also asked BNHS to issue brochures on such findings.

Mr. Arvind Mishra opined that pre-census should be decided and fixed beforehand for each year. Mr S. Sudhakar informed that the pre-census time and sites had been decided in the previous meetings but due to rainfall and bad weather in the first week of December, the exercise got delayed at many sites. He also pointed out that the motive of pre-census was to check the condition of the wetlands and prepare for the ensuing problems in logistics arrangements that the team might face during actual census exercise. This could greatly help the AWC census teams to assess the situation, the travel time required to reach the habitat, logistics support needed and get introduced with the ground staff of the forest department. This exercise will also help to evaluate the habitat's importance in serving as stop-over sites for the long-distance migratory birds.

CWLW asked all the members to fix the time of pre-census that can be followed from next year onwards. Mr Arvind Mishra suggested that the pre-census could be conducted between 15th to 31st December. Mr. Navin suggested that pre-census could be conducted in between 25th Nov to 15th Dec. Dr. Ram Pratap Singh suggested that pre-census could be done from 25th November to 15th December. Mr. S. Sivakumar said that he is unaware of the bird's arrival pattern in Bihar, but 15th Nov to 15th Dec could be a good one-month time for pre-census. Mr. Sudhakar suggested 20th Nov-20th Dec for pre-census.

CWLW said that for pre-census, a wider range like a month is sufficient to fulfill for all the group coordinators, staffs and volunteers. They could get ample time to do to do pre-census according to this timeline. It was therefore, decided to fix 20th Nov to 20th Dec as the suitable time period for pre-census from next year onwards.

2. Discussion on Bird Ringing and Monitoring System (BRMS) app & it's use, issues faced in pre-census AWC 2024

CWLW asked everyone about BRMS app usage and asked that if anyone used it during pre-census.

Mr. Manish Kumar (from IT cell) said that only one data was uploaded which was from Patna.

CWLW expressed concern on non-use of the app by coordinators and birders and said that if the app is not used by the coordinators/birders in the census, then it would be restricted for in-house use by the Bird Ringing and Monitoring Centre Bhagalpur and the Department officials. He further added that the app is a technological innovation meant to minimize human effort and analytical time and that not using the app is not desirable.

Mr. Kamlesh said that he didn't use BRMS app in pre-census, used only hard copy.

Mr. Rahul Kumar said that he uploaded data through the BRMS app.

Mr. Ram Pratap Singh said that he will soon upload the data through the app.

Dr. Gopal said expressed difficulties in using the apps some more training is required.

CWLW said that a virtual demonstration and training on the app has already been provided. During this year's AWC, we will allow the use of BRMS app for all teams. If the data is not uploaded by the concerned, its access will be made limited in that case.

Col. Amit Sinha enquired whether the app is available for Apple Iphone users as well, to which CWLW clarified that the app is available for Android phones only at present.

After discussion with all present, CWLW decided that the actual recording in the field/wetland sites could be done on hard copies of Count Format to save data-entry time. After return from field each day, the coordinator would examine and verify/filter the records and authorize a techno-savvy member of his team to upload the verified data from hard copy on BRMS app.

3. Finalizing of Budget Estimate submission status by DFO of the census AWC

CWLW asked the Nodal Officer whether the DFOs have prepared the estimate for AWC.

Mr. S. Sudhakar said that the estimate is not prepared yet, He will a model estimate prepared and share the estimate format with the all for guidance.

CWLW asked him to do so immediately. He further added that a model minimum requirement estimate could be prepared based on which a basic minimum amount could be disbursed exclusively for AWC purpose, for each division. In case where extra expenditure is incurred, the concerned DFO could submit the final estimate after completion of the AWC exercise in his jurisdiction based on the actuals.

4. Discussion about logistics and equipment required for AWC 2024

Mr. S. Sudhakar presented the list of wetlands with final Coordinators name for AWC-2024, which contained ninety-seven wetlands, including the new sites.

Ms Megha, DFO Arnia confirmed four wetlands for this year's AWC. The division has trained some staff in basic identification of birds using of ebird app. In the pre-visit of the wetlands, her team has observed some migratory birds like Bluethroat, and Himalayan bullbul in the vicinity of the wetlands. She informed that Kajra char is not a potential site for census this year as the congregation of birds was very less.

Mr. S. Sudhakar pointed out that Son river in Aurangabad is not confirmed yet.

CWLW asked to identify the concerned stretch and its location in the Son River, its accessibility, and also check water condition bird congregation near the river.

Mr. Arvind Mishra said that Pachela in Begusarai has been degraded and fragmented in the recent years. He added that Sisami is very rich wetland for birds.

CWLW asked Mr. Sudhakar to include the 'distance (kms) of the wetland from Division HQ' in the prepared list. He also suggested to confirm the Karaiya and Mahesi site with Dr. Neeraj.

DFO Purnea suggested excluding the Singhiya Forest from AWC2024.

CWLW said that the number of wetlands for AWC-2024 should be in a manner that they could be covered by the census team's manpower and it is not unduly burden. He also suggested to include the local college students as a volunteer. He asked all the coordinators to finalize their Birders team soon. He asked all the DFOs to provide the Department Staff list participating in AWC 2024 by the next meeting. He also asked Mr. Sudhakar to prepare the Model Budget estimate as soon as possible.

Col. Ankit Sinha suggested that it will be convenient if the AWC2024 census date is decided now.

CWLW told that the census would probably take place mid-January, 2024. It will be announced in the next preparatory meeting.

Ms. Khushboo Rani asked all the coordinators to provide the pre-survey data on email- k_rani@boba.org for the AWC report.

Mr. Arvind Mishra asked about the AWC post survey dates, to which CWLW replied that it is being taken in consideration. After viewing the use of BRMS app during the AWC census, the post-count dates will be decided post AWC.

Mr. Dibyranjan Giri suggested that the AWC period should be fixed seasonally every year which also can be useful for long-term research. CWLW explained that the primary objective of AWC count is collection qualitative and quantitative data to help in decision making for effective management of wetlands having migratory birds. Interested individuals could take up research work from time to time in this wetlands, as and when needed. The department would gladly provide permission to such persons in the case the research work is to be done in the sanctuary. However, it may not be possible to take up such huge management exercise on frequent basis each year.

The meeting ended with a vote of thanks

Participants of the meeting:

1. Mr. Prabhat Kumar Gupta, CWLW
2. Mr S. Sudhakar, CF, Gaya and State nodal Officer, AWC Bihar
3. Dr S. Kumarasamy, CF Purnea
4. Dr K. Nesamani, FD VTR
5. Ms Megha Rao, DFO, Araria
6. Mr Bhaskar Chandra Bharti, D.F.O., Purnea
7. Mr Tejas Jaiswal, DFO Aurangabad
8. Mr Ramsundar, DFO Saran
9. Mrs. Ruchi Singh, DFO Mithila
10. Mr Atish Kumar, DFO Bettiah
11. Mr R. K. Sinha, DFO Saharsa
12. Mr Manish Kumar Verma, DFO Rohtas
13. Mr Prachuman Gaurav, DFO Bettiah-I
14. Mr Amit Kumar, DFO Vaishali
15. Shri Prateek Anand, DFO Supaul
16. DFO Sitamarhi

17. Mr Navin Kumar, Coordinator
18. Mr. Arvind Mishra, Mander Nature Club
19. Dr. Gopal Sharma, Regional Director, ZSI
20. Dr Satyendra Kumar, Head of Department, Zoology, Hajipur
21. Mr. Vidiya Jha, Mithala University
22. Mr. Ram Pratap Singh, Central University of South Bihar
23. Mr. Kamlesh Kr. Manrya
24. Col. Amit Sinha
25. Mr. Sivakumar, Scientist, BNHS
26. Ms. Khushboo Rani, SRF, BNHS
27. Ma. Vertika Patel, JPF, BNHS
28. Mr. Abhay Rai, JPF, BNHS
29. Mr. Abilash, JPF, BNHS
30. Mr. Gyanachandra Gyanai
31. Mr. Rahul Kumar
32. Mr. Vatan Kumar
33. Mr. Deepak Kumar Jhunnun
34. Mr. Rahul Rohitashwa
35. Mr. Shambhu Kumar
36. Mr Dibyaranjan Gori
37. Mr. Manish kumar
38. Mr. Abdhesh Adarsh, Bird guide
39. Mr. Pradeep Kumar

पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, बिहार।

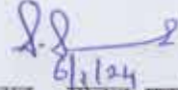
कार्यालय—वन संरक्षक, गया अंचल, गया।

वन भवन, सेवा नगर, गया, बिहार मोबाईल— 9430890989 email-cfgaya@gmail.com

झापांक—45

दिनांक—06/04/24

प्रतिलिपि — सभी क्षेत्रीय मुख्य वन संरक्षक/निदेशक, पारिस्थितिकी एवं पर्यावरण, पटना/सभी वन संरक्षक/सभी वन प्रमण्डल पदाधिकारी/बैठक के सभी प्रतिभागियों को सूचना एवं आवश्यक कार्रवाई हेतु प्रेषित।



वन संरक्षक —सह— मोडल पदाधिकारी,
Asian waterbird Census, Bihar

ASIAN WATERBIRD CENSUS 2024 5th PREPARATORY MEETING



DATE: 06/01/2024



ASIAN WATERBIRD COUNT – 2024

5th Preparatory Meeting

Minutes of the Meeting

Venue- Zoom (Virtual)

Date:06/01/2024**Time:** 03:00 PM TO 05:15 PM

A virtual meeting was held on the 06th of January 2024 to finalize the AWC-2024 wetland sites, dates of count, usage update on BRMS App and pre-census status. Mr. Prabhat Kumar Gupta, IFS, Chief Wildlife Warden, Bihar chaired the meeting. At the outset, the Chairman welcomed all the participants and thanked everyone for their contribution in conducting & successfully completing the Asian Waterbird Census in Bihar during the last two years. He briefed the agenda of the meeting. Topics and proposed activities discussed in the meeting are summarized below.

1. Finalization of the AWC-2024 wetland sites
2. Discussion on the Pre-census status in the decided sites and data received.
3. Discussion on Bird Ringing and Monitoring System (BRMS) app & its usage status by the surveyors in the pre-census surveys.
4. Finalizing the dates for AWC-2024.
5. Discussion on other points raised by participants.

1. Finalization of the AWC-2024 wetland sites

CWLW asked all the DFOs to inform & confirm the wetland sites examined and proposed to be included in AWC-2024.

RCCF, Bhagalpur, Field Director, VTR, DFO Araria, Aurangabad, Bhojpur, Mithila, Gaya, Purnea, Begusarai, Samastipur, Bhojpur, Patna, Supaul, Saran, Motihari and Bettiah confirmed their sites (Table 1), while confirmation could not be received for Vaishali and Kaimur as DFO, Vaishali and Kaimur weren't present in the meeting.

DFO Araria confirmed three sites viz. **Dopahriya Pokhar** and **Trishulia Ghat** from **Araria & Mahananda Ghat** from **Kishanganj**.

During the meeting, for Bhagalpur district, instead of including two different sites: Ghatora Wetland and Gauripur to Narayanpur, it was decided to include **Ghatora Wetland Complex** which will cover Gauripur to Narayanpur area as well. Mr. Gyanchandra Gyani and Mr. Vatan Kumar confirmed this too.

DFO, Bhojpur confirmed **Gokul Jalashay** as a potential site. This was decided to be included for AWC-2024.

CWLW recommended retaining the **Ganga River stretch (Buxar to Patna)** in four stretches as four different wetlands, which can be covered by a single team on different dates or by more than one team simultaneously.

DFO, Mithila confirmed **Khiroi Nadi** and **Kuseshwar Asthan** and asked to remove the **Mithila University Pond** from Darbhanga. Mr. Vidyanath Jha asked CWLW if Mr. Arvind Mishra could cover the Darbhanga region, to which CWLW said that Mr. Arvind Mishra and Dr. Gopal Sharma should not be burdened with many sites, as was done last year. Mr. Arvind Mishra also agreed to this.

Mr. Neeraj asked to remove **Karariya Mann** due to increased anthropogenic activities. He confirmed **Budhi Gandak** and **Chilrao Mann** for the census.

CWLW asked Mr. S. Sudhakar to share list of wetlands and coordinators' list mentioning the DFO's name and contact details to BNHS team to include in the report.

Mr. Arvind Mishra asked to remove Nagi River, which was discussed in last meeting as a potential site. He informed that he has visited the area and found that it lacks potential. He asked to add **Jhajha railway pond** and confirmed inclusion of the already included satellite wetlands in the list. Ms. Vertika Patel said that Badahaar also has potential that can be added in the list. In response to that, CWLW said the teams should try to cover the already listed and additionally verified sites. Additional potential sites can be covered at the time of census if time and situation permits.

Dr. Gopal Sharma confirmed **Karanchak** and **Karkatgarh Waterfall** from Kaimur.

DFO, Purnea asked to remove the **Mahananda River** as it lacks the potential and confirmed the inclusion of the rest of the proposed sites.

Mr. Arvind Mishra confirmed the **Pachailachaur** along with the **Kanwar Lake** and asked to remove Sisauni. **Pasrahachaur** was confirmed from Khagaria. DFO, Mithila confirmed **Chapaniya Lake** from Madhubani.

Ganga river stretch – **Kashtarni ghat to Bariyarpur** was confirmed from Munger.

Manika Mann, Jhapaha Mann and Kanti Mann were confirmed from Muzaffarpur.

DFO, Bhojpur (earlier DFO, Nalanda) confirmed that the earlier selected sites have the potential and can be finalized for the census from Nalanda.

Hardiya Dam (Phulwariya) was confirmed from Nawada.

Rajdhani Jalashay and Ganga River- Maner to Mokama were confirmed from Patna.

Mr. Navin Kumar confirmed all the earlier proposed sites to be potential and final from Saharsa.

DFO, Supaul requested to remove Kosi River from **Rani** area. He confirmed inclusion of **Kosi stretch of Supaul & Saharsa**.

DFO, Samastipur asked to remove the earlier proposed sites in Samastipur as they lacked potential and asked to add **Deokhal Chaur** instead.

DFO, Saran confirmed the inclusion of the earlier proposed sites.

Mr. Niraj confirmed **Bagmati River** from Sheohar.

Dr. Satyendra Kumar confirmed **Baraila Lake, Saloha Lake, Puraniya Chaur, Gandak River stretch- Digha to Mahenaar** from Vaishali.

CWLW asked Mr. S. Sudhakar to add Dr. Satyendra Kumar and Dr. Gopal Sharma's names as coordinators of the Vaishali.

DFO, Bettiah confirmed **Udaipur Jheel and Lal Saraya Mann**.

Field Director, VTR confirmed the inclusion of the earlier proposed sites from West Champaran.

CWLW asked Mr. S. Sudhakar to prepare the final wetlands list as the meeting proceeds with further discussion.

2. Discussion on the Pre-census status in the sites and data received

CWLW asked Ms. Khushboo Rani and Ms. Vertika Patel if all the coordinators had shared their Pre-Survey data with them. He asked Mr. S. Sudhakar if the Pre-Census is done for all

the sites. Mr. S. Sudhakar updated that seven wetlands have been completed for the Pre-Census.

CWLW asked Mr. S. Sudhakar to share the complete coordinator's list with them. He requested the coordinators to share the Pre-Survey data with BNHS at Bird Ringing & Monitoring Stn., Bhagalpur as there will be a separate chapter on pre-census, hence timely sharing of data is of paramount importance.

Mr. S. Sudhakar said that Pre-census was started in November 2023. In response to that CWLW said the pre-census has already exceeded its time limit. He told everyone that pre-census data will be considered till 10th of January, 2024. Data collected after that will not be accepted.

3. Discussion on Bird Ringing and Monitoring System (BRMS) app & its usage status by the surveyors in the pre-census surveys.

CWLW asked Mr. Manish Kumar if he received any further data in BRMS app from the surveyors. Mr. Manish updated that he has received only one data from Aurangabad.

Mr. S.K. Imran asked if he could upload photo in the Habitat form later. In response to that, CWLW said that photos can be added from the camera roll also and it can be uploaded later.

Mr. Arvind Mishra said that he had technical issues while uploading the data after Nagi survey. He also told that if the habitat form could have the multiple option selection feature it would be more accurate, to which CWLW replied that testing the BRMS app among us would give us a clear picture of its shortcomings and discrepancies. He also said that Department is looking forward to presenting the BRMS app concept in the upcoming CMS COP-14 meeting. So BRMS app should be used as much as possible to improve its functions.

Mr. Amit Sinha said the app should be iOS-compatible if we are trying to upgrade it to the international level.

Mr. Arvind Mishra said to enter 15-20 participants list in the app through mobile phone is inconvenient, the app also should be computer operatable. In response to that CWLW said that to address it the same facility is available on the webpage but that is only accessible to departmental people not to the public. Till then we can operate it on mobile phones.

Mr. Rahul Kumar said that in the habitat form, the Latitude and Longitude are only filled automatically when the photo is taken otherwise it's not accepting.

CWLW told everyone, the next meeting can be scheduled to address the BRMS app related issues only. He asked Mr. Manish and Mr. Shambhu to be ready with their presentation in next meeting and to resolve the raised issues of the BRMS app in the next meeting.

4. Finalizing the dates for AWC-2024

After taking feedback from the participants and BNHS scientists, it was decided that the period between 25th Jan 2024 to 10th Feb 2024 would be most suitable for conducting AWC-2024.

CWLW said that period for census may be extended by five days (i.e. up to 15 February 2024) if some of the sites remain uncovered by then due to unforeseen reasons.

5. Other Discussions:

CWLW invited comments, if coordinators and their team were facing any sort of trouble, they can discuss it and that can be sorted.

Dr. Niraj told that due to frequent inspections going on in colleges/Universities, their presence is required so if an exemption letter could be sent to the concerned school/colleges/universities that would be good. In response to that CWLW said a letter to this effect would be issued. Whoever requires the exemption letter can send their Institution's name and address and Date for which the exemption is required.

CWLW suggested all the coordinators that if they want to update their contact details, they can share it with the Nodal Officer Mr. S. Sudhakar.

Table 1: Final list of the 83 finalized sites from 27 districts

Sr. No.	DISTRICT	WETLAND
1.	ARARIA	Trishulia ghat
2.		Dupahariya Pokhar
3.	AURANGABAD	Indrapuri Barrage
4.	BANKA	Odhani Dam
5.	BEGUSARAI	Kawar lake
6.		Pachaila
7.	BHAGALPUR	Jagatpur lake
8.		Gangaprasad Jheel
9.		Kataiyadhar
10.		Dimaha wetland

11.		<i>Ganga river - Manik sarkar ghat - to Barari Ghat</i>
12.		<i>VGDS - Sultanganj to Mirzapur</i>
13.		<i>VGDS - Mirzapur to BarariGhat Bhagalpur</i>
14.		<i>VGDS - Barari ghat Bhagalpur to Bateshwarsthan</i>
15.		Ghatora wetland complex
16.		Bhagalpur bypass
17.	BHOJPUR	Sunki Suhiya - Shahpur
18.	BUXAR	Gokul Jalashay
19.	BUXAR TO PATNA	Ganga river Ghats from Buxar to Patna (1) UP border TatiyakshtraChausa
20.		(2) Buxar Umarpur Ganga Tatiyakshetra
21.		(3) Simri KeshavpurManikpurkshetra
22.		(4) BhrampurNaunijor bandh kshetra
23.	DARBHANGA	Kusheshwarasthan
24.		Khiroinadhi tat
25.	EAST CHAMPARAN	Sarotar Wetland
26.		Basmanpurmann
27.		Sonbarsamann
28.		Chilraon Mann
29.		<i>Gandak river of East champaran</i>
30.		<i>BurhiGandak</i>
31.	GAYA	Barandih dam
32.		Barwadih dam
33.	JAMUI	Nagi dam
34.		Nakti dam
35.		Belatar
36.		Pailbajan
37.		Devanahar
38.		Garhi dam - Part1
39.		Jhajha railway pond
40.		Raja ahar
41.		Garhi dam - Part 2
42.	KAIMUR	Karanchak/Durgawati Dam
43.		Karkat waterfall
44.	KATIHAR	Goga beel
45.		Bagarbeel
46.		Kathotia fish pond
47.		Balidiyachaur
48.		<i>Ganga river - Bateshwarsthan to Manihari ghat</i>
49.	KHAGARIA	PasrahaChaur

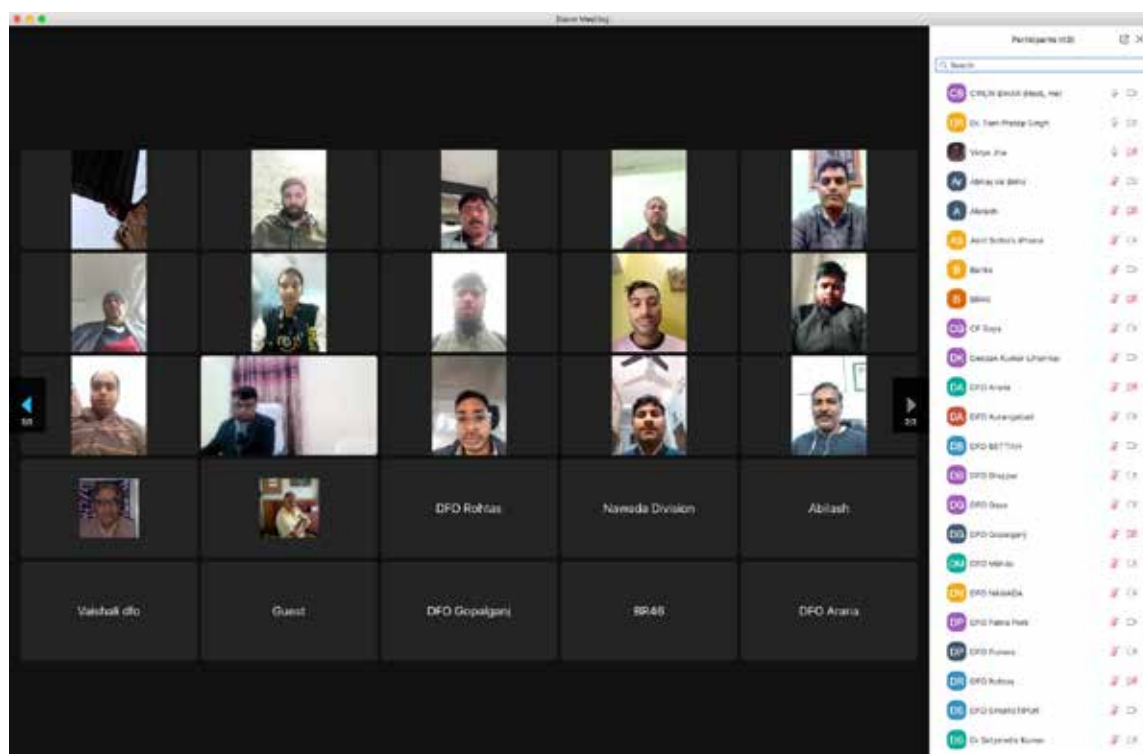
50.	KISHANGANJ	Mahananda river
51.	MADHUBANI	Chapaniya Lake
52.	MUNGER	<i>Ganga river - Kashtarni ghat to Bariyarpur</i>
53.	MUZAFFARPUR	Manika mann
54.		Jhapahamann
55.		Kanti mann
56.	NALANDA	Gidhi Lake
57.		Pushkarni lake
58.		Panchane River (behind Sanik sch.)
59.		Ganga JalashayRajgir
60.		Gora Katora
61.		Arms & Amunition F
62.	NAWADA	Hardiya Dam (Phulwariya)
63.	PATNA	Rajdhani Jalashay, Patna
64.		<i>Ganga river - Maner to Mokhama</i>
65.	SAHARSA	Simri jheel
66.		Arsi chaur
67.		Bora Chaur
68.		Jalai chaur
69.	SAHARSA & SUPAUL	<i>Kosi catchment of Supaul & Saharsa</i>
70.	SAMASTIPUR	DeokalChaur
71.	SARAN	Hariya ChaurAkilpur
72.		Bahiyarachaur
73.		Phulwariyachaur
74.		Atanagarchaur
75.	SHEOHAR	Bagmati river
76.	VAISHALI	Baraila lake
77.		Salaha lake
78.		Puraniyachaur
79.		<i>Gandak river of Vaishali Dt</i>
80.	WEST CHAMPARAN	Valmiki Tiger Reserve (Darwabari wetland)
81.		Udaipur Jheel/WLS
82.		Lal Saraya mann
83.		<i>Gandak river (Valmikinagar to near Madanpur)</i>

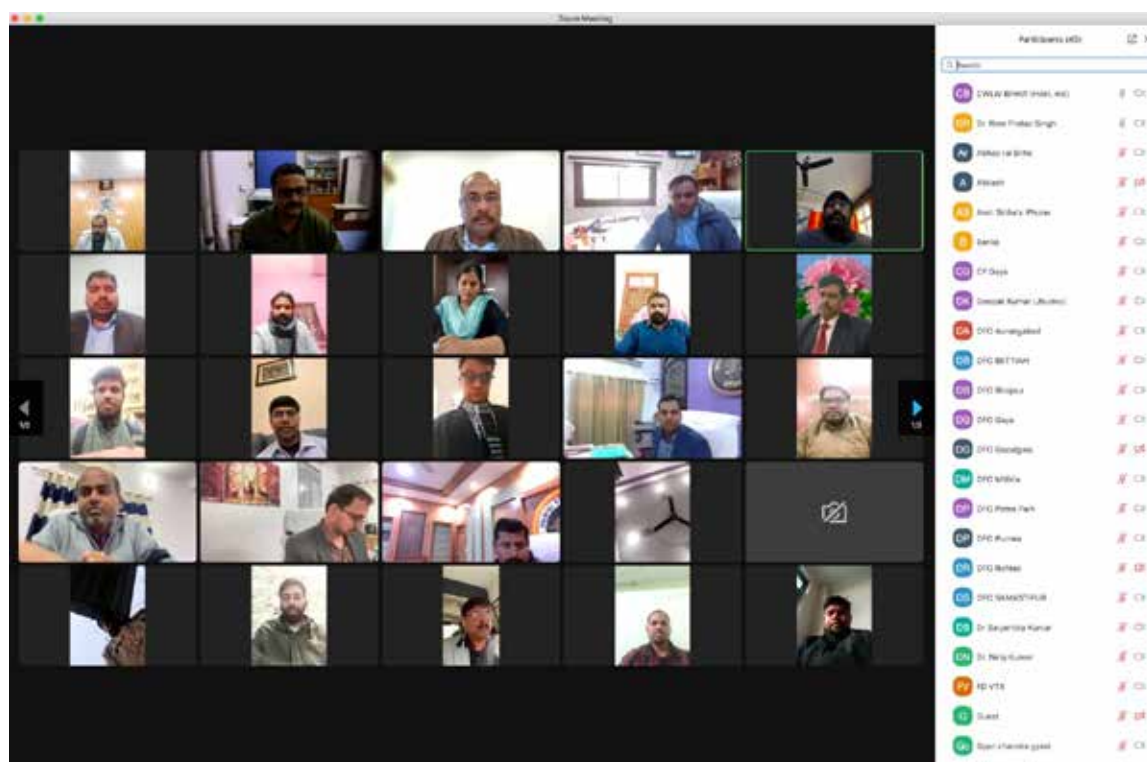
CWLW asked DFOs to submit the Model Estimated Budget for AWC-2024 by 10th Jan, 2024.

During meeting, Md Amir Rizwan informed that birder Mr. Yuvraj Singh has not received his AWC-2022 certificate. CWLW asked him to collect it from DFO Motihari's office.

CWLW congratulated everyone that each year the AWC sites are increasing that is due to everyone's hard work. This year we are doing pre and post AWC census also which is a positive addition. He also mentioned that Bihar is the first State who has been doing AWC successfully for the last three years and it has been carried out jointly by the Department Officials, Citizens, Universities and NGOs which is not common in other State of India.

The meeting ended with closing remarks from Mr. S. Sudhakar where he mentioned the next meeting's Agenda would be discussion on BRMS App and its related issues.





Picture of the participants during the virtual meeting

Participants of the meeting:

1. Mr. Prabhat Kumar Gupta, CWLW Bihar.
2. Mr. Abhay Kumar, RCCF Bhagalpur
3. Mr. S. Sudhakar, CF Gaya cum Nodal Officer, AWC Bihar
4. Dr. K. Nesamani, Field Director, VTR
5. Dr. P. Sathiyaselvam, Deputy Director, BNHS
6. Mr. Shashikant Kumar DFO Patna Park Division
7. Mr. Bhaskar Chandra Bharti, DFOPurnea
8. Ms. Megha, DFO Araria
9. Mr. Teja Jaiswal, DFO Aurangabad
10. Mr. Atish Kumar, DFO Bettiah
11. Mr. Vikas Ahlawat, DFO Bhojpur
12. Mr. R K Ravi, DFO Begusarai
13. Mr. Rajeev Ranjan, DFO Gaya
14. Mr. Pankaj Kumar, DFO Gopalganj
15. Mr. Rajkumar, DFO Nalanda
16. Ms. Ruchi Singh, DFO Mithila
17. Mr. Ambarish Kumar Mall, DFO Patna
18. Mr. Manish Kumar Varma, DFO Rohtas

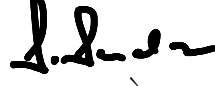
19. Ms. Amita Raj, DFO Sitamahri
20. Mr. Subodh Kumar Gupta, DFO Samastipur
21. Mr. Ramendra Kumar Sinha, DFO Saharsa
22. Mr. Amit Kumar, DFO Vaishali
23. Mr. Sanjeev Ranjan, DFO Nawada
24. Mr. Satyam Kumar, ACF, Munger
25. Mr. Arvind Mishra, Mandar Nature Club
26. Dr. Gopal Sharma, Regional Director, ZSI
27. Col. Amit Sinha, NCC
28. Dr. Satyendra Kumar, Head of Department, Zoology, Hajipur
29. Dr. Niraj Kumar, Prof., Muzaffarpur University
30. Mr. Vidya Jha, Mithila University
31. Dr. Ram Pratap Singh, Central University of South Bihar
32. Mr. Navin Kumar, Former GM Tourism Department
33. Mr. Kamlesh Maurya, Landscape Coordinator, WWF
34. Mr. Sivakumar, scientists, BNHS
35. Ms. Khushboo Rani, SRF, BNHS
36. Ms. Vertika Patel, JPF, BNHS
37. Mr. Abhay Rai, JPF, BNHS
38. Mr. Abilash, JPF, BNHS
39. Mr. GyanChandra Gyani
40. Mr. Shambhu Kumar, IT cell, DEFCC
41. Mr. Manish Kumar, IT cell, DEFCC
42. Mr. Imran- CUSB
43. Mr. Shivam Kumar BIPSA
44. Mr. Rahul Kumar, BIPSA
45. Mr. Vatan Kumar
46. Mr. Deepak Kumar Jhunnu
47. Mr. Rahul Rohitashwa
48. Mr. AbdheshAdarsh, Bird guide
49. Mr. Pradeep Kumar

पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, बिहार।
कार्यालय—वन संरक्षक, गया अंचल, गया।

वन भवन, सेवा नगर, गया, बिहार, दूरभाष सं०-०६३१-२९५१६३३ मोबाईल सं०-९४३०८९०९८९ E-mail. cfgaya@gmail.com

ज्ञापांक-१३४ / गया, दिनांक-१८.०१./२०२४

प्रतिलिपि सभी क्षेत्रीय मुख्य वन संरक्षक/निदेशक, पारिस्थितिकी एवं पर्यावरण, पटना/सभी वन संरक्षक/सभी वन प्रमण्डल पदाधिकारी/बैठक के सभी प्रतिभागियों को सूचना एवं आवश्यक कार्रवाई हेतु प्रेषित।



वन संरक्षक—सह—नोडल पदाधिकारी
Asian Waterbird Census, Bihar.

ASIAN WATERBIRD CENSUS – 2024

6th PREPARATORY MEETING



DATE: 12th January 2024



ASIAN WATERBIRD COUNT – 2024

6th Preparatory Meeting

Minutes of the Meeting

Venue- Zoom (Virtual)

Date: 12/01/2024

Time: 03:30 PM TO 05:30 PM

A virtual meeting was held on the 12th of January, 2024 to discuss issues/doubts related to BRMS App and pre-census status. The meeting was chaired by Mr. Prabhat Kumar Gupta, IFS (CWLW, Bihar). At the outset of the meeting, the Chairman welcomed all the participants. He briefed the agenda of the meeting. Topics and proposed activities discussed in the meeting are summarized below.

1. Discussion and presentation on the Bird Ringing and Monitoring System (BRMS) mobile application,
2. Clarification & clearance of doubts on the BRMS app and final discussion on AWC-2024 preparation status,
3. Discussion on other issues, as raised in the meeting.

1. Discussion and presentation on the Bird Ringing and Monitoring System (BRMS) mobile application

A power point presentation on ‘BRMS App Use’ was displayed by CWLW to clear out the doubts of the coordinators and birders.

SoP - CWLW told coordinators that they can enter AWC data in offline mode as well as online mode. If one has uploaded the team’s details in the Habitat form then in the AWC count form, only one team member’s name entry is sufficient. Before proceeding in field, one should log into the BRMS app in online mode one-by-one for respective wetlands to be surveyed that day, so that the details regarding those wetlands are fetched from server into the memory of the mobile app. Thereafter, one can logout and proceed in the field for survey in offline mode. In the field, they can again log in offline, take lat-long and geo-tagged photo in offline mode, save it and log out. Thereafter, field data can be recorded on hard copies of forms to save time. After returning from field, they can log in the app in online mode, click the “Pending Upload” button which shows the saved data as “1” and selecting “edit” button, feed the noted compiled data (bird count and other habitat details) from hard copies on to the app. After entry of all data in the app, click “Upload to server” button. The same procedure should be followed for each day of survey.

It was clarified that following the procedure above, the analysis and procurement of final AWC data would be fast and the department can come out with AWC results real quick.

Mr. Arvind Mishra asked if one needs to go online to take and upload the on-site photo. To which CWLW replied that it could be done offline.

Mr. Kushagra Rajendra asked if we are in the field and if there is no good connectivity how to upload the data on the BRMS App. CWLW replied in the field you can work offline in the BRMS app. You upload it after coming back from the field when you have a good internet connection.

2. Clarification & clearance of doubts on the BRMS app and final discussion on AWC-2024 preparation status.

Mr. Arvind Mishra listed the doubts/issues that he faced while using the BRMS app:

1. **While installing the app, several warnings showed that this is dangerous.**
CWLW clarified that there is no need to panic about the warning. This is a normal alert which is displayed in case of all third party apps. The app is completely safe to use.
2. **Editing of uploaded list. If we can't, can you do it?**
CWLW clarified that once the data is sent to server, the coordinators cannot edit/change the uploaded list. It can only be done from the department's end. In such a case, they can reach out to Mr. Manish and Mr. Shambhu from IT Cell for necessary edits/corrections.
3. **Multiple options for vegetation cover and water sources should be provisioned in Habitat Form.**
CWLW said that the feature can be added to the app next year.
4. **Photo option to save habitat form draft.**
Mr. Arvind Mishra asked if the Habitat photo can be uploaded from the gallery as well if not, then this feature should be added too. It was clarified that it would be added for the next census.
5. **Do you know, from which mobile number the data is uploaded? If it is filled by anyone other than the coordinator then?**
CWLW said that as already discussed, only one person, nominated by the coordinator, should do this from each team. He asked the coordinators to give the responsibility for uploading the data in the app to one person from their team. This should be done before the census day. The mobile number from which data is uploaded gets recorded in the server.
6. **A manual coordinate filling option may be provisioned in case the correct coordinate does not show. Coordinates taken from different corners may vary from the set coordinates.**
CWLW said we are not going to map the wetland this time. Only one set of coordinates is sufficient for the purpose. Additional features like mapping the survey area can be embedded in the app in coming years.
7. **The App should be Laptop-friendly too.**

Mr. Arvind Mishra expressed that it is inconvenient to enter the data in the app by phone, filling 15-20 names, their mobile numbers, and e-mail IDs on mobile is extremely difficult too in both the habitat and species form. If the app is desktop friendly that would be better. CWLW informed that the web version has already been prepared, but seeing the less interest in usage of app, the web version was not released to coordinators with all facilities. Once the teams in present AWC use mobile version, the web version will be tweaked and released as per requirement. However, that would depend upon the interest shown by teams in making use of technology already provided to them.

8. **In place of using terms like Observer/documenter etc. in certificates and records, only terms such as coordinators and birders be used.**
CWLW said that these terms have been kept to ascertain the field of specialization of the person. Hence these should be maintained in documentation. However, in certificates, only two terms could be used.
9. **For Garhi Dam, there should not be Part I and Part II. Halfway is common for both the parts. It is not a linear wetland like a river. Data of both the parts may be merged and record Garhi Dam as a single site.**
CWLW suggested that to avoid the double counting and data overlap it would be better if Mr. Arvind Mishra's team covered both the parts, using Garhi Dam Part-I as representation of entire dam in the app.
10. **Uploading of Habitat form of Nagi, failed even after trying for many a times. Then I removed the old filled form and wanted to fill a fresh form that failed too (photo option did not work).**
Mr. Manish Kumar replied that it might be a technical issue as the server was low on that day. CWLW asked Mr. Manish to talk it out with Mr. Arvind Mishra. He also advised to follow the SoP as detailed at beginning of discussion to avoid any such issue.
He also told everyone that it must be kept in mind the server also gets slow and some inconvenience can occur. While operating the app, weak internet connection can also be an issue.
11. **In waterbirds and others, no option for unidentified species.**
Manish Kumar from IT Cell clarified that for such situations, "Others" section has been provided. That should be filled in with species and numbers.
12. Mr. Mishra gave general advice to all that it needs to be kept in mind that they select the "add more" option every time while selecting various species otherwise it will get added up in the previous species' number.
13. **Pipits do not fall in the Wagtail group.**
Mr. Mishra pointed that there is option called 'Wagtails & Pipits' in the Birds family drop-down menu, which should be separated, and in Pipits family species should also be added. Dr. Kushagra Rajendra suggested updating the wetland list as well.
CWLW asked Mr. Manish Kumar to update the lists and re-share the app link in the AWC Whatsapp group so that everyone can install the updated app. Manish Kumar of IT Cell said that re-installing the app is not necessary. As soon as the user logs into the existing app, the updated information will get populated automatically.

3. Other discussion

Mr. Surendra Singh asked if more wetlands as per the available list of wetlands in Bihar can be added. CWLW said the wetland list for Bihar consists of 133 wetlands of more than 100 ha. and 4416 wetlands as per National Wetland Atlas. Incorporating such huge number of wetlands would not only make the mobile app heavy and user non-friendly, but also defeat the purpose of BRMS App, as it has been designed solely for the purpose as envisaged in the MoU with BNHS. Moreover, the number of wetlands for AWC 2024 is locked and finalized now. The other wetlands can be covered in a separate census exercise. If any coordinators are willing to cover any other sites during census, they can do so, the data of which will be entered at the backend into the server.

Dr. P. Sathiyaselvam told everyone that at the time of implementation of the plans, some problems may arise, but one should not panic, they shall be dealt with as the situation demands.

CWLW added that teams need to maintain the AWC hard copy, as there could be some technical and connectivity issues. Still, it is compulsory to utilize the BRMS app for this year's AWC, as far as situation permits. We need to showcase Bihar State's ability to conduct the AWC efficiently and set an example as the first State to make use of such technology as compared to other advanced States such as Himachal Pradesh, Andhra Pradesh, Telangana, etc.

Dr. Kushagra Rajendra pointed out that usually due to some logistics and technical issue the focus deviates from the actual task i.e. census, which creates unnecessary time and manpower wastage. He requested the department that every DFO should inform the concerned Range Officers and Forest Guards before the census day in advance. In response to this, CWLW requested the coordinators if they have a resource person in contact at the site level, they can share their contact details with the respective DFOs. He also requested the DFOs to ensure roping in such persons for smooth conduct of AWC at ground level.

Mr. Arvind Mishra said that if the certificates of AWC 2023 could be made readily available to DFOs at the time of the census, the teams could conveniently collect it. To which CWLW replied that certificates need signatures of senior officers, which is not possible before 25th Jan 2024.

CWLW said that he has not received the details of those who require the exemption letter for the census. That should be shared with him as soon as possible.

Ms. Khushboo Rani said that she has not received pre-census data from coordinators except Mr. Deepak Kumar. In response to that, CWLW asked coordinators to submit their pre-census data as soon as possible. Mr. Arvind Mishra said that he has surveyed Gadhi Dam, he will submit the data at Bird Ringing and Monitoring Centre as soon he arrives in Bhagalpur.

The meeting ended with a vote of thanks.

Final list of the 83 Wetlands chosen for AWC-2024 (sites from 27 districts)

Sr. No.	DISTRICT	WETLAND
1.	ARARIA	Trishulia ghat
2.		Dupahariya Pokhar
3.	AURANGABAD	Indrapuri Barrage
4.	BANKA	Odhni Dam
5.	BEGUSARAI	Kawar lake
6.		Pachaila
7.	BHAGALPUR	Jagatpur lake
8.		Gangaprasad Jheel
9.		Kataiya dhar
10.		Dimaha wetland
11.		<i>Ganga river - Manik sarkar ghat - to Barari Ghat</i>
12.		<i>VGDS - Sultanganj to Mirzapur</i>
13.		<i>VGDS - Mirzapur to Barari Ghat Bhagalpur</i>
14.		<i>VGDS - Barari ghat Bhagalpur to Bateshwarsthan</i>
15.		Ghatora wetland complex
16.		Bhagalpur bypass
17.	BHOJPUR	Sunki Suhiya - Shahpur
18.	BUXAR	Gokul Jalashay
19.	BUXAR TO PATNA	Ganga river Ghats from Buxar to Patna (1) UP border Tatiya kshetra Chausa
20.		(2) Buxar Umarpur Ganga Tatiya kshetra
21.		(3) Simri Keshavpur Manikpur kshetra
22.		(4) Bhrampur Naunijor bandh kshetra
23.	DARBHANGA	Kusheshwar asthan
24.		Khiroli nadhi tat
25.	EAST CHAMPARAN	Sarotar Wetland
26.		Basmanpur mann
27.		Sonbarsa mann
28.		Chilraon Mann
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33.	JAMUI	Nagi dam
34.		Nakti dam
35.		Belatar
36.		Pailbajan

37.		Devanahar
38.		Garhi dam - Part1
39.		Jhajha railway pond
40.		Raja ahar
41.		Garhi dam - Part 2
42.	KAIMUR	Karanchak/Durgawati Dam
43.		Karkat waterfall
44.	KATIHAR	Goga beel
45.		Bagar beel
46.		Kathotia fish pond
47.		Baldiya chaur
48.		<i>Ganga river - Bateshwarsthan to Manihari ghat</i>
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80.	WEST CHAMPARAN	Valmiki Tiger Reserve (Darwabari wetland)
81.		Udaipur Jheel/WLS
82.		Lal Saraya mann
83.		<i>Gandak river (Valmikinagar to near Madanpur)</i>

Participants of the meeting

DoEFCC:

1. Mr. Prabhat Kumar Gupta, CWLW
2. Mr. Abhay Kumaar, RCCF, Bhagalpur
3. Me. Surendra Singh, Director, Ecology and Environment, Patna
4. Mr. A.K.Dwivedi, RCCF, Muzaffarpur
5. Mr. Nesamani K., CF-cum-FD, VTR
6. DFO, Purnea
7. DFO, Nawada
8. DFO, Araria
9. DFO Bettiah
10. DFO Gaya
11. DFO, Sitamarhi
12. DFO Gopalganj
13. DFO Patna
14. DFO Saharsa
15. DFO Vaishali
16. DFO Patna Park Division
17. DFO Supaul
18. DFO Motihari
19. DFO Kaimur
20. DFO Mithila
21. DFO Banka
22. Mr. Shambhu Kumar, IT cell, DEFCC
23. Mr. Manish Kumar, IT cell, DEFCC

BNHS:

24. Dr. P. Sathiyaselvam, Deputy Director, BNHS
25. Mr. Sivakumar, Scientists, BNHS
26. Ms. Khushboo Rani, SRF, BNHS
27. Ms. Vertika Patel, JPF, BNHS
28. Mr. Abhay Rai, JPF, BNHS
29. Mr. Abilash, JPF, BNHS

Co-ordinators & Birders:

30. Mr. Arvind Mishra, Mandar Nature Club
31. Dr. Niraj Kumar, Prof. Muzaffarpur University
32. Mr. Kamlesh Maurya, Landscape Coordinator, WWF
33. Mr. Kushagra Rajendra, Prof. Amity University
34. Mr. Navin Kumar
35. Mr. Gyan Chandra Gyani

36. Mr. S.K.Imran- CUSB
37. Ms. Divya CUSB
38. Ms. Manisha CUSB
39. Ms. Trisha CUSB
40. Mr. Shivam Kumar BIPSA
41. Mr. Rahul Kumar, BIPSA
42. Mr. Vatan Kumar
43. Mr. Deepak Kumar Jhunnu
44. Mr. Rahul Rohitsashwa

पर्यावरण, वन एवं जलवायु परिवर्तन विभाग
प्रधान मुख्य वन संरक्षक, पटना का कार्यालय
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राईडिंग रोड (पीर अली मार्ग), अरण्य भवन, चतुर्थ तल, पटना-800014
ई-मेल: cwlwbihar@rediffmail.com

पत्रांक: 53

पटना, दिनांक 25 जनवरी, 2024 ई०।

प्रतिलिपि: सभी क्षेत्रीय मुख्य वन संरक्षक/ निदेशक, पारिस्थितिकी एवं पर्यावरण,
पटना/सभी वन संरक्षक/सभी वन प्रमण्डल पदाधिकारी/बैठक के सभी प्रतिभागियों
को सूचना एवं आवश्यक कार्रवाई हेतु प्रेषित।



प्रधान मुख्य वन संरक्षक-सह-
मुख्य वन्यप्राणी प्रतिपालक, बिहार।

ASIAN WATERBIRD COUNT – 2024

Post-count review Meeting



Date: 03.03.2024



ASIAN WATERBIRD COUNT – 2024

Post-count review Meeting

Minutes of the Meeting

Date: 03/03/2024

Time: 03:30 PM TO 05:30 PM

Venue- Virtual via Zoom

A virtual meeting was held on 3rd March, 2024 to review the Asian Waterbird Census (AWC) - 2024 exercise, status of data submission and preparations for the post-census event. The meeting was chaired and steered by Prabhat Kumar Gupta, IFS, Chief Wildlife Warden (CWLW), Bihar. The Chairman welcomed all the participants and thanked everyone for their wholehearted contribution in conducting and completing the AWC in Bihar. He also praised the efforts of the participants in the recently concluded Nagi Bird Festival, 2024 and the impact it made in creation of mass awareness and outreach through bird talks & seminar sessions. He then briefed all about the agenda of the meeting.

Agenda for the meeting:-

- Experiences gained, difficulties and bottlenecks faced by coordinators and birders during the AWC-2024
- Common and rare species recorded during AWC-2024
- Public response, curiosities and their conversations with teams conducting AWC-2024
- Usage of the BRMS app for submission of the AWC – 2024
- Submission of Data and habitat assessment forms of AWC-2024
- Certificate for AWC participants
- Strategy for Post-count survey, 2024

Discussion

CWLW congratulated everyone for successfully completing the AWC-2024 with great enthusiasm. Mr. S. Sudhakar, CF Gaya and the nodal officer for the AWC-2024 invited AWC coordinators one by one to share their AWC-2024 experiences.

Mr. Arvind Mishra expressed satisfaction with the AWC experience, mentioning the excellent logistics, the helpfulness of DFOs and forest staff during the survey. However, he mentioned a

slight challenge in his AWC schedule due to three significant events happening together i.e. AWC-2024, International Workshop and Nagi Bird Festival.

He also mentioned that this year's Bird Festival took place very near to the Nagi wetland during the AWC which was bound to create disturbance to waterbirds in some extent. He suggested that the bird festival may be conducted in other district locations too, in future. He informed that he has submitted report of 4 sites, but 16 are remaining as he was out of Bihar.

The CWLW conveyed to Mr. Arvind Mishra that there is a plan to arrange a meeting with all the AWC coordinators to discuss and develop a coordinated plan for organizing the bird festival in the coming years. He asked him to submit the remaining sites' data.

Dr. Kamlesh Maurya said that he had submitted all the data of AWC. He further informed that they faced no issues during the survey and they reported Black-capped Kingfisher for the first time in Bihar. This species is mostly found in coastal areas but they spotted this in Udaipur Jheel, Valmiki Tiger Reserve while doing AWC. CWLW appreciated this and asked to share the details and photographs of the species with Bird Ringing and Monitoring Station (BRMS), Bhagalpur for record and verification purposes.

Mr. Arvind Mishra mentioned that in the AWC, Mr. Vatan Kumar coordinator of Ganga stretch from Maniksarkar to Barai Ghat, had sighted Little Pied Flycatcher which is also a first record for Bihar.

Dr. Kamlesh Maurya added that they had prepared a checklist of 306 species in the Valmiki Tiger Reserve. CWLW asked him to share all these information with BRMS, Bhagalpur, so that the department may publish the findings.

Dr Maurya mentioned that the Udaipur Jheel Wetland is a pleasant location for surveys. In contrast, Lal Saraya Mann Wetland has anthropogenic disturbance, suggesting exclusion of the latter from future AWC. Additionally, he mentioned that the Gandak River is currently a threat-free area. Mr. S. Sudhakar said to Dr. Kamlesh Maurya that long-term monitoring is important to know the trend of the species and their abundance, it will be helpful for the future conservation actions in this region.

Mr. Gyan Chandra Gyani shared that this time the AWC experience was trouble-free and went smoothly, and he reported three new species namely, Smokey Warbler, White-tailed Eagle and Short-eared Owl. He told that he has submitted his data. He also informed that people are slowly getting sensitized. During the survey in Pasraha Chaur, the residents expressed appreciation for their efforts in bird conservation but also questioned why the prevalence of hunting nets has not decreased despite initiatives.

CWLW urged all the DFOs, forest staffs, and coordinators to engage in effective communication with villagers. The emphasis was placed on gathering ongoing information about poaching activities, to take stringent measures against those involved in poaching. He also said to share respective DFO's number so that he can immediately take action against it.

Dr. Gopal Sharma mentioned that he has submitted all the data. He informed that the Kosi River area proved to be a favorable location for birding. The density and diversity of birds were high, and there were no reported illegal activities. However, he noted that in Supaul, bird diversity was low as compared to last year in Kosi catchment area but when they moved forward to Virpur Barrage pond near Nepal border, more than 750 Lesser-whistling Duck were seen. This is because of low water level in Kosi catchment area which leads them migrate to that pond.

While doing AWC in Panta, the weather suddenly changed, and it started raining. Unfortunately, there was a lack of proper shelter on the boat which resulted in damage to camera equipment. CWLW specified that for the upcoming year's survey, arrangements would be made to provide plastic bags to mitigate potential issues caused by rain. This measure will be aimed to ensure the team is well-prepared and equipped to handle adverse weather conditions during the survey.

In Baraila Lake, evidences of bird trapping, netting and poaching activities were seen. Despite efforts by the forest staff to remove these nets, the trapping persists daily. To address this on going issue, it was suggested to set up a special task force with the specific mandate of tackling bird trapping and poaching activities in the area. Mr. Amit, DFO, Vaishali mentioned that to control bird hunting, the forest staff are actively engaged in regular monitoring. This proactive approach had been effective in managing and controlling bird-hunting activities in the area since, he added. The CWLW advised the DFO to conduct regular monitoring / vigilance in the area by actively involving the local community in both monitoring and conservation efforts. He also emphasized the need of the strict actions against poachers.

Mr. Rahul Kumar informed that he has submitted all data sheets. He stated that they had a positive experience. He stated that they successfully completed AWC in three districts. He also commended the support received from the DFOs and forest staff, highlighting their cooperation during the survey.

CWLW inquired Mr. Arvind Mishra whether he had shared the data sheets of AWC-2024 with the nodal officer. Mr. Arvind Mishra informed that he would be uploading the data for the wetlands of Katihar on that day itself, and data for Buxar and Jamui would be uploaded in the BRMS App in a couple of days, he added.

Mr. Deepak Kumar Jhunnu stated that the survey in Kahalgoan was conducted successfully, revealing a count of 3,308 individual of birds belonging to 38 different species. He informed that all data sheets are submitted.

In Ghatora Wetland, the survey resulted with a significant count of more than 10,000 individual of birds belonging to 48 species. He mentioned the noteworthy additions of two new species for Bihar : the Lesser Black-backed Gull and the Hen Harrier. However, it was observed that the area faces anthropogenic pressure and is susceptible to poaching activities. CWLW expressed appreciation for the valuable findings in Ghatora Wetland and requested to send the data sheets to BNHS. Ms. Khushboo Rani informed that the data sheets for Ghatora Wetland have been reviewed, and the actual count was 1241, not 10,000 as mentioned by Mr. Jhunnu. CWLW asked

Mr. Deepak Kumar Jhunnu to review the data once more and ensure its accuracy. Additionally, CWLW asked him to promptly share the revised data with the BNHS team.

CWLW and Dr. P. Sathiyaselvam requested all coordinators to send scanned copies of datasheet to the BNHS field station by 10th March, 2024.

Mr. Bharat Chintapalli, DFO, Muzaffarpur conveyed that Manika Mann Wetland yielded satisfactory results, but he recommended excluding Jhapaha Mann Wetland from future AWC counts. Instead, he suggested to incorporate the Muzaffarpur Gandak River stretch for upcoming surveys. Furthermore, he recalled birding with Mr. Arvind Mishra in December 2020, highlighting the reporting of the Steppe Gull as the sub-species of the Lesser Black-backed Gull. This marked the first recorded instance of this species in Bihar.

Mr. Kamlesh Maurya added that the Hen Harrier had already been reported in 2014.

Mr. Bharat Chintapalli urged everyone to upload the survey data on the eBird app. He pointed out that Delhi alone has reported more species than Bihar on eBird, emphasizing that Bihar has the potential to contribute valuable avian data, more so in light of regular AWCs. Therefore, he encouraged the comprehensive uploading of all data to the eBird app. CWLW also requested everyone to upload the data in the eBird App as it is valued and recognized globally.

Mr. Sudhakar recommended adding landbird species to eBird. Additionally, he mentioned plans for future systematic surveys with the assistance of BNHS. Mr. Arvind Mishra mentioned that in the eBird app, bird species submissions are accepted without asking any additional proof or documentation. CWLW requested the BNHS team to take a technical session on this.

Dr. P. Sathiyaselvam congratulated all coordinators for their support and enthusiasm during the AWC over the past three years. Additionally, he mentioned that a survey booklet would be prepared based on the photographs taken during the AWC, and he requested all coordinators to send the photos captured during the survey.

Dr. P. Sathiyaselvam requested Ms. Khushboo Rani to make a presentation on the AWC-2024.

Ms. Khushboo Rani made a presentation about the AWC, 2024 - an update. She mentioned that a total of 89 wetlands in 28 districts, including 19 river stretches, were covered by 20 coordinators during the AWC-2024. As of now, bird counts data for 52 wetlands and habitat data sheets for 48 wetlands of 22 districts had been received. These sheets documented the observation of 29,815 individuals of birds of 177 species. However, the information for 37 wetlands are still pending.

The chairman of the meeting expressed concern on non-submission of data sheets and consequent loss of data in the update. Mr. Arvind Mishra stated that 20,000 to 30,000 birds will be added to the count through the bird count data of wetlands of Katihar, Jamui, and Buxar districts. He informed that he would submit the data sheets shortly.

Ms. Khushboo informed that the newspaper clips were received only for five districts. As the newspaper clips are added to the AWC report, she requested all the coordinators to share the high resolution pics of published news items. CWLW requested all coordinators to send high-

quality newspaper clips to the BNHS team at the earliest. He asked the State Nodal Officer to pursue it on regular basis.

Ms. Khushboo added that BNHS team had received six sets of photos of wetland habitat, birds, and census operation group photos from the coordinators. The remaining 13 sets of photos need to be received from the coordinators. As the photo documentations are needed for supporting the facts of the AWC activities, she requested all the coordinators to share the best photos in the stated email id.

Dr. P. Sathiyaselvam requested each coordinator to share all photographs on or before 10th March 2024 for the AWC report.

The CWLW instructed Mr. Sudhakar to reach out to all coordinators and gather the necessary requirements at the earliest.

Ms. Khushboo reported that out of the nine wetlands selected for the pre-survey, data for three wetlands were received from coordinators. However, it was noted that one additional wetland, Chhapa, was not originally included in the selected list. Mr. Deepak Kumar Jhunnu clarified that Chhapa is the location of Nagi Dam and its appearance as Chhapa is due to the locations mentioned in the eBird.

Ms. Khushboo highlighted issues and concerns in the AWC data which were observed during the data entry. The issues and concerns she mentioned were that (a) for some wetlands, the details given in the habitat forms were incomplete, and (b) the GPS coordinates were incorrect for some wetlands. Mr. Sudhakar, the nodal officer of the AWC, suggested a solution for this issues that incorrect GPS coordinates can be corrected by using the coordinates from the previous year's wetland data.

Ms. Khushboo pointed out challenges related to updating the BRMS app and the inclusion of rare bird sightings in the data sheet without getting the photos. Mr. Manish from IT cell said that they will work on the BRMS app related issues and rectify it shortly. CWLW suggested Mr. Manish to be in touch with the BNHS team and solve this problem at the earliest.

Mr. Bharat Chintapalli, DFO, Muzaffarpur suggested that as in one of the counts forms many rare species have been reported, he recommended to get the photos of those records from the coordinators. It would enhance the credibility and significance of the records, making them valuable additions to the AWC report, he added.

CWLW thanked Ms. Khushboo for her informative presentation on the AWC 2024 update.

Post-count census

CWLW asked Dr. P. Sathiyaselvam about the possibility of conducting post-count surveys for only selected wetlands and which wetlands to be included in the post-count survey. Dr. P. Sathiyaselvam replied that if the team receives all AWC count and wetland habitat datasheets on

or before the 10th of March 2024, the selected wetlands for the post-count survey can be communicated by the 15th of March 2024.

CWLW suggested that for the post-count survey, we should consider wetlands where the maximum number of species was reported during the AWC-2024. He asked Dr. P. Sathiyaselvam's opinion on this. Dr. P. Sathiyaselvam replied that it is a good idea. Dr. Sathiyaselvam also humbly requested all the AWC Coordinators, not to take it personally if the BNHS team asks any coordinator for any clarification on the submitted datasheets and bird records. He emphasized that including any rare bird sightings / new records in the AWC report, with proper photographic documentation, would enhance the overall value of the report.

Mr Gupta expressed appreciation for the point made and emphasized the importance of an error-free report. This was the reason for repeatedly asking for photos, particularly for new species, to ensure the accuracy and reliability of the AWC report, he said.

Dr. P. Sathiyaselvam mentioned that this year's AWC report would also encompass the Pre-count Survey and Post-count Survey details. Additionally, he indicated that the post-count survey is likely to commence in the third or fourth week of March.

CWLW asked all the DFOs to organize and coordinate the preparation and arrangement for the birders for the post-AWC count. He further asked for their comments on the exercise.

The DFO, Vaishali expressed that the AWC was a positive and good experience for him.

The DFO, Aurangabad said it was a good experience for him as well. Mr. Sudhakar, the CF, also went with them and they got 50 species in six wetlands, he added. CWLW appreciated DFO Aurangabad for being involved directly in AWC.

The DFO, Bettiah conveyed that the AWC was a positive and enriching experience. He specifically praised the coordinator Dr. Kamlesh Maurya who covered the site in Bettiah. DFO, Bettiah suggested that next year's Bird Festival can be organized in their division, highlighting it as a favourable location for such events.

The DFO, Supaul briefed that their experience during the AWC was positive and good.

The DFO, Motihari shared that the AWC survey was a very nice experience, and they successfully covered six wetlands during the process.

The DFO, Mithila shared that the AWC was a unique experience, mentioning that they counted a good number of birds during the survey.

The DFO, Rohtas stated that they had observed many land bird species as well in this area. The possibilities of conducting a land bird survey in the area with the assistance of BNHS can be worked out in near future.

The CWLW suggested to conduct a land bird identification training programme in collaboration with BNHS and Dr. Kamlesh Maurya for enhancing skills of the frontline staff and other stakeholders in identifying land birds in the region.

The DFO, Nawada stated that there were no logistical issues during the survey. They had surveyed the Rajauli Wildlife Sanctuary. This survey was part of their efforts in preparing a management plan for the sanctuary. It was also a part of comprehensive approach to wildlife conservation and habitat management. CWLW appreciated this effort regarding collection of additional data for preparation of the management plan.

The DFO, Jamui reported that everything went on well during the survey, expressing satisfaction with the overall process.

The DFO, Bhagalpur mentioned that she faced an issue initially. Mr. Bharat Chintapalli, the former DFO's name had been given as coordinator in some of the sites. But he was transferred before starting of the AWC. Therefore, there was no coordinators for those sites. She mentioned that all the birders of Bhagalpur helped her to complete the AWC successfully in the given sites. The Chairman of the meeting stated that the Bhagalpur division has a strong birders' community. The knowledgeable and enthusiastic birders in Bhagalpur are actively contributing towards wildlife conservation initiatives, he acknowledged.

Mr. Abhay Kumar, Director, Ecology and Environment said that overall it was a good experience.

The Chairman of the meeting expressed gratitude and thanked everyone for their efforts in conducting the AWC. He asked Mr. Sudharkar, the State Nodal officer to look into the issues of AWC-2024 update presented by Ms. Khushboo. He requested all the coordinators to share the AWC Count and Habitat forms to awcbihar@gmail.com on or before 10th March, 2024. He also requested all the coordinators to share the paper news, photos of habitats, birds and group activities taken during the AWC-2024 to the same mail id at the earliest. The CWLW also informed the IT personnel to sort out the data submission issues in the BRMS app.

The meeting ended with a thanks to all those present.

Participants of the meeting:

1. Mr. Prabhat Kumar Gupta, CWLW
2. Mr. Abhay Kumaar, Director, Ecology and Environment, Patna
3. Mr. Sudhir Kumar, RCCF, Bhagalpur
4. Mr. S. Sudhakar, CF, Gaya
5. Dr. P. Sathiyaselvam, Deputy Director, BNHS
6. Mr. Bharat Chintapalli, DFO, Tirhut
7. DFO, Araria
8. DFO, Bettiah
9. DFO, Bhagalpur
10. DFO, Gopalganj
11. DFO, Bhojpur
12. DFO, Vaishali

13. DFO, Supaul
14. DFO, Motihari
15. DFO, Mithila
16. DFO, Aurangabad
17. DFO, Nawada
18. DFO, Rohtas
19. DFO, Jamui
20. DFO, Saran
21. Mr. Arvind Mishra, Mandar Nature Club
22. Dr. Gopal Sharma, Regional Director, ZSI
23. Dr. Kamlesh Kumar Maurya, Landscape Coordinator, WWF
24. Ms. Khushboo Rani, SRF, BNHS
25. Mr. Abhay Rai, JPF, BNHS
26. Mr. Abilash, JPF, BNHS
27. Ms. Sharon Christina, Intern, BNHS
28. Mr. Gyan Chandra Gyani, AWC Coordinator
29. Mr. Shambhu Kumar, IT cell, DEFCC
30. Mr. Manish Kumar, IT cell, DEFCC
31. Mr. Rahul Kumar, AWC Coordinator
32. Mr. Deepak Kumar Jhunnu, AWC Coordinator

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पत्रांक: 246

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