Department of Environment, Forest & Climate Change
Government of Bihar

ASIAN WATERBIRD CENSUS 2023

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ANNUAL REPORT

Bihar State Bird Count

BNHS INDIA CONSERVING NATURE SINCE 1883

बिहार सरकार

Department of Environment,
Forest & Climate Change Government of Bihar

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बिहार सरकार

TEJ PRATAP YADAV
Hon'ble Minister
Environment, Forest & Climate Change
Government of Bihar

MESSAGE

The rich and diverse agricultural landscape of Bihar comprises various ecosystems that include wetlands also. This landscape is a highly favored stopover and wintering sites for resident and migratory birds. It is necessary that such sites be identified and protected through management strategies based on robust data. It is indeed satisfying to see that efforts in this direction have not only been initiated, but are also being sustained with the help of people's participation. The Government of Bihar is fully committed to protect and conserve these avian species which are also markers of Climate Change. The first ever Asian Waterbird Census, 2022 conducted in Bihar last year stands as a testimony to this fact.

I am happy to find that the departmental officers, along with Bombay Natural History Society (BNHS), Mumbai and volunteers have continued these efforts and come out with this document for the year 2023 also. It will indeed provide a boost to the bird conservation and management efforts in coming years.

I congratulate the officers of Environment, Forest and Climate Change Department for conducting a successful iteration of the Asian Waterbird Census, 2023 in Bihar with peoples' participation and for presenting this scientific report.

Tej Pratap Yadav

Date:
Place: Patna

TEJ PRATAP YADAV

बिहार सरकार

Bandana Preyashi, I.A.S.
Secretary
Environment, Forest & Climate Change
Government of Bihar

MESSAGE

Birds are indicators of ecosystem health and any change in their diversity or population strength directly affects the ecological balance, upon which our very life and livelihoods depends. The Jal-Jeevan-Hariyali Abhiyan, launched in 2018 in Bihar by the Hon'ble Chief Minister, Bihar, is geared towards conservation and rejuvenation of agricultural and wetland landscapes in Bihar, which are sensitive bird ecosystems. It is of paramount importance to conduct scientific studies and surveys to gain a proper understanding of such ecosystem habitats and disseminate their importance to the public and scientific community at large.

The first ever Asian Waterbird Census (AWC) was organized in 2022 by the Department of Environment, Forest and Climate Change, Govt. of Bihar. It is heartening to know that building upon the earlier efforts, the second annual census has also been conducted in January-February 2023, covering higher number of bird habitats in more districts across Bihar. The AWC, 2023 Report, together with the AWC, 2022 Report, will aid in the drafting of bird conservation policies in Bihar.

I appreciate the hard work and commitment displayed by the team that participated in the AWC, 2023 and congratulate all the department officers, field staff, BNHS scientists, experts, and volunteers who have been instrumental in publishing this scientific document.

Date:
Place: Patna

BANDANA PREYASHI

विहार सरकार

ASHUTOSH, I.F.S.
Principal Chief Conservator of Forest (HoFF)
Bihar

MESSAGE

The state of Bihar has been endowed with richness in diversity of flora, fauna and their exosystem. The vast landscape is home to numerous wildlife and the various terrestrial and aquatic ecosystems are the preferred habitats. These habitats are part of the Central Asian Flyway, the flight route followed by the migratory birds to move from their northernmost breeding habitats to the southernmost wintering grounds. These migratory birds and their habitats require continuous monitoring in order to get scientifically backed data that can aid us in various conservation policies for the state.

Wetlands provide a unique ecosystem that facilitates the congregation of migratory birds. The wetland habitats where these birds inhabit during the winter are not only biodiversity rich habitats, but also lifeline and livelihood support of millions of people living in and around these wetlands.

It was a matter of great satisfaction when in February 2022, our field officials, with the technical support of the Bombay Natural History Society (BNHS), under the leadership of the Chief Wildlife Warden of Bihar embarked on the very first Asian Waterbird Census (AWC) in Bihar. The fact that this feat has been repeatedly sustained in January-February 2023 also in the form of the second AWC, is a matter of great joy and pride. For the second time, the Department has produced substantial scientific results that will serve as insight for policy-making, conservation and management.

I congratulate the officials, staff, scientists, experts, and volunteers associated with the census and hope that this report will be another stepping-stone in furthering the State's policy of bird conservation.

ASHUTOSH

Date:
Place: Patna

बिहार सरकार

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

PREFACE

Birds holding upper echelons of the food chain and diverse niche elements, are markers and indicators of ecological health, "naturalness" and environmental status of landscape regions. These rank high in terms of evolutionary status, adaptability, diversity, variability of habitats and niches, also reflected in morphological and behavioral aspects. Globally, the diversity of birds manifests with 10000 species belonging to 2274 genera and 232 families. We have fast and swift fliers like Falcons, Eagles and Pigeons and flightless birds like Ostrich, Emu, Cassowary and Penguins with many bird species with in-between flight capabilities. The phenomenon of migration from local to transcontinental are awe inspiring and interesting fields, amongst many other characteristic attributes, of exploration and research by scientists and naturalists. In India, conservation of birds and bird habitats is gaining ascendancy day by day, with many bird sanctuaries and also projects for conservation and recovery of collapsing populations of some endangered birds supported by individual naturalists and NGO are now high on the agenda of the State and Central Governments. Many sanctuaries and wilderness tracts that were earlier reckoned dominantly for mammals are now being given importance for sheltering avian community and the management of these have also substantive elements incorporated for conservation of birds and their habitats. Encouraging and illustrative cases in recent times are those of special measures interventions undertaken in India for protection of birds - both migratory and endemic - Vultures, Siberain Cranes, Amur Falcons, Hornbills, Flamingoes, Great Indian Bustard, Greater Adjutant and Jerdon's Courser. For Vultures specifically, the use of a common veterinary medicine formulation - *Diclofinac* has been banned. To save the only remaining habitat of the endemic Jerdon's Courser, a striking rarest nocturnal bird, found only in one region of Andhra Pradesh with a population limited in hundreds, a 400 km Telugu Ganga Canal from Srisailam in central Andhra Pradesh to Chennai has been diverted and 3000 acres of scrub wilderness have been added as sanctuary for this particular species. The decision to this effect reached after protracted disputes and debates including judicial intervention, and it is an example of how governments, communities and conservationists can work together for salvaging the future of a threatened species.

The Indian subcontinent has about 1300 bird species which belong to 88 families. As per currently available information about 400 species of birds may be found in Bihar; that may be grouped for easy

reference in terrestrial, water birds and waterline species – ducks, birds of prey, raptors and arboreal groups (412 species under 73 families enlisted from recent inventories from 8 sources; Birds in Bihar, Vol. 2, 2014). Looking at these figures and with the smaller geographical extent of Bihar, the diversity of birds' community found in this State may be considered fairly rich. The diversity of birds found in Bihar is factored by variety in landforms and vegetation and variability in climate that throw up considerably rich diversity of micro-climate, niches, habitats and bio-regions, and specifically the rivers and wetlands of the river basins in Bihar - the natural depressions, cut-off meanders and ox-bow lakes called variously as *Diaras, Chaurs, Jeel, Beel, Man, Tal* etc. are the dominant components of bird habitat tracts. While recording the presence of a good number of bird species, the facts of dwindling diversity and declining abundance of a substantial number of species in Bihar have also to be reckoned and acted upon.

The Central Asian Flyway (CAF), one among the nine flyways in the world, encompasses overlapping migration routes over 30 countries for different waterbirds linking their northern most breeding grounds in Russia (Siberia) to the southernmost non-breeding (wintering) grounds in West and South Asia, the Maldives and the British Indian Ocean Territory. India has a strategic role in the flyway, as it provides critical stopover sites to over 90% of the bird species known to use this migratory route. A part of the East Asian Australasian Flyway, too, overlaps with the eastern part of India. The Ministry of Environment, Forests and Climate Change, Govt. of India has chalked out a 5 Year National Action Plan (2018-23) to arrest the population decline and secure habitats of migratory bird species along these flyways. The State of Bihar, owing to abundance of preferred habitats for these species and its unique geographical location falling immediately after the long trans-Himalayan flight of these winged migrants, is a favorite resting ground. Hence, providing safe roosting and resting place here for these trans-continental migrants achieves paramount importance.

Keeping this in view, leading steps were taken by the State of Bihar for conservation of the migratory birds along the Central Asian Flyway. The year 2014 saw two departmental publications *"Birds of Bihar - Vol. I & II"* and, thereafter, setting up of a Greater Adjutant Rescue and Rehabilitation Centre in Bhagalpur. This was followed by a detailed scientific study of its breeding site, one among the three worldwide, jointly with Sri Arvind Mishra, Founder, Mandar Nature Club, Bhagalpur-cum-Bihar Coordinator, IBCN and local community in Kadwa diara, Bhagalpur in 2015-16, which provided the first official baseline data regarding the species and its breeding status in form of the report titled *"Breeding of Greater Adjutants in Bhagalpur"*. The work on Greater Adjutant in Bhagalpur as well as the abundant richness of avifauna and its habitat in Bihar was showcased in the Central Asian Flyway Range States Meeting held at Lonavala in November, 2019 before 30 member countries which took note of the potential in Bihar and the seeds for further research on migratory birds in Bihar were sown. This fructified soon after when the Department of Environment, Forests and Climate Change, Government of Bihar entered into a MoU with the Bombay Natural History Society (BNHS), Mumbai in the CMS CoP-13 held at Gandhinagar, Gujarat in February, 2020, which was attended by 133 Parties to the Convention. The conservation efforts regarding Greater Adjutant in Bihar were also featured and documented in the report released by MoEFCC on Migratory Species conservation in India during CMS CoP13. Taking initiative in furtherance of the goals of the National Action Plan, the country's first State funded Bird Ringing and Monitoring Station was set up at Bhagalpur in Bihar. This was followed by the first ever Bird Festival in the State- *'KALRAV'*- in January 2021 in Jamui to celebrate birds of Bihar.

In terms of surveys of birds undertaken by a few avid bird watchers in Bihar a couple of years back, it had been observed that the number of relatively commonly seen species in any locality saturate at fifty and certainly less than hundred. This was a crude indication about species abundance in Bihar. There was no authentic baseline data to represent the population, spatial distribution, breeding behavior and related statistics despite the bird diversity, especially waterbirds and waterline birds, in Bihar, that could be used as a benchmark or reference data by the Forest Department and others associated with bird conservation to understand the trend through future studies or make comparisons by linkages with the earlier data, available through these sporadic efforts made by various NGOs and bird enthusiasts. For any conservation endeavours to be sustained, it is essential to gather vital information and utilize these for further actions and perspective planning. Deriving from this, the first Asian Waterbird Census (AWC) was taken up on initiative of the Department of Environment, Forest and Climate Change across 68 wetlands of the State in February, 2022 which yielded 202 species of terrestrial, waterline and waterbirds with a total count of 45173. The results of the same have been brought out in the form of a report and a coffee table book titled *"Bihar Annual Waterbird Census, 2022"* and "*Drenched in Wonder"* respectively.

The present report, which is the outcome of the second Asian Waterbird Census conducted in Bihar, is a sustained effort in this direction and another such step in a series of steps taken towards conservation of bird species (both migratory and non-migratory). This census was conducted across 76 wetlands spanning 26 districts in the month of January-February, 2023. The outcomes of AWC, 2023, together with AWC, 2022 have ushered in an era of conservation, research and education in the context of avifauna in Bihar. The combined data from both years, in addition to data from potential AWCs in the future, would go a long way in the strategic planning and achievement of the goals and objectives of the National Action Plan and the commitment of the State of Bihar to halting and reversing the decline of these wonderful winged creatures of nature and harbingers of climate change.

It indeed gives me a feeling of comforting accomplishment in being associated with this effort. I congratulate the entire team of forest department officials and their staff, the team of Bombay Natural History Society, Mumbai lead by Dr. P. Sathiyaselvam, all Co-ordinators and their team members in sustaining the efforts initiated towards conservation and research of these wonderful winged creatures of nature. The pro-active involvement of Sri S. Sudhakar, Conservator of Forests, Gaya Circle as the State Nodal Officer and the driving force behind this gigantic exercise has been commendable and is worthy of special mention. The support of other professionals, scientists, volunteers, support staff and local communities, specifically the veterinarians associated, are praiseworthy and needs to be acknowledged, applauded and augmented for sustaining and expanding this noble crusade.

Date:
Place: Patna

PRABHAT KUMAR GUPTA

S. Sudhakar, I.F.S.
Conservator of Forests, Gaya Circle and
State Nodal Officer AWC, Bihar.

ACKNOWLEDGEMENT

The Department of Environment, Forest and Climate Change, Govt of Bihar, has actively undertaken citizen science programme in the state in a big way. One of the success stories is that of the Greater Adjutant Stork community conservation programme that involved the local community people to conserve the breeding habitats of this endangered bird species. The active community involvement has resulted in a significant rise in Greater adjutant stork population in Bhagalpur, Bihar state, which is one of the last three remaining breeding grounds in the world. The department formed a special task team, the Asian Waterbird Census team in Bihar in the year 2021-22. The team ventured into State-level bird counting and habitat assessment exercises for the first time in the year 2022. Wetlands not covered in 2022 Asian Waterbird Census were also covered during 2023 and the census exercise was carried out due to their strategic location and presence of migratory bird population and diversity.

This scientific report of AWC Bihar, 2023 is the result of the outstanding effort by the entire team that participated in the exercise. The team meticulously walked remote landscapes and waded the marshes and rivers of Bihar. I take this opportunity to express my sincere thanks to, Shri. Arvind Kumar Chaudhary IAS, Principal Secretary, Education department, Govt of Bihar. During his tenure of leadership in our department, he was a constant source of motivation for our officers and the AWC team. My sincere thanks are due to Smt. Bandana Preyashi IAS, Secretary, Environment, Forest and Climate Change Department, Govt of Bihar for her support and guidance in publishing this report. I express my sincere thanks to Shri. Ashutosh IFS, PCCF (Head of Forest Force) Bihar, whose continuous support, precise guidance, and constructive assessments of our work steered our team in the direction of achievement and success.

My sincere thanks are due to Shri. Prabhat Kumar Gupta IFS, APCCF cum Chief Wildlife Warden, Bihar for initiating the AWC exercise in our state. He has constantly guided and motivated the entire team during the execution as well as report preparation stages. His effort towards appraisal and timely course corrections has greatly steered the team towards accuracy in the census and precision in data analysis. I am very thankful and appreciate the involvement and technical support of Dr. P. Sathiyaselvam, Deputy Director and Mr. Sohail Madan, Assistant Director of the Bombay Natural History Society (BNHS), Mumbai and their team of scientists and research scholars at the Bird ringing and monitoring centre, Bhagalpur, Bihar.

I sincerely thank all the Divisional Forest Officers of Bihar and their field staff, Team Coordinators, various University and college Professors, Scientists, Student volunteers constituting the AWC 2023 team of Bihar, for their active participation and interest expressed during the AWC exercise. On behalf of the entire team, I express my gratitude and sincere thanks to all stakeholders of all the wetland ecosystems in Bihar, especially the Wetland Mitras, Dolphin Mitras, Ganga Praharis, Garud Saviours, fishermen, and boatmen who provided ground support and assistance that ensured our success and safety during the AWC 2023 exercise.

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

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Bihar has two distinct physiographic regions, namely the Gangetic Plain and the Southern Plateau. The State is watered by four major river systems, the Ganga, the Sone, the Gandak and the Damodar. As a result, it is home to many wetlands. The wetlands of this state in turn are populated by a diverse variety of flora and fauna. These wetlands also support varied avian populations, both resident and migratory. Every winter, wetlands in Bihar play important role to a number of birds that migrate along the Central Asian Flyway (CAF) and East Asian Australasian Flyway (EAAF). These migratory birds use the wetlands in Bihar as wintering sites and staging / stop-over sites during their onward / return journey.

Even though Bihar is bestowed with numerous wetlands, most of them remain unstudied. In order to protect migratory birds and their habitats along the CAF, the Government of India released a five years National Action Plan (NAP), more commonly known as India's CAF-NAP, in 2018. This policy document directs all the state governments to take concrete actions towards "conserving migratory birds and their habitats" in their respective states. The CAF-NAP has been developed specifically to fulfil India's commitments to the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and other biodiversity related conventions.

As part of the implementation of the India's National Action Plan, the Department of Environment, Forest, and Climate Change (DEF&CC), Government of Bihar signed a Memorandum of Understanding (MoU) with the Bombay Natural History Society (BNHS), stipulating the establishment of a Bird Research, Ringing, and Monitoring Centre in Bhagalpur. The objectives of this MoU included regular bird monitoring and ringing of both resident and migrant species. The MoU also lays special emphasis on the dissemination of research outcomes among the wider public; this shall be undertaken to increase public's awareness of birds and their habitats, and to sensitize various stakeholders to avian conservation practices in the state. Under the MoU, the BNHS obliged to extend technical support to the DEF&CC. Government of Bihar as it conducts the Asian Waterbird Census (AWC) every winter to boost citizen science initiatives in the state.

The first AWC was held across 68 wetlands in 23 districts during 2022. Following its resounding success, the second AWC was held from 30th January to 12th February 2023. Overall, 76 wetlands in 26 districts of Bihar were covered for the census. Total 159 people grouped into sixteen teams together spent 968 hours on the bird census. A total of 69,935 individuals of 203 species belonging to 55 families were reported during the AWC 2023. Of this, 61,957 individuals of 87 species belonging to 16 families were waterbirds, 1,243 individuals of 26 species belonging to 5 families were wetland-dependent birds and 6,023 individuals of 90 species belonging to 36 families were land birds.

During the AWC 2022, a total of 45,173 individuals of 202 species belonging to 61 families were recorded from 68 wetlands. Of those, 39,937 individuals of 81 species were waterbirds, 569 individuals of 23 species were wetland-dependent birds, and 5,630 individuals of 101 species were land birds. When compared to AWC 2022, the total number of birds observed during the AWC 2023 were higher. Over 24,600 more birds were reported during the AWC 2023 when compared to 2022. More number of wetlands were also covered during AWC 2023 than in AWC 2022.

The highest number of birds were reported from Jamui followed by Bhagalpur and Buxar districts during the AWC 2023. A total of 18,480 birds were reported from Jamui, while 9,084 and 8,126 individuals were reported from Bhagalpur and Buxar districts respectively. Highest number of species were reported from Bhagalpur followed by Jamui. A total of 112 species belonging to 31 families and 91 species belonging to 35 families were reported from Bhagalpur and Jamui districts respectively.

The wetland with the highest number of birds reported was Nakti Dam Bird Sanctuary, with a count of 7,844 birds, followed by Nagi Dam Bird Sanctuary with 6,938 individuals. The wetland with the highest number of species reported was Deokhal Chaur in Samastipur district, where a total of 66 bird species were reported. During the AWC 2022, the highest bird count was reported at Gogabeel, in Katihar district. A total of 4,992 individuals were reported during 2022.

Of the 69,935 individuals reported during AWC 2023, 29,795 birds of 73 species (41.58%) were long-distance migrants (M) and the rest 40,140 birds of 126 species (57.39%) were resident (R). The highest number of migratory birds were recorded from Jamui District. A total of 18,480 individuals belongings to 87 species were reported in this district.

A total of 20 Threatened and Near-Threatened species were reported in AWC 2023, including eight globally threatened and 12 Near-Threatened species. The Threatened and Near-Threatened birds formed 3.53% of the total population counted during the AWC 2023. Of the threatened species recorded, two were endangered and six were vulnerable. Of the 20 threatened birds reported, 15 species were waterbirds, three were wetland-dependent birds, and two were land bird species.

Habitat surveys and threat assessments were also carried out at each wetland site. Vegetation types at each site were classified and recorded. Signs of pollution and threats such as over-fishing, poaching, and agricultural expansion were also reported.

ASIAN WATERBIRD CENSUS, 2023
ANNUAL REPORT

CHAPTER 1: INTRODUCTION

India is a megadiverse country; it is home to a variety of biomes and landscapes that support an even greater variety of native life forms. In addition to these native life forms, India hosts migratory birds that travel to escape the cold northern winters of Central Asia, andin search of warmer foraging (or wintering) grounds. The path that these birds follow between their northern breeding grounds (where they breed) and southern wintering grounds (where they spend their winter during non-breeding period) is known as a flyway. All aspects of a migratory bird's life cycle are completed within the geographical confines of a flyway (Donnelly *et al*. 2022). India falls within the Central Asian Flyway (CAF), which extends from Siberia to West and South-west Asia, and comprises 30 countries. A significant number of migratory birds, especially waterbirds, choose Indian wetlands as their staging grounds (Kumar 2019).

About19% of the world's extant avian species (BirdLife International 2008a, b) are migratory; of these, 11% have been classified as threatened or near-threatened by International (Kirby *et al*. 2008). Migratory birds depend on a network of wetlands for the purpose of breeding, resting, feeding, and moulting throughout their life cycle (Yang *et al*. 2017; Merken *et al*. 2015); any damage to these wetlands can lead to a contraction in the area of stop-over sites available for migratory bird populations, thus endangering their long-term survival (Merken *et al*. 2015).

Wetlands are areas where soil is covered by shallow water either throughout the year or for a few months of the year (US Environmental Protection Agency 2022). The presence or absence of water affects the quality of soil that develops in the wetland; as a result, it also affects the plant and animal communities that form on and around the wetland (US Environmental Protection Agency 2022). Thus, wetlands are directly responsible for promoting a diverse biological community that contributes to maintaining ecological balance.

Wetlands are also the one of the most productive ecosystems in the world (Ghermandi *et al*. 2008), and are home to numerous species of mammals, reptiles, birds, amphibians, and invertebrate organisms (Mitsch andGosselink 2000). In addition to serving as the staging groundsfor migratory birds, wetlands offer a number of ecological goods and services in the form of water supply, fisheries, groundwater recharge, nutrient recycling, and biodiversity maintenance (Yang *et al*. 2017; Russi *et al*. 2013; Bassi *et al.* 2014). Wetlands are among the most threatened habitats in the world (Merken et al., 2015). About half of all wetlands that existed in the last century have been lost to agriculture, urbanization, and poor management practices (Millennium Ecosystem Assessment 2005).

India recognizes the intrinsic value of wetlands to both humans and migratory waterbirds; it has therefore chosen to be party to international conventions and programmes that are aimed for protecting wetlands and the species that depend on them. In addition to these programmes, India also participates in an annual Asian Waterbird Census (AWC) in concert with Wetlands International. The AWC is an important part of the International Waterbird Census (IWC), and is held parallel to other regional programmes of the IWC in Africa, Europe, West Asia, the Neotropics, and the Caribbean. AWC was started in India in 1987. Since then, the event has spread to other regions of Asia, from Afghanistan in the East to Japan, Southeast Asia, and Australasia. As of today, in the AWC held during every January and February, thousands of volunteers participate across Asia and Australasia.

Ecological monitoring programmes are necessary for establishing and maintaining long-term datasets that assess the impact of anthropogenic activities and climate change on protected sites (Haase *et al*. 2018; Parmesan *et al*. 2013; Magurran *et al*. 2010). An important goal of population monitoring is to study species abundance and distribution over time; this allows for the detection of changes in the population of the species (Vos *et al*. 2000). In particular, collecting data on the abundance of migratory waterbirds such as that collected through the AWC is important becauseit contributes to the development of national policies that enshrine in law of the protection of flyway stop-over/staging sites that are critical for the long-term survival of the migratory birds that depend on them.

The AWC is jointly organized in India by Wetlands International and the Bombay Natural History Society (BNHS). It has the following objectives:

- To obtain information of waterbird population of wetland in the region during the non-breeding period of most species (January & February) as a basis for evaluation of sites and monitoring populations.
- To monitor on an annual basis the status and condition of wetlands.
- To encourage greater interest in waterbirds and wetlands amongst people, and thereby promote the conservation of wetlands and waterbirds at local, regional, and the national level.

The AWC is also helpful for:

- Raising awareness of waterbirds and their conservation issues
- Supporting local conservation activities at wetlands
- Identifying and monitoring wetlands of international importance (Ramsar Sites)

In addition, the AWC contributes to

- Addressing and fulfilling India's national commitments to the Convention on Migratory Species (CMS), by monitoring the status of migratory waterbirds and their habitats
- Achieving the goals of the Convention on Biological Diversity (CBD) in conservation and sustainable use of biodiversity
- Implementation of the East Asian-Australasian Flyway Partnership Initiative (EAAFPI) and the Central Asian Flyway Action Plan through the monitoring of important and Flyway Network sites
- BirdLife International's Important Bird Areas (IBA) Programme
- IUCN/BirdLife International's Global Species Programme (Red List)
- Wetland International's Waterbird Population Estimates Programme
- Implementing the India's National Action Plan for the conservation of migratory birds and their habitats along the CAF.

The AWC, which records both the number of waterbirds and the habitat specifics of each site, is thus useful in building a sustained record of the diversity at each wintering site, and in turn, recommending conservation measures.

Bihar is an important state for birds following the CAF and East Asian-Australasian Flyway (EAAF); the state is located on the floodplain of the river Ganges, and as such, is rich in wetlands. Not only it is home to a number of resident land birds, but it is also an important stopover site for migratory birds of the CAF and EAAF. The first AWC was conducted in Bihar jointly by the state's Department of Environment, Forest, and Climate Change (DEF&CC) with technical support of the BNHS in February, 2022. It was the beginning of an annual tradition that will help to create a record of birds (both migratory and resident) that depend on

the wetlands of Bihar. The AWC brings together enthusiastic birders throughout the state who volunteer their time towards monitoring the waterbird population in the state. The status of globally threatened species, and the status of species prioritized in India's CAF National Action Plan could be able to determine through the AWC. This in turn will help in the conservation of wetland and avifaunal diversity. Bihar has a total of 16 IBAs, of which 10 are wetlands. Of these ten wetlands, one is declared Ramsar Site and seven are potential Ramsar Sites (Islam and Rahmani, 2008; Rahmani *et al*. 2016; Ramsar 2019).

The AWC in Bihar 2023 was conducted in January-February. This document reports bird recorded across 72 wetlands in Bihar. Similar to the census in 2022 (Fig.1), threats to wetlands have also been recorded in the 2023 census. Listed below are the objectives of the AWC Bihar, 2023.

a. **Objectives**

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

View of the the Kanwar Jheel

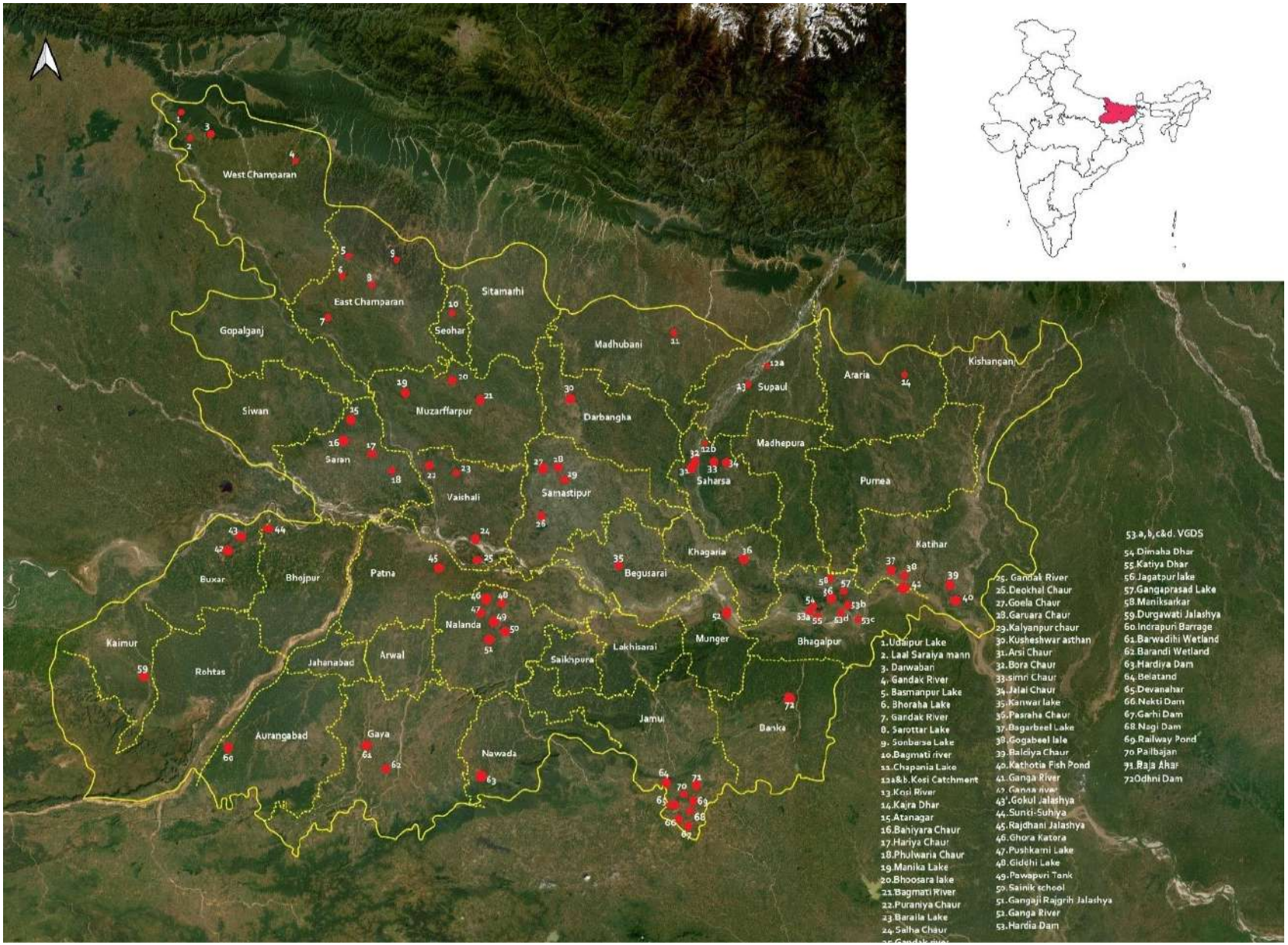

Figure 1. Locations of all wetlands covered during AWC 2023

CHAPTER 2: METHODOLOGY

a. **Preparatory meetings**

Organizing Second State level Bird Count was discussed during December 2022 and the strategies for conducting the AWC-2023, group size, volunteer details were discussed in the series of preparatory meetings. A total of five preparatory meetings were conducted between December 2022 and January 2023, by Mr Prabhat Kumar Gupta, IFS, Chief Wildlife Warden, Government of Bihar and Mr S. Sudhakar, IFS, Conservator of Forest, Gaya with forest officials, bird experts, academicians, and volunteers (Annexure 21). It was carried out to finalise the team and their wetland sites based on the potentiality of the wetland, areas and accessibility. The inventory of important wetlands prepared in 2022 was used to decide the census sites of 2023.

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

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

The minutes of the preparatory meetings are given in the annexures 25.

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 76 wetlands from 26 districts were finalised for conducting AWC 2023 (Figure 1).A pre-census was conducted in some 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 undertaken for 13 days starting from January 31 to February 12, 2023 with 16 teams at 76 wetlands. Surveys were conducted with different approaches, either by boats, vehicles or on foot. Boat surveys were undertaken in the reservoirs, large waterbodies and river systems, while small ponds and lakes were surveyed on foot. Bird abundance and diversity were recorded from randomly selected vantage points during the survey by using binoculars and spotting scope. The geographical coordinates of each survey site were recorded and photographs were also taken for further verification.

d. **Data Compilation**

The data sheets (bird count and habitat forms) received electronically from the participants were scrutinized and entered in excel. The process of data entry, rationalisation, and scrutiny took over 40 days. Doubtful entries and observations from each site were marked, and the survey coordinators of each site were contacted for clarifications. Data analysis and data clustering were performed subsequently.

e. **Habitat assessment**

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

- 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.

View of the Indrapuri Barrage

CHAPTER 3: CENSUS OPERATION

a. Wetlands covered

The total area of Bihar is 94,163 sq. km. Of this, 3,856.27 sq. km area is covered with wetlands, includes a Ramsar Site. A total of 76 wetlands from 26 districts of Bihar were covered during AWC 2023. The total area of the wetlands covered is 1,882.26km^2 inclusive of three river systems namely Ganga, Kosi and Gandak, 13 reservoirs, three fish ponds, seven freshwater marshes, and 28 freshwater lakes.

Among these 76 wetlands covered for AWC 2023, 16 wetlands of eights districtsare freshwater Chaurs (a large tract of low land filled with water or group of wetlands). Of the 76 wetlands, 11 are Protected Areas (PAs), and rest are non-protected areas. Of the wetlands covered, almost all the wetlands are permanent in nature except three wetlands namely Phulwaria Chaur of Saran district, Batrauliya Chaur of Muzaffarpur and Baldia Chaur of Katihar district (Table 1).

Table 1. Details of the wetlands covered during the Asian Waterbird Census, 2023

Sl. No.	DISTRICT	NAME OF THE SITE	PROTECTION STATUS	WETLAND TYPE
1	Araria	Kajra Dhar	Non-Protected Area	River
2	Aurangabad	Indrapuri Barrage	Non-Protected Area	Reservoir
3	Banka	Orhni Dam	Non-Protected Area	Reservoir
4	Begusarai	Kanwar Lake	Protected Area	Freshwater lake
5	Bhagalpur	Ganga Prasad Lake	Non-Protected Area	Freshwater marshes
6	Bhagalpur	Jagatpur Lake	Non-Protected Area	Freshwater lake
7	Bhagalpur	Sultanganj to Mirzapur	Protected Area	River
8	Bhagalpur	Mirzapur to Barari	Protected Area	River
9	Bhagalpur	Barari to Kahalgaon	Protected Area	River
10	Bhagalpur	Manik Sarkar to Barari Ghat	Protected Area	River
11	Bhagalpur	Dimaha Dhar	Non-Protected Area	River
12	Bhagalpur	Katiya Dhar	Non-Protected Area	River
13	Bhojpur	Sunki Suhiya Bhangar	Non-Protected Area	Freshwater lake
14	Buxar	Ganga River (Chausa-Ahirauli)	Non-Protected Area	River
15	Buxar	Gokul Jalashay	Non-Protected Area	Freshwater lake
16	Darbhanga	Kusheshwar Sthan	Protected Area	Freshwater lake
17	East Champaran	Basmanpur Lake	Non-Protected Area	Freshwater lake
18	East Champaran	Bhoraha Lake	Non-Protected Area	Freshwater lake
19	East Champaran	Gandak River	Non-Protected Area	River
20	East Champaran	Sarotar Maun	Non-Protected Area	Freshwater lake
21	East Champaran	Sonbarsa Lake	Non-Protected Area	Freshwater lake
22	Gaya	Barwadih Wetland	Non-Protected Area	Reservoir
23	Gaya	Barandih	Non-Protected Area	Reservoir
24	Jamui	Bela Tand	Non-Protected Area	Reservoir
25	Jamui	Devan Ahar	Non-Protected Area	Freshwater lake
26	Jamui	Garhi Dam	Non-Protected Area	Freshwater lake
27	Jamui	Nagi Dam	Protected Area	Reservoir

Table 1. Details of the wetlands covered during the Asian Waterbird Census, 2023 (*contd.*)

Sl. No.	DISTRICT	NAME OF THE SITE	PROTECTION STATUS	WETLAND TYPE
28	Jamui	Nakti Dam	Protected Area	Reservoir
29	Jamui	Pailbajan	Non-Protected Area	Reservoir
30	Jamui	Railway Pond	Non-Protected Area	Freshwater lake
31	Jamui	Raja Ahar	Non-Protected Area	Freshwater lake
32	Kaimur	Durgawati Jalashay	Non-Protected Area	Reservoir
33	Katihar	Baghar Beel	Non-Protected Area	Freshwater lake
34	Katihar	Baldiya Chaur	Non-Protected Area	Freshwater lake
35	Katihar	Gogabeel	Protected Area	Freshwater lake
36	Katihar	Kathotia Fish Pond	Non-Protected Area	Fish Pond
37	Katihar	Kahalgaon, Bhagalpur to Manihari, Katihar	Non-Protected Area	River
38	Khagaria	Pasraha Chaur	Non-Protected Area	Freshwater lake
39	Madhubani	Chhapaniya Lake	Non-Protected Area	Freshwater lake
40	Munger	Ganga (Munger to Gangania)	Non-Protected Area	River
41	Muzaffarpur	Manika Lake	Non-Protected Area	Freshwater lake
42	Muzaffarpur	Bhoosara Lake	Non-Protected Area	Freshwater lake
43	Muzaffarpur	Bagmati River	Non-Protected Area	River
44	Nalanda	Ghora Katora	Non-Protected Area	Freshwater lake
45	Nalanda	Pushpkarni Tank	Non-Protected Area	Freshwater lake
46	Nalanda	Gidhi Lake	Non-Protected Area	Freshwater lake
47	Nalanda	Pawapuri Tank	Non-Protected Area	Freshwater lake
48	Nalanda	Sainik School	Non-Protected Area	River
49	Nalanda	Gangaji Rajgriha Jalashaya	Non-Protected Area	Freshwater lake
50	Nawada	Hardiya Dam	Non-Protected Area	Reservoir
51	Patna	Rajdhani Jalashay	Non-Protected Area	Freshwater lake
52	Saharsa	Arsi Chaur	Non-Protected Area	Freshwater marshes
53	Saharsa	Bora Chaur	Non-Protected Area	Freshwater lake
54	Saharsa	Simri Chaur	Non-Protected Area	Freshwater lake
55	Saharsa	Kosi Catchment	Non-Protected Area	Freshwater marshes
56	Saharsa	Jalai Chaur	Non-Protected Area	Freshwater lake
57	Samastipur	Deokhal Chaur	Non-Protected Area	Freshwater lake
58	Samastipur	Goela Chaur	Non-Protected Area	Freshwater lake
59	Samastipur	Garuara Chaur	Non-Protected Area	Freshwater lake
60	Samastipur	Klayanpur Chaur	Non-Protected Area	Freshwater lake
61	Saran	Atanagar	Non-Protected Area	Fish Pond
62	Saran	Bahiyara Chaur	Non-Protected Area	Freshwater lake
63	Saran	Hariya Chaur	Non-Protected Area	Fish Pond
64	Saran	Phulwaria Chaur	Non-Protected Area	Freshwater lake
65	Sheohar	Bagmati River	Non-Protected Area	River
66	Supal	Kosi River Catchment Area	Non-Protected Area	Freshwater marshes
67	Supaul	Kosi River Survey (Raniganj to Kosi Mahasetu)	Non-Protected Area	River
68	Vaishali	Purainiya Chaur	Non-Protected Area	Freshwater lake
69	Vaishali	Baraila Lake	Protected Area	Freshwater lake
70	Vaishali	Salha Chaur	Non-Protected Area	Freshwater lake
71	Vaishali	Gandak River	Non-Protected Area	River

Table 1. Details of the wetlands covered during the Asian Waterbird Census, 2023 (*contd.*)

Sl. No.	DISTRICT	NAME OF THE SITE	PROTECTION STATUS	WETLAND TYPE
72	Vaishali	Barai Chaur	Non-Protected Area	Freshwater lake
73	West Champaran	Udaipur WLS	Protected Area	River
74	West Champaran	Lal Sariya Man	Non-Protected Area	River
75	West Champaran	Darwabari (Valmiki TR)	Protected Area	Freshwater lake
76	West Champaran	Gandak River	Protected Area	River

a. **Team building**

During the preparatory meeting, a total of 16 teams of 159 members were finalised for carrying out the count in 76 wetlands in 26 districts of Bihar. The team was supervised by 15 coordinators. Along with the volunteers, 44 forest staff were also involved in the census. Each team was constituted with the following combination:

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

based on the expertise of bird identification. The bird guides of Bhagalpur and Jamui 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 23).

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

A total of 16 teams and 159 people were involved for the counts. The number of members in the team varied from 2 (Chhapaniya Lake, Madhubani District) to 23 (wetlands in Jamui District). Considering each volunteer effort per wetland, a total of 968 hours were spent across 76 wetlands for the census. Details of number of volunteers involved in the census operation in each wetland and hours spent per wetlands siteare given in the Table 2.

Table 2: Details of team size and time to cover the area during AWC 2023

Sl. No	District	Wetland	Duration (minutes)	Coordinator	Team Size
1	Araria	Kajra Dhar	215	Gyan Chandra Gyani	5
2	Aurangabad	Indrapuri Barrage	300	S. Sudhakar	4
3	Banka	Orhni Dam	275	Dr D. N. Chaudhary	4
4	Begusarai	Kanwar Lake	90	Dr P. Sathiyaselvam & Sohail Madan	9
5	Bhagalpur	Ganga Prasad Lake	120	Dr D. N. Chaudhary	5
6	Bhagalpur	Jagatpur Lake	120	Dr D. N. Chaudhary	7
7	Bhagalpur	Sultanganj to Mirzapur	540	Dr Sunil Kr. Choudhury	4
8	Bhagalpur	Mirzapur to Barari	280	Dr Sunil Kr. Choudhury	3
9	Bhagalpur	Barari to Kahalgaon	315	Rahul Rohitashwa	3
10	Bhagalpur	Manik Sarkar to Barari	240	Vatan Kumar	4
11	Bhagalpur	Dimaha Dhar	75	Dr Sunil Chaudhary	14
12	Bhagalpur	Katiya Dhar	120	Dr Sunil Chaudhary	14
13	Bhojpur	Sunki Suhiya Bhangar	305	Arvind Mishra	11
14	Buxar	Chausa-Ahirauli Ganga River	480	Arvind Mishra	14

Table 2: Details of team size and time to cover the area during AWC 2023 (*contd.*)

Sl. No	District	Wetland	Duration (minutes)	Coordinator	Team Size
15	Buxar	Gokul Jalashay	460	Arvind Mishra	14
16	Darbhanga	Kusheshwar Sthan	90	Dr Gopal Sharma & Navin Kumar	2
17	East Champaran	Basmanpur Lake	120	Dr Niraj Kumar	4
18	East Champaran	Bhoraha Lake	155	Dr Niraj Kumar	4
19	East Champaran	Gandak River	120	Dr Niraj Kumar	5
20	East Champaran	Sarotar Maun	220	Dr Niraj Kumar	4
21	East Champaran	Sonbarsa Lake	175	Dr Niraj Kumar	5
22	Gaya	Barwadih Wetland	70	S. Sudhakar	6
23	Gaya	Barandih	60	S. Sudhakar	6
24	Jamui	Bela Tand	105	Arvind Mishra	
25	Jamui	Devan Ahar	30	Arvind Mishra	15
26	Jamui	Garhi Dam	245	Arvind Mishra	15
27	Jamui	Nagi Dam	165	Arvind Mishra	23
28	Jamui	Nakti Dam Bird Sanctuary	120	Arvind Mishra	23
29	Jamui	Pailbajan	45	Arvind Mishra	23
30	Jamui	Railway Pond	35	Arvind Mishra	23
31	Jamui	Raja Ahar	50	Arvind Mishra	23
32	Kaimur	Durgawati Jalashay	240	Dr Gopal Sharma	3
33	Katihar	Baghar Beel	95	Arvind Mishra	5
34	Katihar	Baldiya Chaur	55	Arvind Mishra	5
35	Katihar	Gogabeel	210	Arvind Mishra	5
36	Katihar	Kathotia Fish Pond	20	Arvind Mishra	5
37	Katihar	Kahalgaon, Bhagalpur to Manihari, Katihar	480	Deepak Kumar Jhunnu	9
38	Khagaria	Pasraha Chaur	705	Gyan Chandra Gyani	5
39	Madhubani	Chhapaniya Lake	225	Dr Gopal Sharma & Navin Kumar	2
40	Munger	Ganga (Munger to Gangania)	240	Dr P. Sathiyaselvam & Sohail Madan	10
41	Muzaffarpur	Manika Lake	180	Dr Niraj Kumar	5
42	Muzaffarpur	Bhoosara Lake	142	Dr Niraj Kumar	4
43	Muzaffarpur	Bagmati River	220	Dr Niraj Kumar	4
44	Nalanda	Ghora Katora	60	Navin Kumar	3
45	Nalanda	Pushpkarni Tank		Dr Gopal Kumar, Navin Kumar	3
46	Nalanda	Gidhilake Pond	59	Navin Kumar	3
47	Nalanda	Pawapuri Tank	160	Navin Kumar	3
48	Nalanda	Sainik School	50	Dr Gopal Sharma, Navin Kumar	3
49	Nalanda	Gangaji Rajgriha Jalashaya	60	Navin Kumar	3
50	Nawada	Hardiya Dam	280	S. Sudhakar	4
51	Patna	Rajdhani Jalashay	180	Col. Amit Sinha&Anand Kumar	8
52	Saharsa	Arsi Chaur	60	Navin Kumar	3
53	Saharsa	Bora Chaur	120	Navin Kumar	4
54	Saharsa	Simri Chaur	60	Navin Kumar	3
55	Saharsa	Kosi Catchment	120	Navin Kumar	3
56	Saharsa	Jalai Chaur	140	Navin Kumar	4
57	Samastipur	Deokhal Chaur	150	Amir Rizwan Khan	4
58	Samastipur	Goela Chaur	140	Amir Rizwan Khan	5

Table 2: Details of team size and time to cover the area during AWC 2023 (*contd.*)

Sl. No	District	Wetland	Duration (minutes)	Coordinator	Team Size
59	Samastipur	Garuara Chaur	135	Amir Rizwan Khan	5
60	Samastipur	Kalyanpur Chaur	420	Amir Rizwan Khan	5
61	Saran	Atanagar		Gyanchandra Gyani	4
62	Saran	Bahiyara Chaur	340	Gyanchandra Gyani	5
63	Saran	Hariya Chaur	330	Gyanchandra Gyani	5
64	Saran	Phulwaria Chaur	540	Gyanchandra Gyani	4
65	Sheohar	Bagmati River	60	Dr Niraj Kumar	3
66	Supaul	Kosi River Catchment Area	480	Navin Kumar	3
67	Supaul	Kosi River Survey (Raniganj to Kosi Mahasetu)	350	Navin Kumar	3
68	Vaishali	Purainiya Chaur	120	Dr Satyendra Kumar	8
69	Vaishali	Baraila Lake	120	Dr Satyendra Kumar	8
70	Vaishali	Salha Chaur	120	Dr Satyendar Kumar	8
71	Vaishali	Gandak River	120	Dr Satyendar Kumar	8
72	Vaishali	Berai Chaur	120	Dr Satyendar Kumar	
73	West Champaran	Udaipur WLS (SariyaMan)	125	Dr Kamlesh K Maurya	10
74	West Champaran	Lal Sariya Man	150	Dr Kamlesh K Maurya	7
75	West Champaran	Darwabani (Valmiki TR)	120	Dr Kamlesh K Maurya	10
76	West Champaran	Gandak River	270	Dr Kamlesh K Maurya	6

Boat surveys in the Gandak River in Valmiki Tiger Reserve

Survey team starting from Munger to cover the Munger to Gangania stretch

AWC Team gathered at Vaishali District

Census team in Ganga River in Buxer

CHAPTER 4: BIRD COUNT

All types of waterbirds were sighted in each wetland that includes grebes, cormorants, pelicans, herons, egrets, storks, ibises, ducks, geese, rails, jacanas, shorebirds, gulls and terns and were counted carefully. In addition to this, the raptors, other wetland dependent bird and land birds seen during the count were also reported.

a. **Overall abundance and richness**

A total of 69,935 individuals of 203 species belonging to 55 families were reported from 76 wetlands during the AWC - 2023. Among these, 61,957 individuals of 87 species belonging to 16 families were waterbirds, 1,243 individuals of 26 species belonging to 5 families were wetland-dependent birds and 6,023 individuals of 90 species belonging to 36 families were landbirds (Fig. 2a & b).

During the AWC in 2022, a total of 45,173 individuals of 202 species belonging to 61 families were recordedfrom 68 wetlands. Of them, 39,937 individuals of 81 species were waterbirds; 569 individuals of 23 species were wetland-dependent birds and 5,630 individuals of 101 species were landbirds. When compared to AWC 2022, the total numbers ofbirds observed during AWC -2023 were high and over 24,640 more individuals of birds were reported when compared to 2022 (Fig. 2c & d). It is due to

- More coverage of wetlands during AWC 2023. During AWC-2022, 68 Wetlands were covered and in AWC 2023 & 76 wetlands were covered.
- Birds reported from Jamui District was higher than the previous year.

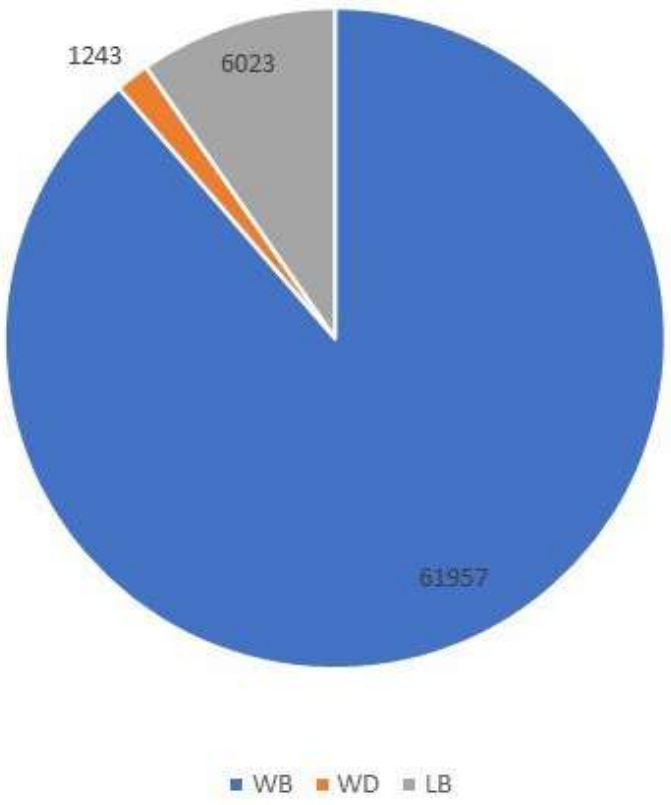

Figure 2a. Number of individuals reported during AWC 2023

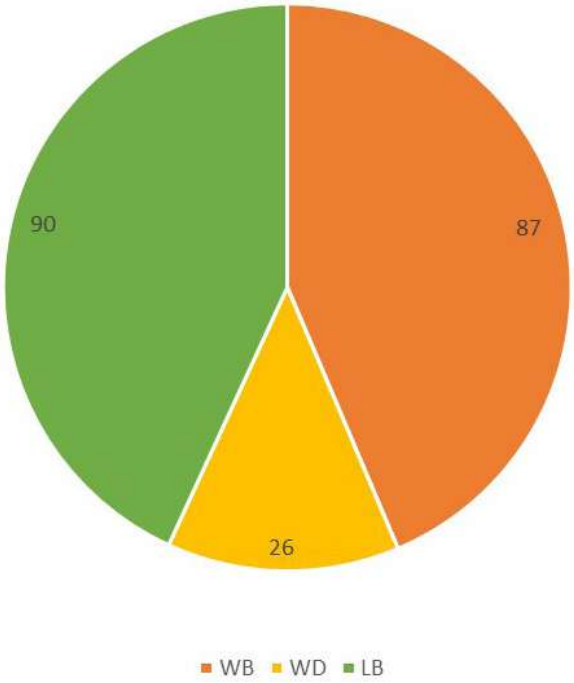

Figure 2b. Number of species reported during AWC2023

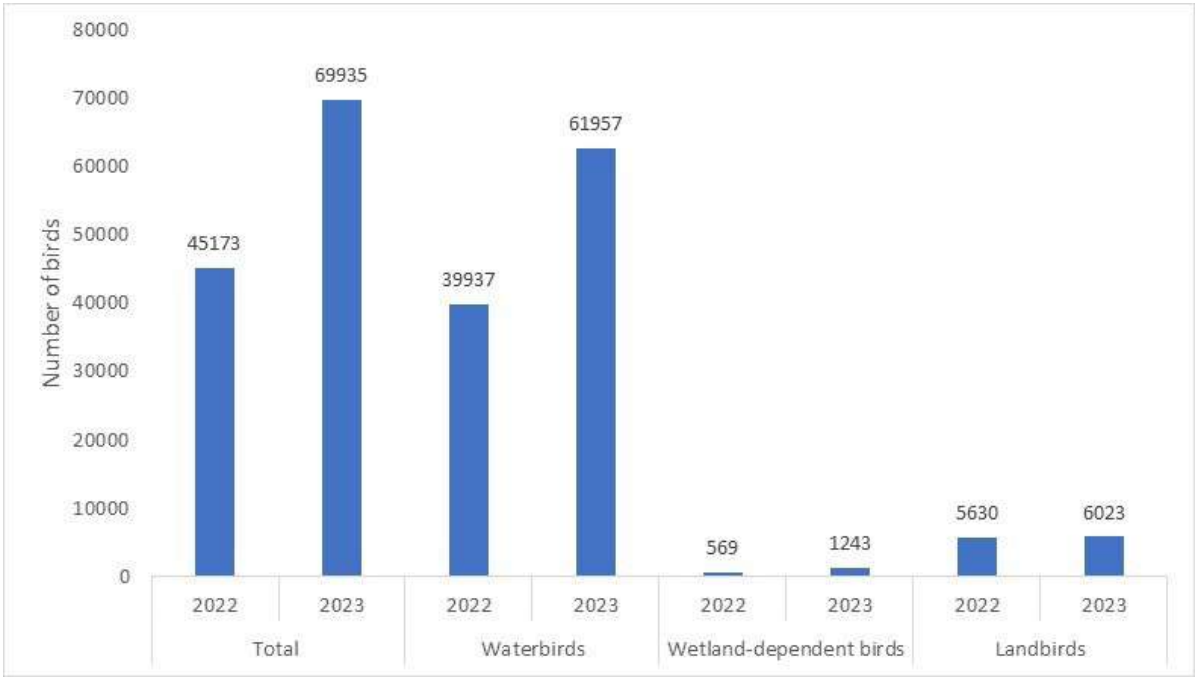

Figure 2c. Details of number of individuals reported in AWC 2022 and 2023

b. District-wise bird abundance and richness

In district-wisebird count, highest number of birds were reported from Jamui District followed by Bhagalpur and Buxar districts. A total of 18,480 individuals of birds were reported from Jamui, and 9,084 and 8,126 individuals were reported from Bhagalpur and Buxar districts respectively. Lowest number of birds were reported from Patna where only 171birds from a wetland was reported. As far as species-wise numbers are concerned, a total of 112 species belonging to 31 families were reported from Bhagalpur and 91 species belonging to 35 families were reported from Jamui district. Total 83 species from 35 families were reported from Buxar-Bhojpur districts reported a total of 8,126 birds (Figure 3a). The district and wetland-wise total number of birds reported are given in the Annexure 1-13.

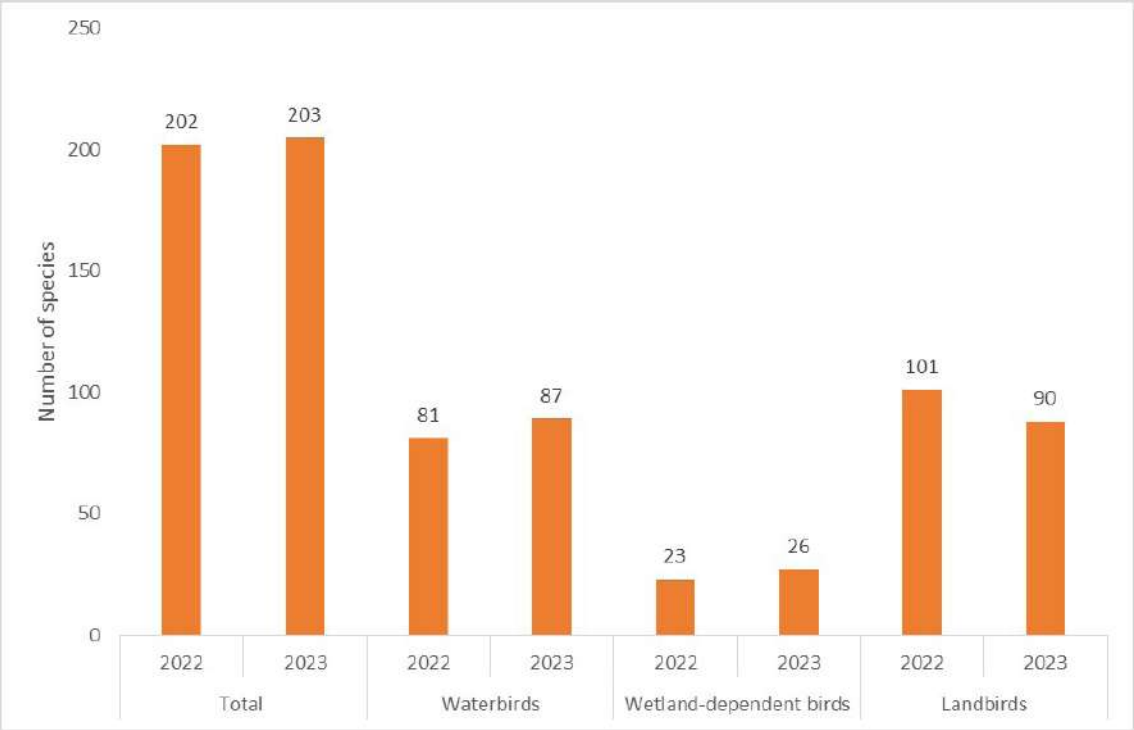

Figure 2d. Details of number of species reportedduring AWC 2022 and 2023

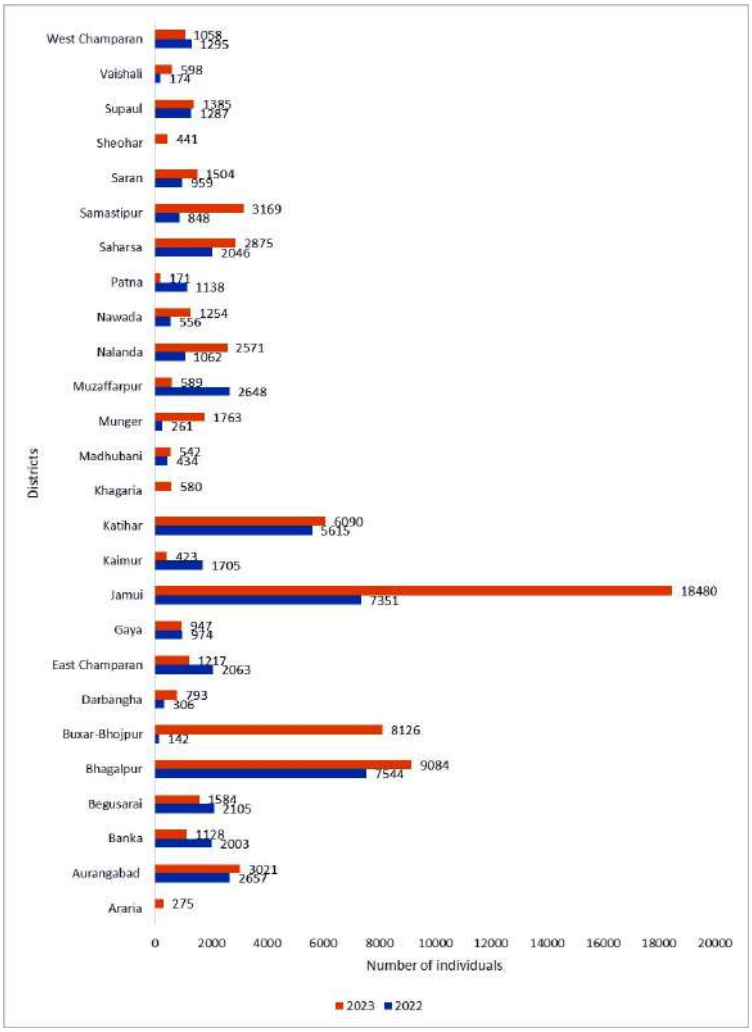

Figure 3a: District-wise total number of birds reported during the AWC 2022 and 2023

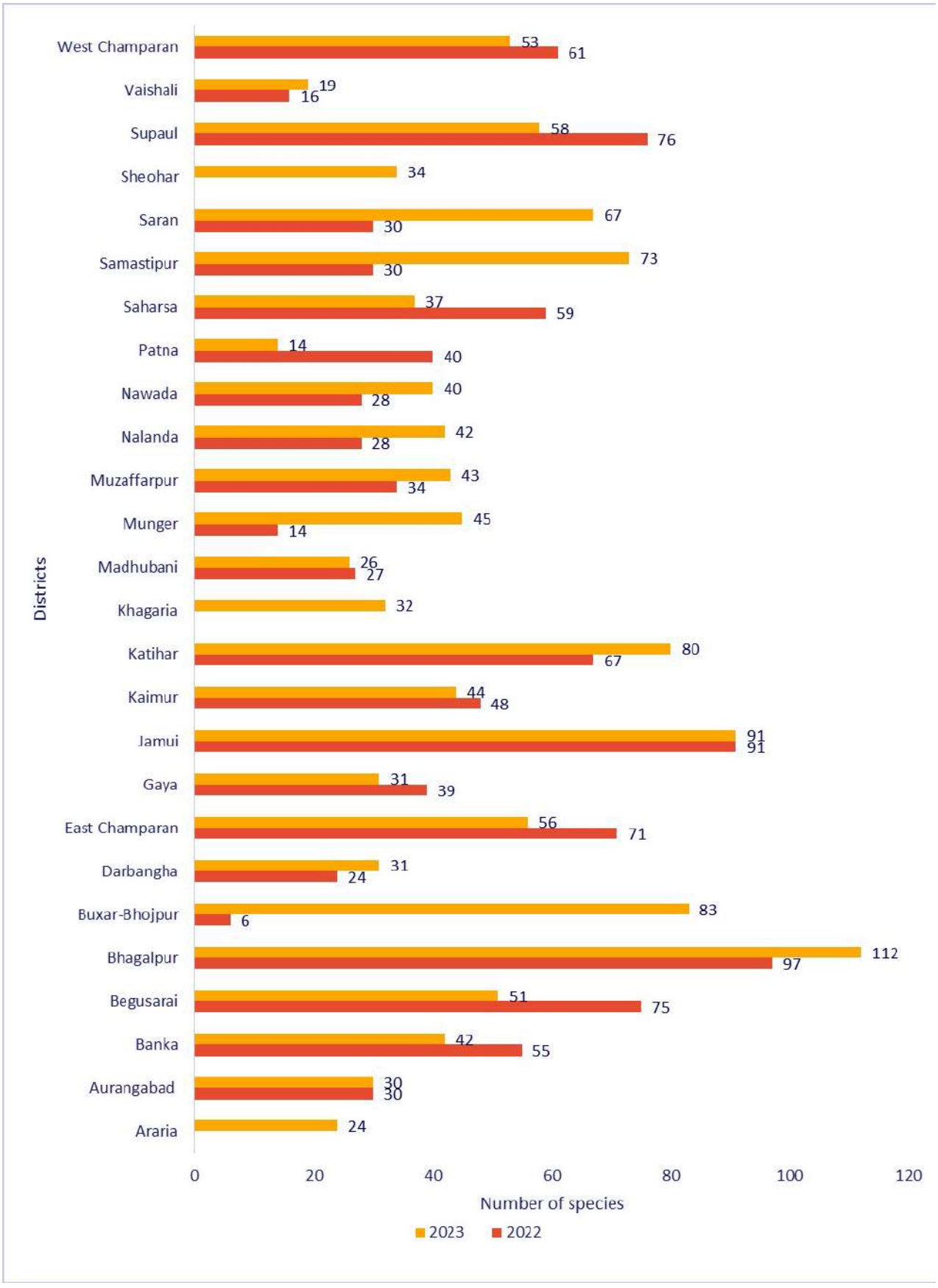

Figure 3b: District-wise total number of species reported during the AWC 2022 and 2023

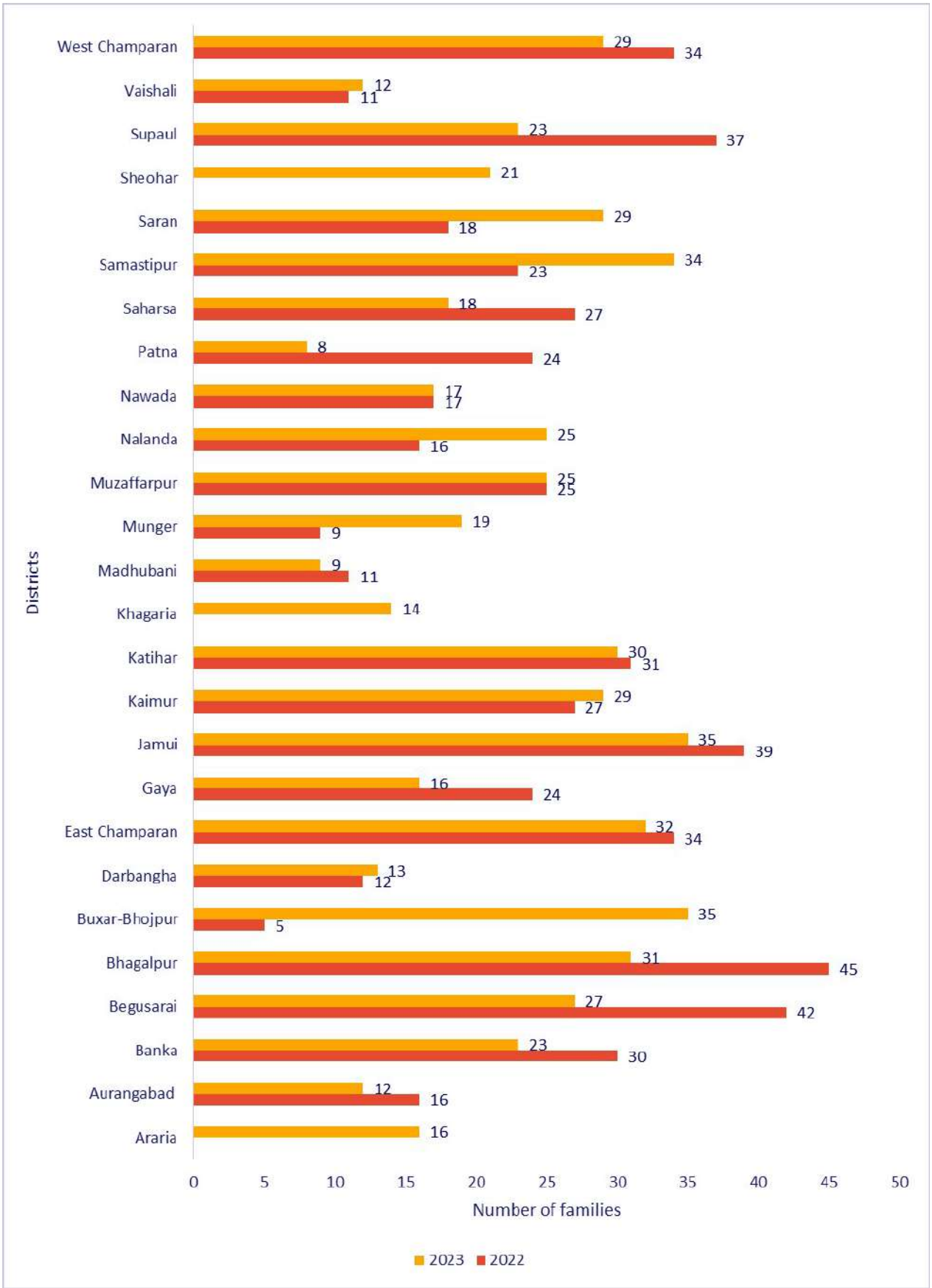

Figure 3c: District-wise total number of families reported during the AWC 2022 and 2023

During the AWC 2022, both the highest numbers of individuals and species were reported in Bhagalpur district, followed by Jamui District. A total of 7,544 birds of 97 species belonging to 45 families was reported from Bhagalpur District while 7,351 individuals of 91 species belonging to 39 families were reported in Jamui District during AWC 2022 (Table 3). During AWC 2023, total numbers of birds reported from both Jamui and Bhagalpur districts were high compared to AWC-2022. In Jamui the overall numbers reported during AWC-2023 were 2.5 times (251%) higher than that of AWC-2022. Similarly, in Bhagalpur 1.2 times a greater number of birds were reported during AWC 2023 (Fig. 3a, b & c).

It is important to mention here, two wetlands (Athania & Bahatra) covered during AWC 2022 were not covered during AWC 2023 but two other potential sites Katiya Dhar and Dimaha were covered in Bhagalpur District. Also, a side canal stretch (Manik Sarkar to Barari Ghat) was added in Vikramshila Gangetic Dolphin Sanctuary (VGDS) for counting. A Ganga River stretch from Chausa to Ahirauli, Buxar-Bhojpur District yielded more number of birds. A total of 5,703 individuals of 42 species were recorded during the AWC 2023. The details of district-wise bird count records during the AWC 2022 & 2023 are given in the Table 3.

Table 3. District-wise details of number of individuals, species and families reported during AWC 2022 & 2023

District	Number of individuals		Number of species		Number of families	
	2022	2023	2022	2023	2022	2023
Araria	NC	275	NC	24	NC	16
Aurangabad	2,657	3,021	30	30	16	12
Banka	2,003	1,124	55	42	30	22
Begusarai	2,105	1,584	75	51	42	27
Bhagalpur	7,544	9,084	97	106	45	33
Buxar-Bhojpur	142	8,120	6	79	5	34
Darbangha	306	793	24	31	12	13
East Champaran	2,063	1,217	71	56	34	32
Gaya	974	947	39	31	24	16
Jamui	7,351	18,480	91	94	39	36
Kaimur	1,705	423	48	44	27	29
Katihar	5,615	6,343	67	79	31	31
Khagaria	NC	580	NC	32	NC	14
Madhubani	434	542	27	26	11	9
Munger	261	1,763	14	45	9	19
Muzaffarpur	2,648	589	34	43	25	26
Nalanda	1,062	2,576	28	42	16	25
Nawada	556	1,254	28	40	17	17
Patna	1,138	171	40	14	24	8
Saharsa	2,046	2,877	59	39	27	19
Samastipur	848	3,169	30	73	23	34
Saran	959	1,504	30	67	18	28
Sheohar	NC	441	NC	34	NC	21
Supaul	1,287	1,385	76	60	37	24
Vaishali	174	609	16	19	11	12
West Champaran	1,295	1,061	61	53	34	28

Note: **NC: Not covered**

c. Wetland-wise bird population and species reported

The wetland site with the highest number of birds reported was Nakti Dam Bird Sanctuary in Jamui, with a count of 7,844 birds, followed by Nagi Dam Bird Sanctuary with 6,938 individualsduring the AWC 2023. The wetland site with the highest number of species reported was Deokhal Chaur in Samastipur district in which 66 bird species were reported (Table 4).

During the AWC 2022, the highest bird count was reported at Gogabeel in Katihar district. A total of 4,992 individuals were reported which had declined 34% (1,711 individuals) during the AWC 2023. The wetland-wise birds counted, species and families reported during the AWC 2022 & 2023 are given in the Annexure 20 & 21.

Table 4. Details of number of birds, species and families reported during the AWC 2023

District	Sr. No.	Wetland	Total count	Total species	Total families	WB Species	WD Species	LB Species
Araria	1	Kajra Dhar	275	24	16	13	3	8
Aurangabad	2	Indrapuri Barrage	3,021	30	12	22	4	2
Banka	3	Odhni Dam	1,128	42	22	27	6	9
Begusarai	4	Kanwar Lake	1,584	51	27	23	9	19
Bhagalpur	5	Jagatpur Lake	1,948	59	23	40	8	11
	6	Gangaprasad Lake	1,391	41	18	28	4	9
	7	Dimaha Dhar	346	26	16	20	1	5
	8	Katiyadhar	425	25	14	15	7	3
	9	Sultangaj to Mirzapur	1,502	36	15	27	5	4
	10	Mirzapur to Bhagalpur	980	36	16	27	4	5
	11	Bhagalpur to Kahalgaon	1,813	46	16	34	8	4
	12	Manik Sarkar to Barrari	679	47	21	29	5	13
Buxar-Bhojpur	13	Chausa-Ahirauli Ganga	5,703	42	19	28	6	8
	14	Gokul Jalashay	1,424	54	30	25	3	25
	15	Sunki Suhiya	993	35	18	24	6	6
Darbhanga	16	Kusheshwar Sthan	793	31	13	27	4	0
East Chambaran	17	Basmanpur Lake (Maun)	235	26	21	7	2	17
	18	Bhoraha Lake	114	20	15	4	2	14
	19	Gandak River	97	14	11	4	1	9
	20	Sarotar Lake	482	24	17	11	4	9
	21	Sonbarsa Lake	289	25	17	14	3	8
Gaya	22	Barandih	829	18	12	13	2	3
	23	Barwadih	118	20	12	14	2	4
Jamui	24	Bela Tand	650	31	15	24	3	4
	25	Devan Ahar	400	17	12	12	4	1
	26	Pailbajaan	241	17	13	9	1	7
	27	Garhi Dam	971	55	27	27	8	20
	28	Nagi	6,938	44	20	34	5	5
	29	Rail Pond	1,063	14	12	8	1	5
	30	Raja Ahar	373	30	12	26	2	2
	31	Nakti	7,844	29	10	27	1	1
Kaimur	32	Durgawati Jalashay	423	44	29	12	6	26

Table 4. Details of number of birds, species and families encountered during AWC 2023

District	Sr. No.	Wetland	Total count	Total species	Total families	WB Species	WD Species	LB Species
Katihar	33	Baldia Chaur	487	21	14	12	4	5
	34	Baghar Beel	1,215	44	25	24	4	16
	35	Gogabeel	3,281	39	18	28	4	7
	36	Kathotia Fish Pond	220	9	5	9	0	0
	37	Ganga (Kahalgaon to Manihari)	1,140	41	41	27	6	8
Khagaria	38	Pasraha Chaur	580	32	14	27	5	0
Madhubani	39	Chapaniya Lake	542	26	9	25	1	0
Munger	40	Ganga-Munger-Gagaria	1,763	45	19	28	8	9
Muzaffarpur	41	Manika Lake	308	28	20	8	3	17
	42	Bhoosara Lake	127	32	18	13	3	16
	43	Bagmati River	154	20	15	6	2	12
Nalanda	44	Gangaji Rajgriha Jalashaya	711	14	10	10	0	4
	45	Ghora Katora Forest trail	61	12	9	0	0	12
	46	Pushpakarani tank	548	11	7	10	0	1
	47	Giddhi Lake (Begumpur)	66	6	5	4	0	2
	48	Pavapuri Jal Mandir	802	11	7	9	1	1
	49	Panchane River, Sainik School	388	16	12	10	1	5
Nawada	50	Hardiya Dam	1,254	40	17	34	2	4
Patna	51	Rajdhani Jalashay	171	14	8	13	1	0
Saharsa	52	Arsi Chaur	290	19	10	16	3	0
	53	Simri Chaur	266	10	8	8	0	2
	54	Kosi River Catchment Area	1,466	26	14	14	3	9
	55	Bora Chaur	280	14	7	13	1	0
	56	Jalai Chaur	575	17	10	16	1	0
Samastipur	57	Deokhal Chaur	724	66	32	32	11	23
	58	Goela Chaur	615	46	26	14	10	22
	59	Garuara Chaur	761	52	30	14	11	27
	60	Kalyanpur Chaur	1,069	38	24	13	5	20
Saran	61	Atanagar	290	33	20	16	5	12
	62	Bahiyara Chaur	1,125	48	22	32	11	5
	63	Hariya Chaur	63	8	5	5	3	0
	64	Phulwaria Chaur	26	9	6	6	3	0
Sheohar	65	Bagmati River	441	34	21	14	4	16
Supaul	66	Kosi River survey from Raniganj to kosi Mahasetu	402	30	14	23	5	2
	67	Kosi Catchment	983	47	24	26	7	14
Vaishali	68	Baraila Lake	253	15	9	10	1	4
	69	Purainiya Chaur	283	15	10	8	3	4
	70	Salha Chaur	32	4	3	3	1	0
	71	Berai Chaur	1	1	1	0	0	1
	72	Gandak River	40	2	2	2	0	0
West Chambaran	73	Udaipur Wildlife Sanctuary	147	26	14	15	7	4
	74	Lal Sariya Maan	54	10	7	8	2	0
	75	Daruabari Wetland	128	27	19	12	6	9
	76	Gandak River	732	17	12	13	3	1

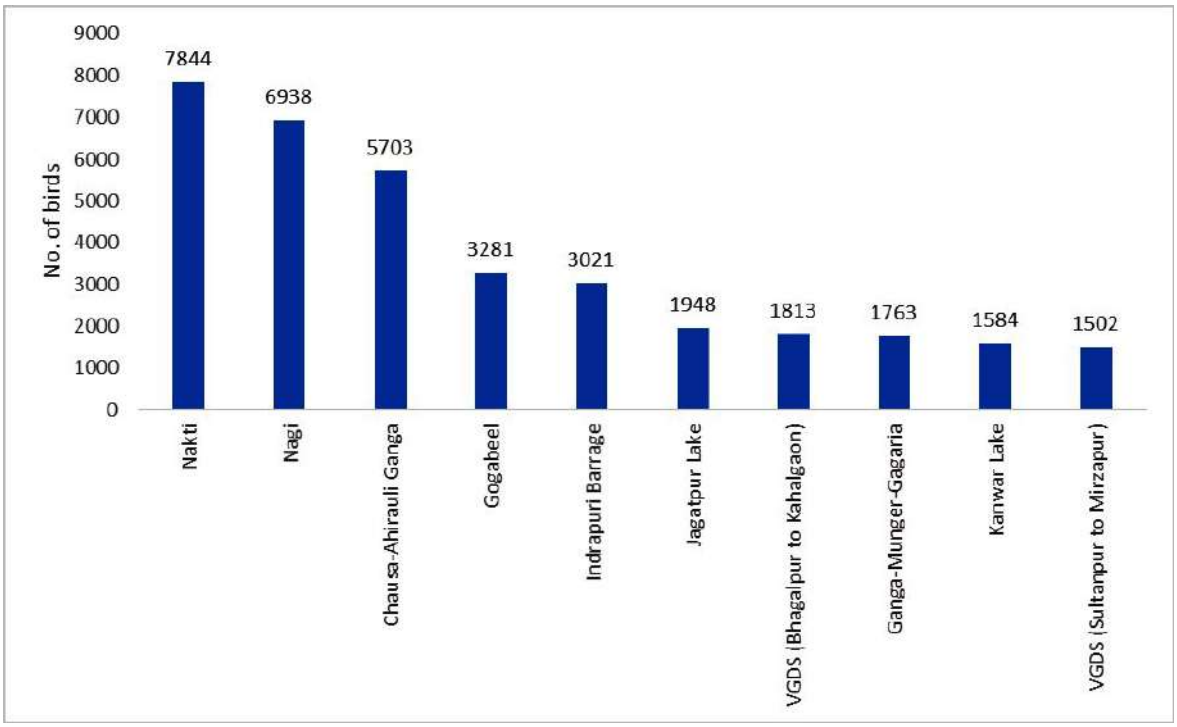

Figure 3d. Details of 10 wetlands that contributed 50% of the birds counted during AWC 2023

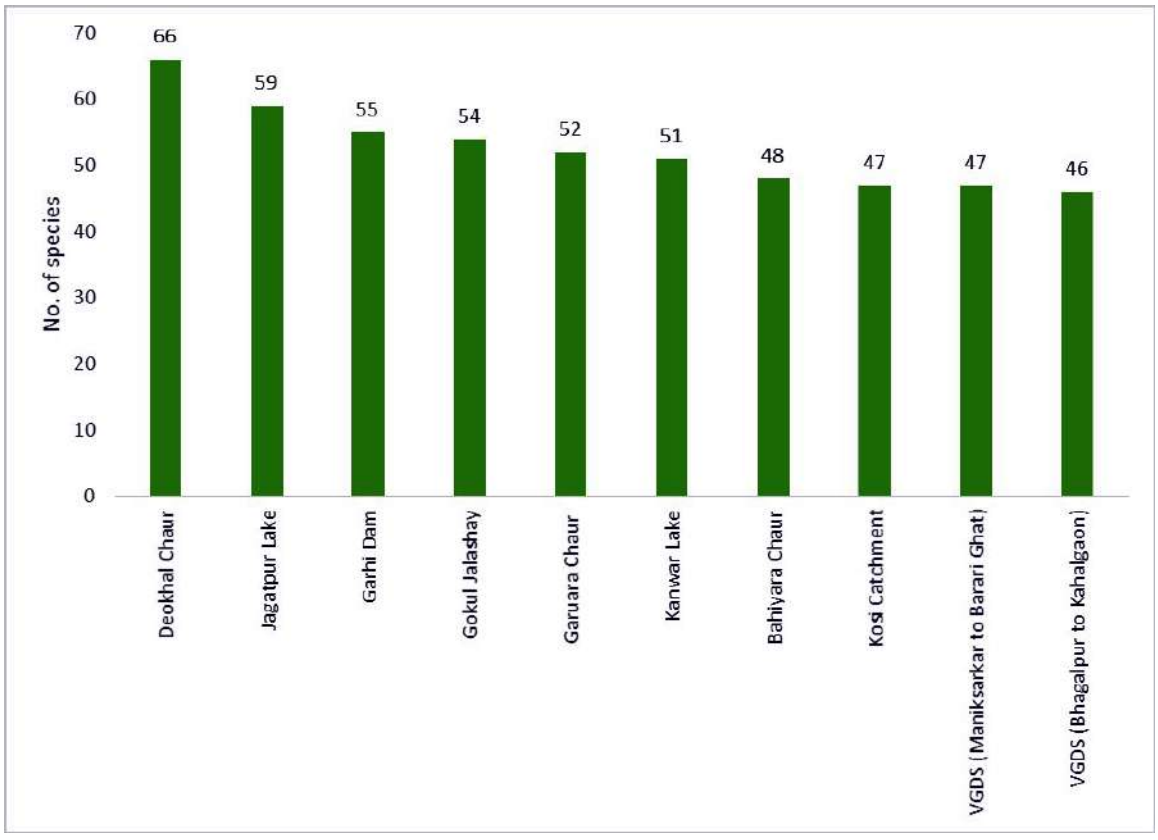

Figure 3e. Details of 10 wetlands with highest number of species reported during AWC 2023

Though 76 wetlands were covered for the enumeration, over 50.61% of the birds were reported from 10 wetlands of seven districts only. Of 69,935 individualsrecorded during AWC 2023, 35,957 individuals, were reported from these 10 wetlands (Figure 3d).

d. **Overall abundance and richness of migratory birds reported**

Out of 69,935 individuals reported during AWC 2023, 29,077 birds of 73 species (41.58%) were long-distance migratory (LDM), five individuals of two species of them were short-distance migratory (SDM) and rest 40,140 birds of 126 species 57% birds were resident (R) (Figure 3f & 3g).

The highest number of LDM birds were recorded from Jamui District where 14,329 individuals of 87 species were reported (Figure 3h). Whereas maximum numbers of LDM species (118 species) were recorded from Bhagalpur district (Figure 3i). Further district and wetland-wise details are given in the Annexure 14.

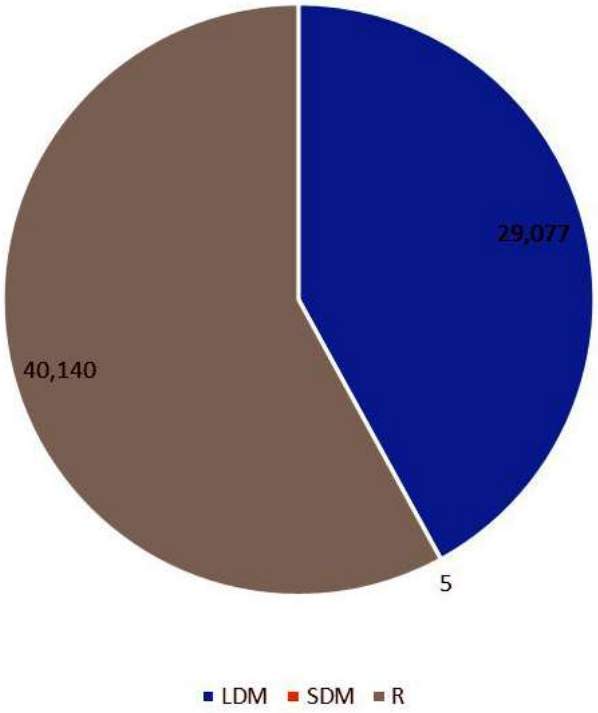

Figure 3f. Number of long-distance, short-distance migratory and resident birds reported during AWC 2023

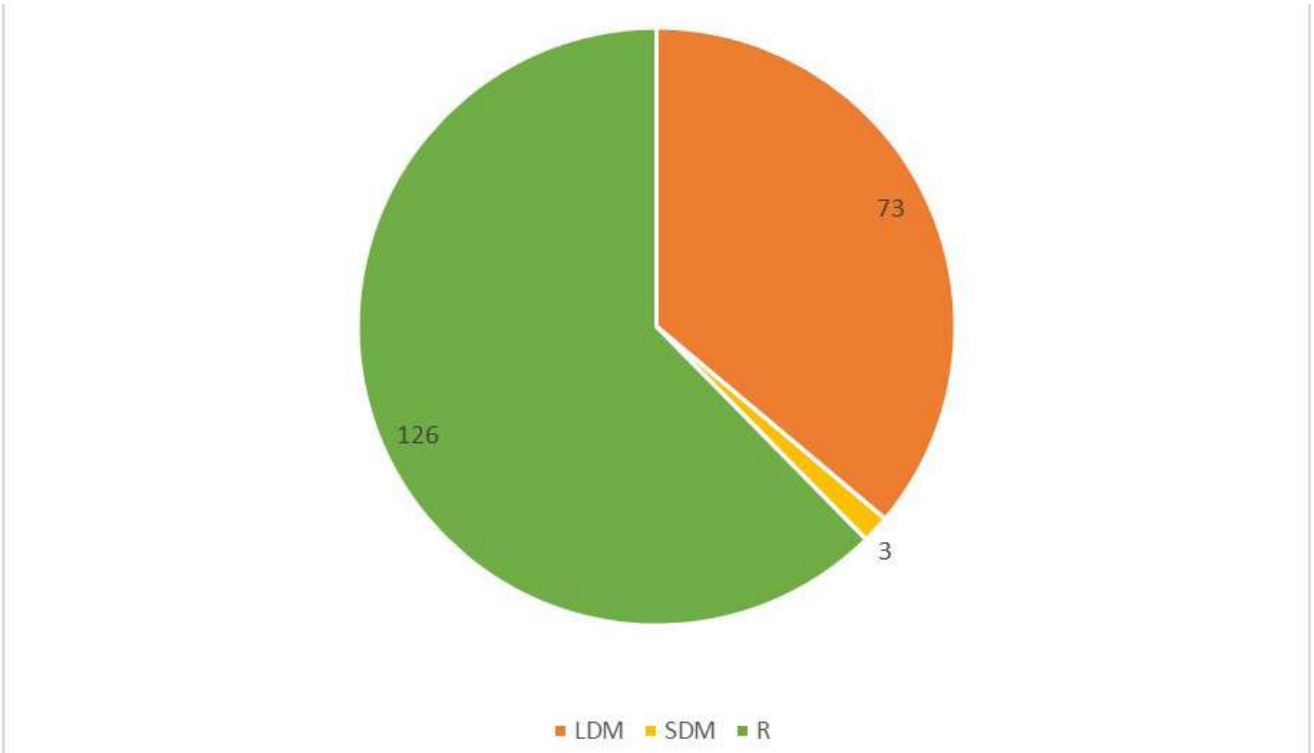

Figure 3g. Number of long-distance, short-distance migratory and resident species reported during AWC 2023

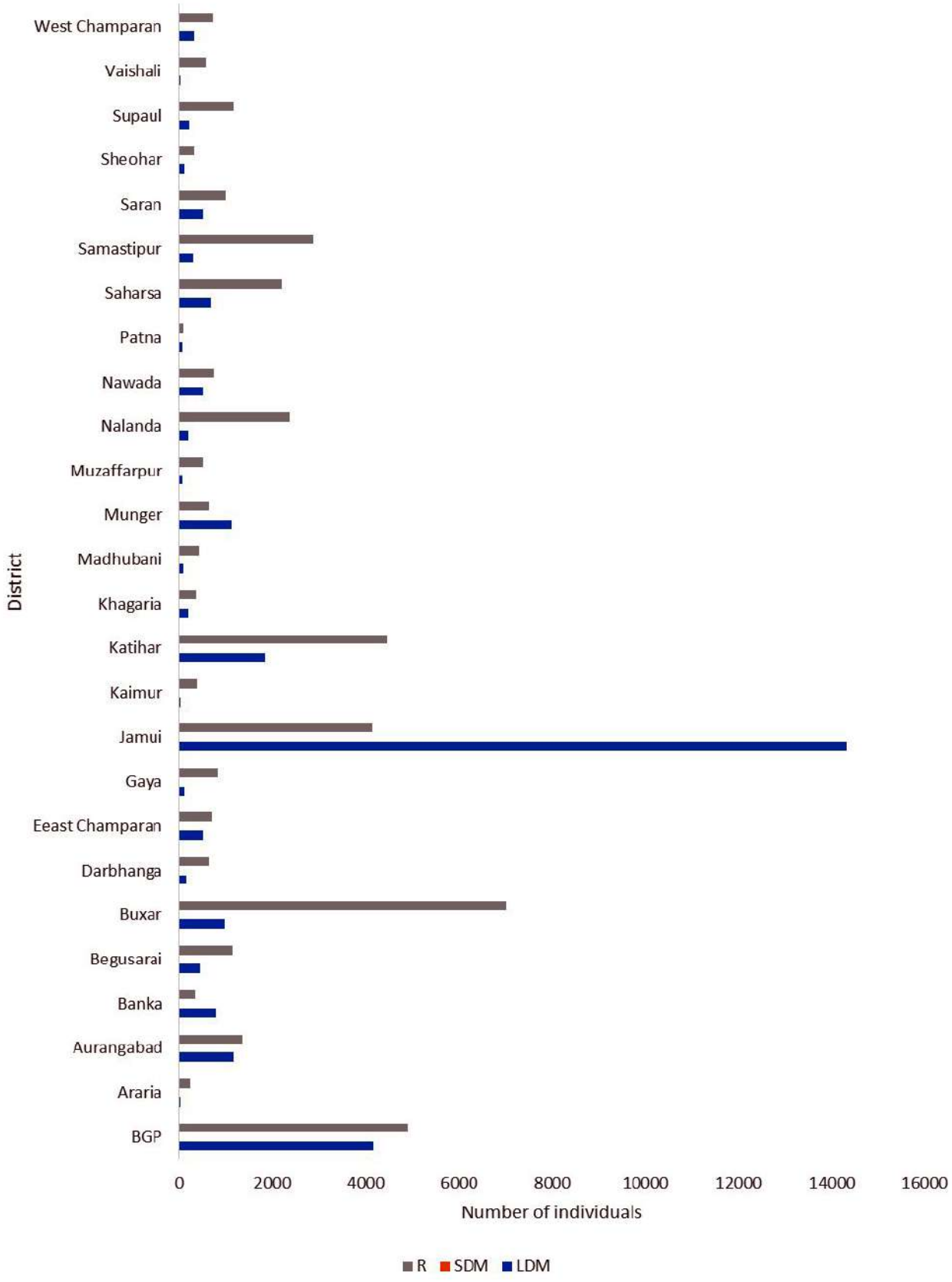

Figure 3h. District-wise details of number of migratory birds reported in AWC 2023

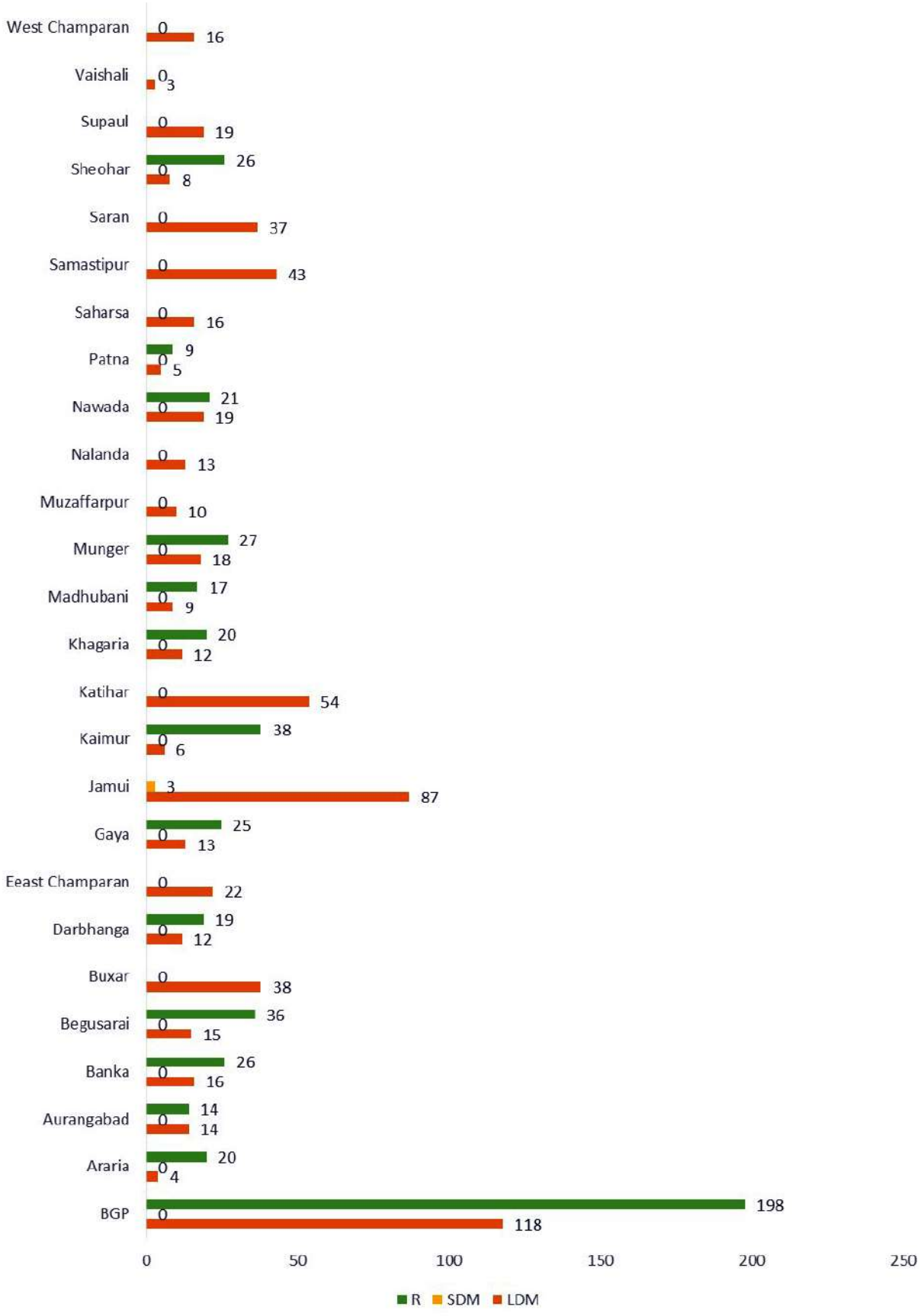

Figure 3i. District-wise details of number of migratory birds reported during AWC 2023

Glimpse of the Bird species reported during the AWC 2023

A flock of Bar-headed Geese *Anser indicus* and Greylag Goose *Anser anser*

A flock of Common Redshank *Tringa totanus* and Common Greenshank *Tringa nebularia*

Garganey *Spatula querquedula*

White-eyed buzzard *Butastur teesa*

Osprey *Pandion haliaetus*

Oriental honey buzzard *Pernis ptilorhynchus*

Citrine wagtail *Motacilla citreola*

Common Kingfisher *Alcedo atthis*

Barn swallow *Hirundo rustica*

CHAPTER 5: IMPORTANT WETLANDS IN THE STATE BASED ON THE AWC 2022 AND 2023

The top seven wetlands constituted 41.44% of the total population reported during AWC 2022, and in 2023 it comprised of 38.12%. The maximum individuals (4,992) were reported from Gogabeel of Katihar district during AWC 2022 but only 3,281 individuals recorded during AWC 2023 (Table 5).

Likewise, the highest number of individuals were reported in Nakti Dam during AWC 2023 but during AWC 2022 only 1,926 individuals were recorded from the site (Table 5). From the above observations, it could be understood that the numbers of the birds utilizing these wetlands fluctuated between the years. It is further through light on the importance of these wetlands which needs to be focused for better management and state level decision making. Further, give a scope for regular monitoring of the site to understand the role played by the wetlands for the birds during the migratory and non-migratory seasons. Some of the wetlands have already been identified as potential Ramsar sites and the Important Bird Areas. The information gathered through AWC 2022 & 2023, have also highlighted the current status of birds in these wetlands and further action to be taken to declare as wetlands of state national and international importance. Even though the Kanwar lake is a declared Ramsar site and bird sanctuary, the AWC 2022 & 2023 data suggests to take management actions for reviving the wetland to bring back its past glory.

Table 5: List of top seven wetlands with highest number of individuals reported during AWC 2023 and 2022

S. No.	Wetland	District	Numbers reported	
			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
		Total	**18,723**	**26,662**

CHAPTER 6: DISTRICT LEVEL ENUMERATION

During AWC 2023, 19 more wetlands were covered compared to AWC 2022 and 15 wetlands which were covered during 2022 were not covered during 2023 as they were not potential bird sites. In all,76 wetlands from 26 districts were covered during 2023. Araria, Sheohar and Khagaria districts were additions to the AWC 2023. The Ganga stretches between Buxar and Bhojpur were covered during AWC 2023, which is presented as Buxar-Bhojpur in this report. The number of wetlands covered varied in each district. A maximum of eight wetlands were covered in Jamui during 2023, where seven wetlands were covered during AWC 2022. One wetland each was covered from 12 districts (Table 6).

Table 6: Comparison of number of wetlands covered during AWC 2022 and 2023

Sl. No.	District	No. of wetland covered in 2022	No. of wetland covered in 2023
1	Araria	NC	1
2	Aurangabad	1	1
3	Banka	1	1
4	Begusarai	2	1
5	Bhagalpur	6	8
6	Buxar-Bhojpur	1	3
7	Darbhanga	2	1
8	East Champaran	2	5
9	Gaya	4	2
10	Jamui	7	8
11	Kaimur	3	1
12	Katihar	3	5
13	Khagaria	NC	1
14	Madhubani	1	1
15	Munger	2	1
16	Muzaffarpur	7	4
17	Nalanda	4	6
18	Nawada	3	1
19	Patna	2	1
20	Saharsa	4	5
21	Samastipur	3	4
22	Saran	2	4
23	Sheohar	NC	1
24	Supaul	1	2
25	Vaishali	2	6
26	West Champaran	5	4
	Total	**68**	**76**

Note: **NC: Not Covered**

BIRD CATEGORIES

Birds reported during the AWC 2023 were classified into three categories, namely waterbirds, water-dependent birds and land birds. Even though, all mentioned bird categories were reported during the AWC, the mainfocus was given to report the waterbirds. The efforts to count other two categories of birds were not made equally; thus, water-dependent and land birds have been under-represented during the AWC.

a. **Waterbirds**

A total of 61,780 waterbirds were countedfrom 26 districts of Bihar during the AWC 2023. Of them, overall, 84.45% (52,174) of birds were counted from 10 districts. They are further categorized as follows:

- Over 54.58% (33,720) of waterbirdsreported during AWC 2023 were from three districts namely Jamui (18,234), Bhagalpur (7,922), and Buxar-Bhojpur (7,564).
- 13.57% (8,525) of waterbirds were reported from two districts namely Katihar (5,534) and Aurangabad (2,991).
- 15.61% (9,808) of waterbirds were reported from five districts, namely Saharsa (2,799), Nalanda (2,474), Samastipur (1,788), Munger (1,501), and Saran (1,246).

During the AWC 2023, the highest number of waterbirds was recorded in Jamui. A total of 18,234 birds of 51 species belonging to 17 families were reported from this district (Figure 4a & b). The lowest number ofwaterbirds was recorded in Araria (97 individuals) District.

Among the 61,780 waterbirds reported during AWC 2023, approximately 50% of the population comprised five species. Lesser Whistling-duck *Dendrocygna javanica* (N=10,348 individuals), Red-crested Pochard *Netta rufina* (N= 6,549 individuals), Little Pratincole *Glareola lactea* (N= 5,758 individuals), Common Coot *Fulica atra* (N= 5,066 individuals) and Asian Openbill *Anastomus oscitans* (N= 3,920) were the predominant among the waterbird reported during the AWC 2023.

b. **Wetland-dependent birds**

A total of 1,152 wetland dependent birds were counted from 26 districts of Bihar. The highest number of wetland dependent birds were recorded in Samastipur followed by Begusarai and Bhagalpur districts. A total of 250 birds belonging to 11 species were reported from Samastipur District. The lowest number of wetland-dependent birds, only two individuals were recorded from each, Patna and Nalanda districts (Fig. 4c & d)

Of the 1,152 wetland-dependent birds reported during AWC 2023, Citrine Wagtail*Motacilla citreola* (N=286 individuals), White Wagtail *Motacilla alba* (N= 234 individuals), White-throated Kingfisher *Halcyon smyrnensis* (N=196 individuals), White-browed Wagtail *Motacilla maderaspatensis* (N= 142 individuals) and EasternYellow Wagtail*Motacilla tschutschensis* (N= 102 individuals) were the predominant comprising approximately 77% of the total number of the wetland-dependent birds reported.

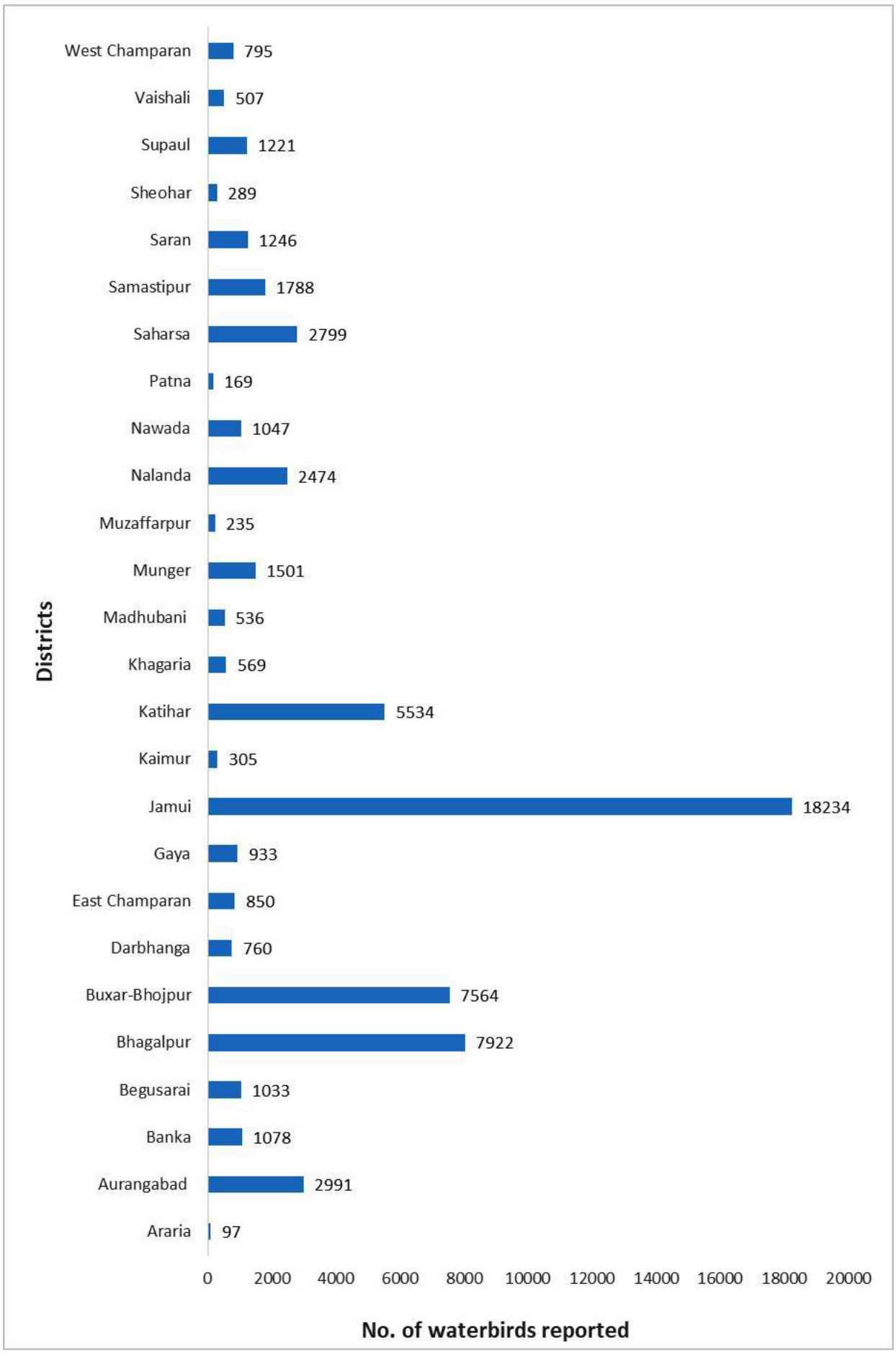

Figure 4a: District-wise details of number of waterbirds reported during the AWC 2023

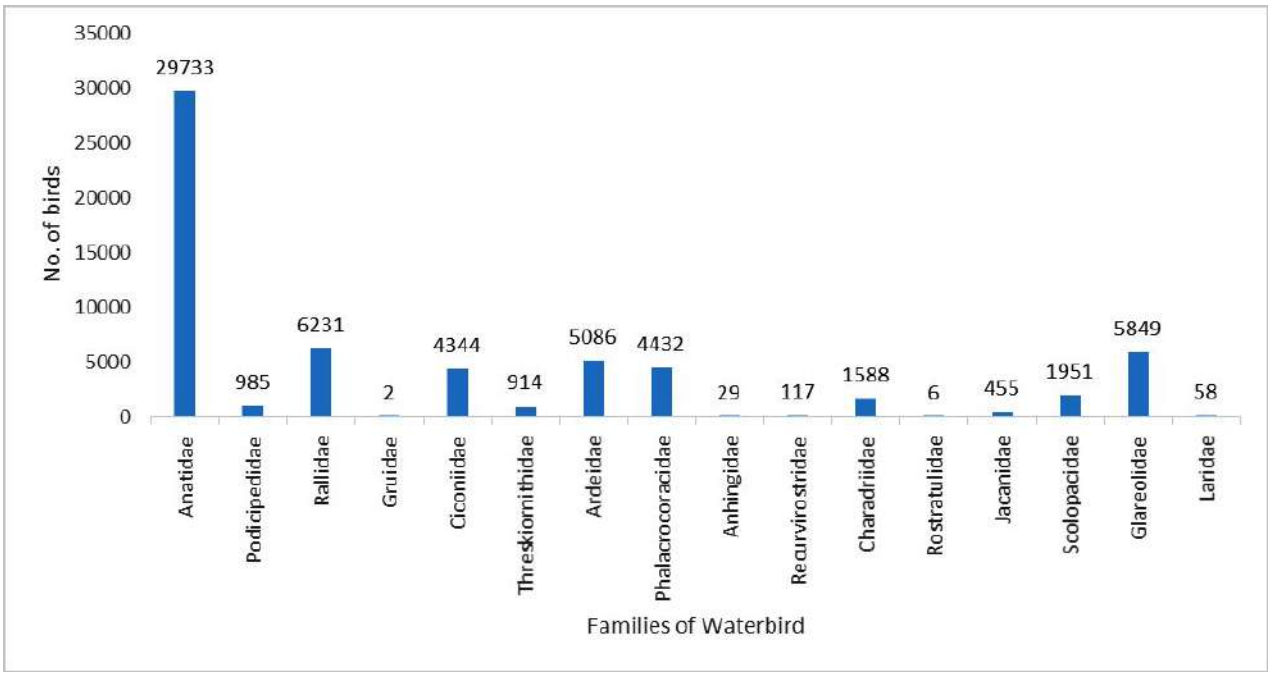

Figure 4b: Details of families of waterbirds reported during the AWC 2023

c. **Landbirds**

A total of 5,681 landbirds were counted from 26 districts of Bihar. A total of 1,131 landbirds belonging to 26 species recorded from Samastipur was the highest number among the district of Bihar during the AWC 2023. Over 1,050 and 490 individuals of landbirds reported from Bhagalpur and Katihard districts, stood second and third places respectively as far as land birds records are convened. No landbirds were recorded from Darbhanga, Madhubani, Patna, and Khagaria where the team had totally concentrated on counting the waterbirds (Fig. 4e & f).

Among the 5,783 landbirds reported during AWC 2023, approximately 63% of the population comprised five species,namely Barn Swallow *Hirundo rustica* (N=1,438 individuals), House Crow *Corvus splendens* (N= 648 individuals), Pied Starling *Gracupica contra* (N= 632 individuals), Black Drongo*Dicrurus macrocerces* (N= 482 individuals) and Common Myna *Acridotheres tristis* (N= 466).

District and wetland-wise details of waterbird, wetland-dependent and land birds recorded from 26 districts during the AWC 2023 are given in the Table 7.

District-wise details of number of species and individuals reported during the AWC 2023 are given in the annexure – 16

Further details of wetland-wise number of species and individuals reported during the Awc-2023 are given in the annexure 17

The details of wetland-wise numbers and families reported during the AWC-2023 are given in the Annexure – 18

Details of wetland-wise species, numbers and families reported during the AWC 2023 are given in the Annexure - 19

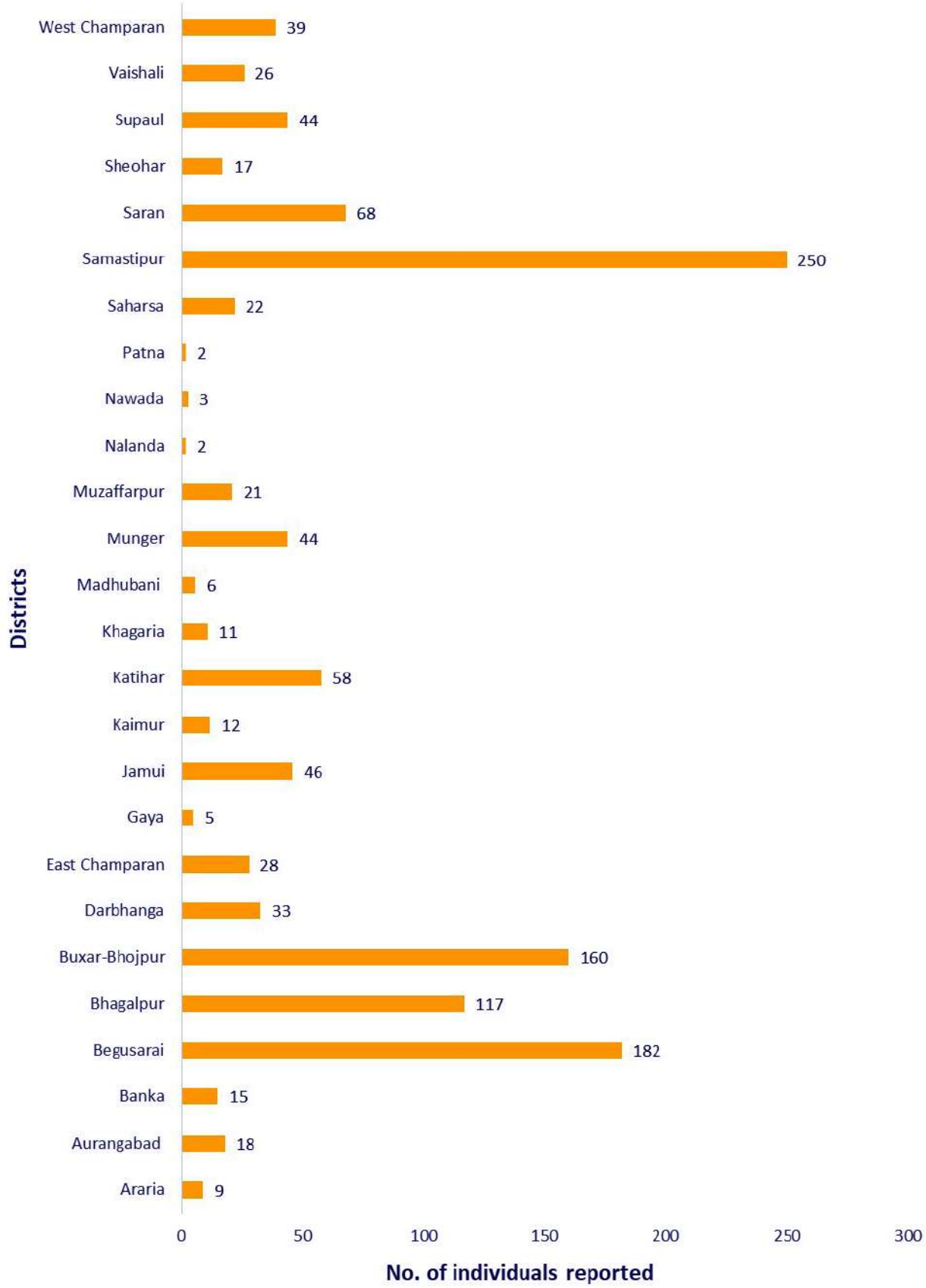

Figure 4c: District-wise details of number of water-dependent birds reported during the AWC 2023

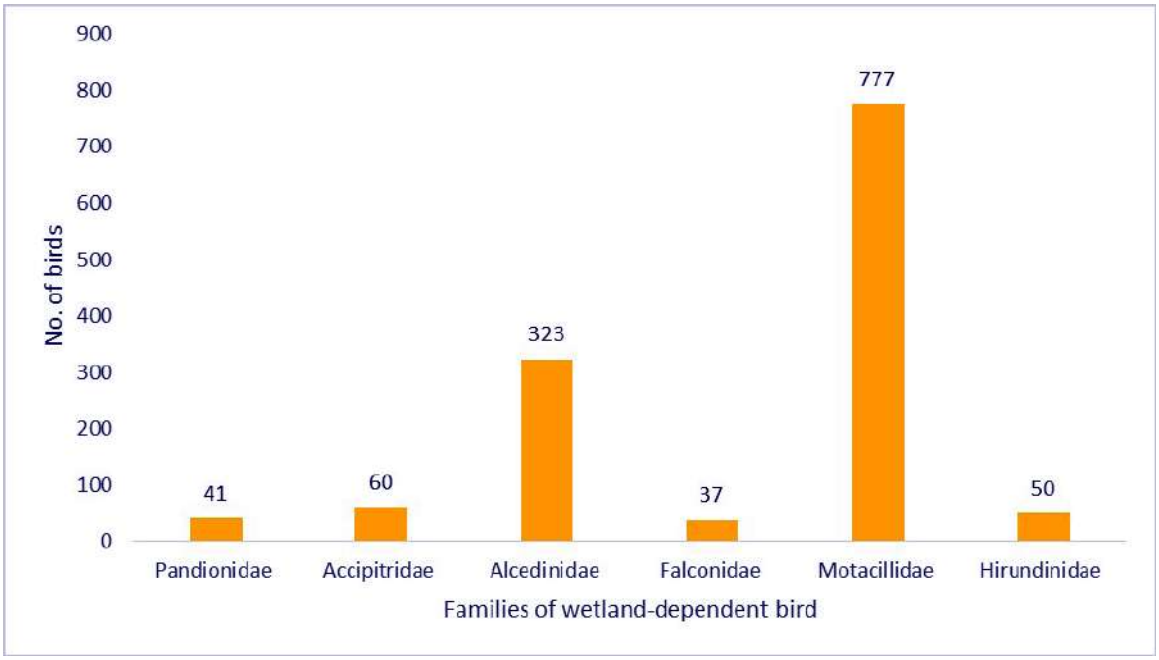

Figure 4d: Details of families of water-dependent birds reported during the AWC 2023.

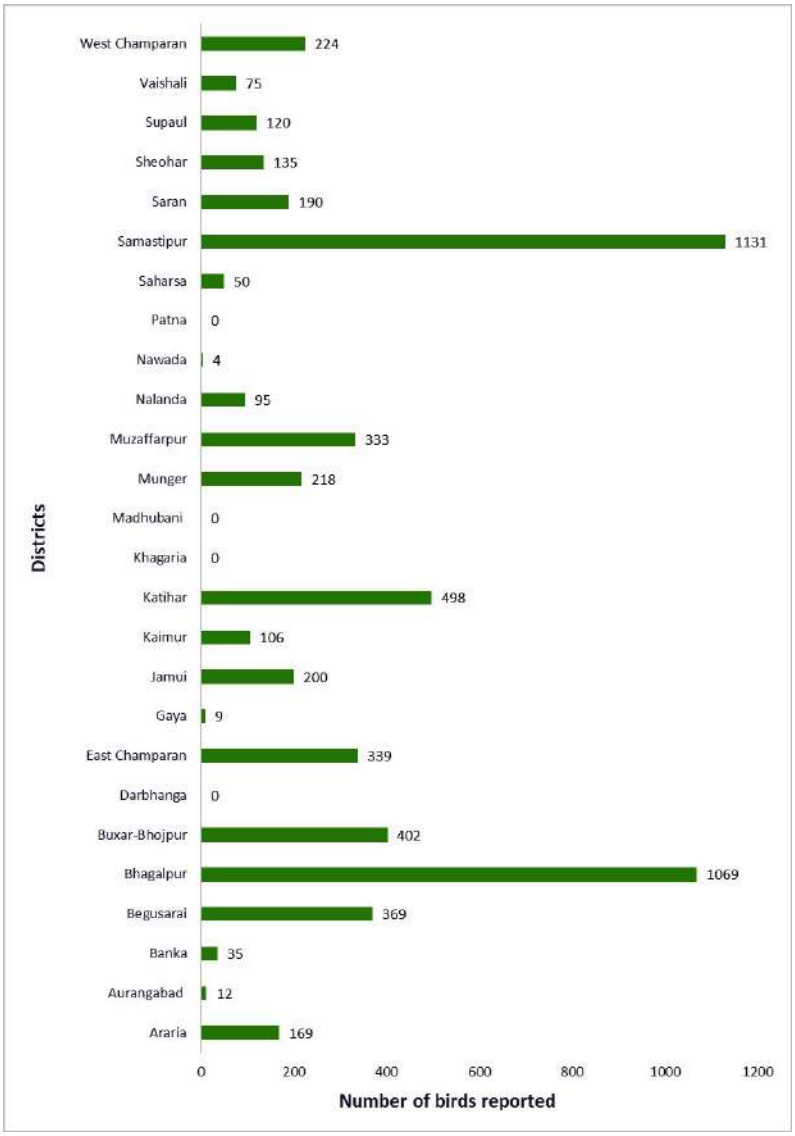

Figure 4e: District-wise details of number of land birds reported during AWC 2023

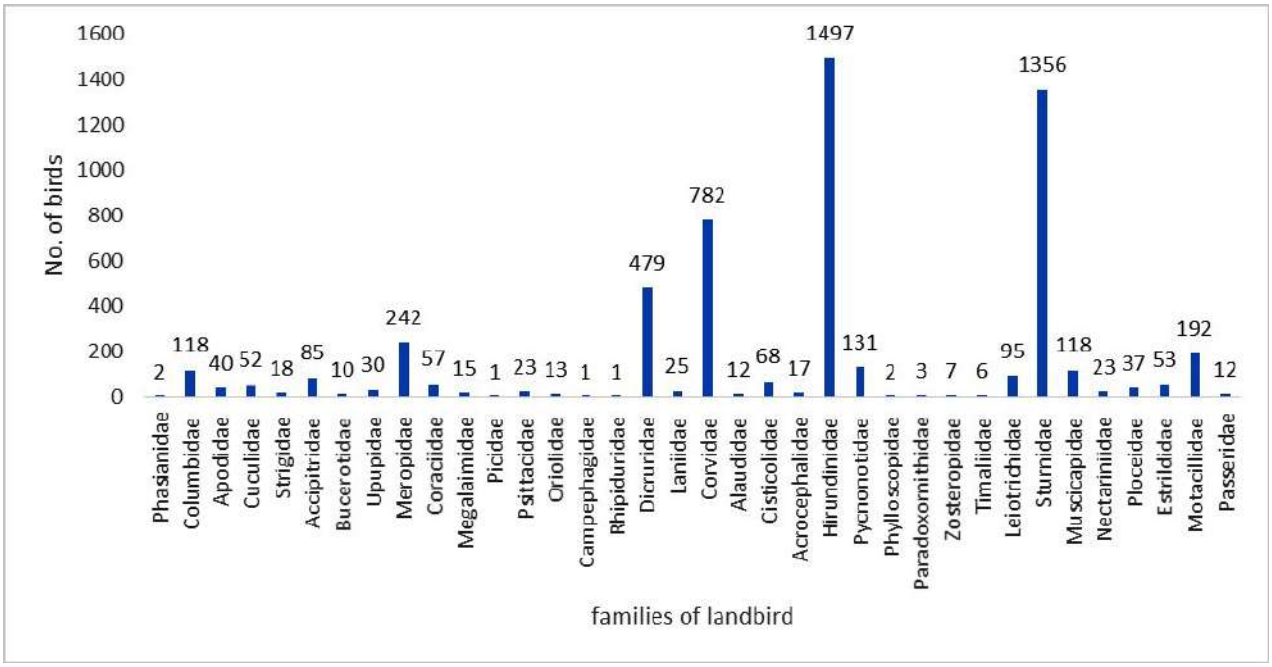

Figure 4f: Details of families of landbirds reported during the AWC 2023

Table 7. Details of waterbirds, wetland dependent and landbirds recorded from 26 districts of Bihar during the AWC 2023

District	Wetland	Total count	Total species	Total families	WB Count	WB Species	WD Count	WD Species	LB Count	LB Species
Araria	Kajra Dhar	275	24	16	97	13	9	3	169	8
Aurangabad	Indrapuri Barrage	3,021	30	12	2,991	22	18	4	12	2
Banka	Odhni Dam	1,128	42	22	1,078	27	15	6	35	9
Begusarai	Kanwar Lake	1,584	51	27	1,033	23	182	9	369	19
Bhagalpur	Jagatpur Lake	1,948	59	23	1,852	40	11	8	85	11
	Gangaprasad Lake	1,391	41	18	1,308	28	9	4	74	9
	Dimaha Dhar	346	26	16	211	20	2	1	133	5
	Katiyadhar	425	25	14	399	15	10	7	16	3
	Sultangaj to Mirzapur	1,502	36	15	1,360	27	9	5	133	4
	Mirzapur to Bhagalpur	980	36	16	723	27	9	4	248	5
	Bhagalpur to Kahalgaon	1,813	46	16	1,564	34	23	8	226	4
	Manik Sarkar to Barrari	679	47	21	508	29	44	5	127	13
Buxar-Bhojpur	Chausa-Ahirauli Ganga	5,703	42	19	5,476	28	138	6	89	8
	Gokul Jalashay	1,424	54	30	1,145	25	6	3	273	25
	Sunki Suhiya	993	35	18	938	24	16	6	45	6
Darbhanga	Kusheshwar Sthan	793	31	13	760	27	33	4	0	0
EC	Basmanpur Lake (Maun)	235	26	21	106	7	10	2	119	17
	Bhoraha Lake	114	20	15	49	4	4	2	61	14
	Gandak River	97	14	11	30	4	4	1	63	9
	Sarotar Lake	482	24	17	408	11	7	4	67	9
	Sonbarsa Lake	289	25	17	257	14	3	3	29	8
Gaya	Barandih	829	18	12	824	13	2	2	3	3
	Barwadih	118	20	12	109	14	3	2	6	4

Table 7. Details of waterbirds, wetland dependent and landbirds recorded from 26 districts of Bihar during the AWC 2023 (*contd.*)

District	Wetland	Total count	Total species	Total families	WB Count	WB Species	WD Count	WD Species	LB Count	LB Species
Jamui	Bela Tand	650	31	15	632	24	6	3	12	4
	Devan Ahar	400	17	12	394	12	5	4	1	1
	Pailbajaan	241	17	13	188	9	1	1	52	7
	Garhi Dam	971	55	27	861	27	22	8	88	20
	Nagi	6,938	44	20	6,916	34	7	5	15	5
	Rail Pond	1,063	14	12	1,032	8	1	1	30	5
	Raja Ahar	373	30	12	367	26	3	2	3	2
	Nakti	7,844	29	10	7,842	27	1	1	1	1
Kaimur	Durgawati Jalashay	423	44	29	305	12	12	6	106	26
Katihar	Baldia Chaur	487	21	14	269	12	25	4	193	5
	Baghar Beel	1,215	44	25	976	24	9	4	180	16
	Gogabeel	3,281	39	18	3,136	28	7	4	138	7
	Kathotia Fish Pond	220	9	5	219	9	0	0	0	0
	Ganga (Kahalgaon to Manihari)	1,140	41	41	1,084	27	17	6	39	8
Khagaria	Pasraha Chaur	580	32	14	569	27	11	5	0	0
Madhubani	Chapaniya Lake	542	26	9	536	25	6	1	0	0
Munger	Ganga-Munger-Gagaria	1,763	45	19	1,501	28	44	8	218	9
Muzaffarpur	Manika Lake	308	28	20	140	8	6	3	162	17
	Bhoosara Lake	127	32	18	63	13	4	3	60	16
	Bagmati River	154	20	15	27	6	11	2	116	12
Nalanda	Gangaji Rajgriha Jalashaya	711	14	10	701	10	0	0	10	4
	Ghora Katora Forest trail	61	12	9	0	0	0	0	61	12
	Pushpakarani tank	548	11	7	547	10	0	0	1	1
	Giddhi Lake (Begumpur)	66	6	5	54	4	0	0	12	2
	Pavapuri Jal Mandir	802	11	7	799	9	2	1	1	1
	Panchane River, Sainik School	388	16	12	371	10	4	1	13	5
Nawada	Hardiya Dam	1,254	40	17	1,047	34	3	2	204	4
Patna	Rajdhani Jalashay	171	14	8	169	13	2	1	0	0
Saharsa	Arsi Chaur	290	19	10	278	16	12	3	0	0
	Simri Chaur	266	10	8	260	8	0	0	6	2
	Kosi River Catchment Area	1,466	26	14	1413	14	5	3	48	9
	Bora Chaur	280	14	7	278	13	2	1	0	0
	Jalai Chaur	575	17	10	572	16	3	1	0	0
Samastipur	Deokhal Chaur	724	66	32	436	32	69	11	219	23
	Goela Chaur	615	46	26	240	14	57	10	318	22
	Garuara Chaur	761	52	30	315	14	89	11	357	27
	Kalyanpur Chaur	1,069	38	24	782	13	35	5	252	20

Table 7. Details of waterbirds, wetland dependent and landbirds recorded from 26 districts of Bihar during the AWC 2023 (*contd.*)

District	Wetland	Total count	Total species	Total families	WB Count	WB Species	WD Count	WD Species	LB Count	LB Species
Saran	Atanagar	290	33	20	128	16	28	5	134	12
	Bahiyara Chaur	1,125	48	22	1,041	32	28	11	56	5
	Hariya Chaur	63	8	5	58	5	5	3	0	0
	Phulwaria Chaur	26	9	6	19	6	7	3	0	0
Sheohar	Bagmati River	441	34	21	289	14	17	4	135	16
Supaul	Kosi River survey from Raniganj to kosi Mahasetu	402	30	14	376	23	22	5	4	2
	Kosi Catchment	983	47	24	845	26	22	7	116	14
Vaishali	Baraila Lake	253	15	9	203	10	4	1	46	4
	Purainiya Chaur	283	15	10	242	8	12	3	29	4
	Salha Chaur	32	4	3	22	3	10	1	0	0
	Berai Chaur	1	1	1	0	0	0	0	1	1
	Gandak River	40	2	2	40	2	0	0	0	0
WC	Udaipur Wildlife Sanctuary	147	26	14	129	15	13	7	5	4
	Lal Sariya Maan	54	10	7	52	8	2	2	0	0
	Daruabari Wetland	128	27	19	94	12	16	6	18	9
	Gandak River	732	17	12	523	13	9	3	200	1
TOTAL		**69,935**	**203**	**55**	**62,606**	**87**	**1,243**	**26**	**6,042**	**90**

Note: WB -Waterbirds: WD – Wetland-dependent birds: LB - Landbirds

Flock of Ruddy Shelduck *Tadorna ferruginea* in VGDS

CHAPTER 7: STATUS OF GLOBALLY THREATENED AND NEAR-THREATENED SPECIES

A total of 20 Threatened and Near Threatened species were reported in AWC 2023, including eight globally threatened and 12 Near Threatened species. The Threatened and Near Threatened birds formed 3.53% of the total population counted during the AWC 2023. Of the threatened species recorded, two were endangered and six were vulnerable. Of the 20 threatened birds reported, 15 species were waterbirds, three were wetland-dependent and two were land bird species (Table 8).

Table 8: Details of Threatened and Near Threatened species reported during AWC 2023

Sl. No.	Common Name	Scientific Name	Family	IUCN status	Category
1	Greater Adjutant	*Leptoptilos dubius*	Ciconiidae	EN	WB
2	Steppe Eagle	*Aquila nipalensis*	Accipitridae	EN	WD
3	Common Pochard	*Aythya ferina*	Anatidae	VU	WB
4	Sarus Crane	*Grus antigone*	Gruidae	VU	WB
5	Lesser Adjutant	*Leptoptilos javanicus*	Ciconiidae	VU	WB
6	River Tern	*Sterna aurantia*	Laridae	VU	WB
7	Greater Spotted Eagle	*Clanga clanga*	Accipitridae	VU	WD
8	Black-capped Kingfisher	*Halcyon pileata*	Alcedinidae	VU	WD
9	Ferruginous Duck	*Aythya nyroca*	Anatidae	NT	WB
10	Falcated Duck	*Mareca falcata*	Anatidae	NT	WB
11	Painted Stork	*Mycteria leucocephala*	Ciconiidae	NT	WB
12	Woolly-necked Stork	*Ciconia episcopus*	Ciconiidae	NT	WB
13	Black-necked Stork	*Ephippiorhynchus asiaticus*	Ciconiidae	NT	WB
14	Black-headed Ibis	*Threskiornis melanocephalus*	Threskiornithidae	NT	WB
15	Oriental Darter	*Anhinga melanogaster*	Anhingidae	NT	WB
16	Northern Lapwing	*Vanellus vanellus*	Charadriidae	NT	WB
17	River Lapwing	*Vanellus duvaucelii*	Charadriidae	NT	WB
18	Eurasian Curlew	*Numenius arquata*	Scolopacidae	NT	WB
19	Red-breasted Parakeet	*Psittacula alexandri*	Psittacidae	NT	LB
20	Alexandrine Parakeet	*Palaeornis eupatria*	Psittacidae	NT	LB

Note:
NT: Near Threatened; VU: Vulnerable; EN: Endangered; WB: Waterbird; LB: Landbird; WD: Wetland-dependent bird

Totally, 20 Threatened and Near Threatened species were reported in AWC 2023. Of these, two species were new to this year that were not reported during AWC 2022. They were Steppe Eagle *Aquila nipalensis,* and Red-breasted Parakeet *Psittacula alexandri*. Two species namely Himalayan Griffon *Gyps himalayensis* and Tawny Eagle *Aquila rapax* which were reported during AWC 2022, were not reported during AWC 2023. Totally 20 Threatened and Near Threatened species were reported during the AWC 2022 (Fig. 5a).

A total of 2,472 individuals of 20 species of Threatened and Near-Threatened were reported during AWC 2023. Among these, 64 individuals of two species were endangered which were reported from 12 wetlands of six districts. Total 618 individuals of seven species and 1,790 individuals of 12 species were Vulnerable and Near Threatened respectively (Fig. 5b). The vulnerable species were recorded from 37 wetlands of 18 districts and near threatened from 38 wetlands of 20 districts. It is noteworthy to mention

here that highest numbers of all these three categories of birds were reported in Bhagalpur district (EN-51 individuals, VU- 60individuals & NT-595individuals) (Annexure 15).

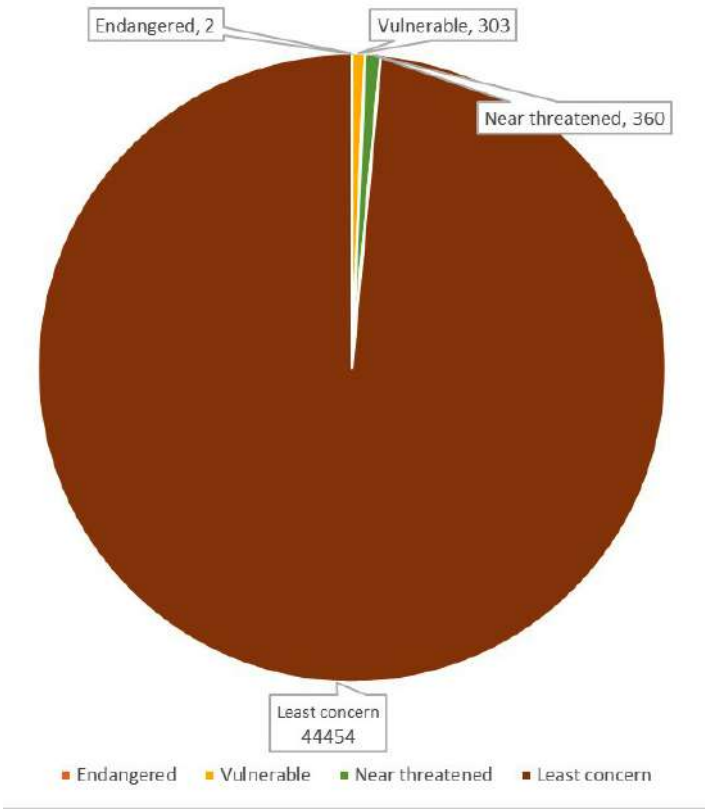

Figure 5a. Status of Threatened and Near Threatened birds recorded during the AWC 2022

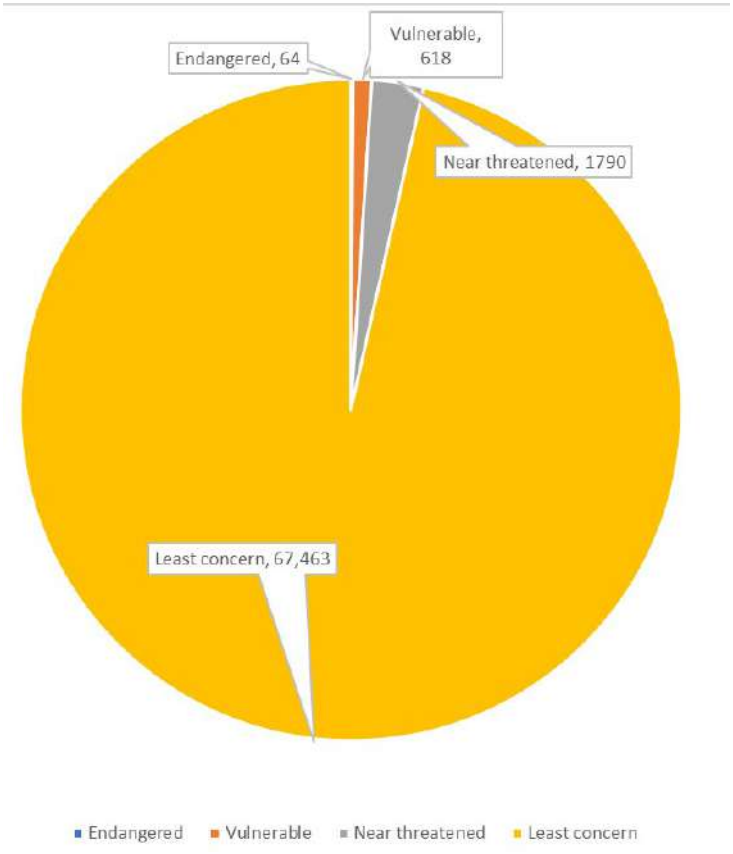

Figure 5b. Status of Threatened and Near Threatened birds recorded during the AWC 2023

Threatened and Near Threatened bird species reported during AWC 2023

Greater Adjutant *Leptoptilos dubius*

Sarus Crane *Grus antigone*

Northern Lapwing *Vanellus vanellus*

CHAPTER 8: STATUS OF PRIORITY SPECIES LISTED IN CENTRAL ASIAN FLYWAY (CAF)

In the India's National Action Plan for Conservation of migratory birds and their habitats along the Central Asian Flyway (2018–2023), twenty species have been prioritized for the Single Species Action Plan. Of the twenty, four species namely, Common Pochard *Aythya ferina*, Ferruginous Duck *Aythya nyroca,* Eurasian Curlew *Numenius arquata* and Little Stint *Calidris minuta* were reported during both the AWC 2023 and 2022 in Bihar (Table 9).

Table 9: IUCN Status and number of species listed in the CAF

Sl. No.	Common Name	Latin Name	IUCN Status	Numbers reported during AWC 2023	Numbers reported during AWC 2022	Sighting record from wetland
1	Common Pochard	*Aythya ferina*	Vulnerable	449	218	Jagatpur, VGDS (Mirzapur to Barari & Barari to Kahalgaon), Kusheshwar Asthan, Belatand, Garhi Dam, Nagi, Rajahar, Nakti, Simri Jheel, Indrapuri Barrage, Bagarbeel, Pasraha Chaur, Bahiyara Chaur.
2	Ferruginous Duck	*Aythya nyroca*	Near Threatened	646	130	Jagatpur, VGDS (Mirzapur to Barari & Barari to Kahalgaon), Kusheshwar Asthan, Chapaniya Lake, Belatand, Rajahar, Nakti, Simri Jheel, Bagarbeel, Kathotia Pond, Rajdhani Jalasya, Bahiyara Chaur
3	Eurasian Curlew	*Numenius arquata*	Near Threatened	21	7	Gangaprasad Lake, Ganga (Kahalgaon to Manihari)
4	Little Stint	*Calidris minuta*	Least Concern	407	49	Jagatpur, Gangaprasad, odhni Dam, Barwadih Dam, Hardiya Dam, Jalai Chaur, Indrapuri Barrage, Ganga (Chausa-Ahirauli), Pasraha Chaur, Atanagar, Bagmati River, Ganga (Munger), Kajra Dhar, Deokhal Chaur

CHAPTER 9: STATUS OF SPECIES LISTED IN CAF CONSERVATION CONCERN

In all,30species listed in the CAF conservation concern were reported from Bihar during the AWC 2023. Of these, three were Near Threatened and one was Vulnerable species (Table 10).

Table 10: List of migratory birds of CAF conservation concern in India

Sl. No.	Common Name	Scientific name	Status (IUCN RedList)	Numbers reported during 2023
1	Black Stork	*Ciconia nigra*	LC	02
2	Greylag Goose	*Anser anser*	LC	1,534
3	Common Shelduck	*Tadorna tadorna*	LC	258
4	Gadwall	*Anas strepera*	LC	1,824
5	Falcated Duck	*Anas falcata*	NT	05
6	Eurasian Wigeon	*Anas penelope*	LC	638
7	Northern Shoveler	*Anas clypeata*	LC	152
8	Northern Pintail	*Anas acuta*	LC	2,124
9	Garganey	*Anas querquedula*	LC	169
10	Common Teal	*Anas crecca*	LC	482
11	Red-crested Pochard	*Netta rufina*	LC	6,549
12	Common Pochard	*Aythya ferina*	VU	409
13	Tufted Pochard	*Aythya fuligula*	LC	107
14	Pacific Golden-Plover	*Pluvialis fulva*	LC	81
15	Common Ringed Plover	*Charadrius hiaticula*	LC	155
16	Northern Lapwing	*Vanellus vanellus*	NT	63
17	Grey-headed Lapwing	*Vanellus cinereus*	LC	856
18	Pintail Snipe	*Gallinago stenura*	LC	01
19	Eurasian Curlew	*Numenius arquata*	NT	33
20	Spotted Redshank	*Tringa erythropus*	LC	32
21	Marsh Sandpiper	*Tringa stagnatilis*	LC	80
22	Common Greenshank	*Tringa nebularia*	LC	399
23	Spotted Greenshank	*Tringa guttifer*	LC	91
24	Green Sandpiper	*Tringa ochropus*	LC	24
25	Wood Sandpiper	*Tringa glareola*	LC	98
26	Little Stint	*Calidris minuta*	LC	547
27	Temminck's Stint	*Calidris temminckii*	LC	400
28	Ruff	*Philomachus pugnax*	LC	03
29	Pallas's Gull	*Larus ichthyaetus*	LC	01
30	Black-headed Gull	*Larus ridibundus*	LC	27

A total of 17,144 individuals of 30 species listed under CAF conservation concern were reported from 52 wetlands of 23 districts during AWC 2023. Among these, 72% (12,570 individuals) of the population of CAF conservation concern species were recorded from 10 wetlands (Figure 6a). The highest count of the species reported from VGDS, Jagatpur Lake and Nakti followed by Hardiya Dam (Fig. 6b).

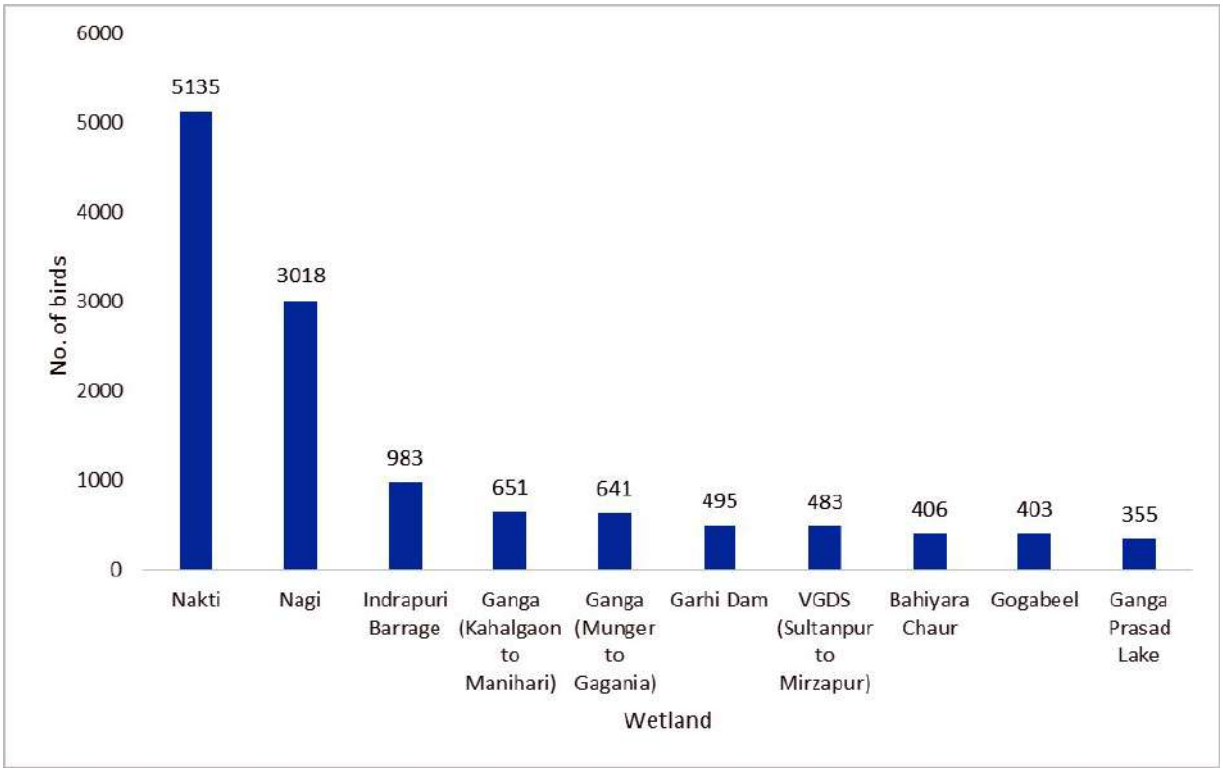

Figure 6a. Details of 10 wetlands with highest number of species listed under CAF conservation concern reported during AWC 2023

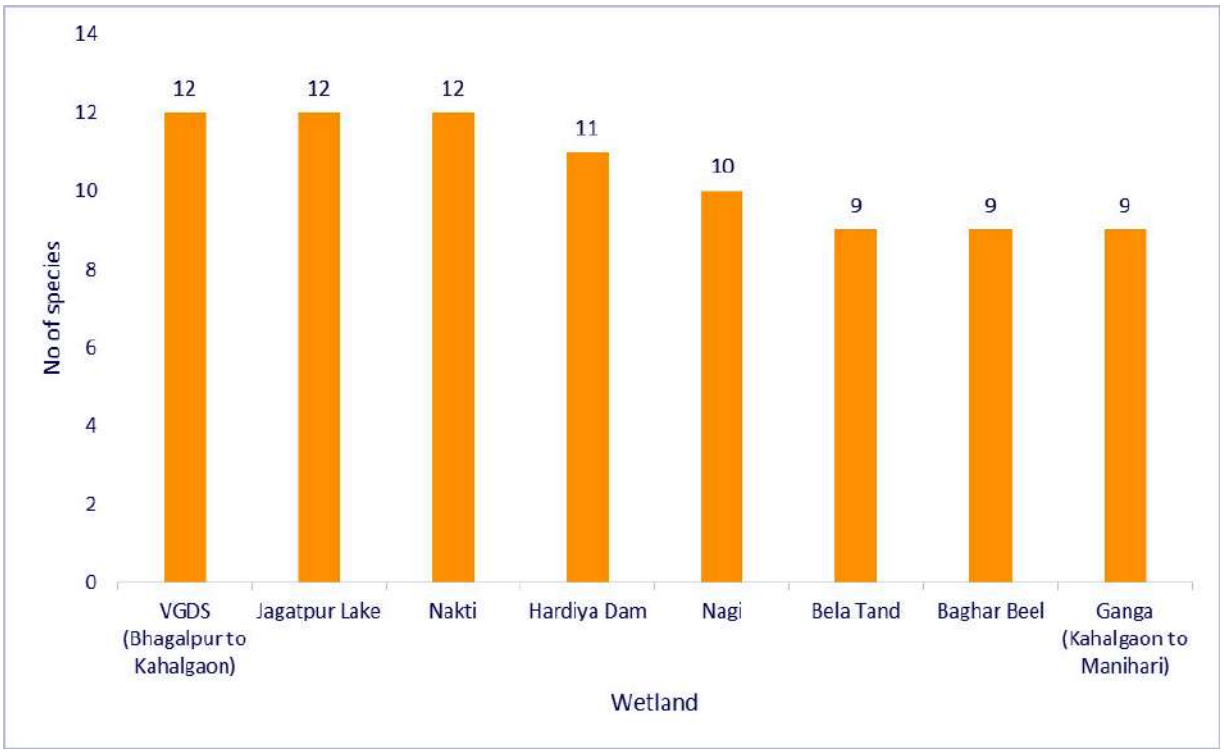

Figure 6b. Details of eight wetlands in which the highest number of species listed under the CAF conservation concernwere reported during AWC 2023

CHAPTER 10: HABITAT ASSESSMENT

a. **Wetland Type**

Of the 76 wetlands covered during the AWC 2023, three were river systems (Ganga, Kosi and Gandak), which includes 19 census segments. Each one is considered as one wetland. 10 were freshwater marshes, 14 were reservoirs, three were fish ponds and 30 were freshwater lakes. Based on the water availability, the wetlands covered during the AWC 2023 were categorized as perenial and temporary water sourcein nature. Among the 76 wetlands, three wetlands (Baldia Chaur in Katihar, Batrauliya Chaur in Muzaffarpur and Phulwaria Chaur in Saran) were temporary and rest of them are perenial. The details are given in the Table 11 & Fig. 7.

Table 11. Details of district-wise wetland types

District	Site	River	Freshwater marsh	Freshwater Lake	Reservoir	Fish pond	Peranial water source	Temporary water source
Araria	Kajra Dhar	✓					✓	
Aurangabad	Indrapuri Barrage				✓		✓	
Banka	Orhni Dam				✓		✓	
Banka	Ohrni Dam Banka				✓		✓	
Begusarai	Kanwar Lake	✓		✓				
Bhagalpur	Ganga Prasad Lake		✓					
Bhagalpur	Jagatpur Lake			✓				
Bhagalpur	Sultanganj to Barari	✓					✓	
Bhagalpur	Barari to Kahalgaon	✓					✓	
Bhagalpur	Manik Sarkar to Barari	✓	✓					
Bhagalpur	Dimaha Dhar		✓				✓	
Bhagalpur	Katiyadhar		✓				✓	
Bhojpur	Sunki Suhiya Bhangar			✓			✓	
Buxar	Chausa-Ahirauli Ganga River	✓					✓	
Buxar	Gokul Jalashay			✓			✓	
Darbhanga	Kusheshwar Sthan		✓				✓	
East Champaran	Basmanpur Lake			✓			✓	
East Champaran	Bhoraha Lake			✓			✓	
East Champaran	Gandak River	✓						
East Champaran	Sarottar Maun			✓			✓	
East Champaran	Sonbarsa Lake			✓			✓	
Gaya	Barwadih Wetland				✓		✓	
Jamui	Bela Tand				✓		✓	
Jamui	Devan Ahar			✓	✓		✓	
Jamui	Garhi Dam			✓	✓		✓	
Jamui	Nagi Dam				✓		✓	
Jamui	Nakti Dam				✓		✓	
Jamui	Pailbajan			✓			✓	
Jamui	Railway Pond			✓			✓	
Jamui	Raja Ahar				✓			

Kaimur	Durgawati Jalashay			✓	✓		✓	
Katihar	Ganga (Kahalgaon to Manihari)							
Katihar	Baghar Beel			✓			✓	
Katihar	Baldiya Chaur			✓				✓
Katihar	Gogabeel			✓			✓	
Katihar	Kathotia Fish Pond					✓	✓	
Khagaria	Pasraha Chaur			✓	✓		✓	
Madhubani	Chhapaniya Lake						✓	
Munger	Ganga (Munger to Gangania)						✓	
Muzaffarpur	Manika Lake			✓			✓	
Muzaffarpur	Bhoosara Lake			✓			✓	
Muzaffarpur	Bagmati River	✓					✓	
Muzaffarpur	Batrauliya Chaur							✓
Nalanda	Ghora Katora			✓			✓	
Nalanda	Pushpkarni Tank			✓				
Nalanda	Gidhilake Pond			✓				
Nalanda	Pawapuri Tank			✓				
Nalanda	Sainik School	✓						
Nalanda	Gangaji Rajgriha Jalashaya			✓	✓		✓	
Nawada	Hardiya Dam				✓		✓	
Patna	Rajdhani Jalashay						✓	
Saharsa	Arsi Chaur	✓	✓					
Saharsa	Bora Chaur							
Saharsa	Simri Chaur	✓		✓				
Saharsa	Kosi Catchment	✓	✓					
Saharsa	Jalai Chaur	✓						
Saran	Atanagar	✓	✓	✓		✓	✓	
Saran	Bahiyara Chaur			✓			✓	
Saran	Hariya Chaur					✓	✓	
Saran	Phulwaria Chaur	✓						✓
Sheohar	Bagmati River	✓					✓	
Supal	Kosi River Catchment Area		✓					
Supal	Kosi (Raniganj to Kosi Mahasetu)	✓						
Vaishali	Berai Chuar							
Vaishali	Purainiya Chaur	✓						
Vaishali	Baraila Lake							
Vaishali	Salha Chaur							
Vaishali	Gandak River							
West Champaran	Udaipur WLS	✓					✓	
West Champaran	Lal Sariya Man	✓					✓	
West Champaran	Darwabani			✓			✓	
West Champaran	Gandak River	✓						

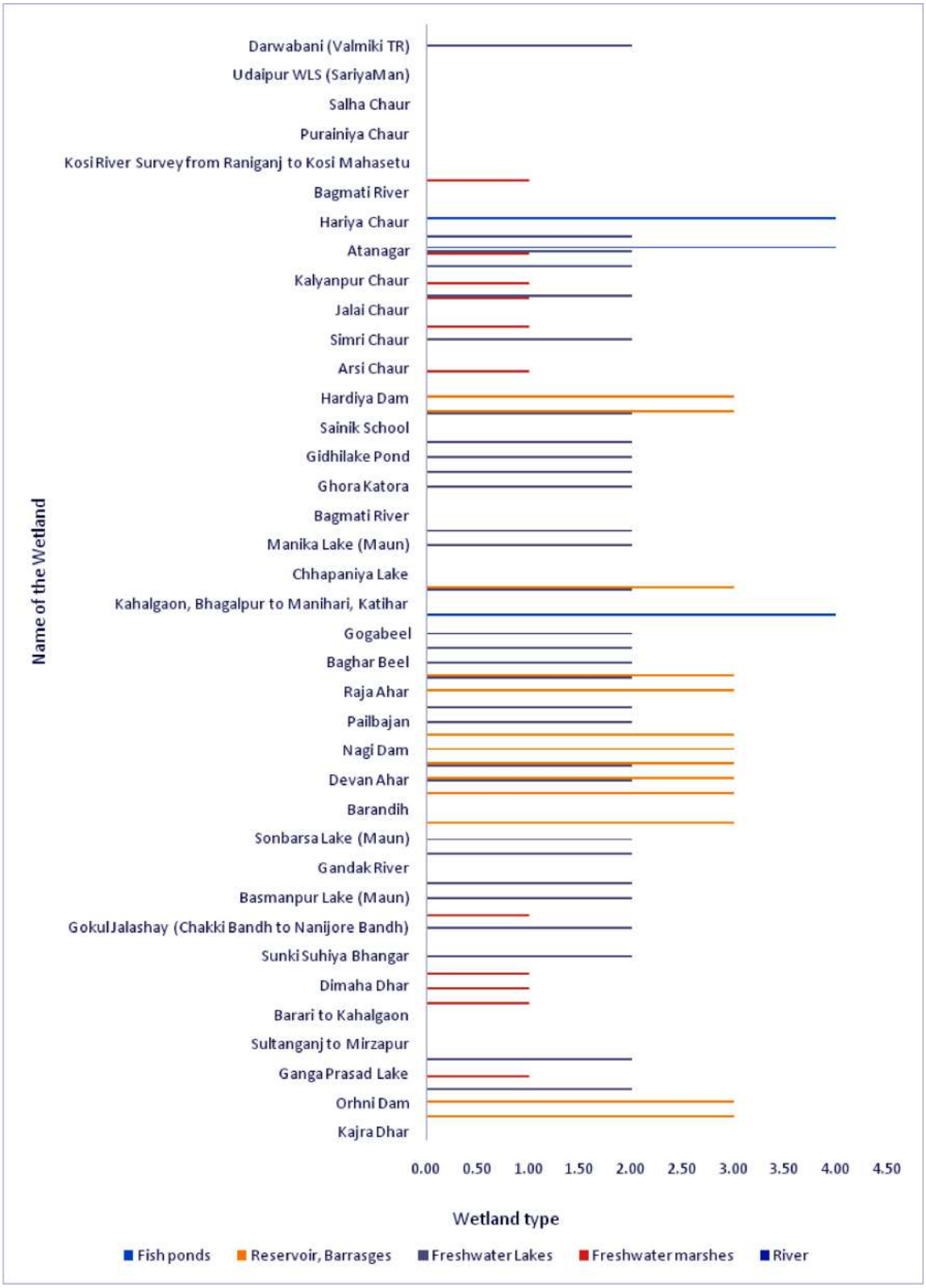

Figure 7. Wetland types

b. **Vegetation type**

Five major categories of vegetation were reported from the wetlands covered during the AWC 2023. Of the 76 wetlands, 10 wetlands had all four types of vegetation (Table 12).

Table 12. Details of site-wise vegetation type reported during the AWC 2023

District	Site	Vegetation cover of wetland					Vegetation type			
		Unknown	None	Half	Complete	Recently cleared	On Bank	Submerged	Emergent	Floating leaved-rooted
Araria	Kajra Dhar			✓						✓
Aurangabad	Indrapuri Barrage		✓				✓			
Banka	Orhni Dam	✓								✓
Begusarai	Kanwar Lake				✓		✓	✓	✓	✓
Bhagalpur	Ganga Prasad Lake									
Bhagalpur	Jagatpur Lake			✓						✓
Bhagalpur	VGDS		✓				✓			
Bhagalpur	VGDS		✓				✓			
Bhagalpur	VGDS (Mirzapur to Barari)		✓				✓			
Bhagalpur	Manik Sarkar to Barari									
Bhagalpur	Dimaha Chaur		✓				✓			
Bhagalpur	Katiyadhar Chaur		✓				✓			
Bhojpur	Sunki Suhiya Bhangar				✓		✓	✓	✓	✓
Buxar	Chausa-Ahirauli Ganga River			✓			✓	✓		
Buxar	Gokul Jalashay			✓			✓	✓	✓	✓
Darbhanga	Kusheshwar Sthan			✓			✓	✓		
East Champaran	Basmanpur Lake			✓				✓	✓	✓
East Champaran	Bhoraha Lake			✓				✓	✓	✓
East Champaran	Gandak River		✓							
East Champaran	Sarotar Maun			✓				✓	✓	✓
East Champaran	Sonbarsa Lake			✓			✓	✓	✓	✓
Gaya	Barwadih Wetland		✓				✓	✓		
Jamui	Bela Tand			✓			✓	✓	✓	✓
Jamui	Devan Ahar			✓			✓	✓		
Jamui	Garhi Dam			✓			✓	✓		
Jamui	Nagi Dam			✓			✓	✓		
Jamui	Nakti Dam Bird Sanctuary			✓			✓	✓		
Jamui	Pailbajan				✓		✓	✓	✓	✓
Jamui	Railway Pond				✓		✓	✓	✓	✓
Jamui	Raja Ahar				✓		✓	✓	✓	✓
Kaimur	Durgawati Jalashay	✓					✓	✓		
Katihar	Kahalgaon, Bhagalpur to Manihari, Katihar									
Katihar	Baghar Beel				✓		✓	✓	✓	✓
Katihar	Baldiya Chaur				✓		✓	✓	✓	✓
Katihar	Gogabeel				✓		✓	✓		
Katihar	Kathotia Fish Pond	✓								
Khagaria	Pasraha Chaur			✓						✓
Madhubani	Chhapaniya Lake			✓			✓	✓		

Table 12. Details of site-wise vegetation type reported during the AWC 2023 (*contd.*)

District	Site	Vegetation cover of wetland					Vegetation type			
		Unknown	None	Half	Complete	Recently cleared	On Bank	Submerged	Emergent	Floating leaved-rooted
Munger	Ganga (Munger to Gangania)		✓							
Muzaffarpur	Manika Lake			✓				✓	✓	✓
Muzaffarpur	Bhoosara Lake			✓			✓	✓	✓	✓
Muzaffarpur	Bagmati River		✓							
Muzaffarpur	Batrauliya Chaur			✓						
Nalanda	Ghora Katora		✓							
Nalanda	Pushpkarni Tank			✓			✓	✓		✓
Nalanda	Gidhilake Pond				✓					
Nalanda	Pawapuri Tank			✓			✓	✓	✓	✓
Nalanda	Sainik School			✓			✓	✓	✓	✓
Nalanda	Gangaji Rajgriha Jalashaya		✓							
Nawada	Hardiya Dam		✓				✓			
Patna	Rajdhani Jalashay			✓			✓			
Saharsa	Arsi Chaur									
Saharsa	Bora Chaur			✓		✓				
Saharsa	Simri Chaur						✓	✓	✓	
Saharsa	Kosi Catchment						✓	✓		✓
Saharsa	Jalai Chaur							✓		
Saran	Atanagar			✓						
Saran	Bahiyara Chaur			✓				✓	✓	✓
Saran	Hariya Chaur					✓				
Saran	Phulwaria Chaur				✓					✓
Sheohar	Bagmati River		✓					✓	✓	
Supal	Kosi River Catchment Area			✓			✓	✓		✓
Supal	Kosi River Survey from Raniganj to Kosi Mahasetu						✓	✓		
Vaishali	Berai Chuar								✓	✓
Vaishali	Purainiya Chaur			✓			✓			
Vaishali	Baraila Lake						✓	✓		
Vaishali	Salha Chaur						✓	✓	✓	✓
Vaishali	Gandak River			✓						
West Champaran	Udaipur WLS (SariyaMan)			✓			✓	✓		
West Champaran	Lal Sariya Man			✓			✓	✓		
West Champaran	Darwabani (Valmiki TR)			✓			✓	✓		
West Champaran	Gandak River		✓	✓						

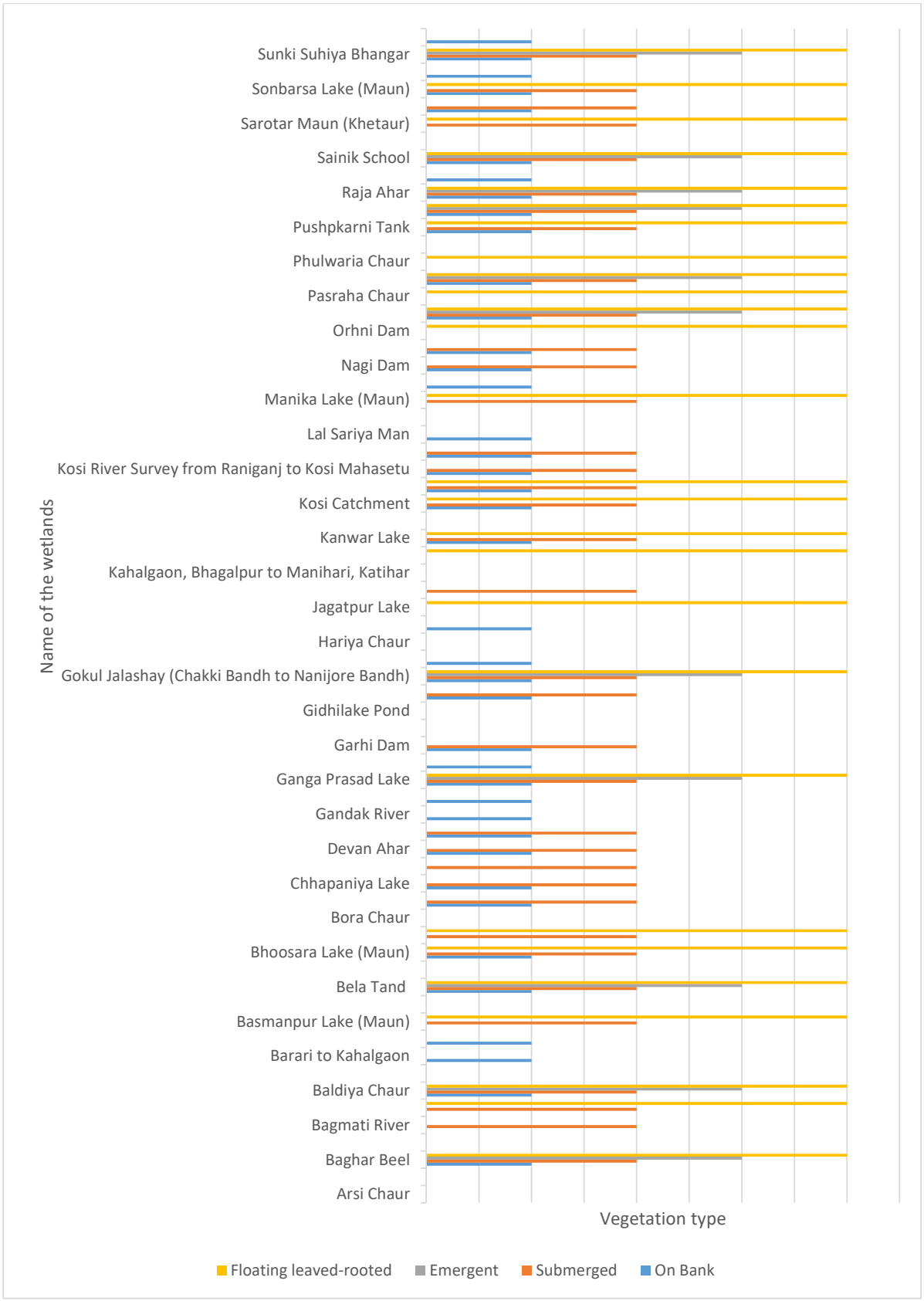

Figure 8. Wetland-wise details of vegetation type

Baraila Wetland

Gogabeel community reserve

Jagatpur Lake

CHAPTER 11: THREATS AND ISSUES

The threats to each wetland site were also recorded by the census teams in habitat forms (Table 13). The following were the threats reported from the wetlands

a. **Fishing**

Fishing was observed at 60.5% of the wetlands (46 out of 76 wetlands). Extensive fishing was observed from 22 wetlands, moderate fishing was observed in 12 wetlands and minimal fishing was reported from 10 wetlands. No fishing was observed in 11 wetlands. Fishing data were unavailable for 14 wetlands.

b. **Poaching**

Among all wetlands surveyed, poaching was observed in 36.8% wetlands (28 out of 76 wetlands). Extensive poaching was observed in five wetlands, moderate poaching was observed in 14 wetlands and minimal poaching was reported innine wetlands. Poaching was not reported from 10 wetlands, and data on poaching for 33 wetlands remained unreported. On the contrary, poaching was reported in 41% (28 out of 68 wetlands)of the wetlands covered during the AWC in 2022.

c. **Pollution**

A total of 35 wetlands showed signs of pollution due to following reasons:

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

Pollution was absent from 17 wetlands, while pollution data remained unreported in 19 wetlands. In contrast, 32 wetlands showed signs of pollution during the AWC in 2022.

d. **Others**

Cattle grazing was reported from 55 wetlands. Extensive cattle grazing was reported in six wetlands, moderate cattle grazing was reported in 28 wetlands, while minimal cattle grazing was reported in 13 wetlands. No cattle grazing was observed in eight wetlands, while data on cattle grazing remained unreported in 15 wetlands.

While the numbers suggest reductions in the intensity of threats to wetlands between 2022 and 2023, it is too early to determine if the change in threat intensity is due to sustained planning and effort, or if the change is due to a difference in sampling effort, observer error, and number of sites surveyed between 2022 and 2023.

Table 13. Details of threats reported from the wetlands covered during the AWC 2023

District	Site	Fishing activity					Bird hunting					Agriculture				Cattle grazing				Pollution
		Unknown	None	Little	Moderate	Large	Unknown	None	Little	Moderate	Large	None	Little	Moderate	Large	None	Little	Moderate	Large	
Araria	Kajra Dhar				✓	✓									✓		✓			Yes
Aurangabad	Indrapuri Barrage				✓				✓					✓					✓	Yes
Banka	Orhni Dam			✓					✓				✓			✓				No
Begusarai	Kanwar Lake					✓					✓				✓		✓			Yes
Bhagalpur	Ganga Prasad Lake				✓					✓					✓			✓		No
Bhagalpur	Jagatpur Lake				✓				✓					✓				✓		No
Bhagalpur	VGDS				✓		✓					✓				✓				Yes
Bhagalpur	VGDS				✓		✓					✓				✓				
Bhagalpur	Manik Sarkar to Barari				✓					✓					✓		✓			Yes
Bhagalpur	Dimaha Dhar			✓				✓												
Bhagalpur	Katiyadhar			✓					✓											
Bhojpur	Sunki Suhiya Bhangar					✓				✓				✓				✓		Yes
Buxar	Chausa-Ahirauli Ganga River					✓	✓								✓			✓		Yes
Buxar	Gokul Jalashay					✓				✓					✓			✓		Yes
Darbhanga	Kusheshwar Sthan				✓				✓					✓			✓			
East Champaran	Basmanpur Lake					✓				✓					✓			✓		Yes
East Champaran	Bhoraha Lake					✓				✓					✓			✓		Yes
East Champaran	Gandak River	✓				✓			✓						✓					Yes
East Champaran	Sarotar Maun					✓					✓				✓			✓		Yes
East Champaran	Sonbarsa Lake					✓					✓				✓				✓	Yes
Gaya	Barwadih Wetland		✓					✓						✓				✓		Yes
Jamui	Bela Tand			✓					✓				✓					✓		Yes
Jamui	Devan Ahar					✓	✓							✓				✓		Yes
Jamui	Garhi Dam					✓	✓								✓			✓		Yes

Table 13. Details of threats reported from the wetlands covered during the AWC 2023 (*contd.*)

District	Site	Fishing activity					Bird hunting					Agriculture				Cattle grazing				Pollution
		Unknown	None	Little	Moderate	Large	Unknown	None	Little	Moderate	Large	None	Little	Moderate	Large	None	Little	Moderate	Large	
Jamui	Nagi Dam			✓				✓							✓			✓		Yes
Jamui	Nakti Dam Bird Sanctuary			✓			✓								✓		✓			Yes
Jamui	Pailbajan		✓				✓							✓				✓		Yes
Jamui	Railway Pond		✓				✓					✓				✓				Yes
Jamui	Raja Ahar					✓	✓								✓			✓		Yes
Kaimur	Durgawati Jalashay		✓					✓				✓				✓				No
Katihar	Ganga (Kahalgaonto Manihari																			
Katihar	Baghar Beel					✓	✓								✓			✓		Yes
Katihar	Baldiya Chaur					✓	✓								✓			✓		Yes
Katihar	Gogabeel					✓			✓						✓			✓		Yes
Katihar	Kathotia Fish Pond					✓	✓					✓				✓				Yes
Khagaria	Pasraha Chaur				✓					✓					✓		✓			No
Madhubani	Chhapaniya Lake		✓					✓						✓		v				Yes
Munger	Ganga (Munger to Gangania)			✓											✓					Yes
Muzaffarpur	Manika Lake					✓				✓					✓				✓	Yes
Muzaffarpur	Bhoosara Lake					✓				✓					✓				✓	Yes
Muzaffarpur	Bagmati River				✓						✓								✓	Yes
Muzaffarpur	Batrauliya Chaur														✓			✓		
Nalanda	Ghora Katora		✓					✓				✓					✓			No
Nalanda	Pushpkarni Tank							✓												No
Nalanda	Gidhilake Pond			✓			✓								✓					Yes
Nalanda	Pawapuri Tank		✓					✓				✓				✓				
Nalanda	Sainik School						✓							✓				✓		Yes
Nalanda	Gangaji Rajgriha Jalashaya		✓					✓				✓					✓			No

Table 13. Details of threats reported from the wetlands covered during the AWC 2023 (*contd.*)

District	Site	Fishing activity					Bird hunting					Agriculture				Cattle grazing				Pollution
		Unknown	None	Little	Moderate	Large	Unknown	None	Little	Moderate	Large	None	Little	Moderate	Large	None	Little	Moderate	Large	
Nawada	Hardiya Dam				✓			✓					✓				✓			No
Patna	Rajdhani Jalashay		✓					✓				✓				✓				No
Saharsa	Arsi Chaur																			
Saharsa	Bora Chaur														✓					
Saharsa	Simri Chaur					✓					✓		✓					✓		
Saharsa	Kosi Catchment				✓		✓						✓							No
Saharsa	Jalai Chaur			✓														✓		No
Saran	Atanagar	✓												✓				✓		No
Saran	Bahiyara Chaur			✓						✓				✓			✓			
Saran	Hariya Chaur	✓				✓	✓				✓	✓								No
Saran	Phulwaria Chaur														✓		✓			
Sheohar	Bagmati River					✓			✓						✓			✓		No
Supal	Kosi River Catchment Area			✓					✓					✓				✓		No
Supal	Kosi River (Raniganj to Kosi Mahasetu)	✓			✓					✓						✓				No
Vaishali	Berai Chuar																			
Vaishali	Purainiya Chaur																			
Vaishali	Baraila Lake				✓						✓				✓			✓		Yes
Vaishali	Salha Chaur																			
Vaishali	Gandak River																			
West Champaran	Udaipur WLS (SariyaMan)					✓				✓		✓						✓		Yes
West Champaran	Lal Sariya Man				✓					✓				✓				✓		No
West Champaran	Darwabani (Valmiki TR)		✓							✓					✓				✓	No
West Champaran	Gandak River				✓			✓						✓			✓			

CHAPTER 12: BIRD RINGING AND MONITORING SYSTEM (BRMS)APP

While planning the AWC 2023, Dr P. Sathiyaselvam suggested that as a part of AWC, the forest department can develop a mobile based application for gathering the AWC data and also described the advantages of the mobile application. The Suggestion was implemented by Department of Environment, Forest and Climate Change (DEF&CC), Bihar. The mobile app was developed by the Information DEF&CC, Bihar with the technical support of Bombay Natural History society (BNHS)in the following aspects:

- To get the data directly
- Easy validation
- Instant analysis and getting reports

Further, the app compiles observation data automatically and develops an excel sheet in the prescribed format. Thus, it minimises the efforts for the need for manual compilation of count data.

Later the scope of the app was scaled up to capture the following data as well

I. Asian Waterbird Census
II. Bird Monitoring and Ringing and
III. Education and Outreach programme being implemented in the Bihar state

BRMS app will be used primarily by scientists to maintain records of bird ringing and outreach activities, and by volunteers to record birds sighted during the AWC. The AWC part of the app is based on the datasheets (bird count and habitat) used on field during AWC. The app also has regional altitude and rainfall data which can be extracted from Bihar Weather Sewa Kendra. This information will be correlated with number of birds and species reported from different wetlands of the Bihar State.

The app was developed successfully and launched by the Hon'ble Environment and Forest Minister, Government of Bihar, on the occasion of World Sparrow Day at the Sanjay Gandhi Jaivik Udyan (Patna Zoo), Patna in 2023. The app will be used in full-fledged way from the AWC 2024 onwards. The features of the mobile app are shown in the figure 9.

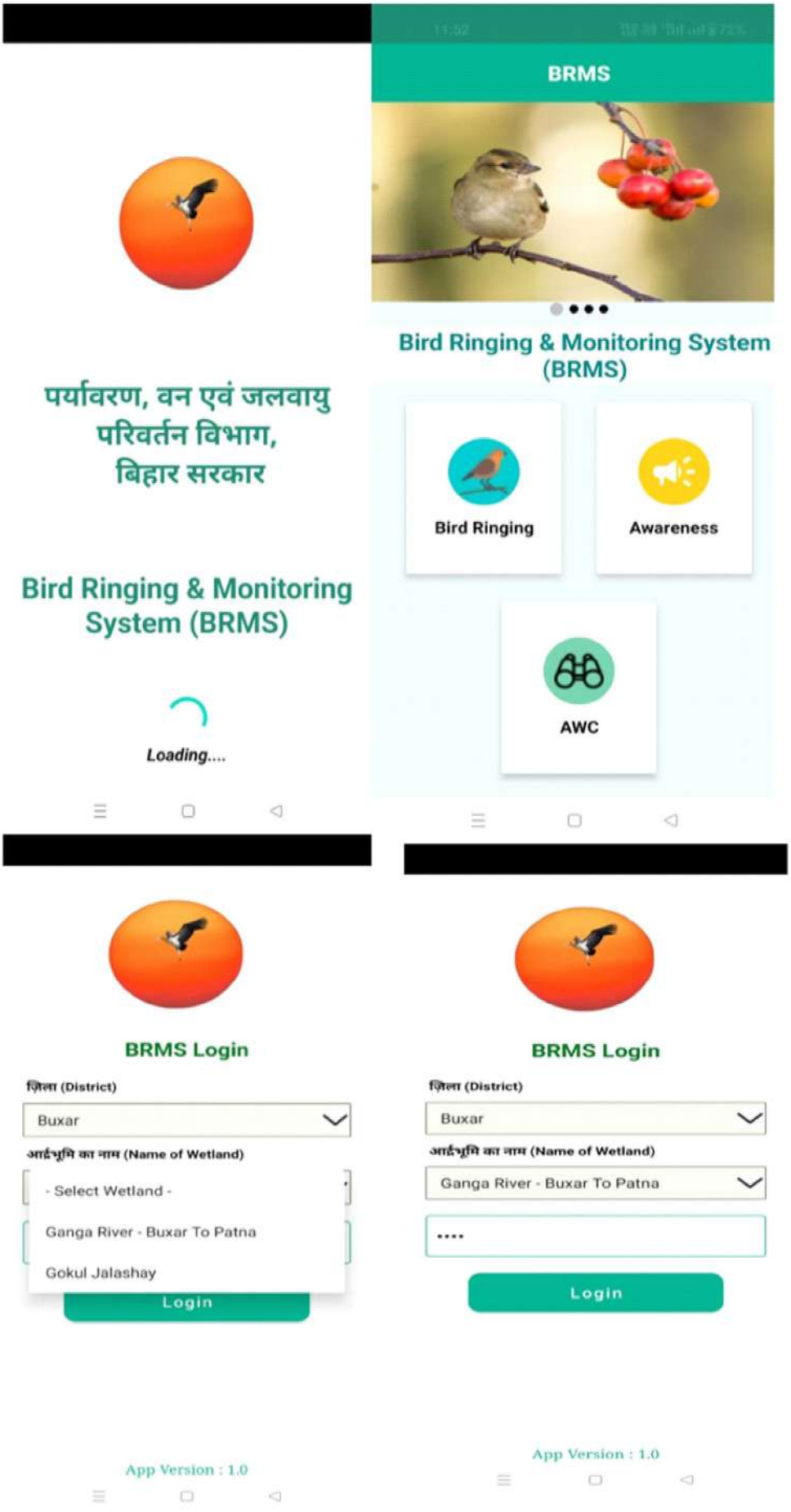

Figure 9. Features of the Bird Ringing and Monitoring System App

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Annexure 1: Details of birds reported during AWC 2023 in Araria, Aurangabad, Banka, Begusarai and Darbangha districts

English name	Scientific name	Araria	Aurangabad	Banka	Begusarai	Darbangha
		Kajra Dhar	Indrapuri Barrage	Odhni Dam	Kanwar Lake	Kusheshwar Asthan
Fulvous Whistling-duck	*Dendrocygna bicolor*	0	0	0	0	33
Lesser Whistling-duck	*Dendrocygna javanica*	0	1,230	80	0	0
Bar-headed Goose	*Anser indicus*	0	139	600	0	0
Ruddy Shelduck	*Tadorna ferruginea*	0	4	4	0	0
Red-crested Pochard	*Netta rufina*	0	447	102	4	12
Common Pochard	*Aythya ferina*	0	163	0	0	6
Ferruginous Duck	*Aythya nyroca*	0	0	0	0	2
Garganey	*Spatula querquedula*	0	0	0	0	9
Northern Shoveler	*Spatula clypeata*	0	0	0	18	0
Gadwall	*Mareca strepera*	0	179	4	0	28
Northern Pintail	*Anas acuta*	0	165	0	0	38
Common Teal	*Anas crecca*	0	0	0	4	23
Little Grebe	*Tachybaptus ruficollis*	14	3	1	80	18
Great Crested Grebe	*Podiceps cristatus*	0	10	10	0	0
Eastern Spotted Dove	*Spilopelia chinensis*	5	0	1		0
Little Swift	*Apus affinis*	0	0	0	10	0
Greater Coucal	*Centropus sinensis*	0	0	0	3	0
White-breasted Waterhen	*Amaurornis phoenicurus*	0	0	0	0	19
Common Moorhen	*Gallinula chloropus*	2	0	0	0	0
Common Coot	*Fulica atra*	0	0	24	0	0
Lesser Adjutant	*Leptoptilos javanicus*	7	0	0	20	17
Asian Openbill	*Anastomus oscitans*	0	21	17	607	304
Black-headed Ibis	*Threskiornis melanocephalus*	0	0	2	28	0
Red-naped Ibis	*Pseudibis papillosa*	0	0	15	19	4

Annexure 1: Details of birds reported during AWC 2023 in Araria, Aurangabad, Banka, Begusarai and Darbangha districts (*contd.*)

Indian Pond-heron	*Ardeola grayii*	8	3	2	21	16
Cattle Egret	*Bubulcus ibis*	5	2	2	20	24
Grey Heron	*Ardea cinerea*	0	1	9	2	45
Purple Heron	*Ardea purpurea*	0		0	8	0
Great White Egret	*Ardea alba*	3	3	0	27	25
Intermediate Egret	*Ardea intermedia*	0		0	3	20
Little Egret	*Egretta garzetta*	6	80	18	80	17
Little Cormorant	*Microcarbo niger*	0	7	106	31	28
Great Cormorant	*Phalacrocorax carbo*	0	2	9	5	15
Indian Cormorant	*Phalacrocorax fuscicollis*	0	0	0	14	16
Oriental Darter	*Anhinga melanogaster*	0	0	1	0	0
Pacific Golden Plover	*Pluvialis fulva*	29	0	0	0	0
Little Ringed Plover	*Charadrius dubius*	0	0	4	0	0
Kentish Plover	*Charadrius alexandrinus*	0	0	1	0	0
Red-wattled Lapwing	*Vanellus indicus*	8	1	0	1	7
Greater Painted-snipe	*Rostratula benghalensis*	2	0	0	0	0
Pheasant-tailed Jacana	*Hydrophasianus chirurgus*	0	0	0	16	11
Bronze-winged Jacana	*Metopidius indicus*	2	0	0	3	2
Little Stint	*Calidris minuta*	3	26	2	0	0
Common Snipe	*Gallinago gallinago*	0	0	0	13	0
Common Sandpiper	*Actitis hypoleucos*	8	2	2	0	16
Green Sandpiper	*Tringa ochropus*	0	1	0	0	5
Common Greenshank	*Tringa nebularia*	0	2	2	0	0
Wood Sandpiper	*Tringa glareola*	0	0	6	9	0
Little Pratincole	*Glareola lactea*	0	0	42	0	0
Little Tern	*Sternula albifrons*	0	0	3	0	0
River Tern	*Sterna aurantia*	0	0	10	0	0

Annexure 1: Details of birds reported during AWC 2023 in Araria, Aurangabad, Banka, Begusarai and Darbangha districts (*contd.*)

Osprey	*Pandion haliaetus*	0	2	2	0	2
Greater Spotted Eagle	*Clanga clanga*	0	0	0	3	0
Steppe Eagle	*Aquila nipalensis*	0	0	0	1	0
Black Kite	*Milvus migrans*	0	0	1	4	0
Indian Grey Hornbill	*Ocyceros birostris*	0	0	0	1	0
Asian Green Bee-eater	*Merops orientalis*	0	2	0	0	0
Indian Roller	*Coracias benghalensis*	0	1	0	0	0
Common Kingfisher	*Alcedo atthis*	0	0	1	2	0
Pied Kingfisher	*Ceryle rudis*	5	0	3	7	0
White-breasted Kingfisher	*Halcyon smyrnensis*	3	3	1	8	10
Peregrine Falcon	*Falco peregrinus*	0	0	1		0
Rose-ringed Parakeet	*Alexandrinus krameri*	0	0	0	5	0
Black-hooded Oriole	*Oriolus xanthornus*	1	0	0	0	0
Indian Golden Oriole	*Oriolus kundoo*	0	0	1	0	0
Black Drongo	*Dicrurus macrocercus*	42	0	1	17	0
Ashy Drongo	*Dicrurus leucophaeus*	0	0	0	1	0
Long-tailed Shrike	*Lanius schach*	1	0	0	0	0
Rufous Treepie	*Dendrocitta vagabunda*	0	0	0	2	0
House Crow	*Corvus splendens*	15	0	6	17	0
Large-billed Crow	*Corvus macrorhynchos*	10	0	3	0	0
Plain Prinia	*Prinia inornata*	0	0	0	24	0
Clamorous Reed-warbler	*Acrocephalus stentoreus*	0	0	0	16	0
Red-rumped Swallow	*Cecropis daurica*	0	0	0	1	0
Barn Swallow	*Hirundo rustica*	0	0	0	215	0
Jungle Babbler	*Argya striata*	0	0	10	11	0
Indian Pied Starling	*Gracupica contra*	65	0	5	1	0
Brahminy Starling	*Sturnia pagodarum*	0	0	0	1	0

Annexure 1: Details of birds reported during AWC 2023 in Araria, Aurangabad, Banka, Begusarai and Darbangha districts (*contd.*)

Common Myna	*Acridotheres tristis*	30	0	7	28	0
Bank Myna	*Acridotheres ginginianus*	0	0	0	3	0
Common Stonechat	*Saxicola torquatus*	0	0	0	9	0
Grey Wagtail	*Motacilla cinerea*	0	0	0	2	0
Citrine Wagtail	*Motacilla citreola*	0	4	0	76	8
Eastern Yellow Wagtail	*Motacilla tschutschensis*	0	0	0	72	13
White-browed Wagtail	*Motacilla maderaspatensis*	1	0	7	0	0
White Wagtail	*Motacilla alba*	0	9	0	11	0

Annexure 2: Details of birds reported during AWC 2023 in Bhagalpur district

Common Name	Scientific Name	Jagatpur Lake	Gangaprasad Lake	Dimaha Dhar	Katia dhar	Sultanganj to Mirzapur	Mirzapur to barrari (Bhagalpur)	Barari (Bhagalpur) to Kahalgaon	Manik Sarkar to Barrari Ghat	Total
Grey Francoline	*Ortygornis pondicerianus*	0	0	0	0	0	0	0	2	2
Fulvous Whistling-duck	*Dendrocygna bicolor*	80	19	0	0	0	0	40	0	139
Lesser Whistling-duck	*Dendrocygna javanica*	553	500	0	0	0	0	250	0	1303
Bar-headed Goose	*Anser indicus*	0	0	1		1	0	162	0	164
Greylag Goose	*Anser anser*	0	0	0	0	32	0		0	32
Common Shelduck	*Tadorna tadorna*	0	0	0	0		0	2	0	2
Ruddy Shelduck	*Tadorna ferruginea*	0	0	0	0	321	246	216	0	783
Cotton Pygmy-goose	*Nettapus coromandelianus*	16	0	0	0	0	0	0	0	16
Red-crested Pochard	*Netta rufina*	25	0	0	0	0	6	46	0	77
Common Pochard	*Aythya ferina*	27	0	0	0	0	5	2	0	34
Ferruginous Duck	*Aythya nyroca*	120	54	11	0	0	0	0	0	185
Garganey	*Spatula querquedula*	2	0	0	0	1	0	2	0	5
Northern Shoveler	*Spatula clypeata*	26	0	0	0	0	0	0	0	26
Gadwall	*Mareca strepera*	49	27	0	0	70	0	64	15	225
Eurasian Wigeon	*Mareca penelope*	46		0	0	0		0		46
Northern Pintail	*Anas acuta*	35	237	0	0	0	4	8	20	304
Common Teal	*Anas crecca*	2	30	0	0	48	60		150	290
Little Grebe	*Tachybaptus ruficollis*	5	59	12	12	0	0	0	30	118
Asian Palm Swift	*Cypsiurus balasiensis*	0	0	0	0	0	0	0	30	30
Common Hawk-cuckoo	*Hierococcyx varius*	2	0	0	0	0	0	0	0	2
White-breasted Waterhen	*Amaurornis phoenicurus*	3	5	0	0	0	0	0	0	8
Purple Swamphen	*Porphyrio porphyrio*	124	50	0	0	0	0	0	0	174
Common Moorhen	*Gallinula chloropus*	69	15	0	0	0	0	0	0	84

Annexure 2: Details of birds reported during AWC 2023 in Bhagalpur district (*contd.*)

Common Name	Scientific Name	Jagatpur Lake	Gangaprasad Lake	Dimaha Dhar	Katia dhar	Sultanganj to Mirzapur	Mirzapur to barrari (Bhagalpur)	Barari (Bhagalpur) to Kahalgaon	Manik Sarkar to Barrari Ghat	Total
Common Coot	*Fulica atra*	549	100	10	0	0	0	0	0	659
Greater Adjutant	*Leptoptilos dubius*	5	2		2	8	21	8	5	51
Lesser Adjutant	*Leptoptilos javanicus*	2	8	7	1	1	1	5	2	27
Painted Stork	*Mycteria leucocephala*	0	0	0	1	150	15	0	3	169
Asian Openbill	*Anastomus oscitans*	20	13	46	78	69	0	37	2	265
Asian Woollyneck	*Ciconia episcopus*	0	0	0	1		9	4	1	15
Black-necked Stork	*Ephippiorhynchus asiaticus*	2	2	1		2	0	0	0	7
Black-headed Ibis	*Threskiornis melanocephalus*	6		27		74	32	20	20	179
Red-naped Ibis	*Pseudibis papillosa*	12	17	1		13	8	97	35	183
Indian Pond-heron	*Ardeola grayii*				8	2		3	6	19
Cattle Egret	*Bubulcus ibis*	5	62	17	103	101	20	2	9	319
Grey Heron	*Ardea cinerea*	4	5	2	10	18	3	10	10	62
Purple Heron	*Ardea purpurea*	4	4		1					9
Great White Egret	*Ardea alba*	1	0	0	0	7	1		2	11
Intermediate Egret	*Ardea intermedia*	5	3	2		2	2	15		29
Little Egret	*Egretta garzetta*	2	2	8	100	6	10	10	2	140
Little Cormorant	*Microcarbo niger*	21	27	50	51	66	30	174	25	444
Great Cormorant	*Phalacrocorax carbo*	0	31	0	0	4	96	196	0	327
Oriental Darter	*Anhinga melanogaster*	2	0	0	13	0	0	0	0	15
Pied Avocet	*Recurvirostra avosetta*	0	0	0	0	0	0	0	5	5
Black-winged Stilt	*Himantopus himantopus*	0	0	0	0	0	8	0	15	23
Little Ringed Plover	*Charadrius dubius*	2		3		31		12	3	51
Lesser Sandplover	*Charadrius mongolus*	0	0	0	0	0	22	0	0	22

Annexure 2: Details of birds reported during AWC 2023 in Bhagalpur district (*contd.*)

Common Name	Scientific Name	Jagatpur Lake	Gangaprasad Lake	Dimaha Dhar	Katia dhar	Sultanganj to Mirzapur	Mirzapur to barrari (Bhagalpur)	Barari (Bhagalpur) to Kahalgaon	Manik Sarkar to Barrari Ghat	Total
Grey-headed Lapwing	*Vanellus cinereus*	0	7	0	0	0	0	0	0	7
River Lapwing	*Vanellus duvaucelii*	0	0	0	0	1	6	7	6	20
Red-wattled Lapwing	*Vanellus indicus*	2	5	0	15		4	4	9	39
Pheasant-tailed Jacana	*Hydrophasianus chirurgus*	2	14	0	0	0	0	0	0	16
Bronze-winged Jacana	*Metopidius indicus*	12	8	0	0	0	0	0	0	20
Eurasian Curlew	*Numenius arquata*	0	0	2	0	0	0	0	3	5
Temminck's Stint	*Calidris temminckii*	0	0	4		227	34	7		272
Little Stint	*Calidris minuta*	2	0	0	0	90	43	40	18	193
Common Snipe	*Gallinago gallinago*	0	0	0	0	0	0	0	50	50
Common Sandpiper	*Actitis hypoleucos*	2	0	3	3	0	0	4	25	37
Green Sandpiper	*Tringa ochropus*	0	0	0	0	0	0	1		1
Spotted Redshank	*Tringa erythropus*	0	0	0	0	0	0	0	25	25
Common Greenshank	*Tringa nebularia*	3	0	0	0	14	17	1	6	41
Wood Sandpiper	*Tringa glareola*	3	0	0	0	0	0	1	6	10
Marsh Sandpiper	*Tringa stagnatilis*	0	0	0	0	0	0	4		4
Dunlin	*Calidris alpina*	0	0	2	0	0	0	0	0	2
Little Pratincole	*Glareola lactea*	0	0	0	0	0	19	110		129
Black-headed Gull	*Larus ridibundus*	0	0	2	0	0	0	0	0	2
Pallas's Gull	*Larus ichthyaetus*	0	0	0	0	1	0	0	0	1
Caspian Gull	*Larus cachinnans*	0	0	0	0	0	1	0	0	1
Caspian Tern	*Hydroprogne caspia*	0	2	0	0	0	0	0	0	2
Whiskered Tern	*Chlidonias hybrida*	2		0	0	0	0	0	0	2
Osprey	*Pandion haliaetus*	1	1	0	0	1	1	2	0	6
Black-winged Kite	*Elanus caeruleus*	0	0	0	1	0	0	0	0	1
Booted Eagle	*Hieraaetus pennatus*	1	0	0	0	0	0	1	0	2

Annexure 2: Details of birds reported during AWC 2023 in Bhagalpur district (*contd.*)

Common Name	Scientific Name	Jagatpur Lake	Gangaprasad Lake	Dimaha Dhar	Katia dhar	Sultanganj to Mirzapur	Mirzapur to barrari (Bhagalpur)	Barari (Bhagalpur) to Kahalgaon	Manik Sarkar to Barrari Ghat	Total
Western Marsh-harrier	*Circus aeruginosus*	0	0	0	0	0	0	2	0	2
Black Kite	*Milvus migrans*	0	1	0	0	1	0	10	15	27
Common Kingfisher	*Alcedo atthis*	1	0	0	1		0	0	0	2
Pied Kingfisher	*Ceryle rudis*	2		0	1	4	6	11	1	25
White-breasted Kingfisher	*Halcyon smyrnensis*	2	2	0	1	1	1	0	5	12
Common Kestrel	*Falco tinnunculus*	0	0	0	1	0	0	0	0	1
Lesser Kestrel	*Falco naumanni*	0	0	0	1	0	0	0	0	1
Peregrine Falcon	*Falco peregrinus*	1	0	0	0	0	0	1	0	2
Black Drongo	*Dicrurus macrocercus*	5	0	0	13	0	1	2	0	21
Brown Shrike	*Lanius cristatus*	1	0	0	0	0	0	0	0	1
Long-tailed Shrike	*Lanius schach*		1		1					2
House Crow	*Corvus splendens*	12	10	16	0	47	34	4	50	173
Large-billed Crow	*Corvus macrorhynchos*	2	2	0	0	0	0	0	1	5
Sand Lark	*Alaudala raytal*	0	0	0	0	0	0	0	3	3
Plain Prinia	*Prinia inornata*	0	0	0	0	0	0	0	6	6
Common Tailorbird	*Orthotomus sutorius*	1	0	0	0	0	0	0	0	1
House Swallow	*Hirundo javanica*	0	10	0	0	0	0	0	0	10
Barn Swallow	*Hirundo rustica*	0	0	0	0	0	0	0	3	297
Plain Martin	*Riparia paludicola*	0	0	50	0	0	0	0	0	50
Dusky Crag Martin	*Ptyonoprogne concolor*	0	0	0	0	0	0	210		210
Striated Babbler	*Argya earlei*	0	0	0	0	0	0	0	2	2
Indian Pied Starling	*Gracupica contra*	17	10	0	0	0	0	0	1	28
Common Myna	*Acridotheres tristis*	12	12	0	0	0	1	0	0	25
Bank Myna	*Acridotheres ginginianus*	28	27	0	0	50	6	0	0	111
Jungle Myna	*Acridotheres fuscus*	4	0	0	0	0	0	0	0	4

Annexure 2: Details of birds reported during AWC 2023 in Bhagalpur district (*contd.*)

Common Name	Scientific Name	Jagatpur Lake	Gangaprasad Lake	Dimaha Dhar	Katia dhar	Sultanganj to Mirzapur	Mirzapur to barrari (Bhagalpur)	Barari (Bhagalpur) to Kahalgaon	Manik Sarkar to Barrari Ghat	Total
Bluethroat	*Luscinia svecica*	0	0	0	0	0	0	0	10	10
Common Stonechat	*Saxicola torquatus*	0	0	0	2	0	0	0	2	4
House Sparrow	*Passer domesticus*	0	0	12	0	0	0	0	0	12
Rosy Pipit	*Anthus roseatus*	0	0	2	0	0	0	0	0	2
Paddyfield Pipit	*Anthus rufulus*	1	1	0	0	0	0	0	2	4
Grey Wagtail	*Motacilla cinerea*	0	0	0	4	0	0	1	0	5
Citrine Wagtail	*Motacilla citreola*	0	0	0		0	0	0	16	16
Eastern Yellow Wagtail	*Motacilla tschutschensis*	0	0	0	0	2	0	0	0	2
White-browed Wagtail	*Motacilla maderaspatensis*	2	2	2	0	0	0	2	2	10
White Wagtail	*Motacilla alba*	1	4	0	0	1	1	3	20	30

Annexure 3. Details of birds reported during AWC 2023 in Buxar-Bhojpur and Kaimur districts

English name	Scientific name	Buxar-Bhojpur				Kaimur
		Chausa-Ahirauli Ganga	Gokul Jalashay	Sunki Suhiya	Total	Durgawati Jalashay
Lesser Whistling-duck	*Dendrocygna javanica*	0	332	250	582	240
Greylag Goose	*Anser anser*	0	0	133	133	0
Ruddy Shelduck	*Tadorna ferruginea*	8	0	0	8	0
Cotton Pygmy-goose	*Nettapus coromandelianus*	0	18	2	20	5
Red-crested Pochard	*Netta rufina*	70	3		73	22
Garganey	*Spatula querquedula*	10	11	70	91	0
Northern Shoveler	*Spatula clypeata*	2	0	0	2	0
Gadwall	*Mareca strepera*	150	31	68	249	6
Northern Pintail	*Anas acuta*	0	0	20	20	0
Little Grebe	*Tachybaptus ruficollis*	4	25	10	39	4
Great Crested Grebe	*Podiceps cristatus*	85	0	0	85	0
Eurasian Collared-dove	*Streptopelia decaocto*	0	5	0	5	0
Eastern Spotted Dove	*Spilopelia chinensis*	0	0	6	6	2
Laughing Dove	*Spilopelia senegalensis*	0	0	0	0	18
Greater Coucal	*Centropus sinensis*	1	10	0	11	1
White-breasted Waterhen	*Amaurornis phoenicurus*	1	10	0	11	0
Purple Swamphen	*Porphyrio porphyrio*	0	60	20	80	0
Common Moorhen	*Gallinula chloropus*	0	19	10	29	12
Common Coot	*Fulica atra*	2	9	25	36	6
Asian Openbill	*Anastomus oscitans*	76	150	62	288	0
Black-headed Ibis	*Threskiornis melanocephalus*	4	40		44	0
Red-naped Ibis	*Pseudibis papillosa*	9	21	4	34	0
Black-crowned Night-heron	*Nycticorax nycticorax*		8	0	8	0
Indian Pond-heron	*Ardeola grayii*	15	15	0	30	1

Annexure 3. Details of birds reported during AWC 2023 in Buxar-Bhojpur and Kaimur districts (*contd.*)

English name	Scientific name	Buxar-Bhojpur				Kaimur
		Chausa-Ahirauli Ganga	Gokul Jalashay	Sunki Suhiya	Total	Durgawati Jalashay
Cattle Egret	*Bubulcus ibis*	0	22	21	43	0
Grey Heron	*Ardea cinerea*	0	8	1	9	0
Purple Heron	*Ardea purpurea*	0	0	13	13	0
Intermediate Egret	*Ardea intermedia*	4	129	19	152	0
Little Egret	*Egretta garzetta*	72	38	8	118	2
Little Cormorant	*Microcarbo niger*	75	38	19	132	2
Great Cormorant	*Phalacrocorax carbo*	53	0	0	53	0
Indian Cormorant	*Phalacrocorax fuscicollis*	5	0	0	5	0
Little Ringed Plover	*Charadrius dubius*	18	0	0	18	0
Kentish Plover	*Charadrius alexandrinus*	15	0	0	15	0
River Lapwing	*Vanellus duvaucelii*	40	0	0	40	0
Red-wattled Lapwing	*Vanellus indicus*	1	51	35	87	4
Pheasant-tailed Jacana	*Hydrophasianus chirurgus*	0	68	11	79	0
Bronze-winged Jacana	*Metopidius indicus*	0	36	8	44	0
Temminck's Stint	*Calidris temminckii*	29	0	0	29	0
Little Stint	*Calidris minuta*	3	0	0	3	0
Common Sandpiper	*Actitis hypoleucos*	5	0	0	5	0
Green Sandpiper	*Tringa ochropus*	0	1	0	1	0
Common Greenshank	*Tringa nebularia*	10	0	0	10	0
Wood Sandpiper	*Tringa glareola*	10	1	5	16	0
Little Pratincole	*Glareola lactea*	4700	0	0	4700	0
Spotted Owlet	*Athene brama*		2	6	8	0
Osprey	*Pandion haliaetus*	1	0	0	1	0
Western Marsh-harrier	*Circus aeruginosus*	0	0	2	2	0

Annexure 3. Details of birds reported during AWC 2023 in Buxar-Bhojpur and Kaimur districts (*contd.*)

English name	Scientific name	Buxar-Bhojpur				Kaimur
		Chausa-Ahirauli Ganga	Gokul Jalashay	Sunki Suhiya	Total	Durgawati Jalashay
Shikra	*Accipiter badius*	0	0	1	1	0
Indian Grey Hornbill	*Ocyceros birostris*	0	2	0	2	0
Common Hoopoe	*Upupa epops*	0	5	0	5	2
Asian Green Bee-eater	*Merops orientalis*	0	11	7	18	2
Indian Roller	*Coracias benghalensis*	0	3	4	7	9
Pied Kingfisher	*Ceryle rudis*	3	2	0	5	1
White-breasted Kingfisher	*Halcyon smyrnensis*	3	3	3	9	2
Coppersmith Barbet	*Psilopogon haemacephalus*	0	0	0	0	1
Brown-headed Barbet	*Psilopogon zeylanicus*	0	0	0	0	1
Common Kestrel	*Falco tinnunculus*		1		1	1
Plum-headed Parakeet	*Himalayapsitta cyanocephala*	0	0	0	0	8
Rose-ringed Parakeet	*Alexandrinus krameri*	0	0	0	0	2
Black Drongo	*Dicrurus macrocercus*	0	32	0	32	6
Long-tailed Shrike	*Lanius schach*	0	1	0	1	1
House Crow	*Corvus splendens*	10	55	0	65	0
Large-billed Crow	*Corvus macrorhynchos*	35	0	0	35	0
Ashy-crowned Sparrow-lark	*Eremopterix griseus*	0	0	0	0	2
Ashy Prinia	*Prinia socialis*	0	0	0	0	1
Common Tailorbird	*Orthotomus sutorius*	0	0	0	0	1
Barn Swallow	*Hirundo rustica*	18	11	12	41	0
Red-whiskered Bulbul	*Pycnonotus jocosus*	0	2	0	2	0
Red-vented Bulbul	*Pycnonotus cafer*	0	0	0	0	6
Indian White-eye	*Zosterops palpebrosus*	0	0	0	0	3

Annexure 3. Details of birds reported during AWC 2023 in Buxar-Bhojpur and Kaimur districts (*contd.*)

English name	Scientific name	Buxar-Bhojpur				Kaimur
		Chausa-Ahirauli Ganga	Gokul Jalashay	Sunki Suhiya	Total	Durgawati Jalashay
Jungle Babbler	*Argya striata*	0	8	0	8	4
Striated Babbler	*Argya earlei*	0	5	0	5	0
Indian Pied Starling	*Gracupica contra*	2	24	0	26	0
Common Myna	*Acridotheres tristis*	16	0	0	16	12
Bank Myna	*Acridotheres ginginianus*	0	39	0	39	0
Oriental Magpie-robin	*Copsychus saularis*	0	1	0	1	2
Indian Robin	*Copsychus fulicatus*	0	0	0	0	1
Black Redstart	*Phoenicurus ochruros*	0	8	0	8	2
Pied Bushchat	*Saxicola caprata*	0	0	0	0	0
Common Stonechat	*Saxicola torquatus*	0	0	0	0	0
Brown Rockchat	*Oenanthe fusca*	0	3	0	3	2
Purple Sunbird	*Cinnyris asiaticus*	0	4	0	4	1
Indian Silverbill	*Euodice malabarica*	0	6	0	6	0
Paddyfield Pipit	*Anthus rufulus*	0	8	10	18	4
Citrine Wagtail	*Motacilla citreola*	104	0	8	112	0
Eastern Yellow Wagtail	*Motacilla tschutschensis*	2	0	1	3	0
White-browed Wagtail	*Motacilla maderaspatensis*	0	0	1	1	1
White Wagtail	*Motacilla alba*	25	0	0	25	2

Annexure 4. Details of bird reported in AWC 2023 in East Champaran District

English name	Scientific name	Basmanpur Lake	Bhoraha Lake	Gandak River	Sarotar Lake	Sonbarsa Lake	Total
Lesser Whistling-duck	*Dendrocygna javanica*	0	0	21	39	77	137
Cotton Pygmy-goose	*Nettapus coromandelianus*	3	0	0	0	0	3
Red-crested Pochard	*Netta rufina*	0	0	0	40	0	40
Little Grebe	*Tachybaptus ruficollis*	0	0	0	4	2	6
Eastern Spotted Dove	*Spilopelia chinensis*	14	0	0	0	0	14
Greater Coucal	*Centropus sinensis*	2	1	1	0	0	4
White-breasted Waterhen	*Amaurornis phoenicurus*	0	0	0	0	2	2
Purple Swamphen	*Porphyrio porphyrio*	0	0	0	0	2	2
Common Coot	*Fulica atra*	0	0	0	250		250
Asian Openbill	*Anastomus oscitans*	30	12	0	25	19	86
Red-naped Ibis	*Pseudibis papillosa*	1	0	0	0	0	1
Indian Pond-heron	*Ardeola grayii*	8	5	0	3	12	28
Cattle Egret	*Bubulcus ibis*	0	0	0	3	0	3
Grey Heron	*Ardea cinerea*	0	0	0	0	1	1
Purple Heron	*Ardea purpurea*	0	0	0	4	2	6
Intermediate Egret	*Ardea intermedia*	0	0	0	6	0	6
Little Egret	*Egretta garzetta*	21	17	3	14	7	62
Little Cormorant	*Microcarbo niger*	29	15	5	20	27	96
Indian Cormorant	*Phalacrocorax fuscicollis*	0	0	0	0	3	3
Grey-headed Lapwing	*Vanellus cinereus*	0	0	0	0	99	99
Red-wattled Lapwing	*Vanellus indicus*	14	0	0	0	0	14
Pheasant-tailed Jacana	*Hydrophasianus chirurgus*	0	0	0	0	2	2
Bronze-winged Jacana	*Metopidius indicus*	0	0	0	0	2	2
Common Sandpiper	*Actitis hypoleucos*	0	0	1	0	0	1
Spotted Owlet	*Athene brama*	1	0	0	0	0	1

Annexure 4. Details of bird reported in AWC 2023 in East Champaran District (*contd.*)

English name	Scientific name	Basmanpur Lake	Bhoraha Lake	Gandak River	Sarotar Lake	Sonbarsa Lake	Total
Shikra	*Accipiter badius*	0	1	0	0	1	2
Common Hoopoe	*Upupa epops*	4	1	0	0	0	5
Indian Roller	*Coracias benghalensis*	1	0	0	2	0	3
Common Kingfisher	*Alcedo atthis*	1	0	0	0	0	1
White-breasted Kingfisher	*Halcyon smyrnensis*	9	3	0	0	1	13
Coppersmith Barbet	*Psilopogon haemacephalus*	0	2	0	0	0	2
Brown-headed Barbet	*Psilopogon zeylanicus*	0	8	0	0	0	8
Common Kestrel	*Falco tinnunculus*	0	0	0	1	1	2
Rose-ringed Parakeet	*Alexandrinus krameri*	1	0	0	0	0	1
Black-hooded Oriole	*Oriolus xanthornus*	1	4	0	0	0	5
Indian Golden Oriole	*Oriolus kundoo*	0	2	0	0	0	2
Black Drongo	*Dicrurus macrocercus*	11	10	0	2	4	27
Brown Shrike	*Lanius cristatus*	1	0	0	0	0	1
Rufous Treepie	*Dendrocitta vagabunda*	5	4	0	0	0	9
House Crow	*Corvus splendens*	7	5	11	5	1	29
Large-billed Crow	*Corvus macrorhynchos*	3	8	19	4	2	36
Indian Bushlark	*Mirafra erythroptera*	0	0	1	0	0	1
Zitting Cisticola	*Cisticola juncidis*	0	0	0	2	0	2
Ashy Prinia	*Prinia socialis*	0	0	1	0	0	1
Common Tailorbird	*Orthotomus sutorius*	0	1	0	0	1	2
Barn Swallow	*Hirundo rustica*	23	8	25	30	10	96
Red-vented Bulbul	*Pycnonotus cafer*	0	5	0	0	0	5
Jungle Babbler	*Argya striata*	16	0	0	0	0	16
Common Myna	*Acridotheres tristis*	10	0	0	6	7	23
Bluethroat	*Luscinia svecica*	0	0	1		0	1

Annexure 4. Details of bird reported in AWC 2023 in East Champaran District (*contd.*)

English name	Scientific name	Basmanpur Lake	Bhoraha Lake	Gandak River	Sarotar Lake	Sonbarsa Lake	Total
Common Stonechat	*Saxicola torquatus*	7	2	2	7	2	20
Paddyfield Pipit	*Anthus rufulus*	0	0	2	9	2	13
Citrine Wagtail	*Motacilla citreola*	0	0	0	2	0	2
Eastern Yellow Wagtail	*Motacilla tschutschensis*	0	0	0	1	0	1
White Wagtail	*Motacilla alba*	0	0	4	3	0	7

Annexure 5: Details of bird reported in AWC 2023 in Jamui District

English name	Scientific name	Bela Tand	Devan Ahar	Pailbajaan	Garhi Dam	Nagi	Rail Pond	Raja Ahar	Nakti	Total
Lesser Whistling-duck	*Dendrocygna javanica*	200	0	0	31		1,000	8	200	1,439
Bar-headed Goose	*Anser indicus*	0	0	0	16	1,176	0	0	28	0
Greylag Goose	*Anser anser*	0	0	0		1,300	0	0	50	1,350
Ruddy Shelduck	*Tadorna ferruginea*	0	0	0	0	13	0	0		13
Cotton Pygmy-goose	*Nettapus coromandelianus*	40	300	42	0	55	0	24	200	661
Red-crested Pochard	*Netta rufina*	160	8	114	348	1,580	0	58	3,000	5,268
Common Pochard	*Aythya ferina*	12	0	0	14	15	0	3	150	230
Ferruginous Duck	*Aythya nyroca*	140	0	0	0		0	2	150	292
Tufted Duck	*Aythya fuligula*	4	0	0	0	16	0		80	100
Garganey	*Spatula querquedula*		0	0	0	0	0	3	0	3
Northern Shoveler	*Spatula clypeata*	4	0	0	0	0	0	6	20	30
Falcated Duck	*Mareca falcata*		0	0	0	0	0	2	1	3
Gadwall	*Mareca strepera*	15	2	0	0	58	0	24	300	
Eurasian Wigeon	*Mareca penelope*	0	0	0	0	20	0		150	170
Mallard	*Anas platyrhynchos*	0	0	0	0	0	0	0	2	2
Northern Pintail	*Anas acuta*	0	0	0	0	20	0	14	1,200	1,414
Common Teal	*Anas crecca*	1	0	0	0	0	0	0	30	31
Little Grebe	*Tachybaptus ruficollis*	2	35	5	3	106	1	46	158	356
Great Crested Grebe	*Podiceps cristatus*	1	0	0	6	2	0	0	6	15
Eurasian Collared-dove	*Streptopelia decaocto*	0	0	0	2	0	0	0	0	2
Eastern Spotted Dove	*Spilopelia chinensis*	0	0	0	3	0	0	0	0	3
Laughing Dove	*Spilopelia senegalensis*	0	0	0	4	0	0	0	0	4
Purple Swamphen	*Porphyrio porphyrio*	0	0	0	0	0		4	0	4
Common Moorhen	*Gallinula chloropus*	3	0	0	0	0	3	100	0	106
Common Coot	*Fulica atra*	11	6	0	118	1,610	0	7	2,000	3,752

Annexure 5: Details of bird reported in AWC 2023 in Jamui District (*contd.*)

English name	Scientific name	Bela Tand	Devan Ahar	Pailbajaan	Garhi Dam	Nagi	Rail Pond	Raja Ahar	Nakti	Total
Asian Openbill	*Anastomus oscitans*	4	1	0	7	5	0	1	3	21
Black Stork	*Ciconia nigra*	0	0	0	0	2	0	0	0	2
Asian Woollyneck	*Ciconia episcopus*	0	0	0	0	6	0	0	0	6
Black-headed Ibis	*Threskiornis melanocephalus*	6	0	0	7	18	0	1	17	49
Red-naped Ibis	*Pseudibis papillosa*	11	2	0	9	8	3	2	3	38
Indian Pond-heron	*Ardeola grayii*	1	1	2	2	0	3	4	0	13
Cattle Egret	*Bubulcus ibis*	6	0	7	13	10	14	31	5	86
Grey Heron	*Ardea cinerea*	0	0	0	0	3	0	2	1	6
Purple Heron	*Ardea purpurea*	0	0	0	0	1	0	1	0	2
Great White Egret	*Ardea alba*	0	0	0	0	2	0	0	0	2
Intermediate Egret	*Ardea intermedia*	1	3	0	6	7	0	3	6	26
Little Egret	*Egretta garzetta*	1		0	4	12	0	9	28	44
Little Cormorant	*Microcarbo niger*	4	25	10	59	787	5	5	50	945
Great Cormorant	*Phalacrocorax carbo*	0	0	0	18	10	0	0	0	28
Black-winged Stilt	*Himantopus himantopus*	0	0	0	0	14	0	0	0	14
Pacific Golden Plover	*Pluvialis fulva*	0	0	0	52	0	0	0	0	52
Little Ringed Plover	*Charadrius dubius*	0	0	0	40	9	0	0	0	49
Kentish Plover	*Charadrius alexandrinus*	0	0	0	12	5	0	0	0	17
Red-wattled Lapwing	*Vanellus indicus*	0	0	0	8	0	0	6	0	14
Pheasant-tailed Jacana	*Hydrophasianus chirurgus*		3	0	0	0	0	1	0	4
Bronze-winged Jacana	*Metopidius indicus*	1	8	6	0	2	3	0	0	20
Temminck's Stint	*Calidris temminckii*	2	0	0	55	5	0	0	0	62
Common Snipe	*Gallinago gallinago*	0	0	1	0	0	0	0	0	1
Common Sandpiper	*Actitis hypoleucos*	0	0	1	3	0	0	0	0	4
Green Sandpiper	*Tringa ochropus*	0	0	0	1	0	0	0	0	1

Annexure 5: Details of bird reported in AWC 2023 in Jamui District (*contd.*)

English name	Scientific name	Bela Tand	Devan Ahar	Pailbajaan	Garhi Dam	Nagi	Rail Pond	Raja Ahar	Nakti	Total
Common Greenshank	*Tringa nebularia*	0	0	0	11	0	0	0	4	15
Wood Sandpiper	*Tringa glareola*	2	0	0	13	2	0	0	0	17
Marsh Sandpiper	*Tringa stagnatilis*	0	0	0	1	0	0	0	0	1
Little Pratincole	*Glareola lactea*	0	0	0	0	35	0	0	0	35
River Tern	*Sterna aurantia*	0	0	0	0	2	0	0	0	2
Osprey	*Pandion haliaetus*	0	0	0	1	0	0	0	0	1
Booted Eagle	*Hieraaetus pennatus*	0	0	0	0	0	0	0	1	1
Black Kite	*Milvus migrans*	0	0	0	12	1	7	0	0	20
Asian Green Bee-eater	*Merops orientalis*	3	1	4	5	2	0	0	0	15
Indian Roller	*Coracias benghalensis*	0	0	0	2	0	0	0	0	2
Common Kingfisher	*Alcedo atthis*	0	0	0	1	0	0	0	0	1
Pied Kingfisher	*Ceryle rudis*	4	1	0	3	2	0	1		11
White-breasted Kingfisher	*Halcyon smyrnensis*	1	1	1	0	1	1	2	0	7
Coppersmith Barbet	*Psilopogon haemacephalus*	0	0	0	0	0	3	0	0	3
Common Kestrel	*Falco tinnunculus*	0	1	0	1	1	0	0	0	3
Peregrine Falcon	*Falco peregrinus*	0	0	0	0	1	0	0	0	1
Indian Golden Oriole	*Oriolus kundoo*	0	0	0	0		2	0	0	2
Black Drongo	*Dicrurus macrocercus*	3		5	6	6		2	0	22
Brown Shrike	*Lanius cristatus*	0	0	0	0	0	1	0	0	1
House Crow	*Corvus splendens*	0	0	0	2	0	0	0	0	2
Ashy-crowned Sparrow-lark	*Eremopterix griseus*	0	0	0	2	0	0	0	0	2
Oriental Skylark	*Alauda gulgula*	0	0	0	0	0	0	0	1	1
Barn Swallow	*Hirundo rustica*	0	0	0	3	4	0	1	0	8

Annexure 5: Details of bird reported in AWC 2023 in Jamui District (*contd.*)

English name	Scientific name	Bela Tand	Devan Ahar	Pailbajaan	Garhi Dam	Nagi	Rail Pond	Raja Ahar	Nakti	Total
Red-vented Bulbul	*Pycnonotus cafer*	0	0	0	1	0	0	0	0	1
Jungle Babbler	*Argya striata*	0	0	0	4	0	0	0	0	4
Indian Pied Starling	*Gracupica contra*	0	0	2	0	0	17	0	0	19
Common Myna	*Acridotheres tristis*	0	0	0	12	0	0	0	0	12
Bank Myna	*Acridotheres ginginianus*	0	0	8	0	0	0	0	0	8
Indian Robin	*Copsychus fulicatus*	2	0	0	4	0	0	0	0	6
White-capped Water-redstart	*Phoenicurus leucocephalus*	0	0	0	1	0	0	0	0	1
Black Redstart	*Phoenicurus ochruros*	0	0	0	4	0	0	0	0	4
Purple Sunbird	*Cinnyris asiaticus*	0	0	0	5	0	0	0	0	5
Indian Silverbill	*Euodice malabarica*	0	0	2	0	0	0	0	0	2
Paddyfield Pipit	*Anthus rufulus*	0	0	1	6	2	0	0	0	9
Grey Wagtail	*Motacilla cinerea*	0	0	0	3		0	0	0	3
Citrine Wagtail	*Motacilla citreola*	1	0	0	2	0	0	0	0	3
White-browed Wagtail	*Motacilla maderaspatensis*	0	0	0	3	0	0	0	0	3
White Wagtail	*Motacilla alba*	0	2	0	8	2	0	0	0	12

Annexure 6: Details of bird reported in AWC 2023 in Katihar District

English name	Scientific name	Baldia Chaur	Baghar Beel	Gogabeel	Kathotia Fish Pond	Ganga (Kahalgaon-Manihari)	Total
Fulvous Whistling-duck	*Dendrocygna bicolor*			20			20
Lesser Whistling-duck	*Dendrocygna javanica*	20		1500			1,520
Common Shelduck	*Tadorna tadorna*					129	129
Cotton Pygmy-goose	*Nettapus coromandelianus*		20	50			70
Red-crested Pochard	*Netta rufina*		5	250	65	15	335
Common Pochard	*Aythya ferina*		2				2
Ferruginous Duck	*Aythya nyroca*		200		100		300
Tufted Duck	*Aythya fuligula*				1	4	5
Northern Shoveler	*Spatula clypeata*		4				4
Gadwall	*Mareca strepera*		12		15		27
Eurasian Wigeon	*Mareca penelope*		2			410	412
Mallard	*Anas platyrhynchos*					10	10
Northern Pintail	*Anas acuta*		10			31	41
Common Teal	*Anas crecca*		20				20
Little Grebe	*Tachybaptus ruficollis*		42		11		53
Eurasian Collared-dove	*Streptopelia decaocto*					1	1
Eastern Spotted Dove	*Spilopelia chinensis*		11				11
Purple Swamphen	*Porphyrio porphyrio*	35	54	27			116
Common Coot	*Fulica atra*	10	152	100			262
Greater Adjutant	*Leptoptilos dubius*					6	6
Lesser Adjutant	*Leptoptilos javanicus*	2	1	3		3	9
Asian Openbill	*Anastomus oscitans*	105	103	250		47	505
Asian Woollyneck	*Ciconia episcopus*					3	3
Black-headed Ibis	*Threskiornis melanocephalus*		80	9		9	98
Red-naped Ibis	*Pseudibis papillosa*	2		11		39	52
Indian Pond-heron	*Ardeola grayii*	1	26	1			28
Cattle Egret	*Bubulcus ibis*			140			140

Annexure 6: Details of bird reported in AWC 2023 in Katihar District (*contd.*)

English name	Scientific name	Baldia Chaur	Baghar Beel	Gogabeel	Kathotia Fish Pond	Ganga (Kahalgaon-Manihari)	Total
Grey Heron	*Ardea cinerea*	2	7	20		31	60
Purple Heron	*Ardea purpurea*	1	3	7			11
Great White Egret	*Ardea alba*			100		1	101
Intermediate Egret	*Ardea intermedia*	15	3	50		3	71
Little Egret	*Egretta garzetta*			100		1	101
Little Cormorant	*Microcarbo niger*	74	185	250	20	6	535
Great Cormorant	*Phalacrocorax carbo*				5	233	238
Oriental Darter	*Anhinga melanogaster*	2	3	3	1		9
Little Ringed Plover	*Charadrius dubius*					12	12
Northern Lapwing	*Vanellus vanellus*			60			60
River Lapwing	*Vanellus duvaucelii*					18	18
Grey-headed Lapwing	*Vanellus cinereus*			3			3
Pheasant-tailed Jacana	*Hydrophasianus chirurgus*		10	29			39
Bronze-winged Jacana	*Metopidius indicus*		30	3	1		34
Eurasian Curlew	*Numenius arquata*					14	14
Temminck's Stint	*Calidris temminckii*					3	3
Common Sandpiper	*Actitis hypoleucos*					4	4
Green Sandpiper	*Tringa ochropus*		2				2
Marsh Sandpiper	*Tringa stagnatilis*					35	35
River Tern	*Sterna aurantia*					10	10
Osprey	*Pandion haliaetus*	1		1		7	9
Booted Eagle	*Hieraaetus pennatus*	1					1
Eastern Marsh-harrier	*Circus spilonotus*			1			1
Black Kite	*Milvus migrans*	1		1		4	6
Long-legged Buzzard	*Buteo rufinus*					1	1
Common Kingfisher	*Alcedo atthis*			1			1
Pied Kingfisher	*Ceryle rudis*		1			4	5

Annexure 6: Details of bird reported in AWC 2023 in Katihar District (*contd.*)

English name	Scientific name	Baldia Chaur	Baghar Beel	Gogabeel	Kathotia Fish Pond	Ganga (Kahalgaon-Manihari)	Total
White-breasted Kingfisher	*Halcyon smyrnensis*	1	5	4		2	12
Eurasian Wryneck	*Jynx torquilla*		1				1
Common Kestrel	*Falco tinnunculus*					1	1
Black Drongo	*Dicrurus macrocercus*	14		2		12	28
Brown Shrike	*Lanius cristatus*		1				1
Rufous Treepie	*Dendrocitta vagabunda*		1				1
House Crow	*Corvus splendens*		50	1		2	53
Bengal Bushlark	*Mirafra assamica*		1				1
Sand Lark	*Alaudala raytal*					2	2
Plain Prinia	*Prinia inornata*			1			1
Common Tailorbird	*Orthotomus sutorius*		2				2
Barn Swallow	*Hirundo rustica*	7	20	2			29
Dusky Crag Martin	*Ptyonoprogne concolor*					3	3
Red-vented Bulbul	*Pycnonotus cafer*		4				4
Indian White-eye	*Zosterops palpebrosus*		1				1
Jungle Babbler	*Argya striata*		3				3
Indian Pied Starling	*Gracupica contra*	100	50	130			280
Common Myna	*Acridotheres tristis*		30				30
Bank Myna	*Acridotheres ginginianus*					13	13
Oriental Magpie-robin	*Copsychus saularis*		3				3
Bluethroat	*Luscinia svecica*		1				1
Rosy Pipit	*Anthus roseatus*		1				1
Paddyfield Pipit	*Anthus rufulus*	21		1		2	24
Citrine Wagtail	*Motacilla citreola*		1				1
White Wagtail	*Motacilla alba*	21	2			2	25

Annexure 7: Details of birds reported during AWC 2023 in Khagaria, Madhubani, Munger, Patna and Sheohar districts

English name	Scientific name	Khagaria	Total	Madhubani	Munger	Patna	Seohar
		Pasraha Chaur		Chapaniya Lake	Ganga	Rajdhani Jalashay	Bagmati River
Lesser Whistling-duck	*Dendrocygna javanica*		137	258		10	
Ruddy Shelduck	*Tadorna ferruginea*				284		
Cotton Pygmy-goose	*Nettapus coromandelianus*		3				
Red-crested Pochard	*Netta rufina*		40	8	144		
Common Pochard	*Aythya ferina*	1					
Ferruginous Duck	*Aythya nyroca*			3		1	
Tufted Duck	*Aythya fuligula*	2					
Garganey	*Spatula querquedula*			16			
Northern Shoveler	*Spatula clypeata*			3	50	2	
Gadwall	*Mareca strepera*			32	70	55	
Northern Pintail	*Anas acuta*			8	20		
Common Teal	*Anas crecca*			19	1		
Little Grebe	*Tachybaptus ruficollis*	17	6		1	2	
Eastern Spotted Dove	*Spilopelia chinensis*		14				2
Greater Coucal	*Centropus sinensis*		4		1		3
White-breasted Waterhen	*Amaurornis phoenicurus*	2	2	6		23	
Purple Swamphen	*Porphyrio porphyrio*		2				
Common Moorhen	*Gallinula chloropus*	6		8		50	
Common Coot	*Fulica atra*	17	250	11		10	
Greater Adjutant	*Leptoptilos dubius*				4		
Lesser Adjutant	*Leptoptilos javanicus*	6		1	11		
Painted Stork	*Mycteria leucocephala*						
Asian Openbill	*Anastomus oscitans*	73	86	28	300		
Asian Woollyneck	*Ciconia episcopus*				3		
Black-headed Ibis	*Threskiornis melanocephalus*	30			1		
Red-naped Ibis	*Pseudibis papillosa*	3	1		10		2
Indian Pond-heron	*Ardeola grayii*	45	28	9		2	24
Cattle Egret	*Bubulcus ibis*	45	3	23	1	2	8

Annexure 7: Details of birds reported during AWC 2023 in Khagaria, Madhubani, Munger, Patna and Sheohar districts (*contd.*)

English name	Scientific name	Khagaria	Total	Madhubani	Munger	Patna	Seohar
		Pasraha Chaur		Chapaniya Lake	Ganga	Rajdhani Jalashay	Bagmati River
Grey Heron	*Ardea cinerea*	8	1		17		
Purple Heron	*Ardea purpurea*	5	6	1			
Great White Egret	*Ardea alba*			8	30		1
Intermediate Egret	*Ardea intermedia*	10	6				
Little Egret	*Egretta garzetta*		62	11	8		49
Little Cormorant	*Microcarbo niger*	55	96	26	72	3	110
Great Cormorant	*Phalacrocorax carbo*	48		21	29		
Indian Cormorant	*Phalacrocorax fuscicollis*		3	18	1		2
Pied Avocet	*Recurvirostra avosetta*				3		
Little Ringed Plover	*Charadrius dubius*				2		
Kentish Plover	*Charadrius alexandrinus*				1		
Northern Lapwing	*Vanellus vanellus*	3					
River Lapwing	*Vanellus duvaucelii*			4	3		12
Grey-headed Lapwing	*Vanellus cinereus*		99				
Red-wattled Lapwing	*Vanellus indicus*	4	14				
Greater Painted-snipe	*Rostratula benghalensis*	1					
Pheasant-tailed Jacana	*Hydrophasianus chirurgus*	8	2	3			
Bronze-winged Jacana	*Metopidius indicus*	6	2	7		4	
Temminck's Stint	*Calidris temminckii*						8
Little Stint	*Calidris minuta*	161			150		11
Common Snipe	*Gallinago gallinago*	7					
Common Sandpiper	*Actitis hypoleucos*		1	4	6	5	37
Green Sandpiper	*Tringa ochropus*						10
Common Greenshank	*Tringa nebularia*	3			206		
Common Redshank	*Tringa totanus*	2			73		
Wood Sandpiper	*Tringa glareola*	1					9
Marsh Sandpiper	*Tringa stagnatilis*						6
Spotted Owlet	*Athene brama*		1				

Annexure 7: Details of birds reported during AWC 2023 in Khagaria, Madhubani, Munger, Patna and Sheohar districts (*contd.*)

English name	Scientific name	Khagaria	Total	Madhubani	Munger	Patna	Seohar
		Pasraha Chaur		Chapaniya Lake	Ganga	Rajdhani Jalashay	Bagmati River
Osprey	*Pandion haliaetus*	2			2		
Western Marsh-harrier	*Circus aeruginosus*	1					
Shikra	*Accipiter badius*		2				2
Black Kite	*Milvus migrans*				23		
White-eyed Buzzard	*Butastur teesa*				1		
Common Hoopoe	*Upupa epops*		5				3
Asian Green Bee-eater	*Merops orientalis*						1
Indian Roller	*Coracias benghalensis*		3				2
Common Kingfisher	*Alcedo atthis*	1	1		1		
Pied Kingfisher	*Ceryle rudis*				8		3
Stork-billed Kingfisher	*Pelargopsis capensis*						
White-breasted Kingfisher	*Halcyon smyrnensis*	2	13	6	5	2	3
Coppersmith Barbet	*Psilopogon haemacephalus*		2				
Brown-headed Barbet	*Psilopogon zeylanicus*		8				
Common Kestrel	*Falco tinnunculus*		2				
Peregrine Falcon	*Falco peregrinus*				1		
Rose-ringed Parakeet	*Alexandrinus krameri*		1				
Black-hooded Oriole	*Oriolus xanthornus*		5				
Indian Golden Oriole	*Oriolus kundoo*		2				1
Black Drongo	*Dicrurus macrocercus*		27				21
Brown Shrike	*Lanius cristatus*		1				
Rufous Treepie	*Dendrocitta vagabunda*		9		1		1
House Crow	*Corvus splendens*		29		74		8
Large-billed Crow	*Corvus macrorhynchos*		36		6		17
Sand Lark	*Alaudala raytal*		1				
Golden-headed Cisticola	*Cisticola exilis*		2				
Plain Prinia	*Prinia inornata*		1				
Paddyfield Warbler	*Acrocephalus agricola*		2				

Annexure 7: Details of birds reported during AWC 2023 in Khagaria, Madhubani, Munger, Patna and Sheohar districts (*contd.*)

English name	Scientific name	Khagaria	Total	Madhubani	Munger	Patna	Seohar
		Pasraha Chaur		Chapaniya Lake	Ganga	Rajdhani Jalashay	Bagmati River
Barn Swallow	*Hirundo rustica*				78		31
Dusky Crag Martin	*Ptyonoprogne concolor*		96				
Pale Sand Martin	*Riparia diluta*				30		
Red-vented Bulbul	*Pycnonotus cafer*				2		7
Dusky Warbler	*Phylloscopus fuscatus*		5				
Striated Babbler	*Argya earlei*		16				
Indian Pied Starling	*Gracupica contra*						6
Common Myna	*Acridotheres tristis*				3		19
Bank Myna	*Acridotheres ginginianus*		23				
Oriental Magpie-robin	*Copsychus saularis*						1
White-capped Water-redstart	*Phoenicurus leucocephalus*		1				
Brown Rockchat	*Oenanthe fusca*		20				
Grey Wagtail	*Motacilla cinerea*		13				
Citrine Wagtail	*Motacilla citreola*				23		
Eastern Yellow Wagtail	*Motacilla tschutschensis*		2				
White-browed Wagtail	*Motacilla maderaspatensis*	5	1				
White Wagtail	*Motacilla alba*				3		9

Annexure 8: Details of birds reported during AWC 2023 in Muzaffarpur district

English name	Scientific name	Manika Lake	Bhoosara Lake	Bagmati River	Batraulia Chaur	Total
Lesser Whistling-duck	*Dendrocygna javanica*		18			18
Red Turtle-dove	*Streptopelia tranquebarica*			5		5
Eastern Spotted Dove	*Spilopelia chinensis*		3	2		5
Greater Coucal	*Centropus sinensis*	4	2	1		7
Common Hawk-cuckoo	*Hierococcyx varius*		1			1
White-breasted Waterhen	*Amaurornis phoenicurus*			1		1
Lesser Adjutant	*Leptoptilos javanicus*		1			1
Asian Openbill	*Anastomus oscitans*	12	1	3		16
Red-naped Ibis	*Pseudibis papillosa*	6		6		12
Indian Pond-heron	*Ardeola grayii*	7	14			21
Cattle Egret	*Bubulcus ibis*		2	1		3
Grey Heron	*Ardea cinerea*		1			1
Purple Heron	*Ardea purpurea*		1			1
Intermediate Egret	*Ardea intermedia*	19	3			22
Little Egret	*Egretta garzetta*	16	4	10		30
Little Cormorant	*Microcarbo niger*	28	8	6		42
Indian Cormorant	*Phalacrocorax fuscicollis*	3	4			7
Grey-headed Lapwing	*Vanellus cinereus*	49	2			51
Red-wattled Lapwing	*Vanellus indicus*		4			4
Black Kite	*Milvus migrans*	1	1			2
Indian Grey Hornbill	*Ocyceros birostris*	2	2			4
Common Hoopoe	*Upupa epops*	2				2
Pied Kingfisher	*Ceryle rudis*		1			1
White-throated Kingfisher	*Halcyon smyrnensis*	4	2	3		9
Common Kestrel	*Falco tinnunculus*	1	1			2
Rose-ringed Parakeet	*Alexandrinus krameri*	3				3
White-throated Fantail	*Rhipidura albicollis*			1		1
Black Drongo	*Dicrurus macrocercus*	33	20	10		63
Rufous Treepie	*Dendrocitta vagabunda*	5	4			9
House Crow	*Corvus splendens*	11	6	3		20
Large-billed Crow	*Corvus macrorhynchos*	2	1	9		12
Zitting Cisticola	*Cisticola juncidis*	3		1		4
Plain Prinia	*Prinia inornata*		1			1
Barn Swallow	*Hirundo rustica*	13	5			18
Red-whiskered Bulbul	*Pycnonotus jocosus*			2		2
Red-vented Bulbul	*Pycnonotus cafer*		3	17		20
Jungle Babbler	*Argya striata*	8	2			10
Indian Pied Starling	*Gracupica contra*	9	4	30		43
Common Myna	*Acridotheres tristis*	51	4	35		90
Common Stonechat	*Saxicola torquatus*	3	1			4
Paddyfield Pipit	*Anthus rufulus*	4				4
White Wagtail	*Motacilla alba*	1		8		9

Annexure 9: Details of birds reported during AWC 2023 in Nalanda district

English name	Scientific name	Gangaji Rajgriha Jalashaya	Ghora Katora Forest trail	Pushpakarani tank	Giddhi Lake	Pavapuri Jal Mandir	Panchane River	Total
Lesser Whistling-duck	*Dendrocygna javanica*	600		439		636	230	1905
Bar-headed Goose	*Anser indicus*	11						11
Ruddy Shelduck	*Tadorna ferruginea*	30		15				45
Cotton Pygmy-goose	*Nettapus coromandelianus*						35	35
Red-crested Pochard	*Netta rufina*	28						28
Northern Shoveler	*Spatula clypeata*					11		11
Gadwall	*Mareca strepera*					82		82
Northern Pintail	*Anas acuta*	8						8
Little Grebe	*Tachybaptus ruficollis*	2				2	1	5
Eurasian Collared-dove	*Streptopelia decaocto*		2				1	3
Purple Swamphen	*Porphyrio porphyrio*			3		17		20
Common Moorhen	*Gallinula chloropus*					34		34
Common Coot	*Fulica atra*					1		1
Asian Openbill	*Anastomus oscitans*						50	50
Indian Pond-heron	*Ardeola grayii*			1			2	3
Grey Heron	*Ardea cinerea*	18					4	22
Great White Egret	*Ardea alba*			18	39		8	65
Little Egret	*Egretta garzetta*				7			7
Little Cormorant	*Microcarbo niger*	1		13	2	2	29	47
Great Cormorant	*Phalacrocorax carbo*			47				47
Bronze-winged Jacana	*Metopidius indicus*			8		14	8	30
Common Sandpiper	*Actitis hypoleucos*	1			6			7
Black Kite	*Milvus migrans*			1				1
Asian Green Bee-eater	*Merops orientalis*	2	1				2	5
Indian Roller	*Coracias benghalensis*						1	1
Black Drongo	*Dicrurus macrocercus*		1		10		5	16
Ashy Drongo	*Dicrurus leucophaeus*					1		1

Annexure 9: Details of birds reported during AWC 2023 in Nalanda district (*contd.*)

English name	Scientific name	Gangaji Rajgriha Jalashaya	Ghora Katora Forest trail	Pushpakarani tank	Giddhi Lake	Pavapuri Jal Mandir	Panchane River	Total
Rufous Treepie	*Dendrocitta vagabunda*		1					1
Red-vented Bulbul	*Pycnonotus cafer*		40					40
Dusky Warbler	*Phylloscopus fuscatus*		1					1
Indian White-eye	*Zosterops palpebrosus*		3					3
Jungle Babbler	*Argya striata*	2						2
Indian Pied Starling	*Gracupica contra*				2			2
Indian Robin	*Copsychus fulicatus*	1	3					4
Asian Brown Flycatcher	*Muscicapa dauurica*		1					1
Black Redstart	*Phoenicurus ochruros*		4					4
Pied Bushchat	*Saxicola caprata*		1					1
Purple Sunbird	*Cinnyris asiaticus*		3					3
White Wagtail	*Motacilla alba*					2		2

Annexure 10: Details of birds reported during AWC 2023 in Saran district

English name	Scientific name	Atanagar	Bahiyara Chaur	Hariya Chaur	Phulwaria Chaur	Total
Cotton Pygmy-goose	*Nettapus coromandelianus*		6			6
Common Pochard	*Aythya ferina*		1			1
Ferruginous Duck	*Aythya nyroca*		37			37
Garganey	*Spatula querquedula*		47			47
Northern Shoveler	*Spatula clypeata*		3			3
Gadwall	*Mareca strepera*		28			28
Northern Pintail	*Anas acuta*		256			256
Common Teal	*Anas crecca*		27			27
Little Grebe	*Tachybaptus ruficollis*		24			24
Baillon's Crake	*Zapornia pusilla*		2			2
White-breasted Waterhen	*Amaurornis phoenicurus*	2	1		2	5
Purple Swamphen	*Porphyrio porphyrio*	13	12		6	31
Common Moorhen	*Gallinula chloropus*	1	13			14
Common Coot	*Fulica atra*		17			17
Painted Stork	*Mycteria leucocephala*	1				1
Asian Openbill	*Anastomus oscitans*	12	392			404
Red-naped Ibis	*Pseudibis papillosa*		2			2
Cinnamon Bittern	*Ixobrychus cinnamomeus*		2			2
Black Bittern	*Ixobrychus flavicollis*				1	1
Black-crowned Night-heron	*Nycticorax nycticorax*			26	2	28
Indian Pond-heron	*Ardeola grayii*	12	11		3	26
Cattle Egret	*Bubulcus ibis*	6	25			31
Grey Heron	*Ardea cinerea*	11	14	9		34
Purple Heron	*Ardea purpurea*		4			4
Great White Egret	*Ardea alba*		11			11
Little Egret	*Egretta garzetta*	7	29			36
Little Cormorant	*Microcarbo niger*	30	20	18		68
Indian Cormorant	*Phalacrocorax fuscicollis*			3		3
Oriental Darter	*Anhinga melanogaster*		3			3

Annexure 10: Details of birds reported during AWC 2023 in Saran district (*contd.*)

English name	Scientific name	Atanagar	Bahiyara Chaur	Hariya Chaur	Phulwaria Chaur	Total
Little Ringed Plover	*Charadrius dubius*		2			2
Grey-headed Lapwing	*Vanellus cinereus*	5				5
Red-wattled Lapwing	*Vanellus indicus*		11		5	16
Greater Painted-snipe	*Rostratula benghalensis*	2	1			3
Pheasant-tailed Jacana	*Hydrophasianus chirurgus*		16			16
Bronze-winged Jacana	*Metopidius indicus*		12			12
Little Stint	*Calidris minuta*	23				23
Pintail Snipe	*Gallinago stenura*	1				1
Common Sandpiper	*Actitis hypoleucos*	1	5	2		8
Wood Sandpiper	*Tringa glareola*	1	7			8
Osprey	*Pandion haliaetus*	1	1			2
Black-winged Kite	*Elanus caeruleus*		1			1
Greater Spotted Eagle	*Clanga clanga*				1	1
Western Marsh-harrier	*Circus aeruginosus*		1			1
Pied Harrier	*Circus melanoleucos*	1	2	1		4
Long-legged Buzzard	*Buteo rufinus*		1			1
Indian Roller	*Coracias benghalensis*	1				1
Pied Kingfisher	*Ceryle rudis*		2			2
White-breasted Kingfisher	*Halcyon smyrnensis*	2	6	2	5	15
Common Kestrel	*Falco tinnunculus*		1			1
Peregrine Falcon	*Falco peregrinus*		1			1
Grey-backed Shrike	*Lanius tephronotus*	1				1
Golden-headed Cisticola	*Cisticola exilis*	1				1
Ashy Prinia	*Prinia socialis*	15	3			18
Plain Prinia	*Prinia inornata*		2			2
Paddyfield Warbler	*Acrocephalus agricola*	1				1
Dusky Warbler	*Phylloscopus fuscatus*	1				1
Yellow-eyed Babbler	*Chrysomma sinense*	3				3
Indian Pied Starling	*Gracupica contra*	45				45

Annexure 10: Details of birds reported during AWC 2023 in Saran district (*contd.*)

English name	Scientific name	Atanagar	Bahiyara Chaur	Hariya Chaur	Phulwaria Chaur	Total
Common Myna	*Acridotheres tristis*	53				53
Bluethroat	*Luscinia svecica*	4				4
Black-breasted Weaver	*Ploceus benghalensis*		37			37
Red Avadavat	*Amandava amandava*	7	3			10
Scaly-breasted Munia	*Lonchura punctulata*		11			11
Citrine Wagtail	*Motacilla citreola*	12				12
White-browed Wagtail	*Motacilla maderaspatensis*		2	2		4
White Wagtail	*Motacilla alba*	12	10		1	23

Annexure 11: Details of birds reported during AWC 2023 in Samastipur district

English name	Scientific name	Deokhal Chaur	Goela Chaur	Garuara Chaur	Klayanpur Chaur	Total
Lesser Whistling-duck	*Dendrocygna javanica*	41		29		70
Greylag Goose	*Anser anser*	8				8
Cotton Pygmy-goose	*Nettapus coromandelianus*	2				2
Red-crested Pochard	*Netta rufina*	13				13
Northern Shoveler	*Spatula clypeata*	3				3
Little Grebe	*Tachybaptus ruficollis*	33		13		46
Eurasian Collared-dove	*Streptopelia decaocto*	1	6	1	7	15
Eastern Spotted Dove	*Spilopelia chinensis*	2	7	5	1	15
Greater Coucal	*Centropus sinensis*	7	2	5	1	15
White-breasted Waterhen	*Amaurornis phoenicurus*	6	4	2	1	13
Purple Swamphen	*Porphyrio porphyrio*	8	2			10
Common Moorhen	*Gallinula chloropus*	3	1			4
Common Coot	*Fulica atra*	6				6
Asian Openbill	*Anastomus oscitans*	132	17		14	163
Red-naped Ibis	*Pseudibis papillosa*	2	7	2	20	31
Black-crowned Night-heron	*Nycticorax nycticorax*	1		9		10
Indian Pond-heron	*Ardeola grayii*	7	3	2		12
Cattle Egret	*Bubulcus ibis*	42	170	214	150	576
Grey Heron	*Ardea cinerea*	1	3	2	1	7
Purple Heron	*Ardea purpurea*	1		1		2
Intermediate Egret	*Ardea intermedia*				2	2
Little Egret	*Egretta garzetta*	1	2	1	2	6
Little Cormorant	*Microcarbo niger*	12	20	30	50	112
Great Cormorant	*Phalacrocorax carbo*		2	1	20	23
Indian Cormorant	*Phalacrocorax fuscicollis*	10	4	2	17	33
Little Ringed Plover	*Charadrius dubius*	7				7
Kentish Plover	*Charadrius alexandrinus*	2				2
River Lapwing	*Vanellus duvaucelii*	3				3

Annexure 11: Details of birds reported during AWC 2023 in Samastipur district (*contd.*)

English name	Scientific name	Deokhal Chaur	Goela Chaur	Garuara Chaur	Klayanpur Chaur	Total
Red-wattled Lapwing	*Vanellus indicus*	20			2	22
Pheasant-tailed Jacana	*Hydrophasianus chirurgus*	12	3			15
Bronze-winged Jacana	*Metopidius indicus*	2				2
Temminck's Stint	*Calidris temminckii*	4				4
Little Stint	*Calidris minuta*	5				5
Common Sandpiper	*Actitis hypoleucos*	4	2	7	3	16
Wood Sandpiper	*Tringa glareola*	15				15
Little Pratincole	*Glareola lactea*	15			500	515
Spotted Owlet	*Athene brama*	2	4	3		9
Osprey	*Pandion haliaetus*	1	2	3		6
Western Marsh-harrier	*Circus aeruginosus*	1		2		3
Shikra	*Accipiter badius*	3	1	4	1	9
Common Hoopoe	*Upupa epops*	2	3	5	1	11
Asian Green Bee-eater	*Merops orientalis*	50	10	100	20	180
Indian Roller	*Coracias benghalensis*	9	5	10	2	26
Pied Kingfisher	*Ceryle rudis*	2	4	8		14
White-breasted Kingfisher	*Halcyon smyrnensis*	8	13	15		36
Common Kestrel	*Falco tinnunculus*	2	1	4	2	9
Peregrine Falcon	*Falco peregrinus*	1	2	2	1	6
Black Drongo	*Dicrurus macrocercus*	15	20	19	25	79
Long-tailed Shrike	*Lanius schach*	1		3	4	8
House Crow	*Corvus splendens*	20	47	60	10	137
Large-billed Crow	*Corvus macrorhynchos*	3	4	1	15	23
Barn Swallow	*Hirundo rustica*	20	7	3		30
Red-vented Bulbul	*Pycnonotus cafer*	10	6	12	3	31
Jungle Babbler	*Argya striata*	5	10	3		18
Striated Babbler	*Argya earlei*			2		2
Indian Pied Starling	*Gracupica contra*	15	29	20	8	72
Common Myna	*Acridotheres tristis*	20	15	50	20	105

Annexure 11: Details of birds reported during AWC 2023 in Samastipur district (*contd.*)

English name	Scientific name	Deokhal Chaur	Goela Chaur	Garuara Chaur	Klayanpur Chaur	Total
Bank Myna	*Acridotheres ginginianus*		50		13	63
Oriental Magpie-robin	*Copsychus saularis*	1	2	1	2	6
Black Redstart	*Phoenicurus ochruros*			2		2
Brown Rockchat	*Oenanthe fusca*	2	1	1		4
Purple Sunbird	*Cinnyris asiaticus*	3		1	4	8
Indian Silverbill	*Euodice malabarica*	3		20		23
Paddyfield Pipit	*Anthus rufulus*	15	32	17	40	104
Citrine Wagtail	*Motacilla citreola*	7	2	20		29
Eastern Yellow Wagtail	*Motacilla tschutschensis*	1	3	1	2	7
White-browed Wagtail	*Motacilla maderaspatensis*	40	22	13	29	104
White Wagtail	*Motacilla alba*	3	7	17		27

Annexure 12: Details of birds reported during AWC 2023 in Vaishali district

English name	Scientific name	Baraila Lake	Purainiya Chaur	Berai Chaur	Salha Chaur	Gandak River	Total
Little Grebe	*Tachybaptus ruficollis*	2	2				4
Purple Swamphen	*Porphyrio porphyrio*	6					6
Asian Openbill	*Anastomus oscitans*	100					100
Indian Pond-heron	*Ardeola grayii*	4	4				8
Grey Heron	*Ardea cinerea*	1	1		2	20	24
Purple Heron	*Ardea purpurea*	4					4
Intermediate Egret	*Ardea intermedia*	5	5				10
Little Egret	*Egretta garzetta*	50	200		10		260
Little Cormorant	*Microcarbo niger*	15	10		10		35
Great Cormorant	*Phalacrocorax carbo*	6	10			20	36
Common Kingfisher	*Alcedo atthis*		1				1
White-breasted Kingfisher	*Halcyon smyrnensis*		1				1
Black Drongo	*Dicrurus macrocercus*	15	20				35
House Crow	*Corvus splendens*	1	2				3
Indian Pied Starling	*Gracupica contra*	20					20
Common Myna	*Acridotheres tristis*	10	2				12
Black Redstart	*Phoenicurus ochruros*		5				5
White Wagtail	*Motacilla alba*	4	10		10		24

Annexure 13: Details of birds reported during AWC 2023 in West Champaran district

English name	Scientific name	Udaipur Wildlife Sanctuary	Lal Sariya Maan	Darwabari Wetland	Gandak River	Total
Ruddy Shelduck	*Tadorna ferruginea*				20	20
Gadwall	*Mareca strepera*	60				60
Little Grebe	*Tachybaptus ruficollis*	3				3
Great Crested Grebe	*Podiceps cristatus*	6			8	14
Eastern Spotted Dove	*Spilopelia chinensis*			1		1
Lesser Coucal	*Centropus bengalensis*	2		1		3
White-breasted Waterhen	*Amaurornis phoenicurus*	1	4	3	1	9
Purple Swamphen	*Porphyrio porphyrio*	1				1
Sarus Crane	*Grus antigone*			2		2
Lesser Adjutant	*Leptoptilos javanicus*			2		2
Asian Openbill	*Anastomus oscitans*	7	4	7		18
Black-necked Stork	*Ephippiorhynchus asiaticus*			2		2
Red-naped Ibis	*Pseudibis papillosa*			1	1	2
Indian Pond-heron	*Ardeola grayii*	6	8	8		22
Cattle Egret	*Bubulcus ibis*	1	1	63	3	68
Grey Heron	*Ardea cinerea*	3			1	4
Purple Heron	*Ardea purpurea*	1		1		2
Great White Egret	*Ardea alba*		6			6
Intermediate Egret	*Ardea intermedia*	1		1		2
Little Egret	*Egretta garzetta*				2	2
Little Cormorant	*Microcarbo niger*	32		3	157	192
Great Cormorant	*Phalacrocorax carbo*	2				2
Indian Cormorant	*Phalacrocorax fuscicollis*	2	9		8	19
Lesser Sandplover	*Charadrius mongolus*				1	1
Red-wattled Lapwing	*Vanellus indicus*			1		1
Pheasant-tailed Jacana	*Hydrophasianus chirurgus*		17			17
Bronze-winged Jacana	*Metopidius indicus*	3	3			6
Little Pratincole	*Glareola lactea*				301	301

Annexure 13: Details of birds reported during AWC 2023 in West Champaran district (*contd.*)

English name	Scientific name	Udaipur Wildlife Sanctuary	Lal Sariya Maan	Darwabari Wetland	Gandak River	Total
Osprey	*Pandion haliaetus*	1			5	6
Black-winged Kite	*Elanus caeruleus*			2		2
Oriental Honey-buzzard	*Pernis ptilorhynchus*	1				1
Crested Serpent-eagle	*Spilornis cheela*	1				1
Western Marsh-harrier	*Circus aeruginosus*			1		1
Shikra	*Accipiter badius*		1			1
Common Kingfisher	*Alcedo atthis*	1		5		6
Stork-billed Kingfisher	*Pelargopsis capensis*	3		1		4
White-breasted Kingfisher	*Halcyon smyrnensis*	5	1	5		11
Black-capped Kingfisher	*Halcyon pileata*	1				1
Peregrine Falcon	*Falco peregrinus*				2	2
Red-breasted Parakeet	*Psittacula alexandri*			1		1
Alexandrine Parakeet	*Palaeornis eupatria*			3		3
Black-hooded Oriole	*Oriolus xanthornus*	1				1
Large Cuckooshrike	*Coracina javensis*			1		1
Black Drongo	*Dicrurus macrocercus*	1				1
Long-tailed Shrike	*Lanius schach*			3		3
Rufous Treepie	*Dendrocitta vagabunda*	1				1
Barn Swallow	*Hirundo rustica*				200	200
Himalayan Bulbul	*Pycnonotus leucogenys*			1		1
Chestnut-capped Babbler	*Timalia pileata*			6		6
Asian Brown Flycatcher	*Muscicapa dauurica*			1		1
Eastern Yellow Wagtail	*Motacilla tschutschensis*			2		2
White-browed Wagtail	*Motacilla maderaspatensis*				2	2

Annexure 14: Site-wise details of long, short distance migratory and resident species recorded during the AWC 2023

Districts	Wetlands	No. of birds			No. of species			Waterbirds counted			Wetland-dependent bird counted			Landbirdc cunted			No. of Waterbirds species			No. of wetland-dependent species			No. of Landbird species		
		LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R
Araria	Kajra Dhar	41	0	234	4	0	20	40	0	62	1	0	8	0	0	234	3	0	11	1	0	2	0	0	20
Aurangabad	Indrapuri Barrage	1,153	0	1,359	14	0	14	1,138	0	1,353	15	0	6	0	0	1,359	11	0	11	3	0	3	0	0	14
Banka	Odhni Dam	774	0	354	16	0	26	764	0	315	10	0	6	0	0	354	13	0	15	3	0	4	0	0	26
Begusarai	Kanwar Lake	454	0	1,130	15	0	36	48	0	998	406	0	22	241	0	1,130	5	0	20	10	0	5	4	0	36
Bhagalpur	VGDS (Sultanpur to Mirzapur)	875	0	627	15	0	21	836	0	524	39	0	6	35	0	627	11	0	16	4	0	3	1	0	21
	VGDS (Mirzapur to Bhagalpur)	646	0	334	13	0	23	438	0	285	208	0	7	206	0	334	10	0	17	3	0	2	1	0	23
	VGDS (Bhagalpur to Kahalgaon)	794	0	1,019	24	0	22	572	0	992	222	0	21	210	0	1019	16	0	18	8	0	2	1	0	22
	VGDS (Maniksarkar to Barari Ghat)	379	0	300	18	0	29	326	0	212	53	0	21	15	0	300	12	0	18	6	0	3	3	0	29
	Jagatpur Lake	902	0	1,046	22	0	37	895	0	959	7	0	5	1	0	1,046	16	0	25	6	0	3	1	0	37
	Ganga Prasad Lake	464	0	927	10	0	31	457	0	851	7	0	3	0	0	927	7	0	21	3	0	2	0	0	31
	Dimaha Dhar	95	0	251	12	0	14	38	0	173	57	0	0	55	0	251	9	0	11	3	0	0	2	0	14
	Katiya Dhar	10	0	415	4	0	21	3	0	396	7	0	5	2	0	415	1	0	14	3	0	5	1	0	21
	Abundance	4,165	0	4,919	118	0	198	3,565	0	4,392	600	0	68	524	0	4,919	46	0	51	27	0	18	11	0	126

Annexure 14: Site-wise details of long, short distance migratory and resident species recorded during the AWC 2023 (*contd.*)

Districts	Wetlands	No. of birds			No. of species			Waterbirds counted			Wetland-dependent bird counted			Landbird cunted			No. of Waterbirds species			No. of wetland-dependent species			No. of Landbird species		
		LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R
Buxar-Bhojpur	Chausa-Ahirauli Ganga	567	0	5134	19	0	22	417	0	5060	150	0	6	18	0	5134	14	0	15	5	0	2	1	0	22
	Gokul Jalashay	68	0	1,355	8	0	45	56	0	1,126	12	0	26	11	0	1,355	6	0	23	2	0	6	1	0	45
	Sunki Suhiya	345	0	524	11	0	22	321	0	499	24	0	15	12	0	524	6	0	17	5	0	4	1	0	22
	Abundance	980	0	7,013	38	0		794	0	6,685	186	0	47	41	0	7,013	46	0	51	27	0	18	11	0	126
Darbhanga	Kusheshwar Sthan	162	0	631	12	0	19	139	0	621	23	0	10	0	0	631	9	0	18	3	0	1	0	0	19
Eeast Champaran	Basmanpur Lake	31	0	204	3	0	23	0	0	134	31	0	15	31	0	204	0	0	10	3	0	4	3	0	23
	Bhoraha Lake	10	0	104	2	0	18	0	0	50	10	0	15	10	0	104	0	0	5	2	0	5	2	0	18
	Gandak River	33	0	63	5	0	8	1	0	30	32	0	0	28	0	63	1	0	4	4	0	0	3	0	8
	Sarotar Lake	334	0	148	8	0	16	290	0	118	44	0	2	37	0	148	2	0	9	6	0	1	2	0	16
	Sonbarsa Lake	112	0	177	4	0	21	99	0	158	13	0	2	12	0	177	1	0	13	3	0	2	2	0	21
	Abundance	520	0	696	22	0		390	0	490	130	0	34	118	0	696	46	0	51	27	0	18	11	0	126
Gaya	Barwadih	21	0	97	7	0	13	20	0	89	1	0	3	0	0	97	6	0	8	1	0	2	0	0	13
	Barandih Wetland	103	0	726	6	0	12	102	0	723	1	0	1	0	0	726	5	0	9	1	0	1	0	0	12
	Abundance	124	0	823	13	0	25	122	0	812	2	0	4	0	0	823	46	0	51	27	0	18	11	0	126
Jamui	Bela Tand	353	0	297	12	0	19	352	0	284	1	0	8	0	0	297	11	0	14	1	0	3	0	0	19
	Devan Ahar	19	0	381	5	0	12	16	0	378	3	0	3	0	0	381	3	0	9	2	0	3	0	0	12
	Pailbajaan	116	0	125	3	0	14	116	0	102	0	0	5	0	0	125	3	0	7	0	0	2	0	0	14
	Garhi Dam	711	0	256	21	0	33	690	0	184	21	0	23	3	0	256	14	0	16	7	0	5	1	0	33
	Nagi	5839	2	1,097	19	1	24	5,831	3	1,083	8	0	6	4	0	1,097	15	1	18	4	0	4	1	0	24
	Rail Pond	1	0	1,062	1	0	13	0	0	1,032	1	0	11	1	0	1,062	0	0	8	1	0	3	1	0	13
	Raja Ahar	120	0	253	10	0	20	119	0	248	1	0	3	1	0	253	9	0	17	1	0	2	1	0	20
	Nakti	7170	3	671	16	2	11	7,169	5	671	1	0	0	0	1	671	15	1	11	1	0	0	0	1	11
	Abundance	14329	5	4,142	87	3		14,293	8	3,982	36	0	59	9	1	4,142	46	1	51	27	0	18	11	1	126

Annexure 14: Site-wise details of long, short distance migratory and resident species recorded during the AWC 2023 (*contd.*)

Districts	Wetlands	No. of birds			No. of species			Waterbirds counted			Wetland-dependent bird counted			Landbird cunted			No. of Waterbirds species			No. of wetland-dependent species			No. of Landbird species		
		LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R
Kaimur	Durgawati Jalashay	38	0	385	6	0	38	34	0	292	4	0	23	0	0	385	3	0	12	3	0	8	0	0	38
Katihar	Baldia Chaur	40	0	396	5	0	16	10	0	259	30	0	2	7	0	396	1	0	11	4	0	2	1	0	16
	Baghar Beel	435	0	780	16	0	29	409	0	628	26	0	7	23	0	780	10	0	16	6	0	3	4	0	29
	Gogabeel	507	0	2,774	12	0	27	503	0	2,633	4	0	6	2	0	2,774	9	0	19	3	0	3	1	0	27
	Kathotia Fish Pond	181	0	39	4	0	6	181	0	38	0	0	1	0	0	39	4	0	5	0	0	1	0	0	6
	Ganga (Kahalgaon to Manihari)	682	0	458	17	0	24	668	0	417	14	0	10	3	0	458	12	0	16	5	0	3	1	0	24
	Abundance	1,845	0	4,447	54	0		1,771	0	3,975	74	0	26	35	0	4,447	46	0	51	27	0	18	11	0	126
Khagaria	Pasraha Chaur	205	0	375	12	0	20	197	0	372	8	0	3	0	0	375	9	0	18	3	0	2	0	0	20
Madhubani	Chapaniya Lake	104	0	438	9	0	17	104	0	432	0	0	6	0	0	438	9	0	16	0	0	1	0	0	17
Munger	Ganga (Munger to Gagania)	1,117	0	646	18	0	27	1,010	0	492	107	0	38	78	0	646	13	0	16	5	0	5	1	0	27
Muzaffarpur	Manika Lake	67	0	241	5	0	23	49	0	103	18	0	9	16	0	241	1	0	9	4	0	4	2	0	23
	Bhoosara Lake	9	0	118	4	0	28	2	0	67	7	0	6	6	0	118	1	0	15	3	0	4	2	0	28
	Bagmati River	8	0	146	1	0	19	0	0	35	8	0	3	0	0	146	0	0	9	1	0	1	0	0	19
	Abundance	84	0	505	10	0		51	0	205	33	0	18	22	0	505	46	0	51	27	0	18	11	0	126

Annexure 14: Site-wise details of long, short distance migratory and resident species recorded during the AWC 2023 (*contd.*)

Districts	Wetlands	No. of birds			No. of species			Waterbirds counted			Wetland-dependent bird counted			Landbird cunted			No. of Waterbirds species			No. of wetland-dependent species			No. of Landbird species		
		LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R
Nalanda	Gangaji Rajgriha Jalashaya	78	0	633	5	0	9	78	0	623	0	0	2	0	0	633	5	0	5	0	0	1	0	0	9
	Ghora Katora Forest trail	1	0	60	1	0	11	0	0	2	1	0	1	1	0	60	0	0	1	1	0	1	1	0	11
	Pushpakarani tank	15	0	533	1	0	10	15	0	532	0	0	1	0	0	533	1	0	9	0	0	1	0	0	10
	Giddhi Lake (Begumpur)	6	0	60	1	0	5	6	0	48	0	0	0	0	0	60	1	0	3	0	0	0	0	0	5
	Pavapuri Jal Mandir	96	0	706	4	0	7	94	0	705	2	0	0	0	0	706	3	0	6	1	0	0	0	0	7
	Panchane River, Sainik School	4	0	384	1	0	15	0	0	376	4	0	3	0	0	384	0	0	12	1	0	2	0	0	15
	Abundance	200	0	2,376	13	0		193	0	2,286	7	0	7	1	0	2,376	46	0	51	27	0	18	11	0	126
Nawada	Hardiya Dam	515	0	739	19	0	21	315	0	732	200	0	3	200	0	739	18	0	16	1	0	2	1	0	21
Patna	Rajdhani Jalashay	73	0	98	5	0	9	73	0	96	0	0	2	0	0	98	5	0	8	0	0	1	0	0	9
Saharsa	Arsi Chaur	29	0	261	3	0	16	21	0	257	8	0	4	0	0	261	1	0	15	2	0	1	0	0	16
	Simri Chaur	83	0	183	4	0	6	82	0	178	1	0	0	1	0	183	3	0	5	1	0	0	1	0	6
	Kosi River Catchment Area	331	0	1,135	5	0	21	326	0	1,089	5	0	5	3	0	1135	1	0	14	4	0	2	2	0	21
	Bora Chaur	37	0	243	2	0	12	37	0	241	0	0	2	0	0	243	2	0	11	0	0	1	0	0	12
	Jalai Chaur	201	0	374	2	0	15	201	0	371	0	0	3	0	0	374	2	0	14	0	0	1	0	0	15
	Abundance	681	0	2,196	16	0		667	0	2,136	14	0	14	4	0	2,196	46	0	51	27	0	18	11	0	126

Annexure 14: Site-wise details of long, short distance migratory and resident species recorded during the AWC 2023 (*contd.*)

Districts	Wetlands	No. of birds			No. of species			Waterbirds counted			Wetland-dependent bird counted			Landbird cunted			No. of Waterbirds species			No. of wetland-dependent species			No. of Landbird species		
		LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R
Samastipur	Deokhal Chaur	143	0	581	19	0	47	67	0	392	76	0	74	20	0	581	10	0	27	9	0	6	1	0	47
	Goela Chaur	48	0	567	9	0	37	2	0	304	46	0	36	7	0	567	1	0	18	8	0	6	1	0	37
	Garuara Chaur	72	0	689	10	0	42	7	0	327	65	0	145	3	0	689	1	0	18	9	0	7	1	0	42
	Kalyanpur Chaur	37	0	1,032	5	0	33	3	0	859	34	0	24	0	0	1,032	1	0	17	4	0	4	0	0	33
	Abundance	300	0	2,869	43	0		79	0	1,882	221	0	279	30	0	2,869	46	0	51	27	0	18	11	0	126
Saran	Atanagar	63	0	227	12	0	21	31	0	97	32	0	3	6	0	227	5	0	11	7	0	2	3	0	21
	Bahiyara Chaur	451	0	674	20	0	28	432	0	609	19	0	9	0	0	674	12	0	20	8	0	3	0	0	28
	Hariya Chaur	5	0	58	3	0	5	2	0	56	3	0	2	0	0	58	1	0	4	2	0	1	0	0	5
	Phulwaria Chaur	2	0	24	2	0	7	0	0	19	2	0	5	0	0	24	0	0	6	2	0	1	0	0	7
	Abundance	521	0	983	37	0		465	0	781	56	0	19	6	0	983	46	0	51	27	0	18	11	0	126
Sheohar	Bagmati River	121	0	320	8	0	26	81	0	225	40	0	14	31	0	320	6	0	11	2	0	6	1	0	26
Supaul	Kosi River (Raniganj to Kosi Mahasetu)	154	0	246	10	0	19	148	0	228	6	0	16	0	0	246	8	0	15	2	0	3	0	0	19
	Kosi Catchment	63	0	920	9	0	38	51	0	806	12	0	35	1	0	920	5	0	23	4	0	6	1	0	38
	Abundance	217	0	1,166	19	0		199	0	1,034	18	0	51	1	0	1,166	46	0	51	27	0	18	11	0	126
Vaishali	Baraila Lake	4	0	239	1	0	14	0	0	193	4	0	0	0	0	239	0	0	10	1	0	0	0	0	14
	Purainiya Chaur	10	0	263	1	0	13	0	0	232	10	0	2	0	0	263	0	0	7	1	0	2	0	0	13
	Salha Chaur	10	0	22	1	0	3	0	0	22	10	0	0	0	0	22	0	0	3	1	0	0	0	0	3
	Gandak River	0	0	40	0	0	2	0	0	40	0	0	0	0	0	40	0	0	2	0	0	0	0	0	2
	Berai Chaur	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1
	Abundance	24	0	565	3	0		0	0	487	24	0	3	0	0	565	46	0	51	27	0	18	11	0	126

Annexure 14: Site-wise details of long, short distance migratory and resident species recorded during the AWC 2023 (*contd.*)

Districts	Wetlands	No. of birds			No. of species			Waterbirds counted			Wetland-dependent bird counted			Landbird cunted			No. of Waterbirds species			No. of wetland-dependent species			No. of Landbird species		
		LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R
West Champaran	Udaipur Wildlife Sanctuary	71	0	76	5	0	21	66	0	65	5	0	8	0	0	76	2	0	14	3	0	4	0	0	21
	Lal Sariya Maan	0	0	54	0	0	10	0	0	52	0	0	2	0	0	54	0	0	8	0	0	2	0	0	10
	Daruabari Wetland	4	0	124	3	0	24	0	0	96	4	0	12	0	0	124	0	0	14	3	0	3	0	0	24
	Gandak River	255	0	477	8	0	9	46	0	477	209	0	0	200	0	477	4	0	9	4	0	0	1	0	9
	Abundance	330	0	731	16	0		112	0	690	218	0	22	200	0	731	46	0	51	27	0	18	11	0	126
	Total	29,077	5	40,140	73	3	126	26,644	8	35,827	2,433	0	792	1541	2	40,140	46		51	27	0	18	11		126

Note: LDM = Long distance migrant
SDM = Short distance migrant
R = Resident

Annexure 15: Details of number of threatened and near threatened species recorded during AWC 2023

Scientific name	*Leptoptilos dubius*	*Aquila nipalensis*	*Aythya ferina*	*Grus antigone*	*Leptoptilos javanicus*	*Sterna aurantia*	*Clanga clanga*	*Halcyon pileata*	*Aythya nyroca*	*Mareca falcata*	*Mycteria leucocephala*	*Ciconia episcopus*	*Ephippiorhynchus asiaticus*	*Threskiornis melanocephalus*	*Anhinga melanogaster*	*Vanellus vanellus*	*Vanellus duvaucelii*	*Numenius arquata*	*Psittacula alexandri*	*Palaeornis eupatria*
Common name	Greater Adjutant	Steppe Eagle	Common Pochard	Sarus Crane	Lesser Adjutant	River Tern	Greater Spotted Eagle	Black-capped Kingfisher	Ferruginous Duck	Falcated Duck	Painted Stork	Asian Woollyneck	Black-necked Stork	Black-headed Ibis	Oriental Darter	Northern Lapwing	River Lapwing	Eurasian Curlew	Red-breasted Parakeet	Alexandrine Parakeet
	EN	EN	VU	VU	VU	VU	VU	VU	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
VGDS (Sultanpur to Mirzapur)	8				1						150		2	74			1			
VGDS (Mirzapur to Bhagalpur)	21		5		1						15	9		32			6			
VGDS (Bhagalpur to Kahalgaon)	8		2		5							4		20			7			
VGDS (Maniksarkar to Barari Ghat)	5				2						3	1		20			6	3		
Jagatpur Lake	5		27		2				120				2	6	2					
Ganga Prasad Lake	2				8				54				2							
Dimaha Dhar					7				11				1	27				2		
Katiya Dhar	2				1						1	1			13					
Odhni Dam						10								2	1					
Barwadih		1																		
Hardiya Dam										2										
Udaipur Wildlife Sanctuary								1												
Daruabari Wetland				2	2								2						1	3
Kosi River from Raniganj to kosi Mahasetu					4							2		19						
Kosi Catchment	1				30									30						
Durgawati Jalashay															1					

Annexure 15: Details of number of threatened and near threatened species recorded during AWC 2023 (*contd.*)

Scientific name	*Leptoptilos dubius*	*Aquila nipalensis*	*Aythya ferina*	*Grus antigone*	*Leptoptilos javanicus*	*Sterna aurantia*	*Clanga clanga*	*Halcyon pileata*	*Aythya nyroca*	*Mareca falcata*	*Mycteria leucocephala*	*Ciconia episcopus*	*Ephippiorhynchus asiaticus*	*Threskiornis melanocephalus*	*Anhinga melanogaster*	*Vanellus vanellus*	*Vanellus duvaucelii*	*Numenius arquata*	*Psittacula alexandri*	*Palaeornis eupatria*
Common name	Greater Adjutant	Steppe Eagle	Common Pochard	Sarus Crane	Lesser Adjutant	River Tern	Greater Spotted Eagle	Black-capped Kingfisher	Ferruginous Duck	Falcated Duck	Painted Stork	Asian Woollyneck	Black-necked Stork	Black-headed Ibis	Oriental Darter	Northern Lapwing	River Lapwing	Eurasian Curlew	Red-breasted Parakeet	Alexandrine Parakeet
Kusheshwar Sthan			6		17				2											
Chapaniya Lake					1				3								4			
Bhoosara Lake					1															
Bela Tand			12						140					6						
Garhi Dam			14											7						
Nagi			15			2						6		18						
Raja Ahar			3						2	2				1						
Nakti			150						150	1				17						
Arsi Chaur					3															
Simri Chaur			5		2				7											
Kosi River Catchment Area					19												5			
Bora Chaur					3															
Indrapuri Barrage			163																	
Baldia Chaur					2										2					
Baghar Beel			2		1				200					80	3					
Gogabeel			6		3				50					9	3	60				
Kathotia Fish Pond									100						1					

Annexure 15: Details of number of threatened and near threatened species recorded during AWC 2023 (*contd.*)

Scientific name	*Leptoptilos dubius*	*Aquila nipalensis*	*Aythya ferina*	*Grus antigone*	*Leptoptilos javanicus*	*Sterna aurantia*	*Clanga clanga*	*Halcyon pileata*	*Aythya nyroca*	*Mareca falcata*	*Mycteria leucocephala*	*Ciconia episcopus*	*Ephippiorhynchus asiaticus*	*Threskiornis melanocephalus*	*Anhinga melanogaster*	*Vanellus vanellus*	*Vanellus duvaucelii*	*Numenius arquata*	*Psittacula alexandri*	*Palaeornis eupatria*
Common name	Greater Adjutant	Steppe Eagle	Common Pochard	Sarus Crane	Lesser Adjutant	River Tern	Greater Spotted Eagle	Black-capped Kingfisher	Ferruginous Duck	Falcated Duck	Painted Stork	Asian Woollyneck	Black-necked Stork	Black-headed Ibis	Oriental Darter	Northern Lapwing	River Lapwing	Eurasian Curlew	Red-breasted Parakeet	Alexandrine Parakeet
Ganga (Kahalgaon to Manihari)	6				3	10						3		9			18	14		
Chausa-Ahirauli Ganga														4			40			
Gokul Jalashay														40						
Pasraha Chaur			1		6									30		3				
Rajdhani Jalashay									1											
Atanagar											1									
Bahiyara Chaur			1						37						3					
Phulwaria Chaur							1													
Bagmati River																	12			
Ganga-Munger-Gagaria	4				11							3		1			3			
Kanwar Lake		1			20		3							28						
Kajra Dhar					7															
Deokhal Chaur																	3			
Abundance	62	2	412	2	162	22	4	1	877	5	170	29	9	480	29	63	105	19	1	3

Annexure 16: District-wise details of number of species and individuals reported during the Asian Waterbird Census 2023 in Bihar

District	Wetland	Number of Individuals	Number of Species	Number of Families	Coordinator
Araria	Kajra Dhar	275	24	16	Mr. Gyanchandra gyani
Aurangabad	Indrapuri Barrage	3,021	30	12	Mr. S. Sudhakar
Banka	Odhni Dam	1,128	42	22	Prof D N Choudhary
Begusarai	Kanwar Lake	1,584	51	27	Dr. P. Sathiyaselvam & Mr Sohail Madan
Bhagalpur	VGDS (Sultanpur to Mirzapur)	1,502	36	15	Mr. Rahul Rohitashwa
Bhagalpur	VGDS (Mirzapur to Bhagalpur)	980	36	16	Prof Sunil Choudhary
Bhagalpur	VGDS (Bhagalpur to Kahalgaon)	1,813	46	16	Mr. Bharat Chintapalli
Bhagalpur	VGDS (Maniksarkar to Barari Ghat)	679	47	21	Mr. Vatan Kumar
Bhagalpur	Jagatpur Lake	1,948	59	23	Prof D N Choudhary
Bhagalpur	Ganga Prasad Lake, Gopalpur	1,391	41	18	Prof D N Choudhary
Bhagalpur	Dimaha Dhar	346	26	16	Mr. Bharat Chintapalli
Bhagalpur	Katiya Dhar	425	25	14	Mr. Bharat Chintapalli
Buxar-Bhojpur	Chausa-Ahirauli Ganga	5,703	42	19	Mr Arvind Mishra
Buxar-Bhojpur	Gokul Jalashay	1,424	54	30	Mr Arvind Mishra
Buxar-Bhojpur	Sunki Suhiya	993	33	18	Mr Arvind Mishra
Darbhanga	Kusheshwar Sthan	793	31	13	Dr Gopal Sharma & Mr Navin Kr.
East Champaran	Basmanpur Lake (Maun)	235	26	21	Dr. Kushagra Rajendra
East Champaran	Bhoraha Lake	114	20	15	Dr. Kushagra Rajendra
East Champaran	Gandak River	97	14	11	Dr. Kushagra Rajendra
East Champaran	Sarotar Lake	482	24	17	Dr. Kushagra Rajendra
East Champaran	Sonbarsa Lake	289	25	17	Dr. Kushagra Rajendra
Gaya	Barwadih	118	20	12	Mr. S. Sudhakar
Gaya	Barandih Wetland	829	18	12	Mr. S. Sudhakar
Jamui	Bela Tand	650	31	15	Mr Arvind Mishra
Jamui	Devan Ahar	400	17	12	Mr Arvind Mishra
Jamui	Pailbajaan	241	17	13	Mr Arvind Mishra
Jamui	Garhi Dam	971	55	27	Mr Arvind Mishra
Jamui	Nagi	6,938	44	20	Mr Arvind Mishra

Annexure 16: District-wise details of number of species and individuals reported during the Asian Waterbird Census 2023 in Bihar (*contd.*)

District	Wetland	Number of Individuals	Number of Species	Number of Families	Coordinator
Jamui	Rail Pond	1,063	14	12	Mr Arvind Mishra
Jamui	Raja Ahar	373	30	12	Mr Arvind Mishra
Jamui	Nakti	7,844	29	10	Mr Arvind Mishra
Kaimur	Durgawati Jalashay	423	44	29	Dr Gopal Sharma
Katihar	Baldia Chaur	487	23	15	Mr Arvind Mishra
Katihar	Baghar Beel	1,215	45	26	Mr Arvind Mishra
Katihar	Gogabeel	3,281	39	18	Mr Arvind Mishra
Katihar	Kathotia Fish Pond	220	10	5	Mr Arvind Mishra
Katihar	Ganga (Kahalgaon to Manihari)	1,139	41	42	Mr Arvind Mishra
Khagaria	Pasraha Chaur	580	32	14	Mr. Gyanchandra gyani
Madhubani	Chapaniya Lake	542	26	9	Dr Gopal Sharma & Mr Navin Kr.
Munger	Ganga-Munger-Gagaria	1,763	45	19	Dr. P. Sathiyaselvam & Mr Sohail Madan
Muzaffarpur	Manika Lake	308	28	20	Dr. Niraj Kumar & Dr. Kushagra Rajendra
Muzaffarpur	Bhoosara Lake	127	32	18	Dr. Niraj Kumar & Dr. Kushagra Rajendra
Muzaffarpur	Bagmati River	154	20	15	Dr. Niraj Kumar & Dr. Kushagra Rajendra
Nalanda	Gangaji Rajgriha Jalashaya	711	14	10	Dr Gopal Sharma & Mr Navin Kr.
Nalanda	Ghora Katora Forest trail	61	12	9	Dr Gopal Sharma & Mr Navin Kr.
Nalanda	Pushpakarani tank	548	11	7	Dr Gopal Sharma & Mr Navin Kr.
Nalanda	Giddhi Lake (Begumpur)	66	6	5	Dr Gopal Sharma & Mr Navin Kr.
Nalanda	Pavapuri Jal Mandir	802	11	7	Dr Gopal Sharma & Mr Navin Kr.
Nalanda	Panchane River, Sainik School	388	16	12	Dr Gopal Sharma & Mr Navin Kr.
Nawada	Hardiya Dam	1,254	40	17	Mr. S. Sudhakar
Patna	Rajdhani Jalashay	171	14	8	Col. Amit Sinha & Mr. Anand Kumar
Saharsa	Arsi Chaur	290	19	10	Mr. Gyanchandra gyani
Saharsa	Simri Chaur	266	10	8	Mr. Gyanchandra gyani
Saharsa	Kosi River Catchment Area	1,466	26	14	Dr Gopal Sharma & Mr Navin Kr.
Saharsa	Bora Chaur	280	14	7	Mr. Gyanchandra gyani
Saharsa	Jalai Chaur	575	17	10	Dr Gopal Sharma & Mr Navin Kr.

Annexure 16: District-wise details of number of species and individuals reported during the Asian Waterbird Census 2023 in Bihar (*contd.*)

District	Wetland	Number of Individuals	Number of Species	Number of Families	Coordinator
Samastipur	Deokhal Chaur	724	66	32	Mr. Amir Rizwan Khan
Samastipur	Goela Chaur	615	46	26	Mr. Amir Rizwan Khan
Samastipur	Garuara Chaur	761	52	30	Mr. Amir Rizwan Khan
Samastipur	Kalyanpur Chaur	1,069	38	24	Mr. Amir Rizwan Khan
Saran	Atanagar	290	33	20	Mr. Gyanchandra gyani
Saran	Bahiyara Chaur	1,125	48	22	Mr. Gyanchandra gyani
Saran	Hariya Chaur	63	8	5	Mr. Gyanchandra gyani
Saran	Phulwaria Chaur	26	9	6	Mr. Gyanchandra gyani
Sheohar	Bagmati River	441	34	21	Dr. Niraj Kumar & Dr. Kushagra Rajendra
Supaul	Kosi River survey from Raniganj to kosi Mahasetu	402	30	14	Dr Gopal Sharma & Mr Navin Kr.
Supaul	Kosi Catchment	983	47	24	Dr Gopal Sharma & Mr Navin Kr.
Vaishali	Baraila Lake	253	15	9	Dr. Satyendra Kumar
Vaishali	Purainiya Chaur	283	15	10	Dr. Satyendra Kumar
Vaishali	Salha Chaur	32	4	3	Dr. Satyendra Kumar
Vaishali	Gandak River	40	2	2	Dr. Satyendra Kumar
Vaishali	Berai Chaur	1	1	1	Dr. Satyendra Kumar
West Champaran	Udaipur Wildlife Sanctuary	147	26	14	Dr. Niraj Kumar & Dr. Kushagra Rajendra
West Champaran	Lal Sariya Maan	54	10	7	Dr. Niraj Kumar & Dr. Kushagra Rajendra
West Champaran	Daruabari Wetland	128	27	19	Dr. Niraj Kumar & Dr. Kushagra Rajendra
West Champaran	Gandak River	732	16	12	Dr. Niraj Kumar & Dr. Kushagra Rajendra

Annexure 17: Details of wetland-wise number of species and individuals recorded during the Asian Waterbird Census 2023 in Bihar

Sl. No.	Wetland	District	Number of Individuals	Number of Species	Number of Families	Coordinator
1	Arsi Chaur	Saharsa	290	19	10	Mr. Gyanchandra gyani
2	Atanagar	Saran	290	33	20	Mr. Gyanchandra gyani
3	Baghar Beel	Katihar	1,215	45	26	Mr Arvind Mishra
4	Bagmati River	Muzaffarpur	154	20	15	Dr. Niraj Kumar & Dr. Kushagra Rajendra
5	Bagmati River	Sheohar	441	34	21	Dr. Niraj Kumar & Dr. Kushagra Rajendra
6	Bahiyara Chaur	Saran	1,125	48	22	Mr. Gyanchandra gyani
7	Baldia Chaur	Katihar	487	23	15	Mr Arvind Mishra
8	Baraila Lake	Vaishali	253	15	9	Dr. Satyendra Kumar
9	Barandih Wetland	Gaya	829	18	12	Mr. S. Sudhakar
10	Barwadih	Gaya	118	20	12	Mr. S. Sudhakar
11	Basmanpur Lake	East Champaran	235	26	21	Dr. Kushagra Rajendra
12	Bela Tand	Jamui	650	31	15	Mr Arvind Mishra
13	Berai Chaur	Vaishali	1	1	1	Dr. Satyendra Kumar
14	Bhoosara Lake	Muzaffarpur	127	32	18	Dr. Niraj Kumar & Dr. Kushagra Rajendra
15	Bhoraha Lake	East Champaran	114	20	15	Dr. Kushagra Rajendra
16	Bora Chaur	Saharsa	280	14	7	Mr. Gyanchandra gyani
17	Chapaniya Lake	Madhubani	542	26	9	Dr Gopal Sharma & Mr Navin Kr.
18	Chausa-Ahirauli Ganga	Buxar-Bhojpur	5,703	42	19	Mr Arvind Mishra
19	Daruabari Wetland	West Champaran	128	27	19	Dr. Niraj Kumar & Dr. Kushagra Rajendra
20	Deokhal Chaur	Samastipur	724	66	32	Mr. Amir Rizwan Khan
21	Devan Ahar	Jamui	400	17	12	Mr Arvind Mishra
22	Dimaha Dhar	Bhagalpur	346	26	16	Mr. Bharat Chintapalli
23	Durgawati Jalashay	Kaimur	423	44	29	Dr Gopal Sharma
24	Gandak River	East Champaran	97	14	11	Dr. Kushagra Rajendra
25	Gandak River	Vaishali	40	2	2	Dr. Satyendra Kumar
26	Gandak River	West Champaran	732	16	12	Dr. Niraj Kumar & Dr. Kushagra Rajendra
27	Ganga (Kahalgaon to Manihari)	Katihar	1,139	41	42	Mr Arvind Mishra
28	Ganga Prasad Lake, Gopalpur	Bhagalpur	1,391	41	18	Prof D N Choudhary

Annexure 17: Details of wetland-wise number of species and individuals recorded during the Asian Waterbird Census 2023 in Bihar (*contd.*)

Sl. No.	Wetland	District	Number of Individuals	Number of Species	Number of Families	Coordinator
29	Gangaji Rajgriha Jalashaya	Nalanda	711	14	10	Dr Gopal Sharma & Mr Navin Kr.
30	Ganga-Munger-Gagaria	Munger	1,763	45	19	Dr. P. Sathiyaselvam & Mr Sohail Madan
31	Garhi Dam	Jamui	971	55	27	Mr Arvind Mishra
32	Garuara Chaur	Samastipur	761	52	30	Mr. Amir Rizwan Khan
33	Ghora Katora Forest trail	Nalanda	61	12	9	Dr Gopal Sharma & Mr Navin Kr.
34	Giddhi Lake (Begampur)	Nalanda	66	6	5	Dr Gopal Sharma & Mr Navin Kr.
35	Goela Chaur	Samastipur	615	46	26	Mr. Amir Rizwan Khan
36	Gogabeel	Katihar	3,281	39	18	Mr Arvind Mishra
37	Gokul Jalashay	Buxar-Bhojpur	1,424	54	30	Mr Arvind Mishra
38	Hardiya Dam	Nawada	1,254	40	17	Mr. S. Sudhakar
39	Hariya Chaur	Saran	63	8	5	Mr. Gyanchandra gyani
40	Indrapuri Barrage	Aurangabad	3,021	30	12	Mr. S. Sudhakar
41	Jagatpur Lake	Bhagalpur	1,948	59	23	Prof D N Choudhary
42	Jalai Chaur	Saharsa	575	17	10	Dr Gopal Sharma & Mr Navin Kr.
43	Kajra Dhar	Araria	275	24	16	Mr. Gyanchandra gyani
44	Kalyanpur Chaur	Samastipur	1,069	38	24	Mr. Amir Rizwan Khan
45	Kanwar Lake	Begusarai	1,584	51	27	Dr. P. Sathiyaselvam & Mr Sohail Madan
46	Kathotia Fish Pond	Katihar	220	10	5	Mr Arvind Mishra
47	Katiya Dhar	Bhagalpur	425	25	14	Mr. Bharat Chintapalli
48	Kosi Catchment	Supaul	983	47	24	Dr Gopal Sharma & Mr Navin Kr.
49	Kosi River Catchment Area	Saharsa	1,466	26	14	Dr Gopal Sharma & Mr Navin Kr.
50	Kosi River survey from Raniganj to kosi Mahasetu	Supaul	402	30	14	Dr Gopal Sharma & Mr Navin Kr.
51	Kusheshwar Sthan	Darbhanga	793	31	13	Dr Gopal Sharma & Mr Navin Kr.
52	Lal Sariya Maan	West Champaran	54	10	7	Dr. Niraj Kumar & Dr. Kushagra Rajendra
53	Manika Lake	Muzaffarpur	308	28	20	Dr. Niraj Kumar & Dr. Kushagra Rajendra
54	Nagi	Jamui	6,938	44	20	Mr Arvind Mishra
55	Nakti	Jamui	7,844	29	10	Mr Arvind Mishra
56	Odhni Dam	Banka	1,128	42	22	Prof D N Choudhary

Annexure 17: Details of wetland-wise number of species and individuals recorded during the Asian Waterbird Census 2023 in Bihar (*contd.*)

Sl. No.	Wetland	District	Number of Individuals	Number of Species	Number of Families	Coordinator
57	Pailbajaan	Jamui	241	17	13	Mr Arvind Mishra
58	Panchane River, Sainik School	Nalanda	388	16	12	Dr Gopal Sharma & Mr Navin Kr.
59	Pasraha Chaur	Khagaria	580	32	14	Mr. Gyanchandra gyani
60	Pavapuri Jal Mandir	Nalanda	802	11	7	Dr Gopal Sharma & Mr Navin Kr.
61	Phulwaria Chaur	Saran	26	9	6	Mr. Gyanchandra gyani
62	Purainiya Chaur	Vaishali	283	15	10	Dr. Satyendra Kumar
63	Pushpakarani tank	Nalanda	548	11	7	Dr Gopal Sharma & Mr Navin Kr.
64	Rail Pond	Jamui	1,063	14	12	Mr Arvind Mishra
65	Raja Ahar	Jamui	373	30	12	Mr Arvind Mishra
66	Rajdhani Jalashay	Patna	171	14	8	Col. Amit Sinha & Mr. Anand Kumar
67	Salha Chaur	Vaishali	32	4	3	Dr. Satyendra Kumar
68	Sarotar Lake	East Champaran	482	24	17	Dr. Kushagra Rajendra
69	Simri Chaur	Saharsa	266	10	8	Mr. Gyanchandra gyani
70	Sonbarsa Lake	East Champaran	289	25	17	Dr. Kushagra Rajendra
71	Sunki Suhiya	Buxar-Bhojpur	993	33	18	Mr Arvind Mishra
72	Udaipur Wildlife Sanctuary	West Champaran	147	26	14	Dr. Niraj Kumar & Dr. Kushagra Rajendra
73	VGDS (Bhagalpur to Kahalgaon)	Bhagalpur	1,813	46	16	Mr. Bharat Chintapalli
74	VGDS (Maniksarkar to Barari Ghat)	Bhagalpur	679	47	21	Mr. Vatan Kumar
75	VGDS (Mirzapur to Bhagalpur)	Bhagalpur	980	36	16	Prof Sunil Choudhary
76	VGDS (Sultanpur to Mirzapur)	Bhagalpur	1,502	36	15	Mr. Rahul Rohitashwa

Annexure 18: Details of wetland-wise number of individuals reported during the Asian Waterbird Census 2023

Sl. No.	District	Wetland	Number of Individuals	Number of species	Number of Families	Coordinator
1	Jamui	Nakti	7844	29	10	Mr Arvind Mishra
2	Jamui	Nagi	6,938	44	20	Mr Arvind Mishra
3	Buxar-Bhojpur	Chausa-Ahirauli Ganga	5,703	42	19	Mr Arvind Mishra
4	Katihar	Gogabeel	3,281	39	18	Mr Arvind Mishra
5	Aurangabad	Indrapuri Barrage	3,021	30	12	Mr. S. Sudhakar
6	Bhagalpur	Jagatpur Lake	1,948	59	23	Prof D N Choudhary
7	Bhagalpur	VGDS (Bhagalpur to Kahalgaon)	1,813	46	16	Mr. Bharat Chintapalli
8	Munger	Ganga-Munger-Gagaria	1,763	45	19	Dr. P. Sathiyaselvam & Mr Sohail Madan
9	Begusarai	Kanwar Lake	1,584	51	27	Dr. P. Sathiyaselvam & Mr Sohail Madan
10	Bhagalpur	VGDS (Sultanpur to Mirzapur)	1,502	36	15	Mr. Rahul Rohitashwa
11	Saharsa	Kosi River Catchment Area	1,466	26	14	Dr Gopal Sharma & Mr Navin Kr.
12	Buxar-Bhojpur	Gokul Jalashay	1,424	54	30	Mr Arvind Mishra
13	Bhagalpur	Ganga Prasad Lake, Gopalpur	1,391	41	18	Prof D N Choudhary
14	Nawada	Hardiya Dam	1,254	40	17	Mr. S. Sudhakar
15	Katihar	Baghar Beel	1,215	45	26	Mr Arvind Mishra
16	Katihar	Ganga (Kahalgaon to Manihari)	1,139	41	42	Mr Arvind Mishra
17	Banka	Odhni Dam	1,128	42	22	Prof D N Choudhary
18	Saran	Bahiyara Chaur	1,125	48	22	Mr. Gyanchandra gyani
19	Samastipur	Kalyanpur Chaur	1,069	38	24	Mr. Amir Rizwan Khan
20	Jamui	Rail Pond	1,063	14	12	Mr Arvind Mishra
21	Buxar-Bhojpur	Sunki Suhiya	993	33	18	Mr Arvind Mishra
22	Supaul	Kosi Catchment	983	47	24	Dr Gopal Sharma & Mr Navin Kr.
23	Bhagalpur	VGDS (Mirzapur to Bhagalpur)	980	36	16	Prof Sunil Choudhary
24	Jamui	Garhi Dam	971	55	27	Mr Arvind Mishra
25	Gaya	Barandih Wetland	829	18	12	Mr. S. Sudhakar
26	Nalanda	Pavapuri Jal Mandir	802	11	7	Dr Gopal Sharma & Mr Navin Kr.
27	Darbhanga	Kusheshwar Sthan	793	31	13	Dr Gopal Sharma & Mr Navin Kr.
28	Samastipur	Garuara Chaur	761	52	30	Mr. Amir Rizwan Khan

Annexure 18: Details of wetland-wise number of individuals reported during the Asian Waterbird Census 2023 *(contd.)*

Sl. No.	District	Wetland	Number of Individuals	Number of species	Number of Families	Coordinator
29	West Champaran	Gandak River	732	16	12	Dr. Niraj Kumar & Dr. Kushagra Rajendra
30	Samastipur	Deokhal Chaur	724	66	32	Mr. Amir Rizwan Khan
31	Nalanda	Gangaji Rajgriha Jalashaya	711	14	10	Dr Gopal Sharma & Mr Navin Kr.
32	Bhagalpur	VGDS (Maniksarkar to Barari Ghat)	679	47	21	Mr. Vatan Kumar
33	Jamui	Bela Tand	650	31	15	Mr Arvind Mishra
34	Samastipur	Goela Chaur	615	46	26	Mr. Amir Rizwan Khan
35	Khagaria	Pasraha Chaur	580	32	14	Mr. Gyanchandra gyani
36	Saharsa	Jalai Chaur	575	17	10	Dr Gopal Sharma & Mr Navin Kr.
37	Nalanda	Pushpakarani tank	548	11	7	Dr Gopal Sharma & Mr Navin Kr.
38	Madhubani	Chapaniya Lake	542	26	9	Dr Gopal Sharma & Mr Navin Kr.
39	Katihar	Baldia Chaur	487	23	15	Mr Arvind Mishra
40	East Champaran	Sarotar Lake	482	24	17	Dr. Kushagra Rajendra
41	Sheohar	Bagmati River	441	34	21	Dr. Niraj Kumar & Dr. Kushagra Rajendra
42	Bhagalpur	Katiya Dhar	425	25	14	Mr. Bharat Chintapalli
43	Kaimur	Durgawati Jalashay	423	44	29	Dr Gopal Sharma
44	Supaul	Kosi River survey from Raniganj to kosi Mahasetu	402	30	14	Dr Gopal Sharma & Mr Navin Kr.
45	Jamui	Devan Ahar	400	17	12	Mr Arvind Mishra
46	Nalanda	Panchane River, Sainik School	388	16	12	Dr Gopal Sharma & Mr Navin Kr.
47	Jamui	Raja Ahar	373	30	12	Mr Arvind Mishra
48	Bhagalpur	Dimaha Dhar	346	26	16	Mr. Bharat Chintapalli
49	Muzaffarpur	Manika Lake	308	28	20	Dr. Niraj Kumar & Dr. Kushagra Rajendra
50	Saharsa	Arsi Chaur	290	19	10	Mr. Gyanchandra gyani
51	Saran	Atanagar	290	33	20	Mr. Gyanchandra gyani
52	East Champaran	Sonbarsa Lake	289	25	17	Dr. Kushagra Rajendra
53	Vaishali	Purainiya Chaur	283	15	10	Dr. Satyendra Kumar
54	Saharsa	Bora Chaur	280	14	7	Mr. Gyanchandra gyani
55	Araria	Kajra Dhar	275	24	16	Mr. Gyanchandra gyani

Annexure 18: Details of wetland-wise number of individuals reported during the Asian Waterbird Census 2023 *(contd.)*

Sl. No.	District	Wetland	Number of Individuals	Number of species	Number of Families	Coordinator
56	Saharsa	Simri Chaur	266	10	8	Mr. Gyanchandra gyani
57	Vaishali	Baraila Lake	253	15	9	Dr. Satyendra Kumar
58	Jamui	Pailbajaan	241	17	13	Mr Arvind Mishra
59	East Champaran	Basmanpur Lake (Maun)	235	26	21	Dr. Kushagra Rajendra
60	Katihar	Kathotia Fish Pond	220	10	5	Mr Arvind Mishra
61	Patna	Rajdhani Jalashay	171	14	8	Col. Amit Sinha & Mr. Anand Kumar
62	Muzaffarpur	Bagmati River	154	20	15	Dr. Niraj Kumar & Dr. Kushagra Rajendra
63	West Champaran	Udaipur Wildlife Sanctuary	147	26	14	Dr. Niraj Kumar & Dr. Kushagra Rajendra
64	West Champaran	Daruabari Wetland	128	27	19	Dr. Niraj Kumar & Dr. Kushagra Rajendra
65	Muzaffarpur	Bhoosara Lake	127	32	18	Dr. Niraj Kumar & Dr. Kushagra Rajendra
66	Gaya	Barwadih	118	20	12	Mr. S. Sudhakar
67	East Champaran	Bhoraha Lake	114	20	15	Dr. Kushagra Rajendra
68	East Champaran	Gandak River	97	14	11	Dr. Kushagra Rajendra
69	Nalanda	Giddhi Lake (Begumpur)	66	6	5	Dr Gopal Sharma & Mr Navin Kr.
70	Saran	Hariya Chaur	63	8	5	Mr. Gyanchandra gyani
71	Nalanda	Ghora Katora Forest trail	61	12	9	Dr Gopal Sharma & Mr Navin Kr.
72	West Champaran	Lal Sariya Maan	54	10	7	Dr. Niraj Kumar & Dr. Kushagra Rajendra
73	Vaishali	Gandak River	40	2	2	Dr. Satyendra Kumar
74	Vaishali	Salha Chaur	32	4	3	Dr. Satyendra Kumar
75	Saran	Phulwaria Chaur	26	9	6	Mr. Gyanchandra gyani
76	Vaishali	Berai Chaur	1	1	1	Dr. Satyendra Kumar

Annexure 19: Details of wetland-wise species richness during the Asian Waterbird Census 2023

Sl. No.	District	Wetland	Number of Species	Number of Individuals	Number of Families	Coordinator
1	Samastipur	Deokhal Chaur	66	724	32	Mr. Amir Rizwan Khan
2	Bhagalpur	Jagatpur Lake	59	1,948	23	Prof D N Choudhary
3	Jamui	Garhi Dam	55	971	27	Mr Arvind Mishra
4	Buxar-Bhojpur	Gokul Jalashay	54	1,424	30	Mr Arvind Mishra
5	Samastipur	Garuara Chaur	52	761	30	Mr. Amir Rizwan Khan
6	Begusarai	Kanwar Lake	51	1,584	27	Dr. P. Sathiyaselvam & Mr Sohail Madan
7	Saran	Bahiyara Chaur	48	1,125	22	Mr. Gyanchandra gyani
8	Supaul	Kosi Catchment	47	983	24	Dr Gopal Sharma & Mr Navin Kr.
9	Bhagalpur	VGDS (Maniksarkar to Barari Ghat)	47	679	21	Mr. Vatan Kumar
10	Bhagalpur	VGDS (Bhagalpur to Kahalgaon)	46	1,813	16	Mr. Bharat Chintapalli
11	Samastipur	Goela Chaur	46	615	26	Mr. Amir Rizwan Khan
12	Munger	Ganga (Munger-Gagania)	45	1,763	19	Dr. P. Sathiyaselvam & Mr Sohail Madan
13	Katihar	Baghar Beel	45	1,215	26	Mr Arvind Mishra
14	Jamui	Nagi Dam	44	6,938	20	Mr Arvind Mishra
15	Kaimur	Durgawati Jalashay	44	423	29	Dr Gopal Sharma
16	Buxar-Bhojpur	Chausa-Ahirauli Ganga	42	5,703	19	Mr Arvind Mishra
17	Banka	Odhni Dam	42	1,128	22	Prof D N Choudhary
18	Bhagalpur	Ganga Prasad Lake, Gopalpur	41	1,391	18	Prof D N Choudhary
19	Katihar	Ganga (Kahalgaon to Manihari)	41	1,139	42	Mr Arvind Mishra
20	Nawada	Hardiya Dam	40	1,254	17	Mr. S. Sudhakar
21	Katihar	Gogabeel	39	3,281	18	Mr Arvind Mishra
22	Samastipur	Kalyanpur Chaur	38	1,069	24	Mr. Amir Rizwan Khan
23	Bhagalpur	VGDS (Sultanpur to Mirzapur)	36	1,502	15	Mr. Rahul Rohitashwa
24	Bhagalpur	VGDS (Mirzapur to Bhagalpur)	36	980	16	Prof Sunil Choudhary
25	Sheohar	Bagmati River	34	441	21	Dr. Niraj Kumar & Dr. Kushagra Rajendra
26	Buxar-Bhojpur	Sunki Suhiya	33	993	18	Mr Arvind Mishra
27	Saran	Atanagar	33	290	20	Mr. Gyanchandra gyani
28	Khagaria	Pasraha Chaur	32	580	14	Mr. Gyanchandra gyani

Annexure 19: Details of wetland-wise species richness during the Asian Waterbird Census 2023 (*contd.*)

Sl. No.	District	Wetland	Number of Species	Number of Individuals	Number of Families	Coordinator
29	Muzaffarpur	Bhoosara Lake	32	127	18	Dr. Niraj Kumar & Dr. Kushagra Rajendra
30	Darbhanga	Kusheshwar Sthan	31	793	13	Dr Gopal Sharma & Mr Navin Kr.
31	Jamui	Bela Tand	31	650	15	Mr Arvind Mishra
32	Aurangabad	Indrapuri Barrage	30	3,021	12	Mr. S. Sudhakar
33	Supaul	Kosi River survey from Raniganj to kosi Mahasetu	30	402	14	Dr Gopal Sharma & Mr Navin Kr.
34	Jamui	Raja Ahar	30	373	12	Mr Arvind Mishra
35	Jamui	Nakti	29	7,844	10	Mr Arvind Mishra
36	Muzaffarpur	Manika Lake	28	308	20	Dr. Niraj Kumar & Dr. Kushagra Rajendra
37	West Champaran	Daruabari Wetland	27	128	19	Dr. Niraj Kumar & Dr. Kushagra Rajendra
38	Saharsa	Kosi River Catchment Area	26	1,466	14	Dr Gopal Sharma & Mr Navin Kr.
39	Madhubani	Chapaniya Lake	26	542	9	Dr Gopal Sharma & Mr Navin Kr.
40	Bhagalpur	Dimaha Dhar	26	346	16	Mr. Bharat Chintapalli
41	East Champaran	Basmanpur Lake (Maun)	26	235	21	Dr. Kushagra Rajendra
42	West Champaran	Udaipur Wildlife Sanctuary	26	147	14	Dr. Niraj Kumar & Dr. Kushagra Rajendra
43	Bhagalpur	Katiya Dhar	25	425	14	Mr. Bharat Chintapalli
44	East Champaran	Sonbarsa Lake	25	289	17	Dr. Kushagra Rajendra
45	East Champaran	Sarotar Lake	24	482	17	Dr. Kushagra Rajendra
46	Araria	Kajra Dhar	24	275	16	Mr. Gyanchandra gyani
47	Katihar	Baldia Chaur	23	487	15	Mr Arvind Mishra
48	Muzaffarpur	Bagmati River	20	154	15	Dr. Niraj Kumar & Dr. Kushagra Rajendra
49	Gaya	Barwadih	20	118	12	Mr. S. Sudhakar
50	East Champaran	Bhoraha Lake	20	114	15	Dr. Kushagra Rajendra
51	Saharsa	Arsi Chaur	19	290	10	Mr. Gyanchandra gyani
52	Gaya	Barandih Wetland	18	829	12	Mr. S. Sudhakar
53	Saharsa	Jalai Chaur	17	575	10	Dr Gopal Sharma & Mr Navin Kr.
54	Jamui	Devan Ahar	17	400	12	Mr Arvind Mishra
55	Jamui	Pailbajaan	17	241	13	Mr Arvind Mishra
56	West Champaran	Gandak River	16	732	12	Dr. Niraj Kumar & Dr. Kushagra Rajendra

Annexure 19: Details of wetland-wise species richness during the Asian Waterbird Census 2023 (*contd.*)

Sl. No.	District	Wetland	Number of Species	Number of Individuals	Number of Families	Coordinator
57	Nalanda	Panchane River, Sainik School	16	388	12	Dr Gopal Sharma & Mr Navin Kr.
58	Vaishali	Purainiya Chaur	15	283	10	Dr. Satyendra Kumar
59	Vaishali	Baraila Lake	15	253	9	Dr. Satyendra Kumar
60	Jamui	Rail Pond	14	1,063	12	Mr Arvind Mishra
61	Nalanda	Gangaji Rajgriha Jalashaya	14	711	10	Dr Gopal Sharma & Mr Navin Kr.
62	Saharsa	Bora Chaur	14	280	7	Mr. Gyanchandra gyani
63	Patna	Rajdhani Jalashay	14	171	8	Col. Amit Sinha & Mr. Anand Kumar
64	East Champaran	Gandak River	14	97	11	Dr. Kushagra Rajendra
65	Nalanda	Ghora Katora Forest trail	12	61	9	Dr Gopal Sharma & Mr Navin Kr.
66	Nalanda	Pavapuri Jal Mandir	11	802	7	Dr Gopal Sharma & Mr Navin Kr.
67	Nalanda	Pushpakarani tank	11	548	7	Dr Gopal Sharma & Mr Navin Kr.
68	Saharsa	Simri Chaur	10	266	8	Mr. Gyanchandra gyani
69	Katihar	Kathotia Fish Pond	10	220	5	Mr Arvind Mishra
70	West Champaran	Lal Sariya Maan	10	54	7	Dr. Niraj Kumar & Dr. Kushagra Rajendra
71	Saran	Phulwaria Chaur	9	26	6	Mr. Gyanchandra gyani
72	Saran	Hariya Chaur	8	63	5	Mr. Gyanchandra gyani
73	Nalanda	Giddhi Lake (Begumpur)	6	66	5	Dr Gopal Sharma & Mr Navin Kr.
74	Vaishali	Salha Chaur	4	32	3	Dr. Satyendra Kumar
75	Vaishali	Gandak River	2	40	2	Dr. Satyendra Kumar
76	Vaishali	Berai Chaur	1	1	1	Dr. Satyendra Kumar

Annexure 20. Number of individuals and species reported during Annual Waterbird Census 2022 & 2023

District	Wetland	No. of birds		No. of species	
		2023	2022	2023	2022
Araria	Kajra Dhar	275	NC	24	NC
Aurangabad	Indrapuri Barrage	3,021	2,657	30	30
Banka	Odhni Dam	1,128	2,003	42	53
Begusarai	Kanwar Lake	1,584	1,412	51	62
Begusarai	Pachaila Chaur	NC	693	NC	33
Bhagalpur	VGDS (Sultanpur to Mirzapur)	1,502	2,542	36	44
Bhagalpur	VGDS (Mirzapur to Bhagalpur)	980		36	
Bhagalpur	VGDS (Bhagalpur to Kahalgaon)	1,813	1,274	46	33
Bhagalpur	VGDS (Maniksarkar to Barari Ghat)	679	NC	47	NC
Bhagalpur	Jagatpur Lake	1,948	2,002	59	52
Bhagalpur	Ganga Prasad Lake, Gopalpur	1,391	1,646	41	54
Bhagalpur	Dimaha Dhar	346	NC	26	NC
Bhagalpur	Katiya Dhar	425	NC	25	NC
Bhagalpur	Bahatra	NC	68	NC	14
Bhagalpur	Athaniya	NC	12	NC	9
Buxar	Sewage Marsh	NC	142	NC	6
Buxar-Bhojpur	Chausa-Ahirauli Ganga	5,703	NC	42	NC
Buxar-Bhojpur	Gokul Jalashay	1,424	845	54	47
Buxar-Bhojpur	Sunki Suhiya	993	NC	33	NC
Darbhanga	Kusheshwar Sthan	793	120	31	17
Darbhanga	Kalma Jheel	NC	186	NC	21
East Champaran	Basmanpur Lake (Maun)	235	NC	26	NC
East Champaran	Bhoraha Lake	114	NC	20	NC
East Champaran	Gandak River	97	NC	14	NC
East Champaran	Sarotar Lake	482	1,217	24	49
East Champaran	Sonbarsa Lake	289	NC	25	NC
East Champaran	Chilraon Lake	NC	846	NC	50
Gaya	Barwadih	118	102	20	11
Gaya	Barandih Wetland	829	760	18	32
Gaya	Mohanpur reservior	NC	86	NC	11
Gaya	Sita Dam	NC	26	NC	6
Jamui	Bela Tand	650	594	31	34
Jamui	Devan Ahar	400	267	17	23
Jamui	Pailbajaan	241	326	17	19
Jamui	Garhi Dam	971	1,193	55	40
Jamui	Nagi	6,938	2,601	44	55
Jamui	Rail Pond	1,063	444	14	10
Jamui	Raja Ahar	373	NC	30	NC
Jamui	Nakti	7,844	1,926	29	33
Kaimur	Durgawati Jalashay	423	525	44	40
Kaimur	Dhrauli Lake	NC	335	NC	17
Katihar	Baldia Chaur	487	247	23	25
Katihar	Baghar Beel	1215	376	45	40

Annexure 20. Number of individuals and species reported during Annual Waterbird Census 2022 & 2023 (*contd.*)

District	Wetland	No. of birds		No. of species	
		2023	2022	2023	2022
Katihar	Kathotia Fish Pond	220	NC	10	NC
Katihar	Ganga (Kahalgaon to Manihari)	1,139	NC	41	NC
Khagaria	Pasraha Chaur	580	NC	32	NC
Madhubani	Chapaniya Lake	542	434	26	27
Munger	Ganga-Munger-Gagaria	1,763	NC	45	NC
Munger	Kharagpur Lake	NC	225	NC	13
Munger	Kukurjhap Lake	NC	36	NC	4
Muzaffarpur	Manika Lake	308	247	28	12
Muzaffarpur	Bhoosara Lake	127	NC	32	NC
Muzaffarpur	Bagmati River	154	NC	20	NC
Muzaffarpur	Brahmapura Lake	NC	332	NC	12
Muzaffarpur	Narsan Chaur	NC	70	NC	12
Muzaffarpur	Basaitha Chaur	NC	63	NC	15
Muzaffarpur	Batraulia Chaur	NC	1,783	NC	12
Muzaffarpur	Manikpur chaur	NC	152	NC	6
Muzaffarpur	Rewa ghat (Gandak River)	NC	1	NC	1
Nalanda	Gangaji Rajgriha Jalashaya	711	NC	14	NC
Nalanda	Ghora Katora Forest trail	61	NC	12	NC
Nalanda	Pushpakarani tank	548	30	11	3
Nalanda	Giddhi Lake (Begumpur)	66	81	6	12
Nalanda	Pavapuri Jal Mandir	802	460	11	11
Nalanda	Panchane River, Sainik School	388	NC	16	NC
Nalanda	Arm and Ammuniation factory	NC	491	NC	11
Nawada	Phulwaria Reservior	NC	423	NC	28
Nawada	Kulmahadev Dam	NC	3	NC	1
Nawada	Jabsalasaya Dam	NC	130	NC	1
Nawada	Hardiya Dam	1,254	NC	40	NC
Patna	Rajdhani Jalashay	171	1,009	14	34
Patna	Patna Jalla	NC	129	NC	11
Saharsa	Arsi Chaur	290	74	19	12
Saharsa	Simri Chaur	266	374	10	29
Saharsa	Kosi River Catchment Area	1,466	NC	26	NC
Saharsa	Bora Chaur	280	1,060	14	22
Saharsa	Jalai Chaur	575	538	17	42
Samastipur	Deokhal Chaur	724	92	66	17
Samastipur	Goela Chaur	615	NC	46	NC
Samastipur	Garuara Chaur	761	NC	52	NC
Samastipur	Kalyanpur Chaur	1,069	NC	38	NC
Samastipur	Tajpur Chaur	NC	582	NC	9
Samastipur	Satanpur Chaur	NC	174	NC	11
Saran	Atanagar	290	NC	33	NC
Saran	Bahiyara Chaur	1,125	345	48	17

Annexure 20. Number of individuals and species reported during Annual Waterbird Census 2022 & 2023 (*contd.*)

District	Wetland	No. of birds		No. of species	
		2023	2022	2023	2022
Saran	Phulwaria Chaur	26	NC	9	NC
Sheohar	Bagmati River	441	NC	34	NC
Supaul	Kosi River survey from Raniganj to kosi Mahasetu	402	NC	30	NC
Supaul	Kosi Catchment	983	1,287	47	75
Vaishali	Baraila Lake	253	55	15	9
Vaishali	Purainiya Chaur	283	119	15	11
Vaishali	Salha Chaur	32	NC	4	NC
Vaishali	Gandak River	40	NC	2	NC
Vaishali	Berai Chaur	1	NC	1	NC
West Champaran	Udaipur Wildlife Sanctuary	147	377	26	29
West Champaran	Lal Sariya Maan	54	13	10	3
West Champaran	Daruabari Wetland	128	72	27	11
West Champaran	Gandak River	732	803	16	24
West Champaran	Dhobhaha (VTR)	NC	30	NC	13
	Total	**69,935**	**45,137**		

Note: NC- Not covered

Annexure 21. Wetland-wise bird population range reported during Asian Waterbird Census 2023

District	Wetland	Bird population range
Jamui	Nakti	6000-7999
Jamui	Nagi	
Buxar-Bhojpur	Chausa-Ahirauli Ganga	4000-5999
Katihar	Gogabeel	2000-3999
Aurangabad	Indrapuri Barrage	
Bhagalpur	Jagatpur Lake	1000-1999
Bhagalpur	VGDS (Bhagalpur to Kahalgaon)	
Munger	Ganga-Munger-Gagania	
Begusarai	Kanwar Lake	
Bhagalpur	VGDS (Sultanganj to Mirzapur)	
Saharsa	Kosi River Catchment Area	
Buxar-Bhojpur	Gokul Jalashay	
Bhagalpur	Ganga Prasad Lake	
Nawada	Hardiya Dam	
Katihar	Baghar Beel	
Katihar	Ganga (Kahalgaon to Manihari)	
Banka	Odhni Dam	
Saran	Bahiyara Chaur	
Samastipur	Kalyanpur Chaur	
Jamui	Rail Pond	
Buxar-Bhojpur	Sunki Suhiya	800-999
Supaul	Kosi Catchment	
Bhagalpur	VGDS (Mirzapur to Bhagalpur)	
Jamui	Garhi Dam	
Gaya	Barandih Wetland	
Nalanda	Pawapuri Jal Mandir	
Darbhanga	Kusheshwar Sthan	600-799
Samastipur	Garuara Chaur	
West Champaran	Gandak River	
Samastipur	Deokhal Chaur	
Nalanda	Gangaji Rajgriha Jalashaya	
Bhagalpur	VGDS (Maniksarkar to Barari Ghat)	
Jamui	Bela Tand	
Samastipur	Goela Chaur	
Khagaria	Pasraha Chaur	400-599
Saharsa	Jalai Chaur	
Nalanda	Pushpakarani tank	
Madhubani	Chapaniya Lake	
Katihar	Baldia Chaur	
East Champaran	Sarotar Lake	
Sheohar	Bagmati River	
Bhagalpur	Katiya Dhar	
Kaimur	Durgawati Jalashay	
Supaul	Kosi River (Raniganj to kosi Mahasetu)	
Jamui	Devan Ahar	

Annexure 21. Wetland-wise bird population range reported during Asian Waterbird Census 2023 (*contd.*)

District	Wetland	Bird population range
Nalanda	Panchane River, Sainik School	200-399
Jamui	Raja Ahar	
Bhagalpur	Dimaha Dhar	
Muzaffarpur	Manika Lake	
Saharsa	Arsi Chaur	
Saran	Atanagar	
East Champaran	Sonbarsa Lake	
Vaishali	Purainiya Chaur	
Saharsa	Bora Chaur	
Araria	Kajra Dhar	
Saharsa	Simri Chaur	
Vaishali	Baraila Lake	
Jamui	Pailbajaan	
East Champaran	Basmanpur Lake	
Katihar	Kathotia Fish Pond	
Patna	Rajdhani Jalashaya	1-199
Muzaffarpur	Bagmati River	
West Champaran	Udaipur Wildlife Sanctuary	
West Champaran	Daruabari Wetland	
Muzaffarpur	Bhoosara Lake	
Gaya	Barwadih	
East Champaran	Bhoraha Lake	
East Champaran	Gandak River	
Nalanda	Giddhi Lake (Begampur)	
Saran	Hariya Chaur	
Nalanda	Ghora Katora Forest trail	
West Champaran	Lal Sariya Maan	
Vaishali	Gandak River	
Vaishali	Salha Chaur	
Saran	Phulwaria Chaur	
Vaishali	Berai Chaur	

Annexure 22. Wetland-wise bird species size reported during Asian Waterbird Census 2023

District	Wetland	Bird species size
Samastipur	Deokhal Chaur	61-70
Bhagalpur	Jagatpur Lake	51-60
Jamui	Garhi Dam	
Buxar-Bhojpur	Gokul Jalashaya	
Samastipur	Garuara Chaur	
Begusarai	Kanwar Lake	
Saran	Bahiyara Chaur	41-50
Bhagalpur	VGDS (Maniksarkar to Barari Ghat)	
Supaul	Kosi Catchment	
Bhagalpur	VGDS (Bhagalpur to Kahalgaon)	
Samastipur	Goela Chaur	
Katihar	Baghar Beel	
Munger	Ganga-Munger-Gagania	
Jamui	Nagi Dam	
Kaimur	Durgawati Jalashaya	
Banka	Odhni Dam	
Buxar-Bhojpur	Chausa-Ahirauli Ganga	
Bhagalpur	Ganga Prasad Lake	
Katihar	Ganga (Kahalgaon to Manihari)	
Nawada	Hardiya Dam	31-40
Katihar	Gogabeel	
Samastipur	Kalyanpur Chaur	
Bhagalpur	VGDS (Sultanganj to Mirzapur)	
Bhagalpur	VGDS (Mirzapur to Bhagalpur)	
Sheohar	Bagmati River	
Buxar-Bhojpur	Sunki Suhiya	
Saran	Atanagar	
Khagaria	Pasraha Chaur	
Muzaffarpur	Bhoosara Lake	
Darbhanga	Kusheshwar Sthan	
Jamui	Bela Tand	
Aurangabad	Indrapuri Barrage	21-30
Jamui	Raja Ahar	
Supaul	Kosi River (Raniganj to kosi Mahasetu)	
Jamui	Nakti Dam	
Muzaffarpur	Manika Lake	
West Champaran	Darwabari Wetland	
Bhagalpur	Dimaha Dhar	
East Champaran	Basmanpur Lake	
Madhubani	Chapaniya Lake	
Saharsa	Kosi River Catchment Area	
West Champaran	Udaipur Wildlife Sanctuary	
Bhagalpur	Katiya Dhar	
East Champaran	Sonbarsa Lake	
Araria	Kajra Dhar	
East Champaran	Sarotar Lake	
Katihar	Baldia Chaur	

Annexure 22: Wetland-wise bird species size reported during Asian Waterbird Census 2023 (*contd.*)

District	Wetland	Bird species size
East Champaran	Bhoraha Lake	11-20
Gaya	Barwadih	
Muzaffarpur	Bagmati River	
Saharsa	Arsi Chaur	
Gaya	Barandih Wetland	
Jamui	Devan Ahar	
Jamui	Pailbajaan	
Saharsa	Jalai Chaur	
Nalanda	Panchane River, Sainik School	
West Champaran	Gandak River	
Vaishali	Baraila Lake	
Vaishali	Purainiya Chaur	
East Champaran	Gandak River	
Jamui	Rail Pond	
Nalanda	Gangaji Rajgriha Jalashaya	
Patna	Rajdhani Jalashay	
Saharsa	Bora Chaur	
Nalanda	Ghora Katora Forest trail	
Nalanda	Pushpakarani tank	
Nalanda	Pawapuri Jal Mandir	
Katihar	Kathotia Fish Pond	1-10
Saharsa	Simri Chaur	
West Champaran	Lal Sariya Maan	
Saran	Phulwaria Chaur	
Saran	Hariya Chaur	
Nalanda	Giddhi Lake (Begumpur)	
Vaishali	Salha Chaur	
Vaishali	Gandak River	
Vaishali	Berai Chaur	

Annexure 23. Number of birds, species and families reported during Annual Waterbird Census 2023 & 2022

District	Wetland	No. of birds		No. of species		No. of families		WB Species		WD Species		LB Species	
		2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Araria	Kajra Dhar	275	NC	24	NC	16	NC	13	NC	3	NC	8	NC
Aurangabad	Indrapuri Barrage	3,021	2,657	30	30	12	16	22	10	4	3	2	3
Banka	Odhni Dam	1,128	2,003	42	53	22	31	27	12	6	3	9	16
Begusarai	Kanwar Lake	1,584	1,412	51	62	27	42	23	10	9	4	19	28
Bhagalpur	Jagatpur Lake	1,948	2,002	59	52	23	27	40	10	8	4	11	13
	Gangaprasad Lake	1,391	1,646	41	54	18	34	28	11	4	5	9	18
	Dimaha Dhar	346	NC	26	NC	16	NC	20	NC	1	NC	5	NC
	Katiyadhar	425	NC	25	NC	14	NC	15	NC	7	NC	3	NC
	Sultangaj to Mirzapur	1,502	2,542	36	NC	15	NC	27	NC	5	NC	4	NC
	Mirzapur to Bhagalpur	980		36	NC	16	NC	27	NC	4	NC	5	NC
	Bhagalpur to Kahalgaon	1,813	1,274	46	33	16	20	34	7	8	5	4	8
	Manik Sarkar to Barrari	679	NC	47	NC	21	NC	29	NC	5	NC	13	NC
Buxar-Bhojpur	Chausa-Ahirauli Ganga	5,703	NC	42	NC	19	NC	28	NC	6	NC	8	NC
	Gokul Jalashay	1,424	845	54	47	30	30	25	10	3	3	25	17
	Sunki Suhiya	993	NC	35	NC	18	NC	24	NC	6	NC	6	NC
Darbhanga	Kusheshwar Sthan	793	NC	31	NC	13	NC	27	NC	4	NC	0	NC
East Chambaran	Basmanpur Lake (Maun)	235	NC	26	NC	21	NC	7	NC	2	NC	17	NC
	Bhoraha Lake	114	NC	20	NC	15	NC	4	NC	2	NC	14	NC
	Gandak River	97	NC	14	NC	11	NC	4	NC	1	NC	9	NC
	Sarotar Lake	482	1,217	24	49	17	23	11	9	4	4	9	10
	Sonbarsa Lake	289	NC	25	NC	17	NC	14	NC	3	NC	8	NC
Gaya	Barandih	829	NC	18	NC	12	NC	13	NC	2	NC	3	NC
	Barwadih	118	NC	20	NC	12	NC	14	NC	2	NC	4	NC

Annexure 23. Number of birds, species and families reported during Annual Waterbird Census 2023 & 2022 (*contd.*)

District	Wetland	No. of birds		No. of species		No. of families		WB Species		WD Species		LB Species	
		2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Jamui	Bela Tand	650	594	31	34	15	17	24	9	3	1	4	7
	Devan Ahar	400	267	17	23	12	16	12	9	4	1	1	6
	Pailbajaan	241	326	17	19	13	12	9	7	1	1	7	4
	Garhi Dam	971	1,193	55	40	27	22	27	10	8	2	20	10
	Nagi	6,938	2,601	44	55	20	27	34	10	5	3	5	14
	Rail Pond	1,063	444	14	10	12	7	8	4	1	1	5	2
	Raja Ahar	373	NC	30	NC	12	NC	26	NC	2	NC	2	NC
	Nakti	7,844	1,926	29	33	10	17	27	9	1	3	1	5
Kaimur	Durgawati Jalashay	423	525	44	40	29	27	12	6	6	2	26	19
Katihar	Baldia Chaur	487	247	21	25	14	17	12	9	4	4	5	4
	Baghar Beel	1,215	376	44	40	25	23	24	10	4	5	16	8
	Gogabeel	3,281	4,992	39	41	18	17	28	10	4	2	7	5
	Kathotia Fish Pond	220	NC	9	NC	5	NC	9	NC	0	NC	0	NC
	Ganga (Kahalgaon to Manihari)	1,140	NC	41	NC	41	NC	27	NC	6	NC	8	NC
Khagaria	Pasraha Chaur	580	NC	32	NC	14	NC	27	NC	5	NC	0	NC
Madhubani	Chapaniya Lake	542	434	26	27	9	11	25	10	1	1	0	0
Munger	Ganga-Munger-Gagaria	1,763	NC	45	NC	19	NC	28	NC	8	NC	9	NC
Muzaffarpur	Manika Lake	308	247	28	12	20	11	8	5	3	0	17	6
	Bhoosara Lake	127	NC	32	NC	18	NC	13	NC	3	NC	16	NC
	Bagmati River	154	NC	20	NC	15	NC	6	NC	2	NC	12	NC
Nalanda	Gangaji Rajgriha Jalashaya	711	NC	14	NC	10	NC	10	NC	0	NC	4	NC
	Ghora Katora Forest trail	61	NC	12	NC	9	NC	0	NC	0	NC	12	NC
	Pushpakarani tank	548	30	11	3	7	3	10	2	0	1	1	0
	Giddhi Lake (Begumpur)	66	81	6	12	5	9	4	5	0	1	2	3
	Pavapuri Jal Mandir	802	460	11	11	7	5	9	4	1	0	1	1
	Panchane River, Sainik School	388	NC	16	NC	12	NC	10	NC	1	NC	5	NC
Nawada	Hardiya Dam	1,254	NC	40	NC	17	NC	34	NC	2	NC	4	NC

Annexure 23. Number of birds, species and families reported during Annual Waterbird Census 2023 & 2022 (*contd.*)

District	Wetland	No. of birds		No. of species		No. of families		WB Species		WD Species		LB Species	
		2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Patna	Rajdhani Jalashay	171	1,009	14	34	8	20	13	7	1	1	0	12
Saharsa	Arsi Chaur	290	74	19	12	10	9	16	6	3	2	0	1
	Simri Chaur	266	374	10	29	8	16	8	7	0	2	2	7
	Kosi River Catchment Area	1,466	1,287	26	75	14	32	14	10	3	5	9	17
	Bora Chaur	280	1,060	14	22	7	10	13	10	1	0	0	0
	Jalai Chaur	575	538	17	42	10	22	16	11	1	5	0	6
Samastipur	Deokhal Chaur	724	92	66	17	32	16	32	2	11	3	23	11
	Goela Chaur	615	NC	46	NC	26	NC	14	NC	10	NC	22	NC
	Garuara Chaur	761	NC	52	NC	30	NC	14	NC	11	NC	27	NC
	Kalyanpur Chaur	1,069	NC	38	NC	24	NC	13	NC	5	NC	20	NC
Saran	Atanagar	290	NC	33	NC	20	NC	16	NC	5	NC	12	NC
	Bahiyara Chaur	1,125	345	48	17	22	11	32	10	11	1	5	0
	Hariya Chaur	63	614	8	21	5	11	5	7	3	1	0	3
	Phulwaria Chaur	26	NC	9	NC	6	NC	6	NC	3	NC	0	NC
Sheohar	Bagmati River	441	NC	34	NC	21	NC	14	NC	4	NC	16	NC
Supaul	Kosi River survey from Raniganj to kosi Mahasetu	402	NC	30	NC	14	NC	23	NC	5	NC	2	NC
	Kosi Catchment	983	1,287	47	75	24	32	26	10	7	5	14	17
Vaishali	Baraila Lake	253	55	15	9	9	6	10	4	1	0	4	2
	Purainiya Chaur	283	119	15	11	10	7	8	3	3	1	4	3
	Salha Chaur	32	NC	4	NC	3	NC	3	NC	1	NC	0	NC
	Berai Chaur	1	NC	1	NC	1	NC	0	NC	0	NC	1	NC
	Gandak River	40	NC	2	NC	2	NC	2	NC	0	NC	0	NC
West Champaran	Udaipur Wildlife Sanctuary	147	377	26	29	14	18	15	8	7	2	4	8
	Lal Sariya Maan	54	13	10	3	7	3	8	2	2	0	0	1
	Daruabari Wetland	128	72	27	11	19	8	12	3	6	2	9	3
	Gandak River	732	803	17	24	12	18	13	8	3	4	1	6

Note: WB- Waterbird : WD- Wetland-dependent bird : LB- Landbird : NC – Not Covered

Annexure 24. List of birds reported during Asian Waterbird Census 2023

English name	Scientific name	Family	IUCN Category	Migratory Status
Grey Francolin	*Ortygornis pondicerianus*	Phasianidae	LC	R
Fulvous Whistling-duck	*Dendrocygna bicolor*	Anatidae	LC	R
Lesser Whistling-duck	*Dendrocygna javanica*	Anatidae	LC	R
Bar-headed Goose	*Anser indicus*	Anatidae	LC	M
Greylag Goose	*Anser anser*	Anatidae	LC	M
Common Shelduck	*Tadorna tadorna*	Anatidae	LC	M
Ruddy Shelduck	*Tadorna ferruginea*	Anatidae	LC	M
Cotton Pygmy-goose	*Nettapus coromandelianus*	Anatidae	LC	R
Common Merganser	*Mergus merganser*	Anatidae	LC	M
Red-crested Pochard	*Netta rufina*	Anatidae	LC	M
Common Pochard	*Aythya ferina*	Anatidae	VU	M
Ferruginous Duck	*Aythya nyroca*	Anatidae	NT	M
Tufted Duck	*Aythya fuligula*	Anatidae	LC	M
Garganey	*Spatula querquedula*	Anatidae	LC	M
Northern Shoveler	*Spatula clypeata*	Anatidae	LC	M
Falcated Duck	*Mareca falcata*	Anatidae	NT	M
Gadwall	*Mareca strepera*	Anatidae	LC	M
Eurasian Wigeon	*Mareca penelope*	Anatidae	LC	M
Mallard	*Anas platyrhynchos*	Anatidae	LC	M
Northern Pintail	*Anas acuta*	Anatidae	LC	M
Common Teal	*Anas crecca*	Anatidae	LC	M
Little Grebe	*Tachybaptus ruficollis*	Podicipedidae	LC	R
Great Crested Grebe	*Podiceps cristatus*	Podicipedidae	LC	M
Eurasian Collared-dove	*Streptopelia decaocto*	Columbidae	LC	R
Red Turtle-dove	*Streptopelia tranquebarica*	Columbidae	LC	R
Eastern Spotted Dove	*Spilopelia chinensis*	Columbidae	LC	R
Yellow-footed Green Pigeon	*Treron phoenicopterus*	Columbidae	LC	R
Common Pigeon	*Columba livia*	Columbidae	LC	R
Laughing Dove	*Spilopelia senegalensis*	Columbidae	LC	R
Asian Palm Swift	*Cypsiurus balasiensis*	Apodidae	LC	R
Little Swift	*Apus affinis*	Apodidae	LC	R
Greater Coucal	*Centropus sinensis*	Cuculidae	LC	R
Lesser Coucal	*Centropus bengalensis*	Cuculidae	LC	R
Common Hawk-cuckoo	*Hierococcyx varius*	Cuculidae	LC	R
Asian Koel	*Eudynamys scolopaceus*	Cuculidae	LC	R
Baillon's Crake	*Zapornia pusilla*	Rallidae	LC	DD
White-breasted Waterhen	*Amaurornis phoenicurus*	Rallidae	LC	R
Purple Swamphen	*Porphyrio porphyrio*	Rallidae	LC	R
Common Moorhen	*Gallinula chloropus*	Rallidae	LC	R
Common Coot	*Fulica atra*	Rallidae	LC	R / M
Sarus Crane	*Grus antigone*	Gruidae	VU	R
Greater Adjutant	*Leptoptilos dubius*	Ciconiidae	EN	R
Lesser Adjutant	*Leptoptilos javanicus*	Ciconiidae	VU	R
Painted Stork	*Mycteria leucocephala*	Ciconiidae	NT	R

Annexure 24. List of birds reported during Asian Waterbird Census 2023 (*contd.*)

English name	Scientific name	Family	IUCN Category	Migratory Status
Asian Openbill	*Anastomus oscitans*	Ciconiidae	LC	R
Black Stork	*Ciconia nigra*	Ciconiidae	LC	M
Asian Woollyneck	*Ciconia episcopus*	Ciconiidae	NT	R
Black-necked Stork	*Ephippiorhynchus asiaticus*	Ciconiidae	NT	R
Black-headed Ibis	*Threskiornis melanocephalus*	Threskiornithidae	NT	R
Red-naped Ibis	*Pseudibis papillosa*	Threskiornithidae	LC	R
Cinnamon Bittern	*Ixobrychus cinnamomeus*	Ardeidae	LC	R
Black Bittern	*Ixobrychus flavicollis*	Ardeidae	LC	R
Black-crowned Night-heron	*Nycticorax nycticorax*	Ardeidae	LC	R
Indian Pond-heron	*Ardeola grayii*	Ardeidae	LC	R
Cattle Egret	*Bubulcus ibis*	Ardeidae	LC	R
Grey Heron	*Ardea cinerea*	Ardeidae	LC	R
Purple Heron	*Ardea purpurea*	Ardeidae	LC	R
Great White Egret	*Ardea alba*	Ardeidae	LC	R / M
Intermediate Egret	*Ardea intermedia*	Ardeidae	LC	R
Little Egret	*Egretta garzetta*	Ardeidae	LC	R
Little Cormorant	*Microcarbo niger*	Phalacrocoracidae	LC	R
Great Cormorant	*Phalacrocorax carbo*	Phalacrocoracidae	LC	R / M
Indian Cormorant	*Phalacrocorax fuscicollis*	Phalacrocoracidae	LC	R
Oriental Darter	*Anhinga melanogaster*	Anhingidae	NT	R
Pied Avocet	*Recurvirostra avosetta*	Recurvirostridae	LC	M
Black-winged Stilt	*Himantopus himantopus*	Recurvirostridae	LC	R
Pacific Golden Plover	*Pluvialis fulva*	Charadriidae	LC	M
Little Ringed Plover	*Charadrius dubius*	Charadriidae	LC	R / M
Kentish Plover	*Charadrius alexandrinus*	Charadriidae	LC	R / M
Lesser Sandplover	*Charadrius mongolus*	Charadriidae	LC	M
Northern Lapwing	*Vanellus vanellus*	Charadriidae	NT	M
River Lapwing	*Vanellus duvaucelii*	Charadriidae	NT	R
Grey-headed Lapwing	*Vanellus cinereus*	Charadriidae	LC	M
Red-wattled Lapwing	*Vanellus indicus*	Charadriidae	LC	R
Greater Painted-snipe	*Rostratula benghalensis*	Rostratulidae	LC	R
Pheasant-tailed Jacana	*Hydrophasianus chirurgus*	Jacanidae	LC	R
Bronze-winged Jacana	*Metopidius indicus*	Jacanidae	LC	R
Eurasian Curlew	*Numenius arquata*	Scolopacidae	NT	M
Ruff	*Calidris pugnax*	Scolopacidae	LC	M
Temminck's Stint	*Calidris temminckii*	Scolopacidae	LC	M
Little Stint	*Calidris minuta*	Scolopacidae	LC	M
Pintail Snipe	*Gallinago stenura*	Scolopacidae	LC	M
Common Snipe	*Gallinago gallinago*	Scolopacidae	LC	M
Common Sandpiper	*Actitis hypoleucos*	Scolopacidae	LC	M
Green Sandpiper	*Tringa ochropus*	Scolopacidae	LC	M
Spotted Redshank	*Tringa erythropus*	Scolopacidae	LC	M
Common Greenshank	*Tringa nebularia*	Scolopacidae	LC	M

Annexure 24. List of birds reported during Asian Waterbird Census 2023 (*contd.*)

English name	Scientific name	Family	IUCN Category	Migratory Status
Common Redshank	*Tringa totanus*	Scolopacidae	LC	M
Wood Sandpiper	*Tringa glareola*	Scolopacidae	LC	M
Marsh Sandpiper	*Tringa stagnatilis*	Scolopacidae	LC	M
Dunlin	*Calidris alpina*	Scolopacidae	LC	M
Little Pratincole	*Glareola lactea*	Glareolidae	LC	R / M
Black-headed Gull	*Larus ridibundus*	Laridae	LC	M
Pallas's Gull	*Larus ichthyaetus*	Laridae	LC	M
Caspian Gull	*Larus cachinnans*	Laridae	LC	M
Little Tern	*Sternula albifrons*	Laridae	LC	M
Caspian Tern	*Hydroprogne caspia*	Laridae	LC	M
Whiskered Tern	*Chlidonias hybrida*	Laridae	LC	M
River Tern	*Sterna aurantia*	Laridae	VU	R
Spotted Owlet	*Athene brama*	Strigidae	LC	R
Osprey	*Pandion haliaetus*	Pandionidae	LC	M
Black-winged Kite	*Elanus caeruleus*	Accipitridae	LC	R
Oriental Honey-buzzard	*Pernis ptilorhynchus*	Accipitridae	LC	R
Crested Serpent-eagle	*Spilornis cheela*	Accipitridae	LC	R
Short-toed Snake-eagle	*Circaetus gallicus*	Accipitridae	LC	R
Greater Spotted Eagle	*Clanga clanga*	Accipitridae	VU	M
Steppe Eagle	*Aquila nipalensis*	Accipitridae	EN	M
Booted Eagle	*Hieraaetus pennatus*	Accipitridae	LC	M
Western Marsh-harrier	*Circus aeruginosus*	Accipitridae	LC	M
Pied Harrier	*Circus melanoleucos*	Accipitridae	LC	M
Shikra	*Accipiter badius*	Accipitridae	LC	R
Black Kite	*Milvus migrans*	Accipitridae	LC	R
White-eyed Buzzard	*Butastur teesa*	Accipitridae	LC	R
Long-legged Buzzard	*Buteo rufinus*	Accipitridae	LC	M
Indian Grey Hornbill	*Ocyceros birostris*	Bucerotidae	LC	R
Common Hoopoe	*Upupa epops*	Upupidae	LC	R
Asian Green Bee-eater	*Merops orientalis*	Meropidae	LC	R
Indian Roller	*Coracias benghalensis*	Coraciidae	LC	R
Common Kingfisher	*Alcedo atthis*	Alcedinidae	LC	R
Pied Kingfisher	*Ceryle rudis*	Alcedinidae	LC	R
Stork-billed Kingfisher	*Pelargopsis capensis*	Alcedinidae	LC	M
White-breasted Kingfisher	*Halcyon smyrnensis*	Alcedinidae	LC	R
Black-capped Kingfisher	*Halcyon pileata*	Alcedinidae	VU	R
Coppersmith Barbet	*Psilopogon haemacephalus*	Megalaimidae	LC	R
Brown-headed Barbet	*Psilopogon zeylanicus*	Megalaimidae	LC	R
Eurasian Wryneck	*Jynx torquilla*	Picidae	LC	R
Common Kestrel	*Falco tinnunculus*	Falconidae	LC	M
Lesser Kestrel	*Falco naumanni*	Falconidae	LC	R
Peregrine Falcon	*Falco peregrinus*	Falconidae	LC	M
Plum-headed Parakeet	*Himalayapsitta cyanocephala*	Psittacidae	LC	R
Red-breasted Parakeet	*Psittacula alexandri*	Psittacidae	NT	R

Annexure 24. List of birds reported during Asian Waterbird Census 2023 (*contd.*)

English name	Scientific name	Family	IUCN Category	Migratory Status
Rose-ringed Parakeet	*Alexandrinus krameri*	Psittacidae	LC	R
Alexandrine Parakeet	*Palaeornis eupatria*	Psittacidae	NT	R
Black-hooded Oriole	*Oriolus xanthornus*	Oriolidae	LC	R
Indian Golden Oriole	*Oriolus kundoo*	Oriolidae	LC	R
Large Cuckooshrike	*Coracina javensis*	Campephagidae	LC	R
White-throated Fantail	*Rhipidura albicollis*	Rhipiduridae	LC	R
Black Drongo	*Dicrurus macrocercus*	Dicruridae	LC	R
Ashy Drongo	*Dicrurus leucophaeus*	Dicruridae	LC	R
Brown Shrike	*Lanius cristatus*	Laniidae	LC	M
Long-tailed Shrike	*Lanius schach*	Laniidae	LC	R
Grey-backed Shrike	*Lanius tephronotus*	Laniidae	LC	R
Rufous Treepie	*Dendrocitta vagabunda*	Corvidae	LC	R
House Crow	*Corvus splendens*	Corvidae	LC	R
Large-billed Crow	*Corvus macrorhynchos*	Corvidae	LC	R
Ashy-crowned Sparrow-lark	*Eremopterix griseus*	Alaudidae	LC	R
Bengal Bushlark	*Mirafra assamica*	Alaudidae	LC	R
Indian Bushlark	*Mirafra erythroptera*	Alaudidae	LC	
Sand Lark	*Alaudala raytal*	Alaudidae	LC	R
Oriental Skylark	*Alauda gulgula*	Alaudidae	LC	R / LM
Zitting Cisticola	*Cisticola juncidis*	Cisticolidae	LC	R
Golden-headed Cisticola	*Cisticola exilis*	Cisticolidae	LC	R
Ashy Prinia	*Prinia socialis*	Cisticolidae	LC	R
Plain Prinia	*Prinia inornata*	Cisticolidae	LC	R
Common Tailorbird	*Orthotomus sutorius*	Cisticolidae	LC	R
Paddyfield Warbler	*Acrocephalus agricola*	Acrocephalidae	LC	M
Clamorous Reed-warbler	*Acrocephalus stentoreus*	Acrocephalidae	LC	R / M
Red-rumped Swallow	*Cecropis daurica*	Hirundinidae	LC	LM
House Swallow	*Hirundo javanica*	Hirundinidae	LC	R
Barn Swallow	*Hirundo rustica*	Hirundinidae	LC	M
Plain Martin	*Riparia paludicola*	Hirundinidae	LC	R
Dusky Crag Martin	*Ptyonoprogne concolor*	Hirundinidae	LC	M
Pale Sand Martin	*Riparia diluta*	Hirundinidae	LC	R
Red-whiskered Bulbul	*Pycnonotus jocosus*	Pycnonotidae	LC	R
Himalayan Bulbul	*Pycnonotus leucogenys*	Pycnonotidae	LC	R
Red-vented Bulbul	*Pycnonotus cafer*	Pycnonotidae	LC	R
Dusky Warbler	*Phylloscopus fuscatus*	Phylloscopidae	LC	M
Yellow-eyed Babbler	*Chrysomma sinense*	Paradoxornithidae	LC	R
Indian White-eye	*Zosterops palpebrosus*	Zosteropidae	LC	R
Chestnut-capped Babbler	*Timalia pileata*	Timaliidae	LC	R
Jungle Babbler	*Argya striata*	Leiotrichidae	LC	R
Striated Babbler	*Argya earlei*	Leiotrichidae	LC	R
Indian Pied Starling	*Gracupica contra*	Sturnidae	LC	R
Brahminy Starling	*Sturnia pagodarum*	Sturnidae	LC	R
Chestnut-tailed Starling	*Sturnia malabarica*	Sturnidae	LC	R

Annexure 24. List of birds reported during Asian Waterbird Census 2023 (*contd.*)

English name	Scientific name	Family	IUCN Category	Migratory Status
Common Myna	*Acridotheres tristis*	Sturnidae	LC	R
Bank Myna	*Acridotheres ginginianus*	Sturnidae	LC	R
Jungle Myna	*Acridotheres fuscus*	Sturnidae	LC	R
Oriental Magpie-robin	*Copsychus saularis*	Muscicapidae	LC	R
Indian Robin	*Copsychus fulicatus*	Muscicapidae	LC	R
Asian Brown Flycatcher	*Muscicapa dauurica*	Muscicapidae	LC	R
Bluethroat	*Luscinia svecica*	Muscicapidae	LC	M
White-capped Water-redstart	*Phoenicurus leucocephalus*	Muscicapidae	LC	R
Black Redstart	*Phoenicurus ochruros*	Muscicapidae	LC	R
Blue Rock Thrush	*Monticola solitarius*	Muscicapidae	LC	R
Pied Bushchat	*Saxicola caprata*	Muscicapidae	LC	R
Common Stonechat	*Saxicola torquatus*	Muscicapidae	LC	M
Brown Rockchat	*Oenanthe fusca*	Muscicapidae	LC	R
Purple Sunbird	*Cinnyris asiaticus*	Nectariniidae	LC	R
Black-breasted Weaver	*Ploceus benghalensis*	Ploceidae	LC	R
Red Avadavat	*Amandava amandava*	Estrildidae	LC	R
Indian Silverbill	*Euodice malabarica*	Estrildidae	LC	R
Scaly-breasted Munia	*Lonchura punctulata*	Estrildidae	LC	R
House Sparrow	*Passer domesticus*	Passeridae	LC	R
Richard' Pipit	*Anthus richardi*	Motacillidae	LC	M
Rosy Pipit	*Anthus roseatus*	Motacillidae	LC	M
Paddyfield Pipit	*Anthus rufulus*	Motacillidae	LC	R
Grey Wagtail	*Motacilla cinerea*	Motacillidae	LC	M
Citrine Wagtail	*Motacilla citreola*	Motacillidae	LC	M
Eastern Yellow Wagtail	*Motacilla tschutschensis*	Motacillidae	LC	M
White-browed Wagtail	*Motacilla maderaspatensis*	Motacillidae	LC	M
White Wagtail	*Motacilla alba*	Motacillidae	LC	M

Note: LC- Least Concern; VU- Vulnerable; NT- Near- threatened; EN-Endangered
M- Long-distance migratory; LM- Local Migrant; DD - Data Deficient ; R- Resident

Annexure 25. List of people involved in Asian Waterbird Census 2023

District	DFOs Details	Coordinators Details	Wetland	AWC Participants Details	Role	Mail ID of the Participant
Araria	Mr. Naresh Prasad	Mr. Gyanchandra Gyani gyanchandragyani@Gmail.Com Sh. Sudan Sahai	Kajra Dhar	Rajkishor Kumar	Birder	rajkishorkumar6546@gmail.com
-do-	-do-	-do-	-do-	Chandan Kumar	Recorder	moryachandan735@gmail.com
-do-	-do-	-do-	-do-	Priytam Kr. Priyanshu	Documenter	priytampriyanshu47@gmail.com
-do-	-do-	-do-	-do-	Ratnesh Kumar	Assistant	ratneshkumar36196@gmail.com
Aurangabad	Mr. Tejas Jaiswal	Mr S Sudhakar sudhakarifs@gmail.com	Indrapuri Barrage	Manoj Kumar Mishra	ROF	manojmishraforest@gmail.com
-do-	-do-	-do-	-do-	Amit Kumar	ROF	amitk751983@gmail.com
-do-	-do-	-do-	-do-	Pushp Mala	Forester	pushpmaurya25@gmail.com
Banka	Mr. Abhishek	Prof. DN Choudhary dncgopal08@gmail.com	Odhni Dam	Rahul Rohitaswa	Birder	mnc_rahul2007@rediffmail.com
-do-	-do-	-do-	-do-	Sumit Kumar Sum	Photographer	sumitk.sum@gmail.com
-do-	-do-	-do-	-do-	Jay Kumar Jay	Birder	jaykumarjay2505@gmail.com
-do-	-do-	-do-	-do-	Pintu Kumar Azad	Birder	pintuk10991kumar@gmail.com
-do-	-do-	-do-	-do-	Rajeev Kumar	Forest Guard	
Begusarai	Mr. R K Ravi	Dr. P Sathiyaselvam Bnhs.sathiyaselvam@bnhs.org Mr. Sohail Madan s.madan@bnhs.org	Kanwar Lake	Rahul Kumar	Documenter	
-do-	-do-	-do-	-do-	Vijay Kumar	Documenter	
-do-	-do-	-do-	-do-	Khushboo Rani	Birder	k.rani@bnhs.org
-do-	-do-	-do-	-do-	Jitendra Sahani	Assistant	
-do-	-do-	-do-	-do-	Randhir Kumar	Spotter	
Bhagalpur	Mr. Bharat Chintapalli dfobhagalpur@gmail.com	Prof D. N. Choudhary dncgopal08@Gmail.com	Jagatpur Lake	Mahesh Bharti	Spotter	

Annexure 25. List of people involved in Asian Waterbird Census 2023 (*contd.*)

District	DFOs Details	Coordinators Details	Wetland	AWC Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Sumit Kumar Sum	Photographer	sumitk.sum@gmail.com
-do-	-do-	-do-	-do-	Dr. T.K.Gosh	Birder	tkzool@yahoo.co.in
-do-	-do-	-do-	-do-	Atul Samiran	Birder	atulsamiran@gmail.com
-do-	-do-	-do-	-do-	Rahul Nayan	Birder	rahulnayan1993@gmail.com
-do-	-do-	-do-	-do-	Gopal Roy	Birder	royg47130@gmail.com
-do-	-do-	-do-	-do-	P.N. Singh	ROF	
-do-	-do-	-do-	-do-	Punam Kumari	Forester	
-do-	-do-	-do-	Gangaprasad Jheel	Rajeev Kumar Ranjan	Recorder	rrrajeevkumar84@gmail.com
-do-	-do-	-do-	-do-	Deepak Kumar	Photographer	dpk.id1980@gmail.com
-do-	-do-	-do-	-do-	Rahul Nayan	Birder	rahulnayan1993@gmail.com
-do-	-do-	-do-	-do-	Gopal Roy	Birder	royg47130@gmail.com
-do-	-do-	-do-	-do-	Sumit Kumar	Forest Guard	
-do-	-do-	-do-	Kataiya Dhar	Gyan Chandra Gyani		gyanchandragyani@gmail.com
-do-	-do-	-do-	-do-	Sumit Kr Sum		
-do-	-do-	-do-	-do-	Dr. Sanjit Kumar		
-do-	-do-	-do-	Dimaha Dhar	Deepak Kumar		
-do-	-do-	-do-	-do-	Vatan Kumar		
-do-	-do-	-do-	-do-	Gyan Chandra Gyani		gyanchandragyani@gmail.com
-do-	-do-	-do-	-do-	Sumit Kr Sum		
-do-	-do-	-do-	-do-	Dr. Sanjit Kumar		
-do-	-do-	Mr. Vatan Kumar	Ganga River - Manik Sarkar Ghat - to Barari Ghat	Mrinal Kaushik		
-do-	-do-	Mr. Rahul Rohitashwa Gene7.Rahul@gmail.Com	VGDS: Sultanganj to Mirzapur	Gaurav Sinha	Birder	gauravsinhaaa.1990@gmail.com
-do-	-do-	-do-	-do-	Jay Kumar Jay	Photographer	jaykumarjay2505@gmail.com
-do-	-do-	-do-	-do-	Mohammad Rizwan	Birder	mohammadrizwan8102@gmail.com
-do-	-do-	-do-	-do-	Vikramjeet Singh	Birder	vikramjeetsingh55340@gmail.com
-do-	-do-	-do-	-do-	Yogendra Mahaldar	Dolphin Mitra	

Annexure 25. List of people involved in Asian Waterbird Census 2023 (*contd.*)

District	DFOs Details	Coordinators Details	Wetland	AWC Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Santosh Kumar Sahani	Recorder	kumarsahanisantosh6@gmail.com
-do-	-do-	-do-	-do-	Santosh Kumar Jha	Spotter	sjha3808@gmail.com
-do-	-do-	-do-	-do-	Subash Das	Forest Guard	subashdasjamui@gmail.com
-do-	-do-	-do-	-do-	Mini Kumari	Forester	minijha@gmail.com
-do-	-do-	Prof Sunil Choudhary Sunil_Vikramshila@yahoo.co.in	VGDS: Mirzapur to Barari Ghat Bhagalpur			
-do-	-do-	Mr. Bharat Chintapalli Dfobhagalpur@gmail.Com	VGDS: Barari Ghat Bhagalpur to Bateshwarsthan			
Bhojpur	Mr. Raj Kumar	Mr. Arvind Mishra Mnarvind@Hotmail.Com	Sunki Suhiya - Shahpur	Sandeep Kumar	Bird Guide	sandeep98pkjaje@gmail.com
-do-	-do-	-do-	-do-	Manish Kumar Yadav	Bird Guide	mY3819988@gmail.com
-do-	-do-	-do-	-do-	Harshit Ranjan	Observer	sharmavarsha@gmail.com
-do-	-do-	-do-	-do-	Rajni Kant Srivastava	Observer	ararajni5268@gmail.com
-do-	-do-	-do-	-do-	Ranjan Kumar Sharma	ROF	sharmaranjanmth1974@gmail.com
-do-	-do-	-do-	-do-	Anjali Kumari	Forester	sinhakanjali@gmail.com
-do-	-do-	-do-	-do-	Amitabh Saurabh	Forest Guard	amitpallu837@gmail.com
-do-	-do-	-do-	-do-	Manish Kumar	Forest Guard	
-do-	-do-	-do-	-do-	Anuj Kumar	Forest Guard	anujk0940@gmail.com
-do-	-do-	-do-	-do-	Ranjan Kumar Yadav	Forest Guard	
Buxar	Mr. Raj Kumar	Mr. Arvind Mishra Mnarvind@Hotmail.Com	Gokul Jalashay	Sandeep Kumar	Bird Guide	sandeep98pkjaje@gmail.com
-do-	-do-	-do-	-do-	Manish Kumar Yadav	Bird Guide	mY3819988@gmail.com
-do-	-do-	-do-	-do-	Shailesh Kumar Rai	DPO, Namami Gange	shaileshkumarrai478@gmail.com
-do-	-do-	-do-	-do-	T P Singh	ROF	
-do-	-do-	-do-	-do-	Ranjan Kumar Sharma	ROF	sharmaranjanmth1974@gmail.com

Annexure 25. List of people involved in Asian Waterbird Census 2023 (*contd.*)

District	DFOs Details	Coordinators Details	Wetland	AWC Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Ruchi Kumari	ROF	ruchukumari12101993@gmail.com
-do-	-do-	-do-	-do-	Sarika Kumari	Forester	sarikakumari7779@gmail.com
-do-	-do-	-do-	-do-	Anjali Kumari	Forester	sinhakanjali@gmail.com
-do-	-do-	-do-	-do-	Mahima Ram Kumar	Forest Guard	mahimaram91gmail.com
-do-	-do-	-do-	-do-	Guddu Kumar Singh	Forest Guard	gksingh1994@gmail.com
-do-	-do-	-do-	-do-	Raj Kumar Paswan	Forest Guard	rajkumarrf4291@gmail.com
-do-	-do-	-do-	-do-	Meera Kumari	Forest Guard	meeraabrf@gmail.com
-do-	-do-	-do-	-do-	Hare Ram Rajbihar	CG	
Darbhanga	Mr. Subodh Kumar Gupta	Dr. Gopal Sharma Gopal_dolphinboy@rediffmail.com Mr. Naveen Kumar Naveenkumaribcn@gmail.com	Kusheshwar Asthan	Md. Maaz	Recorder	maaz.unicorn@gmail.com
-do-	-do-	-do-	-do-	Md. Sahhwaz	Documenter	shahwazvegeta@gmail.com
East Champaran	Ms. Shweta Kumari	Dr. Niraj Kumar Dr.Knirajj@Gmail.Com Dr. Kushagra Rajendra Krajendra@Ggn.Amity.Edu	Sarotar Wetland	Sh. Prashant Kumar	Birder	lucifer7261@gmail.com
-do-	-do-	-do-	-do-	Sh. Abhay Kumar	Birder	rishabhkush802@gmail.com
-do-	-do-	-do-	-do-	Guddu Kumar	Recorder	krguddu055@gmail.com
-do-	-do-	-do-	-do-	Shambhu Singh	ROF	
-do-	-do-	-do-	-do-	Shashi Raj	Forest Guard	
-do-	-do-	-do-	-do-	Tribhuan Singh	CG	
-do-	-do-	-do-	-do-	Dasrath Sahni	CG	
-do-	-do-	-do-	Basmanpur Maun	Rajnish Patel	Forest Guard	
-do-	-do-	-do-	Sonbarsa Maun	Vijay Choubey	ROF	
-do-	-do-	-do-	-do-	Jitendra K Mahto	Forester	
-do-	-do-	-do-	-do-	Mukesh K Suman	Forest Guard	
-do-	-do-	-do-	Bhoraha Maun			

Annexure 25. List of people involved in Asian Waterbird Census 2023 (*contd.*)

District	DFOs Details	Coordinators Details	Wetland	AWC Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	Gandak River Of East Champaran			
Gaya	Mr. Rajeev Ranjan	Mr. S Sudhakar sudhakarifs@gmail.com Mr. Rajeev Ranjan dfogaya@gmail.com	Barandih Dam	Vivekanand Swamy	ROF	
-do-	-do-	-do-	-do-	Avinash Kumar Singh	Forest Guard	avinashsingh848209@gmail.com
-do-	-do-	-do-	-do-	Rukesh Kumar	Forest Guard	rukeshkumar1818@gmail.com
-do-	-do-	-do-	-do-	Sanjay Yadav	Tracker	
-do-	-do-	-do-	Barwadih			
Jamui	Mr. Piush Baranwal	Mr. Arvind Mishra mnarvind@hotmail.com	Nagi Dam	Ms. Ashu Mishra	Documenter	mishraashu1133@gmail.com
-do-	-do-	-do-	-do-	Deepak Kumar	Photographer	dk05365@gmail.com
-do-	-do-	-do-	-do-	Ashutosh Kumar	Bird guide	ashutosh.kumar.0620@gmail.com
-do-	-do-	-do-	-do-	Bablu Kumar	Bird guide	br523605@gmail.com
-do-	-do-	-do-	-do-	Bambam Kumar	Bird guide	bkr12062001@gmail.com
-do-	-do-	-do-	-do-	Abdhesh Kumar	Bird guide	abdheshkhairan@gmail.com
-do-	-do-	-do-	-do-	Gautam Kumar	Bird guide	gautamkumar87092@gmail.com
-do-	-do-	-do-	-do-	Manish Kumar Yadav	Bird guide	mY3819988@gmail.com
-do-	-do-	-do-	-do-	Pintu Kumar Yadav	Bird guide	Pintukumary534@gmail.com
-do-	-do-	-do-	-do-	Pradeep Kumar	Bird guide	yadubansirajpremdeep@gmail.com
-do-	-do-	-do-	-do-	Ravindra Kumar	Bird guide	K.K.9684@gmal.com
-do-	-do-	-do-	-do-	Sahdeo Yadav	Bird guide	sahdeo7061320747@gmail.com
-do-	-do-	-do-	-do-	Sandeep Kumar	Bird guide	sandeep98pkjaje@gmail.com
-do-	-do-	-do-	-do-	Sanoj Kumar	Bird guide	sk3892505@gmail.com
-do-	-do-	-do-	-do-	Shyam Sunder Yadav	Bird guide	shyamrnfi@gmail.com
-do-	-do-	-do-	-do-	Vikas Kumar Yadav	Bird guide	bkyadav10496@gmail.com
-do-	-do-	-do-	-do-	Yugal Kumar	Bird guide	kumaryugal31@gmail.com

Annexure 25. List of people involved in Asian Waterbird Census 2023 (*contd.*)

District	DFOs Details	Coordinators Details	Wetland	AWC Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Megha Yadav	ACF Jamui	
-do-	-do-	-do-	-do-	Uday Shanker	ROF	
-do-	-do-	-do-	-do-	Vinay Kumar	Forest Guard	ckpir09@gmail.com
-do-	-do-	-do-	-do-	Suman Kumar Suman	Forest Guard	sumankumarsuman71096@gmail.com
-do-	-do-	-do-	-do-	Saurabh Kumar	Forest Guard	saurabhkumar7654626954@gmail.com
-do-	-do-	-do-	-do-	Sanjeet Kumar	Forest Guard	sanjeetkumar3973@gmail.com
-do-	-do-	-do-	Nakti Dam	-do-	-do-	-do-
-do-	-do-	-do-	Belatar	-do-	-do-	-do-
-do-	-do-	-do-	Pailbajan	-do-	-do-	-do-
-do-	-do-	-do-	Devanahaar	-do-	-do-	-do-
-do-	-do-	-do-	Garhi Dam- Part 1	-do-	-do-	-do-
-do-	-do-	-do-	Jhajha Railway Pond	-do-	-do-	-do-
-do-	-do-	-do-	Raja Ahar	-do-	-do-	-do-
		Ms. Megha Yadav	Garhi Dam			
Kaimur	Mr. Chanchal Prakasham	Mr. Gopal Sharma	Durgawati Dam			
Katihar	Mr. Bhaskar Chandra Bharati	Mr. Arvind Mishra mnarvind@hotmail.com	Gogabeel	Ms. Ashu Mishra	Documenter	mishraashu1133@gmail.com
-do-	-do-	-do-	-do-	Ashutosh Kumar	Bird guide	ashutosh.kumar.0620@gmail.com
-do-	-do-	-do-	-do-	Anand Sharma	Bird guide	anandsharma76026@gmail.com
-do-	-do-	-do-	-do-	Pankaj Raj	Forest Guard	pankajyadavbihar1998@gmail.com
-do-	-do-	-do-	Bagharbeel	-do-	-do-	-do-
-do-	-do-	-do-	Kathotia Fish Pond	-do-	-do-	-do-
-do-	-do-	-do-	Baldiya Chaur	-do-	-do-	-do-
-do-	-do-	Mr. Deepak Kumar Dk05365@gmail.com	Ganga- Bateshwar Sthan to Manihari Ghat	Gaurav Sinha	Birder	gauravsinhaaa.1990@gmail.com
-do-	-do-	-do-	-do-	Rajeev Kumar Ranjan	Spotter	rrajeevkumar84@gmail.com
-do-	-do-	-do-	-do-	Sambhu Kumar	Dolphin Mitra	
-do-	-do-	-do-	-do-	Rahul Kumar	Dolphin Mitra	
-do-	-do-	-do-	-do-	Dhiraj Kumar	Dolphin Mitra	

Annexure 25. List of people involved in Asian Waterbird Census 2023 (*contd.*)

District	DFOs Details	Coordinators Details	Wetland	AWC Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Rajeev Raaj	Dolphin Mitra	
-do-	-do-	-do-	-do-	Chandan Sahni	Dolphin Mitra	
-do-	-do-	-do-	-do-	Ramashanker Singh	Dolphin Mitra	
Khagaria	Mr. R K Ravi	Mr. Gyanchandra Gyani gyanchandragyani@gmail.com	Pasraha Chaur	Rajkishor Kumar	Birder	rajkishorkumar6546@gmail.com
-do-	-do-	-do-	-do-	Chandan Kumar	Recorder	moryachandan735@gmail.com
-do-	-do-	-do-	-do-	Priytam Kr. Priyanshu	Documenter	priytampriyanshu47@gmail.com
-do-	-do-	-do-	-do-	Ratnesh Kumar	Assistant	ratneshkumar36196@gmail.com
Madhubani	Mr. Subodh Kumar Gupta	Dr. Gopal Sharma gopal_dolphinboy@rediffmail.com Mr. Naveen Kumar naveenkumaribcn@gmail.com	Chapaniya Lake	Md. Maaz		
-do-	-do-	-do-	-do-	Md. Sahhwaz		
-do-	-do-	-do-	-do-	Shivani Jaiswal		
Munger	Mr. Gaurav Ojha	Dr. P Sathiyaselvam bnhs.sathiyaselvam@bnhs.org Mr. Sohail Madan s.madan@bnhs.org	Ganga- Kashtarni Ghat to Bariyarpur	Rahul Kumar	Documenter	
-do-	-do-	-do-	-do-	Vijay Kumar	Documenter	
-do-	-do-	-do-	-do-	Khushboo Rani	Birder	
-do-	-do-	-do-	-do-	Md. Asik	Assistant	
Muzaffarpur	Mr. Abhishek Kumar	Dr. Niraj Kumar Dr.Kniraj@gmail.com Dr. Kushagra Rajendra krajendra@ggn.amity.edu	Manika Maun	Sh. Prashant Kumar	Birder	lucifer7261@gmail.com
-do-	-do-	-do-	-do-	Sh. Abhay Kumar	Birder	rishabhkush802@gmail.com
-do-	-do-	-do-	-do-	Guddu Kumar	Recorder	krguddu055@gmail.com
-do-	-do-	-do-	-do-	Binod Kumar	Forest Guard	
-do-	-do-	-do-	Batrauliya Chaur			

Annexure 25. List of people involved in Asian Waterbird Census 2023 (*contd.*)

District	DFOs Details	Coordinators Details	Wetland	AWC Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	Bhoosara Maun	Santosh Kumar	Forest Guard	
Nalanda	Mr. Vikas Ahlawat	Dr. Gopal Sharma gopal_dolphinboy@rediffmail.com	Gidhi Lake	Shil Asheesh	Recorder	
-do-	-do-	-do-	-do-	Md. Maaz	Recorder	maaz.unicorn@gmail.com
-do-	-do-	-do-	-do-	Md. Sahahbaz	Recorder	shahwazvegeta@gmail.com
-do-	-do-	-do-	Pushkarni Lake			
-do-	-do-	-do-	Panchane River			
-do-	-do-	-do-	Ganga Jalashay Rajgir			
-do-	-do-	-do-	Gora Katora			
-do-	-do-	Mr. Navin Kumar navinkumaribcn@gmail.com	Gora Katora			
Nawada	Mr. Sanjeev Ranjan	Mr. S Sudhakar sudhakarifs@gmail.com Mr. Sanjeev Ranjan dfonawada@rediffmail.com	Hardiya Dam	Rajkumar Paswan	Forester	
-do-	-do-	-do-	-do-	Sankesh Kumar	Forest Guard	
-do-	-do-	-do-	-do-	Ganesh Kumar	Forest Guard	
Patna	Mr. Shashikant	Mr. Shashikant Mr. Anand Kumar Col. Amit Sinha kunwarji25@yahoo.co.in	Rajdhani Jalashay	Prof. Shahla Yasmin	Spotter	shahla.02apex@gmail.com
-do-	-do-	-do-	-do-	Md. Maaz	Recorder	maaz.unicorn@gmail.com
-do-	-do-	-do-	-do-	Md. Sahahbaz	Recorder	shahwazvegeta@gmail.com
-do-	-do-	-do-	-do-	Dr. Reshmi Komal	Spotter	rashmi0911@gmail.com
-do-	-do-	-do-	-do-	Ms. Saloni Kumari	Recorder	salonirepublic1994@rediffmail.com
-do-	-do-	-do-	-do-	Dr. Gaurav Kumar	Spotter	gourav.raj.gwl@gmail.com
Saharsa	Mr. RK Sinha	Mr. Gyanchandra Gyani gyanchandragyani@gmail.com	Simri Jheel	Sh. Rajkishor Kumar	Birder	rajkishorkumar6546@gmail.com
-do-	-do-	-do-	-do-	Sh. Chandan Kumar	Recorder	moryachandan735@gmail.com

Annexure 25. List of people involved in Asian Waterbird Census 2023 (*contd.*)

District	DFOs Details	Coordinators Details	Wetland	AWC Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Sh. Priytam Kr. Priyanshu	Documenter	priytampriyanshu47@gmail.com
-do-	-do-	-do-	-do-	Sh. Ratnesh Kumar	Assistant	ratneshkumar36196@gmail.com
-do-	-do-	-do-	Arsi Chaur			
-do-	-do-	-do-	Bora Chaur			
-do-	-do-	Dr. Gopal Sharma gopal_dolphinboy@rediffmail.com Mr. Navin Kumar navinkumaribcn@gmail.com	Jalai Chaur	Sh. Ahbar Alam	Birder	ahbaralam@gmail.com
-do-	-do-	-do-	-do-	Ms. Shivani Jaiswal	Documenter	shivanijaisawal013@gmail.com
-do-	-do-	-do-	-do-	Sh. Sailendra Kumar	Forest Guard	
-do-	-do-	-do-	-do-	Mr. Shubham Kumar	Forest Guard	
Supaul	-do-	-do-	Kosi River from Rani			
Saharsa and Supaul	Mr. RK Sinha	Dr. Gopal Sharma gopal_dolphinboy@rediffmail.com Mr. Navin Kumar navinkumaribcn@gmail.com	Kosi Catchment of Supaul and Saharsa	Shil Asheesh	Recorder	
-do-	-do-	-do-	-do-	Md. Maaz	Recorder	maaz.unicorn@gmail.com
-do-	-do-	-do-	-do-	Md. Sahahbaz	Recorder	shahwazvegeta@gmail.com
-do-	-do-	-do-	-do-	Mithilesh Kumar	Forest Guard	
Samastipur	Mr. Subodh Kumar Gupta	Mr. Amir Rizwan Khan khanaamirrizwan@gmail.com	Goela Chaur	Vrajbhar Kumar	Forest Guard	
-do-	-do-	-do-	-do-	Md. Ahsamul Haq	Forest Guard	
-do-	-do-	-do-	-do-	Prof. Vidyanath Jha		
-do-	-do-	-do-	Kalyanpur Chaur	Mr. Lalita Narayan Shah		
-do-	-do-	-do-	Garuara Chaur			
Saran	Mr. Ramsundar	Mr. Gyanchandra Gyani gyanchandragyani@gmail.com	Hariya Chaur	Rajkishor Kumar	Birder	rajkishorkumar6546@gmail.com
-do-	-do-	-do-	-do-	Chandan Kumar	Recorder	moryachandan735@gmail.com
-do-	-do-	-do-	-do-	Priytam Kr. Priyanshu	Documenter	priytampriyanshu47@gmail.com

Annexure 25. List of people involved in Asian Waterbird Census 2023 (*contd.*)

District	DFOs Details	Coordinators Details	Wetland	AWC Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Ratnesh Kumar	Assistant	ratneshkumar36196@gmail.com
-do-	-do-	-do-	-do-	Bharat Singh	Forest Guard	
-do-	-do-	-do-	-do-	Pankaj Kumar	Forest Guard	
-do-	-do-	-do-	Bahiyara Chaur			
-do-	-do-	-do-	Phulwariya Chaur			
-do-	-do-	-do-	Atanagar			
Sheohar and Muzaffarpur	Mr. Naresh Prasad	Dr. Niraj Kumar Dr.Kniraj@gmail.com Dr. Kushagra Rajendra krajendra@ggn.amity.edu	Bhagmati and Lal Bakeya	Guddu Kumar	Recorder	krguddu055@gmail.com
-do-	-do-	-do-	-do-	Prem Ratan Kumar	Forest Guard	
-do-	-do-	-do-	-do-	Nagendra Rai	CG	
Vaishali	Ms. Amita Raj	Dr. Satyendra Kumar Satyendra.hajipur@gmail.com	Baraila Lake	Dr. Ajit Kumar	Birder	akpatajanli02@gmail.com
-do-	-do-	-do-	-do-	Ms. Komal	Birder	Komal.pmufisheries@gmail.com
-do-	-do-	-do-	-do-	Mr. Rajan Kumar	Documenter	rajankumar8834@gmail.com
-do-	-do-	-do-	-do-	Mr.Rajesh Kumar	Assistant	rajeshkumargprs@gmail.com
-do-	-do-	-do-	-do-	Mr.Pushkar Kumar	Assistant	pushkarkumar0255@gmail.com
-do-	-do-	-do-	-do-	Gaya Pd Gupta	Forester	
-do-	-do-	-do-	-do-	Kumar Gaurav	Forest Guard	
-do-	-do-	-do-	-do-	Ajit Kumar	Forest Guard	
-do-	-do-	-do-	-do-	Anoj Kumar	Forest Guard	
-do-	-do-	-do-	Salaha Lake			
-do-	-do-	-do-	Berai Lake			
-do-	-do-	-do-	Puraniya Chaur			
-do-	-do-	-do-	Gandak River			
West Champaran	Dr. Neeraj Narayan	Dr. Kamlesh K Maurya kmaurya@wwf.india.net	Valmiki Tiger Reserve (Daruabari Wetland)	Abhishek	Birder	abhishek.wildlifer@gmail.com
-do-	-do-	-do-	-do-	Akshay Jain	Birder	ajain@wwfindia.net

Annexure 25. List of people involved in Asian Waterbird Census 2023 (*contd.*)

District	DFOs Details	Coordinators Details	Wetland	AWC Participants Details	Role	Mail ID of the Participant
-do-	-do-	-do-	-do-	Subham Kumar	Birder	subhamkumar006@gmail.com
-do-	-do-	-do-	-do-	Mukesh Kumar	Spotter	
-do-	-do-	-do-	-do-	Sunil Kumar Yadav	Spotter	sunilkumar58248@gmail.com
-do-	-do-	-do-	-do-	Abhishek Singh	Spotter	abhisheksingh11494@gmail.com
-do-	-do-	-do-	-do-	Om Prakash Singh	Spotter	omprakashsingh98@gmail.com
-do-	-do-	-do-	-do-	Anil Kumar Thapa	Spotter	athapa@gmail.com
-do-	-do-	-do-	-do-	Ritesh Kumar	Spotter	
-do-	-do-	-do-	Udaipur Jheel/WLS	Abhishek	Birder	abhishek.wildlifer@gmail.com
-do-	-do-	-do-	-do-	Indu	Birder	indu96@gmail.com
-do-	-do-	-do-	-do-	Akshay Jain	Birder	ajain@wwfindia.net
-do-	-do-	-do-	-do-	Subham Kumar	Birder	subhamkumar006@gmail.com
-do-	-do-	-do-	-do-	Manoj Kumar	Spotter	manoj.kumar.ivl@gmail.com
-do-	-do-	-do-	-do-	Hosil Kumar	Birder	
-do-	-do-	-do-	-do-	Ravindra Kumar	Recorder	
-do-	-do-	-do-	-do-	Anil Kumar Thapa	Spotter	athapa@gmail.com
-do-	-do-	-do-	-do-	Abhishek Singh	Spotter	abhisheksingh11494@gmail.com
-do-	-do-	-do-	Lal Sariya Man	Abhishek	Birder	abhishek.wildlifer@gmail.com
-do-	-do-	-do-	-do-	Indu	Birder	indu96@gmail.com
-do-	-do-	-do-	-do-	Akshay Jain	Birder	ajain@wwfindia.net
-do-	-do-	-do-	-do-	Subham Kumar	Birder	subhamkumar006@gmail.com
-do-	-do-	-do-	-do-	Hosil Kumar	Birder	
-do-	-do-	-do-	-do-	Ravindra Kumar	Recorder	
-do-	-do-	-do-	-do-	Nasseem	Spotter	
-do-	-do-	-do-	Gandak River	Sunil Kumar	ROF	
-do-	-do-	-do-	-do-	Subrat Kumar Behera	Birder	subrat@wti.org.in
-do-	-do-	-do-	-do-	Sourabh Verma	Recorder	sourabhvermabhu@gmail.com
-do-	-do-	-do-	-do-	Hosil Kumar	Birder	
-do-	-do-	-do-	-do-	Soumyadeep Pal	Birder	deepsomya342@gmail.com
-do-	-do-	-do-	-do-	Sonu Kumar	Spotter	

ANNEXURE 26: MEDIA COVERAGE

Bhagalpur District

प्रवासी पक्षियों के कलरव से गुंजायमान हुआ विक्रमशिला गांगेय डॉल्फिन रिजर्व

भागलपुर, अंग भारत। संपूर्ण बिहार में विगत वर्ष की तरह इस वर्ष भी बिहार सरकार के पर्यावरण, वन एवं क्लाइमेट चेंज विभाग एवम बॉम्बे नेचुरल हिस्ट्री सोसायटी के संयुक्त तत्वाधान में पक्षी प्रेमियों एवं नेचर एक्टिविस्टों की टीम ने भागलपुर अवस्थित विक्रमशिला गंगेटिक डॉल्फिन रिजर्व में भागलपुर से कहलगांव तक प्रवासी एवं स्थानीय पक्षियों की गणना और अध्ययन किया। इस टीम का नेतृत्व भागलपुर के युवा पक्षी विशेषज्ञ एवं पर्यावरण योद्धा राहुल रोहिताश्व कर रहे थे। श्री राहुल ने बताया कि यह गणना भागलपुर के इंजीनियरिंग कॉलेज घाट से शुरू होकर कहलगांव तक लगभग तीस किलोमीटर के दायरे में मिलने वाले प्रवासी पक्षियों का अध्ययन किया गया। श्री राहुल के अनुसार इस बार पिछले वर्ष से गंगा में बर्ड डायवर्सिटी अधिक देखी गई हालांकि उन्होंने बताया कि पक्षियों की कम संख्या जरूर एक चिंता का विषय है तथा साथ ही साथ टीम ने गांगेय डॉल्फिन की गतिविधि भी देखी जिससे पक्षी प्रेमियों में काफी खुशी की लहर है।श्री राहुल ने बताया कि 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 सिल्ही, फुलवॉस विसलिंग डक या बड़ी सिल्ही, रूडी शेल्डक इत्यादि काफी बड़ी मात्रा में दिखे। वहीं इस बार पक्षी प्रेमियों ने लगातार दूसरी बार डॉल्फिन रिजर्व में कॉमन शेल्डक देखा जो एक संकटग्रस्त प्रजाति है तथा बत्तखों के झुंड में कभी कभार ही दिखता है। श्री राहुल ने बताया कि इस बत्तख को उन्होंने पिछले बार सन 2020 में हुए भागलपुर बर्ड फ़ेस्टिवल के उपलक्ष्य में गंगा में देखा था जिस दल का वह नेतृत्व कर रहे थे।वहीं दूसरी और टीम ने कई और भी पक्षियों को देखा जैसे ब्रूटेड ईगल, ऑस्प्रे या मछरंगा, पैरेग्रिन फाल्कन, मार्श हैरियर, ब्लैक काईट, कॉमन इंडियन प्रतिनकोल, सैंड लार्क, टेमिंक्स स्टिंट, लिटिल स्टिंट, कॉमन सैंडपाइपर, मार्श सैंडपाइपर, ग्रीन सैंडपाइपर, डस्की क्रेग मार्टिन, बॉर्न स्वैलो इत्यादि। वहीं स्थानीय पक्षियों में इस बार गंगा में लिटिल कार्मोरेंट, लार्ज कार्मोरेंट, लिटिल इग्रेट, रिवर लैपविंग, रेड वॉटल्ड लैपविंग, इंटरमीडिएट इग्रेट, कॉमन क्रो, जंगल क्रो, व्हाइट वैगटेल, ग्रे वैगटेल, ग्रे हेरोन, एशियन ओपनबिल स्टार्क, वूली नेक्ड स्टार्क, बड़ा गरुड़, छोटा गरुड़, रेड नेप्ड आइबिस, व्हाइट आईबिस, लिटिल रिंग्ड प्लोवर, पाइड किंगफिशर, व्हाइट ब्रेस्टेड किंगफिशर इत्यादि पक्षी काफी मात्रा में दिखे।इस टीम का नेतृत्व श्री राहुल रोहिताश्व कर रहे थे। इस टीम में उनके अलावा, विक्रमजीत सिंह, बर्ड गाइड मोहम्मद रिजवान, संतोष कुमार साहनी, गंगा प्रहरी गौरव सिन्हा, रिसर्च स्कॉलर जय कुमार जय, फॉरेस्टर मिनी झा, फॉरेस्ट गार्ड प्रमोद साह, डॉल्फिन मित्र योगेंद्र महलदार, संतोष कुमार झा एवम वन्य विभाग के कई सदस्य शामिल थे।

कलरव | 'एशियाई जलीय पक्षियों की गणना-2023' में मिली यह जानकारी, भागलपुर के जगतपुर झील व गंगा प्रसाद झील में हुआ सर्वेक्षण

विदेशी मेहमान परिंदों की संख्या घटी, लेकिन प्रजाति नहीं

- जलस्तर नहीं बढ़ने और जलकुंभी होने से यहां घटी पक्षियों की संख्या
- पर्यावरण वन व जलवायु परिवर्तन विभाग ने पक्षियों का कराया सर्वेक्षण

भागलपुर, वरीय संवाददाता। एशियाई जलीय पक्षियों की गणना (एडब्ल्यूसी) - 2023 शुरू हो गई है। भागलपुर के दो झीलों में सर्वेक्षण में विदेशी मेहमान पक्षियों की संख्या घटी है लेकिन प्रजातियों की संख्या नहीं घटी हैं। दोनों झील में 60 प्रजातियों की परिंदे दिखे। बिहार में इस बार एडब्ल्यूसी का दूसरा वैज्ञानिक सर्वे हो रहा है। भागलपुर में भी इस महीने से पहले सप्ताह में सर्वे हुआ। सर्वे जगतपुर झील और गंगा प्रसाद झील में किया गया। यह सर्वेक्षण पर्यावरण वन एवं जलवायु परिवर्तन विभाग बिहार और बॉम्बे नेचुरल हिस्ट्री सोसायटी मुंबई मिलकर करा रहा है। सर्वेक्षण पूरे बिहार में कराया जा रहा है।

टीएमबीयू के जन्तु विज्ञान विभाग के डॉ. डीएन चौधरी ने बताया कि इन दोनों झील में विदेशी और स्थानीय पक्षियों की करीब 50 से 60 प्रजातियां दिखी। पिछले साल के मुकाबले प्रजातियों में कमी नहीं थी लेकिन संख्या में कमी दिखी। वहां मिले पक्षियों में मछरंगा, लालसर, छोटा लालसर, करछिया बत्तख, गुगरैल तथा तिलकधारी काफी संख्या में दिखे। यहां प्रवासी पक्षियों की गणना पक्षी विशेषज्ञ व टीएमबीयू के पीजी जूलोजी विभाग के प्रोफेसर डीएन चौधरी के नेतृत्व में किया गया।

जगतपुर झील में पक्षियों का जमावड़ा। ● हिन्दुस्तान

पहली बार दिखा शाही बाज

डॉ. चौधरी ने बताया कि जगतपुर झील में शाही बाज पहली बार देखा गया। पहले इस पक्षी को यहां नहीं देखा गया था। यह 300 किलोमीटर प्रति घंटे की रफ्तार से उड़ती है और झपट्टामार पक्षी है। यह एक अच्छा संकेत है। इससे आगे की भी संभावना दिखती है।

कम जलस्तर से घटे पक्षी

डॉ. डीएन चौधरी ने कहा कि जगतपुर झील में जलकुंभी व पानी कम होने से पक्षियों की संख्या घटी। बाढ़ का पानी वहां नहीं पहुंचने के कारण जलस्तर कम रहा। इसके कारण वहां पक्षियों की संख्या कम दिखी। जलकुंभी को साफ करने की योजना पर काम होना चाहिये।

दोनों झील में तिलकधारी पक्षियों की बढ़ी संख्या

इन दोनों झील में तिलकधारी पक्षी दिखी। पिछले साल इनकी संख्या 600 से अधिक थी जबकि पहले यह संख्या 250 से 300 के करीब थी। बिहार में तिब्बत से आने वाली विदेशी पक्षियों में सबसे पहले तिलकधारी ही आती है। वहीं अन्य पक्षियों की संख्या में कमी दिखी। इनमें लालसर पिछले साल 150 की तुलना में 100 की संख्या में दिखी। दर्वीन भी इस बार करीब 100 की संख्या में दिखी जो कि पिछले साल 150 के करीब थी।

तीन साल बाद दिखा कॉमन शेल्डक

डाल्फिन रिजर्व

भागलपुर, कार्यालय संवाददाता। रविवार को वन, पर्यावरण एवं जलवायु परिवर्तन विभाग व बांबे नेचुरल हिस्ट्री सोसाइटी के संयुक्त दल ने शहर के इंजीनियरिंग कॉलेज से लेकर कहलगांव तक गंगा नदी के नजारे को देखा। इस दौरान तीन साल बाद फिर डाल्फिन रिजर्व में कामन शेल्डक (प्रवासी पक्षी चकवा) देखा गया। इससे पहले टीम के सदस्यों ने साल 2020 में देखा था। टीम में शामिल पक्षी प्रेमी व प्रकृति संरक्षकों ने पक्षियों के अध्ययन में पाया कि बीते एक साल में गांगेय डाल्फिन रिजर्व में पक्षियों की वेरायटी ज्यादा संख्या में देखी जा रही है। प्रवासी पक्षियों में रेड क्रेस्टेड पोचार्ड, कॉमन पोचार्ड, पिनटेल डक, हेडेड गूज या राजहंस, गडवाल डक, लेसर विसलिंग डक, छोटी सिल्ही, फुलवॉस विसलिंग डक या बड़ी सिल्ही, रूडी शेल्डक बड़ी संख्या में देखे गये। टीम के साथ राहुल रोहिताश्व, विक्रमजीत सिंह, बर्ड गाइड मो. रिजवान, संतोष कुमार साहनी, गंगा प्रहरी गौरव सिन्हा, रिसर्च स्कॉलर जय कुमार, फॉरेस्टर मिनी झा आदि थे।

ये पक्षी अधिक संख्या में दिखे

बूटेड ईगल, ऑस्प्रे या मछरंगा, पैरेग्रिन फाल्कन, मार्श हैरियर, ब्लैक काईट, कॉमन इंडियन प्रतिनकोल, सैंड लार्क, टेर्मिक्स स्टिंट, लिटिल स्टिंट, कॉमन सैंडपाइपर, मार्श सैंडपाइपर, ग्रीन सैंडपाइपर, डस्की क्रेग मार्टिन, बॉर्न स्वैलो। जबकि स्थानीय पक्षियों में इस बार गंगा में लिटिल कार्मोरेंट, लार्ज कार्मोरेंट, लिटिल इग्रेट, रिवर लैपविंग, रेड वॉटल्ड लैपविंग, कॉमन क्रो, जंगल क्रो, व्हाइट वैगटेल, ग्रे वैगटेल, ग्रे हेरोन, एशियन ओपनबिल स्टार्क, वूली नेक्ड स्टार्क, बड़ा गरुड़, छोटा गरुड़, रेड नेप्ड आइबिस, व्हाइट आइबिस, लिटिल रिंग्ड प्लोवर, पाइड किंगफिशर, व्हाइट ब्रेस्टेड किंगफिशर पक्षी बहुतायत में दिखे।

प्रवासी पक्षियों के कलरव से गुंजायमान हुआ विक्रमशिला गांगेय डाल्फिन सेंचूरी

जास, भागलपुर : प्रवासी पक्षियों के कलरव से विक्रमशिला गांगेय डाल्फिन रिजर्व गुंजायमान है। हजारों की संख्या में विदेशी पक्षियों को देखकर लोग रोमांचित हो रहे हैं। पर्यावरण, वन एवं जलवायु विभाग एवम बाम्बे नेचुरल हिस्ट्री सोसायटी के संयुक्त तत्वाधान में पक्षी प्रेमियों एवं नेचर एक्टिविस्टों की टीम ने विक्रमशिला गंगेटिक डाल्फिन सेंचुरी में भागलपुर से कहलगांव तक प्रवासी एवं स्थानीय पक्षियों की गणना और अध्ययन किया। टीम का नेतृत्व युवा पक्षी विशेषज्ञ राहुल रोहिताश्व कर रहे थे।

राहुल ने बताया कि यह गणना भागलपुर के इंजीनियरिंग कालेज घाट से शुरू होकर कहलगांव तक लगभग तीस किलोमीटर के दायरे में मिलने वाले प्रवासी पक्षियों का अध्ययन किया गया। इस बार पिछले वर्ष से गंगा में बर्ड डायवर्सिटी अधिक देखी गई। टीम ने गांगेय डाल्फिन की गतिविधि को भी देखा। टीम ने बूटेड ईगल, आस्प्रे या मछरंगा, पैरेग्रिन फाल्कन, मार्श हैरियर, ब्लैक काइट, कामन इंडियन प्रतिनकोल, सैंड लार्क, टेर्मिक्स स्टिंट, लिटिल स्टिंट, कामन सैंडपाइपर, मार्श सैंडपाइपर, ग्रीन सैंडपाइपर, डस्की क्रेग मार्टिन, बार्न स्वैलो आदि पक्षियों को देखा।

स्थानीय पक्षियों में इस बार गंगा में लिटिल कार्मोरेंट, लार्ज कार्मोरेंट, लिटिल इग्रेट, रिवर लैपविंग, रेड वाटल्ड लैपविंग, इंटरमीडिएट इग्रेट, कॉमन क्रो, जंगल क्रो, व्हाइट वैगटेल, ग्रे वैगटेल, ग्रे हेरोन, एशियन ओपनबिल स्टार्क, वूली नेक्ड स्टार्क, बड़ा गरुड़, छोटा गरुड़, पाइड किंगफिशर, व्हाइट ब्रेस्टेड किंगफिशर आदि पक्षी काफी संख्या में दिखे। गंगा में मिलने वाले प्रमुख प्रवासी पक्षियों में रेड क्रेस्टेड पोचार्ड, कामन पोचार्ड, पिनटेल डक, बार हेडेड गूज या राजहंस, गडवाल डक, लेसर विसलिंग डक या छोटी सिल्ही, फुलवास विसलिंग डक या बड़ी सिल्ही, रूडी शेल्डक आदि काफी बड़ी संख्या में दिखे। टीम में विक्रमजीत सिंह, बर्ड गाइड मोहम्मद रिजवान, संतोष साहनी, गंगा प्रहरी गौरव सिन्हा आदि मौजूद थे।

प्रवासी पक्षियों ने डाला बसेरा, सर्वे के नतीजों से विज्ञानी उत्साहित

जयमंगल पांडेय ● ब्रह्मपुर (बक्सर)

- पक्षी वैज्ञानिकों ने गंगा सहित जलाशयों में पक्षियों की पहचान की
- प्रवासी और देसी पक्षियों के अनुकूल है बक्सर की नदियां
- बड़ी संख्या में मिले देसी और प्रवासी पक्षियों के झुंड

पक्षी विज्ञानियों की टीम ने वन विभाग के अधिकारियों के साथ बक्सर जिले में बहने वाली गंगा नदी के साथ गोकुल और अन्य जलाशयों का सर्वेक्षण कर दुर्लभ और प्रवासी पक्षियों की पहचान कर उनकी गणना की है। इस सर्वेक्षण के दौरान बड़ी संख्या में प्रवासी पक्षियों के अलावा दुर्लभ पक्षियों का मिलना एक सुखद अनुभव दे रहा है।

पक्षियों की पहचान और उनके संरक्षण के लिए वेटलैंड इंटरनेशनल एशियाई जल पक्षी गणना के स्टेट कोऑर्डिनेटर तथा पक्षी विज्ञानी अरविंद मिश्रा के नेतृत्व में टीम ने वन विभाग के अधिकारियों के सहयोग से लगातार दो दिनों तक नदियों और जलाशयों में पक्षियों की पहचान कर उनकी गणना की। टीम के अधिकारियों ने शुक्रवार को चौसा से लेकर बक्सर, अर्जुनपुर और सिमरी तक गंगा नदी में नौका से सर्वेक्षण और पूछताछ कर विभिन्न तरह की पक्षियों की पहचान की।

शनिवार को अधिकारियों की टीम ने चक्की से लेकर गायघाट और नैनीजोर होते हुए गंगा और उसकी सहायक नदी गोकुल जलाशयों का सर्वेक्षण किया। दोनों दिन के सर्वेक्षण में वन विभाग के रेंजर टीपी सिंह और दूसरे दिन के सर्वेक्षण में डीएफओ राजकुमार भी शामिल होकर नदियों के हालात का जायजा लिया।

सर्वेक्षण करते गोकुल जलाशय में दिखे दुर्लभ पक्षी, गंगा में नौका से सर्वेक्षण करते पक्षी वैज्ञानिक और रेंजर। ● जागरण

नदियों के संरक्षण में दिखे दुर्लभ एवं प्रवासी पक्षी : सर्वेक्षण के बाद वेटलैंड इंटरनेशनल एशियाई जल पक्षी गणना के स्टेट कोऑर्डिनेटर तथा पक्षी विज्ञानी अरविंद मिश्रा ने बताया कि गंगा नदी और जलाशयों की वर्तमान स्थिति, यहां के पक्षी, जैव विविधता के अनुकूल वातावरण तथा पक्षियों के संरक्षण के लिए वस्तुस्थिति की जानकारी ली गई। ने यह भी बताया कि सर्वेक्षण के दौरान बड़ी संख्या में प्रवासी पक्षी भी देखने को मिले। सबसे अधिक प्रवासी पक्षी ब्रह्मपुर प्रखंड के गंगा नदी और गोकुल जलाशय में देखने को मिले। यह पक्षी प्रतिवर्ष हिमालय क्षेत्र के चीन, रूस, साइबेरिया, मंगोलिया, अफगानिस्तान आदि देशों से हजारों किलोमीटर की दूरी तय कर यहां नदियों के किनारे आश्रय लेते हैं। पर्यावरण रक्षा के लिए इन पंछियों का आना सुखद एहसास है और इनका संरक्षण होना जरूरी है।

पर्यावरण रक्षा के लिए वन विभाग भी करेगा पहल : सर्वेक्षण टीम में शामिल वन विभाग के रेंजर टीपी सिंह ने बताया कि दियारा क्षेत्र में पक्षियों के अनुकूल वातावरण को शुद्ध रखने तथा पर्यावरण से मुक्ति के लिए पौधारोपण किया गया है और इसके अलावा भी विभाग द्वारा इस दिशा में कई तरह की कार्ययोजना पर काम किया जाएगा, जिससे नदियां सुरक्षित रहें और पक्षियों के लिए स्वच्छ वातावरण मिल सके।

खुद डीएफओ राजकुमार द्वारा भी प्रयास किया जा रहा है। इस सर्वेक्षण टीम में पक्षीविद संदीप कुमार और मनीष कुमार के अलावा शैलेश कुमार, गुड्डू, मीरा और महिमा राय भी शामिल हुए।

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13.0° न्यूनतम | सूर्य अस्त (आज) 05:48 उदय (कल) 06:18 | आर्द्रता 75% 48% अधिकतम न्यूनतम

बक्सर जागरण

चौसा-अहिरौली के बीच मिले 30 डाल्फिन व हजारों दुर्लभ पक्षी

जयमंगल पांडेय ● ब्रह्मपुर (बक्सर)

- डाल्फिन और दुर्लभ पक्षियों के मिलने से जिले में पर्यटन की असीम संभावनाएं
- नदियों में बढ़ते कचरे और प्रदूषण से प्रवासी पक्षियों के जीवन पर खतरा
- पर्यावरणविद-विज्ञानियों के दल ने चौसा से बक्सर के बीच गंगा नदी का किया भ्रमण

बक्सर की नदियों और जलाशयों में पक्षी गणना के दौरान दुर्लभ डाल्फिन और विलुप्त पक्षियों के मिलने से प्रकृति प्रेमी उत्साहित हैं। गत दिनों पर्यावरणविद और विज्ञानियों के एक दल ने चौसा से बक्सर के बीच गंगा नदी का भ्रमण और अध्ययन किया। अध्ययन के दौरान वैज्ञानिकों को डॉल्फिन के साथ ही दुर्लभ देसी और प्रवासी पक्षी देखने को मिले। यहां की नदियों और जलाशयों में जैव विविधता के पोषक दुर्लभ पक्षियों के मिलने से पर्यटन की संभावना भी है।

पिछले दिनों वेटलैंड इंटरनेशनल एशियाई जल पक्षी गणना के राज्य समन्वयक तथा पक्षी विज्ञानी अरविंद मिश्रा के नेतृत्व में वन विभाग के अधिकारियों के सहयोग से गंगा नदी तथा गोकुल जलाशयों में सर्वेक्षण किया गया। इस दौरान पक्षियों की गणना और उनका अध्ययन करने के बाद कई चौंकानेवाले तथ्य भी सामने आए।

सर्वेक्षण के दौरान गंगा और गोकुल जलाशय में मिले दुर्लभ पक्षी | गंगा और गोकुल जलाशय में मिले दुर्लभ प्रवासी पक्षी ● जागरण

गंगा नदी में मिले 30 दुर्लभ डाल्फिन : अध्ययन के बाद पक्षी विज्ञानी अरविंद मिश्रा ने बताया कि जिले के चौसा और ठोरा के पास गंगा नदी में अहिरौली तक 25 से 30 डॉल्फिन देखे गए। बक्सर के आसपास इतनी बड़ी तादाद में डाल्फिन का मिलना पहली बार है। इसके अलावा लालसर, कूट, गढ़वाल, सिल्ली, सफेद बुजा, कॉटन पिग्मी, ब्लैक तथा ह्वाइट आईबिस जैसे दुर्लभ और विलुप्त चार हजार से अधिक पक्षियों की गणना की गई। उन्होंने यह भी बताया कि यहां पर पहली बार चैटा पक्षी भी मिलना कम आश्चर्य की बात नहीं है। इसके अलावा दूसरे देशों से आने वाले बड़ी संख्या में प्रवासी पक्षी भी देखने को मिले। दुर्लभ और विलुप्त प्रवासी पक्षी ब्रह्मपुर से लेकर चक्की तक गोकुल जलाशय में भी पाए गए। इन पक्षियों को मिलने से यहां पर्यटन की काफी संभावनाएं हैं। उन्होंने यह भी बताया कि अब तक बिहार के 75 जलाशयों में पक्षियों की गणना कर चुके हैं।

नदियों में कचरा और प्रदूषण से पक्षियों पर खतरा : अरविंद मिश्रा तथा वन विभाग के रेंजर टीपी सिंह बताते हैं कि दुर्लभ तथा विलुप्त पक्षियों की सुरक्षा के लिए आम लोगों को जागरूक होना जरूरी है। नदियों में डाले जा रहे कचरे और बढ़ते प्रदूषण के कारण दुर्लभ पक्षियों का जीवन सुरक्षित नहीं रह सकता और जैव विविधता भी नष्ट हो जाएगी। इससे मानव और पशु-पक्षियों का जीवन भी खतरे में पड़ जाएगा। वैसे भी इस साल बारिश कम होने से नदियों में जल की उपलब्धता 50 प्रतिशत है। इन लोगों ने यह भी बताया कि प्रवासी पक्षियों के नहीं आने से जलाशय बंजर जमीन में तब्दील हो जाएंगे।

ओढ़नी डैम पर डेरा डाले हैं हजारों प्रवासी पक्षी

ओढ़नी डैम पर पक्षी गणना पहुंचे डा. चौधरी और उनके टीम के सदस्य ● जागरण

जासं, बांका : ओढ़नी डैम पर दूसरी बार शनिवार को एशियन वाटर बर्डस सेन्सस पक्षी विशेषज्ञों के एक दल ने पूरा किया। जिला संयोजक सह जन्तु विज्ञान के प्रोफेसर डा. डीएन चौधरी की अगुवाई में ओढ़नी डैम में जल पक्षियों की गणना हुई। पिछली बार की तरह इस बार भी प्रवासी पक्षियों की संख्या काफी अच्छी मिली। डा. चौधरी के अनुसार इस बार लालसर, सिल्ही, सुरखाब, गडवाल तथा राजहंसों ने ओढ़नी डैम की शोभा में चार चांद लगाया है। लालसर पक्षियों के अलावा राजहंस (बार हेडेड गूज) पांच सौ से भी अधिक संख्या में ओढ़नी डैम में कलरव करते मिले। प्रवासी पक्षियों के अलावा स्थानीय पक्षियों की संख्या भी बहुत है। सभी प्रवासी पक्षी ठंडे मुल्कों जैसे साइबेरिया, अलास्का, मंगोलिया तथा तिब्बत जैसे देशों से

पक्षी विशेषज्ञों के दल ने दूसरी बार पूरी की जल पक्षी गणना, प्रवासी पक्षियों के अलावा स्थानीय पक्षियों की संख्या भी है बहुत

हमारे देश में जाड़े के दिनों में आए हैं। उपयुक्त जलवायु की खोज में वे मार्च तक रहने के बाद वापस जाते हैं। ये पक्षी हमारे मेहमान हैं और हमें इनका संरक्षण करना चाहिए। ये पक्षी पर्यावरण के संतुलन को बनाए रखने में सहायक होते हैं तथा और किसानों के मित्र होते हैं। इनका हमारे देश में आना शुभ संकेत माना जाता है, इनके साथ छेड़छाड़ न हो यह हमारी आमलोगों से अपील है। इनकी सुरक्षा हमारे पर्यावरण की सुरक्षा है। सर्वे दल में राहुल रोहिताश्व, सुमीत कुमार सूम, पिन्टू कुमार, जय कुमार, जय बर्बर ने शामिल होकर जल पक्षियों की गणना की।

जमुई जागरण
…नपुर, 5 फरवरी 2023

वन विभाग के सहयोग से जिले में जल पक्षी गणना का कार्य शुरू

संसू, झाझा (जमुई): बिहार में एशियाई जल पक्षी गणना का कार्य शुक्रवार से जमुई जिले में शुरू हुआ। इसका नेतृत्व एशियाई जल पक्षी गणना कार्यक्रम के स्टेट को-आर्डिनेटर अरविंद मिश्रा कर रहे हैं। बिहार में यह कार्यक्रम राज्य के मुख्य वन प्राणी प्रतिपालक प्रभात कुमार गुप्ता और गया के वन संरक्षक सुधाकर संचिचदानंदन की अगुवाई में वन विभाग के सहयोग से किया जा रहा है। जिसमें मुंबई नेचुरल हिस्ट्री सोसाइटी का तकनीकी सहयोग शामिल है। बिहार की अनेक संस्थाओं और संस्थानों उनके सदस्यों के साथ ही निजी तौर पर पक्षियों में रुचि रखने वाले लोगों के साथ ही वन विभाग के तमाम अधिकारियों और कर्मचारियों तथा स्थानीय लोग बिहार के 2023 के मध्य शीतकालीन जल जल पक्षी गणना में सैकड़ों की संख्या में भाग ले रहे हैं। बिहार की अनेक संस्थाओं और संस्थानों, उनके सदस्यों के साथ ही निजी तौर पर पक्षियों में रुचि रखने वाले लोगों के साथ ही वन विभाग के तमाम अधिकारियों और कर्मचारियों तथा स्थानीय लोग बिहार के मध्य शीतकालीन जल पक्षी गणना में सैकड़ों की संख्या में भाग ले रहे हैं। इस बार तकरीबन 75 स्थलों पर जल पक्षियों की गणना के साथ उन जलाशयों की स्थिति, उनकी उपयोगिता, उन जलाशयों और पक्षियों पर मंडराने वाले खतरों की भी निगरानी की जाएगी। भागलपुर और जमुई में प्रशिक्षित बर्ड गाइड्स भी इस गणना में हिस्सा ले रहे हैं। पक्षियों के सुरक्षित भविष्य के लिए एक शुभ संकेत है। भागलपुर से आए इस दल में अरविंद मिश्रा के साथ पक्षी विद दीपक कुमार झुन्नू, भारतीय वन्यजीव संस्थान के क्षेत्रीय सहायक आशुतोष कुमार और पक्षी प्रेमी आशु मिश्रा शामिल हैं। 10 की संख्या में जमुई में प्रशिक्षित बर्ड गाइड्स भी गणना में हिस्सा ले रहे हैं। जिनमें संदीप कुमार, रविंद्र कुमार, पिंटू कुमार यादव, युगल कुमार, श्याम सुंदर यादव थे।

तीन जलाशय के पक्षियों की हुई गणना

इस दल ने बेलाटांड, देवन आहर और पैलवाजन जलाशयों में पक्षियों की गणना की। शनिवार को नागी और नकटी पक्षी आश्रयणी के पक्षी का गणना का कार्य प्रारंभ हुआ जिसमें वन प्रमंडल पदाधिकारी पीयूष बर्नवाल, सहायक वन संरक्षक मेघा यादव, झाझा के वन क्षेत्र पदाधिकारी उदय कुमार ने वन रक्षियों और वनपालों की सहायता से सारी व्यवस्था की और पूर्ण सहयोग दिया।

गणना करते पक्षी विशेषज्ञ • जागरण

जलाशय में पानी के अभाव में कम दिखे पक्षी

इस वर्ष तीनों जलाशयों में जल की उपलब्धता सामान्य से 50 प्रतिशत ही प्रतीत हुई जिसका कारण इस वर्ष बिहार में अत्यंत कम वर्षा का होना है। हालांकि, उत्तरी बिहार के जलाशयों में जल की पर्याप्त मात्रा देखी गई, क्योंकि वे कहीं न कहीं बड़ी नदियों से जुड़े हैं। देवन आहर और बेला टांड में लोग मछलियों का शिकार करते देखे गए जिनके आवागमन के कारण भी कुछ व्यवधान पक्षियों को अवश्य हुआ होगा।

देसी और विदेशी पक्षी गणना में शामिल हुआ

इस अध्ययन और गणना में सैकड़ों स्थानीय और प्रवासी पक्षियों की गणना की गई जिनमें, लालसर, कूट, वाइट आइड पोचार्ड, गडवाल, कामन पोचार्ड, शोवेलेर, कामन टील, टफ्टेड डक, सिल्ली, काटन पिग्मी गूज, व्हाइट आइबिस, ब्लैक आइबिस, यूरेशियन केस्ट्रेल तथा अन्य पक्षी शामिल थे।

अमृत काल का जमुई को 'अमृत'

बदमाशों ने छात्र सहित दो को किया घायल

नागी में मौजूद है 300 किमी प्रति घंटे की रफ्तार से उड़ने वाली पेरिग्रीन फाल्कन

वन विभाग के अथक प्रयास से पक्षियों की संख्या हुई दोगुनी

झाझावासियों ने सरकार से की पर्यटन संभावनाओं को और बढ़ाने की मांग

अतीश कुमार सिंह, झाझा

जमुई जिले में बिहार की सबसे समृद्ध पक्षी आश्रयणी नागी में 300 किमी प्रति घंटे की रफ्तार से उड़ने वाली पेरिग्रीन फाल्कन पक्षी भी मौजूद है. बिहार की एशियाई मध्य शीतकालीन जल पक्षियों की गणना कार्यक्रम के तहत अरविंद मिश्रा के नेतृत्व में लगातार पक्षियों की गणना की जा रही है. उनके साथ भारतीय वन्यजीव संस्थान के क्षेत्रीय सहायक आशुतोष कुमार, पक्षी प्रेमी आशु मिश्रा के अलावा पक्षी विशेषज्ञ दीपक कुमार झुन्नू भी शामिल हैं. इसके अलावा स्थानीय स्तर पर नागी पक्षी आश्रयणी में प्रशिक्षण लिए बर्ड गाइड अवधेश कुमार आदर्श, संदीप कुमार, रविंद्र कुमार, पिंटू कुमार यादव, धनंजय कुमार, संतोष कुमार भी मौजूद थे. इनके प्रयास से जिले के सौंरा प्रखंड क्षेत्र के गढ़ही डैम, सोनो प्रखंड के देवन आहार, बेलवाजन आहर में गणना की गयी. ख्यातिप्राप्त नागी पक्षी आश्रयणी व नकटी पक्षी आश्रयणी में पक्षियों की लगातार गणना की गयी.

मछुआरे मछली मारना बंद करे, तो बढ़ेगी पक्षियों की संख्या

पक्षी विशेषज्ञ अरविंद मिश्रा ने कहा कि नागी में वन विभाग के अथक प्रयास के बाद मछली मारने पर पूर्ण पाबंदी लगा दी गयी . इस कारण यहां पानी तो कम हो गया, लेकिन पक्षियों की संख्या बीते वर्षों से दोगुनी हो गयी . जो इस क्षेत्र और इस पक्षी आश्रयणी के लिए सबसे सुखद बात है . श्री मिश्रा ने बताया कि आने वाले दिनों में यदि यहां मछुआरे मछली मारना बंद कर देंगे तो लालसर, राजहंस, सरारटूट समेत कई ऐसे पक्षियों की संख्या में बढ़ोतरी होगी . सरकार लगातार ऐसे जलाशयों पर ध्यान देते हुए पक्षियों पर रिसर्च भी करवा रही है . नागी ने प्रदेश से लेकर देश स्तर पर अपनी छाप छोड़ी है . इसी कारण आज पक्षियों में रिंग पहनाई जा रही है, गिनती हो रही है .

1200 से अधिक हैं राजहंस

अरविंद मिश्रा ने कहा कि जिले के अन्य जलाशयों की तरह नागी पक्षी आश्रयणी में भी जल क्षेत्र में काफी कमी देखी गयी . परंतु पक्षियों की संख्या सामान्य वर्षों से अधिक देखी गयी . विशेष रूप से राजहंस (बार हेडेड गूज) और ग्रे लेग गूज की तो संख्या यहां हजारों में दिखी . यह भी रिकॉर्ड है . अरविंद मिश्रा ने बताया कि पिछले करीब तीस वर्षों के अध्ययन में ग्रे लेग गूज की इतनी संख्या हमने नागी में कभी नहीं देखी . इसकी संख्या 1200 से भी ज्यादा थी . हालांकि लालसर की संख्या जरूर कुछ कम दिखाई पड़ी . उन्होंने बताया कि भरपूर शक्तिशाली एवं दुनिया की सबसे तेज झपट वाले पक्षी पेरिग्रीन फाल्कन जैसे शिकारी पक्षी नागी में दिखाई पड़े, जो 300 किलोमीटर प्रति घंटे से भी ज्यादा की रफ्तार से उड़ता है . इसी रफ्तार से अपने शिकार पर टूट पड़ता है .

पक्षियों की संख्या बढ़ने से बढ़ गयी है नागी की सुंदरता

भागलपुर से आये इस दल में अरविंद मिश्रा के साथ पक्षीविद दीपक कुमार झुन्नू, भारतीय वन्यजीव संस्थान के क्षेत्रीय सहायक आशुतोष कुमार और पक्षी प्रेमी आशु मिश्रा आदि ने बताया कि यदि इस धरोहर को संजोकर रखा जाये, आने वाले दिनों में नागी अपनी विशिष्ट पहचान बनायेगा . स्थानीय सहयोगियों सहदेव यादव, वनरक्षी संजीत कुमार, वनपाल अनीश सिंह राठौर आदि के साथ नागी का विचरण करते पक्षी विशेषज्ञ ने बताया कि पेरिग्रीन फाल्कन, राजहंस (बार हेडेड गूज) और ग्रे लेग गूज, लालसर, कूट, कॉटन पिग्मी गूज, ब्लैक स्टॉर्क, यूरेशियन वीजन, लिटिल रिंग प्लोवर, टेमिंक स्टिंट, व्हाइट आईबिस, ब्लैक आईबिस, कॉमन केट्रेल, टफ्टेड डक आदि बड़ी संख्या में अन्य पक्षी दिखाई पड़े . नागी की सुंदरता व विशेष पक्षियों के आगमन से इसकी सुंदरता लगातार बढ़ रही है . झाझावासियों ने इसे पर्यटन के क्षेत्र में और विकास करने की सरकार से मांग की है . ताकि इस क्षेत्र के स्थानीय लोगों को रोजगार के साथ स्वरोजगार का संसाधन मिल सके .

नागी की सुंदरता के कारण ही पिछले वर्ष पक्षी महोत्सव कार्यक्रम हुआ था, मुख्यमंत्री ने नागी को प्रदेश स्तर से लेकर देश स्तर के फलक पर निखारा है . अब सरकार को चाहिए कि इस क्षेत्र में पर्यटन को बढ़ावा दे, ताकि स्थानीय लोगों को रोजगार भी मिले.
-प्रो अमरेंद्र कुमार सिंह उर्फ लुकल जी, पूर्व प्राचार्य, डीएसएम कॉलेज

सरकार से मांग करते है कि नागी को संरक्षित किया जाये एवं पक्षियों के रहने के लिए और अधिक व्यवस्था की जाये, ताकि आने वाले दिनों में पूरे देश के वैज्ञानिक यहां आकर रिसर्च करें . इससे न सिर्फ स्थानीय लोगों का रोजगार मिलेगा, बल्कि स्वरोजगार को भी बढ़ावा मिलेगा.
-संजय यादव, निवर्तमान नगर परिषद उपाध्यक्ष सह सामाजिक कार्यकर्ता

नागी लगातार अपनी अच्छाई को लेकर सुर्खियों में रहा है . यहां प्रवासी पक्षी से लेकर स्थानीय पक्षी कलरव करते हैं . सरकार से मांग है कि इसे और अधिक विकसित किया जाये, ताकि पर्यटन को बढ़ावा मिल सके . इससे स्थानीय बेरोजगार लोगों को रोजगार मिलेगा . नागी भी सरंक्षित रहेगा .
-पप्पू यादव, मुखिया छापा पंचायत

नागी पक्षी अभ्यारण्य आज की तारीख में पक्षी, जल, मृदा वैज्ञानिकों के लिए रिसर्च का हब बनता जा रहा है . यही कारण है कि स्थानीय विश्वविद्यालय से लेकर पूरे देश के विश्वविद्यालय स्तर तक के विशेषज्ञ, शिक्षक व रिसर्चर यहां आकर इस क्षेत्र का रिसर्च कर, यहां की अच्छाई बता रहे हैं . उन्होंने सरकार से मांग की कि यह क्षेत्र पर्यटन के क्षेत्र के रूप में अधिक विकसित हो, ताकि स्थानीय लोगों को रोजगार मिल सके .
-डॉ प्रो अजफर शम्सी, प्राचार्य, देव सुंदरी मेमोरियल महाविद्यालय

नागी अब किसी परिचय का मोहताज नहीं है . इसकी प्राकृतिक सुंदरता अनायास ही लोगों को अपनी ओर आकर्षित कर रही है . विदेशी पक्षी आकर कलरव करते हुए लोगों को आकर्षित करते हैं . सरकार से मांग है कि इसे पर्यटक स्थल के रूप में विकसित करें, ताकि क्षेत्र लोगों का विकास हो सके .
-सहदेव यादव, जिला परिषद सदस्य

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प्रभात खबर
जमुई प्रभात
शहरों का तापमान | जमुई : अधिकतम 27.0° न्यूनतम 13.0° | मुंगेर : अधिकतम 27.0° न्यूनतम 13.0°

जमुई के जलाशयों में पहली बार दिखा दुर्लभ पेसिफिक गोल्डन फ्लोवर का झुंड

- हिमालय क्षेत्र में पाया जाने वाला व्हाइट कैप्ड वाटर रेड स्टार्ट भी दिखा, पक्षी विशेषज्ञों में खुशी

अतीश कुमार सिंह, झाझा

बिहार में एशियाई मध्य शीतकालीन जल पक्षियों की गणना जिले में शुरू हुई है. पक्षियों की गणना के दौरान दुर्लभ व विदेशी पक्षियां भी बहुतायत देखी जा रही है. हिमालय क्षेत्र में पाये जानेवाले पक्षी भी गणना के दौरान पक्षी विशेषज्ञों को देखने में मिले. इससे ना सिर्फ पर्यटन के क्षेत्र में जमुई के जलाशयों को बढ़ावा मिलने की संभावना बढ़ी है, बल्कि देश-विदेश से ऐसे जलाशयों में विशेषज्ञ आकर इस पर रिसर्च भी करेंगे.

पेसिफिक गोल्डन फ्लोवर का झुंड

नाव में विचरण करते पक्षी विशेषज्ञ

तीन सौ किलोमीटर प्रति घंटे की रफ्तार से पेरिग्रिन फाल्कन करता है शिकार

सबसे तेज झपट वाले पक्षी में की जाती है गिनती इस बार अधिक दिखे जल पक्षी

संजय सूत्र, झाझा (जमुई): इस बार बिहार पक्षी आश्रणीय नागी में कई साइबेरियन पक्षी आए हैं। दुनिया का सबसे तेज झपट वाले पक्षी पेरिग्रिन फाल्कन जैसे शिकारी पक्षी भी इस बार यहां आए। इसके बारे में बताया जाता है कि 300 किलोमीटर प्रति घंटे की रफ्तार से अपने शिकार पर टूट पड़ता है। नागी में एक प्रवासी पक्षी कूट का शिकार करते कैमरे में कैद किया गया है। यह शिकारी पक्षी पहली बार नागी पक्षी आश्रणीय में देखा गया है। इसकी मौजूदगी नागी के लिए अच्छा संकेत है।

पक्षी विशेषज्ञ अरविन्द मिश्रा के नेतृत्व में बिहार की सबसे समृद्ध पक्षी आश्रयणी नागी में बिहार के एशियाई मध्य शीतकालीन जल पक्षियों की गणना की गई। जिले के अन्य जलाशयों की तरह यहां भी जल क्षेत्र में काफी कमी देखी गई। इसके बावजूद पक्षियों की संख्या सामान्य वर्षों से अधिक देखी गई है। विशेष रूप से राजहंस (बार हेडेड गूज) और ग्रे लैग गूज की तो रिकार्ड संख्या में यहां दिखी है। अरविन्द मिश्रा ने बताया कि पिछले करीब तीस वर्षों के अध्ययन में ग्रे लैग गूज की इतनी संख्या उन्होंने नागी में कभी नहीं देखी है। इस वक्त यहां 1200 से भी ज्यादा की संख्या में यह जल पक्षी मौजूद थी। हालांकि लालसर की संख्या जरूर कुछ कम दिखाई पड़ी है। भागलपुर से आए इस दल में अरविन्द मिश्रा के साथ पक्षीविद दीपक कुमार झुन्नू, भारतीय वन्यजीव संस्थान के क्षेत्रीय सहायक आशुतोष कुमार और पक्षी प्रेमी आशु मिश्रा शामिल हैं। करीब दस की संख्या में जमुई में प्रशिक्षित यंग गाइड्स भी इस गणना में हिस्सा ले रहे हैं। इनमें संदीप कुमार, रविन्द्र कुमार, पिंटू कुमार यादव, युगल कुमार, श्याम सुंदर यादव, मनीष कुमार यादव, अवधेश कुमार, अमबम कुमार, सनोज कुमार, प्रदीप कुमार आदि शामिल थे। स्थानीय सहयोगियों में सहदेव यादव, वनरक्षी संजीत कुमार और वनपाल अनीश राठौर भी शामिल थे।

शिकार करते पेरिग्रिन फाल्कन • सौजन्य : वन विभाग

30 वर्षों में सबसे अधिक देखे गए ये लैग गूज

1200 से भी अधिक जल पक्षी हैं मौजूद

नागी में ये प्रमुख पक्षी दिखे

पेरिग्रिन फाल्कन, राजहंस (बार हेडेड गूज) और ग्रे लैग गूज, लालसर, कूट, कॉटन पिग्मी गूज, ब्लैक स्टॉर्क, यूरेशियन वीजन, लिटिल रिंग प्लोवर, टैमिंक स्टिंट, ब्लाइट आईबिस, ब्लैक आईबिस, कामन कैट्रेल, स्पॉटेड डक और बड़ी संख्या में पनडुबी आदि देखे गए हैं।

नकटी में दिखी विलुप्त हो रही स्टेपी ईगल

अच्छी खबर

झाझा,निज संवाददाता। जमुई जिले भर के जलाशयों में इन दिनों जारी एशियाई मध्य शीतकालीन जल पक्षियों की गणना के क्रम में झाझा में अवस्थित तीन जलाशयों में भी जल पक्षियों की गणना की गई। झाझा नगर क्षेत्र में स्थित रेलवे ताल में तो पिछली बार से बहुत अधिक संख्या में जल पक्षी देखे गए।

पक्षी विशेषज्ञों के अनुसार यहां मुख्य रूप से लेसर व्हिसलिंग डक यानि छोटी सिल्ली का बसेरा है। पिछली बार यहां इन पक्षियों की तादाद 4-5 सौ की संख्या में पाई गई थी। जबकि इस बार ये एक हजार से भी ज्यादा संख्या में दिखे बताए जाते हैं। बताया कि इस बार रेलवे ताल में जलकुम्भी की सफाई भी नजर आई जिसके कारण उन पक्षियों को भी देखना आसान हो गया जो इनमें छिपे रह जाते थे। पक्षी विशेषज्ञों के दल की अगुवाई कर रहे अरविंद मिश्रा ने बताया कि किनारे उगी झाड़ियों व वृक्षों पर गोल्डेन ओरियल, ब्राउन श्राईक, वाइट थ्रोटेड किंगफिशर, कॉपरस्मिथ बारबेट, बगुले, एशियन ओपेनबिल आदि अन्य पक्षी भी नजर आए हैंक झाझा के वन क्षेत्र पदाधिकारी उदय शंकर भी गणना की कवायद में शामिल हुए।श्री मिश्रा ने बताया कि नागी के पड़ोस में लगभग 50 एकड़ में फैले राजा आहर में सैकड़ों की संख्या में जल पक्षी दिखाई दिए हैं। इनमें लालसर, कूट, गडवाल, गार्गेनी, शोवेलर, कॉटन पिग्मी गूज, इंडियन मूरहेन, पर्पल मूरहेन, ब्रोंज विंग्ड जकाना, ग्रे हेरॉन, पर्पल हेरॉन जैसे प्रवासी और देशी पक्षी शामिल थे। उनके अनुसार सबसे रोचक तो यहां दो फाल्केटेड डक यानि काला सिंखुर का दिखना रहा।

कहा,पूरे देश में यदा-कदा दिखाई देने वाले फाल्केटेड डक (काला सिंखुर) जमुई जिले की चौहदी में सन 2018 से लगातार देखने को मिलते आ रहे हैं। कभी जिले के देवन आहर,कभी नागी-नकटी तो कभी बेला टांड में ये देखे जाते रहे हैं।

बुधवार को नागी-नकटी में डैम में बोटिंग करते लोग । • हिन्दुस्तान

हिन्दुस्तान

ग्रेट बैकयार्ड बर्ड काउंट में जमुई जिला 53 सूचियों के साथ आगे

बिहार के 11 जिलों के पक्षी प्रेमियों के अपलोड किये गए सूचि में जमुई 117 प्रजातियों साथ आगे है। चार दिवसीय बर्ड वॉचिंग कार्यक्रम में बिहार ने शीर्ष 25 राज्यों में 23वां स्थान हासिल किया।

नागी डेम राष्ट्रीय पक्षी अभयारण्य में स्वच्छंद विचरण करते हमारे देश के अतिथि पक्षी।

25

राज्यों में बिहार ने कार्यक्रम में 23वां स्थान हासिल किया है

■ पछले साल देश में प्रजातियों की संख्या 1033 थी

जीबीबीसी के माध्यम से हम यह जान सकेंगे

- राज्य में चिड़ियों का विस्तार किस तरह का है
- मौसम के अनुसार उनके रहवास में परिवर्तन कैसे हो रहा है
- वर्ष दर वर्ष में उनमे क्या बदलाव हो रहा है
- पर्यावरण के अनुसार उनके व्यवहार में परिवर्तन को समझना
- चिड़ियों को देखने और उनकी चहचहाहट सुन तनाव से मुक्ति मिलती है

झाझा, नगर संवाददाता। ग्रेट बैकयार्ड बर्ड काउंट (जीबीबीसी) 2023 में जमुई 117 प्रजातियों और 53 सूचियों के साथ आगे बढ़ा है। बिहार के बर्ड वॉचर ने 17 से 20 फरवरी 2023 तक ई-बर्ड पर 150 चेकलिस्ट और 161 प्रजातियां दर्ज की है, इसे बिहार के 11 जिलों के पक्षी प्रेमियों द्वारा अपलोड किया गया है, जिसमें जमुई 117 प्रजातियों और 53 सूचियों के साथ आगे रहा। चार दिवसीय बर्ड वॉचिंग कार्यक्रम में बिहार ने शीर्ष 25 राज्यों में 23वां स्थान हासिल किया है। पिछले साल भारत में प्रजातियों की संख्या 1033 थी जबकि इस साल यह बढ़कर 1058 पहुंच चुकी है। भारत पूरे विश्व मे दूसरे स्थान पर रहा जबकि चेकलिस्ट की संख्या में कोई अंतर नहीं देखने को मिला है। अपलोड की गई चेस्ट लिस्ट का यदि अवलोकन किया जाए तो जमुई 117 प्रजातियों और 53 सूचियों के साथ आगे रहा। इसके बाद नालंदा, पटना, भागलपुर, नवादा, कटिहार अन्य का स्थान रहा। 2021 और 2022 में, बिहार में रमशः पक्षियों की 33 और 50 सूची ही दर्ज हुई थी। बिहार की सभी चिड़िया प्रेमी को एक इस जी बीबीसी ग्रुप को लीड करने वाले राहुल कुमार एवं जमुई से बर्ड गाइड अवधेश कुमार आदर्श, बिन्दू कुमार यादव, संदीप, प्रदीप का विचार है कि हमें अपने इकोसिस्टम की रक्षा के लिए पक्षियों का संरक्षण करना ही होगा उनके रहवास के लिए पर्याप्त अवसर बनाए रखना होगा और इसके लिए पेड़ पौधे अति आवश्यक है।

झाझा वासियों में खुशी, लोगों ने तालाब साफ कराने की रेलवे के उच्चाधिकारियों से की मांग

रेलवे तालाब बना लेसर व्हिसलिंग डक का बसेरा

ऋतांजय कुमार सिंह, झाझा।

रेलवे तालाब में लेसर किसलिंग डक पक्षी यानी छोटी सिल्ली का बसेरा पाया गया है. इससे न सिर्फ झाझा वासियों में खुशी है, बल्कि पक्षी विशेषज्ञों में इसको लेकर रिसर्च करने की एक ललक पैदा हो गयी है. मंदार नेचर हिल के पक्षी विशेषज्ञ अरविंद मिश्रा ने कहा कि झाझा-जमुई में कई जलाशयों में जल पक्षियों की गणना की गयी है. झाझा के रेलवे तालाब में बहुत अधिक संख्या में जल पक्षी देखे गये. यह तालाब मुख्य रूप से लेसर किसलिंग डक यानि छोटी सिल्ली का बसेरा बन गया है. इस बार की गिनती में एक हजार से भी ज्यादा संख्या देखी गयी. इस बार इस तालाब में जलकुंभी की सफाई भी की गयी है, जिसके कारण उन पक्षियों को देखना आसान हो गया. किनारे उगी झाड़ियों और वृक्षों पर गोल्डेन ओरियल, ब्राउन श्राईक, चाइट थ्रोटेड किंगफिशर, कॉपरस्मिथ बारबेट, बगुले, एशियन ओपेनबिल आदि अन्य पक्षी भी देखे गये. रेलवे तालाब में बहुतायत संख्या में पक्षियों के देखे जाने से जहां लोगों में खुशी है, वहीं पक्षी विशेषज्ञों के लिए यह रिसर्च का केंद्र बनता जा रहा है. झाझा वासियों ने रेलवे के उच्चाधिकारियों से इस तालाब की सफाई कराने की मांग की, ताकि दूसरे जगह के पक्षी यहां आकर रह सकें और झाझा की सुंदरता को बढ़ा सकें.

झाझा के वन क्षेत्र पदाधिकारी उदय शंकर सिंह ने भी इस गणना में शामिल होकर रेलवे तालाब की सफाई की वकालत की. बिहार के एशियाई मध्य शीतकालीन जल पक्षियों की गणना कार्यक्रम में शामिल लोगों ने राजा आहार में भी पक्षियों का झुंड देखकर गिनती की. नागी के निकट लगभग 50 एकड़ में फैले राजा आहर में सैकड़ों की संख्या में जल पक्षी दिखायी दिये. इसमें ग्लासर, कूट, गडवाल, गार्गेनी, शोवेलर, कॉटन पिग्मी गूज, इंडियन मूरहेन, पर्पल मूरहेन, ब्रोंज विंग्ड जकाना, ग्रे हेरॉन, पर्पल हेरॉन जैसे प्रवासी और देशी पक्षी शामिल थे.

2018 से लगातार जमुई जिले में देखा जा रहा फाल्केटेड डक: अरविंद मिश्रा ने बताया कि रेलवे तालाब में दो फाल्केटेड डक भी देखा गया. पूरे देश में यदा-कदा दिखने वाला फाल्केटेड डक यानि काला सिंखुर वर्ष 2018 से लगातार जमुई जिले में कभी टेवन आहर, कभी नागी-नकटी तो कभी बेला टांड में देखा जा रहा है. खास बात यह है कि यह पक्षी हजारों के बीच बस एक ही दिखाई देता है. लेकिन इस वर्ष यह राजा आहर में दिखा वो भी दो की संख्या में, जो एक शुभ संकेत है. उन्होंने बताया कि वन प्रमंडल पदाधिकारी पीयुष बरनवाल, सहायक वन संरक्षक मेघा यादव, झाझा के वन क्षेत्र पदाधिकारी उदय कुमार, वनपाल अनिल कुमार, अनीश राठौर, स्थानीय सहदेव यादव, वन रक्षियों के सहयोग पक्षियों की गणना की गयी. उन्होंने बताया कि कई वर्षों के बाद स्टेपी ईगल को देखा गया. पूरी दुनिया में इस पक्षी को अत्यंत संकटग्रस्त श्रेणी में रखा गया है. क्योंकि इसकी संख्या तेजी से घट रही है. जबरदस्त ताकतवर यह पक्षी चीन, रूस और उससे भी उत्तर मंगोलिया से हमारे देश में शीतकाल में आता है. इसके अलावा सबसे अधिक संख्या में कूट और लालसर पक्षी दिखे. अन्य पक्षियों में राजहंस, कॉटन पिग्मी गूज, यूरेशियन वीजन, मलार्ड, गार्गेनी, व्हाइट आईबिस, ब्लैक आईबिस, टफ्टेड डक और बड़ी संख्या में पनडुब्बी आदि शामिल थे. बिहार के एशियाई मध्य शीतकालीन जल पक्षियों की गणना का कार्यक्रम अरविंद मिश्रा, पक्षीविद् दीपक कुमार झुन्नू, भारतीय वन्यजीव संस्थान के क्षेत्रीय सहायक आशुतोष कुमार और पक्षी प्रेमी आशु मिश्रा द्वारा लगातार जमुई में पक्षी गणना की गयी. इसके अलावा प्रशिक्षित बर्ड गाइड्स संदीप कुमार, रंकिन्द्र कुमार, पिंटू कुमार यादव, युगल कुमार, श्याम सुंदर यादव, मनीष कुमार यादव, अवधेश कुमार आदर्श, बमबम कुमार, सन्नोज कुमार, प्रदीप कुमार का भी सराहनीय योगदान रहा. पक्षी विशेषज्ञों ने कहा कि वन विभाग की कर्मठता के कारण आज जिले के नागी, नकटी से लेकर सभी जलाशयों में पक्षियों की संख्या तीन गुनी बढ़ी है. यह वन विभाग की एक सार्थक पहल है. झाझावासी रेलवे तालाब में पक्षियों के देखे जाने के बाद काफी उत्साहित है. रेलवे उच्चाधिकारियों से इसे साफ करने की मांग भी की है.

रेलवे तालाब में पक्षी.

रेलवे तालाब में पक्षियों की गणना करते विशेषज्ञ.

रेलवे तालाब की सफाई से लगातार दिखेगा पक्षियों का झुंड

बिहार खादी विकास महासंघ के मंत्री दयाशंकर बरनवाल उर्फ सोनू जी ने कहा कि रेलवे तालाब की सफाई हो जाने से ना सिर्फ पक्षियों का झुंड लगातार यहां के लोगों को देखने को मिलेगा. पर्यावरण भी शुद्ध हो जायेगा. प्रधानमंत्री कौशल विकास केंद्र के प्रबंध निदेशक संजय सिंह ने कहा कि रेलवे तालाब की सफाई हो जाने से यहां पक्षी आएंगे और पक्षी आने से यहां के पक्षी विशेषज्ञ आकर यहां रिसर्च करेंगे, जो झाझावासियों के लिए एक सुखद एहसास होगा.

ऐसा हो जाने से झाझा में एक नया कीर्तिमान स्थापित होगा. बैंक प्रबंधक सह समाजसेवी शैलेश कुमार ने रेलवे के अधिकारियों से मांग करते हुए कहा कि अतिशीघ्र इस रेलवे तालाब की सफाई की जाये. कई बार रेलवे उच्चाधिकारी तालाब का निरीक्षण भी किये हैं. लेकिन अब तक इसकी सफाई नहीं हो पायी है. पक्षी विशेषज्ञ अरविंद मिश्रा ने झाझावासियों की आखें खोल दी है और निहित तौर पर रेलवे तालाब की सफाई होनी चाहिए. केमिस्ट एंड ड्रगिस्ट एसोसिएशन के अध्यक्ष सुरेश यादव ने रेलवे उच्चाधिकारियों से अतिशीघ्र रेलवे तालाब की सफाई की मांग की है, ताकि पक्षी आसानी से यहां रह सकें. और पक्षियों के कलरव सुनकर प्रत्येक सुबह झाझावासी आनंदित हो सकें.

सुरेश यादव

संजय सिंह

शैलेश कुमार

दयाशंकर बरनवाल.

जिले के जलाशयों में जलपक्षियों की गणना

झाझा,निज संवाददाता। जमुई जिले के जलाशयों में मिड विंटर वाटर बर्ड्स सेंसश यानि जलपक्षियों की गणना की वार्षिक कवायद शुक्रवार से परवान चढ़ गई है। 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।

सूबे के पर्यावरण, वन एवं जलवायु परिवर्त्तन विभाग के तत्वाधान में भागलपुर के चार पक्षी विशेषज्ञों के अलावा स्थानीय बर्ड गाइड युवाओं की कुल 18 सदस्यीय टीम के सदस्य गणना अभियान के पहले दिन सोनो के पेलवाजन, देवनहार व बेलाटांढ़ आदि जलाशयों में जलविहार करतीं

झाझा के नागी पक्षी आश्रयणी में पक्षियों की गणना में करते टीम के सदस्य।

प्रवासी व सामान्य पक्षियों की अनेकों प्रजातियों की पहचान करते हुए उनकी संख्या का प्रजातिवार ब्यौरा संकलित करते दिखे। जकि शनिवार को गणना का यह कार्यक्रम गरही डैम में चलने की बात बताई गई है। डीएफओ पीयूष बर्णवाल के निर्देशन में चली उक्त कवायद में सहयोग को एसीएफ मेधा यादव व रेंजर उदय शंकर तथा स्थानीय बर्ड गाइड संदीप कुमार समेत कई बर्ड गाइड एवं वनकर्मी भी सहयोगी की भूमिका में दिखे।

एशिया उप महाद्वीप स्तर पर बनती है संरक्षण नीति

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। बताया जाता है कि 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-प्रवृति का भी गहराई से जायजा लिया जाता है। कंपाइल कर उसका एशिया स्तर पर एक डेटा बेस तैयार किया जाता है।

Nalanda District

प्रवासी नवंबर में राजगीर जलाशय का किया गया था निर्माण

राजगीर में दिखा मंगोलिया का बार हेडेड गूज

SPECIAL

जमुई के नागी बर्ड सैंचुरी में देखा जाता था पहले

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PATNA (12 Feb): सेंट्रल एशिया, खासकर मंगोलिया का मूल रूप से रहने वाला बार हेडेड गूज पहली बार राजगीर जलाशय में देखा गया है. नवंबर, 2022 में राजगीर जलाशय का निर्माण किया गया था और सरकार के इस प्रयास का यह एक और सफलता है. इस जलाशय से न केवल स्थानीय लोगों की जिंदगी में बदलाव आया है और यह बार हेडेड गूज जैसे विदेशी पक्षियों के प्रवास के लिए माकूल स्थान साबित हो रहा है. ये सभी झुंड में यहां जमा हो गए हैं. इस बात की पुष्टि करते हुए जूलॉजिकल सर्वे ऑफ इंडिया, पटना प्रभाव के ज्वाइंट डायरेक्टर एवं वरिष्ठ वैज्ञानिक डॉ. गोपाल शर्मा ने कहा कि यह पक्षी प्रेमियों

मंगोलिया बार हेडेड गूज.

का नया ठिकाना हो सकता है. जिसे आगे और विकसित किया जाना चाहिए. आम तौर पर प्रति वर्ष आने वाले प्रवासी पक्षी के तौर पर बार हेडेड गूज को आम तौर पर जमुई के नागी बर्ड सैंचुरी में देखा जाता था. लेकिन यह पहला मौका है जब यह विचरण करते हुए राजगीर में अपना प्रवास कर रहे हैं. डॉ. गोपाल शर्मा ने कहा कि इन दिनों सेंट्रल एशिया में भीषण ठंड पड़ रही है और भोजन की तलाश में ये बिहार पहुंचे हैं. जानकारी हो कि सीएम नीतीश कुमार ने नवंबर, 2022 में राजगीर जलाशय का शुभारंभ किया था और फरवरी माह में बार हेडेड गूज दिखने लगे हैं. आम जन के साथ पक्षियों के प्रवास और पर्यावरण के लिए भी बड़ा इनिशिएटिव है.

29 हजार पर भरते हैं उड़ान

बार हेडेड गूज एक प्रकार का बत्तख है और मंगोलिया से भारत आने के लिए करीब 29 हजार फीट की ऊंचाई पर उड़कर यहां पहुंचा है. डॉ. गोपाल का कहना है कि इसका यहां प्रवास करना राज्य के लिए खुशखबरी है क्योंकि यहां पर्यावरण संरक्षण का काम होने से विदेशी पक्षियों का समूह आया है. उन्होंने सुझाव दिया है कि इसे आगे और विकसित किया जाए, तो इसके और अच्छे परिणाम मिल सकते हैं.

अन्य पक्षी भी दिखने लगे

केवल बार हेडेड गूज ही नहीं, यहां और भी कई शानदार पक्षियों को देखा जा सकता है. इनमें रेड क्रेस्टेड पोचार्ड, ब्राह्मणी डक, लेजर व्हिस्लिंग डक, नार्दन पेनटेल, ग्रे हेरेन, जंगल बैबलर, कॉमन सैंड पाइपर, रेड वैटल इरियंग आदि कई पक्षियों को यहां देखा जा रहा है. इस दिनों एशियाई वाटर बर्ड सेंसस 2023 का कार्यक्रम चल रहा है जिसमें डॉ गोपाल शर्मा, नवीन कुमार और आशीष समेत अन्य पार्टिसिपेट कर रहे हैं.

Patna District

...सम्मान इन्हें साहित्य में योगदान के लिए दिया गया है। रिटायर्ड प्रो. सुधा सिन्हा कवियत्री हैं और ये अपनी रचनाओं के माध्यम से देश-समाज के मुद्दों को लगातार उठाती रही हैं। पूर्व में बज्मे हफीज बनारसी, आगमन, थावे विद्यापीठ, सामयिक परिवेश, विश्व हिन्दी साहित्य, प्रयागराज आदि विभिन्न संस्थाओं के द्वारा हिन्दी साहित्य में योगदान के लिए इन्हें सम्मानित किया जा चुका है।

टेस्ट ड्राइव के बहाने बाइक लेकर चंपत हुआ युवक

पटना। टेस्ट ड्राइव के बहाने एक शातिर युवक की बाइक लेकर चंपत हो गया। यह घटना सचिवालय थाना इलाके में एक फरवरी को हुई। हालांकि बीते सोमवार को ही अविनाश ने इसकी एफआईआर थाने में दर्ज करवायी। मूलरूप से कादिरगंज के रहने वाले अविनाश ने बाइक बेचने के लिए ओएलएक्स पर विज्ञापन दिया था। इसके बाद उसे शातिर ने कॉल कर सचिवालय हाल्ट के समीप बुलाया। वहां पहले से दो युवक मौजूद थे। टेस्ट ड्राइव के बहाने युवकों ने बाइक लिया और भाग निकले।

राजधानी जलाशय में जलीय पक्षियों की हुई गणना

पटना। एशियन वाटर बर्डस सेन्सस के तहत राजधानी जलाशय में जलीय पक्षियों की गणना एवं पहचान की गई। यह पटना जू के वन क्षेत्र पदाधिकारी आनंद कुमार और कर्नल अमित सिन्हा के नेतृत्व में हुआ। जिसमें 14 अलग-अलग प्रजातियों के 171 जलीय पक्षी पाए गए। पर्यावरण, वन एवं जलवायु परिवर्तन विभाग की ओर से यह राज्यभर के सभी जलाशयों में गणना की जा रही है। मौके पर पक्षी विशेषज्ञ साहेला आसमिन, रश्मि कोमल, सलोनी, गौरव नारायण, शहबाज समेत अन्य शामिल थे।

Saharsa District

हिन्दुस्तान

वन एवं पर्यावरण विभाग व बंबई नेचुरल हिस्ट्री सोसायटी को भेजी जाएगी रिपोर्ट

नेपाल सीमा से सहरसा होते चौसा तक होगी जलीय पक्षियों की गणना

एक्सक्लूसिव

■ रंजीत

22 सौ 35 जलीय पक्षी दिखे थे चौर में पिछले साल

02 टीम इसी माह गणना के लिए आयेगी, बनेगी रिपोर्ट

- 13 व 14 फरवरी को वर्ष 2022 में भी हुई थी पक्षियों की गणना
- इको टूरिज्म के रूप में क्षेत्र को विकसित करने का है प्रस्ताव

सहरसा के सोनवर्षा का अरसी चौर में गुरुवार को दिखे जलीय पक्षी।

सहरसा। नेपाल बॉर्डर पास स्थित वीरपुर से सहरसा होते मधेपुरा के भटगामा चौसा तक 85 किमी की दूरी में आर्द्र भूमि में स्थित चउर में जलीय पक्षियों की गणना इसी माह से शुरू होगी। जलीय पक्षियों की गणना के लिए पक्षी विज्ञानियों की दो टीम बिहार व प. बंगाल से आवेगी।

नेपाल बॉर्डर से सहरसा होते मधेपुरा के भटगामा चौसा तक चउर में जलीय पक्षियों की गणना पटना स्थित जूलॉजिकल सर्वे ऑफ इंडिया भारत सरकार के संयुक्त निदेशक सह वरीय वैज्ञानिक डॉ. गोपाल शर्मा के नेतृत्व में की जावेगी। सहरसा के तीन चउर सिमरी, महिषी के जलीय और सोनवर्षा के अरसी में जलीय पक्षियों की गणना बंबई नेचुरल हिस्ट्री सोसायटी के कॉर्डिनेटर ज्ञानेन्द्र ज्ञानी के नेतृत्व में होगी। वन एवं पर्यावरण विभाग के अधिकारियों के सुपरविजन में चउर क्षेत्र में जलीय पक्षियों की गणना का काम होगा। वन प्रमंडल पदाधिकारी आरकेसिन्हा ने कहा कि देसी और विदेशी पक्षियों की संख्या जानने के लिए विज्ञानियों की दो टीमों के द्वारा गणना का काम इसी माह से शुरू होगा। गणना के बाद वास्तविक संख्या से संबंधित रिपोर्ट तैयार कर वन एवं पर्यावरण विभाग और बंबई नेचुरल हिस्ट्री सोसायटी को टीम देगी। जलीय पक्षियों के संरक्षण व संवर्धित आर्द्र भूमि में स्थित चउर क्षेत्र के विकास के लिए कार्ययोजना तैयार कर विभागीय मुख्यालय पटना में मुख्य वन्य प्राणी प्रतिपालक को भेजेंगे। जलीय पक्षियों का बसेरा बनने वाले चउर पास वायरलेस स्टेशन निर्माण, गांवों में जनजागरूकता अभियान व पक्षियों का शिकार नहीं हो उसकी निगरानी के लिए वेटलैंड मित्र की बहाली करने को लिखा जायेगा। बिहार व कोलकाता के पक्षी विज्ञानियों की टीम सूबे के अलग-अलग जिले में स्थित 60 चउर में जल पक्षियों की गणना के लिए पहुंचेंगे। गणना के दौरान जल पक्षियों की वास्तविक संख्या का आंकलन करेंगे। देखा जायेगा कि पिछली साल की तुलना में इस बार जल पक्षियों की संख्या बढ़ी या घटी है। घटी है तो इसकी वजह चोरी छिपे पक्षियों का शिकार होना तो नहीं है। चउर आसपास खेती किसानी होने की वजह से कहीं जल पक्षियों का पलायन तो नहीं हो रहा। पिछले साल फरवरी में गणना हुई थी। इस बार जनवरी में गणना होगी। माना जा रहा कि जनवरी में फरवरी की बजाय बहुतायत संख्या में पक्षियों को चउर क्षेत्रों में देखा जाता है।

सिमरी झील में 92 पक्षी देखे गए थे

वहीं चउर का पानी सूखे नहीं और इको टूरिज्म के रूप में यह क्षेत्र विकसित हो उसे भी प्रस्ताव में शामिल किया जायेगा। पिछले साल 13 और 14 फरवरी को हुई गणना में सहरसा जिले के महिषी के बीरा चउर में 1069, सिमरी झील में 92 और अरसी चउर में 74 कुल 1235 देशी-विदेशी पक्षी दिखे थे। वहीं नेपाल बॉर्डर से सुपौल जिले के भपटियाही तक 35 किमी की दूरी में कोसी नदी के आर्द्र भूमि में स्थित चउर पास करीब एक हजार की संख्या में जलीय पक्षियों को देखा गया था।

जलीय जीवों का कोसी नदी में है बसेरा

डॉल्फिन, बड़ा कछुआ, मगरमच्छ, घड़ियाल, विशालकाय गिद्ध सहित अन्य जलीय जीवों का कोसी नदी में बसेरा है। इसका प्रमाण पिछले साल की जलीय पक्षियों की गणना और वर्ष 2021 व 2016 के सर्वेक्षण में मिल चुका है। सर्वेक्षण में वर्ष 2016 में 139 तो वहीं 2021 में डॉल्फिन की संख्या बढ़कर 194 पाई गई थी। बताया जा रहा है कि कोसी और गंगा नदी में गांगेय प्रजाति के डॉल्फिन देखे जाते हैं। लेकिन सर्वेक्षण और गणना के बाद भी जलीय जीवों और पक्षियों के संरक्षण को तैयार प्रस्ताव कमोबेश हर साल कागज पर ही सिमटा रह जाता है। जरूरी है कि संरक्षण के प्रस्ताव को धरातल पर उतारा जाय। जिससे विकसित होने वाला इको टूरिज्म स्वस्थ वातावरण बनाने के साथ-साथ रोजगार का जरिया बन सके।

हिन्दुस्तान

कोसी के चउर में देसी-विदेशी 52 प्रजातियों के पक्षी

विशेष

■ रंजीत

110 किमी की दूरी में दो दिनों में किया सर्वे | 03 सदस्यीय विशेषज्ञों की टीम कर रही गिनती

कोसी नदी के चउर क्षेत्र में इस तरह से विचरती दिखी रेड क्रिस्टेड पोचार्ड।

हरा-पीला कबूतर दिखा

तीन सदस्यीय पक्षी विशेषज्ञों की टीम को नेपाल बॉर्डर से कोसी नदी के चउर क्षेत्र में हरा, पीला कबूतर, मूंछ वाली बुलबुल से लेकर सतबहिनी चिड़िया तक दिखी। इसके अलावा रेड क्रेस्टेड पोचार्ड, तीतर पूछ व कांस्य पंखों वाला जकाना, कॉमन सैंडपाइपर, छोटा बगुला, बड़ा बगुला, पर्पल हेटन, व्हाइट ब्रेस्टेड किंगफिशर, पॉन्ड हेटन, छोटा जलकाग, ग्रेटर सहायक सारस, ग्रे हेड लैपविंग, लिटिल ग्रीब, एशिइन ओपन बिल, रेड नेड आईबिस, ग्रेट कॉर्मोरेंट, पाइड किंगफिशर, कम सीटी बतख, सफेद आइबिस, रेड वेंटेड बुलबुल, ब्लेक ड्रोंगो सहित अन्य पक्षियों को देखा गया।

सहरसा। नेपाल बॉर्डर से कोसी नदी के आद्र भूमि में स्थित चउर क्षेत्र में विशेषज्ञों को 52 प्रजातियों के करीब 1500 की संख्या में देसी-विदेशी पक्षी दिखे। शनिवार को भपटियाही से भीमनगर तक 65 किमी के क्षेत्र में मोटरबोट से आठ घंटे तक लगातार किये गये भ्रमण में 47 पक्षियों की प्रजातियां मिलीं। जो पिछले साल की गणना से अधिक है। लेकिन पक्षियों की संख्या पिछले साल के मुकाबले कम देखी गयी। इस बार के सर्वे में रेड क्रेस्टर्ड पोचार्ड, तीतर पूंछ व कांस्य वाला जैकाना जैसी दुर्लभ प्रवासी पक्षियों को पहली बार देखा गया। वहीं नेपाल बॉर्डर पर जंगल मैना का मिलना पक्षी प्रेमियों के लिए कौतूहल का विषय बना है। दूसरे दिन भी रविवार को पक्षी विशेषज्ञों की तीन सदस्यीय टीम में शामिल डॉ. गोपाल शर्मा, नवीन कुमार और शील आशीष ने भीमनगर से नेपाल बॉर्डर में स्थित वीरपुर बराज पास 17 नंबर स्पर तक 45 किमी की दूरी तक पहुंच पक्षी गणना की। जिसमें 500 से अधिक पक्षियां पांच से अधिक प्रजाति की मिली। पटना स्थित जूलॉजिकल सर्वे ऑफ इंडिया भारत सरकार के संयुक्त निदेशक सह वरीय वैज्ञानिक डॉ. गोपाल शर्मा ने कहा कि दो दिनों तक 110 किमी की दूरी में की गई गणना में 50 से अधिक पक्षियों की प्रजातियां मिली जो पिछले साल से अधिक है। लेकिन कैचमेंट एरिया(चउर क्षेत्र) में इस साल पानी कम रहने के कारण पक्षियों की संख्या पिछले साल के मुकाबले कम देखी गई है। उन्होंने कहा कि सूबे के विभिन्न चउर क्षेत्र में बिहार सरकार के पर्यावरण, वन एवं जलवायु परिवर्तन विभाग के सौजन्य से 15 टीम में शामिल 100 विशेषज्ञों से अधिक के माध्यम से पक्षी गणना सर्वे कराया जा रहा हैं। एशियन वाटर बर्ड सेंसस की यह गणना विश्व स्तर पर पक्षियों के प्रवास की जानकारी देता है।

नेपाल सीमा से सहरसा होते चौसा तक होगी जलीय पक्षियों की गणना

■ रंजीत

सहरसा। नेपाल बॉर्डर पास स्थित वीरपुर से सहरसा होते मधेपुरा के भटगामा चौसा तक 85 किमी की दूरी में आर्द्र भूमि में स्थित चउर में जलीय पक्षियों की गणना इसी माह से शुरू होगी। जलीय पक्षियों की गणना के लिए पक्षी विज्ञानियों की दो टीम बिहार व प. बंगाल से आयेगी।

नेपाल बॉर्डर से सहरसा होते मधेपुरा के भटगामा चौसा तक चउर में जलीय पक्षियों की गणना पटना स्थित जूलॉजिकल सर्वे ऑफ इंडिया भारत सरकार के संयुक्त निदेशक सह वरीय वैज्ञानिक डॉ. गोपाल शर्मा के नेतृत्व में की जायेगी। सहरसा के तीन चउर सिमरी, महिषी के जलैय और सोनवर्षा के अरसी में जलीय पक्षियों की गणना बंबई नेचुरल हिस्ट्री सोसायटी के कॉर्डिनेटर ज्ञानेन्द्र ज्ञानी के नेतृत्व में होगी। वन एवं पर्यावरण विभाग के अधिकारियों के सुपरविजन में चउर क्षेत्र में जलीय पक्षियों की गणना का काम होगा। वन प्रमंडल पदाधिकारी आरके सिन्हा ने कहा कि देसी और विदेशी पक्षियों की संख्या जानने के लिए विज्ञानियों की दो टीमों के द्वारा गणना का काम इसी माह से शुरू होगा। गणना के बाद वास्तविक संख्या से संबंधित रिपोर्ट तैयार कर वन एवं पर्यावरण विभाग और बंबई नेचुरल हिस्ट्री सोसायटी को टीम देगी। जलीय पक्षियों के संरक्षण व संबंधित आर्द्र भूमि में स्थित चउर क्षेत्र के विकास के लिए कार्ययोजना तैयार कर विभागीय मुख्यालय पटना में मुख्य वन्य प्राणी प्रतिपालक को भेजेंगे। बिहार व कोलकाता के पक्षी विज्ञानियों की टीम सूबे के अलग-अलग जिले में स्थित 60 चउर में जल पक्षियों की गणना के लिए पहुंचेंगे।

जलीय जीवों का कोसी नदी में है बसेरा

डॉल्फिन, बड़ा कछुआ, मगरमच्छ, घड़ियाल, विशालकाय गिद्ध सहित अन्य जलीय जीवों का कोसी नदी में बसेरा है। इसका प्रमाण पिछले साल की जलीय पक्षियों की गणना और वर्ष 2021 व 2016 के सर्वेक्षण में मिल चुका है। सर्वेक्षण में वर्ष 2016 में 139 तो वहीं 2021 में डॉल्फिन की संख्या बढ़कर 194 पाई गई थी।

हिन्दुस्तान

सहरसा जिले के चउर में हैं देशी-विदेशी 2550 पक्षी

खास

- कोसी नदी के कैचमेंट एरिया में सबसे अधिक 1140 पक्षी दिखा
- 579 पक्षी जलैय चउर में व 576 गाय बगुला सबसे अधिक दिखा

विघसा लेजर व्हिसटलिंग डक

ब्लैक हेडेड व्हाइट लबिस बैक पक्षी

सहरसा, निज प्रतिनिधि। जिले के चउर क्षेत्र में 2550 देशी-विदेशी पक्षी विशेषज्ञों को मिले। सबसे अधिक सहरसा जिले के कोसी नदी के कैचमेंट एरिया में 1140 देशी-विदेशी पक्षी दिखा।उसके बाद जलैय चउर में 579, अरसी चउर में 290 और बारा चउर में 275 पक्षी मिले। सबसे कम 266 पक्षी सिमरी चउर में दिखाई दिया। वहीं सबसे अधिक 576 की संख्या में गाय बगुला मिला। पक्षी विशेषज्ञ बम्बई नेचुरल हिस्ट्री सोसायटी के सदस्य सह इंडियन बर्ड कंजर्वेशन नेटवर्क के सदस्य नवीन कुमार ने कहा कि 2 और 3 फरवरी को सहरसा जिले के चार चउर व कोसी नदी के कैचमेंट एरिया में सर्वे किया गया था। जिसमें 15 प्रजाति की 2550 देशी और विदेशी पक्षी मिले। एक तरफ खेती और दूसरी दिशा में करीब 5 वर्ग किलोमीटर के क्षेत्र में दलदली होने के बावजूद सिमरी चउर में सबसे अधिक विदेशी पक्षी दिखा। यहां उजला आंख वाली कत्थई रंग की प्रिजेनियस पोचार्ड पक्षी मिली। कॉमन पोचार्ड को भी यहां देखा गया। उन्होंने कहा कि पक्षी सर्वे के दौरान उनके साथ पर्यावरण, वन एवं जलवायु परिवर्तन विभाग के मिथिलेश कुमार सिंह, सुरेश कुमार थे। पक्षी सर्वे से संबंधित रिपोर्ट वन विभाग को दे दी गई है। उधर वन प्रमंडल पदाधिकारी आर. के. सिन्हा ने कहा कि विभाग के द्वारा पक्षी विशेषज्ञों से पक्षी गणना कराई गई है। गणना से संबंधित रिपोर्ट मुख्यालय भेजी जायेगी।

जलैय चउर में सबसे अधिक घुसर टिटहरी मिले: पक्षी विशेषज्ञ को जलैय चउर में 200 घुसर टिटहरी मिले। वहीं 110 छोटा सिलपी, 75 घोंघिल, एक-एक लिटल स्विफ्ट, लाल अंजन सहित कुल 579 पक्षी दिखे।

बारा चउर में गाय बगुला की भरमार: जिले के बारा चउर में गाय बगुला बहुतायत संख्या में दिखा। यहां सबसे अधिक 191 गाय बगुला, 35 घुसर टिटहरी, तीन छोटा गरुड़ के अलावा बड़ा, छोटा व मंझला बगुला भी दिखा। यहां कुल 275 पक्षी दिखे।

सिमरी चउर में गरुड़ भी दिखा: सिमरी चउर में सबसे अधिक 140 ख़रीम, जामुनी जलमुर्गी दिखे। वहीं 2 गरुड़, 70 घुसर टिटहरी सहित कुल 266 पक्षी मिले।

अरसी चउर में काला बुज्जा सहित अन्य पक्षी: अरसी चउर में भी सबसे अधिक 165 गाय बगुला दिखा। वहीं 4 काला बुज्जा, 3 छोटा गरुड़, 4 पनडुब्बी सहित कुल 290 पक्षी दिखाई दिया।

कोसी नदी के कैचमेंट एरिया में 520 लेजर व्हिसटलिंग डक(छोटी सिल्ही) दिखा। इसके अलावा 245 घोंघिल, 195 गाय बगुला, 19 छोटा गरुड़ सहित कुल 1140 पक्षी मिले।

हिन्दुस्तान

नेपाल सीमा के वीरपुर से शुरू हो सहरसा होते हुए मधेपुरा के चौसा तक होगी पक्षी गणना

कोसी क्षेत्र में कौन-कौन जलीय पक्षी, इसी माह शुरू होगी गिनती

एक्सक्लूसिव

■ रंजीत

022 सौ 35 जलीय पक्षी पिछले साल कोसी के चउर में दिखे थे

013 और 14 फरवरी को वर्ष 2022 में भी हुई थी पक्षियों की गणना

- चउर में जाकर विज्ञानियों की टीमें जलीय पक्षियों का करेंगी आकलन
- वन एवं पर्यावरण विभाग व बंबई नेचुरल हिस्ट्री सोसायटी को जाएगी रिपोर्ट

सहरसा। नेपाल बॉर्डर पास स्थित वीरपुर से सहरसा होते मधेपुरा जिले के भटगामा चौसा तक 85 किमी की दूरी में आर्द्र भूमि में स्थित चउर में जलीय पक्षियों की गणना इसी माह से शुरू होगी। जलीय पक्षियों की गणना के लिए पक्षी विज्ञानियों की दो टीम बिहार और बंगाल राज्यों से आयेगी। नेपाल बॉर्डर से सहरसा होते मधेपुरा के भटगामा चौसा तक चउर में जलीय पक्षियों की गणना पटना स्थित जूलॉजिकल सर्वे ऑफ इंडिया भारत सरकार के संयुक्त निदेशक सह वरीय वैज्ञानिक डॉ. गोपाल शर्मा के नेतृत्व में की जायेगी।

वहीं सहरसा जिले के तीन चउर सिमरी, महिषी के जलैय और सोनवर्षा के अरसी में जलीय पक्षियों की गणना बंबई नेचुरल हिस्ट्री सोसाइटी के कॉर्डिनेटर ज्ञानेन्द्र ज्ञानी के नेतृत्व में होगी। वन एवं पर्यावरण विभाग के अधिकारियों के सुपरविजन में चउर क्षेत्र में जलीय पक्षियों की गणना करने का काम होगा। वन प्रमंडल पदाधिकारी आरके सिन्हा ने कहा कि देशी और विदेशी पक्षियों की संख्या जानने के लिए विज्ञानियों की अलग-अलग दो टीम के द्वारा गणना करने का काम इसी माह से शुरू किया जायेगा। गणना के बाद वास्तविक संख्या से संबंधित रिपोर्ट तैयार कर वन एवं पर्यावरण विभाग और बंबई नेचुरल हिस्ट्री सोसायटी को टीम देगी।

चउर क्षेत्र के विकास के लिए कार्ययोजना तैयार कर विभागीय मुख्यालय पटना में मुख्य वन्य प्राणी प्रतिपालक को भेजेंगे। जलीय पक्षियों का बसेरा बनने वाले चउर पास वायरलेस स्टेशन निर्माण, आसपास के गांवों में जनजागरूकता अभियान और पक्षियों का शिकार नहीं हो उसकी निगरानी के लिए बेटलैंड मित्र की बहाली करने को लिखा जायेगा।

इको टूरिज्म बनाने को तैयार होगा प्रस्ताव

चउर का पानी सूखे नहीं और इको टूरिज्म के रूप में यह क्षेत्र विकसित हो उसे भी प्रस्ताव में शामिल किया जायेगा। बता दें कि पिछले साल 13 और 14 फरवरी को हुई गणना में सहरसा जिले के महिषी के बैत चउर में 1069, सिमरी झील में 92 और अरसी चउर में 74 कुल 1235 देशी-विदेशी पक्षी दिखे थे। वहीं नेपाल बॉर्डर से भटियाही तक 35 किमी की दूरी में कोसी नदी के आर्द्र भूमि में स्थित चउर पास करीब एक हजार की संख्या में जलीय पक्षियों को देखा गया था।

डॉल्फिन का भी कोसी नदी में है बसेरा

डॉल्फिन, बड़ा घड़ियाल, मगरमच्छ, घड़ियाल, शिशुकवच गिद्ध सहित अन्य जलीय जीवों का कोसी नदी में बसेरा है। इसका प्रमाण वर्ष 2021 व 2016 के सर्वेक्षण में मिल चुका है। सर्वेक्षण में वर्ष 2016 में 139 तो वर्ष 2021 में डॉल्फिन की संख्या बढ़कर 194 पाई गई थी। कोसी और गंगा नदी में गांगेय प्रजाति के डॉल्फिन देखे जाते हैं। सर्वेक्षण और गणना के बाद भी जलीय जीवों और पक्षियों के संरक्षण को तैयार प्रस्ताव हर साल कागज पर ही सिमट कर रह जाता है।

सूबे के 60 चउर में जल पक्षियों की गणना होगी

बिहार और कोलकाता के पक्षी विज्ञानियों की टीम सूबे के अलग-अलग जिले में स्थित करीब 60 चउर में जल पक्षियों की गणना के लिए जुटेंगे। गणना के दौरान जल पक्षियों की वास्तविक संख्या का आकलन करेंगे। वह देखा जायेगा कि पिछली सात की तुलना में इस बार जल पक्षियों की संख्या बढ़ी या घटी है। अगर घटी है तो इसकी वजह जानी जायेगी। चउर आसपास खेती किसानी होने की वजह से वहीं पक्षियों का पलायन तो नहीं हो रहा।

हिन्दुस्तान

नेपाल से चौसा तक होगी जलीय पक्षी की गणना

एक्सक्लूसिव

■ रंजीत

सहरसा। नेपाल बॉर्डर पास स्थित वीरपुर से सहरसा होते मधेपुरा के भटगामा चौसा तक 85 किमी की दूरी में आर्द्र भूमि में स्थित चउर में जलीय पक्षियों की गणना इसी माह से शुरू होगी। जलीय पक्षियों की गणना के लिए पक्षी विज्ञानियों की दो टीम बिहार व प. बंगाल से आयेगी।

नेपाल बॉर्डर से सहरसा होते मधेपुरा के भटगामा चौसा तक चउर में जलीय पक्षियों की गणना पटना स्थित जूलॉजिकल सर्वे ऑफ इंडिया भारत सरकार के संयुक्त निदेशक सह वरीय वैज्ञानिक डॉ. गोपाल शर्मा के नेतृत्व में की जायेगी। सहरसा के तीन चउर सिमरी, महिषी के जलैय और सोनवर्षा के अरसी में जलीय पक्षियों की गणना बंबई नेचुरल हिस्ट्री सोसायटी के कॉर्डिनेटर ज्ञानेन्द्र ज्ञानी के नेतृत्व में होगी। वन एवं पर्यावरण विभाग के अधिकारियों के सुपरविजन में चउर क्षेत्र में जलीय पक्षियों की गणना का काम होगा।

वन प्रमंडल पदाधिकारी आरके सिन्हा ने कहा कि देसी और विदेशी पक्षियों की संख्या जानने के लिए विज्ञानियों की दो टीमों के द्वारा गणना का काम इसी माह से शुरू होगा। गणना के बाद वास्तविक संख्या से संबंधित रिपोर्ट तैयार कर वन एवं पर्यावरण विभाग और बंबई नेचुरल हिस्ट्री सोसायटी को टीम देगी। जलीय पक्षियों के संरक्षण व संबंधित आर्द्र भूमि में स्थित चउर क्षेत्र के विकास के लिए कार्ययोजना तैयार कर विभागीय मुख्यालय पटना में मुख्य वन्य प्राणी प्रतिपालक को भेजेंगे। जलीय पक्षियों का बसेरा बनने वाले चउर पास वायरलेस स्टेशन निर्माण, गांवों में जनजागरूकता अभियान व पक्षियों का शिकार नहीं हो उसकी निगरानी के लिए बेटलैंड मित्र की बहाली करने को लिखा जायेगा। बिहार व कोलकाता के पक्षी विज्ञानियों की टीम सूबे के अलग-अलग जिले में स्थित 60 चउर में जल पक्षियों की गणना के लिए पहुंचेंगे।

जलीय जीवों का कोसी नदी में है बसेरा

डॉल्फिन, बड़ा कछुआ, मगरमछ, घड़ियाल, विशालकाय गिद्ध सहित अन्य जलीय जीवों का कोसी नदी में बसेरा है। इसका प्रमाण पिछले साल की जलीय पक्षियों की गणना और वर्ष 2021 व 2016 के सर्वेक्षण में मिल चुका है। सर्वेक्षण में वर्ष 2016 में 139 तो वहीं 2021 में डॉल्फिन की संख्या बढ़कर 194 पाई गई थी। बताया जा रहा है कि कोसी और गंगा नदी में गांगेय प्रजाति के डॉल्फिन देखे जाते हैं। गणना के बाद भी जलीय जीवों और पक्षियों के संरक्षण को तैयार प्रस्ताव कमोबेश हर साल कागज पर ही सिमटा रह जाता है।

हिन्दुस्तान

पहली बार रेड क्रेस्टेड पोचार्ड, तीतर व कांस्य पंखों वाला जकाना प्रवासी पक्षी दिखी

खुशखबरी : कोसी के चउर में 52 प्रजातियों के देशी और विदेशी पक्षी

विशेष

■ रंजीत

सहरसा। नेपाल बॉर्डर से कोसी नदी के आर्द्र भूमि में स्थित चउर क्षेत्र में विशेषज्ञों को 52 प्रजातियों के करीब 1500 की संख्या में देशी-विदेशी पक्षी दिखे। शनिवार को भर्रटियाही से भीमनगर तक 65 किमी के क्षेत्र में मोटरबोट से आठ घंटे तक लगातार किये गये भ्रमण में 47 पक्षियों की प्रजातियां मिलीं। जो पिछले साल की गणना से अधिक है। लेकिन पक्षियों की संख्या पिछले साल के मुकाबले कम देखी गयी।

इस बार के सर्वे में रेड क्रेस्टर्ड पोचार्ड, तीतर पूंछ व कांस्य वाला जैकाना जैसी दुर्लभ प्रजाति पक्षियों को पहली बार देखा गया। वहीं नेपाल बॉर्डर पर जंगल मैना का दिखना पक्षी प्रेमियों के लिए कौतूहल का विषय बना है। दूसरे दिन भी रविवार को पक्षी विशेषज्ञों की तीन सदस्यीय टीम में शामिल डॉ. गोपाल शर्मा, नवीन कुमार और शील आशीष ने भीमनगर से नेपाल बॉर्डर में स्थित वीरपुर बराज पास 17 नंबर स्पर तक 45 किमी की दूरी तक पहुंच पक्षी गणना की। जिसमें 500 से अधिक पक्षियां पांच से अधिक प्रजाति की मिली। पटना स्थित जूलॉजिकल सर्वे ऑफ इंडिया भारत सरकार के संयुक्त निदेशक सह वरीय वैज्ञानिक डॉ. गोपाल शर्मा ने कहा कि दोदिनों तक 110 किमी की दूरी में की गई गणना में 50 से अधिक पक्षियों की प्रजातियां मिली जो पिछले साल से अधिक है। बिहार सरकार के पर्यावरण, वन एवं जलवायु परिवर्तन विभाग के सौजन्य से 15 टीम में शामिल 100 विशेषज्ञों से अधिक के माध्यम से पक्षी गणना सर्वे कराया जा रहा है।

रविवार को कोसी नदी के चउर क्षेत्र में सर्वे के दौरान पक्षियों को कैमरे में कैद करते पटना से आए विशेषज्ञ।

गणना के दौरान विशेषज्ञों को कोसी नदी के चउर क्षेत्र में इस तरह से दिखते दिखे प्रवासी पक्षी रेड क्रिस्टेड पोचार्ड।

हरा-पीला कबूतर से लेकर सतबहिनी चरखी चिड़िया तक दिखी

तीन सदस्यीय पक्षी विशेषज्ञों की टीम को नेपाल बॉर्डर से कोसी नदी के चउर क्षेत्र में हरा, पीला कबूतर, मूंछ वाली बुलबुल से लेकर सतबहिनी चिड़िया तक दिखी। इसके अलावा रेड क्रेस्टेड पोचार्ड, तीतर पूंछ व कांस्य पंखों वाला जकाना, कॉमन सैंडपाइपर, छोटा बगुला, बड़ा बगुला, पर्पल हेरन, ब्लाइट ब्रेस्टेड किंगफिशर, पोंड हेरन, छोटा जलकाग, ग्रेटर सहायक सारस, पी हैड लैपविंग, लिटिल ग्रीब, एशियन ओपन बिल, रेड नेप्ड आइबिस, ग्रेट कॉर्मोरेंट, पाइड किंगफिशर, कम स्नीटी बलख, सकेड आइबिस, रेड वैटेड बुलबुल, ब्लैक ड्रोंगो, कम सहायक सारस, छोटी हरी मधुमखी खाने वाली पक्षी, कैस्ट्रेल, बैगनी दलदली मुर्गी, मार्श सैंडपाइपर, ब्राउन शीके, प्लम सिपट, ब्लैक हेडेड आइबिस, कॉमन मूरहेन, कॉमन कूट, सकेड आंख वाडर्ड, रूफस ट्रीपी, काली सोलडियर पतंग, सकेट वैगटेल, पाइड वैगटेल, जंगल मैना, पेस्टनट सोलियर स्टर्लिंग, पाइड स्टर्लिंग, भारतीय तीतर, आम कोआ, जंगल कौआ, दर्जी सहित अन्य पक्षी को देखा गया। लेकिन कैचमेंट एरिया चउर क्षेत्र में इस साल पानी कम रहने के कारण पक्षियों की संख्या पिछले साल के मुकाबले कम देखी गई है।

जलीय पक्षी प्रगणकों को मिला प्रमाणपत्र

जागरण संगाददाता, हाजीपुर : जिले में जलीय पक्षियों की गणना करने वाले वाटर बर्ड काउंटर को पर्यावरण वन एवं जलवायु परिवर्तन विभाग ने सहभागिता का प्रमाण पत्र सौंपा है। स्थानीय वैशाली वन प्रमंडल कार्यालय में इन प्रगणकों को वन प्रमंडल पदाधिकारी ने प्रमाण पत्र प्रदान किया।

बताया गया है कि गत वर्ष 2022 में पहली बार बिहार राज्य में जलीय पक्षियों की गणना कराई गई थी। इसके तहत वैशाली जिले दो जल विहार बरैला झील एवं पुरैनिया वेट लैंड में जलीय पक्षी की गणना कराया गया। जिले में जलीय पक्षी गणना को-आर्डिनेटर एसएनएस कालेज जंतु विज्ञान विभागाध्यक्ष डा. सत्येंद्र कुमार के साथ सात बर्डर शामिल किए गए थे। जलीय

हाजीपुर में सहभागिता प्रमाण पत्र देती वन प्रमंडल पदाधिकारी। ● जागरण

पक्षियों की गिनती में शामिल बर्डरों को बिहार सरकार पर्यावरण वन एवं जलवायु परिवर्तन विभाग की ओर से जारी सहभागिता प्रमाण पत्र वैशाली वन प्रमंडल पदाधिकारी अमिता राज ने अपने कार्यालय कक्ष के कार्यक्रम में सौंपा। कार्यक्रम में रसायन विज्ञान शिक्षक डा. अजीत कुमार, पटना यूनिवर्सिटी शोध छात्रा कोमल, मगध विश्वविद्यालय शोध छात्रा अर्चना कुमारी, जेपी यूनिवर्सिटी शोध छात्र राजन कुमार, ज्योतिष कुमार सिंह एवं राजेश कुमार को सहभागिता प्रमाण पत्र प्रदान किया गया।

एस्ट्रो गाइड

तिथि : पंचमी तिथि रात्रि 5.30 तक उपरांत षष्ठी तिथि
पक्ष : कृष्ण, मास-फाल्गुन, विक्रम संवत-2079, शक संवत-1944
नक्षत्र : हस्त नक्षत्र रात्रि 9.25 तक उपरांत चित्रा नक्षत्र
बंगला : तारीख-27, दिन-शुक्रवार, मास-माघ, बंगाब्द-1429.

– डॉ एनके बेरा

आज सूर्यास्त 05:40 बजे | कल सूर्योदय 06:29 बजे

बिहार में एशियन वाटर बर्ड गणना 2023 का चल रहा है काम

गणना से पक्षियों की प्रजाति व संख्या की मिलेगी जानकारी

एशियन वाटर बर्ड गणना

संवाददाता, हाजीपुर

पर्यावरण मंत्रालय की ओर से बिहार में एशियन वाटर बर्ड गणना का चल रहा है काम

पुरैनिया वेटलैंड को बचाने की है जरूरत

राज्य सरकार के पर्यावरण, वन व जलवायु परिवर्तन मंत्रालय की ओर से पूरे बिहार में एशियन वाटर बर्ड गणना 2023 का कार्य चल रहा है. इस क्रम में वैशाली वन प्रमंडल के अधिकारियों के साथ एशियन वाटर बर्ड गणना के कोऑर्डिनेटर एसएनएस कॉलेज, हाजीपुर के जंतु विज्ञान विभागाध्यक्ष व पर्यावरणविद डॉ सत्येंद्र कुमार के नेतृत्व में गुरुवार को तीसरे दिन लालगंज के पुरैनिया वेटलैंड और वैशाली गढ़ के निकट जलाशयों में जलीय पक्षी गणना करायी गयी.

गणना में बर्डर के रूप में पाटलिपुत्र यूनिवर्सिटी के डॉ अजीत कुमार, जेपी यूनिवर्सिटी के शोध छात्र ज्योतिष कुमार सिंह, मगध विश्वविद्यालय की शोध छात्रा अर्चना कुमारी, पटना यूनिवर्सिटी की शोध छात्रा कोमल, आरएन कॉलेज, हाजीपुर के जंतु विज्ञान ऑनर्स के छात्र पुष्कर कुमार व कुमार अनंत शामिल रहे.

वहीं वन विभाग के वनपाल गया प्रसाद गुप्ता, विजय कुमार समेत कई आरक्षी मौजूद रहे.

कोऑर्डिनेटर डॉ सत्येंद्र कुमार ने बताया कि बर्ड काउंट में ली गयी पक्षियों की जाति और संख्या की रिपोर्ट पर्यावरण, वन एवं जलवायु परिवर्तन विभाग को सौंप दी जायेगी. ताकि देश को अपने राज्यों और जिलों में मौजूद पक्षियों की सही जानकारी मिल सके. पुरैनिया वेटलैंड में जल की कमी के बावजूद कई प्रकार के पक्षी नजर आये हैं. इस वेटलैंड को बचाने की जरूरत है.

प्रभात खबर Fri, 10 February 2023
https://epaper.prabhatkhabar.com/c/71648288

पक्षी संरक्षण के लिए जागरूकता जरूरी : डॉ सत्येंद्र

जागरूकता अभियान में शामिल डॉ. सत्येंद्र व अन्य लोग।

हाजीपुर (एसएनबी)। वैशाली जिला में एशियन वाटर बर्ड सेंसस 23 का आज चौथा दिन गंडक नदी के विस्तार यानि स्ट्रेच में पक्षियों की गणना की गई। यह गणना एशियन वाटर बर्ड गणना 23 के कोऑर्डिनेटर एवम हाजीपुर एस एन एस कॉलेज हाजीपुर के जन्तु विज्ञान विभाग के विभागाध्यक्ष डॉ सत्येंद्र कुमार के नेतृत्व में हुआ। गणना में वैशाली वन प्रमंडल पदाधिकारी डॉ अमिता राज अपने हाजीपुर रेंजर आलोक चंद्र राय, लालगंज रेंजर सुनील कुमार, वनपाल गया प्रसाद गुप्ता एवम वन आरक्षी के साथ शामिल हुई। गणना में बर्डर के रूप में पाटलिपुत्र यूनिवर्सिटी के डॉ अजीत कुमार, आर एन कॉलेज हाजीपुर के जन्तु विज्ञान प्रतिष्ठा के छात्र पुष्कर कुमार एवम कुमार अनंत ने पूरी टीम के साथ लगभग पांच घंटे तक गड़क नदी में दो मोटर बोट से पक्षियों की खोज एवम गणना करते रहे। गंडक नदी में जल धार कमजोर होने के वजह नदी में कई जगह बोट को धक्का देकर आगे बढ़ाया गया। नदी में कई प्रकार के पक्षी नजर आए है। डी एफ ओ वैशाली डॉ अमिता राज ने कहा कि समय समय पर गडक नदी में पक्षी की निगरानी की जरूरत है वही डॉ सत्येंद्र कुमार ने कहा कि नदी के मछुआरे एवम नदी से जीविका चलाने वाले लोगो में पक्षी के प्रति जागरूकता कार्यक्रम आयोजित कर पक्षी संरक्षण किया जा सकता है।

गंडक नदी में पक्षियों की वैज्ञानिकों ने की गणना

- डॉ. अमिता राज बोलीं, समय पर गंडक में पक्षी की निगरानी की जरूरत
- पक्षी संरक्षण के लिए जरूरी है जागरूकता अभियान : डॉ सत्येंद्र

हाजीपुर,निज संवाददाता। वैशाली जिले में एशियन वॉटर बर्ड सेंसस 23 के चौथे दिन शुक्रवार को गंडक नदी के विस्तार यानि स्ट्रेच में पक्षियों की गणना की गई। यह गणना एशियन वॉटर बर्ड गणना 23 के को-ऑर्डिनेटर एवं हाजीपुर एसएनएस कॉलेज हाजीपुर के जन्तु विज्ञान विभाग के विभागाध्यक्ष डॉ. सत्येंद्र कुमार के नेतृत्व में हुआ।

इस जलीय पक्षी गणना में वैशाली वन प्रमंडल पदाधिकारी डॉ. अमिता राज, हाजीपुर के रेंजर आलोक चंद्र राय, लालगंज रेंजर सुनील कुमार, वनपाल गया प्रसाद गुप्ता एवं वन आरक्षी के साथ शामिल हुई। गणना में बर्डर के रूप में पाटलिपुत्र यूनिवर्सिटी के डॉ. अजीत कुमार, आरएन कॉलेज हाजीपुर के जन्तु विज्ञान प्रतिष्ठा के छात्र पुष्कर कुमार एवं कुमार अनंत ने पूरी टीम के साथ लगभग 05 घंटे तक गंडक नदी में दो मोटर बोट से पक्षियो की खोज एवं गणना करते दिखे। गंडक नदी में जल धारा कमजोर होने की वजह नदी में कई जगह बोट को धक्का देकर आगे बढ़ाया गया। डीएफओ वैशाली डॉ. अमिता राज ने कहा कि समय-समय पर गंडक नदी में पक्षी की निगरानी की जरूरत है। वहीं डॉ सत्येंद्र कुमार ने कहा कि मछुआरे एवं नदी से जीविका चलाने वाले लोगों में पक्षी के प्रति जागरूकता कार्यक्रम आयोजित कर पक्षी संरक्षण किया जा सकता है।

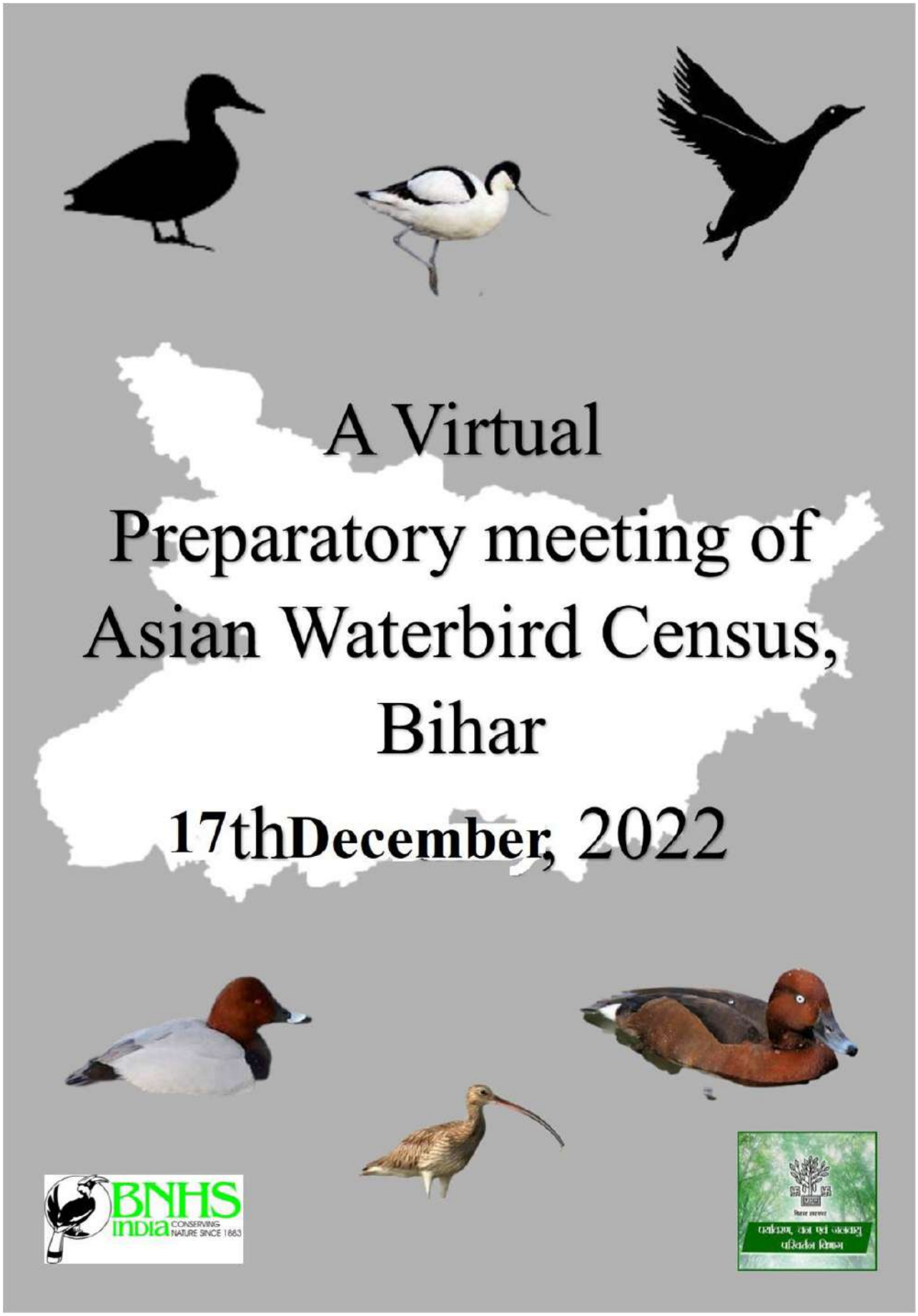
पक्षी संरक्षण के लिए जरूरी है जागरूकता अभियान.. डॉ सत्येंद्र

दस्तक प्रभात प्रतिनिधि

वैशाली जिला में एशियन वाटर बर्ड सेंसस 23 का आज चौथा दिन गंडक नदी के विस्तार यानि स्ट्रेच में पक्षियों की गणना की गई। यह गणना एशियन वाटर बर्ड गणना 23 के कोऑर्डिनेटर एवम हाजीपुर एस एन एस कॉलेज हाजीपुर के जन्तु विज्ञान विभाग के विभागाध्यक्ष डॉ सत्येंद्र कुमार के नेतृत्व में हुआ। इस जलीय पक्षी गणना में वैशाली वन प्रमंडल पदाधिकारी डॉ अमिता राज अपने हाजीपुर रेंजर आलोक चंद्र राय, लालगंज रेंजर सुनील कुमार, वनपाल गया प्रसाद गुप्ता एवम वन आरक्षी के साथ शामिल हुई। गणना में बर्डर के रूप में पाटलिपुत्र यूनिवर्सिटी के डॉ अजीत कुमार, आर एन कॉलेज हाजीपुर के जन्तु विज्ञान प्रतिष्ठा के छात्र पुष्कर कुमार एवम कुमार अनंत ने पूरी टीम के साथ लगभग पांच घंटे तक गड़क नदी में दो मोटर बोट से पक्षियों की खोज एवम गणना करते रहे।

गंडक नदी में जल धार कमजोर होने के वजह नदी में कई जगह बोट को धक्का देकर आगे बढ़ाया गया। नदी में कई प्रकार के पक्षी नजर आए है। डी एफ ओ वैशाली डॉ अमिता राज ने कहा कि समय समय पर गडक नदी में पक्षी की निगरानी की जरूरत है वही डॉ सत्येंद्र कुमार ने कहा कि नदी के मछुआरे एवम नदी से जीविका चलाने वाले लोगो में पक्षी के प्रति जागरूकता कार्यक्रम आयोजित कर पक्षी संरक्षण किया जा सकता है।

Annexure 27: Minutes of the AWC 2023 preparatory meeting



ASIAN WATERBIRD COUNT – 2023 : 1ST PREPARATORY MEETING

Minutes of Meeting

Venue- Zoom (Virtual)

Date: 17.12.2022 **Time: 03:00 PM to 05:30 PM**

A virtual meeting was held on 17th of December, 2022 to initiate, prepare, and plan for the Annual Waterbird Count, 2023 for select important wetlands of the state of Bihar. The meeting was chaired by Sri Prabhat Kumar Gupta, CWLW and spearheaded by Dr. P.Sathiyaselvam, Deputy Director, BNHS. The FD officials involved in the AWC-2022 census,the census coordinators and some of the volunteers of the AWC-2022, participated in the meeting. The meeting was chaired by Mr Prabhat Kumar Gupta, CWLW, Bihar. At the outsetof the meeting, the Chairman welcomed the new office-bearers of the Bihar Bird Ringing & Monitoring Project. The participants in the meeting were then introduced to one another followed by laying down the agenda of the meeting. Topics and proposed activities discussed in the meeting are summarised below.

- For the benefit of the new joiners, CWLW commented in brief on the past AWC-2022 exercise conducted and lauded the efforts of the FD officials, co-ordinators & volunteers that resulted in the successful culmination of the huge manpower mobilisation exercise. He explained that a total of 15 teams comprising of 413 human resource covered a total of 68 wetlands from 23 districts of Bihar investing approx. 986 human hours in the count during the AWC-2022. A total of 45,173 individuals of birds of 202 species belonging to 61 families were reported during AWC-2022. Of these 39,937 individuals of 80 species were waterbirds, 2271 individuals of 21 specieswere water dependent birds and 2965 individuals of 101 species were Land birds. He informed that this exercise had, for the first time, provided a baseline data that could be used in building management strategies for conservation of birds in Bihar.

- CWLW asked all the participants to recount their experiences during the AWC-2022. The main points / concerns of the participants are summarized below.

    - The certificates for the AWC-2022 needs to be issued at the earliest.
    - Some participants mentioned the problems faced by them during the AWC- 2022 and suggested that the logistics could be better planned, based on experience gained.
    - Submission of quality photos for coffee-table book to the nodal officer along with the collected census data was also discussed.

The participants were informed that the certificates have already been sent to corresponding divisions for distribution to AWC-2022 participants. The DFOs were requested to distribute the same by holding a small ceremonial function. DFO,Bhagalpur informed that he has already done so.

- Nodal Officer- As in AWC-2022, it was felt that the present AWC-2023 shall also have a Nodal Officer to manage and further collate and verify the data with the BNHS team and also act as a DEFCC link between the Bihar bird experts, coordinators, local birders and the State Coordinator as well as other concerned agencies. Dr. S. Sudhakar, CF Gaya was designated as the State Nodal officer for Bihar Waterbird Count and other such bird related activities, as done during last count.

- Dr. P. Sathiyaselvam, Deputy Director, BNHS gave a brief presentation on the aims and importance of the AWC. Dr. Sathiyaselvam briefed that how the AWC results are playing a role in policy & decision-making right from the site level to global level. He mentioned that AWC becomes important to:

  (i) providing the basis for estimates of waterbird populations;
  (ii) monitoring changes in waterbird numbers and distribution by regular, standardised counts of representative wetlands;
  (iii) improving knowledge of little-known waterbird species and wetland sites;
  (iv) increasing awareness of the importance of waterbirds and their wetland habitats at local, national and international levels.

- CWLW explained that preparations for AWC-2023 should be done keeping in mind that,
  (1) The procedure for AWC-2023 would be the same as done in AWC-2022 (Annexure-1).
  (2) The list of wetlands selected in the last count needs to be revisited, so that those wetlands which were not having sufficient bird presence could be deleted and new wetlands added (Annexure-2).
  (3) The list of co-ordinators, birders and Bird Guides also need to be enrichedand enhanced (Annexure-3, 4 & 5).
  (4) Forming of new/additional teams is also needed based on the number of new members to be involved during the AWC-2023.
  He sought participants' opinion and inputs on the above issues.

  - It was suggested that the following people may be added to the list of co-ordinators,
  - Dr. P. Sathiyaselvam
  - Mr. Sohail Madan
  - Mr. Sumit Kumar
  - Mr. Danish Mashroor
  - Ms Sabina Hayat
  - Mr. Anwar Alam

It was, However, decided that Mr. Sumit Kumar, Mr. Danish Mashroor, Mr. Anwar Alam and Ms Sabina Hayat would be included in the list after getting their concurrence.

- It was also suggested that the following wetlands may be added to the previous list of wetlands,

  - Basmanpur (E. Champaran)
  - Sikrahna riverplain (E. Champaran)
  - Bagmati riverplain (Sheohar)
  - Maria Dhar (Araria)
  - Guide Bund, Kursela (Purnea)
  - Sukhia Wetland (Arrh-Buxar road)
  - Gokul Jalashay (Arrah)
  - Nodal Officer stated that the DFOs should get a pre-survey of wetlands in their divisions done, so that the list of wetlands for AWC could be finalised, based on waterbird congregation status. All participants were in agreement to this. CWLW informed that the date(s) for the same would be discussed in next meeting.

- It was also discussed that the habitat forms, as far as possible, be filled during pre-survey in order to save time during actual count.
- Based on suggestion by Dr. Sathiyaselvam, it was decided that the DEFCC will develop a mobile app to record data for Ringing and AWC. Moreover, the participantswould be given a training on eBird App to disseminate the birds' information atglobal level.
- CWLW explained that the following things needs to submitted / followed during the census
- Photographs of the wetlands and the interesting species needs to be shared with the nodal officer after the AWC-2023. He also cautioned the participants that the all the teams of AWC-2023 should ensure that the focus of the census activities are not distracted for the reasons of taking photos and recording other activities during the AWC day.
- The participants shall ensure the submission of all data sheets / books to the concerned Forest Officers as soon as the count is over.

Summing up

- The DFOs will get the listed wetlands in their jurisdiction examined and finalise the important ones amongst them, which could be taken up for actual count.
- The DFOs will select 2 -3 forest guards in the division who could be attached with the team doing the count in their jurisdiction.
- The DFOs will work upon the logistics requirement needed for pre-survey and final count in their jurisdiction and put it up in next meeting for discussion.
- Other Co-ordinators and birders to be identified by present ones. Their concurrence for voluntary involvement in the exercise to be taken. School children and college students may be involved too.
- Work to be started on BRMS (Bihar Ringing & Monitoring Station) App.

For the forthcoming meeting(s)

- Finalization of wetlands for actual count based on inputs from DFOs & experts.
- Field essentials, especially binoculars and bird guide book, to be inventoried and keptfor use.
- Local bird guides to be identified.
- Training to be imparted to participants on eBird App.
- Availability of boats also to be checked in the potential wetlands.
- Collect contact no. & emails of all co-ordinators and birders. The State Nodal officer shall collate the Names, designation (if there), contact no., email ID, addresses etc in an Excel sheet and circulate in the group.
- Formation of wetland clusters under each co-ordinator.
- Finalization of exhaustive birders list.
- Finalization of birders under each coordinator for present exercise.
- Finalization of FGs & bird guides.
- Status of field essentials.

- Freezing of manpower and other resources.
- Training of selected birders and FGs.
- Fixing the Pre-count date for AWC.

The meeting ended with the vote of thanks by the Nodal Officer.

Participants of the meeting:

1. Mr. Prabhat Kumar Gupta, CWLW, Bihar
2. Mr S. Sudhakar, CF, Gaya
3. Dr. P. Sathiyaselvam, BNHS
4. Mr. Sohail Madan, BNHS
5. Mr Vikas Ahlawat, DFO, Kaimur
6. Mr Gaurav Ojha, DFO, Munger
7. Mr Ambarish Kumar Mall, D.F.O., VTR-1
8. Mr. Tejas Jaiswal, DFO AURANGABAD
9. Mr. Abhishek Kumar Singh, DFO Banka
10. Miss Shweta Kumari, DFO Motihari
11. Mr Chanchal Prakash, D.F.O. Kaimur
12. Mr Bhaskar Chandra Bharti, D.F.O., Purnea
13. Ms. Amita Raj, DFO Vaishali
14. Dr. Gopal Sharma, Regional Director, ZSI
15. Dr Niraj Kumar, Assistant Professor, Motihari
16. Dr. Kushagra Rajendra, Amity University
17. Mr. Navin Kumar, Former GM Tourism Department
18. Dr Satyendra Kumar, Head of Department, Zoology, Muzaffurpur
19. Mr. Gyanchandra Gyani
20. Col. Amit Sinha
21. Mr Rahul Kumar, Education Assistant, BNHS

Annexure – 1

i. Pre-Requisites:

Count Procedure to be adopted

A total of at least 15 teams, each comprising of a Coordinator plus three birders.Each team will be assigned a cluster of wetlands, which will be enumerated by the respective team. Each Team set up: Expert coordinator, DFO's administrative coordination, Forest Guards, three birders.

- **Field essentials:** Each team will have two binoculars and one spotting scope, birdfield guide: soft copy /hard copy, Data sheet, four pocket note books, pencils, ball point pens, identity card, water bottle, camera for documentation shots, dry snacksand a sling bag. All will be given a local administration emergency number.

- For smooth operation of AWC, the concerned DFOs may communicate & inform inadvance to DM/ Police/ SSB etc in the select districts during the period of the count.

ii. Technical Processes involved for enumeration (data formats, photographs,Android APP):

- A dedicated volunteer network of Coordinators along with three Birders, two Guards and two bird guides will carry out the collection of data. A maximum of three hours per site will be invested for the enumerations. Each group will give maximum 3-3.5 hours for each wetland depending on the size of the wetland and the enumeration will be conducted for 2 to 3 days only. In case of large wetland, more teams could be usedspread out systematically in Boats for total coverage of the wetland count in a day. Five to six teams could similarly conduct for Kusheshwar, Baraila and Indrapuri barrage wetlands as well.
- Assigned tasks for every team member: Multiple levels of Screening and Filtering processes on the data collected from field sites will be done on the Desk by the designated officials and BNHS team. Coordinators in field will verify data for the correct species identification and enumeration, at least three birders will assist in data collection from the wetland clusters assigned along with photo documentation. Site wise Data collation, data computation will be done mandatorily on daily basis.
- The formats to be the same as used in AWC-2022 i.e. the *Habitat Form* and *Count Form*. In case the App is ready by the count time, training on it to be imparted and recording to be done in hybrid mode, i.e. digitialy as well as on forms.

iii. Pre-count Survey

A pre-count survey should be conducted by DEFCC, Co- ordinators, BNHS team in January, 2023 mainly to understand the kind of wetlands that would be addressed during AWC and bird presence.

Annexure – 2

Tentative list of wetlands (open to addition/deletion)

Sl. No.	Wetland	Location	District
1.	Rajdhani jalashya	Patna	Patna
2.	Patna Jalla	Patna City	Patna
3.	Bhusara man	Bhusara	Muzaffarpur
4.	Bramhpura man	Muzaffarpur	Muzaffarpur
5.	Bhartuya chaur	Bhartua	Muzaffarpur
6.	Narsan chaur	Muzzafarpur	Muzzafarpur
7.	Kultiya sharif man	Muzzafarpur	Muzzafarpur
8.	Kesariya chaur or Sarrotar	Kesariya	East Champaran
9.	Chilraon jheel	Supouliya	East Champaran
10.	Udaipur jheel or Laal Saraiya	Bettiah	West Champaran
11.	Mansi chaur	Fulia khar	Khagaria
12.	Dainee maan	Khagariya	Khagaria
13.	Simri jheel	Simri, baktiyarpur	Sahrasa
14.	Bhagwa chaur	Balua bazaar	Saharsa
15.	Bora chaur	Kharkta taal	Saharsa
16.	Parba murli chaur	Kumar gez	Saharsa
17.	Muradpur chaur	Muradpur	Saharsa
18.	Jalai Chaur	Saharsa	Saharsa
19.	Hariya chaur	Akilpur	Saran
20.	Bahiyara Chaur	Sarn	Saran
21.	Kosi catchment area	Supaul	Supaul
22.	Jhali Dam	Nawada	Nawada
23.	Phulwaria Dam	Nawada	Nawada
24.	Sohjana Dam	Fatehpur	Gaya
25.	Barwadih Dam	Barachatti	Gaya
26.	Water reservoir, Mohanpur	Mohanpur	Gaya
27.	Begampur wetland	Begampur	Nalanda
28.	Pushpakarni lake	Surajpur	Nalanda
29.	Pawapuri Jal Mandir	Pawapuri	Nalanda
30.	Arm and Ammunition factory ponds	Rajgir	Nalanda
31.	Radhopur	Majipur	Vaishali
32.	Baraila lake	Vaishali	Vaishali
33.	Salah Chaur	Vaishali	Vaishali
34.	Pahetiya chaur	Vaishali	Vaishali
35.	Powra chaur	Vaishali	Vaishali
36.	Boaraiya Chaur	Vaishali	Vaishali
37.	Puraniya chaur	Vaishali	Vaishali

Annexure – 2 (*contd.*)

Tentative list of wetlands (open to addition/deletion)

Sl. No.	Wetland	Location	District
38.	Lochna Chaur	Vaishali	Vaishali
39.	Beraiyee Chaur	Vaishali	Vaishali
40.	Saraula chaur	Siwan	Siwan
41.	Gorgia Chaur	Siwan	Siwan
42.	Kawar lake	Begusarai	Begusarai
43.	Pachaila Chaur	Begusarai	Begusarai
44.	Ecopark IOC	Barauni	Begusarai
45.	Kanshar chaur	Samastipur	Samastipur
46.	Kalma Jheel	Darbhanga	Darbhanga
47.	Kusheshwar asthan	Darbhanga	Darbhanga
48.	Gogabeel community reservoir	Katihar	Katihar
49.	Bagar beel Lake	Katihar	Katihar
50.	Baldiya chaur	Katihar	Katihar
51.	Gangaprashad Jheel	Naugachia	Bhagalpur
52.	Jagatpur jheel	Naugachia	Bhagalpur
53.	Bahatra jheel	Naugachia	Bhagalpur
54.	Athaniya jheel	Naugachia	Bhagalpur
55.	VGDS	Bhagalpur	Bhagalpur
56.	Kharagpur lake	Munger	Munger
57.	Nagi Dam	Jhajha	Jamui
58.	Nakti Dam	Jhajha	Jamui
59.	Belataar	Jamui	Jamui
60.	Pailbajan	Jamui	Jamui
61.	Devanahar	Jamui	Jamui
62.	Gadhi Dam	Jamui	Jamui
63.	Moorni Dam	Lakhisarai	Lakhisarai
64.	Indrapuri barrage	Aurangabad	Aurangabad
65.	Karanchak or Durgawati Dam	Kaimur	Kaimur
66.	Chapania Lake	Madhubani	Madhubani
67.	Orhni Dam		Banka
68.	River systems Ganga ,Gandak ,Kosi		
69.	Basmanpur	E. Champaran	E. Champaran
70.	Sikrahna riverplain	E. Champaran	E. Champaran
71.	Bagmati riverplain	Sheohar	Sheohar
72.	Maria Dhar	Araria	Araria
73.	Sukhiya wetland	Ara-Buxar road	Bhojpur
74.	Gokul Jalashay	Bhojpur	Bhojpur
75.	Guide Bandh	Kursela	Purnea

Annexure – 3

Tentative list of Co-ordinators (open to addition/deletion based on concurrence)

Sl. No.	Name	District	Contact
1.	Shri Arvind Mishra	Bhagalpur	7766993421
2.	Shri Navin Kumar	Patna	9431020809
3.	Dr Gopal Sharma	ZSI, Patna	9006718900
4.	Dr. Satyendra Kumar	Vaishali	9123269907
5.	Prof. D N Chaudhary	Bhagalpur	94300 88707
6.	Mr. Kamlesh Maurya	WWF, W. Champaran	7905718296 9546463300
7.	Dr. Niraj Kumar	L.N.D. College, MotihariMuzzaffarpur	9771148223, 7321850223
8.	Dr. Ram Pratap Singh	Life Science Department. CUSB,Gaya	7598112621
9.	Col. Amit Sinha	Patna	7781049431
10.	Jainandan Mandal	Bhagalpur	9504179016
11.	Dr.Sudhakar, IFS	Gaya	9471873016
12.	Mr. Bharat Chintapali , IFS	Bhagalpur	6232770035
13.	Mr. Anand Kumar, RFO	Patna Zoo	8002269037
14.	Dr. P. Sathiyaselvam	BRMS, BNHS, Bhagalpur	
15.	Shri Sohail Madan	BRMS, BNHS, Bhagalpur	
16.	Dr. Sunil Kumar Chaudhary	Bhagalpur	
17.	Shri Sumit Kumar		
18.	Shri Danish Masroor	Gaya	
19.	Ms Sabina Hayat	Patna	
20.	Shri Ahbar Alam	Patna	
21.	Shri Gyan Chandra Gyani	Bhagalpur	
22.	Dr. Kushagra Rajendra	Muzaffarpur	
23.	Shri Pradumn Gaurav	W. Champaran	

Annexure – 4

Tentative list of Birders (open to addition/deletion)

Sl. No.	Name	District	Contact No.
1.	~~Prof. S.K. Chaudhary~~	~~Bhagalpur~~	9431875861
2.	~~Gyan chandra gyani~~	~~Bhagalpur~~	7903486230
3.	Deepak Shah	Bhagalpur	7766885588
4.	Gaurav Sinha	Bhagalpur	9931824123
5.	Rahul Rohitashwa	Bhagalpur	89864 31476
6.	Vatan Kumar	Bhagalpur	
7.	Rahul Mukesh	Bhagalpur	9931204511
8.	Anurag Kumar	Bhagalpur	
9.	Anand Swarup	Bhagalpur	
10.	Jay kumar Jay	Bhagalpur	7479572180
11.	Anand Kumar	Bhagalpur	
12.	Ashish Ranjan Bhadari	Bhagalpur	7979049233
13.	Prashant Kumar	Bhagalpur	
14.	Santosh Sahani	Bhagalpur	
15.	Nishant Kumar	Bhagalpur	
16.	Arvind Kumar	Muzzafarpur	7782055508
17.	Ravindra Kumar	Jamui	
18.	~~Ahbar alam~~	~~Patna~~	9431009135
19.	Md. Shahbaz	Patna	6202710032
20.	Gaurav Narayan	Patna	70707 67677
21.	Sanjay kumar	Patna	
22.	Md. Maaz	Patna	7677145626
23.	Shivani Jaiswal	Patna	9631462437
24.	Dr. Reshmi Komal	Patna	7903675645
25.	Sabiha Rafyat	Patna	9973888788
26.	Rajkishor Singh	Rohtash	
27.	Abhishek	West Champaran	76772 13159
28.	Rahul Shrivastava, Nature Guide, VTR	West Champaran	9123228997
29.	Arif Siddique, Biologist, VTR	West Champaran	6307614127
30.	Sourabh Verma, Biologist, VTR	West Champaran	7355482548
31.	Soham Sachin Pattekar, Biologist, WWF	West Champaran	979877614
32.	Sunil kumar, Nature Guide, VTR	West Champaran	6204027260
33.	~~Dr. Kushagra Rajendra, Asst. Prof~~.	~~East Champaran~~	9650913635
34.	Vikas Uraon	West Champaran	6206177415
35.	Ankit Aryan	Nalanda	74887 01168
36.	Harsh Kumar	Nalanda	7004455237
37.	Debasis Mahaptra	Nalanda	

Annexure – 4 (*contd.*)

Tentative list of Birders (open to addition/deletion)

Sl. No.	Name	District	Contact No.
38.	Rahul Pranjape	Gaya	
39.	Alex Jacob	Gaya	
40.	~~Danish Masroor~~	~~Gaya~~	62009 54724
41.	Mark Menezes	Purnea	
42.	Dinkar Jha	Vaishali	9931463352
43.	Navdeep Kumar	Munger	7301527972
44.	Mahesh Bharti	Begusarai (Manjhaul)	
45.	Prashant Kumar	Begusarai, Majhaul (SEEDS INDIA)	9470094019
46.	Mahesh Bharti	Kabar Nature Club, Majhaul, Begusarai	
47.	Ajit Singh	Saharsa	9431492488
48.	Dr. Vidyanath Jha	Darbhanga	9931463352
49.	Manoj Kumar	Betiah	9430826999
50.	Rakesh kumar Roy	Aurangabad	8271812824
51.	Rajiv Ranjan	Khagaria	9931623437

Annexure – 5

Tentative list of Bird Guides (open to addition/deletion)

Sl. No.	Name	Location	Contact No.
1.	Pritam Kumar Priyanshu	Bird Giude, Bhagalpur	8877631604
2.	Abhishek Anand	Bird Giude, Bhagalpur	6201164115
3.	Kumar Sanu	Bird Giude, Bhagalpur	7909049553
4.	Ashutosh Kumar	Bird Giude, Bhagalpur	6299569742
5.	Md. Rizwan	Bird Giude, Bhagalpur	7061144932
6.	Santosh Kumar Sahani	Bird Giude, Bhagalpur	7004297783
7.	Chandan Kumar	Bird Giude, Bhagalpur	6204219650
8.	Suraj Kumar	Bird Giude, Bhagalpur	6205321410
9.	Punam Kumari	Bird Giude, Bhagalpur	9113488423
10.	Chandan Kumar	Bird Giude, Bhagalpur	9570143613
11.	MukeshKumarChoudhary	Bird Giude, Bhagalpur	9931204511
12.	Sandeep Kumar	Bird Guide, Jamui	9304342202
13.	Sonu Kumar	Bird Guide, Jamui	8252773416
14.	Ravindra Kumar	Bird Guide, Jamui	9905922298
15.	Manish Kr. Yadav	Bird Guide, Jamui	9113406861
16.	Rupesh Kumar	Bird Guide, Jamui	7782828558
17.	Manish kr. Singh	Bird Guide, Jamui	6203858988
18.	Shrikant Kumar	Bird Guide, Jamui	6207574306
19.	Trivdev Kumar	Bird Guide, Jamui	9608468263
20.	Chandan Kumar	Bird Guide, Jamui	7061142426
21.	Awadhesh Kumar	Bird Guide, Jamui	6207750743
22.	Rajeev Ranjan	Bird Guide, Jamui	9110167720
23.	Ranjeet Kumar	Bird Guide, Jamui	6351475621
24.	Krishna kr. Mishra	Bird Guide, Jamui	8789421961
25.	Mahesh Kumar	Bird Guide, Jamui	8210290168
26.	Shubham Kumar	Bird Guide, Jamui	9006663550
27.	Suneela Besra	Bird Guide, Jamui	7903015308
28.	Chunchun Kumar	Bird Guide, Jamui	7367887718
29.	Kedar Tudu	Bird Guide, Jamui	6280392251
30.	Saurabh Kumar	Bird Guide, Jamui	8877086584
31.	Chotelal Tudu	Bird Guide, Jamui	9347758627
32.	Krishdev kr. Yadav	Bird Guide, Jamui	8789947475
33.	Tuntun Kumar	Bird Guide, Jamui	7858950459
34.	Virendra Kumar	Bird Guide, Jamui	7070082785
35.	Yugal Kumar	Bird Guide, Jamui	9798S11974
36.	Saurabh Kumar	Bird Guide, Jamui	9973189824
37.	Sanoj Kumar	Bird Guide, Jamui	9798217972
38.	Pintu Kr. Yadav	Bird Guide, Jamui	8969878827
39.	Pawan Kumar	Bird Guide, Jamui	7667190936

Annexure – 5 (*contd.*)

Tentative list of Bird Guides (open to addition/deletion)

Sl. No.	Name	Location	Contact No.
40.	Guddu kr. Paswan	Bird Guide, Jamui	8140523619
41.	Shyam Sunder Yadav	Bird Guide, Jamui	7033688069
42.	Virendra Kumar	Bird Guide, Jamui	8709522206
43.	Rohit Hembrum	Bird Guide, Jamui	9060063122
44.	Mubarak Hussain	Bird Guide, Jamui	8825316432
45.	Ajay kr. Sharma	Bird Guide, Jamui	8757640902
46.	Vikash Kumar	Bird Guide, Jamui	6204900082
47.	Vikash kr. Yadav	Bird Guide, Jamui	8340643572
48.	Bambam Kumar	Bird Guide, Jamui	9304127341
49.	Rajkishor Prasad	Bird Guide, Jamui	9931934055
50.	Pankaj Kumar	Bird Guide, Jamui	9304659971
51.	Sagar Kr. Mandal	Bird Guide, Jamui	8340443381
52.	Kusum Hasda	Bird Guide, Jamui	8294422485
53.	Sandeep Kr. Thakur	Bird Guide, Jamui	6205269746
54.	Shreeram Thakur	Bird Guide, Jamui	9939308696
55.	Mithun Kumar	Bird Guide, Jamui	9955006800
56.	Yogendra Kr. Yadav	Bird Guide, Jamui	9199679024
57.	Nandlal Kumar	Bird Guide, Jamui	7667848612
58.	Shaligram Mandal	Bird Guide, Jamui	7739170053
59.	Rupesh Kumar	Bird Guide, Jamui	9934655253
60.	Vikash Kumar	Bird Guide, Jamui	9102370897
61.	Uttam Kr. Monu	Bird Guide, Jamui	7903300572

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–मेलः cwlwbihar@rediffmail.com

पत्रांकः 42 पटना, दिनांक 21 जनवरी, 2023 ई०।

प्रतिलिपिः 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।

A virtual Second AWC preparatory meeting Bihar

24th December 2022

ASIAN WATERBIRD COUNT – 2023: 2ND PREPARATORY MEETINGMINUTES OF MEETING

VENUE- ZOOM (VIRTUAL)

Date: 24.12.2022 **Time: 11:00 AM to 02:30 PM**

The second virtual meeting was held on 24th of December, 2022 to initiate, prepare, and plan for the Annual Waterbird Count, 2023, for selecting important wetlands of the state of Bihar. The meeting was chaired by Mr Prabhat Gupta CWLW, Bihar. The FD officials involved in the AWC-2022 census, the census coordinators and some of the volunteers of the AWC- 2022, participated in the meeting. Dr Taej Mundkur, Nature Conservationist, an independent consultant and Global Coordinator of AWC also attended the meeting as a special invitee.

Prior to the focal discussion, CWLW explained the agenda of the meeting. The topics and proposed activities discussed in the meeting are summarised below. Prior to the discussion onagenda of the meeting, the Chair invited Dr Taej Mundkur, Global Coordinator of AWC, to explain the method and importance of waterbird count so that the meeting participants may get a global perspective.

Dr Taej Mundkur explained the background of International Waterbird Census (IWC) and briefed about the Asian Waterbird Census (AWC). He mentioned that the IWC was started in 1950. He said that monitoring of waterbird is important for the management of waterbodies, including Protected Areas (PAs). AWC provides the platform for evidence-based conservation, he added. He also mentioned that the frequency of AWC needs to be increased at least four times in a year so that it can be observed that how the numbers of birds are changing through the year. He explained along with the bird count, basic information about the condition of wetland also needs to be collected in order to observe the threats and it would help in preparation of management plan.

He informed about the the decision taken in the 15th meeting of the Conference of Parties of the Convention on the Biological Diversity (CBD COP 15) which was conducted in Montreal, Canada, 7 - 19 December 2022, which is given below:-

"Ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories".

The AWC will be the instrumental in fulfilling the Global Biodiversity Forum target 13 through evidence-based actions, he added.

- **Bird Ringing and Monitoring Station or System (BRMS) App:**

CWLW informed the participants regarding preparation of BRMS Mobile App. A small presentation about the application specially being designed for capturing the AWC data in theBihar State was also shown. The name of the app is Bird Ringing Monitoring System(BRMS) which is android based. The app is being prepared by the Forest Department's IT- wing. The app will have three major tabs for capturing

the data on bird ringing, awarenessand AWC. In this app, participants can instantly feed bird count and habitat details. The data will be processed automatically in the back-end and the report will be generated as per the requirements.

Dr Mundkur suggested that collection of transects or GPS coordinates of the area covered in each wetland is very important to map out the areas surveyed in each site. So that we can compare the data from the previous year. CWLW agreed on this and said site boundary of thewetland and the area coverage during the AWC would be added. Dr. Mundkur also suggested to look for the scope of the app to be expanded to all over India in future.

- **Discussion on the tentative list of wetlands to be covered in AWC 2023**

Later discussions were held on the list of wetlands to be covered during the AWC 2023. Mr. S. Sudhakar, Conservator of Forests (CF), Gaya and the Nodal Officer for the AWC – 2023 showed the list of 75 wetlands to get inputs from DFOs & experts to finalize the wetlands for AWC 2023. Based on the discussion, from the list of 75 wetlands, 18 wetlands were deleted and nine wetlands were added, considering the potentiality. Till now, a total of 54 wetlands and river beds of Ganga (from Buxar to Patna; Munger to Bariyarpur), Kosi, and Gandak selected with four tentative wetlands (to be discussed in next meeting). It was also suggested that the following **wetlands may be added** to the existing list of wetlands,

1. Pasraha Chaur (Khagaria)
2. Harlakhi Chaur (Saharsa)
3. Atanagar
4. Dimaha Lake (Bhagalpur)
5. Railway Pond (Jamui)
6. Kastorni Ghat, Ganga Ghat (Munger)
7. Raja harai (Jamui)
8. Dorwa mann (East Champaran)
9. Kajra Dhar (Araria)

Following wetlands **need to be confirmed** by the Nodal officer after discussion with respective DFOs and coordinators:

1. Bhusara mann, Muzaffarpur
2. Bhartuya mann, Muzaffarpur
3. Bhrampura mann, Muzaffarpur
4. Narsan Chaur, Muzaffarpur
5. Kultiya Shariff, Muzaffarpur
6. Sarrotar lake, East Champaran
7. Chilraon Lake, East Champaran
8. Parba murli chaur, saharsa
9. Muradpur chaur, saharsa
10. Basmanpur, East Champaran
11. Bagmati riverplain, Sheohar

- **Field essentials, especially binoculars and bird guide book**

All DFOs who attended meeting were requested by CWLW to submit the inventory of equipment like field bird guide book, binoculars, spotting scope etc., available with each division, so that the availability of the equipment to the census groups during the upcoming AWC 2023 could be calculated and gaps filled, if any..

- **List of Local bird guides**

DFO, Bhagalpur and Jamui were requested to list out the good birders from bird guides trained by them that can be included in the volunteers list or could be added with some team for bird count, so that they would also get exposure and get to know the guidelines, procedures and methods of the bird count.

- **Collect contact numbers & emails of all co-ordinators and birders.**

CWLW suggested that the State Nodal officer shall collate the Names, designation (if there), contact no., email ID, addresses etc in an Excel sheet and circulate in thegroup.

- **Finalization of exhaustive birders list**

It was informed that from the tentative list of coordinators, two coordinators namely Jainandan Mandal and Ahbar Alam, would not be available for the survey. Therefore, their names were omitted from the coordinators list. Mr Arvind Mishra, Dr. S.K. Chaudhary and others suggested four names for inclusion in the coordinatorlist,

- Deepak Kumar Jhunnu
- Vatan Kumar
- Amir Rizwan Khan
- Rohit Rohitashwa

Thus, the list of coordinators for AWC, 2023 was expanded to 25.

Eight birders were removed from birder list. In these, two birders would not be able to join AWC, 2023. Rest six birder names were upgraded to coordinators list. Dr Gopal Sharma suggested to add Dr Gaurav in birder list. Till date, 44 birders and 61 bird guides have been listed in the volunteer list.

- **Pre-Count date for AWC, 2023**

Dr. Sudhakar, CF, Gaya-cum-Nodal Officer, AWC-2023, mentioned that to check the potential issues that team can face during actual count, Pre-survey should be performed particularly in the large wetlands and the river courses. The participants of the meeting were in agreement. CWLW stated that the presurvey would give idea on the following:-

1. To reduce the logistic problems
2. Team deployment and number of teams needed to cover the area
3. To understand the logistics like, boat, boat personnel, vehicles etc.,
4. Route to be followed
5. Confirmation of bird presence

Further it was suggested that based on the convenience, Coordinators can immediately start pre-survey and complete it by first week of January in large wetlands such as,

- Kanwar lake
- VGDS
- Durgawati dam
- Phulwaria Dam
- Indrapuri Barrrage
- Barwadihi Dam
- Udaipur Jheel
- Gogabeel community reservoir

CWLW suggested that the same team who performed the AWC in the concerned wetland lastyear should be involved in the present year pre-survey as they know which area they had covered earlier. In addition, all new wetlands included this year should be considered for pre- survey to assess their potentiality.

Summing up

- Pre-survey to be done in large wetlands and newly added wetlands between26.12.2022 to 06.01.2023, as per convenience.
- Last year AWC teams to take up pre-survey in the same wetland.
- Names, designations and contact details of the co-ordinators and birders be finalized.
- Listing of 2 -3 forest guards in each division who could be attached with the teamdoing
- the count in their jurisdiction to be finalized.
- Field equipment availability to be assessed.
- Fine-tuning of BRMS (Bihar Ringing & Monitoring System) App.

For the forthcoming meeting(s)

- Training to be imparted to participants on eBird App
- Training on the count techniques, guidelines, mapping of survey areas
- Training to be imparted to participants on BRMS App
- Formation of wetland clusters under each co-ordinator.
- Freezing of the coordinators and birders list. Also inclusion of college and university students in the AWC
- Finalization of birders under each coordinator for AWC 2023 exercise
- Status of field essentials
- Freezing of manpower and other resources.
- Training of selected birders and Forest Guards (FGs).

The meeting ended with the vote of thanks by the Nodal Officer.

Participants of the Meeting:

1. Mr Prabhat Kumar Gupta, CWLW, Bihar
2. Mr S. Sudhakar, CF, Gaya
3. Mr Taej Mundkur, Global coordinator, AWC
4. Dr P. Sathiyaselvam, BNHS

5. Mr Sohail Madan, BNHS
6. Mr Arvind Mishra, State coordinator, AWC
7. Mr Vikas Ahlawat, DFO, Kaimur
8. Mr Gaurav Ojha, DFO, Munger
9. Mr Ambarish Kumar Mall, D.F.O., VTR-1
10. Mr Tejas Jaiswal, DFO AURANGABAD
11. Mr Abhishek Kumar Singh, DFO Banka
12. Ms Shweta Kumari, DFO Motihari
13. Mr Chanchal Prakash, D.F.O. Kaimur
14. Mr Bhaskar Chandra Bharti, D.F.O., Purnea
15. Ms Amita Raj, DFO Vaishali
16. Mr Piyush Baranwal, DFO, Jamui
17. Mr Bharat Chintapalli, DFO, Bhagalpur
18. Dr Gopal Sharma, Regional Director, ZSI
19. Mr Navin Kumar, Former GM Tourism Department
20. Mr Kamlesh Kumar Murya, WWF
21. Dr Niraj Kumar, Assistant Professor, Motihari
22. Dr Kushagra Rajendra, Amity University
23. Dr Satyendra Kumar, Head of Department, Zoology, Muzaffurpur
24. Dr S. K. Choudhary, Professor, TMB University
25. Dr D. N. Choudhary, Professor, TMB University
26. Mr Gyanchandra Gyani
27. Col. Amit Sinha, NCC
28. Ms Khushboo Rani, BNHS
29. Mr Rahul Kumar, Education Assistant, BNHS
30. Mr Manish Verma
31. Mr Sambhu Kumar
32. Mr Sandeep, Bird guide, Jamui

ANNEXURE – 1

TENTATIVE LIST OF WETLANDS, UPDATED UPTO 24-12-2022 (open to addition/deletion)

Sl No.	Wetland	Location	District
1	Rajdhani jalashya	Patna	Patna
2	Bhusara man	Bhusara	Muzaffarpur
3	Bramhpura man	Muzaffarpur	Muzaffarpur
4	Bhartuya chaur	Bhartua	Muzaffarpur
5	Narsan chaur	Muzzafarpur	Muzzafarpur
6	Kultiya sharif man	Muzzafarpur	Muzzafarpur
7	Kesariya chaur or Sarrotar	Kesariya	East Champaran
8	Chilraon jheel	Supouliya	East Champaran
9	Udaipur jheel or Laal Saraiya	Bettiah	West Champaran
10	Mansi chaur	Fulia khar	Khagaria
11	Dainee maan	Khagariya	Khagaria
12	Simri jheel	Simri, baktiyarpur	Sahrasa
13	Bhagwa chaur	Balua bazaar	Saharsa
14	Bora chaur	Kharkta taal	Saharsa
15	Parba murli chaur	Kumar gez	Saharsa
16	Muradpur chaur	Muradpur	Saharsa
17	Jalai Chaur	Saharsa	Saharsa
18	Harlakhi Chaur	Saharsa	Saharsa
19	Hariya chaur	Akilpur	Saran
20	Bahiyara Chaur	Sarn	Saran
21	Kosi catchment area	Supaul	Supaul
22	Jhali Dam	Nawada	Nawada
23	Phulwaria Dam	Nawada	Nawada
24	Sohjana Dam	Fatehpur	Gaya
25	Barwadih Dam	Barachatti	Gaya
26	Water reservoir, Mohanpur	Mohanpur	Gaya
27	Begampur wetland	Begampur	Nalanda
28	Pushpakarni lake	Surajpur	Nalanda
29	Pawapuri Jal Mandir	Pawapuri	Nalanda
30	Arm and Ammunition factory ponds	Rajgir	Nalanda
31	Radhopur	Majipur	Vaishali
32	Baraila lake	Vaishali	Vaishali
33	Salah Chaur	Vaishali	Vaishali
34	Pahetiya chaur	Vaishali	Vaishali
35	Powra chaur	Vaishali	Vaishali
36	Boaraiya Chaur	Vaishali	Vaishali
37	Puraniya chaur	Vaishali	Vaishali
38	Lochna Chaur	Vaishali	Vaishali
39	Beraiyee Chaur	Vaishali	Vaishali
40	Saraula chaur	Siwan	Siwan
41	Gorgia Chaur	Siwan	Siwan

ANNEXURE – 1 (*contd*.)

TENTATIVE LIST OF WETLANDS, UPDATED UPTO 24-12-2022 (open to addition/deletion)

Sl No.	Wetland	Location	District
42	Kawar lake	Begusarai	Begusarai
43	Pachaila Chaur	Begusarai	Begusarai
44	Kanshar chaur	Samastipur	Samastipur
45	Kalma Jheel	Darbhanga	Darbhanga
46	Kusheshwar asthan	Darbhanga	Darbhanga
47	Gogabeel community reservoir	Katihar	Katihar
48	Bagar beel Lake	Katihar	Katihar
49	Baldiya chaur	Katihar	Katihar
50	Gangaprashad Jheel	Naugachia	Bhagalpur
51	Jagatpur jheel	Naugachia	Bhagalpur
52	Bahatra jheel	Naugachia	Bhagalpur
53	Athaniya jheel	Naugachia	Bhagalpur
54	VGDS	Bhagalpur	Bhagalpur
55	Dimaha	Bhagalpur	Bhagalpur
56	Nagi Dam	Jhajha	Jamui
57	Nakti Dam	Jhajha	Jamui
58	Belataar	Jamui	Jamui
59	Pailbajan	Jamui	Jamui
60	Devanahar	Jamui	Jamui
61	Gadhi Dam	Jamui	Jamui
62	Railway Pond	Jamui	Jamui
63	Raja Harai	Jamui	Jamui
64	Moorni Dam	Lakhisarai	Lakhisarai
65	Indrapuri barrage	Aurangabad	Aurangabad
66	Karanchak or Durgawati Dam	Kaimur	Kaimur
67	Chapania Lake	Madhubani	Madhubani
68	Orhni Dam	Banka	Banka
69	River systems		
70	Ganga ,Gandak ,Kosi		
71	Basmanpur	E. Champaran	E. Champaran
72	Sikrahna riverplain	E. Champaran	E. Champaran
73	Bagmati riverplain	Sheohar	Sheohar
74	Maria Dhar	Araria	Araria
75	Sukhiya wetland	Ara-Buxar road	Bhojpur
76	Gokul Jalashay	Bhojpur	Bhojpur
77	Guide Bandh	Kursela	Purnea

ANNEXURE – 2

TENTATIVE LIST OF WETLANDS, UPDATED UPTO 24-12-2022 (open to addition/deletion)

Sl. No.	Name	District	Contact
1	Shri Arvind Mishra	Bhagalpur	7766993421
2	Shri Navin Kumar	Patna	9431020809
3	Dr Gopal Sharma	ZSI, Patna	9006718900
4	Dr. Satyendra Kumar	Vaishali	9123269907
5	Prof. D N Chaudhary	Bhagalpur	94300 88707
6	Mr. Kamlesh Maurya	WWF, W. Champaran	7905718296 9546463300
7	Dr. Niraj Kumar	L.N.D. College, Motihari Muzzaffarpur	9771148223, 7321850223
8	Dr. Ram Pratap Singh	Life Science Department. CUSB, Gaya	7598112621
9	Col. Amit Sinha	Patna	7781049431
10	Dr.Sudhakar, IFS	Gaya	9471873016
11	Mr. Bharat Chintapali , IFS	Bhagalpur	6232770035
12	Mr. Anand Kumar, RFO	Patna Zoo	8002269037
13	Dr. P. Sathiyaselvam	BRMS, BNHS, Bhagalpur	
14	Shri Sohail Madan	BRMS, BNHS, Bhagalpur	
15	Dr. Sunil Kumar Chaudhary	Bhagalpur	
16	Shri Sumit Kumar		
17	Shri Danish Masroor	Gaya	
18	Ms Sabina Hayat	Patna	
19	Shri Ahbar Alam	Patna	
20	Shri Gyan Chandra Gyani	Bhagalpur	
21	Dr. Kushagra Rajendra	Muzaffarpur	
22	Shri. Pradumn Gaurav	W. Champaran	
23	Deepak Jhunnu	Bhagalpur	
24	Vatan Kumar	Bhagalpur	
25	Rohit Rohitashwa	Bhagalpur	
26	Amir Rizwan Khan	Bhagalpur	

ANNEXURE – 3

TENTATIVE LIST OF BIRDERS, UPDATED UP TO 24-12-2022

(To be discussed and updated further)

Sl No.	Birder	District	Contact no.
1	Deepak Shah	Bhagalpur	7766885588
2	Gaurav Sinha	Bhagalpur	9931824123
3	Rahul Mukesh	Bhagalpur	9931204511
4	Anurag Kumar	Bhagalpur	
5	Anand Swarup	Bhagalpur	
6	Jay kumar Jay	Bhagalpur	7479572180
7	Anand Kumar	Bhagalpur	
8	Ashish Ranjan Bhadari	Bhagalpur	7979049233
9	Prashant Kumar	Bhagalpur	
10	Santosh Sahani	Bhagalpur	
11	Nishant Kumar	Bhagalpur	
12	Arvind Kumar	Muzzafarpur	7782055508
13	Ravindra Kumar	Jamui	
14	Md. Shahbaz	Patna	6202710032
15	Gaurav Narayan	Patna	70707 67677
16	Sanjay kumar	Patna	
17	Md. Maaz	Patna	7677145626
18	Shivani Jaiswal	Patna	9631462437
19	Dr. Reshmi Komal	Patna	7903675645
20	Rajkishor Singh	Rohtash	
21	Abhishek	West Champaran	76772 13159
22	Rahul Shrivastava,	West Champaran	9123228997
23	Nature Guide, VTR		
24	Arif Siddique, Biologist, VTR	West Champaran	6307614127
25	Sourabh Verma, Biologist, VTR	West Champaran	7355482548
26	Soham Sachin Pattekar, Biologist, WWF	West Champaran	979877614
27	Sunil kumar, Nature Guide, VTR	West Champaran	6204027260
28	Vikas Uraon	West Champaran	6206177415
29	Ankit Aryan	Nalanda	74887 01168
30	Harsh Kumar	Nalanda	7004455237
31	Debasis Mahaptra	Nalanda	
32	Rahul Pranjape	Gaya	
33	Alex Jacob	Gaya	
34	Mark Menezes	Purnea	
35	Dinkar Jha	Vaishali	9931463352
36	Navdeep Kumar	Munger	7301527972
37	Mahesh Bharti	Begusarai (Manjhaul)	
38	Prashant Kumar	Begusarai, Majhaul (SEEDS India)	9470094019

ANNEXURE – 3 (*contd.*)

TENTATIVE LIST OF BIRDERS, UPDATED UP TO 24-12-2022

(To be discussed and updated further)

Sl No.	Birder	District	Contact no.
39	Mahesh Bharti	Kabar Nature Club,	
40	Ajit Singh	Saharsa	9431492488
41	Dr. Vidyanath Jha	Darbhanga	9931463352
42	Manoj Kumar	Betiah	9430826999
43	Rakesh kumar Roy	Aurangabad	8271812824
44	Rajiv Ranjan	Khagaria	9931623437

ANNEXURE - 4

TENTATIVE BIRD GUIDE LIST (to be discussed for inclusion in birders list)

Sl. No.	Name	Location	Contact No.
1	Pritam Kumar Priyanshu	Bird Giude, Bhagalpur	8877631604
2	Abhishek Anand	Bird Giude, Bhagalpur	6201164115
3	Kumar Sanu	Bird Giude, Bhagalpur	7909049553
4	Ashutosh Kumar	Bird Giude, Bhagalpur	6299569742
5	Md. Rizwan	Bird Giude, Bhagalpur	7061144932
6	Santosh Kumar Sahani	Bird Giude, Bhagalpur	7004297783
7	Chandan Kumar	Bird Giude, Bhagalpur	6204219650
8	Suraj Kumar	Bird Giude, Bhagalpur	6205321410
9	Punam Kumari	Bird Giude, Bhagalpur	9113488423
10	Chandan Kumar	Bird Giude, Bhagalpur	9570143613
11	MukeshKumarChoudhary	Bird Giude, Bhagalpur	9931204511
12	Sandeep Kumar	Bird Guide, Jamui	9304342202
13	Sonu Kumar	Bird Guide, Jamui	8252773416
14	Ravindra Kumar	Bird Guide, Jamui	9905922298
15	Manish Kr. Yadav	Bird Guide, Jamui	9113406861
16	Rupesh Kumar	Bird Guide, Jamui	7782828558
17	Manish kr. Singh	Bird Guide, Jamui	6203858988
18	Shrikant Kumar	Bird Guide, Jamui	6207574306
19	Trivdev Kumar	Bird Guide, Jamui	9608468263
20	Chandan Kumar	Bird Guide, Jamui	7061142426
21	Awadhesh Kumar	Bird Guide, Jamui	6207750743
22	Rajeev Ranjan	Bird Guide, Jamui	9110167720
23	Ranjeet Kumar	Bird Guide, Jamui	6351475621
24	Krishna kr. Mishra	Bird Guide, Jamui	8789421961
25	Mahesh Kumar	Bird Guide, Jamui	8210290168
26	Shubham Kumar	Bird Guide, Jamui	9006663550
27	Suneela Besra	Bird Guide, Jamui	7903015308
28	Chunchun Kumar	Bird Guide, Jamui	7367887718
29	Kedar Tudu	Bird Guide, Jamui	6280392251
30	Saurabh Kumar	Bird Guide, Jamui	8877086584
31	Chotelal Tudu	Bird Guide, Jamui	9347758627
32	Krishdev kr. Yadav	Bird Guide, Jamui	8789947475
33	Tuntun Kumar	Bird Guide, Jamui	7858950459
34	Virendra Kumar	Bird Guide, Jamui	7070082785
35	Yugal Kumar	Bird Guide, Jamui	9798S11974
36	Saurabh Kumar	Bird Guide, Jamui	9973189824
37	Sanoj Kumar	Bird Guide, Jamui	9798217972
38	Pintu Kr. Yadav	Bird Guide, Jamui	8969878827

ANNEXURE - 4 (*contd.*)

TENTATIVE BIRD GUIDE LIST (to be discussed for inclusion in birders list)

Sl. No.	Name	Location	Contact No.
39	Pawan Kumar	Bird Guide, Jamui	7667190936
40	Guddu kr. Paswan	Bird Guide, Jamui	8140523619
41	Shyam Sunder Yadav	Bird Guide, Jamui	7033688069
42	Virendra Kumar	Bird Guide, Jamui	8709522206
43	Rohit Hembrum	Bird Guide, Jamui	9060063122
44	Mubarak Hussain	Bird Guide, Jamui	8825316432
45	Ajay kr. Sharma	Bird Guide, Jamui	8757640902
46	Vikash Kumar	Bird Guide, Jamui	6204900082
47	Vikash kr. Yadav	Bird Guide, Jamui	8340643572
48	Bambam Kumar	Bird Guide, Jamui	9304127341
49	Rajkishor Prasad	Bird Guide, Jamui	9931934055
50	Pankaj Kumar	Bird Guide, Jamui	9304659971
51	Sagar Kr. Mandal	Bird Guide, Jamui	8340443381
52	Kusum Hasda	Bird Guide, Jamui	8294422485
53	Sandeep Kr. Thakur	Bird Guide, Jamui	6205269746
54	Shreeram Thakur	Bird Guide, Jamui	9939308696
55	Mithun Kumar	Bird Guide, Jamui	9955006800
56	Yogendra Kr. Yadav	Bird Guide, Jamui	9199679024
57	Nandlal Kumar	Bird Guide, Jamui	7667848612
58	Shaligram Mandal	Bird Guide, Jamui	7739170053
59	Rupesh Kumar	Bird Guide, Jamui	9934655253
60	Vikash Kumar	Bird Guide, Jamui	9102370897
61	Uttam Kr. Monu	Bird Guide, Jamui	7903300572

पर्यावरण, वन एवं जलवायु परिवर्तन विभाग
प्रधान मुख्य वन संरक्षक, पटना का कार्यालय
(वन्यप्राणी संभाग)
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पत्रांकः 867 पटना, दिनांक 01 जनवरी, 2023 ई०।

प्रतिलिपिः 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।

A virtual Third AWC preparatory meeting Bihar

7th January 2023

BNHS INDIA CONSERVING NATURE SINCE 1883

Minutes of Meeting

Venue- Zoom (Virtual)

(Topic: Third AWC preparatory meeting for the state of Bihar)

Date: 07.01.2023 **Time: 03:00 PM to 06:00 PM**

The third virtual meeting to sensitize and guide for the Asian Waterbird Census, 2023 in the important wetlands of the state of Bihar was held on 7th of January, 2022. The meeting was chaired by Mr Prabhat Kumar Gupta, Chief Wildlife Warden, Bihar. Prior to the focal discussion, the CWLW explained the agenda of the meeting. Topics and proposed activities those were discussed in the meeting are summarised below.

- **Discussion on the tentative list of wetlands to be covered in AWC 2023 w.r.t Coordinators and team members**

Dr. S. Sudhakar, State Nodal Officer stated that till date, a total of 63 wetlands were listed to be covered in AWC-2023, which would be revised in this meeting based on the discussion. He shared an excel file on the screen of the tentative list of wetland and coordinator with their contact number and email IDs and the discussion started sequentially.

- Mr Raj Kumar, DFO Bhojpur, said Sunki Suhiya and Gokul Jalashya of Ara and Buksar are potential sites that were covered last year also by Mr Arvind Mishra. This year it will also covered by Mr Mishra. CWLW suggested to conduct pre-survey in those area by the department.
- Dr Niraj Kumar and Dr Kushgra Rajendra suggested removal of Chilraon Lake and to add Basmanpur and Son barsa with Sarrotar and Dorwa mann of East Champaran. They said in Muzaffarpur, Brahmapura lake and Narsan Chaur should be removed and Manika mann, Batrauliya Chaur, Bhartua Chaur and Bhusara mann to be added. They are also coordinating Gandak stretch of East Champaran, Bagmati river stretch and Lal bakiya of Sheohar district. This was finalised.
- Dr Kamlesh Kr. Maurya finalised the sites in his charge as VTR, Udaipur jheel, Lal Saraiya mann and Gandak river stretch of West Champaran along with 14 team members in all.
- Mr Gyan Chandra Gyani said he will coordinate Simri, Ara and Bora chaur of Saharsa, Kajra Dhar of Araria, Pasraha Chaur of Khagaria and Hariya, Bahiyara, Athniya & Phulwaria Chaur of Saran district. Finalised.
- Mr Navin Kumar said that he and Dr Gopal sharma will coordinate the Jalai Chaur and Kosi catchment area of Saharsa, Kusheshwar asthan of Darbangha and four wetlands of Nalanda. This was finalised. He suggested Afsar Lake of Nawada, located at the border of Nalanda and Nawada, to be included in AWC-2023. The Nodal Officer asked the respective DFO about this and instructed to conduct pre-survey in the suggested wetland and report in next meeting.
- For the Chapania Lake of Madhubani, coordinated by Mr Gyani last year, Mr Gyani said this lake is far from his area, so he will not able to visit the site this year. Mr Navin said this site is near to Darbangha, therefore he can coordinate the site with Dr Gopal Sharma and team. This was finalised.
- Dr Satyendra Kumar said he will coordinate the four wetlands and Gandak stretch of Vaishali with 11 team members. This was finalised.
- Col. Amit Sinha will manage Rajdhani Jalashya of Patna.
- Durgawati Dam of Kaimur will be covered by Ms Khushboo Rani and Mr Rahul Kumar as they has visited the site last year also. Finalised.

- Mr Arvind Mishra suggested adding names of Dr Sathiyaselvam and Mr Sohail Madan as coordinator of the two wetlands of Begusarai and Ganga stretch from Munger to Bariyarpur. This was agreed to by Mr Sohail Madan.
- Mr Arvind Mishra said that he will coordinate three wetlands of Katihar, and seven wetlands of Jamui. He suggested to form two teams in Gadhi Dam of Jamui, one team lead by him and another by Ms Megha Yadav, ACF, Jamui. Ms Megha agreed to be a coordinator of Gadhi dam (Part). CWLW advised her to conduct a pre-survey of the area of Gadhi dam (Part) under her charge & report in next meeting.
- Dr Sudhakar will coordinate two wetlands of Gaya, one wetland of Nawada and Aurangabad. He said he already completed pre-survey in those area.
- Mr Amir Rizwan Khan suggested to add Geola Chaur, Kalyanpur Chaur and Garuara Chaur of Samastipur with Deokhal Chaur. He said that there is bird presence here and he'll conduct a pre-survey.
- Mr D. N. Choudhary will manage Odhni dam of Banka and Jagatpur & Gangaprasad Lake of Bhagalpur.
- For the Katiya Dhar of Bhagalpur, Mr Mishra suggested to add the name of Mr Vatan Kumar as coordinator along with Mr Deepak Kr Jhunnu and Sumit Kr Sum. Mr Vatan Kumar and Mr Deepak Kr Jhunnu agreed to it. Mr Bharat Chintapalli requested to add his own name as coordinator in Dimaha Lake and Katiya Dhar of Bhagalpur. Finalised.
- It was decided that he VGDS stretch will be divided into three parts for ease of count i.e. Sultanganj to Mirzapur, Mirzapur to Barari Ghat and Barari Ghat to Bateshwarsthan, and these would be coordinated by Mr Rahul Rohitashwa, Dr S. K. Choudhary and Mr Bharat Chintapalli respectively. Bateshwarsthan to Manihari Ghat will managed by Mr Deepak Kumar. CWLW said to add the name of Dr Sathiyaselvam to VGDS stretch as coordinator. Mr Vatan suggested adding the stretch of Ganga from Manik sarkar to Barari pul Ghat. This was also agreed to.

Estimated expenditure

CWLW instructed all DFOs to prepare and send estimates of expenditure for AWC-2023 in wetlands under their divisions for arrangement of boat, vehicle, breakfast, lunch etc.

Training on eBird

Mr Sohail Madan imparted training on eBird through a presentation. He explained how to download, log in and use the eBird app. He said it is a mobile based app as well as can be used on website also. He also explained about the packs to be downloaded in the app of the particular area. He suggested to create an ID of AWC-2023 on eBird where every participants will share their list.

CWLW suggested all to practice eBird app in their backyard. He also said that it is not specifically for AWC-2023, rather it is suggested to be used in AWC because when data will be uploaded simultaneously from approximately 70 wetlands within a week, it will create a surge in the data of birds sighted in Bihar.

BRMS app

CWLW said that the BRMS is a mobile-based application and it is almost ready and designed as per the existing datasheet. He said that we may have a training on this application possibly in next meeting.

Other Suggestions

Mr Gaurav Ojha suggested to include the newly appointed 39 Range officers in AWC- 2023. He said their training will be finished on 25 or 26 of January, 2023. CWLW opined that it was a good idea to include

them in their respective areas. He said that this would ensure creation of a resource of 23-25 such range officers who will be conversant with the AWC processes.

Pending AWC-2022 Certificates

CWLW instructed all DFOs to inform names of such participants whose AWC-2022 certificates have not been received or left out mistakenly, through a letter with their name and corresponding role in AWC-2022 so that these could be issued.

- Mr Niraj said four birders from their team of East Champaran did not receive the certificates. It came to light that these are with DFO, Tirhut. These could be collected from there.
- Mr Piyush Barnwal, DFO, Jamui said that one certificate of a birder named Mr Sandeep Kumar has not been received.
- Mr Rajkumar, DFO Bhojpur said that he had received only one certificate. But the team that did the work in Bhojpur did not raise any such issue.

Other points

- CWLW asked all DFOs to share the list of equipment such as Binoculars, Field book, Camera and Spotting scope in their division with nodal officer.
- Dr Sudhakar asked the concerned DFOs/Co-ordinators to conduct pre-survey in the newly added wetlands.

Summing up

- Pre-survey mostly done. New wetlands added pending pre-survey.
- Wetlands finalised.
- Co-ordinators finalised.
- Names, designations and contact details finalized.
- Estimates to be submitted by DFOs.
- Listing of 2 -3 forest guards in each division who could be attached with the team doing the count in their jurisdiction to be finalized.
- Field equipment availability to be assessed.
- Fine-tuning of BRMS (Bihar Ringing & Monitoring System) App to be done by next meeting for training.

For the forthcoming meeting(s)

- Training to be imparted to participants on BRMS App
- Formation of wetland clusters under each co-ordinator.
- Finalization of birders under each coordinator for present exercise
- Status of field essentials
- Freezing of manpower and other resources.
- Training of selected birders and FGs.
- Training on habitat and bird count form.
- Finalization of AWC-2023 dates

FINAL LIST OF WETLANDS FOR AWC-2023

S.N.	DIVISION	DISTRICT	WETLAND
1	ARARIA	ARARIA	Kajra dhar
2	AURANGABAD	AURANGABAD	Indrapuri Barrage
3	BANKA	BANKA	Odhni Dam
4	BEGUSARAI	BEGUSARAI	Kawar lake
5		KHAGARIA	Pasraha Chaur
6	BETTIAH	WEST CHAMPARAN	Gandak river system
7			Lal Saraya mann
8			Udaipur Jheel/WLS
9	BHAGALPUR	BHAGALPUR	Dimaha wetland
10			Gangaprasad Jheel
11			Ganges - Manik sarkar ghat to Barari Ghatbridge
12			Jagatpur lake
13			Kataiya dhar
14			VGDS - Barari ghat Bhagalpur to Bateshwarsthan
15			VGDS - Mirzapur to Barari ghat Bhagalpur
16			VGDS - Sultanganj to Mirzapur
17	BHOJPUR	ARA	Sunki Suhiya - Shahpur
18		BUXAR	Ganges - Buxar to Patna
19			Gokul Jalashay
20	GAYA	GAYA	Barandih dam
21			Barwadih dam
22	JAMUI	JAMUI	Belatar
23			Devanahar
24			Garhi dam - Part 2
25			Garhi dam - Part1
26			Jhajha railway pond
27			Nagi dam
28			Nakti dam
29			Pailbajan
30			Raja ahar
31	KAIMUR	KAIMUR	Gokul Dam
32			Karanchak/Durgawati Dam
33	MITHILA	DARBHANGA	Kusheshwar asthan
34		MADHUBANI	Chapaniya Lake
35	MOTIHARI	EAST CHAMPARAN	Basmanpur mann
36			Dorwa Mann
37			Gandak river system
39			Sonbarsa mann
40		SHEOHAR	Bagmati & Lalbakeya river stretch
41	MUNGER	MUNGER	Ganges - Kashtarni ghat to Bariyarpur
42	NALANDA		Arms&amunition fac.
43			Begampur wetland
44		BIHARSHARIF	Pawapuri jal mandir
45			Pushkarni lake
46			Hardiya Dam (Phulwariya)

FINAL LIST OF WETLANDS FOR AWC-2023 (*contd.*)

S.N.	DIVISION	DISTRICT	WETLAND
47	PATNA	PATNA	Rajdhani Jalashay, Patna
48	PURNEA	KATIHAR	Bagar beel
49			Baldiya chaur
50			Ganges - Bateshwarsthan to Manihari ghat
51			Goga beel
52	SAHARSA		Arsi chaur
53			Bora Chaur
54		SAHARSA	Jalai chaur
55			Kosi Catchment
56			Simri jheel
57	SAMASTIPUR	SAMASTIPUR	Deokhal chaur
58			Garuara chaur
59			Kalyanpur chaur
60			Keota (Goela chaur)
61	SARAN	CHAPPRA	Atanagar
62			Bahiyara chaur
63			Hariya Chaur Akilpur
64			Phulwariya chaur
65	SUPAUL	SUPAUL	Kosi catchment
66	TIRHUT	MUZAFFARPUR	Batrauliya chaur
67			Bharthua chaur
68			Bhusara mann
69			Manika mann
70	VAISHALI	VAISHALI	Baraila lake
71			Berai lake
72			Gandak river system
73			Puraniya chaur
74			Salaha lake
75	VTR	WEST CHAMPARAN	Valmiki Tiger Reserve (Darwabari wetland)

Participants of the meeting:

1. Mr Prabhat Kumar Gupta, CWLW, Bihar
2. Mr S. Sudhakar, CF, Gaya
3. Mr Sohail Madan, BNHS
4. Mr Arvind Mishra, State coordinator, AWC
5. Mr Chanchal Prakasham, DFO, Kaimur
6. Mr Gaurav Ojha, DFO, Munger
7. Mr Tejas Jaiswal, DFO Aurangabad
8. Mr Abhishek Kumar Singh, DFO Banka
9. Ms Shweta Kumari, DFO Motihari
10. Mr Chanchal Prakash, D.F.O. Kaimur
11. Mr Bhaskar Chandra Bharti, D.F.O., Purnea
12. Mr Piyush Baranwal, DFO, Jamui
13. Mr Bharat Chintapalli, DFO, Bhagalpur
14. Mr Raj Kumar, DFO Bhojpur

15. Mr Abhishek Kr Singh, DFO, Banka
16. Mr Rajeev Ranjan, DFO Gaya
17. Mr Vikas Ahlawat, DFO Nalanda
18. Mr Sanjeev Ranjan, DFO Nawada
19. Mr Ambrish Kr Mall, DFO Patna
20. Mr Ramendra Kr Sinha, DFO Saharsa
21. Mr Subodh Kr Gupta, DFO Samastipur
22. Mr Praduman Gaurav, DFO VTR-1
23. Mr Ram Sundar, DFO Saran
24. Mr Navin Kumar, Former GM Tourism Department
25. Mr Kamlesh Kumar Murya, WWF
26. Dr Niraj Kumar, Assistant Professor, Motihari
27. Dr Kushagra Rajendra, Amity University
28. Dr Satyendra Kumar, Head of Department, Zoology, Hajipur
29. Mr Gyanchandra Gyani
30. Mr Aamir Rizwan Khan
31. Ms Khushboo Rani, BNHS
32. Mr Rahul Kumar, BNHS
33. Mr Rohul Rahitashwa
34. Mr Deepak Kr Jhunnu
35. Mr Vatan Kumar

पर्यावरण, वन एवं जलवायु परिवर्तन विभाग
प्रधान मुख्य वन संरक्षक, पटना का कार्यालय
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पत्रांकः 42 पटना, दिनांक 21 जनवरी, 2023 ई०।

प्रतिलिपिः 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।

A virtual Fourth AWC preparatory meeting Bihar

14th January 2023

Minutes of Meeting

Venue- Zoom (Virtual)

(Topic: Fourth AWC-2023 preparatory meeting for the state of Bihar)

Date: 14.01.2023 **Time: 03:00 PM to 05:30 PM**

A virtual meeting was held on 14th of January, 2022 to sensitize and guide for the Asian Waterbird Census, 2022 in the important wetlands of the state of Bihar. The Chief Wildlife Warden, Bihar, chaired the meeting. Prior to the focal discussion, CWLW explained the agenda of the meeting. Topics and proposed activities those were discussed in the meetingare summarised below.

- **Discussion on the list of wetlands to be covered in AWC 2023 w.r.t Coordinators and team**

CWLW said that we have finalized 75 wetland sites in 27 districts under 24 Forest divisions for conducting the AWC 2023.

- Mr Arvind Mishra said that birders are not available in Buxar and Ara (Bhojpur) districts. Therefore, the team of experts & trained birders from Bhagalpur will have tocover wetlands in those districts. It was decided that DFO, Bhagalpur would see to themovement of team from Bhagalpur to Patna, wherefrom DFO, Bhojpur would arrangenecessary logistics for team movement from Patna to Ara/ Buxar and their stay.
- DFO, Motihari wanted know the details of the coordinators for Muzzafarpur and East Champaran districts for arranging the logistics. CWLW said that Mr Kushagra and MrNiraj had been identified as coordinators for these districts in combination with five volunteers. The DFO shall co-ordinate with them for the AWC. The department will provide one vehicle to them for survey. The local forest guards who are deployed for the AWC along with the team have to arrange their own vehicle, either by their bikes or Departmental vehicle.
- Mr Gyani said that he will manage the wetlands of Saharsa, Araria and Saran. Also update the volunteer list in the group, he added.
- CWLW said that wetlands of West Champaran District will be managed by MrKamlesh Kumar Maurya (as mentioned by him in previous meetings). Dr Satyendra Kumar said that he will coordinate the AWC in wetlands of Vaishali as well.
- Rajdhani Jalashaya in Patna will be managed by Col. Amit Sinha and his team. He also suggested that the Ganges River stretch from Patna to Mokama need to be covered during AWC-2023. It can also be a potential site and by this whole Ganga stretch will be covered from Buxar to Patna which is going to be covered by Mr Arvind Mishra. The stretches from Munger onward will be covered by other teams.Mr Sudhakar said we should drop the idea this year because it needs a pre-survey. CWLW suggested that after completing all the sites by Dr Gopal Sharma and Mr Navin Kumar, they can cover this stretch if time permits. If it needs more time, wewill cover this stretch in next AWC. CWLW commented that there has been information from various sources that the Army Cantonment pond, Danapur also houses lots of waterbirds and whether it should be included in AWC-2023. Col. Amit Sinha replied that this area is an Important Bird Area (IBA) and Asian OpenbillStorks are breeding in this area in large numbers from July to October. No birds will be there during the AWC time. Therefore, it is not wise to cover this area for theAWC 2023.
- Dr Gopal Sharma confirmed to manage the sites of Darbhanga, Nalanda and Madhubani districts and also Kosi catchment.

- Mr Sudhakar informed that the pre-surveys have already been completed for the wetlands of Nawada, Gaya and Aurangabad districts.
- Mr Sohail Madan said that he had already shared the list of volunteers for Begusarai and Munger in the group. If he gets time after completing all the sites, he will alsojoin other teams for Bird count, he added. CWLW said that Dr. Sathiyaselvam canalso join any of the teams as per convenience.
- Mr Arvind Mishra said that he will cover the wetlands of Jamui, Katihar, Khagariaand Buxar. Ms Megha confirmed that she will co-ordinate one site in Garhi Dam area.CWLW explained further that the coordinators are also responsible for building the census teams. Ms Megha replied that she has identified six among potential bird guides in Jamui and she is planning to prepare a mixed team comprising of birdguides of Bhagalpur and Jamui.
- Dr. S.K Choudhary informed that the site between Manikpur and Barari can becovered in two to three hours' time on foot. Mr Mishra agreed on this and said that itis not the site to be covered by boat. He also suggested that after completing the site Mr. Vatan Kumar can assist other teams as birder.
- For the river survey Mr Deepak Kumar Jhunnu asked about boat facilities. Mr.Sudhakar said that boat is possible for this stretch. Dr S.K Choudhary said country motor boat will be the best for this stretch. Dr Gopal Shamra suggested that the boat speed should be 10 to 12 kilometre per hour to complete the survey in five to six hours.

- **Proposal for allotment under AWC 2023**

Mr Sudhakar had prepared and discussed a template of proposal of estimate for the AWC2023. The Chairman instructed to share this template with all the DFOs.

- **Finalization of AWC, 2023 date**
  - Mr Navin said from five to nine February, he will not be available.
  - Dr Gopal said he will not be available from 29 Jan to 09 February.
  - Mr Sohail Madan said after 12 February he will not be available.
  - Dr D.N Choudhary will not be available after 12 February.
  - S.K Choudhary he will also not available from 28 Jan to 02 February.
  - Mr Mishra suggested the date should be of 10 days as we have to complete many wetlands.

· The Chairman concluded that **AWC will be conducted in Bihar from 30 Jan to 10 Feb, 2023. He further** said that approx 95% wetland sites could be covered by 10th Feb. The few remaining sites selected by Dr. Gopal Sharma exclusively can becovered by him between 10 to 12 February, second phase. Meanwhile, Mr. Navin Kumar can fill in for him during his absence.

- **Chairman commented that the discussed dates of AWC should not be made public yet as many arrangements still needed to be finalised. All agreed to this.**

- **Training on BRMS App**

CWLW congratulated the departmental App developers for developing the BRMS App. He showed the PPT on it and demonstrated how to use the app. He explained that the App contained two formats' i.e. habitat and AWC count. He also shared that this app is developed using the same format as in the existing AWC form and it would be further revised over time,based on experience gathered. During the training on App, the concerned hard copies of Habitat Form & Bird Count Form were also displayed and discussed.

- CWLW asked the staff of BNHS station to fill the altitude and rainfall data that will be used for comparison of bird richness and abundance with altitude and rainfall. Mr Surendra Singh, Director, Ecology & Environment, Patna said that those data can be extracted from Bihar Weather Seva Kendra. He agreed to collect and provide the data if the FD will share excel sheet of the wetlands. This was shared with him.
- Mr Mishra opined that the name of the App should be AWC App. CWLW explained that this App has been developed to cover all activities – Bird ringing, awareness generation & AWC – as contained in the MOU with BNHS. Hence the name BRMS App.
- Dr Kushagra said that we should pre-launch the App on trial mode to ensure technical trouble shooting. CWLW agreed and explained that data could be fed offline in this App and later uploaded to server. Hence, during the count, it would be prudent to record bird numbers on hard copy, and then entered in App. He said we can run trial in Rajdhani Jalashaya. Mr Sudhakar suggested we should give the trial version of the App to a few coordinators to take their suggestions from the on trial run. CWLW agreed to this and said that the link of the App would be shared for testing.
- Dr Sathiyaselvam said that the App can be replicated to national level and congratulated the team which had prepared it in short notice. He also mentioned about the mapping feature in the App. CWLW said that the mapping feature could be provided in the App in a manner such that when the team will start moving, any team member can touch the GPS button after moving 20 to 30 mts forward. Thereby, lat.- long. along with the time lag would be recorded. After finishing the surveys, they will also record last point, all these points will be saved in the App which would prepare a map of the areas covered. After this we can get KML file or Shape file based on the requirement.
- Dr Sathiyaselvam asked if possible to upload photographs in the App itself. CWLW replied that if the team will upload a high resolution photographs it will block the server. Therefore, option will be given to upload a single photo in the habitat form, for reference purpose.

Summing up

- Wetland clusters under respective Coordinators finalised.
- Co-ordinator teams/birders finalised.
- Contact details finalised.
- Field equipment availability finalised.
- AWC-2023 dates finalised.
- DFOs to submit estimates for allotment under AWC 2023.
- Training on Habitat Form and Count Forms done.
- Training on BRMS App imparted.
- No data disclosure till the State releases the final counts.

For the forthcoming final meeting

- Discussion on first aid medical kit to be carried.
- Distribution of hard copies of Habitat Forms & Count Forms to Co-ordinators.
- Discussion on submission of hard copies of records and formats, post count.
- Last minute discussions and tying up loose ends, if any.

Participants of the meeting:

1. Mr Prabhat Kumar Gupta, CWLW, Bihar
2. Mr S. Sudhakar, CF, Gaya
3. Mr Sohail Madan, BNHS
4. Dr Sathiyaselvam, BNHS
5. Mr Arvind Mishra, State coordinator, AWC
6. Mr Chanchal Prakasham, DFO, Kaimur
7. Mr Gaurav Ojha, DFO, Munger
8. Mr Tejas Jaiswal, DFO Aurangabad
9. Mr Abhishek Kumar Singh, DFO Banka
10. Ms Shweta Kumari, DFO Motihari
11. Mr Chanchal Prakash, D.F.O. Kaimur
12. Mr Bhaskar Chandra Bharti, D.F.O., Purnea
13. Mr Piyush Baranwal, DFO, Jamui
14. Mr Bharat Chintapalli, DFO, Bhagalpur
15. Mr Raj Kumar, DFO Bhojpur
16. Mr Abhishek Kr Singh, DFO, Banka
17. Mr Rajeev Ranjan, DFO Gaya
18. Mr Vikas Ahlawat, DFO Nalanda
19. Mr Sanjeev Ranjan, DFO Nawada
20. Mr Ambrish Kr Mall, DFO Patna
21. Mr Ramendra Kr Sinha, DFO Saharsa
22. Mr Subodh Kr Gupta, DFO Samastipur
23. Mr Praduman Gaurav, DFO VTR-1
24. Mr Ram Sundar, DFO Saran
25. Mr Navin Kumar, Former GM Tourism Department
26. Dr Satyendra Kumar, Head of Department, Zoology, Hajipur
27. Mr Gyanchandra Gyani
28. Mr Aamir Rizwan Khan
29. Ms Khushboo Rani, BNHS
30. Mr Rahul Kumar, BNHS
31. Mr Rohul Rahitashwa
32. Mr Deepak Kr Jhunnu
33. Mr Vatan Kumar

पर्यावरण, वन एवं जलवायु परिवर्तन विभाग
प्रधान मुख्य वन संरक्षक, पटना का कार्यालय
(वन्यप्राणी संभाग)
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अपर प्रधान मुख्य वन संरक्षक–सह–
मुख्य वन्यप्राणी प्रतिपालक, बिहार।

A virtual fifth AWC preparatory meeting

Bihar

29th January, 2023

Minutes of Meeting

Venue- Zoom (Virtual)

(Topic: Fifth AWC preparatory meeting for the state of Bihar)

Date: 29.01.2023 **Time: 03:00 PM to 04:00 PM**

A virtual meeting was held to sensitize and guide for the Asian Waterbird Census, 2022 in the important wetlands of the state of Bihar. The meeting was chaired by Mr Prabhat Gupta on 29th of January, 2023. Prior to the focal discussion, Mr Prabhat Gupta explained the agenda of the meeting. Topics and proposed activities those were discussed in the meeting are summarised below.

Mr S. Sudhakar said the list of coordinator and volunteers are ready only names of forest guards will need to add in the list for certificate distribution. He also shared that in many wetlands, pre-survey is completed as the team already shared photographs of it in the whatsapp group. Mr Gupta added approximately 50% of the strength of forest guards are on training therefore guards will assign on the spot by DFOs for survey. After survey, the name of guards assisted in the exercise will be collected.

Mr Gupta said to all DFOs to make expenses for the AWC from different heads and it will reimburse after the AWC exercise.

- **Date of conducting the survey**
  - Mr Sudhakar said date of exercise for each wetland by respective coordinators need to be finalise and share so that DFO will be ready for logistics.
  - Dr D. N. Choudhary said he will conduct the survey from 2nd to 4th of February.
  - Dr Gopal Sharma informed as he will be out of station, therefore he will visit the sites from 9th to 11th of February.
  - Mr Gyan Chandra Gyani said he will share his schedule by tonight in the whatsapp group.
  - Dr Kamlesh Kr Maurya has already shared the schedule in the group, i.e. from 31st January to 2nd February.
  - Dr Satyendra Kumar said he will talk to DFO Vaishali and will probably conduct the survey fin Ist week of February.
  - Mr Arvind Mishra has already shared the schedule of survey i.e. from 31st January to 12th of February.
  - Mr Sohail Madan informed that he will conduct the exercise from 2nd to 6th February.
  - Mr Rahul Rohitashwa will visit the site on either 4th or 6th of February.
  - Mr Deepak Jhunnu will organise the survey on 31st January.

- **Exemption letter**

Mr Gupta said all the coordinator who need exemption letter for the holiday from their organisation, they will share their name and dates of survey, he will issue the letter by 2nd of February. He also said that last year some of the coordinator required this letter therefore he will share a template or sample of the letter in the group. If any respective coordinator is conducting the exercise before 2nd, then they will inform the organisation that they will submit the letter later.

List of the coordinators who requires exemption letter

- Dr D. N. Choudhary
- Dr Kushagra Rajendra
- Dr Niraj Kumar
- Dr Gopal Sharma
- Mr Gyan Chandra Gyani
- Mr Navin Kumar
- Dr Satyendra Kumar
- Md. Amir Rizwan Khan

Mr Gupta shared that RoFs are returning on 3rd February after completing their training. He said to all DFOs that after their arrival utilise them in the census work with forest guards and get them exposure in their starting career.

- **BRMS app**
  - Mr Gupta informed that the list of altitude and rainfall is ready and now it is getting feed in the BRMS app so that we can analyse the bird species or numbers with altitude and rainfall.
  - Mr Manish informed that the app will be ready by Friday.
  - Mr Gupta said we are making little changes in the app such as once you feed the data more than one data was compiling in the pending data, we made changes and now when you save the data it will over-right and only on pending data will show.
  - An another changes was, in the count section, when you choose and select family like Geese or Ducks and feed, earlier the data was over-righting now all families will save in pending data and from there it will upload to server.
  - Mr Gupta informed this time we have to rely on hardcopies of bird count and habitat sheet as previous year. Mr Arvind Mishra suggested after completing the survey, the respective coordinators can enter the data in the BRMS app. Mr Gupta agreed on this and said it is a great idea and by this work of compiling the data will be easier for the BNHS team located at Bhagalpur.

- **Verification and Authentication of data**

Mr Mishra showed his concern and said verification and authentication of data is necessary by some experts. Mr Gupta said the Ist stage of filtration will done by coordinator only as they are bird expert and then it will further filter by BNHS team in Bhaglpur.

- **Other points**
  - Mr Bharat Chintapalli suggested to feed the data on ebird also and add a remark of "AWC, 2023" on it.
  - Ms Shweta asked about the timings of the survey and shared that last year in Patna, the exercise was started late in the morning. She also asked about the procedure of AWC. Mr Gupta asked about the presentation shared last year by Dr Nita Shah. Dr Sathiyaselvam said he have that presentation and he will share it in the group.
  - Mr Sudhakar suggested to celebrate "World Wetland Day". Mr Gupta if DFOs and coordinators wants to celebrate, they can conduct but first to decide the place or division.
  - Mr Gupta said everyone should carry medical kit with the team.
  - Dr Satyendra said one birder, Mr Pushkar Kumar, birder did not received his AWC certificate.

Mr Gupta conveyed best wishes to all for the AWC, 2023

Participants of the meeting:

1. Mr Prabhat Kumar Gupta, CWLW, Bihar
2. Mr S. Sudhakar, CF, Gaya
3. Mr Sohail Madan, BNHS
4. Dr Sathiyaselvam, BNHS
5. Mr Arvind Mishra, State coordinator, AWC
6. Mr Chanchal Prakasham, DFO, Kaimur
7. Mr Gaurav Ojha, DFO, Munger
8. Mr Tejas Jaiswal, DFO Aurangabad
9. Mr Abhishek Kumar Singh, DFO Banka
10. Ms Shweta Kumari, DFO Motihari
11. Mr Chanchal Prakash, D.F.O. Kaimur
12. Mr Bhaskar Chandra Bharti, D.F.O., Purnea
13. Mr Piyush Baranwal, DFO, Jamui
14. Mr Bharat Chintapalli, DFO, Bhagalpur
15. Mr Raj Kumar, DFO Bhojpur
16. Mr Abhishek Kr Singh, DFO, Banka
17. Mr Rajeev Ranjan, DFO Gaya
18. Mr Vikas Ahlawat, DFO Nalanda
19. Mr Sanjeev Ranjan, DFO Nawada
20. Mr Ambrish Kr Mall, DFO Patna
21. Mr Ramendra Kr Sinha, DFO Saharsa
22. Mr Subodh Kr Gupta, DFO Samastipur
23. Mr Praduman Gaurav, DFO VTR-1
24. Mr Ram Sundar, DFO Saran
25. Dr Gopal Sharma, ZSI
26. Mr Navin Kumar, Former GM Tourism Department
27. Dr Satyendra Kumar, Head of Department, Zoology, Hajipur
28. Dr Kushagra Rajendra, Amity University
29. Dr Kamlesh Kr Maurya, WWF
30. Mr Manish, IT department, Forest
31. Mr Gyanchandra Gyani
32. Ms Khushboo Rani, BNHS
33. Mr Rahul Kumar, BNHS
34. Mr Rohul Rahitashwa
35. Mr Deepak Kr Jhunnu