

Department of Environment, Forest & Climate Change
Government of Bihar

ASIAN WATERBIRD CENSUS 2022



Greylag Geese *Anser anser*

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ANNUAL REPORT Bihar State Bird Count



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Tej Pratap Yadav,
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Environment, Forest & Climate Change Department
Government of Bihar



MESSAGE

Bihar is rich in bird diversity and it also falls under the migratory route of the birds travelling from the North of the globe to the South. The rich and diverse landscape of Bihar comprising of various ecosystems, including the wetlands, are favourite stopover sites for these birds. It is necessary that such sites are identified, given adequate protection and management strategies are formulated for them based on realistic data.

It is indeed heartening to see that the Department has taken a leap in this direction with people's participation. The first ever Bihar Asian Waterbird Census (AWC), 2022 conducted by the departmental officers with the help of volunteers comprising of scientists, bird enthusiasts, students and villagers will indeed provide a boost to the bird conservation and management efforts in coming years. I hope this effort and enthusiasm would also continue in the forthcoming years.

I convey my immense satisfaction and appreciate the steps taken by the officers of Environment, Forest and Climate Change Department in garnering support from wide range of volunteers and focussing its efforts in community conservation principles. I congratulate the team of AWC, 2022 for successful completion of census exercise and coming out with this report.

TEJ PRATAP YADAV



Arvind Kumar Chaudhary, IAS

Principal Secretary

Environment, Forest & Climate Change Department

Government of Bihar



MESSAGE

Birds are the indicators of health and vitality of an ecosystem. Any drastic change in their diversity or population is directly proportional to the change in ecological balance on which our very life and livelihood depends upon. Conservation and rejuvenation of sensitive ecosystems like wetlands has been greatly emphasised through Jal-Jeevan-Hariyali Abhiyan, launched in 2018 in our State by the Hon'ble Chief Minister, Bihar. It is pivotal to conduct various scientific studies and surveys to gain proper understanding of such habitats and publish their values to the public and scientific community. The first ever Asian Waterbird Census, 2022 conducted over 68 wetland sites in Bihar is one such exercise which is envisaged to contribute towards the national and global efforts of wetland habitat and avifauna conservation. This AWC, 2022 report will be the precursor for taking important policy decisions on our State's pathway towards avifaunal conservation and future course corrections.

I appreciate the hard work put up by the AWC, 2022 team and congratulate all the officers, field staff, scientists, experts and volunteers who have been instrumental in bringing out this lucid scientific document.

ARVIND KUMAR CHAUDHARY



Ashutosh, IFS

Principal Chief Conservator of Forest (HoFF)
Environment, Forest & Climate Change Department
Government of Bihar



MESSAGE

The vast plains of Bihar are home to a wide variety of flora and fauna. Many natural wetlands - permanent and seasonal both – exist in these plains, that are responsible for the high avifaunal diversity in Bihar. However, these floodplains also suffer from burgeoning human population and high level of utilization - irrigation, intensive agriculture, use of pesticides and development - posing conservation threats to many such bird species found in these areas. Altogether, such highly productive wetlands support, and are critical to the survival of hundreds of thousands of waterfowl, ducks, storks, herons and others. They provide a unique ecosystem for dense congregation of land and water birds, of which the migratory birds form a sizeable population. There is an urgent need to gather species specific and site (wetland) specific data from such potential IBA sites.

It is a matter of great pleasure and satisfaction that our field officials, under the leadership of the Chief Wildlife Warden, Bihar had embarked on Asian Waterbird Census, 2022 exercise by the Department for the first time and have come out with substantial & concrete scientific results that would serve as baseline data and pave the way in formulation and preparation of cogent conservation management strategies for such areas.

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

ASHUTOSH



Prabhat Kumar Gupta, IFS

Addl. Principal Chief Conservator of Forest-cum-
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FOREWORD

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 northernmost 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, Forest 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 have been taken by the State of Bihar for conservation of the migratory birds along the Central Asian Flyway. This report, which is the outcome of the first ever Asian Waterbird Census conducted in Bihar in the month of February, 2022, on initiative of the Department of Environment, Forest and Climate Change, is one such other step in a series of steps taken towards conservation of avifaunal species, migratory ones included, in Bihar.

The journey started way back in the year 2014 by putting the occurrence of birds in the State on record through two departmental publications, namely “*Birds of Bihar - Vol. I & II*” and setting up of a Greater Adjutant Rescue and Rehabilitation Centre in Bhagalpur. This was soon 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, that yielded highly encouraging results and 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 sowed. This fructified soon after when the Department of Environment, Forest 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 MoEF & CC 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 migratory birds in Bihar.

There had been no earlier 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 sporadic efforts made by various NGOs. For any conservation endeavours to be sustained, it is essential to gather vital information and utilize these for further actions and perspective planning. Hence, embarking upon the Asian Waterbird Census (AWC) across the State was the next logical step and, therefore, it was taken up in February, 2022. The 1st Annual Report of AWC, 2022 analyses the observations of census exercise and at the same time, provides the first ever baseline data regarding these species of birds that have been grouped for easy reference in terrestrial, water birds and waterline species, in shape of the document in hand.

Apart from participation by officers/support staff of Forest Department and scientists/researchers of BNHS led by Dr. Nita Shah, the noteworthy aspect of this census exercise has been the whole-hearted involvement of volunteers – professionals and scientists from institutions, professors and teachers from educational institutions, NGOs, bird enthusiasts, researchers, students, bird guides, local villagers etc – that constituted the bulk of human resource. This indeed gives a feeling of comforting accomplishment and bolsters the faith that conservation goals of the avian community would be secured as long as involvement of people is ensured.

This report marks the beginning of a new era of conservation, research and education actions in context of avifauna in the State. This would go a long way in strategic planning and achievement of the goals and objectives of the National Action Plan and the commitment of the State of Bihar towards halting and reversing the decline of these wonderful winged creatures of nature and markers of climate change.

It gives me a feeling of immense satisfaction and delight in being associated with this initiative. I congratulate the entire team of forest department officials and their staff, the team of Bombay Natural History Society, Mumbai led by Dr. Nita Shah, all Co-ordinators and their team members in completing the first AWC in Bihar successfully. The pro-active involvement of Sri S. Sudhakar, Conservator of Forests, Gaya Circle as the State Nodal Officer and driving force behind this gigantic exercise has been commendable and needs special mention. The support of other professionals, scientists, 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.



PRABHAT KUMAR GUPTA



Shri. S. Sudhakar, IFS

Conservator of Forests, Gaya Circle and Nodal Officer, AWC 2022
Bihar



ACKNOWLEDGEMENTS

The success of community conservation programme for the endangered Greater Adjutants at Bhagalpur and the continuous census cum habitat monitoring programme that ensured their rise in population has encouraged the department to form a special task force – the Annual Waterbird Census team in Bihar, to venture into this state-wide bird counting and habitat assessment exercise. Apart from covering all the major wetlands, some of the wetlands that were not studied earlier were included in our exercise due to their strategic locations and migratory birds' population and diversity. This scientific study report of AWC Bihar 2022 is the result of the outstanding effort by the entire team of AWC 2022 – Bihar, who had meticulously walked the remote landscapes and waded the marshes and rivers of Bihar. I take this opportunity to express my sincere thanks to Shri. Dipak Kumar Singh IAS, Additional Chief Secretary, Education department, Govt of Bihar. During his tenure of leadership in our department, Sir was a constant source of motivation and assurance for our officers and the AWC team to successfully complete this task. My sincere thanks are due to Shri. Arvind Kumar Chaudhary IAS, Principal Secretary Environment, Forest and Climate Change Department, Govt of Bihar for his 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 to Shri. Prabhat Kumar Gupta IFS, APCCF cum Chief Wildlife Warden, Bihar for initiating the AWC exercise in our state. Right from the days of the preparation, field trials and through the days of AWC exercises in various districts, Sir has constantly guided and motivated the entire team. His patient but persistent effort towards appraisals and timely course corrections has spearheaded the team towards accuracy in the census and precision in data analysis and report. I am greatly thankful and appreciate the involvement and technical support of Dr. Nita Shah, Deputy Director, Bombay Natural History Society, Mumbai and her team of scientists and research scholars at Bird Ringing and Monitoring Centre, Bhagalpur, Bihar. I sincerely thank all the Divisional Forest Officers and their field staff, Team Coordinators, various University and college Professors, Scientists, Student volunteers constituting the AWC 2022 team of Bihar, for their active participation and perpetual interest expressed during the AWC exercise. On behalf of the entire team, I express my gratitude and sincere thanks to all the stakeholders of all the wetland ecosystems of Bihar that include Wetland mitras, Dolphin Mitras, Ganga praharis, Garud saviours, fishermen and boatmen who provided all the ground support and assistance that ensured our success and safety during the exercise.

S. SUDHAKAR

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EXECUTIVE SUMMARY

State of Bihar is important landscape along Central Asian Flyway (CAF) and East Asian Australasian Flyway (EAAF). The wetlands present in Bihar act as important wintering and stop-over sites for several long-distance migratory species using these flyways. Long term monitoring of migratory birds, bird ringing and recapture studies carried out by Bombay Natural History Society (BNHS) in the Indian subcontinent was pivotal for delineating the boundaries of CAF and EAAF. India has been actively involved in the flyway level conservations and in recent years. India leads in the bird conservation in the CAF. As part of it, Government of India released “India’s National Action Plan for conservation of migratory birds and their habitats along the Central Asian Flyway (2018–2023)” in 2018.

India’s CAF National Action Plan warrants states to address and implement the actions prescribed in the Plan thereby fulfilling the Convention on the Conservation of Migratory Species of Wild Animals (CMS) requirements in which Government of India is one of the signatories. The Department of Environment, Forest & Climate Change, Government of Bihar was the first state to take a prompt decision in 2020 and drew up a Memorandum of Understanding (MoU) with Bombay Natural History Society to setup the Bird Research, Ringing, Monitoring and Awareness Centre at Bhagalpur. Under the long-term bird monitoring and awareness objectives, it was felt that it is important to conduct annual waterbird census in Bihar in a regular basis across the state to promote the citizen science initiatives in the state and to sensitize the stakeholders and locals towards birds and their habitat conservations.

Therefore, in 2022, the Asian Waterbird Census (AWC) was conducted across the Bihar State. Prior to conducting the AWC, a series of virtual meetings was carried out by officials of forest department, BNHS team, volunteers, academicians and bird experts from Bihar. Based on those meetings, 67 wetlands, comprised of three river systems (Ganga, Kosi and Gandak), 13 reservoirs, 4 fish ponds, 13 freshwater marshes and 4 freshwater ponds and 39 freshwater lakes, were identified from 23 districts of Bihar. The exercise was carried out for 5 days by 15 teams. Total time invested for the AWC in Bihar was 146.58 hours for 67 wetlands. The time spent on the wetland for enumerations depended on the size of the wetland.

During the census exercise, a total of 45,173 birds of 202 species belonging to 61 families were reported. 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 land birds. Among these, Anatidae was the predominant family and over 21,000 individuals recorded during the AWC 2022. Among the 202 species recorded, 73 were long distance migratory species including 36 waterbird species, 16 wetland-dependent, and 21 land birds; 5 local migratory including 2 waterbirds and 3 land birds, and 134 were resident species.

A maximum of seven wetlands each were covered in Jamui and Muzaffarpur districts followed by six wetlands from Bhagalpur District. The highest count was reported from Bhagalpur District. A total of 7,544 individuals were reported from six wetlands in Bhagalpur District. Over 7,350 birds were reported from Jamui District.

As far as the site-wise bird count is concerned, the maximum number of waterbirds were recorded from Gogabeel Lake followed by Indrapuri Barrage. A total of 4,950 and 2,657 individuals of birds reported from these two wetlands respectively, Highest number of 49 waterbird species belonging to 13 families and 11 species under six families of wetland dependent were recorded from Bhagalpur District. The maximum land birds were reported from Begusarai District. In all 40 species belonging to 28 families were reported from Begusarai District.

A total of Nine Threatened and 11 Near Threatened species were recorded during the AWC-2022. As far as numbers of the threatened species are concerned, Common Pochard *Aythya ferina* was the predominant species followed by River Tern *Sterna aurantia*. Among the Near Threatened species, Black-headed Ibis *Threskiornis melanocephalus* was the predominant species followed by Northern Lapwing *Vanellus vanellus*. It is noteworthy to mention it here that the Northern Lapwing is coming to Bihar in recent years in considerable numbers.

Threat assessment was done for all the 67 wetlands covered during the AWC. Major threats observed / reported under five major categories namely fishing, poaching / hunting, agriculture, cattle grazing and pollution are discussed in this report.

ASIAN WATERBIRD CENSUS 2022

ANNUAL REPORT

Bihar State Bird Count

1. INTRODUCTION

Migratory birds from the Arctic breeding grounds and other temperate regions of northern high latitudes migrate southward to the wetlands located in the tropical countries, including the wetlands located in India, to escape from the extreme colder climate of the northern winter. On the onset of summer these migrants start their return migration to their northern breeding grounds. These migratory birds annually spend only 25% of their time at their place of origin where they breed and 40% at their wintering (the site where they spend the winter) sites. As these birds travelling long distances varying between a few thousands kilometers up to 14,000 km between their breeding and wintering sites depend upon their breeding and wintering destinations, they spend considerable time (30-40%) for their southward and northward journeys which varies not only between species but also between different geographical population of the same species. These migratory waterbird species utilizes several wetlands located between their breeding and wintering sites as stopover sites during their northward and southward journeys.

Wetlands are the ecosystem of great economic, cultural, scientific and recreational value with diverse and abundant flora and fauna. Wetlands are especially known for their abundance of some species or groups of birds as well as for their diversity of species not found elsewhere. The migratory waterbirds connect continents and countries and are therefore excellent environmental indicators at both global and local scales. During migration, birds use certain specific routes to reach their wintering or breeding grounds, which are called as flyways. The “Flyway” is a geographical region within which a single migratory species, a group of migratory species – or a distinct population of a given migratory species completes all components of its annual cycle (breeding, moulting, migratory journey, staging, wintering etc.).

Wetlands provide feeding, resting, roosting and foraging habitats for these charismatic species, where a number of volunteers work to assess the status of population of waterbirds over time. The information generated through the assessment is used to identify wetlands of high importance for waterbirds, and take conservation measures such as designation as Ramsar Sites and Flyway Network Sites, or inclusion as priority wetlands within national programmes. Unfortunately, during the last five decades, over 50% of wetlands have already been lost all over the world and the remaining are also degraded to different degrees. Increasing anthropogenic and developmental activities, water diversions and climate change have largely affected the waterbirds worldwide

Every year, thousands of volunteers across the globe visit wetlands in their country and count waterbirds as part of International Waterbird Census (IWC), coordinated by Wetlands International. The Asian Waterbird Census (AWC) is an integral part of the IWC. It runs in parallel with other regional programmes of the IWC in Africa, Europe, West Asia, the Neotropics and the Caribbean. The AWC was initiated in 1987 in the Indian subcontinent and since has grown rapidly to cover major region of Asia, from Afghanistan eastwards to Japan, Southeast Asia and Australasia. The census, thus covers the entire East Asian – Australasian Flyway and a large part of the Central Asian Flyway (CAF).

Management and conservation of waterbird populations requires precise and up to date information on site-wise populations and their trends. Information on the status and trends of waterbird populations in the CAF is limited and outdated. These trends can be assessed through long-term monitoring of sites used by the waterbirds.

Similarly, it is important to know the population trend and species composition of waterbirds at critical habitats along their migratory pathway. Collection of data and their analysis at the flyway and national levels will provide the basis for improving this knowledge base. As per the available information, till date, more than 6,100 sites of 27 countries have been covered under AWC with active participation of thousands of volunteers. The information collected is available to a wide range of government agencies and non-government organizations and contributes to conservation activities from the local to global level. The AWC has been conducted for over 36 years in India, as an annual programme to encourage coordinated and simultaneous monitoring of waterbirds and their wetland habitats. The AWC has played a significant role in the conservation of waterbirds and their habitats at the national and international levels. For example, information generated through the AWC contributes to the development of national and flyway policies and priorities in the CAF and other parts of the world, for species and habitat conservation, designation of protected areas, Ramsar sites, and Flyway Network sites. It is also being integrated into Single Species Action Plans and to support their implementation.

This programme, jointly coordinated by the Wetlands International and BNHS, encourages birdwatchers, state governments and policy makers across India to record waterbird population systematically. The count is generally organized in January every year and has thus far helped to acquire counts from more than 3,300 sites across the country. The annual AWC focuses on three major objectives. They are

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

The AWC is also helpful for

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

Addressing / fulfilling the 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 (EAAFP) and Central Asian Flyway Action Plan through monitoring important and Flyway Network sites

BirdLife International's Important Bird Area (IBA) Programme

IUCN/BirdLife International's Global Species Programme (Red List)

Wetlands International's Waterbird Population Estimates Programme

India is one of the 17 mega biodiversity countries in the world, and its varying topography and climatic regimes support diverse and unique wetlands. Being situated along the CAF, the Indian wetlands also serve as potential wintering ground for many species of migratory waterbirds. Of the 310 species of waterbirds reported within the geographic limits of India, more than half are winter visitors (Kumar *et al.* 2005). However, information

status of waterbirds in different habitats is still sporadic. In this regard, AWC is a great medium to investigate the diversity and relative abundance of waterbirds in different wetlands and discussed about the conservation implication.

Bihar is a crucial state for birds following the CAF. The major area of the Bihar State comes under the Gangetic Plain, especially the northern part, where many waterbodies exist that attract migratory waterbirds. However, most of them remain unstudied (Rahmani *et al.* 2016). A total list of 412 species of birds has been compiled from six sources in the book Birds of Bihar (Anon. 2013, 2014). However, this list needs authentication. Totally 16 IBAs have been identified in Bihar including 10 wetland IBAs. Of the 10 wetland IBAs in the state, eight of them have the potential to be declared as a Ramsar Sites (Islam and Rahmani, 2008; Rahmani *et al.* 2016).

The Department of Environment, Forest and Climate Changes (DEFCC), Government of Bihar jointly with BNHS started the state-level bird monitoring through AWC in the year 2022. It was mainly aimed to report the waterbird population in the state, status of the globally threatened species, status of the species prioritized in the India's CAF National Action Plan and the status of the uncommon and secretive species in the state. The AWC conducted in Bihar also aimed to build and strengthen state level networks of enthusiastic volunteers and facilitate their training. This is the first time in the Bihar state's history that the waterbird estimations were done in most of the potential bird habitats in the states.

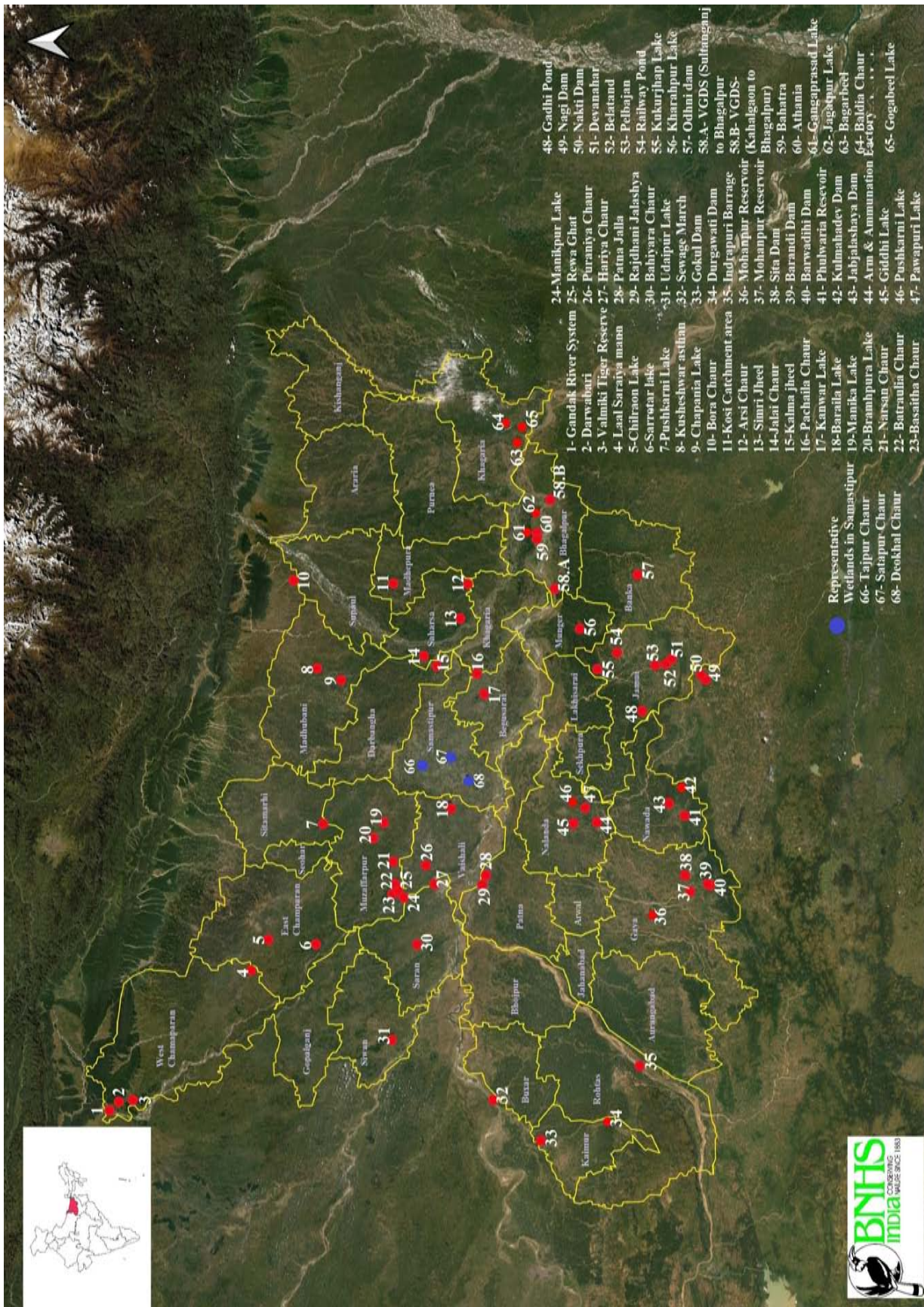
The AWC was conducted in Bihar during 2022 with the following objectives.

Objectives

- i. Providing the basis for estimates of waterbird populations in the state
- ii. Monitoring the waterbird numbers and distribution by standardized counts of wetlands in the state
- iii. Improving knowledge of little-known waterbird species and wetland sites
- iv. Identifying and monitoring (networks 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
- v. Providing information on the conservation status of waterbird species to the national database and international agreements
- vi. Increasing awareness of the importance of waterbirds and their wetland habitats at local, national and international levels.

2. WETLAND SITES

There are 4,416 wetlands covering 3,85,627 ha in Bihar as per the National Wetland Atlas that also include a Ramsar site, Kanwar Lake Bird Sanctuary. A total of 68 wetlands from 23 districts of Bihar were covered during the AWC 2022 that include 10 IBAs and one Ramsar Site. These 68 wetlands covering the total area of more than 1,02,638 acres, comprised three River systems (Ganga, Kosi and Gandak), 12 Reservoirs, two Fish Ponds, nine Freshwater Marshes and 44 Freshwater ponds and Lakes (Map 1 & Table 1). A total of 15 wetlands among all are Chours (a large tract of low land filled with water or group of wetlands).



Map 1. Locations of all wetlands covered during Asian Waterbird Census 2022 in Bihar

Among all these 68 wetlands surveyed, 10 are Protected Areas (PAs), namely Udaipur Wildlife Sanctuary, Valmiki Tiger Reserve, Salim Ali Jubba Sahani Bird Sanctuary, Kusheshwar Asthan Bird Sanctuary, Gautam Buddha Wildlife Sanctuary, Vikramshila Gangetic Dolphin Sanctuary, Kanwar Lake Bird Sanctuary, Nagi- Nakti Dam Bird Sanctuary and Gogabeel Community Reservoir. Almost all the wetlands are permanent in nature except Athaniya, Bahatra of Bhagalpur district and Hariya Chaur of Saran district.

Table 1. Details of the wetlands covered during the Asian Waterbird Census 2022

Sl. No.	DISTRICT	NAME OF THE SITE	PROTECTION STATUS	WETLAND TYPE
1	Aurangabad	Indrapuri Barrage	Non-Protected Area	Reservoir, Barrages
2	Banka	Odhni Dam	Non-Protected Area	Reservoir, Barrages
3	Begusarai	Kanwar Lake	Kanwar Lake Bird Sanctuary	Freshwater Lakes
4	Begusarai	Pachaila Chaur	Non-Protected Area	Freshwater Lakes
5	Bhagalpur	Athania	Non-Protected Area	Freshwater marshes
6	Bhagalpur	Bahatra	Non-Protected Area	Freshwater marshes
7	Bhagalpur	Gangaprasad Lake	Non-Protected Area	Freshwater Lakes
8	Bhagalpur	Jagatpur Lake	Non-Protected Area	Freshwater Lakes
9	Bhagalpur	VGDS	Vikramshila Gangetic Dolphin Sanctuary	River
10	Buxar	Sewage Marsh	Non-Protected Area	Freshwater marshes
11	Darbhanga	Kalma Jheel	Non-Protected Area	Freshwater Lakes
12	Darbhanga	Kusheshwar Asthan	Kusheshwar Asthan Bird Sanctuary	Freshwater Lakes
13	East Champaran	Chilraon Lake	Non-Protected Area	Freshwater Lakes
14	East Champaran	Sarrotar Lake	Non-Protected Area	Freshwater Lakes
15	Gaya	Barandi Dam	Gautam Budha WLS	Freshwater Lakes
16	Gaya	Barwadihi Dam	Gautam Budha WLS	Freshwater Lakes
17	Gaya	Mohanpur Reservoir	Non-Protected Area	Freshwater Lakes
18	Gaya	Sita Dam	Non-Protected Area	Freshwater Lakes
19	Jamui	Belatand	Non-Protected Area	Reservoir, Barrages
20	Jamui	Devanahar	Non-Protected Area	Reservoir, Barrages
21	Jamui	Gadhi Pond	Non-Protected Area	Freshwater Lakes
22	Jamui	Nagi dam Bird sanctuary	Nagi Dam Bird Sanctuary	Reservoir, Barrages
23	Jamui	Nakti Dam Bird sanctuary	Nakti Dam Bird Sanctuary	Reservoir, Barrages
24	Jamui	Pelbajan	Non-Protected Area	Freshwater Lakes
25	Jamui	Railway Pond	Non-Protected Area	Freshwater marshes
26	Kaimur	Durgawati Dam	Non-Protected Area	Reservoir, Barrages
27	Kaimur	Gokul Dam	Non-Protected Area	Freshwater marshes
28	Kaimur	Dhraul	Non-Protected Area	Freshwater Lakes
29	Katihar	Bagarbeel	Non-Protected Area	Freshwater Lakes
30	Katihar	Baldia Chaur	Non-Protected Area	Freshwater Lakes
31	Katihar	Gogabeel Lake	Gogabeel Comm. Reserve	Freshwater Lakes
32	Madhubani	Chapania Lake	Non-Protected Area	Freshwater Lakes
33	Munger	Kharagpur Lake	Non-Protected Area	Reservoir, Barrages
34	Munger	Kukurjhap Lake	Non-Protected Area	Reservoir, Barrages
35	Muzaffarpur	Bramhpura Lake	Non-Protected Area	Freshwater Lakes
35	Muzaffarpur	Narsan Chaur	Non-Protected Area	Freshwater Lakes
37	Muzaffarpur	Basaita Chaur	Non-Protected Area	Freshwater Lakes

Table 1. Details of the wetlands covered during the AsianWaterbird Census 2022 (contd.)

Sl. No.	DISTRICT	NAME FO THE SITE	PROTECTION STATUS	WETLAND TYPE
38	Muzarffarpur	Batraulia Chaur	Non-Protected Area	Freshwater marshes
39	Muzarffarpur	Manika Lake	Non-Protected Area	Freshwater Lakes
40	Muzarffarpur	Manikpur Chaur	Non-Protected Area	Freshwater Lakes
41	Muzarffarpur	Rewa Ghat (Gandak River)	Non-Protected Area	River
42	Nalanda	Arm and Ammunition factory	Non-Protected Area	Freshwater Lakes
43	Nalanda	Giddhi Lake or Begampur	Non-Protected Area	Freshwater Lakes
44	Nalanda	Pawapuri Lake	Non-Protected Area	Freshwater Lakes
45	Nalanda	Pushkarni Lake	Non-Protected Area	Fish Pond
46	Nawada	Jabjalasaya Dam	Non-Protected Area	Reservoir, Barrages
47	Nawada	Kulmahadev Dam	Non-Protected Area	Reservoir, Barrages
48	Nawada	Phulwaria Reservoir	Non-Protected Area	Reservoir, Barrages
49	Patna	Patna Jalla	Non-Protected Area	Fish Pond
50	Patna	Rajdhani Jalashya	Non-Protected Area	Freshwater Lakes
51	Saharsa	Arsi Chaur	Non-Protected Area	Freshwater marshes
52	Saharsa	Bora Chaur	Non-Protected Area	Freshwater marshes
53	Saharsa	Jalai Chaur	Non-Protected Area	Freshwater Lakes
54	Saharsa	Simri Jheel	Non-Protected Area	Freshwater Lakes
55	Samastipur	Deokhal Chaur	Non-Protected Area	Freshwater marshes
56	Samastipur	Satanpur Chaur	Non-Protected Area	Freshwater marshes
57	Samastipur	Tajpur Chaur	Non-Protected Area	Freshwater marshes
58	Saran	Bahiyara Chaur	Non-Protected Area	Freshwater Lakes
59	Saran	Hariya Chaur	Non-Protected Area	Freshwater marshes
60	Supaul and Saharsa	Kosi catchment area	Non-Protected Area	Freshwater Lakes
61	Vaishali	Baraila Lake	Salim Ali Zubba Sahni Bird Sanctuary	Freshwater Lakes
62	Vaishali	Purania Chaur	Non-Protected Area	Freshwater Lakes
63	West Champaran	Darwabari	Valmiki Tiger Reserve	Freshwater Lakes
64	West Champaran	Gandak River System	Valmiki Tiger Reserve	River
65	West Champaran	Lal Saraiya mann	Non-Protected Area	River
66	West Champaran	Udaipur Lake	Udaipur WLS	River
67	West Champaran	Valmiki Tiger Reserve	Valmiki Tiger Reserve	Freshwater marshes

3. PLANNING, HUMAN RESOURCES INVOLVED & TIME INVESTED

State Level Wetland Bird Count was conceived during Feb /March 2021 and the idea was discussed in the DEF&CC high level meetings. The BNHS staff stationed at Bird Migration and Ringing Centre in Bhagalpur commenced the search for local birders at district levels across Bihar since March 2021. Inventory of important wetlands, the list of experts and volunteers were done in consultation with the local experts and resources. In the beginning, thought was given to involve the birders from across the country to build a strong base. Later, it was concluded to develop a local volunteer base by involving local experts and volunteers of the Land.

The tentative list of wetlands to be covered and local experts and volunteers to be involved in the state level wetland bird counts were gathered by November 2021. The tentative AWC enumeration plan was prepared afterwards. Later, a dialogue was commenced with Government of Bihar and DEF&CC which continued through December 2021. During early January 2022, the plan was further firmed up and comprehensive plan of action was formulated in consensus with the CWLW. From mid-January 2022, a series of eight online technical sessions were conducted regarding the State Level Wetland enumeration. The Minutes of the meetings are given in the Annexures. 1 to 8. Value of data sets and its usefulness right from site protection to global level policy making were explained to all the experts and volunteers during the series of meetings.

3.1 Team Building: The CWLW who was the Chairman of the wetlands enumeration supported, coordinated and streamlined the following actions

1. Processes of selection of experts and volunteers for building the teams
2. Training to the participants and finalizing the district-wise wetlands to be taken for the wetland enumeration
3. Explaining the technical processes & procedures for the bird counts,
4. Habitat evaluation procedures and protocols,
5. Discussions on the data formats
6. Arranging for the equipment & gadgets,
7. Administrative planning, logistic and transportation was undertaken.

Mr. S. Sudhakar, IFS, Conservator of Gaya Circle was nominated as a coordinator for the wetland enumeration and he extended support to CWLW on the above activities.

BNHS Team in Bhagalpur, including the Principal Investigator of the Project, was involved in screening of wetlands across the states, allocating the wetland clusters to the coordinators, identifying the volunteers, imparting training to the volunteers for the wetland count, designing and planning the surveys, defining the dates and timeline for the counts, data collection processes, documentation of survey by each team and data submissions with timelines.

History was in the making when the wetland counts were conducted between 10th to 24th Feb 2022. A total of 413 members including 20 coordinators, were involved in the bird counts across 68 wetlands.

3.2 Team size and efforts invested

Two kinds of Time and efforts investment are considered here for technical soundness of counts and for Admin and financial resource investments. A total of 15 teams (total of 414 people) were involved for the counts. Considering every volunteer/enumerator effort per wetland, a total time of 986.20 human hours were invested in 68 wetlands as against total team time investment of 146.58 hours for 68 wetlands. A range of 2 to 18 members participated in any given wetland counts across 68 wetlands. The members participants were >10 in seven wetlands. The team size was high in Nagi Dam and Nakti Dam. A total of 18 members were involved in the count. The other wetlands where more number of participants were involved for the count are Devanahar (15 volunteers), Pelbajan (15 volunteers), Belatand (14 volunteers), Kharagpur (10 volunteers), Kukurjhap (10 volunteers). The wetland-wise details are given in the Table 2. The list of the census participants is give in the Annexure 1.

Table 2. Details of team-size and time to cover the areas during the AsianWaterbird Census 2022

Sl. No.	District	Wetland Name	Duration	Coordinator	Team Size
1	Aurangabad	Indrapuri Barrage	4.10hrs	Mr S. Sudhakar	5
2	Banka	Odhni Dam	4.0 hrs	Dr D. N. Choudhary	5
3	Begusarai	Kanwar Lake	5.30hrs	Mr Arvind Mishra	7
4	Begusarai	Pachaila Chaur	2.15hrs	Mr Arvind Mishra	7
5	Bhagalpur	Jagatpur Lake	4.0 hrs	Mr Bharat Chintapalli	6
6	Bhagalpur	Bahatra	1.15hrs	Mr Bharat Chintapalli	4
7	Bhagalpur	Athaniya	45min	Mr Bharat Chintapalli	4
8	Bhagalpur	VGDS (Sultanganj to Bhagalpur)	6.0 hrs	Mr Bharat Chintapalli	5
9	Bhagalpur	VGDS (Khagalgaon to Bhagalpur)	5.40hrs	Mr Bharat Chintapalli	5
10	Bhagalpur	Gangaprasad Lake	3.0hrs	Mr Bharat Chintapalli	5
11	Buxar	Sewage Marsh	30 min	Mr Arvind Mishra	6
12	Darbhangha	Kalma Jheel	2.15hrs	Dr Gopal Sharma & Mr Navin Kr.	2
13	Darbhangha	Kusheshwar Asthan	1.15hrs	Dr Gopal Sharma & Mr Navin Kr.	2
14	East Champaran	Chilraon Lake	7.05hrs	Dr Niraj Kumar & Dr Kushagra Rajendra	5
15	East Champaran	Sarrotar Lake	6.18hrs	Dr Niraj Kumar & Dr Kushagra Rajendra	5
16	Gaya	Barwadiah Dam	25 min	Mr S. Sudhakar	4
17	Gaya	Mohanpur reservoir	25min	Mr S. Sudhakar	4
18	Gaya	Barandi Dam	1.55hrs	Mr S. Sudhakar	4
19	Gaya	Sita Dam	22min	Mr S. Sudhakar	4
20	Jamui	Belatand	2:05hrs	Mr Arvind Mishra	14
21	Jamui	Devanahar	32min	Mr Arvind Mishra	15
22	Jamui	Pelbajan	1.10hrs	Mr Arvind Mishra	15
23	Jamui	Nagi dam Bird sanctuary	3.5hrs	Mr Arvind Mishra	18
24	Jamui	Nakti Dam Bird sanctuary	2.40hrs	Mr Arvind Mishra	18
25	Jamui	Gadhi Pond	3.50hrs	Mr Arvind Mishra	8
26	Jamui	Railway Pond	20min	Mr Arvind Mishra	6
27	Kaimur	Dhraul Dam	1.30hrs	Mr Arvind Mishra	7
28	Kaimur	Durgawati Dam	3.0hrs	Ms Khushboo Rani & Mr Rahul Kr.	6
29	Kaimur	Gokul Dam	8.0hrs	Mr Arvind Mishra	6
30	Katihar	Gogabeel Lake	2.55hrs	Mr Arvind Mishra	5
31	Katihar	Bagarbeel	1.45hrs	Mr Arvind Mishra	5
32	Katihar	BaldiaChaur	50 min	Mr Arvind Mishra	5
33	Madhubani	Chapania Lake	2.55hrs	Mr Gyan Chandra Gyani	5
34	Munger	Kharagpur Lake	2.5hrs	Ms Shradha Sinha & Mr Deepak Kr.	10
35	Munger	Kukurjhaph Lake	1.5hrs	Ms Shradha Sinha & Mr Deepak Kr.	10
36	Muzaffarpur	Brahmapura Lake	2.10hrs	Dr Kamlesh Kr. Maurya	5
37	Muzaffarpur	Narsan Chaur	2.17hrs	Dr Kamlesh Kr. Maurya	5
38	Muzaffarpur	Basaitha Chaur	1.05hrs	Dr Kamlesh Kr. Maurya	5
39	Muzaffarpur	Batraulia Chaur	1.25hrs	Dr Kamlesh Kr. Maurya	5
40	Muzaffarpur	Manika Lake	1.12hrs	Dr Kamlesh Kr. Maurya	5
41	Muzaffarpur	Manikpur Chaur	19min	Dr Kamlesh Kr. Maurya	5
42	Muzaffarpur	Rewa ghat (Gandak River)	15min	Dr Kamlesh Kr. Maurya	5
43	Nalanda	Begampur or Giddhi Lake	1.15hrs	Dr Gopal Sharma & Mr Navin Kr.	5
44	Nalanda	Arm and Ammunition factory	1.0hrs	Dr Gopal Sharma & Mr Navin Kr.	5

Table 2. Details of team-size and time to cover the areas during the AsianWaterbird Census 2022

Sl. No.	District	Wetland Name	Duration	Coordinator	Team Size
45	Nalanda	Pawapuri Lake	2.0 hrs	Dr Gopal Sharma & Mr Navin Kr.	5
46	Nalanda	Pushkarni Lake	1.15hrs	Dr Gopal Sharma & Mr Navin Kr.	5
47	Nawada	Phulwaria Reservior	2.40hrs	Mr S. Sudhakar	8
48	Nawada	Kulmahadev Dam	20min	Mr S. Sudhakar	8
49	Nawada	Jabsalasaya Dam	28min	Mr S. Sudhakar	8
50	Patna	Rajdhani Jalashya	1.5hrs	Col. Amit Sinha	8
51	Patna	Patna Jalla	2.0 hrs	Col. Amit Sinha	8
52	Saharsa	Simri Jheel	1.35 hrs	Mr Gyan Chandra Gyani	5
53	Saharsa	Arsi Chaur	1.5hrs	Mr Gyan Chandra Gyani	5
54	Saharsa	Bora Chaur	2.29hrs	Mr Gyan Chandra Gyani	5
55	Saharsa	Jalai Chaur	1.50hrs	Mr Gyan Chandra Gyani	5
56	Samastipur	Deokhal Chaur	2.43hrs	Md. Aamir Rizwan Khan	4
57	Samastipur	Tajpur Chaur	58mins	Md. Aamir Rizwan Khan	4
58	Samastipur	Satanpur Chaur	40mins	Md. Aamir Rizwan Khan	4
59	Saran	Bahiyara Chaur	4.30hrs	Mr Gyan Chandra Gyani	5
60	Saran	Hariya Chaur	5.15hrs	Mr Gyan Chandra Gyani	4
61	Supaul and Saharsa	Kosi catchment area	4.15hrs	Dr Gopal Sharma & Mr Navin Kr.	5
62	Vaishali	Puraniya Chaur	2.0 hrs	Dr Satyendra Kr.	5
63	Vaishali	Baraila Lake	2.0 hrs	Dr Satyendra Kr.	5
64	West Champaran	Darwabari (VTR)	2.45hrs	Dr Kamlesh Kr. Maurya	4
65	West Champaran	Gandak River System	3.49hrs	Dr Kamlesh Kr. Maurya	4
66	West Champaran	Dhobhaha (VTR)	5.30hrs	Dr Kamlesh Kr. Maurya	4
67	West Champaran	Udaipur Jheel	5.30hrs	Dr Kamlesh Kr. Maurya	4
68	West Champaran	Lal Saraiya mann	1.5hrs	Dr Kamlesh Kr. Maurya	5

3.3 Time efforts across all wetlands: Total time invested for the AWC Counts in Bihar was 146.58 hours for 68 wetlands. The time spent on the wetland for enumerations depended on the size of the wetland. The lowest time to complete the count was 15 minutes (*Rewa Ghat -Gandak River*) and highest time spent for the count was 08:00 hrs (*Gokul Dam*). Fourteen Wetlands were covered in less than an hour time, 23 wetlands were covered in an hour to two hours' time, 22 wetlands were covered between two- and 5-hour time. Nine wetlands were covered in range of five to 8 hours time. (Fig 1). Efforts in terms of time invested by each person of the human resources involved for surveying and counting birds in given in Table 2.

3.4 Team Size and Human Hours invested: Considering the enumeration done by varied team sizes which ranged between 2 to 18 members with time invested ranging from <5 to 40 human hours/wetland and varied between wetlands. Almost 50% of wetlands covered in 10 human hours. The 17 wetlands with team size of 2 to 8 members took upto 5 human hours per wetland, 17 wetlands with team size of 4 to 15 members took over >5 to 10 human hours /wetland, nine wetlands with a team size of 4 to 10 humans took over 10 to 15 human hours. Six wetlands with team of 4 to 15 members took >15 to 20 human hours per wetland. Twelve wetlands with team of 4 to 14 members took >20 to 30 human hours per wetland. Four wetlands with team of 5 to 8 members took >30 to 40 human hours/wetland. Three wetlands with team of 6 to 18 members took >40 human hours/wetland.

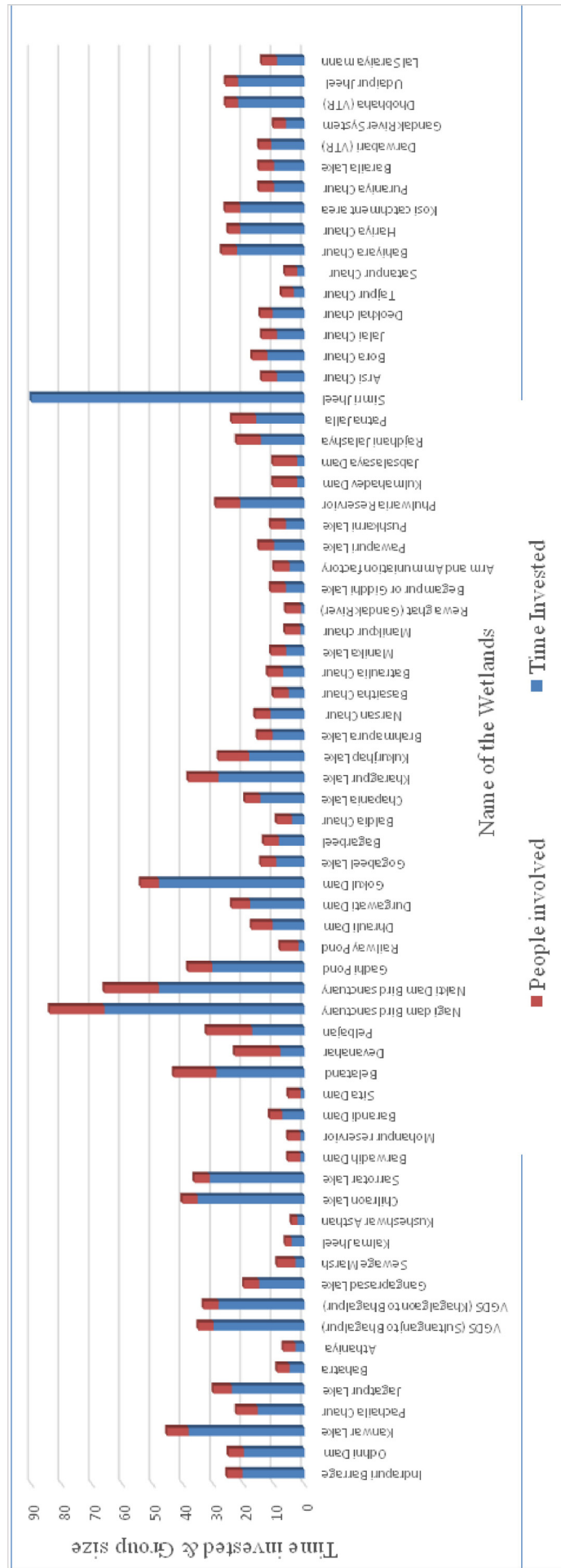


Fig 1. Wetland-wise time invested for the Asian Waterbird Census 2022 and the census group size

4. METHOD

Bird surveys were carried out from 16th to 20th of February 2022. The surveys were conducted in the morning between 06:00 and 10:00 hrs and in the evening from 15:00 to 18:00/19:00 hrs, (depending on the day length), when birds were found to be most active. Different approaches were made at different sites, like boat surveys were done in reservoir and river systems, and small ponds and lakes were covered on foot. Bird diversity and abundance were counted at each site with the help of binoculars and photographed by camera. Observations were done from the vantage points band, the vantage points were randomly selected in different wetlands.

4.1 Data compilation: The raw data sheets received electronically from the participants were scrutinized. Doubtful entries and observations were noted. The respective local experts who have done the count were contacted for clarification. The process of data computing on to excel spread sheet was done. Over 40 hours were spent on data entry, cleaning and clearing the doubts. The preliminary analysis and clustering of data were done afterwards. First draft results were made available by 16th March 2022. The data entries were rechecked and final result summary was made available on 1st April.



View of Wetlands: Vikramshila Gangetic Dolphin Sanctuary (above), Indrapuri Barrage (below)





Census team covering the Odni wetland



Census operation in Indrapuri Barrage



Asian Waterbird Census group at Jagatpur wetland

5. BIRD COUNT

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

During the waterbird count in the state, a total of 45,173 birds of 205 species belonging to 61 families were reported. 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. Anatidae, Ardeidae and Ciconidae were the predominant among waterbird families and a total of 21,090, 4,929 and 3,811 individuals were reported respectively. Lesser Whistling-duck *Dendrocygna javanica* was the predominant among the waterbird species and over 9,700 individuals were reported during the wetlands enumeration in the state followed by Red-crested Pochard *Netta rufina*, Asian Openbill *Anastomus oscitans*, Little Cormorant *Microcarbo niger* and Common Coot *Fulica atra*. A total of 4,808; 3,678; 3,065 and 2,358 individuals were reported for the above species respectively.

As far as site-wise total number of birds reports are concerned, maximum number of individuals were recorded from Gogabeel Lake. Over 4,950 individuals were reported from the Gogabeel including 4,973 waterbirds, six water dependent birds and 13 Land birds followed by Indrapuri Barrage. A total of 2,657 birds including 2,641 waterbirds, seven water dependent and nine Land birds were reported. In Nagi Dam Bird Sanctuary, over 2,600 birds were recorded. Wetland-wise total numbers of birds and species reported are given in the Table 3. The site-wise bird count details are given in the Annexures – 2 to 15.

Table 3. Wetland-wise details of overall numbers and species of birds reported during

AWC-2022 in Bihar

Sl. No	Name of the wetland	District	No. of families	No. of birds	No. of species	Waterbird species	Wetland dependent species	Land bird species
1	Chilraon Lake	East Champaran	29	846	50	7	4	18
2	Sarrotar Lake	East Champaran	23	1,217	49	9	4	10
3	Brahmapura Lake	Muzaffarpur	9	332	12	3	1	5
4	Narsan Chaur	Muzaffarpur	11	70	12	6	1	4
5	Simri Jheel	Saharsa	16	374	29	7	2	7
6	Arsi Chaur	Saharsa	9	74	12	6	2	1
7	Bora Chaur	Saharsa	10	1,060	22	10	0	0
8	Jalai Chaur	Saharsa	22	538	42	11	5	6
9	Kosi catchment area	Supaul and Saharsa	32	1,287	75	10	5	17
10	Chapania Lake	Madhubani	11	434	27	10	1	0
11	BahiyaraChaur	Saran	11	345	17	7	1	3
12	Hariya Chaur	Saran	13	614	21	5	3	5
13	Gandak River System	West Champaran	18	803	24	8	4	6
14	Dhobhaha (VTR)	West Champaran	9	30	13	3	1	5
15	Udaipur Jheel	West Champaran	18	377	29	8	2	8

**Table 3. Wetland-wise details of overall numbers and species of birds reported during
AWC-2022 in Bihar (contd.)**

Sl. No	Name of the wetland	District	No. of families	No. of birds	No. of species	Waterbird species	Wetland dependent species	Land bird species
16	Lal Saraiya mann	West Champaran	3	13	3	2	0	1
17	Puraniya Chaur	Vaishali	7	119	11	3	1	3
18	Baraila Lake	Vaishali	6	55	9	4	0	2
19	Rajdhani Jalashya	Patna	20	1,009	34	7	1	12
20	Patna Jalla	Patna	8	129	11	7	1	0
21	Kalma Jheel	Darbhangha	11	186	21	9	2	0
22	Kusheshwar Asthan	Darbhangha	9	120	17	6	3	0
23	Begampur or Giddhi Lake	Nalanda	9	81	12	5	1	3
24	Arm and Ammunition factory	Nalanda	5	491	11	4	0	1
25	Pawapuri Lake	Nalanda	5	460	11	4	0	1
26	Pushkarni Lake	Nalanda	3	30	3	2	1	0
27	Barwadih Dam	Gaya	7	102	11	5	1	1
28	Mohanpur Reservoir	Gaya	10	86	11	8	1	1
29	Phulwaria Reservoir	Nawada	16	423	28	9	0	7
30	Indrapuri Barrage	Aurangabad	16	2,657	30	10	3	3
31	Jagatpur Lake	Bhagalpur	27	2,002	52	10	4	13
32	Bahatra	Bhagalpur	7	68	14	2	2	3
33	Athaniya	Bhagalpur	8	12	9	1	1	6
34	VGDS (Sultanganj to Bhagalpur)	Bhagalpur	19	2,542	44	9	4	6
35	VGDS (Khagalgau to Bhagalpur)	Bhagalpur	20	1,274	33	7	5	8
36	Gangaprasad Lake	Bhagalpur	34	1,646	54	11	5	18
37	Odhni Dam	Banka	31	2,003	53	12	3	16
38	Durgawati Dam	Kaimur	27	525	40	6	2	19
39	Dhraul Lake	Kaimur	11	335	17	6	2	3
40	Kanwar Lake	Begusarai	42	1,412	62	10	4	28
41	Pachaila Chaur	Begusarai	20	693	33	8	3	9
42	Belatand	Jamui	17	594	34	9	1	7
43	Devanahar	Jamui	16	267	23	9	1	6
44	Pelbajan	Jamui	12	326	19	7	1	4
45	Nagi dam Bird sanctuary	Jamui	27	2,601	55	10	3	14
46	Nakti Dam Bird sanctuary	Jamui	17	1,926	33	9	3	5
47	Gadhi Pond	Jamui	22	1,193	40	10	2	10
48	Gogabeel Lake	Katihar	17	4,992	41	10	2	5
49	Bagarbeel	Katihar	23	376	40	10	5	8
50	Baldia Chaur	Katihar	17	247	25	9	4	4
51	Kharagpur Lake	Munger	9	225	13	6	2	1
52	Kukurjhaph Lake	Munger	3	36	4	3	0	0
53	Deokhal Chaur	Samastipur	16	92	17	2	3	11
54	Tajpur Chaur	Samastipur	4	582	9	3	0	1
55	Satanpur Chaur	Samastipur	5	174	11	4	1	0
56	Basaitha Chaur	Muzaffarpur	14	63	15	7	1	6

Table 3. Wetland-wise details of overall numbers and species of birds reported during AWC-2022 in Bihar (contd.)

Sl. No	Name of the wetland	District	No. of families	No. of birds	No. of species	Waterbird species	Wetland dependent species	Land bird species
57	Batraulia Chaur	Muzaffarpur	10	1,783	12	8	1	1
58	Manika Lake	Muzaffarpur	11	247	12	5	0	6
59	Manikpurchaur	Muzaffarpur	5	152	6	4	1	0
60	Rewa ghat (Gandak River)	Muzaffarpur	1	1	1	0	1	0
61	Barandi Dam	Gaya	21	760	32	9	1	11
62	Sita Dam	Gaya	6	26	6	4	1	1
63	Kulmahadev Dam	Nawada	2	3	1	1	0	1
64	Jabsalasaya Dam	Nawada	1	130	1	1	0	0
65	Railway Pond	Jamui	7	444	10	4	1	2
66	Gokul Dam	Kaimur	30	845	47	10	3	17
67	Darwabari (VTR)	West Champaran	8	72	11	3	2	3
68	Sewage Marsh	Buxar	5	142	6	4	0	1

As far as bird diversity is concerned, the highest number of species was observed in Kosi Catchment Area followed by Kanwar Lake and Nagi Dam Bird Sanctuary. A total of 75 species including 39 waterbirds, nine water dependent, and 27 Land bird species were reported in both the wetlands.

6. DISTRICT LEVEL ENUMERATION OF BIHAR WETLANDS, 2022

6.1 District-wise wetlands covered: A total of 68 wetlands in 23 districts of Bihar were covered during the AWC 2022. The number of wetlands covered varied in each district. A maximum of seven wetlands each were covered in Jamui and Muzaffarpur districts followed by six wetlands from Bhagalpur District. Totally four wetlands each were covered in Saharsa, Nalanda and Gaya districts. Three wetlands each were covered for enumeration in Samastipur, Nawada, Katihar and Kaimur districts. Two wetlands each were covered from seven Districts namely East Champaran, Saran, Vaishali, Patna, Darbhanga, Begusarai and Munger. One wetland were covered each from five districts namely Supaul & Saharsa, Aurangabad, Madhubani, Banka and Buxar (Fig. 2 & Annexure 16).

6.2 District-wise Bird Counts: District-wise bird count ranged between 142 to 7,544 birds. The highest count was reported from Bhagalpur District. A total of 7,544 individuals were reported from six wetlands in Bhagalpur District. Over 7,350 birds were reported from Jamui District. The district-wise total number of birds recorded during the Asian Waterbird Census 2022 is given in the Fig 3. District-wise number of wetlands covered for AWC 2022 and total number of birds counted are given in the Table 5.

Table 4. District-wise details of number of wetlands covered and total bird counted

Districts	No. of wetlands covered	No. of waterbirds	No. of wetland dependent birds	No. of land birds	Total
East Champaran	2	1,546	198	319	2,063
Saharsa	4	1,780	45	221	2,046
Supaul& Saharsa	1	948	74	265	1,287
Madhubani	1	427	7	-	434
Saran	2	911	16	32	959
West Champaran	5	573	565	157	1,295
Vaishali	2	147	1	26	174
Patna	2	1,080	3	55	1,138
Darbhanga	2	296	10		306
Nalanda	4	1,001	3	58	1,062
Gaya	4	938	7	29	974
Aurangabad	1	2,641	7	9	2,657
Bhagalpur	6	6,482	801	261	7,544
Banka	1	1,928	10	65	2,003
Kaimur	3	1,315	57	333	1,705
Begusarai	2	1,555	279	271	2,105
Jamui	7	6,963	47	341	7,351
Katihar	3	5,450	41	124	5,615
Munger	2	251	7	3	261
Samastipur	3	748	67	33	848
Muzaffarpur	7	2,278	26	344	2,648
Nawada	3	540	-	16	556
Buxar	1	139	-	3	142
TOTAL	68	39,937	2,271	2,965	45,173

It was interesting to mention it here that though 68 wetlands were covered for the enumeration, over 79% of the birds were reported from 36 wetlands in 10 districts. Totally 35,737 birds out of 45,173 individuals were reported from these 36 wetlands. Some of the important wetlands worth mentioning from these 10 districts are as follows:

6.3 Site-wise Bird Count: In Bhagalpur District, the Vikramshila Gangetic Dolphin Sanctuary (3,816) and Jagatpur wetland (2002) contributed maximum to the counts. In Jamui District, Nagi (2,601) and Nakti (1,926) dams were the major contributors to the count. Similarly, in Katihar District, the Gogabeel Community Reserve accounted for 4,992 birds; in Aurangabad District, the highest count was reported from Indrapuri Barrage (2,657). Batraulia Chaur in Muzaffarpur District, Kavar Jheel in Begusarai District, Sarrotar Lake in East Champaran District, Odhni Dam in Banka District and Gokul Dam in Kaimur District are the other important wetlands which supported more number of birds. The details of the wetland-wise count richness and species richness are given in the Annexures 17 and 18. The details of number of species and individuals reported during the Asian Waterbird Census 2022 in Bihar are given the Annexure 19 and 20.

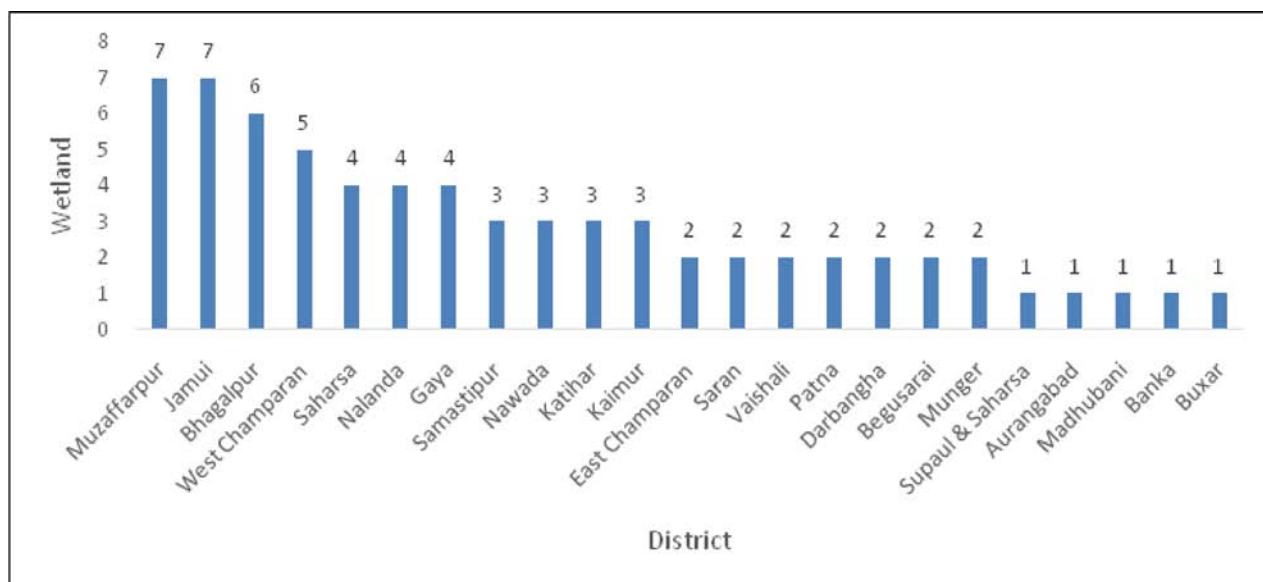


Fig. 2. District-wise number of wetlands covered for Asian Waterbird Census 2022

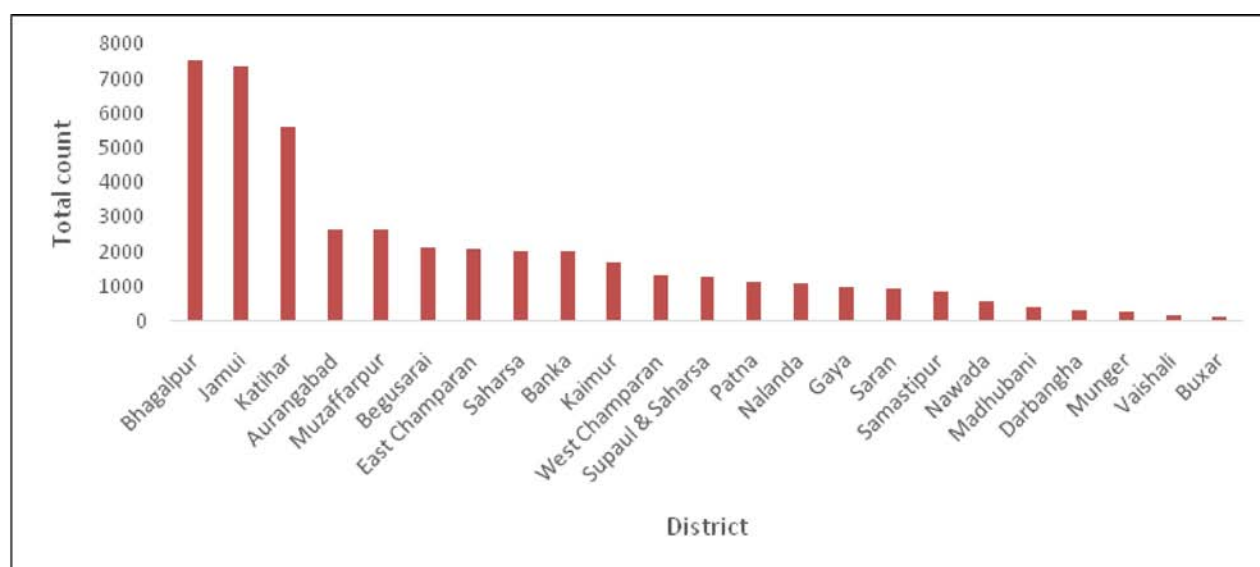


Fig. 3. District-wise total number of birds recorded during Asian Waterbird Census 2022
(in the descending orders)

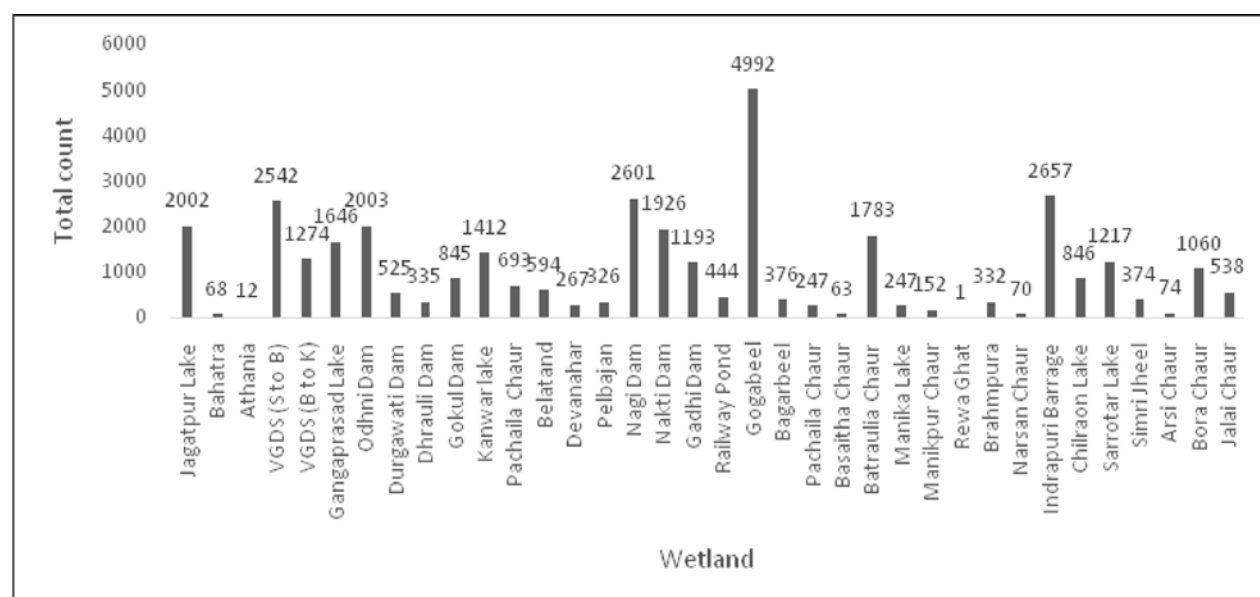


Fig. 4. Details of the wetlands from 10 districts which contributed 79% of the birds counted during Asian Waterbird Census 2022

Birds enumerated were classified into three major categories namely waterbirds, wetland dependent birds and land birds. It must be mentioned here that even though all the birds found during the wetland enumeration were reported, priority was given for counting the waterbirds. Equal efforts were not given for counting the wetland dependent and landbird species. Therefore, the overall wetland dependent and landbird species were under represented.

6.3.1 Waterbirds: A total of 39,937 waterbirds were counted across 23 districts. The district-wise waterbird counts ranged between 6,963 and 139 birds. Overall, 76.7% (30,623) of waterbird counts were obtained from ten districts (Fig. 4) which are categorized to the following dominant three ranges of high counts:

- **47.3%** (18,895) of the waterbird counts were reported from three districts with highest counts from Jamui (6,963). Bhagalpur (6,482) and Katihar (5,450) districts stood second and third in the total count of waterbirds.
- **12.3%** (4,919) of the waterbird counts were reported from two districts with second highest counts from Aurangabad (2,641) and Muzaffarpur (2,278) districts.
- **17.1%** (6,809) of the waterbird counts were reported from four districts namely Banka Saharsa, Begusarai & East Champaran districts. (Fig. 5)

6.3.2. Wetland Dependent Birds: A total of 2,271 wetland dependent birds were counted across 23 districts. Wetland dependent birds were not reported from 11 wetlands in nine districts. In contrast, the highest count of wetland dependent birds were reported from Bhagalpur district followed by West Champaran, Begusarai and East Champaran district (Fig. 6).

6.3.3. Land Birds: A total of 2,965 land birds were enumerated across 68 wetlands spread over in 23 districts of Bihar State. The land birds were not reported from 15 wetlands of ten districts. The highest count was recorded in Muzaffarpur district followed by Jamui, Kaimur, East Champaran, and Begusarai districts (Fig. 7).

District-wise details of the waterbirds, wetland dependent and land birds recorded are given in the Table 6.

Table 5. Details of waterbirds, wetland dependent and land birds recorded from 23 districts of Bihar during the Asian Waterbird Census 2022

Districts	WB Count	WB species	WB Family	WD species	WD Family	Counts WD	LB species	LB Family	Counts LB
East Champaran	1,546	27	9	10	4	198	34	21	319
Saharsa	1,780	39	11	7	5	45	13	11	221
Supaul & Saharsa	948	38	11	9	5	74	29	21	265
Madhubani	427	25	10	2	1	7	0	0	0
Saran	911	15	7	6	3	16	9	8	32
West Champaran	573	28	14	9	4	565	24	16	157
Vaishali	147	9	5	1	1	1	6	5	26
Patna	1,080	21	8	2	2	3	17	14	55
Darbhanga	296	20	9	4	3	10	0	0	0
Nalanda	1,001	19	7	3	3	3	6	6	58

Table 6. Details of waterbirds, wetland dependent and land birds recorded from 23 districts of Bihar during the Asian Waterbird Census 2022 (contd.)

Districts	WB Count	WB species	WB Family	WD species	WD Family	Counts WD	LB species	LB Family	Counts LB
Gaya	938	23	10	3	2	7	13	12	29
Aurangabad	2,641	24	10	3	3	7	3	3	9
Bhagalpur	6,482	49	13	11	6	801	37	26	261
Banka	1,928	29	12	5	3	10	21	15	65
Begusarai	1,555	29	11	6	3	279	40	28	271
Jamui	6,963	47	12	8	3	47	36	24	341
Katihar	5,450	36	11	10	6	41	21	14	124
Munger	251	10	6	3	2	7	1	1	3
Samastipur	748	11	6	5	4	67	14	13	33
Muzaffarpur	2,278	17	10	3	3	26	14	12	344
Nawada	540	19	9	0	0	0	9	8	16
Kaimur	1,315	12	3	7	3	57	29	21	333
Buxar	139	5	4	0	0	0	1	1	3

Note: WB -Waterbirds: WD – Wetland dependent birds: LB - Land Birds

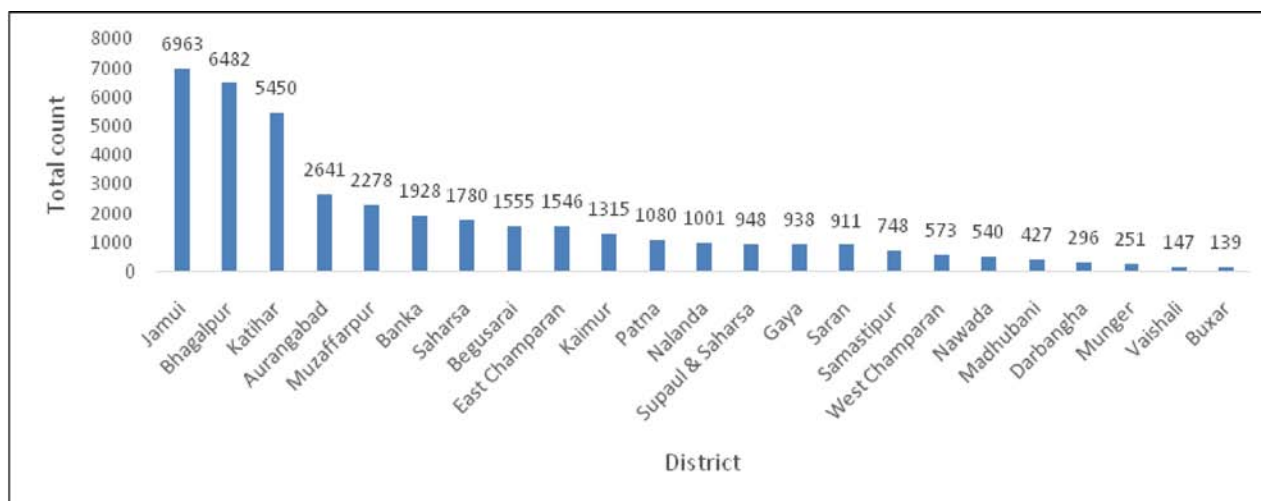


Fig. 5. District-wise total number of waterbirds counted during the Asian Waterbird Census 2022 (In the descending order)

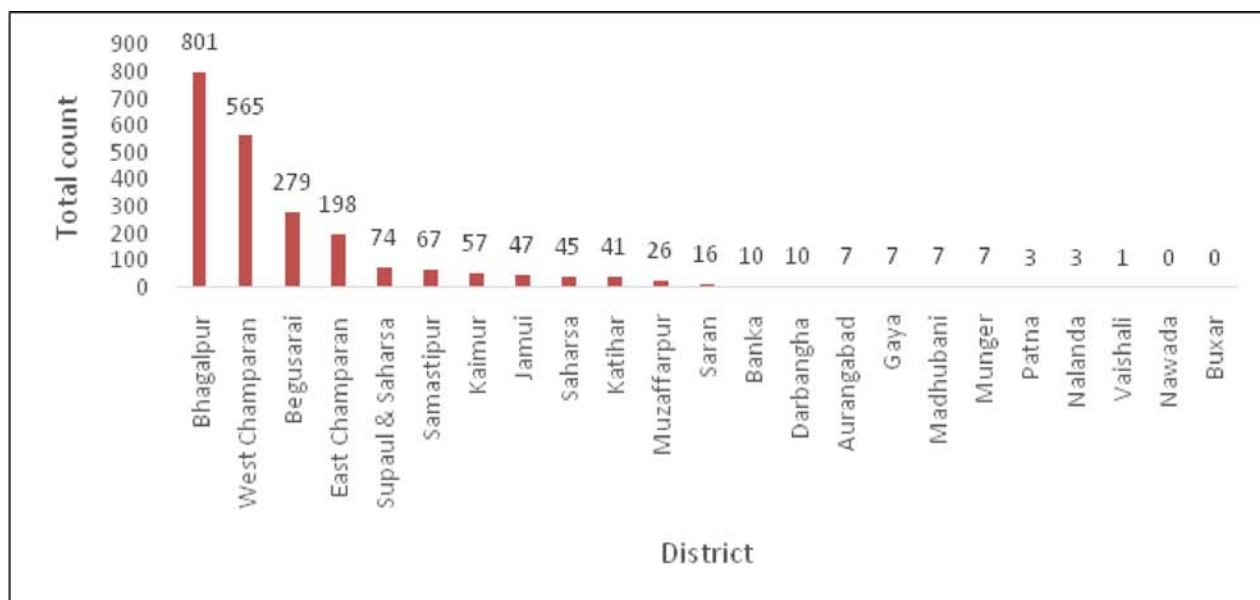


Fig 6. District-wise total number of wetland dependent birds counted during Asian Waterbird Census 2022 (In the descending order)

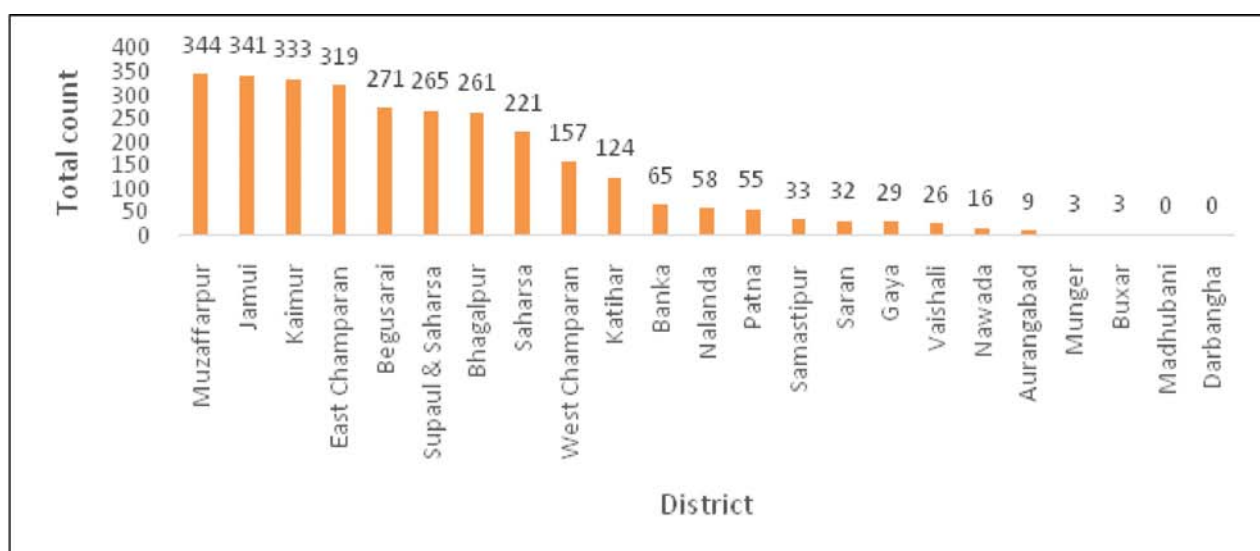


Fig. 7. District-wise total number of land birds counted during Asian Waterbird Census 2022 (In the descending order)

6.4. District-wise species records

Totally 202 species belonging to 63 families were reported during the enumeration. The highest number of species (97) belonging to 45 families with a total of 7,544 was reported from Bhagalpur District followed by Jamui District. A total of 91 species belonging to 39 families with a count of 7,351 birds was reported from Jamui. In all 76 species each from Supaul & Saharsa, 75 species from Begusarai and 71 species from East Champaran districts was reported during the wetland enumeration - 2022 (Fig 8).

6.5. Category-wise species and families

6.5.1. Waterbirds: Highest number of waterbird species was recorded in Bhagalpur District. Total 49 species belonging to 13 families were recorded from this district. Jamui District stood second and totally 47 species belonging to 12 families were recorded. In Saharsa District, 39 species of waterbirds belonging to 11 families were reported. Also, in Supaul & Saharsa districts, total 38 species of 11 families was reported (Fig 9, Annexure - 19).

6.5.2. Wetland Dependent Birds: As far as wetland dependent birds are concerned, the highest number of species were reported from Bhagalpur District. Total number of species recorded was 11 under six families. In Kathiar District, 10 species of wetland dependent birds belonging to six families was reported. Total 10 and nine species of four families were reported from East Champaran and West Champaran districts respectively. (Fig 10.)

6.5.3. Land Birds: Highest numbers of land bird species were reported from Begusarai District. In all, 40 species belonging to 28 families were reported from this district. A total of 37 species belonging to 26 families and 26 species belonging to 24 families were recorded from Bhagalpur and Jamui districts respectively. The number of species reported from East Champaran was 34. 29 species belonging to 21 families were reported each from Supaul & Saharsa and Kaimur districts. (Fig. 11)

The list of birds recorded during the Asian Waterbird Census 2022 and the migratory status of the birds reported under each category are given in the Annexure 20.

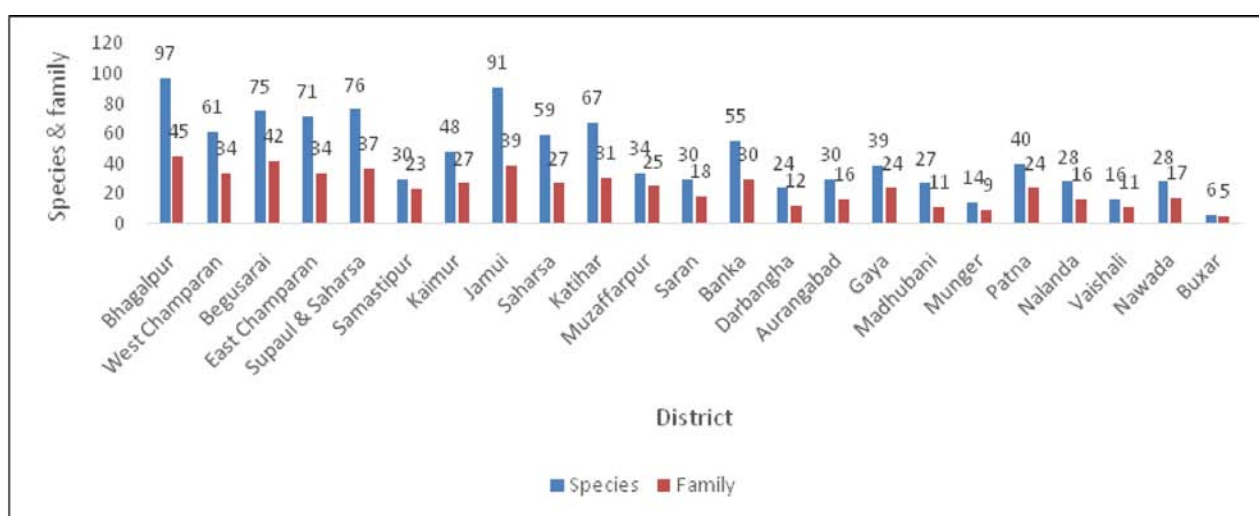


Fig. 8. District-wise total number of bird species & families reported during Asian Waterbird Census 2022

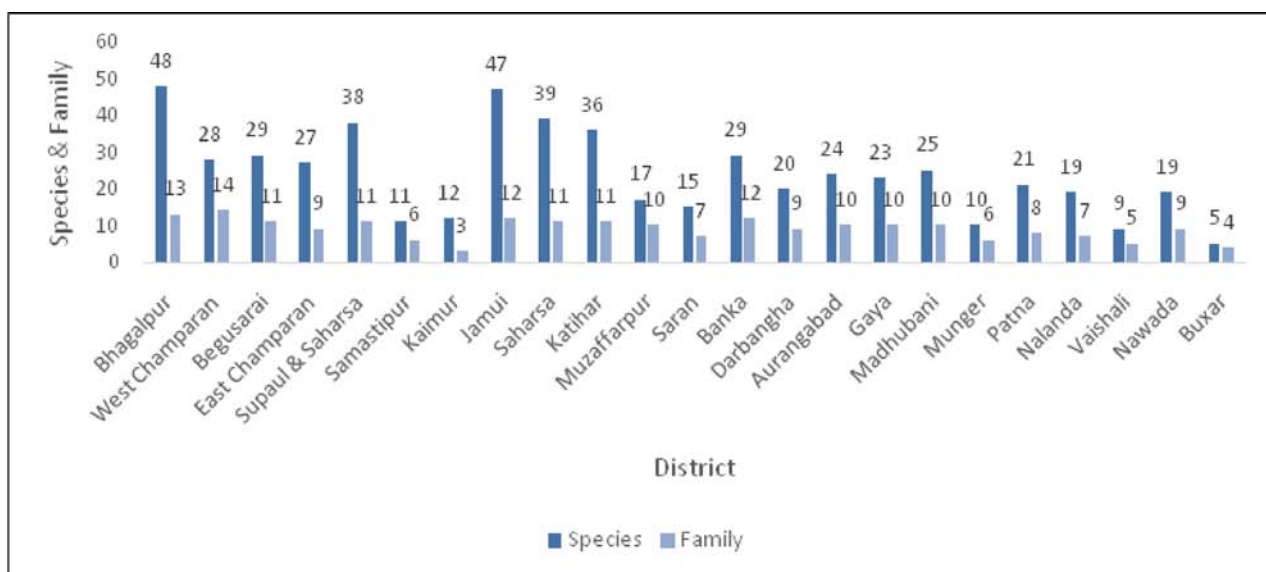


Fig. 9. District-wise total number of waterbird species & families reported during Asian Waterbird Census 2022

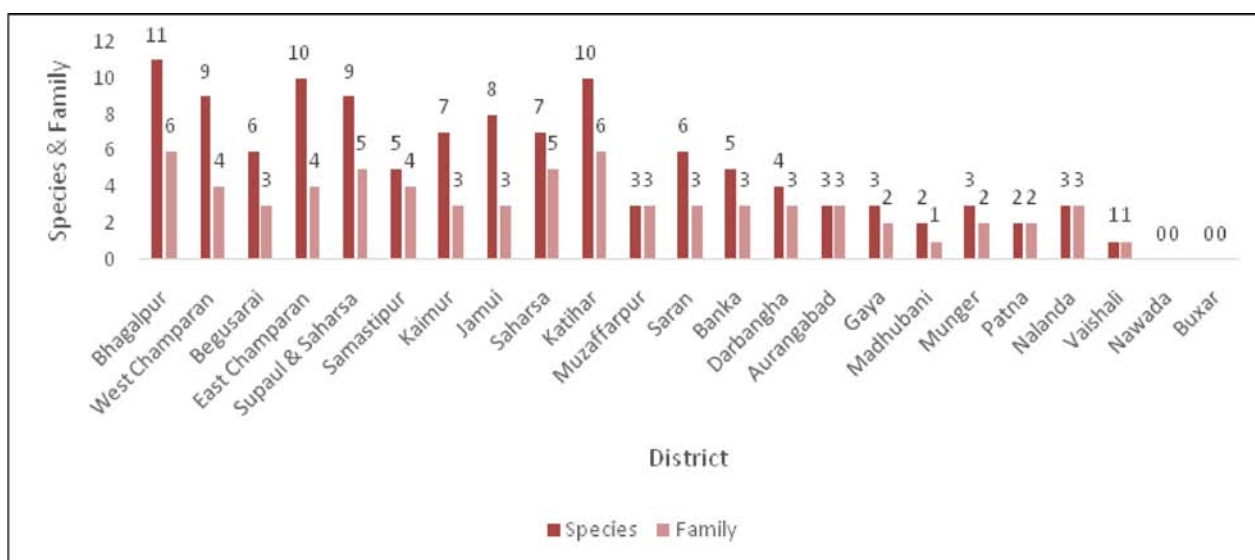


Fig. 10. District-wise total number of wetland dependent species & families reported during Asian Waterbird Census 2022

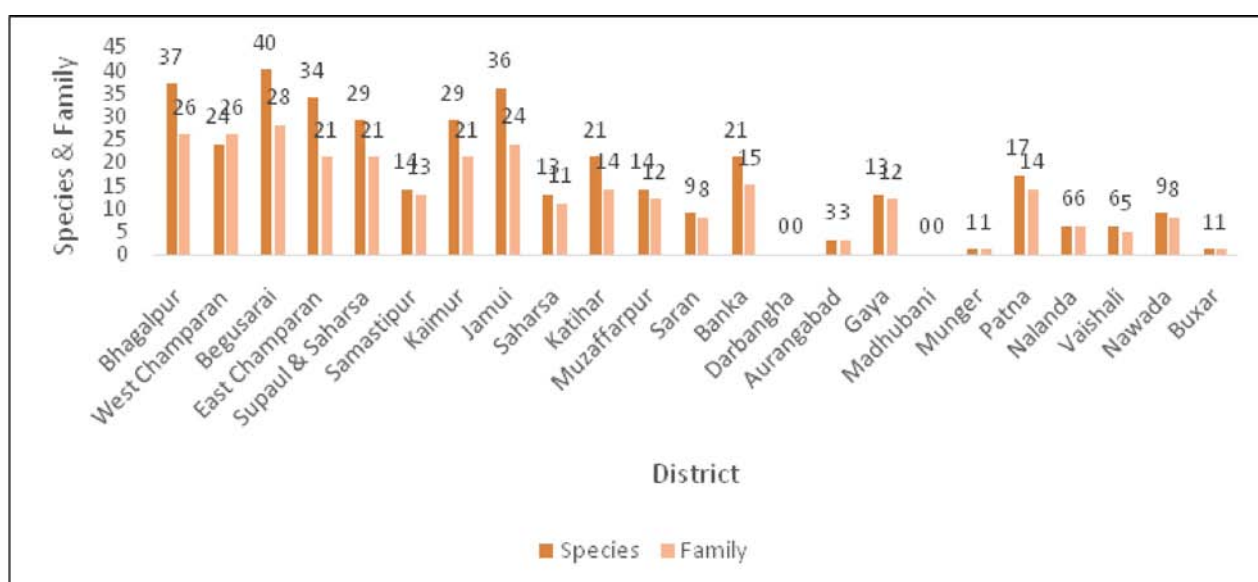


Fig. 11. District-wise total number of land bird species & families reported during Asian Waterbird Census 2022

7. STATUS OF THE GLOBALLY THREATENED AND NEAR THREATENED SPECIES

In all nine Threatened and 11 Near Threatened species were recorded during the AWC-2022 (Table 6). As far as numbers are concerned, Common Pochard *Aythya ferina* was the predominant species followed by River Tern *Sterna aurantia*. Among the Near Threatened species, Black-headed Ibis *Threskiornis melanocephalus* was the predominant species followed by Northern Lapwing *Vanellus vanellus*. It is noteworthy to mention here that the Northern Lapwing are arriving in considerable numbers to Bihar in recent years.

Category-wise, overall, five Threatened waterbird species including one Endangered and four Vulnerable species were reported during the wetland enumeration, Four Vulnerable wetland dependent and two land bird species were also recorded. As far as Near Threatened are concerned, nine waterbirds and two land bird species were reported.

Table. 7. Details of Threatened and Near-Threatened Waterbird Species recorded during the Asian Waterbird Census 2022

SI No.	Common Name	Scientific Name	IUCN status	Abundance
1	Greater Adjutant	<i>Leptoptilos dubius</i>	EN	2
2	Oriental Darter	<i>Anhinga melanogaster</i>	NT	48
3	Painted Stork	<i>Mycteria leucocephala</i>	NT	35
4	Woolly-necked Stork	<i>Ciconia episcopus</i>	NT	35
5	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	NT	3
6	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT	123
7	Falcated Duck	<i>Anas falcata</i>	NT	2
8	Northern Lapwing	<i>Vanellus vanellus</i>	NT	54
9	River Lapwing	<i>Vanellus duvaucelli</i>	NT	20
10	Eurasian Curlew	<i>Numenius arquata</i>	NT	7
11	Alaxandrine Parakeet	<i>Psittacula eupatria</i>	NT	4
12	Himalayan Griffon	<i>Gyps himalayensis</i>	NT	19
13	Lesser Adjutant	<i>Leptoptilos javanicus</i>	VU	55
14	Common Pochard	<i>Aythya ferina</i>	VU	218
15	Sarus Crane	<i>Grus antigone</i>	VU	2
16	River Tern	<i>Sterna aurantia</i>	VU	21
17	Greater Spotted Eagle	<i>Aquila clanga</i>	VU	4
18	Black-capped Kingfisher	<i>Halcyon pileata</i>	VU	1
19	Indian Spotted Eagle	<i>Aquila hastata</i>	VU	1
20	Tawny Eagle	<i>Aquila rapax</i>	VU	1

Of the overall bird population counted, the Threatened and Near Threatened birds formed 1.5% and rest of them were Least Concerned species. Overall, 64 unidentified birds were also counted during the AWC 2022 (Table 7, Fig. 12).

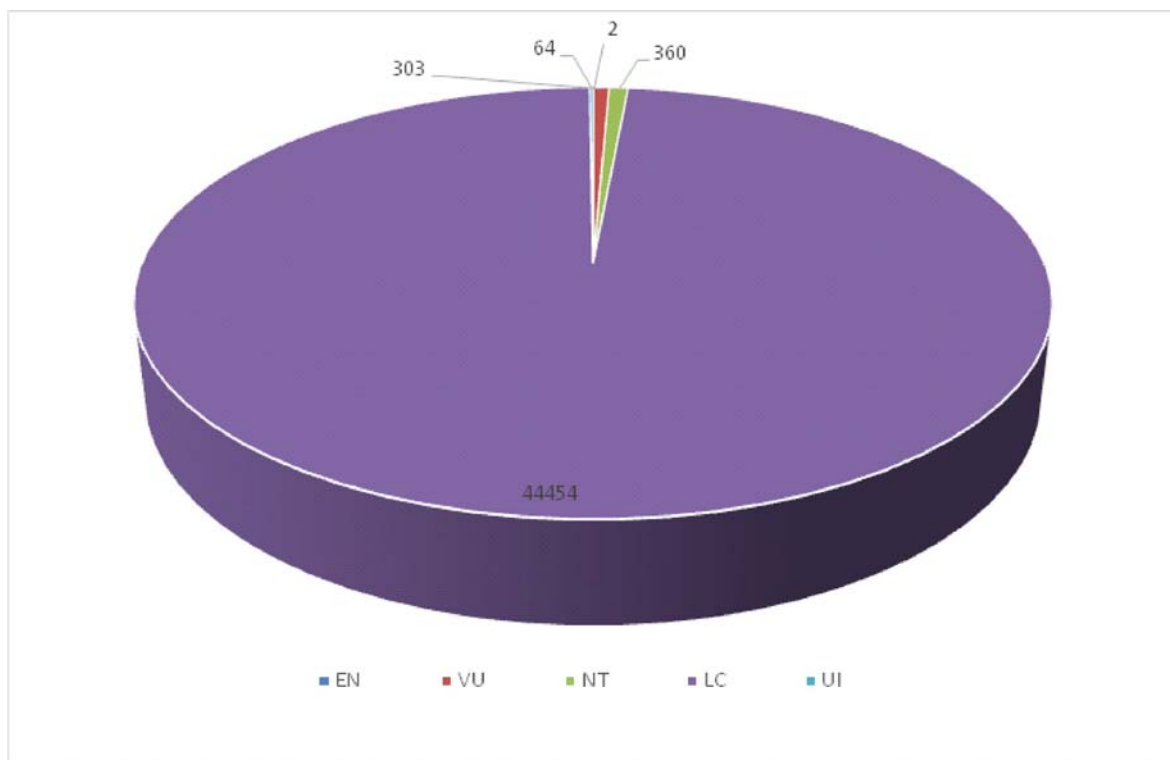


Fig. 12. Status of Threatened and Near Threatened birds recorded during the Asian Waterbird Count 2022

Threatened and Near Threatened Species reported during the Asian Waterbird Census 2022



Greater Adjutant *Leptoptilos dubius*
Endangered



Black-headed Ibis *Threskiornis melanocephalus*
Near Threatened



Black-necked Stork *Ephippiorhynchus asiaticus*
Near Threatened



Oriental Darter *Anhinga melanogaster*
Near Threatened



Painted Stork *Mycteria leucocephala*
Near Threatened



River Lapwing *Vanellus duvaucelii*
Near Threatened



Asian Woollyneck *Ciconia episcopus*
Near Threatened

Long distance Migratory Bird Species reported during the Asian Waterbird Census 2022



Bar-headed Geese *Anser indicus*



Northern Pintail *Anas acuta*

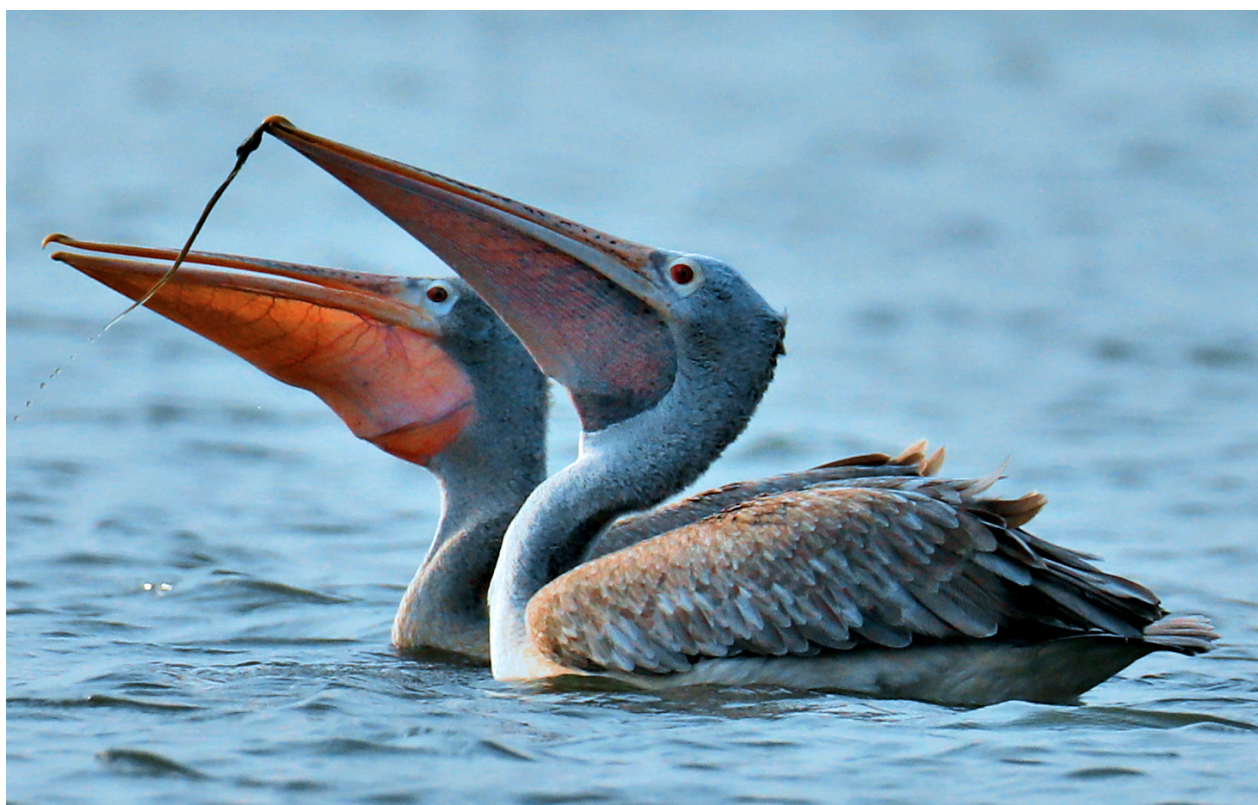


Pied Avocet *Recurvirostra avosetta*



Eurasian Curlew *Numenius arquata*

Short distance Migratory Bird Species reported during the Asian Waterbird Census 2022



Spot-billed Pelican *Pelecanus philippensis*



Comb Duck *Sarkidiornis melanotos*



Great Crested Grebe *Podiceps cristatus*

Resident Bird Species reported during the Asian Waterbird Census 2022



Lesser Whistling-duck *Dendrocygna javanica*



Grey Heron *Ardea cinerea*

8. HABITAT CHARACTERISTICS

8.1. Wetland type: Wetlands are distinguished by the presence of water, either at the surface or within the root zone, seasonally or permanent, they often have unique soil conditions that differ from adjacent uplands, and they support vegetation adapted to the wet conditions (hydrophytes) and, conversely, are characterized by an absence of flooding-intolerant vegetation. Wetlands encompass a wide range of different types, characterized by hydrological and biological characteristics: for example, fens, bogs, marshes, swamps, lakes, mangroves, reservoirs and river systems. The 68 wetlands comprised of 3 River systems (Ganga, Kosi and Gandak), 13 Reservoirs, four Fish ponds, 13 Freshwater marshes and 4 Freshwater ponds and 39 Freshwater Lakes. Along with this, two grasslands (Bahiyara and Hariya Chaur of Saran district) were also covered (Fig 13).

8.2. Vegetation type: There were five criteria in Vegetation type namely, on Bank, Submerged, Free-floating, floating leaved-rooted and emergent. Out of 68 wetlands, 52 % (n=36 wetlands) have vegetation on bank, 39% (n=27 wetlands) have submerged type of vegetation, 32% (n=22 wetlands) with Free-floating vegetation, 14 % (n=10 wetlands) with floating leaved-rooted and only 10% (n=7 wetlands) have emergent type of vegetation. All the five types of vegetation were reported from five wetlands namely, Kanwar, Pachaila, Pelwajan, Bagarbeel and Railway Pond. (Fig 14).

8.3. Fishing: Fishing was observed in almost 88% of the wetlands (60 out of 68 wetlands) at different scale. An extensive fishing was observed in most of the wetlands (n=24 wetlands), in 17 wetlands moderate fishing was observed, and in 10 wetlands very less fishing was reported. The fishing data are not available for nine wetlands. (Table 8)

8.4. Poaching: Out of 38 wetlands, poaching was observed in 41% wetlands (28 out of 68 wetlands). An extensive poaching was observed in seven wetlands whereas in six wetlands moderate poaching was reported. There was either no poaching reported/recorded/ observed in 25 wetlands and in 15 wetlands with less poaching was reported. The poaching details were not available for 15 wetlands. (Table 8)

8.5. Pollution: In all 32 wetlands were reported to be polluted due to deposition of either solid waste, cremation, recreation, ongoing construction or other forms of pollutants. Pollution was not reported from 33 wetlands during the habitat assessments. Pollution data is not reported for three wetlands of Samastipur District (Table 8).

TABLE 8. DETAILS OF THE SITE-WISE THREATS OBSERVED / REPORTED DURING THE ASIAN WATERBIRD CENSUS -2022

Wetland	Fishing			Hunting/ poaching			Agriculture			Cattle grazing			Pollution
	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High	
Chilraon Lake			✓						✓			✓	✓
Sarrotar Lake			✓			✓			✓			✓	
Bramhpura Lake			✓				✓			✓			✓
NarsanChaur			✓	✓					✓		✓		
Arsi Chaur			✓			✓							✓
Bora Chaur		✓			✓				✓		✓	✓	✓
Simri Jheel		✓				✓			✓		✓		✓
Jalai Chaur			✓										
Kosi catchment area			✓			✓			✓		✓		✓
Chapania Lake			✓			✓			✓	✓			✓
Bahiyara Chaur		✓			✓				✓		✓		✓
Hariya Chaur			✓										✓
Udaipur Lake		✓		✓			✓						
Dhobaha wetland	✓						✓				✓		
Gandak River System			✓	✓				✓			✓		✓
Lal Saraiya mann		✓					✓			✓			✓
PuraniaChaur		✓		✓				✓			✓		✓
Baraila Lake		✓		✓				✓			✓		✓
Rajdhani Jalashya													
Patna Jalla			✓										✓
Kalma Jheel									✓				✓
Kusheshwar Asthan									✓				✓

TABLE 8. DETAILS OF THE SITE-WISE THREATS OBSERVED / REPORTED DURING THE ASIAN WATERBIRD CENSUS -2022 (contd.)

Wetland	Fishing			Hunting/ poaching			Agriculture			Cattle grazing			Pollution
	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High	
Giddhi Lake or Begampur			✓										✓
Pawapuri Lake													✓
Pushkarni Lake													✓
Barwadihi Dam										✓			✓
Mohanpur Reservoir	✓						✓			✓			✓
Phulwaria Reservoir		✓						✓			✓		✓
Indrapuri Barrage	✓			✓							✓		
Gangaprasad Lake		✓		✓			✓				✓		✓
Jagatpur Lake		✓		✓			✓			✓			✓
Bahatra		✓		✓					✓		✓		✓
Athania	✓							✓			✓		✓
VGDS		✓		✓					✓	✓			✓
Odhni Dam	✓			✓									✓
Durgawati Dam								✓			✓		
Kanwar Lake			✓			✓		✓		✓			✓
PachailaChaur			✓			✓			✓	✓			✓
Nagi dam Bird sanctuary	✓								✓		✓		✓
Nakti Dam Bird sanctuary	✓								✓	✓			✓
Belatand	✓			✓			✓			✓			✓
Devanahar		✓						✓			✓		✓
Pelbajan								✓			✓		✓
Gadhi Pond			✓						✓		✓		✓

TABLE 8. DETAILS OF THE SITE-WISE THREATS OBSERVED / REPORTED DURING THE ASIAN WATERBIRD CENSUS -2022 (contd.)

Wetland	Fishing			Hunting/ poaching			Agriculture			Cattle grazing			Pollution
	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High	
Bagarbeel			✓						✓		✓		✓
Baldia Chaur			✓						✓		✓		✓
Kharagpur Lake			✓		✓			✓		✓			✓
Kukurjhap Lake			✓		✓			✓			✓		✓
Deokhal Chaur													✓
Tajpur Chaur													✓
Satanpur Chaur													✓
Basaitha Chaur			✓	✓					✓		✓		✓
Batraulia Chaur		✓		✓					✓		✓		✓
Manika Lake			✓	✓					✓		✓		✓
Manikpur Chaur			✓						✓		✓		✓
Rewa ghat (Gandak River)			✓						✓		✓		✓
Barandi Dam							✓			✓			
Sita Dam	✓						✓						
Kulmahadev Dam(Thali)		✓						✓			✓		
Jabjalsaya Dam		✓						✓			✓		
Railway Pond													✓
Gokul Dam			✓		✓				✓		✓		✓
Darwabari		✓			✓							✓	
Sewage Marsh								✓			✓		✓



Submerged and emergent vegetation found in Baraila Wetland



Fishing boats in Kavar Jheel



Floating vegetation found in Kusheshwar Asthan

Fig. 13. Category of the wetlands

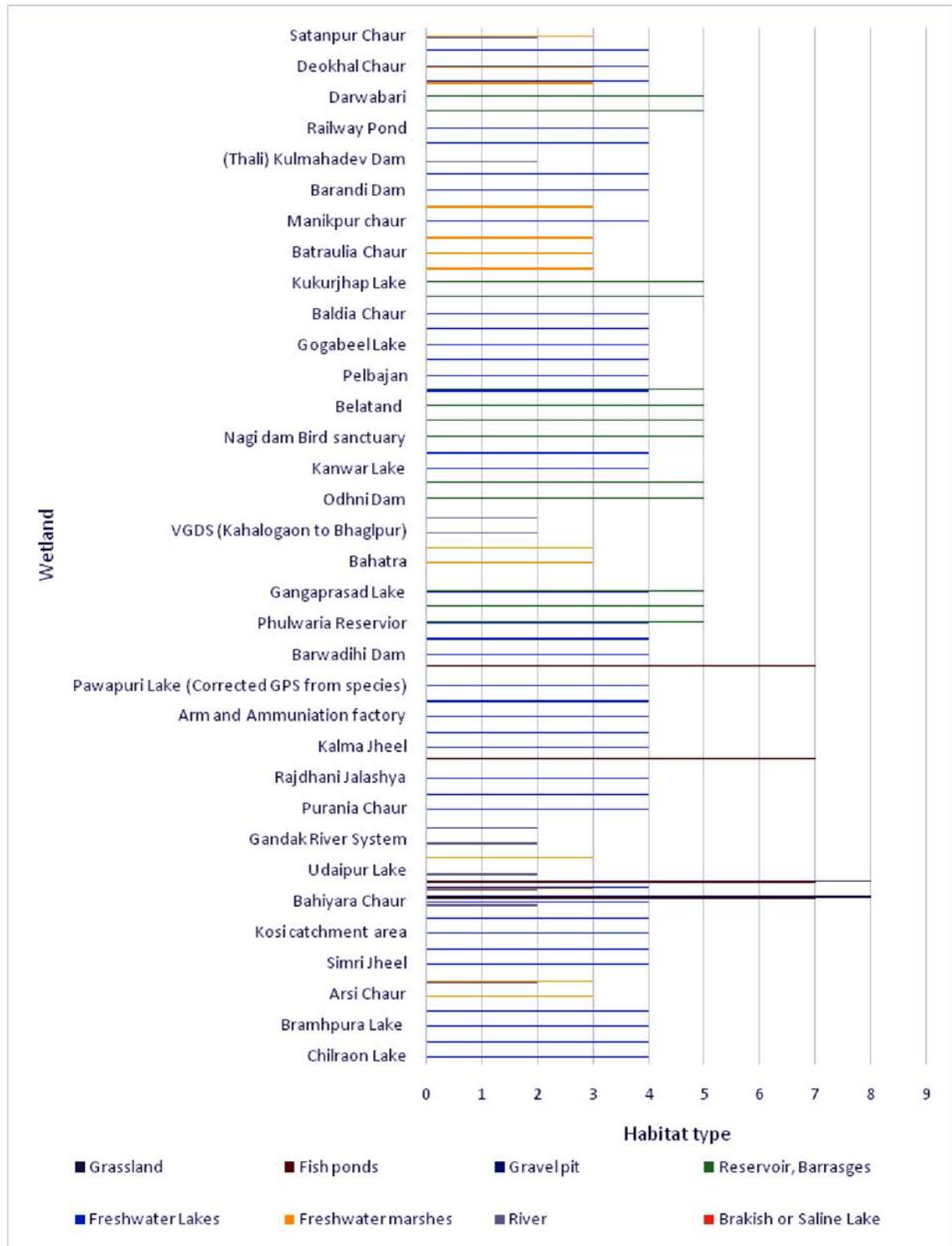
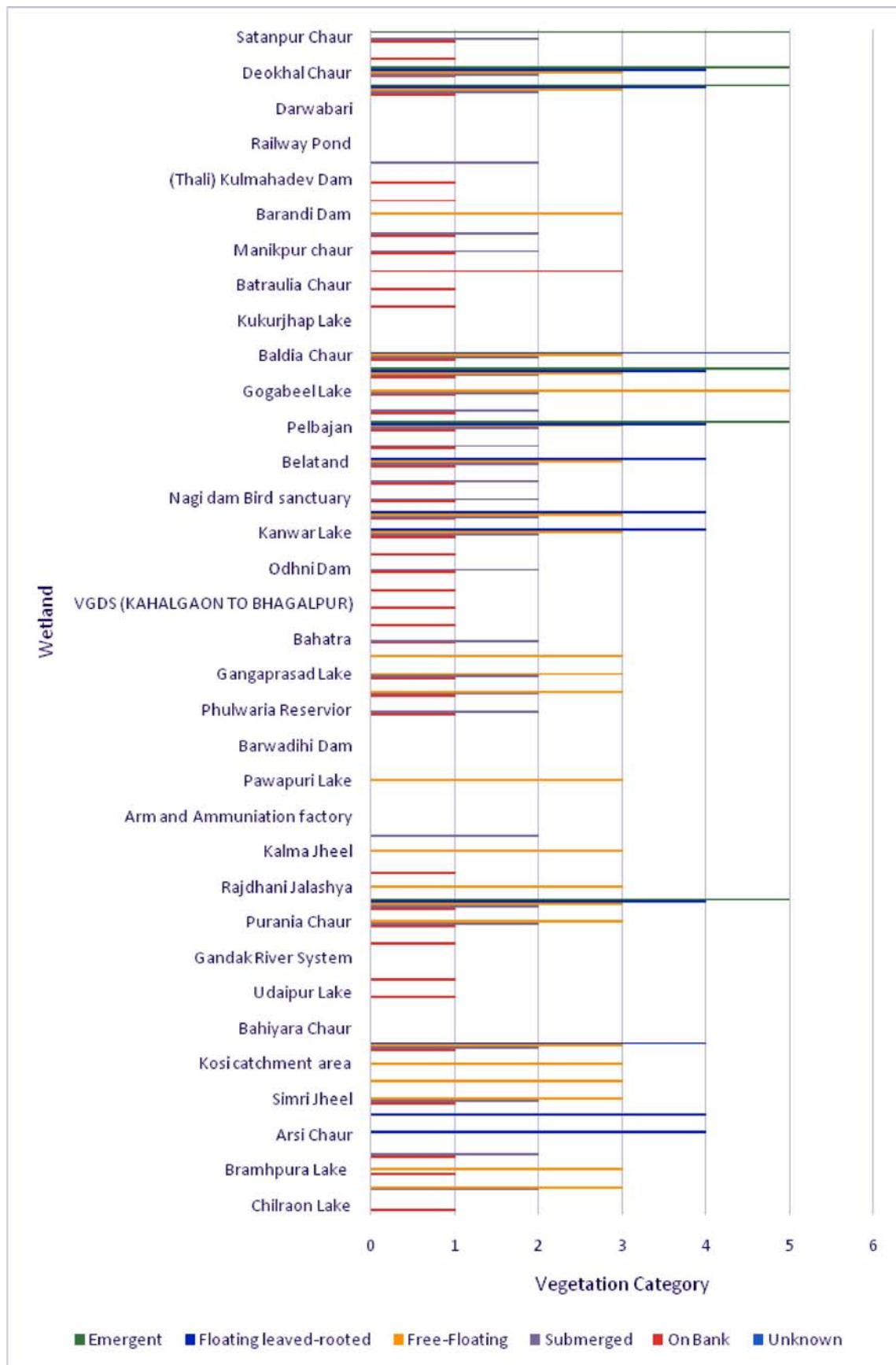


Figure 14: Wetland-wise vegetation type



9. ANNEXURES

Annexure -1. List of People participated in the Asian Waterbird Census 2022

DISTRICT	DFO Name & Contact	NAME	WETLAND	NAME	ROLE IN AWC	Date of AWC
EAST CHAMPARAN	Mr Abhishek Kumar 9716973633	Dr Niraj Kumar 7321850223 dr.knirajj@gmail.com	Sarrotar Wetland	Prashant Kumar 8789691168 lucifer7261@gmail.com	Birder	16/2/2022
		Dr Kushagra Rajendra 9650913635 mekushagra@gmail.com		Abhay Kumar 8294835614	Recorder	
				rishabhkush802@gmail.com	Forest Guard	
				Vinod Kumar Singh 9934756131	Forest Guard	
				Kumari Naina Pushkar 7463097484		
MUZAFFARPUR	Mr Abhishek Kumar 9716973634	Dr Niraj Kumar 7321850223 dr.knirajj@gmail.com	Chilraon Lake	Prashant Kumar 8789691168 lucifer7261@gmail.com	Birder	17/2/2022
		Dr Kushagra Rajendra9650913635 mekushagra@gmail.com	Brahmapura Lake	Abhay Kumar 8294835614 rishabhkush802@gmail.com	Recorder	18/2/2022
				Durgesh Kumar 9576580767	Forest Guard	
				Sneha Kumari 9431262062	Forest Guard	
			Narsan Chaur			19/2/2022
SAHARSA	Mr R K Sinha 9113759177	Mr Gyanchandra gyani 9199587858 gyanchandragyani@gmail.com	Simri Jheel	Rajkishor Kumar 6204103335 rajkishorkumar6546@gmail.com	Birder	13/2/2022
				Chandan Kumar 6204219650 moryachandan735@gmail.com	Recorder	
				Priyatham kr. Priyanshu 8877631604 priyathampriyanshu47@gmail.com	Documenter	
				Ratnesh kumar 8210989159 ratneshkumar36196@gmail.com	Assistant	
				Arsi Chaur		13/2/2022

Annexure -1. List of People participated in the Asian Waterbird Census 2022 (contd.)

DISTRICT	DFO Name & Contact	NAME	WETLAND	NAME	ROLE IN AWC	Date of AWC
		Dr Gopal Sharma 9006718900 gopal_dolphinboy@rediffmail.com	Bora Chaur	Ahbar Alam 9431009135 ahbaralam@gmail.com	Birder	14/2/2022
				Shivani Jaiswal 9631462437 shivanijaiswal013@gmail.com	Documenter	18/2/2022
			Jalai chaur	Sailendra Kumar 7488570755	Forest Guard	
				Shubham Kumar 7632066529	Forest Guard	
		Mr Navin Kumar 7903498058 navinkumaribcn@gmail.com	Kosi catchment	Shubham Kumar 7632066529	Forest Guard	19/2/2022
MADHUBANI	Subodh Kumar Gupta 9431048042	Mr Gyanchandra gyani9199587858 gyanchandragyani@gmail.com	Chapaniya Lake	Rajkishor Kumar 6204103335 rajkishorkumar6546@gmail.com	Birder	16/2/2022
				Chandan Kumar 6204219650 moryachandan735@gmail.com	Recorder	
				Priyank kr. Priyanshu 8877631604 priyampriyanshu47@gmail.com	Documenter	
				Ratnesh Kumar 8210989159 ratneshkumar36196@gmail.com	Assistant	

Annexure -1. List of People participated in the Asian Waterbird Census 2022 (contd.)

DISTRICT	DFO Name & Contact	NAME	WETLAND	NAME	ROLE IN AWC	Date of AWC
SARAN	Mr M J Ali 8986153525	Mr Gyanchandra gyani9199587858 gyanchandragyani@gmail.com	Hariya Chaur Akilpur	Rajkishor Kumar 6204103335 rajkishorkumar6546@gmail.com	Birder	19/2/2022
				Chandan Kumar 6204219650 moryachandan735@gmail.com	Recorder	
				Priyank kr. Priyanshu 8877631604 priyampriyanshu47@gmail.com	Documenter	
				Ratnesh Kumar 8210989159 ratneshkumar36196@gmail.com	Assistant	
				Rakesh Kumar	Forest Guard	
				Shivendra Shekhar	Forest Guard	
				Pankaj Kumar	Forest Guard	
			Bahiyara chaur			20/2/2022

Annexure -1. List of People participated in the Asian Waterbird Census 2022 (contd.)

DISTRICT	DFO Name & Contact	NAME	WETLAND	NAME	ROLE IN AWC	Date of AWC
WEST CHAMPARAN	Mr Ambarish Mall 7652043978	Dr Kamlesh K Maurya 9546463300 kmaurya@wwfindia.net	Gandak River system	Arif 6307614127 arifsiddiqui329@gmail.com	Birder	16/2/2022
				Sourabh 9451499105 sourabhvermabhu@gmail.com	Birder	17/2/2022
				Soham 8657482372 spattekar@wwfindia.net	Recorder	
				Abhishek 7260045405 abhishek.wildlifer@gmail.com	Documenter	
				Shiekh Marifatul haq 7006379928 fo.securehimalayas@wti.org.in	Assistant	
				Rahul Srivastava 9123288997 rahulshreevastava2@gmail.com	Assistant	
				Sunil Kumar 6204027260 sunilvn29@gmail.com	Assistant	
				Manoj Kumar 9430826999 manoj.kumar.ivl@gmail.com	Assistant	
				Vikas Uraon 6206177415	Assistant	
				Subham Kumar 8340545617 subhamkumar006@gmail.com	Assistant	
				Brijesh Paswan 9835413148	Forest Guard	
				Gajendra 7372012634	Forest Guard	
				Jyoti Prakash 7979956031	Forest Guard	
				Azaad 8294232298	Forest Guard	

Annexure -1. List of People participated in the Asian Waterbird Census 2022 (contd.)

DISTRICT	DFO Name & Contact	NAME	WETLAND	NAME	ROLE IN AWC	Date of AWC
			Valmiki Tiger Reserve			17/2/2022
			Udaipur Jheel/WLS			18/2/2022
			Lal Saraiya mann			18/2/2022
VAISHALI	Mr M. J. Ali 8986153525	Dr Satyendra Kumar 9430575567 drsatyendra.hajipur@gmail.com	Baraila lake	Dr Ajit Kumar 9431855710 akpatajanl02@gmail.com	Birder	20/2/2022
				Ms. Komal 9931009971_komal.pmufisheries@gmail.com	Birder	
				Ms Archana Kumari 9939704339 Archana40@gmail.com	Recorder	
				Mr Rajan Kumar 9835618834 rajankumar8834@gmail.com	Documenter	
				Mr Jyotish Kumar Singh 9931027782 Jyotishsingh2008@rediffmail.com	Assistant	
				Mr Rajesh Kumar 9525430262 rajeshkumargprs@gmail.com	Assistant	
				Mr Pushkar Kumar 9262822958 pushkarkumar0255@gmail.com	Assistant	
				Gaya pd Gupta	Forester	
				Kumar Gaurav	Forest Guard	
				Ajit Kumar	Forest Guard	
			Puraniya chaur	Anoj Kumar	Forest Guard	19/2/2022

Annexure -1. List of People participated in the Asian Waterbird Census 2022 (contd.)

DISTRICT	DFO Name & Contact	NAME	WETLAND	NAME	ROLE IN AWC	Date of AWC
PATNA	Mr Shashikant 8210029776	Mr Shashikant 8210029776	Rajdhani Jalashay	Ahbar Alam 9431009135 ahbaralam@gmail.com	Recorder	
		Mr Anand Kumar 8002269037		Md. Maaz 7677145626 maaz.unicorn@gmail.com	Documenter	
				Md. Sahwaz 6202710032 shahwazvegeta@gmail.com	Assistant	
DARBHANGA			Kalma Jheel	Shivani Jaiswal 9631462437 shivanijaisawal013@gmail.com	Assistant	
	Mr Subodh Kumar Gupta 9431048042	Dr. Gopal Sharma 9006718900 gopal_dolphinboy@rediffmail.com		Md. Maaz 7677145626 maaz.unicorn@gmail.com	Recorder	17/2/2022
		Mr. Navin Kumar 7903498058 navinkumaribcn@gmail.com		Md. Sahwaz 6202710032 shahwazvegeta@gmail.com	Documenter	
SUPAUL			Kusheshwar asthan	Md. Maaz 7677145626 maaz.unicorn@gmail.com	Recorder	17/2/2022
				Md. Sahwaz 6202710032 shahwazvegeta@gmail.com	Documenter	
	Mr. Sunil Kumar Saran 8986153160	Dr. Gopal Sharma 9006718900 gopal_dolphinboy@rediffmail.com		Ahbar Alam 9431009135 ahbaralam@gmail.com		19/2/2022
		Mr. Navin Kumar 7903498058 navinkumaribcn@gmail.com	Kosi-catchment area	Shivani Jaiswal 9631462437 shivanijaisawal013@gmail.com		
				Pappu Kumar 9304313773	Forest guard	
				Mithilesh Kumar 6300619480	Forest guard	

Annexure -1. List of People participated in the Asian Waterbird Census 2022 (contd.)

DISTRICT	DFO Name & Contact	NAME	WETLAND	NAME	ROLE IN AWC	Date of AWC
NALANDA	Mr. Vikas Ahlawat 9412996742		Begampur wetland	Ahbar Alam 9431009135 ahbaralam@gmail.com	Recorder	24/2/2022
				Shivani Jaiswal 9631462437 shivanijaisawal013@gmail.com	Documenter	
				Saloni Kumari 9608897833 salonirepublic1994@rediffmail.com	Assistant	
			Pushkarni lake	Ahbar Alam 9431009135 ahbaralam@gmail.com	Recorder	24/2/2022
				Shivani Jaiswal 9631462437 shivanijaisawal013@gmail.com	Documenter	
				Saloni Kumari 9608897833 salonirepublic1994@rediffmail.com	Assistant	
				Ahbar Alam 9431009135 ahbaralam@gmail.com	Recorder	24/2/2022
			Arms & ammunition factory	Shivani Jaiswal 9631462437 shivanijaisawal013@gmail.com	Documenter	
				Saloni Kumari 9608897833 salonirepublic1994@rediffmail.com	Assistant	
				Ahbar Alam 9431009135 ahbaralam@gmail.com	Recorder	24/2/2022
GAYA			Pawapuri Jal Mandir			
	Mr. Rajeev Ranjan 9412996857	Mr. S. Sudhakar 9471873016 sudhakarifs@gmail.com	Sohjana dam	Dr. Subrat Debata 9938617007 s.debata@bnhs.org	Birder	17/2/22
				Gaurav Sinha 9931824123 gauravsinhaaa.1990@gmail.com	Recorder	
				Mohammad Rizwan 7061144932 mohammadrizwan8102@gmail.com	Documenter	

Annexure -1. List of People participated in the Asian Waterbird Census 2022 (contd.)

DISTRICT	DFO Name & Contact	NAME	WETLAND	NAME	ROLE IN AWC	Date of AWC
NAWADA			Barwadih dam	Dr. Subrat Debata 9938617007 s.debata@bnhs.org	Birder	
				Gaurav Sinha 9931824123 gauravsinhaa.1990@gmail.com	Recorder	
				Mohammad Rizwan 7061144932 mohammadrizwan8102@gmail.com	Documenter	
			Mohanpur reservoir	Dr. Subrat Debata 9938617007 s.debata@bnhs.org	Birder	
				Gaurav Sinha 9931824123 gauravsinhaa.1990@gmail.com	Recorder	
				Mohammad Rizwan 7061144932 mohammadrizwan8102@gmail.com	Documenter	
				Dr. Subrat Debata 9938617007 s.debata@bnhs.org	Birder	18/2/22
		Mr. S. Sudhakar 9471873016 sudhakarifs@gmail.com	Thali Dam	Mohammad Rizwan 7061144932 mohammadrizwan8102@gmail.com	Documenter	
				Ramesh Kumar 9661539342	Forest guard	
				Rahul Kumar 9110112583	Forest guard	
AURANGABAD			Phulwaria dam	Dr. Subrat Debata 9938617007 s.debata@bnhs.org	Birder	18/2/22
				Mohammad Rizwan 7061144932 mohammadrizwan8102@gmail.com	Documenter	
	Mr. Tejas Jaiswal 996891 1998	Mr. S. Sudhakar 9471873016 sudhakarifs@gmail.com	Indrapuri Barrage	Dr. Subrat Debata 9938617007 s.debata@bnhs.org	Birder	

Annexure -1. List of People participated in the Asian Waterbird Census 2022 (contd.)

DISTRICT	DFO Name & Contact	NAME	WETLAND	NAME	ROLE IN AWC	Date of AWC
				Mohammad Rizwan 7061144932 mohammadrizwan8102@gmail.com	Documenter	
				Samir Kumar 9110192512	Forest guard	
				Deepak Kumar 6201856679	Forest guard	
				Satanand Kumar 9572155849	Forest guard	
BHAGALPUR	Mr Bharat Chintapalli 6232770035	Prof DN Choudhary 9430088707 dncgopal08@gmail.com	Jagatpur	Kumar Shanu 7909049553 shanu.9631263765@gmail.com	Birder	16/2/2022
				Punam Kumari 9113488423 punammlg154@gmail.com	Recorder	
				Rajeev Kumar Ranjan 8340286844 rajeevkumar84@gmail.com	Documenter	
				Sanjit Kumar 6207592808 sanjitkumar1202@gmail.com	Forest guard	
		Prof DN Choudhary 9430088707 dncgopal08@gmail.com	Gangaprasad Jheel	Jay Kumar Jay 7479572180 jaykumarjay2505@gmail.com	Assistant	20/2/2022
				Sumit Kumar Sum 9540178459 sumitk.sum@gmail.com	Assistant	
				Dr. Sanjeet 7070521479 sanjeetcbm@gmail.com	Birder	
				Uttam Kumar Dangi 7903275215 ukdangi1998@gmail.com	Forest guard	
		Prof Sunil Choudhary 9431875861 sunil_vikramshila@yahoo.co.in	Bahatra and Athaniya Jheel	Uttam Kumar Dangi 7903275215 ukdangi1998@gmail.com	Forest guard	16/2/2022

Annexure -1. List of People participated in the Asian Waterbird Census 2022 (contd.)

DISTRICT	DFO Name & Contact	NAME	WETLAND	NAME	ROLE IN AWC	Date of AWC
				Sumit Kumar Sum 9540178459 sumitk.sum@gmail.com	Photographer	
				Punam Kumari 9113488423 punammlg154@gmail.com	Documenter	
	Prof Sunil Choudhary 9431875861 sunil_vikramshila@yahoo.co.in		VGDS	Kumar Shanu 7909049553 shanu.9631263765@gmail.com	Birder	18/2/2022 & 19/2/2022
				Punam Kumari 9113488423		
				punammlg154@gmail.com	Recorder	
				Rajeev Kumar Ranjan 8340286844 rrajeevkumar84@gmail.com	Documenter	
				Ashish Ranjan 7979049233 bashish341@gmail.com	Assistant	
				Jay Kumar Jay 7479572180 jaykumarjay2505@gmail.com	Assistant	
				Sumit Kumar Sum 9540178459 sumitk.sum@gmail.com	Assistant	
				Ajit Kumar 8102681832	Forest guard	
				Subhash Chandra Yadav 6202255193	Forest guard	
BANKA	Mr. Abhishek 9650389387	Prof DN Choudhary 9430088707 dncgopal08@gmail.com	Odhli Dam	Rahul Rohitaswa 8986431476 mnc_rahul2007@rediffmail.com	Birder	13/2/2022
				Deepak Shah 7766885588 dpk.id1980@gmail.com	Recorder	
				Sumit Kumar Sum 9540178459 sumitk.sum@gmail.com	Documenter	

Annexure -1. List of People participated in the Asian Waterbird Census 2022 (contd.)

DISTRICT	DFO Name & Contact	NAME	WETLAND	NAME	ROLE IN AWC	Date of AWC
				Jay Kumar Jay 7479572180 jaykumarjay2505@gmail.com	Assistant	
				Raja Bose 9934054780 aveekbgp@rediffmail.com	Assistant	
				Kumar Shanu 7909049553 shanu.9631263765@gmail.com	Assistant	
KAIMUR	Mr. Pradumn Gaurav 8285799758	Ms Khushboo Rani 7717700845 k.rani@bnhs.org	Durgawati dam	Rahul Kumar 7544840244 r.kumar@bnhs.org	Birder	17/2/22
				Ashish Ranjan Bhandari 7979049233 bashish341@gmail.com	Documenter	
				Vatan Kumar 9581994309 kvatan12398@gmail.com	Recorder	
			Gokul Dam	Rakesh kumar sharma 9122735454	Forest Guard	17/2/22
BEGUSARAI	Mr. R K Ravi 9525283110	Mr. Arvind Mishra 9431875124 mnarvind@hotmail.com	Kanwar	Amir Rizwan Khan 9304400782 Khanaamirizwan@gmail.com	Birder	22/2/22
				Vatan Kumar 9581994309 kvatan12398@gmail.com	Recorder	
				Ashutosh Kumar 6299569742 ashutosh.kumar0620@gmail.com	Documenter	
				Rajiv Kumar 7909003244 rajivkumarna7@gmail.com	Assistant	
				Vijay Kumar 6201976048 vijaykumarna7@gmail.com	Assistant	

Annexure -1. List of People participated in the Asian Waterbird Census 2022 (contd.)

DISTRICT	DFO Name & Contact	NAME	WETLAND	NAME	ROLE IN AWC	Date of AWC
				Mukesh Kr Choudhary 9931204511 mkc9931@gmail.com	Assistant	
				Mukesh Kumar 7480019151	Forest Guard	
				Neeraj Kumar 7277852307	Forest Guard	
			Pachaila			23/2/22
JAMUI	Mr Piyush	Mr. Arvind Mishra 9431875124 mnarvind@hotmail.com	Nagi Dam	Vatan Kumar 9581994309 kvatan12398@gmail.com	Birder	13/2/2022
				Ashutosh Kumar 6299569742 ashutosh.kumar.0620@gmail.com	Recorder	
				Vijay Kumar 6201976048 vijaykumarna7@gmail.com	Documenter	
				Rajiv Kumar 7909003244 rajivkumarna7@gmail.com	Assistant	
				Santosh Kumar 805138017 santoshbgp410@gmail.com	Assistant	
				Suraj Kumar 6205321410 surajkumarbgp410@gmail.com	Assistant	
			Nakti dam			13/2/2022
			Belatar			14/2/2022
			Pailbajan			14/2/2022
			Devanahar			15/2/2022
			Gadhi dam			15/2/2022

Annexure -1. List of People participated in the Asian Waterbird Census 2022 (contd.)

DISTRICT	DFO Name & Contact	NAME	WETLAND	NAME	ROLE IN AWC	Date of AWC
KATIHAR	Mr Bhaskar Chndr Bharati 9430890753	Mr Arvind Mishra 9431875124 mnarvind@hotmail.com	Goga beel	Vatan Kumar 9581994309 kvatan12398@gmail.com	Birder	21/02/2022
				Rajiv Kumar 7909003244 rajivkumarna7@gmail.com	Recorder	
				Vijay Kumar 6201976048 vijaykumarna7@gmail.com	Documenter	
				Anand Sharma 9934914282 anandsharma76026@gmail.com	Assistant	
				Pankaj Raj 7979025465	Forest Guard	
			Bagar beel			21/2/2022
			Baldiya chaur			21/2/2022
MUNGER	Mr Gaurav Ojha 9471525614 dfomunger@gmail.com	Ms Shradha Sinha 7979059103 s.sinha@bnhs.org	Kharagpur lake	Deepak Shah 7766885588 dpk.id1980@gmail.com	Recorder	17/02/2022
		Mr Deepak Kr. Jhunnu 7979011766 D.kumar@bnhs.org		Kumari Sapna 7488585638	Documenter	
			Kukurjhaph Dam			
SAMASTIPUR	Mr Subodh Kumar Gupta 9431048042	Mr Amir Rizwan Khan 9304400782 Khanaamirrizwan@gmail.com	Deokhal chaur	Vrajbhar Kumar 8340640978 Md. Ahsamul Haq 8229014010	Forest Guard	21/02/2022
					Forest Guard	
			Tajpur chaur			21/02/2022
			Satanpur chaur			21/02/2022

Annexure – 2. Details of birds reported during the Asian Waterbird Census 2022 in Bhagalpur District

SI No.	Common name	Scientific name	Wetlands of Bhagalpur district					
			Jagatpur Lake	Bahatra	Athaniya	VGDS 1	VGDS 2	Gangaprasad
1	Little Grebe	<i>Tachybaptus ruficollis</i>	3					34
2	Little Cormorant	<i>Phalacrocorax niger</i>	38		1	110	344	178
3	Great Cormorant	<i>Phalacrocorax carbo</i>				58	4	21
4	Oriental Darter	<i>Anhinga melanogaster</i>	8					8
5	Grey Heron	<i>Ardea cinerea</i>	21			78	6	8
6	Purple Heron	<i>Ardea purpurea</i>	13					6
7	Great White Egret	<i>Ardea alba</i>		1		3	3	
8	Intermediate Egret	<i>Ardea intermedia</i>	8			10	4	5
9	Little Egret	<i>Egretta garzetta</i>	1	5		13	18	
10	Cattle Egret	<i>Bubulcus ibis</i>	2	16		1		4
11	Indian Pond Heron	<i>Ardeola grayii</i>	3	13		4	2	22
12	Asian Openbill	<i>Anastomus oscitans</i>		1		108	87	75
13	Painted Stork	<i>Mycteria leucocephala</i>				10	25	
14	Greater Adjutant	<i>Leptoptilos dubius</i>	1					
15	Lesser Adjutant	<i>Leptoptilos javanicus</i>	1				2	4
16	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	3					
17	Woolly-necked Stork	<i>Ciconia episcopus</i>				4	4	
18	Red-naped Ibis	<i>Pseudibis papillosa</i>	27	14		65	4	19
19	White Ibis/ Black-headed Ibis	<i>Threskiornis melanocephalus</i>	8			2		7
20	Eurasian Spoonbill	<i>Platalea leucorodia</i>				15		
								15

Annexure – 2. Details of birds reported during the Asian Waterbird Census 2022 in Bhagalpur District (contd.)

SI No.	Common name	Scientific name	Wetlands of Bhagalpur district						
			Jagatpur Lake	Bahatra	Athaniya	VGDS 1	VGDS 2	Gangaprasad	Total
22	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	700					765	1465
23	Brahminy (Ruddy) Shelduck	<i>Tadorna ferruginea</i>				470	120		590
24	Cotton Teal/ Cotton Pygmy Goose	<i>Nettapus coromandelianus</i>	33						33
25	Northern Pintail	<i>Anas acuta</i>	29			590			619
26	Common Teal	<i>Anas crecca</i>	4			50		60	114
27	Garganey	<i>Anas querquedula</i>	15						15
28	Common Pochard	<i>Aythya baeri</i>	14						14
29	Ferruginous Duck	<i>Aythya nyroca</i>	31					4	35
30	Comb Duck/ Knob-billed Duck	<i>Sarkidiornis melanotos</i>				1			1
31	Eurasian Wigeon	<i>Anas penelope</i>	122					1	123
32	Gadwall	<i>Anas strepera</i>				300	150	26	476
33	Red-crested Pochard	<i>Netta rufina</i>	22						22
34	Purple Swamphen	<i>Porphyrio porphyrio</i>	86					35	121
35	White-breasted Waterhen	<i>Amauornis phoenicurus</i>						2	2
36	Common Moorhen	<i>Gallinula chloropus</i>	48					14	62
37	Common Coot	<i>Fulica atra</i>	500					210	710
38	Bronze-winged Jacana	<i>Metopidius indicus</i>	4					11	15
39	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	2						2
40	Little Ringed Plover	<i>Charadrius dubius</i>	4			2	4		10
41	Kentish Plover	<i>Charadrius placidus</i>					2		2

Annexure – 2. Details of birds reported during the Asian Waterbird Census 2022 in Bhagalpur District (contd.)

SI No.	Common name	Scientific name	Wetlands of Bhagalpur district						
			Jagatpur Lake	Bahatra	Athaniya	VGDS 1	VGDS 2	Gangaprasad	Total
43	River Lapwing	<i>Vanellus duvaucelli</i>				1	14		15
44	Small Pratincole	<i>Glareola lactea</i>				170	2		172
45	Marsh Sandpiper	<i>Trianga stagnatilis</i>				23		2	25
46	Common Redshank	<i>Trianga totanus</i>				7			7
47	Common Sandpiper	<i>Actitis hypoleucos</i>			1	6			7
48	Little Stint	<i>Calidris minuta</i>				23	24		47
49	Brown-headed Gull	<i>Chroicocephalus brunnicephalus</i>				4			4
50	Western Marsh Harrier	<i>Circus aeruginosus</i>						2	2
51	Greater Spotted Eagle	<i>Aquila clanga</i>	1						1
52	Peregrine Falcon	<i>Falco peregrinus</i>				1			1
53	Osprey	<i>Pandion haliaetus</i>	1			3	7	2	13
54	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	2	2		2		13	19
55	Lesser Pied Kingfisher	<i>Ceryle rudis</i>				3	8		11
56	White Wagtail	<i>Motacilla alba</i>	1	2		2	1	9	15
57	Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>		1	3				4
58	Sand Martin	<i>Riparia riparia</i>				250			250
59	Dusky Crag-Martin	<i>Ptyonoprogne concolor</i>				100	350		450
60	Barn Swallow	<i>Hirundo rustica</i>				5	24	6	35
61	Common Tailorbird	<i>Orthotomus sutorius</i>	2		1			3	6
62	Indian Roller	<i>Coracias benghalensis</i>		1	1				2

Annexure – 2. Details of birds reported during the Asian Waterbird Census 2022 in Bhagalpur District (contd.)

SI No.	Common name	Scientific name	Wetlands of Bhagalpur district						
			Jagatpur Lake	Bahatra	Athaniya	VGDS 1	VGDS 2	Gangaprasad	Total
64	Spotted Dove	<i>Spilopelia chinensis</i>	5					1	6
65	Oriental Magpie Robin	<i>Copsychus saularis</i>			1				1
66	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	2						2
67	Rose-ringed Parakeet	<i>Psittacula krameri</i>	2						2
68	Common kestrel	<i>Falco tinnunculus</i>					1		1
69	Common Myna	<i>Acridotheres tristis</i>				7	4	4	15
70	Bank Myna	<i>Acridotheres ginginianus</i>				7			7
71	Brown Shrike	<i>Lanius cristatus</i>						1	1
72	Paddyfield pipit	<i>Anthus rufulus</i>					23		23
73	Black Drongo	<i>Dicrurus macrocercus</i>	4	7		3	3	4	21
74	Greater Coucal	<i>Centropus sinensis</i>						3	3
75	Oriental White Eye	<i>Zosterops palpebrosus</i>	1					2	3
76	Green Bee-eater	<i>Merops orientalis</i>						13	13
77	Purple Sunbird	<i>Cinnyris asiaticus</i>						1	1
78	House Crow	<i>Corvus splendens</i>	4	2		15	12	9	42
79	Jungle Crow	<i>Corvus macrorhynchos</i>	2	2	1	2	2	5	14
80	Rufous Treepie	<i>Dendrocitta vagabunda</i>			2				2
81	Asian Palm Swift	<i>Cypsiurus balasensis</i>	25					1	26
82	Taiga Flycatcher	<i>Ficedula perva</i>	2					1	3
83	Black-hooded Oriole	<i>Oriolus xanthornus</i>	1						1

Annexure – 2. Details of birds reported during the Asian Waterbird Census 2022 in Bhagalpur District (contd.)

SI No.	Common name	Scientific name	Wetlands of Bhagalpur district						
			Jagatpur Lake	Bahatra	Athaniya	VGDS 1	VGDS 2	Gangaprasad	Total
84	Asian Koel	<i>Eudynamys scolopaceus</i>						1	1
85	Shikra	<i>Accipiter badius</i>	1					1	2
86	Black Kite	<i>Milvus migrans</i>			1	10	11		22
87	indian spotted eagle	<i>Aquila hastata</i>				1			1
88	Booted Eagle	<i>Hieraaetus pennatus</i>						2	2
89	Long-legged Buzzard	<i>Buteo rufinus</i>	1			1		2	4
90	White-eyed Buzzard	<i>Butastur teesa</i>	1						1
91	Asian Pied Starling	<i>Gracupica contra</i>						2	2
92	Cinereous Tit	<i>Parus cinereus</i>	1					1	2
93	Thick-billed Flowerpecker	<i>Dicaeum agile</i>						1	1
94	Ashy Prinia	<i>Prinia socialis</i>						4	4
95	Plain Prinia	<i>Prinia inornata</i>		1				4	5
96	Black-rumped Flameback	<i>Dinopium benghalense</i>						1	1
97	Spotted Owlet	<i>Athene brama</i>	4						4
98	White-browed Fantail	<i>Rhipidura aureola</i>	4						4
99	Bengal Bush Lark	<i>Mirafra assamica</i>					2		2
100	Sand Lark	<i>Alaudala raytal</i>					7		7

**Annexure – 3. Details of birds reported during the Asian Waterbird Census 2022
in Begusarai district**

Sl. No.	Common Name	Scientific Name	Kanwar Lake	Pachaila Chaur	Total
1	Little Grebe	<i>Tachybaptus ruficollis</i>	8	15	23
2	Great Crested Grebe	<i>Podiceps cristatus</i>		6	6
3	Little Cormorant	<i>Phalacrocorax niger</i>	15	100	115
4	Grey Heron	<i>Ardea cinerea</i>	13	11	24
5	Great White Egret/ Large	<i>Ardea alba</i>		4	4
6	Intermediate Egret	<i>Ardea intermedia</i>	102	150	252
7	Little Egret	<i>Egretta garzetta</i>	5		5
8	Cattle Egret	<i>Bubulcus ibis</i>		6	6
9	Indian Pond Heron	<i>Ardeola grayii</i>	26		26
10	Yellow Bittern	<i>Ixobrychus sinensis</i>	1		1
11	Asian Openbill	<i>Anastomus oscitans</i>	360		360
12	Lesser Adjutant	<i>Leptoptilos javanicus</i>	1		1
13	Red-naped Ibis	<i>Pseudibis papillosa</i>	2		2
14	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	300		300
15	Garganey	<i>Anas querquedula</i>		7	7
16	Ferruginous Duck	<i>Aythya nyroca</i>	2		2
17	Red-crested Pochard	<i>Netta rufina</i>		10	10
18	Baillon's Crake	<i>Zapornia pusilla</i>	6		6
19	Purple Swamphen	<i>Porphyrio porphyrio</i>	22	13	35
20	Common Moorhen	<i>Gallinula chloropus</i>		1	1
21	Common Coot	<i>Fulica atra</i>		123	123
22	Bronze-winged Jacana	<i>Metopidius indicus</i>		1	1
23	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	90	140	230
24	Red-wattled Lapwing	<i>Vanellus indicus</i>	2		2
25	Common Snipe	<i>Gallinago gallinago</i>		1	1
26	Temminck's Stint	<i>Calidris temminckii</i>	1		1
27	Whiskered Tern	<i>Chlidonias hybrida</i>		2	2
28	Unidentified Ducks		3		3
29	Unidentified Waders			6	6
30	Western Marsh Harrier	<i>Circus aeruginosus</i>	2	2	4
31	Greater Spotted Eagle	<i>Aquila clanga</i>	1	1	2
32	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	3		3

**Annexure – 3. Details of birds reported during the Asian Waterbird Census 2022
in Begusarai district (contd.)**

Sl. No.	Common Name	Scientific Name	Kanwar Lake	Pachaila Chaur	Total
33	White Wagtail	<i>Motacilla alba</i>	5	1	6
34	White-browed Wagtail	<i>Motacilla maderaspatensis</i>		1	1
35	Citrine Wagtail	<i>Motacilla citreola</i>	100	1	101
36	Barn Swallow	<i>Hirundo rustica</i>	150	12	162
37	Jungle Babbler	<i>Turdoides striata</i>	20		20
38	Common Tailorbird	<i>Orthotomus sutorius</i>	5		5
39	Brown-headed barbet	<i>Megalaima zeylanica</i>	1		1
40	Indian Roller	<i>Coracias benghalensis</i>	2		2
41	Spotted Dove	<i>Spilopelia chinensis</i>	2		2
42	Indian Grey Hornbill	<i>Ocyrceros birostris</i>	5		5
43	Rufous-tailed Lark	<i>Ammomanes phoenicura</i>	1		1
44	Black Redstart	<i>Phoenicurus ochruros</i>	2		2
45	Oriental Magpie Robin	<i>Copsychus saularis</i>	1	1	2
46	Red vented Bulbul	<i>Pycnonotus cafer</i>	5		5
47	Rose-ringed Parakeet	<i>Psittacula krameri</i>	1	3	4
48	Eurasian Hoopoe	<i>Upupa epops</i>	1		1
49	Grey Francolin	<i>Francolinus pondicerianus</i>	1		1
50	Common Myna	<i>Acridotheres tristis</i>	4	10	14
51	Bank Myna	<i>Acridotheres ginginianus</i>		5	5
52	Rosy Pipit	<i>Anthus roseatus</i>	8		8
53	Black Drongo	<i>Dicrurus macrocercus</i>	5	4	9
54	Greater Coucal	<i>Centropus sinensis</i>	4		4
55	Green Bee-eater	<i>Merops orientalis</i>	6	3	9
56	House Crow	<i>Corvus splendens</i>	50		50
57	Jungle Crow	<i>Corvus macrorhynchos</i>	10		10
58	Rufous Treepie	<i>Dendrocitta vagabunda</i>	8		8
59	Asian Palm Swift	<i>Cypsiurus balasiensis</i>	6	50	56
60	Black hooded Oriole	<i>Oriolus xanthornus</i>	2		2
61	Golden Oriole	<i>Oriolus kundoo</i>	1		1
62	Asian Koel	<i>Eudynamis scolopacea</i>	1		1
63	Shikra	<i>Accipiter badius</i>	1		1
64	Black Kite	<i>Milvus migrans</i>	1		1
65	Tawny Eagle	<i>Aquila rapax</i>		1	1

**Annexure – 3. Details of birds reported during the Asian Waterbird Census 2022
in Begusarai district (contd.)**

Sl. No.	Common Name	Scientific Name	Kanwar Lake	Pachaila Chaur	Total
66	Common Buzzard	<i>Buteo buteo</i>	1		1
67	Asian Pied Starling	<i>Gracupica contra</i>	10		10
68	Cinereous Tit	<i>Paus cinereus</i>	4		4
69	Plain Prinia	<i>Prinia inornata</i>	2		2
70	Lesser Goldenback	<i>Dinopium benghalense</i>	1		1
71	Spotted Owlet	<i>Athene brama</i>	4	1	5
72	Common Stonechat	<i>Saxicola rubicola</i>	3	1	4
73	Zitting Cisticola	<i>Cisticola juncidis</i>	5		5
74	Indian Night jar	<i>Caprimulgus asiaticus</i>	1		1
75	Greenish Warbler	<i>Phylloscopus trochiloides</i>	6		6
76	Clamorous reed warbler	<i>Acrocephalus stentoreus</i>	1		1

**Annexure – 4. Details of birds reported during the Asian Waterbird Census 2022
in Darbangha District**

Sl. No.	Common Name	Scientific Name	Kalma Jheel	Kusheshwar Asthan	Total
1	Little Grebe	<i>Tachybaptus ruficollis</i>	11	8	19
2	Little Cormorant	<i>Phalacrocorax niger</i>	7		7
3	Great Cormorant	<i>Phalacrocorax carbo</i>	6		6
4	Great White Egret	<i>Ardea alba</i>	17	10	27
5	Intermediate Egret	<i>Mesophoyx intermedia</i>	6		6
6	Little Egret	<i>Egretta garzetta</i>	14	14	28
7	Cattle Egret	<i>Bubulcus ibis</i>	8	8	16
8	Indian Pond Heron	<i>Ardeola grayii</i>	10	9	19
9	Asian Openbill	<i>Anastomus oscitans</i>	17		17
10	Northern Pintail	<i>Anas acuta</i>		6	6
11	Common Teal	<i>Anas crecca</i>	33	13	46
12	Common Pochard	<i>Aythya baeri</i>	4	2	6
13	Eurasian Wigeon	<i>Anas penelope</i>	2	1	3
14	Gadwall	<i>Anas strepera</i>	10	21	31
15	Red-crested Pochard	<i>Netta rufina</i>	12	8	20
16	Common Moorhen	<i>Gallinula chloropus</i>	4		4
17	Bronze-winged Jacana	<i>Metopidius indicus</i>	4	9	13
18	Red-wattled Lapwing	<i>Vanellus indicus</i>	1	3	4
19	Common Sandpiper	<i>Actitis hypoleucos</i>	6	3	9
20	Osprey	<i>Pandion haliaetus</i>		1	1
21	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	2	2	4
22	White-browed Wagtail	<i>Motacilla maderaspatensis</i>		2	2
23	Yellow Wagtail	<i>Motacilla tschutschensis</i>	3		3

Annexure – 5. Details of birds reported during the Asian Waterbird Census 2022 in East and West Champaran Districts

Sl. No	Common Name	Scientific Name	East Champaran		Total	West Champaran					Total
			Chilraon Lake	Sarrotar Lake		Darwabari (VTR)	Gandak River System	Dhobhaha (VTR)	Udaipur Jheel	Lal Saraiya mann	
1	Little Grebe	<i>Tachybaptus ruficollis</i>		28	28						0
2	Great Crested Grebe	<i>Podiceps cristatus</i>			0		9				9
3	Little Cormorant	<i>Phalacrocorax niger</i>	60	223	283		4		126	5	135
4	Indian Cormorant	<i>Phalacrocorax fuscicollis</i>		17	17		93				93
5	Great Cormorant	<i>Phalacrocorax carbo</i>			0				3		3
6	Oriental Darter	<i>Anhinga melanogaster</i>			0				2		2
7	Grey Heron	<i>Ardea cinerea</i>	8	70	78						0
8	Purple Heron	<i>Ardea purpurea</i>		15	15				11		11
9	Great White Egret	<i>Ardea alba</i>			0						0
10	Intermediate Egret	<i>Ardea intermedia</i>	4	59	63				6		6
11	Little Egret	<i>Egretta garzetta</i>	49	120	169		1		6		7
12	Cattle Egret	<i>Bubulcus ibis</i>			0	39				1	40
13	Indian Pond Heron	<i>Ardeola grayii</i>	59	36	95	3		1	57	7	68
14	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	38		38						0
15	Black Bittern	<i>Dupetor flavicollis</i>			0			1			1
16	Asian Openbill	<i>Anastomus oscitans</i>	78	88	166	7			46		53
17	Lesser Adjutant	<i>Leptoptilos javanicus</i>		6	6	7					7
18	Wooly-necked Stork	<i>Ciconia episcopus</i>			0		2				2
19	Red-naped Ibis	<i>Pseudibis papilliosa</i>			0				3		3
20	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	182	120	302						0

Annexure – 5. Details of birds reported during the Asian Waterbird Census 2022 in East and West Champaran Districts (contd.)

Sl. No	Common Name	Scientific Name	East Champaran		Total	West Champaran						Total
			Chilraon Lake	Sarrotar Lake		Darwabari (VTR)	Gandak River System	Dhobhaha (VTR)	Udaipur Jheel	Lal Saraiya mann		
22	Northern Pintail	<i>Anas acuta</i>		27	27							0
23	Ferruginous Duck/ White-eyed Pochard	<i>Aythya nyroca</i>		8	8							0
24	Gadwall	<i>Anas strepera</i>			0		31					31
25	Red-crested Pochard	<i>Netta rufina</i>		46	46							0
26	Goosander	<i>Mergus merganser</i>			0		25					25
27	Sarus Crane	<i>Grus antigone</i>			0	2						2
28	Purple Swamphen	<i>Porphyrio porphyrio</i>		4	4							0
29	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	2	27	29			2		1		3
30	Common Moorhen	<i>Gallinula chloropus</i>	6	13	19					7		7
31	Common Coot	<i>Fulica atra</i>		61	61					21		21
32	Bronze-winged Jacana	<i>Metropidius indicus</i>		7	7			3				3
33	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>		10	10							0
34	Little Ringed Plover	<i>Charadrius dubius</i>			0		2					2
35	Red-wattled Lapwing	<i>Vanellus indicus</i>		2	2							0
36	River Lapwing	<i>Vanellus duvaucelli</i>	1		1							0
37	Grey-headed Lapwing	<i>Vanellus cinereus</i>	46		46					5		5
38	Small Pratincole	<i>Glareola lactea</i>			0		2					2
39	Marsh Sandpiper	<i>Trianga stagnatilis</i>			0		6					6
40	Wood Sandpiper	<i>Trianga glareola</i>	2	4	6							0

Annexure – 5. Details of birds reported during the Asian Waterbird Census 2022 in East and West Champaran Districts (contd.)

Sl. No	Common Name	Scientific Name	East Champaran		Total	West Champaran					Total
			Chilraon Lake	Sarrotar Lake		Darwabari (VTR)	Gandak River System	Dhobhaha (VTR)	Udaipur Jheel	Lal Saraiya mann	
42	Common Snipe	<i>Gallinago gallinago</i>	5	6	11						0
43	Black-headed Gull	<i>Chroicocephalus ridibundus</i>			0				1		1
44	Osprey	<i>Pandion haliaetus</i>	1	2	3		3		2		5
45	Common Kingfisher	<i>Alcedo atthis</i>	4	3	7						0
46	Stork-billed Kingfisher	<i>Pelargopsis capensis</i>			0				8		8
47	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	4	12	16	3		1	17		21
48	Black-capped Kingfisher	<i>halcyon pileata</i>			0				1		1
49	Lesser Pied Kingfisher	<i>Ceryle rudis</i>			0		3				3
50	White Wagtail	<i>Motacilla alba</i>	7	17	24		2				2
51	White-browed Wagtail	<i>Motacilla maderaspatensis</i>		4	4						0
52	Yellow Wagtail	<i>Motacilla tschutschensis</i>	9	6	15						0
53	Citrine Wagtail	<i>Motacilla citreola</i>		21	21	5	1				6
54	Grey Wagtail	<i>Motacilla cinerea</i>	6	12	18						0
55	Barn Swallow	<i>Hirundo rustica</i>	45	27	72		509				509
56	Wire-tailed Swallow	<i>Hirundinosmithii</i>	4	14	18		10				10
57	Common Tailor bird	<i>Orthotomusutorius</i>	2	1	3						0
58	Indian Roller	<i>Coracias benghalensis</i>	3	6	9						0
59	Spotted Dove	<i>Stigmatopelia chinensis</i>	5		5						0
60	Emerald Dove	<i>Chalcophaps indica</i>			0			3			3
61	Rock Pigeon	<i>Columba livia</i>	32		32						0

Annexure – 5. Details of birds reported during the Asian Waterbird Census 2022 in East and West Champaran Districts (contd.)

Sl. No	Common Name	Scientific Name	East Champaran		Total	West Champaran					Total
			Chilraon Lake	Sarrotar Lake		Darwabari (VTR)	Gandak River System	Dhobhaha (VTR)	Udaipur Jheel	Lal Saraiya mann	
63	Grey Hornbill	<i>Ocyrocus birostris</i>			0	2		3	7		12
64	Oriental Pied Hornbill	<i>Anthracoeros albirostris</i>			0			2			2
65	Red vented Bulbul	<i>Pycnonotu scafer</i>	14	6	20						0
66	Alexanderine Parakeet	<i>Psittacula eupatria</i>			0			2	1		3
67	Plum headed Parakeet	<i>Psittacula cyanocephala</i>			0			4			4
68	Common kestrel	<i>Falco tinnunculus</i>	1	2	3						0
69	Common Myna	<i>Acridotheres tristis</i>	27	4	31						0
70	Brown Shrike	<i>Lanius cristatus</i>	2		2						0
71	Paddy feild pipit	<i>Anthus rufulus</i>	2	22	24						0
72	Black Drongo	<i>Dicrurus macrocercus</i>	44		44		1				1
73	Ashy Drongo	<i>Dicrurus leucophaeus</i>	14		14						0
74	Greater Coucal	<i>Centropus sinensis</i>	4	5	9	1			5		6
75	Oriental white eye	<i>Zosterops palpebrosus</i>	3		3						0
76	Purple Sunbird	<i>Cinnyris asiaticus</i>	3		3						0
77	House Crow	<i>Corvus splendens</i>	5	13	18				6		6
78	Jungle Crow	<i>Corvus macrorhynchos</i>			0		6		22		28
79	Rufous Treepie	<i>Dendrocitta vagabunda</i>	2	2	4				1		1
80	Little Swift	<i>Apus affinis</i>			0		20				20
81	Black hooded Oriole	<i>Oriolus xanthornus</i>	4		4						0
82	Golden Oriole	<i>Oriolus kundoo</i>	3		3						0

Annexure – 5. Details of birds reported during the Asian Waterbird Census 2022 in East and West Champaran Districts (contd.)

Sl. No	Common Name	Scientific Name	East Champaran		Total	West Champaran					Total
			Chilraon Lake	Sarrotar Lake		Darwabari (VTR)	Gandak River System	Dhobhaha (VTR)	Udaipur Jheel	Lal Saraiya mann	
83	Asian Koel	<i>Eudynamis scolopacea</i>	2							2	
84	Common Cuckoo	<i>Cuculus canorus</i>			0				1		1
85	Common Hawk Cuckoo	<i>Hierococcyx varius</i>	1		1						0
86	Shikra	<i>Accipiter badius</i>	2		2						20
87	Himalayan Griffon	<i>Gyps himalayensis</i>			0		19				19
88	Black Kite	<i>Milvus migrans</i>			0		2				2
89	Black winged Kite	<i>Elanus caeruleus</i>			0	2					2
90	Creasted Serpent Eagle	<i>Spilornis cheela</i>			0				1		1
91	Long-legged Buzzard	<i>Buteo rufinus</i>		1	1						0
92	Large Cuckoo Shrike	<i>Coracina macei</i>			0				1		1
93	Common Starling	<i>Sturnus vulgaris</i>	6		6						0
94	Asian Pied Starling	<i>Gracupica contra</i>	11		11				7		7
95	Chestnut-tailed Starling	<i>Sturnia malabarica</i>			0		7				7
96	Cinereous Tit	<i>Paus cinereus</i>	2		2						0
97	Ashy Prinia	<i>Prinia socialis</i>		2	2						0
98	Junger Prinia	<i>Prinia sylvatica</i>			0			2			2
99	Himalayan Flameback Woodpecker	<i>Dinopium shorii</i>			0			3			3
100	Spotted Owlet	<i>Antheus brama</i>	3		3						0
101	White-browed Fantail	<i>Rhipidura aureola</i>			0			3			3
102	Common Stonechat	<i>Saxicola rubicola</i>	2	6	8						0

Annexure – 5. Details of birds reported during the Asian Waterbird Census 2022 in East and West Champaran Districts (contd.)

Sl. No	Common Name	Scientific Name	East Champaran		Total	West Champaran					Total
			Chilraon Lake	Sarrotar Lake		Darwabari (VTR)	Gandak River System	Dhobhaha (VTR)	Udaipur Jheel	Lal Saraiya mann	
103	Pied Bushchat	<i>Saxicola caprata</i>		7				2		9	
104	Bluethroat	<i>Luscinia svecica</i>		1	1						0
105	House Sparrow	<i>Passer domesticus</i>	3	15	18						0
106	Plain Martin	<i>Riparia paludicola</i>			0		20				20
107	Unidentified Buntings				0	1					1

Annexure – 6. Details of birds reported during the Asian Waterbird Census 2022 in Kaimur and Munger Districts

Sl. No.	Common name	Scientific name	Kaimur District				Munger District		Total
			Durgawati Dam	Dhraul Lake	Gokul Dam		Kharagpur Lake	Kukurjharp Lake	
1	Little Grebe	<i>Tachybaptus ruficollis</i>	8		1				9
2	Little Cormorant	<i>Phalacrocorax niger</i>	4	16	130		33	2	150
3	Grey Heron	<i>Ardea cinerea</i>			1				1
4	Purple Heron	<i>Ardea purpurea</i>			1				1
5	Great Egret/ Large Egret	<i>Casmerodius albus</i>						2	0
6	Intermediate Egret	<i>Mesophoyx intermedia</i>			15		2		15
7	Little Egret	<i>Egretta garzetta</i>		2	10		9	31	12
8	Indian Pond Heron	<i>Ardeola grayii</i>	1	2	15		3		18
9	Asian Openbill	<i>Anastomus oscitans</i>			57		157	1	57
10	Red-naped Ibis	<i>Pseudibis papilliosa</i>			1		6		1
11	Glossy Ibis	<i>Plagadis falcinellus</i>			12				12
12	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	350	135	300				785
13	Garganey	<i>Anas querquedula</i>		1					1
14	Gadwall	<i>Anas strepera</i>		2					2
15	Red-crested Pochard	<i>Netta rufina</i>	6						6
16	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>			2		1		2
17	Common Moorhen	<i>Gallinula chloropus</i>	10	90	1				101
18	Common Coot	<i>Fuli caatra</i>	5	1	36				42
19	Bronze-winged Jacana	<i>Metropidius indicus</i>		50	30				80
									0

Annexure – 6. Details of birds reported during the Asian Waterbird Census 2022 in Kaimur and Munger Districts (contd.)

Sl. No.	Common name	Scientific name	Kaimur District			Total	Munger District		Total
			Durgawati Dam	Dhraul Lake	Gokul Dam		Kharagpur Lake	Kukurjharp Lake	
21	Yellow-wattled Lapwing	<i>vanellus malabricus</i>			4	4			0
22	Red-wattled Lapwing	<i>Vanellus indicus</i>	8	6		14			0
23	River Lapwing	<i>Vanellus duvaucelli</i>				0	2		2
24	Green Sandpiper	<i>Trianga ochropus</i>			1	1			0
25	Common Sandpiper	<i>Actitis hypoleucos</i>			1	1			0
26	Common Kingfisher	<i>Alcedo atthis</i>	1			1			0
27	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	2	2	2	6	3		3
28	Lesser Pied Kingfisher	<i>Ceryle rudis</i>	1			1	1		1
29	White Wagtail	<i>Motacilla alba</i>	1		3	4	3		3
30	White-browed Wagtail	<i>Motacilla maderaspatensis</i>	5			5			0
31	Barn Swallow	<i>Hirundo rustica</i>		20	10	30			0
32	Martin sps.		10			10			0
33	Jungle Babbler	<i>Turdoides striata</i>	12		25	37			0
34	Common Tailor bird	<i>Orthotomus sutorius</i>	1			1			0
35	Yellow throated sparrow	<i>Petronia xanthocollis</i>	6			6			0
36	Brown headed barbet	<i>Megalaima zeylanica</i>	1			1			0
37	Coppersmith Barbet	<i>Psilopogon haemacephalus</i>	1			1			0
38	Indian Roller	<i>Coracias benghalensis</i>	4		6	10			0
39	Spotted Dove	<i>Stigmatopelia chinensis</i>	2		3	5			0

Annexure – 6. Details of birds reported during the Asian Waterbird Census 2022 in Kaimur and Munger Districts (contd.)

Sl. No.	Common name	Scientific name	Kaimur District			Total	Munger District		Total
			Durgawati Dam	Dhraul Lake	Gokul Dam		Kharagpur Lake	Kukurjharp Lake	
40	Laughing Dove	<i>Stigmatopelia senegalensis</i>	15					15	
41	Rock Pigeon	<i>Columba livia</i>			50	50			0
42	Grey Hornbill	<i>Ocyrceros birostris</i>			2	2			0
43	Rofous tailed Lark	<i>Ammomanes phoenicura</i>	14			14			0
44	Ashy crowned sparrow Lark	<i>Eremopterix griseus</i>	8			8			0
45	Black Redstart	<i>Phoenicurus ochruros</i>	12		2	14			0
46	Oriental Magpie Robin	<i>Copsychus saularis</i>	1		1	2			0
47	Indian Robin	<i>Saxicoloides fulicatus</i>	5			5			0
48	Brown Rockchat	<i>Oenanthe fusca</i>	3	1		4			0
49	Red vented Bulbul	<i>Pycnonotus cafer</i>	4		3	7			0
50	Plum headed Parakeet	<i>Psittacula cyanocephala</i>	2			2			0
51	Eurasian Hoopoe	<i>Upupa epops</i>	1		1	2			0
52	Common kestrel	<i>Falco tinnunculus</i>	1			1			0
53	Grey Francolin	<i>Francolinus pondicerianus</i>	1		1	2			0
54	Common Myna	<i>Acridotheres tristis</i>	7		20	27			0
55	Bank Myna	<i>Acridotheres ginginianus</i>			1	1			0
56	Brown Shrike	<i>Lanius cristatus</i>			2	2			0
57	Long tailed Shrike	<i>Lanius schsch</i>	1		1	2			0
58	Paddy field pipit	<i>Anthus rufus</i>	3			3	3		3

Annexure – 6. Details of birds reported during the Asian Waterbird Census 2022 in Kaimur and Munger Districts (contd.)

Sl. No.	Common name	Scientific name	Kaimur District			Total	Munger District		Total
			Durgawati Dam	Dhraul Lake	Gokul Dam		Kharagpur Lake	Kukurjharp Lake	
59	Black Drongo	<i>Dicrurus macrocercus</i>	4	2	7	13			0
60	Greater Coucal	<i>Centropus sinensis</i>	1		1			2	
61	Oriental white eye	<i>Zosterops palpebrosus</i>	1			1			0
62	Green Bee-eater	<i>Merops orientalis</i>	2			2			0
63	Purple Sunbird	<i>Cinnyris asiaticus</i>			2	2			0
64	House Crow	<i>Corvus splendens</i>		2	43	45			0
65	Jungle Crow	<i>Corvus macrorhynchos</i>		2	2	4			0
66	Rufous Treepie	<i>Dendrocitta vagabunda</i>			1	1			0
67	Taiga Flycatcher	<i>Ficedula perva</i>		1		1			0
68	Golden Oriole	<i>Oriolus kundoo</i>			1	1			0
69	Asian Pied Starling	<i>Gracupica contra</i>			30	30			0
70	Plain Prinia	<i>Prinia inornata</i>			4	4			0
71	Red breasted flycatcher	<i>Ficedula perva</i>			1	1			0
72	Orphean warbler	<i>Sylvia hortensis</i>			1	1			0
73	Blyth's reed Warbler	<i>Acrocephalus dumetorum</i>			1	1			0

Annexure – 7. Details of birds reported during the Asian Waterbird Census 2022 in Muzaffarpur District

Sl No.	Common Name	Scientific Name	Brahmapura Lake	Narsan Chaur	Basaitha Chaur	Batraulia Chaur	Manika Lake	Manikpur chaur	Rewa ghat (Gandak River)	Total
1	Little Grebe	<i>Tachybaptus ruficollis</i>			2					2
2	Little Cormorant	<i>Phalacrocorax niger</i>		6	13	251	45	10		325
3	Intermediate Egret	<i>Mesophoyx intermedia</i>			4	419				423
4	Little Egret	<i>Egretta garzetta</i>	41	20	9	346	41	19		476
5	Indian Pond Heron	<i>Ardeola grayii</i>	6	2	2			2		12
6	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>				67	12			79
7	Asian Openbill	<i>Anastomus oscitans</i>		1		563		118		682
8	Red-naped Ibis	<i>Pseudibis papilliosa</i>		1		78				79
9	Lesser Whistling Duck	<i>Dendrocygna javanica</i>		6	2	13				21
10	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	4		1	4	2			11
11	Common Moorhen	<i>Gallinula chloropus</i>					4			4
12	Bronze-winged Jacana	<i>Metopidius indicus</i>	2							2
13	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>				6	2			8
14	Red-wattled Lapwing	<i>Vanellus indicus</i>				30				30
15	Grey-headed Lapwing	<i>Vanellus cinereus</i>					120			120
16	Common Redshank	<i>Trianga totanus</i>			1					1
17	Common Sandpiper	<i>Actitis hypoleucos</i>		1				2		3
18	Osprey	<i>Pandion haliaetus</i>						1	1	2
19	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	4		2	2				8

Annexure – 7. Details of birds reported during the Asian Waterbird Census 2022 in Muzaffarpur District (contd.)

SI No.	Common Name	Scientific Name	Brahmapura Lake	Narsan Chaur	Basaitha Chaur	Batraulia Chaur	Manika Lake	Manikpur chaur	Rewa ghat (Gandak River)	Total
20	Barn Swallow	<i>Hirundo rustica</i>		16						16
21	Indian Roller	<i>Coracias benghalensis</i>		1	1					2
22	Spotted Dove	<i>Stigmatopelia chinensis</i>			2					2
23	Common Myna	<i>Acridotheres tristis</i>	8	11	14		7			40
24	Brown Shrike	<i>Lanius cristatus</i>			1		2			3
25	Large Cuckoo Shrike	<i>Coracinamacei</i>	1							1
26	Paddy feild pipit	<i>Anthus rufulus</i>				4				4
27	Black Drongo	<i>Dicrurusma crocerus</i>	12		7		9			28
28	House Crow	<i>Corvus splendens</i>	7	4						11
29	Rufous Treepie	<i>Dendrocitta vagabunda</i>	3							3
30	Common Hawk Cuckoo	<i>Hierococcyx varius</i>					1			1
31	Black Kite	<i>Milvus migrans</i>	196				2			198
32	Asian Pied Starling	<i>Gracupica contra</i>	48							48
33	Common Stonechat	<i>Saxicola rubicola</i>			2					2
34	Oriental skylark	<i>Alauda gulgula</i>		1						1

Annexure – 8. Details of birds reported during the Asian Waterbird Census 2022 in Gaya & Madhubani Districts

Sl. No.	Common name	Scientific name	Gaya District				Total	Madhubani District		Total
			Barwadih Dam	Mohanpur reservior	Barandi Dam	Sita Dam		Chapania Lake		
1	Little Grebe	<i>Tachybaptus ruficollis</i>		4	4	16	24	2	2	
2	Little Cormorant	<i>Phalacrocorax niger</i>		1	44	1	46	29	29	
3	Great Cormorant	<i>Phalacrocorax carbo</i>			6		6		0	
4	Oriental Darter	<i>Anhinga melanogaster</i>					0	6	6	
5	Grey Heron	<i>Ardea cinerea</i>		1	7		8	2	2	
6	Purple Heron	<i>Ardea purpurea</i>					0	2	2	
7	Great Egret/ Large Egret	<i>Casmerodius albus</i>		8		3	11	13	13	
8	Intermediate Egret	<i>Mesophoyx intermedia</i>	1		1		2		0	
9	Little Egret	<i>Egretta garzetta</i>		2			2	6	6	
10	Cattle Egret	<i>Bubulcus ibis</i>					0	22	22	
11	Indian Pond Heron	<i>Ardeolagrayii</i>	1		1		2	23	23	
12	Asian Openbill	<i>Anastomus oscitans</i>	26	9	12	4	51	45	45	
13	Lesser Adjutant	<i>Leptotilos javanicus</i>					0	7	7	
14	Wooly-necked Stork	<i>Ciconia episcopus</i>					0	6	6	
15	Red-naped Ibis	<i>Pseudibis papilliosa</i>		4			4		0	
16	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	28		618		646		0	
17	Brahminy (Ruddy) Shelduck	<i>Tadorna ferruginea</i>	2		4		6		0	
18	Cotton Teal/ Cotton Pygmy Goose	<i>Nettapus coromandelianus</i>					0	6	6	
19	Mallard	<i>Anas platyrhynchos</i>					0	2	2	
20	Common Teal	<i>Anas crecca</i>					0	13	13	

Annexure – 8. Details of birds reported during the Asian Waterbird Census 2022 in Gaya & Madhubani Districts (contd.)

Sl. No.	Common name	Scientific name	Gaya District				Total	Madhubani District		Total
			Barwadih Dam	Mohanpur reservior	Barandi Dam	Sita Dam		Chapania Lake		
21	Indian Spot-billed Duck	<i>Anas poecilorhyncha</i>					33	33		
22	Ferruginous Duck/ White-eyed Pochard	<i>Aythya nyroca</i>					0	1		1
23	Tufted Duck	<i>Aythya fuligula</i>					0	1		1
24	Comb Duck/ Knob-billed Duck	<i>Sarkidiornis melanotos</i>			3		3			0
25	Gadwall	<i>Anas strepera</i>		46			46	52		52
26	White-breasted Waterhen	<i>Amauornis phoenicurus</i>			2		2	1		1
27	Bronze-winged Jacana	<i>Metropidius indicus</i>					0	1		1
28	Little Ringed Plover	<i>Charadrius dubius</i>		2			2			0
29	Red-wattled Lapwing	<i>Vanellus indicus</i>	1		1		2	5		5
30	Grey-headed Lapwing	<i>Vanellus cinereus</i>					0	118		118
31	Black-winged Stilt	<i>Himantopus himantopus</i>			16		16			0
32	Marsh Sandpiper	<i>Trianga stagnatilis</i>			1		1			0
33	Wood Sandpiper	<i>Trianga glareola</i>	2				2			0
34	Common Greenshank	<i>Trianga nebularia</i>	36	8	4		48			0
35	Common Sandpiper	<i>Actitis hypoleucos</i>	3		4		7	5		5
36	Common Snipe	<i>Gallinago gallinago</i>					0	26		26
37	Temminck's Stint	<i>Calidris temminckii</i>			1		1			0
38	Stork-billed Kingfisher	<i>Pelargopsis capensis</i>					0	1		1
39	White-throated Kingfisher	<i>Halcyon smyrnensis</i>		1	3		4	6		6

Annexure – 8. Details of birds reported during the Asian Waterbird Census 2022 in Gaya & Madhubani Districts (contd.)

Sl. No.	Common name	Scientific name	Gaya District				Total	Madhubani District		Total
			Barwadih Dam	Mohanpurreservior	Barandi Dam	Sita Dam		Chapania Lake		
40	Lesser Pied Kingfisher	<i>Ceryle rudis</i>			1		1			0
41	White Wagtail	<i>Motacilla alba</i>	1			1		2		
42	Indian Roller	<i>Coracias benghalensis</i>			1	1	2			0
43	Eurasion Collard Dove	<i>Streptopelia decaocto</i>			1		1			0
44	Spotted Dove	<i>Stigmatopelia chinensis</i>			2		2			0
45	Black Redstart	<i>Phoenicurus ochruros</i>			1		1			0
46	Rose-ringed Parakeet	<i>Psittacula krameri</i>			2		2			0
47	Plum headed Parakeet	<i>Psittacula cyanocephala</i>			7		7			0
48	EurasionHooppe	<i>Upupa epops</i>	1		1		2			0
49	Grey Francolin	<i>Francolinus pondicerianus</i>			2		2			0
50	Black Drongo	<i>Dicrurus macrocerus</i>			3		3			0
51	Greater Coucal	<i>Centropus sinensis</i>			2		2			0
52	Black hooded Oriole	<i>Oriolus xanthornus</i>			1		1			0
53	Spotted Owllet	<i>Anthene brama</i>			1		1			0
54	Indian Silverbill	<i>Euodice malabarica</i>			3		3			0

Annexure – 9. Details of birds reported during the Asian Waterbird Census 2022 in Katihar & Patna Districts

Sl. No.	Common Name	Scientific Name	Katihar District			Total	Patna District		Total
			Gogabeel Lake	Bagarbeel	Baldia Chaur		Rajdhani Jalashya	Patna Jalla	
1	Little Grebe	<i>Tachybaptus ruficollis</i>	20	30	6	56	5		5
2	Great Crested Grebe	<i>Podiceps cristatus</i>	12			12			0
3	Little Cormorant	<i>Phalacrocorax niger</i>	357	34	46	437	9	3	12
4	Indian Cormorant/ Indian Shag	<i>Phalacrocorax fuscicollis</i>	5			5		8	8
5	Great Cormorant	<i>Phalacrocorax carbo</i>	7			7		3	3
6	Oriental Darter	<i>Anhinga melanogaster</i>	20	2	2	24			0
7	Grey Heron	<i>Ardea cinerea</i>	55	1	2	58			0
8	Purple Heron	<i>Ardea purpurea</i>	28	2	1	31			0
9	Great Egret/ Large Egret	<i>Casmerodius albus</i>	7		1	8			0
10	Intermediate Egret	<i>Mesophoyx intermedia</i>	268	48	40	356			0
11	Little Egret	<i>Egretta garzetta</i>	3	12		15	1		1
12	Cattle Egret	<i>Bubulcus ibis</i>				0		12	12
13	Indian Pond Heron	<i>Ardeola grayii</i>		20	21	41	2		2
14	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>				0	2		2
15	Asian Openbill	<i>Anastomus oscitans</i>	165	82	16	263			0
16	Lesser Adjutant	<i>Lepto tilos javanicus</i>		1		1			0
17	Red-naped Ibis	<i>Pseudibis papilliosa</i>	2	2		4			0
18	Glossy Ibis	<i>Plagadis falcinellus</i>	8	5		13			0
19	White Ibis/ Black-headed Ibis	<i>Threskiornis melanocephalus</i>	13	7	3	23			0
20	Large (Fulvous) Whistling Duck	<i>Dendrocygna bicolor</i>	50			50			0

Annexure – 9. Details of birds reported during the Asian Waterbird Census 2022 in Katihar & Patna Districts (contd.)

Sl. No.	Common Name	Scientific Name	Katihar District			Total	Patna District		Total
			Gogabeel Lake	Bagarbeel	Baldia Chaur		Rajdhani Jalashya	Patna Jalla	
21	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	2,000			2,000	800	80	880
22	Cotton Teal / Cotton Pygmy Goose	<i>Nettapuscoro mandelianus</i>	6			6			0
23	Northern Pintail	<i>Anas acuta</i>	30			30			0
24	Common Teal	<i>Anas crecca</i>	10			10			0
25	Garganey	<i>Anas querquedula</i>	100			100	28		28
26	Common Pochard	<i>Aythya baeri</i>	30			30			00
27	Ferruginous Duck/ White-eyed Pochard	<i>Aythya nyroca</i>	40	5		45	3		3
28	Tufted Duck	<i>Aythya fuligula</i>	20			20			0
29	Comb Duck/ Knob-billed Duck	<i>Sarkidiornis melanotos</i>				0	2		2
30	Gadwall	<i>Anas strepera</i>	60			60	53		53
31	Northern Shoveler	<i>Anas clypeata</i>				0	6		6
32	Red-crested Pochard	<i>Netta rufina</i>	1,500	15		1,515			0
33	Purple Swampphen	<i>Porphyrio porphyrio</i>	40	9		49			0
34	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>				0	8	4	12
35	Common Moorhen	<i>Gallinula chloropus</i>		2	1	3	16	3	19
36	Common Coot	<i>Fulica atra</i>	40	8		48	12		12
37	Bronze-winged Jacana	<i>Metopidius indicus</i>	2	15	25	42	4	5	9
38	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	21	10	1	32			0
39	Northern Lapwing	<i>Vanellus vanellus</i>	54			54			0
40	Red-wattled Lapwing	<i>Vanellus indicus</i>		1		1			0

Annexure – 9. Details of birds reported during the Asian Waterbird Census 2022 in Katihar & Patna Districts (contd.)

Sl. No.	Common Name	Scientific Name	Katihar District			Total	Patna District		Total
			Gogabeel Lake	Bagarbeel	Baldia Chaur		Rajdhani Jalashya	Patna Jalla	
41	Grey-headed Lapwing	<i>Vanellus cinereus</i>				0		8	8
43	Common Redshank	<i>Trianga totanus</i>				0		1	1
44	Common Sandpiper	<i>Actitis hypoleucos</i>				0	2		2
45	Western Marsh Harrier	<i>Circus aeruginosus</i>				0	1		1
46	Greater Spotted Eagle	<i>Aquila clanga</i>		1		1			0
47	Peregrine Falcon	<i>Falco peregrinus</i>	1			1			0
48	Osprey	<i>Pandion haliaetus</i>	3	1	1	4			0
49	Common Kingfisher	<i>Alcedo atthis</i>			1	1			0
50	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	1	4	1	6		2	2
51	Lesser Pied Kingfisher	<i>Ceryle rudis</i>	1			1			0
52	White Wagtail	<i>Motacilla alba</i>		2	4	6			0
53	White-browed Wagtail	<i>Motacilla maderaspatensis</i>		2		2			0
54	Citrine Wagtail	<i>Motacilla citreola</i>			3	3			0
55	Barn Swallow	<i>Hirundo rustica</i>			15	15			15
56	Jungle Babbler	<i>Turdoides striata</i>	6			6	2		2
57	Eurasian Collared Dove	<i>Streptopelia decaocto</i>		3		3			0
58	Spotted Dove	<i>Stigmatopelia chinensis</i>				0	3		3
59	Yellow footed green Pigeon	<i>Treron phoenicopterus</i>				0	1		1
60	Grey Hornbill	<i>Ocyrocus birostris</i>				0	2		2
61	Oriental Magpie Robin	<i>Copsychus saularis</i>		1		1			0

Annexure – 9. Details of birds reported during the Asian Waterbird Census 2022 in Katihar & Patna Districts (contd.)

Sl. No.	Common Name	Scientific Name	Katihar District			Patna District		
			Gogabeel Lake	Bagarbeel	Baldia Chaur	Total	Rajdhani Jalashya	Patna Jalla
62	Red vented Bulbul	<i>Pycnonotus cafer</i>		2		2		0
63	Red whiskered Bulbul	<i>Pycnonotus jocosus</i>				0	1	1
64	Rose-ringed Parakeet	<i>Psittacula krameri</i>				0	1	1
65	Common kestrel	<i>Falco tinnunculus</i>		1		1		0
66	Common Myna	<i>Acridotheres tristis</i>			30	30	5	5
67	Bank Myna	<i>Acridotheres ginginianus</i>		7		7		0
68	Paddy feild pipit	<i>Anthus rufulus</i>	2	4		6	12	12
69	Rosy Pipit	<i>Anthus roseatus</i>			3	3		0
70	Black Drongo	<i>Dicrurus macrocercus</i>	2	5	2	9		0
71	Oriental white eye	<i>Zosterops palpebrosus</i>				0	4	4
72	Purple Sunbird	<i>Cinnyris asiaticus</i>				0	1	1
73	House Crow	<i>Corvus splendens</i>		2		2		0
74	Rufous Treepie	<i>Dendrocitta vagabunda</i>	1			1	4	4
75	Taiga Flycatcher	<i>Ficedula perva</i>		1		1		1
76	Golden Oriole	<i>Oriolus kundoo</i>				0	1	1
77	Black Kite	<i>Milvus migrans</i>			1	1	4	4
78	Long-legged Buzzard	<i>Buteo rufinus</i>	1			1		0
79	White-eyed Buzzard	<i>Butastur teesa</i>				0	1	1
80	Asian Pied Starling	<i>Gracupica contra</i>		2	20	22		0
81	Plain Prinia	<i>Prinia inornata</i>		2		2		0

Annexure – 9. Details of birds reported during the Asian Waterbird Census 2022 in Katihar & Patna Districts (contd.)

Sl. No.	Common Name	Scientific Name	Katihar District			Total	Patna District		Total
			Gogabeel Lake	Bagarbeel	Baldia Chaur		Rajdhani Jalashya	Patna Jalla	
82	Common Stonechat	<i>Saxicola rubicola</i>				0	1		1
83	House Sparrow	<i>Passer domesticus</i>		5		5			0
84	Indian Silverbill	<i>Euodice malabarica</i>		10		10			0
85	Zitting Cisticola	<i>Cisticola juncidis</i>	1			1			0
86	Unidentified Pipit			10		10			0
87	Unidentified Lark					0	8		8
88	Unidentified Pipit					0	4		4

**Annexure – 10. Details of birds reported during the Asian Waterbird Census 2022
in Aurangabad, Banka, and Buxar Districts**

Sl. No.	Common name	Scientific name	Aurangabad	Banka	Buxar
			Indrapuri Barrage	Odhni Dam	Sewage Marsh
1	Little Grebe	<i>Tachybaptus ruficollis</i>	2	15	
2	Great Crested Grebe	<i>Podiceps cristatus</i>	1		
3	Little Cormorant	<i>Phalacrocorax niger</i>	9	164	
4	Great Cormorant	<i>Phalacrocorax carbo</i>	6		
5	Grey Heron	<i>Ardea cinerea</i>		3	
6	Purple Heron	<i>Ardea purpurea</i>	1		
7	Great Egret/ Large Egret	<i>Casmerodius albus</i>			
8	Intermediate Egret	<i>Mesophoyx intermedia</i>	3	1	
9	Little Egret	<i>Egretta garzetta</i>	18	16	
10	Cattle Egret	<i>Bubulcus ibis</i>	1	10	
11	Indian Pond Heron	<i>Ardeolagrayii</i>		4	
12	Asian Openbill	<i>Anastomus oscitans</i>	3	28	
13	Red-naped Ibis	<i>Pseudibis papilliosa</i>		2	
14	White Ibis/ Black-headed Ibis	<i>Threskiornis melanocephalus</i>		1	
15	Large (Fulvous) Whistling Duck	<i>Dendrocygna bicolor</i>		86	
16	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	800	1,100	
17	Bar-headed Goose	<i>Anser indicus</i>		18	
18	Brahminy (Ruddy) Shelduck	<i>Tadorna ferruginea</i>	2		
19	Cotton Teal/ Cotton Pygmy Goose	<i>Nettapus coromandelianus</i>		10	
20	Northern Pintail	<i>Anas acuta</i>	804		
21	Common Teal	<i>Anas crecca</i>		23	
22	Garganey	<i>Anas querquedula</i>		13	
23	Common Pochard	<i>Aythya baeri</i>	23		
24	Ferruginous Duck/ White-eyed Pochard	<i>Aythya nyroca</i>		5	
25	Eurasian Wigeon	<i>Anas penelope</i>			
26	Gadwall	<i>Anas strepera</i>	450	6	
27	Red-crested Pochard	<i>Netta rufina</i>	480	184	
28	Purple Swamphen	<i>Porphyrio porphyrio</i>	2		
29	Common Moorhen	<i>Gallinula chloropus</i>			6
30	Common Coot	<i>Fulica atra</i>		185	
31	Bronze-winged Jacana	<i>Metropidius indicus</i>	2		
32	Little Ringed Plover	<i>Charadrius dubius</i>	6	4	

**Annexure – 10. Details of birds reported during the Asian Waterbird Census 2022
in Aurangabad, Banka, and Buxar Districts (contd.)**

Sl. No.	Common name	Scientific name	Aurangabad	Banka	Buxar
			Indrapuri Barrage	Odhni Dam	Sewage Marsh
33	Red-wattled Lapwing	<i>Vanellus indicus</i>	8	7	7
34	Black-winged Stilt	<i>Himantopus himantopus</i>	9	4	100
35	Small Pratincole	<i>Glareola lactea</i>		11	
36	Spotted Redshank	<i>Trianga erythropus</i>			1
37	Marsh Sandpiper	<i>Trianga stagnatilis</i>		1	
38	Wood Sandpiper	<i>Trianga glareola</i>	2		
39	Common Greenshank	<i>Trianga nebularia</i>		1	25
40	Green Sandpiper	<i>Trianga ochropus</i>		1	
41	Common Sandpiper	<i>Actitis hypoleucos</i>	2	4	
42	Common Snipe	<i>Gallinago gallinago</i>	2		
43	Temminck's Stint	<i>Calidris temminckii</i>	5		
44	River Tern	<i>Sterna aurantia</i>		21	
45	Osprey	<i>Pandion haliaetus</i>	1	2	
46	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	2	1	
47	Lesser Pied Kingfisher	<i>Ceryle rudis</i>		2	
48	White Wagtail	<i>Motacilla alba</i>	4	1	
49	White-browed Wagtail	<i>Motacilla maderaspatensis</i>		4	
50	Yellow Wagtail	<i>Motacilla tschutschensis</i>			
51	Indian Roller	<i>Coracias benghalensis</i>		4	
52	Red vented Bulbul	<i>Pycnonotus cafer</i>		2	
53	Common Myna	<i>Acridotheres tristis</i>		6	
54	Paddy field pipit	<i>Anthus rufulus</i>		2	
55	Black Drongo	<i>Dicrurus macrocercus</i>		6	3
56	Oriental white eye	<i>Zosterops palpebrosus</i>		2	
57	Green Bee-eater	<i>Merops orientalis</i>	1	2	
58	Purple Sunbird	<i>Cinnyris asiaticus</i>		9	
59	House Crow	<i>Corvus splendens</i>		10	
60	Jungle Crow	<i>Corvus macrorhynchos</i>		2	
61	Asian Palm Swift	<i>Cypsiurus balasensis</i>		5	
62	Taiga Flycatcher	<i>Ficedula perva</i>		1	
63	Golden Oriole	<i>Oriolus kundoo</i>		1	
64	Asian Koel	<i>Eudynamys scolopaceus</i>		2	

**Annexure – 10. Details of birds reported during the Asian Waterbird Census 2022
in Aurangabad, Banka, and Buxar Districts (contd.)**

Sl. No.	Common name	Scientific name	Aurangabad	Banka	Buxar
			Indrapuri Barrage	Odhni Dam	Sewage Marsh
65	Shikra	<i>Accipiter badius</i>		2	
66	Black Kite	<i>Milvus migrans</i>		1	
67	Asian Pied Starling	<i>Gracupica contra</i>		5	
68	Cinereous Tit	<i>Parus cinereus</i>		1	
69	Plain Prinia	<i>Prinia inornata</i>	1		
70	Scaly-breasted Munia	<i>Lonchura punctulata</i>	7		
71	Warbler sps.			2	

Annexure – 11. Details of birds reported during the Asian Waterbird Census 2022 in Jamui District

Sl. No.	Common name	Scientific name	Belatand	Devanahar	Pelbajan	Nagi Dam	Nakti Dam	Gadhi Pond	Railway Pond	Total
1	Little Grebe	<i>Tachybaptus ruficollis</i>	56	17	15	50	150			288
2	Great Crested Grebe	<i>Podiceps cristatus</i>				13	20	1		34
3	Little Cormorant	<i>Phalacrocorax niger</i>	35	13	18	42	110	67		285
4	Great Cormorant	<i>Phalacrocorax carbo</i>				2		6		8
5	Grey Heron	<i>Ardea cinerea</i>				3	3	1		7
6	Great Egret/ Large Egret	<i>Casmerodius albus</i>	1							1
7	Intermediate Egret	<i>Mesophoyx intermedia</i>		2	2	2	4	20		30
8	Little Egret	<i>Egretta garzetta</i>		1		2	11	3		17
9	Cattle Egret	<i>Bubulcus ibis</i>	18	5	2	22	35		20	102
10	Indian Pond Heron	<i>Ardeola grayii</i>			1		7	3	1	12
11	Asian Openbill	<i>Anastomus oscitans</i>	22	8		30	22	15		97
12	Black Stork	<i>Ciconia nigra</i>				1	2			3
13	Red-naped Ibis	<i>Pseudibis papilliosa</i>	1			9		12		22
14	White Ibis/ Black-headed Ibis	<i>Threskiornis melanocephalus</i>	5			7	24	14		50
15	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	200						400	600
16	Bar-headed Goose	<i>Anser indicus</i>				427	150			577
17	Brahminy (Ruddy) Shelduck	<i>Tadorna ferruginea</i>	9			14				23
18	Cotton Teal/ Cotton Pygmy Goose	<i>Nettapus coromandelianus</i>	30	34	25	80				169
19	Northern Pintail	<i>Anas acuta</i>	40				10	25		75
20	Common Teal	<i>Anas crecca</i>						2		2
21	Garganey	<i>Anas querquedula</i>	2							2

Annexure – 11. Details of birds reported during the Asian Waterbird Census 2022 in Jamui District (contd.)

Sl. No.	Common name	Scientific name	Belatand	Devanahar	Pelbajan	Nagi Dam	Nakti Dam	Gadhi Pond	Railway Pond	Total
22	Common Pochard	<i>Aythya baeri</i>	11		20	40	40	34		145
23	Ferruginous Duck/ White-eyed Pochard	<i>Aythya nyroca</i>						7		7
24	Tufted Duck	<i>Aythya fuligula</i>	9				10			19
25	Eurasian Wigeon	<i>Anas penelope</i>					10	2		12
26	Gadwall	<i>Anas strepera</i>	30	28	8	135	120	63		384
27	Falcated Teal/ Falcated Duck	<i>Anas falcata</i>	1							1
28	Northern Shoveler	<i>Anas clypeata</i>	13			10	6			29
29	Red-crested Pochard	<i>Netta rufina</i>	30	103	200	950	550	684		2517
30	Common Merganser/ Goosesander	<i>Mergus merganser</i>						3		3
31	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>		2					2	4
32	Common Moorhen	<i>Gallinula chloropus</i>	7	1					5	13
33	Common Coot	<i>Fulicaatra</i>	30	22		450	500	150		1152
34	Bronze-winged Jacana	<i>Metropidius indicus</i>	10	4	8				11	33
35	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	2							2
36	Little Ringed Plover	<i>Charadrius dubius</i>	3	1		3				7
37	Kentish Plover	<i>Charadrius placidus</i>				28	30			58
38	Yellow-wattled Lapwing	<i>vanellus malabicus</i>			6	8				14
39	Red-wattled Lapwing	<i>Vanellus indicus</i>				4	7	5		16
40	Black-winged Stilt	<i>Himantopus himantopus</i>						18		18
41	Small Pratincole	<i>Glareola lactea</i>				28				28
42	Wood Sandpiper	<i>Trianga glareola</i>		1	1	2				4

Annexure – 11. Details of birds reported during the Asian Waterbird Census 2022 in Jamui District (contd.)

Sl. No.	Common name	Scientific name	Belatand	Devanahar	Pelbajan	Nagi Dam	Nakti Dam	Gadhi Pond	Railway Pond	Total
43	Common Greenshank	<i>Trianga nebularia</i>				16	10	3		29
44	Green Sandpiper	<i>Trianga ochropus</i>						2		2
45	Common Sandpiper	<i>Actitis hypoleucos</i>				1				1
46	Temminck's Stint	<i>Calidris temminckii</i>				1	10			11
47	Unidentified Ducks					50				50
48	Common Kingfisher	<i>Alcedo atthis</i>						1		1
49	White-throated Kingfisher	<i>Halcyon smyrnensis</i>				8		3	1	12
50	Lesser Pied Kingfisher	<i>Ceryle rudis</i>					2	2		4
51	White Wagtail	<i>Motacilla alba</i>		1			2	2		5
52	White-browed Wagtail	<i>Motacilla maderaspatensis</i>				2		1		3
53	Citrine Wagtail	<i>Motacilla citreola</i>			5					5
54	Grey Wagtail	<i>Motacilla cinerea</i>						1		1
55	Barn Swallow	<i>Hirudino rustica</i>	8			4	4			16
56	Jungle Babbler	<i>Turdoides striata</i>				10				10
57	Yellow throated sparrow	<i>Petronia xanthocollis</i>						2		2
58	Indian Roller	<i>Coracias benghalensis</i>				5	1	1		7
59	Eurasian Collard Dove	<i>Streptopelia decaocto</i>				1				1
60	Spotted Dove	<i>Stigmatopelia chinensis</i>		4	1			3		8
61	Laughing Dove	<i>Stigmatopelia senegalensis</i>	2		5	4				11
62	Yellow footed green Pigeon	<i>Treron phoenicopterus</i>						2		2
63	Ashy Crowned Sparrow Lark	<i>Eremopterix griseus</i>		4						4

Annexure – 11. Details of birds reported during the Asian Waterbird Census 2022 in Jamui District (contd.)

Sl. No.	Common name	Scientific name	Belatand	Devanahar	Pelbajan	Nagi Dam	Nakti Dam	Gadhi Pond	Railway Pond	Total
64	Black Redstart	<i>Phoenicurus ochruros</i>		1		6				7
65	Oriental Magpie Robin	<i>Copsychus saularis</i>				1				1
66	Indian Robin	<i>Saxicoloides fulicatus</i>	2	2	5	3				12
67	Red vented Bulbul	<i>Pycnonotus cafer</i>	1			8				9
68	Rose-ringed Parakeet	<i>Psittacula krameri</i>					20	3		23
69	Eurasian Hoopoe	<i>Upupa epops</i>				5	1			6
70	Common kestrel	<i>Falco tinnunculus</i>	1			2				3
71	Common Myna	<i>Acridotheres tristis</i>				5				5
72	Brown Shrike	<i>Lanius cristatus</i>							1	1
73	Paddyfield Pipit	<i>Anthus rufulus</i>	2	6	1			2		11
74	Black Drongo	<i>Dicrurus macrocercus</i>	2	1		5		3		11
75	Greater Coucal	<i>Centropus sinensis</i>				2				2
76	Green Bee-eater	<i>Merops orientalis</i>	6	6	2	3		8		25
77	Purple Sunbird	<i>Cinnyris asiaticus</i>							1	1
78	House Crow	<i>Corvus splendens</i>				6		15		21
79	Rufous Treepie	<i>Dendrocitta vagabunda</i>				1				1
80	Asian Palm Swift	<i>Cypsiurus balasiensis</i>				8				8
81	Shikra	<i>Accipiter badius</i>	1							1
82	Black Kite	<i>Milvus migrans</i>	2			1	4	3		10
83	Long-legged Buzzard	<i>Buteo rufinus</i>					1			1
84	Asian Pied Starling	<i>Gracupica contra</i>				30			2	32

Annexure – 11. Details of birds reported during the Asian Waterbird Census 2022 in Jamui District (contd.)

Sl. No.	Common name	Scientific name	Belatand	Devanahar	Pelbajan	Nagi Dam	Nakti Dam	Gadhi Pond	Railway Pond	Total
85	Chestnut-tailed Starling	<i>Sturnia malabarica</i>				40				40
86	Plain Prinia	<i>Prinia inornata</i>	2							2
87	Common Stonechat	<i>Saxicola rubicola</i>			1					1
88	Indian Silverbill	<i>Euodice malabarica</i>						1		1
89	Indian Courser	<i>Cursorius coromandelicus</i>				3				3
90	Unidentified Pipits					8				8
91	Unidentified Larks						50			50

Annexure – 12. Details of birds reported during the Asian Waterbird Census 2022 in Nalanda District

Sl. No	Common Name	Scientific Name	Begampur or Giddhi Lake	Arm and Ammunition factory	Pawapuri Lake	Pushkarni Lake	Total
1	Little Grebe	<i>Tachybaptus ruficollis</i>	4				4
2	Little Cormorant	<i>Phalacrocorax niger</i>	11	42			53
3	Great Cormorant	<i>Phalacrocorax carbo</i>				4	4
4	Great Egret/ Large Egret	<i>Casmerodius albus</i>	6	2			8
5	Intermediate Egret	<i>Mesophoyx intermedia</i>		40	3		43
6	Little Egret	<i>Egretta garzetta</i>	2	3			5
7	Indian Pond Heron	<i>Ardeola grayii</i>			1		1
8	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	1	15			16
9	Black Bittern	<i>Dupetor flavicollis</i>		1			1
10	Lesser Whistling Duck	<i>Dendrocygna javanica</i>		300	260		560
11	Northern Pintail	<i>Anas acuta</i>		64			64
12	Common Teal	<i>Anas crecca</i>	9				9
13	Gadwall	<i>Anas strepera</i>	41		60	25	126
14	Northern Shoveler	<i>Anas clypeata</i>		21	30		51
15	Purple Swampphen	<i>Porphyrio porphyrio</i>			25		25
16	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>		1			1
17	Common Moorhen	<i>Gallinula chloropus</i>			23		23
18	Bronze-winged Jacana	<i>Metropidius indicus</i>			6		6
19	Red-wattled Lapwing	<i>Vanellus indicus</i>	1				1
20	Eurasian Marsh Harrier	<i>Circus aeruginosus</i>				1	1

Annexure – 12. Details of birds reported during the Asian Waterbird Census 2022 in Nalanda District (contd.)

21	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	1				1
22	Unidentified Swallows				1		1
23	Yellow footed green Pigeon	<i>Treron phoenicopterus</i>	1				1
24	Paddy feild pipit	<i>Anthus rufulus</i>		2			2
25	Green Bee-eater	<i>Merops orientalis</i>	1				1
26	Rufous Treepie	<i>Dendrocitta vagabunda</i>	3				3
27	Spotted Owlet	<i>Anthene brama</i>			1		1
28	Unidentified Raptors				50		50

Annexure – 13. Details of birds reported during the Asian Waterbird Census 2022 in Samastipur and Saran Districts

Sl. No.	Common Name	Scientific Name	Samastipur District			Total	Saran District	
			Deokhal Chaur	Tajpur Chaur	Satanpur Chaur		Bahiyara Chaur	Hariya Chaur
1	Little Grebe	<i>Tachybaptus ruficollis</i>		6		6	1	
2	Little Cormorant	<i>Phalacrocorax niger</i>		125		125	35	20
3	Great Cormorant	<i>Phalacrocorax carbo</i>				0		25
4	Grey Heron	<i>Ardea cinerea</i>		2		2	3	
5	Purple Heron	<i>Ardea purpurea</i>				0	6	
6	Great Egret/ Large Egret	<i>Casmerodius albus</i>	1	3	2	6		
7	Intermediate Egret	<i>Mesophoyx intermedia</i>		15	5	20		
8	Little Egret	<i>Egretta garzetta</i>		125	10	135		
9	Cattle Egret	<i>Bubulcus ibis</i>		250	75	325		15
10	Indian Pond Heron	<i>Ardeola grayii</i>		55	50	105	5	378
11	Asian Openbill	<i>Anastomus oscitans</i>	5		15	20	236	132
12	Lesser Adjutant	<i>Leptotilos javanicus</i>				0	1	1
13	Wooly-necked Stork	<i>Ciconia episcopus</i>				0		3
14	Red-naped Ibis	<i>Pseudibis papilliosa</i>			2	2		
15	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>			2	2	2	
16	Common Moorhen	<i>Gallinula chloropus</i>				0	2	
17	Red-wattled Lapwing	<i>Vanellus indicus</i>				0	13	3
18	Common Greenshank	<i>Trianga nebularia</i>				0		12
19	Common Sandpiper	<i>Actitis hypoleucos</i>				0	9	9
20	Eurasian Marsh Harrier	<i>Circus aeruginosus</i>	1			1		
21	Eastern Marsh Harrier	<i>Circus spilonotus</i>					1	1

Annexure – 13. Details of birds reported during the Asian Waterbird Census 2022 in Samastipur and Saran Districts (contd.)

Sl. No.	Common Name	Scientific Name	Samastipur District			Total	Saran District	
			Deokhal Chaur	Tajpur Chaur	Satanpur Chaur		Bahiyara Chaur	Hariya Chaur
22	Pied Harrier	<i>Circus melanoleucos</i>				0		2
23	Common Kingfisher	<i>Alcedo atthis</i>				0	1	2
24	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	4			4	4	2
25	Lesser Pied Kingfisher	<i>Ceryle rudis</i>				0		2
26	White Wagtail	<i>Motacilla alba</i>			10	10		2
27	Citrine Wagtail	<i>Motacilla citreola</i>			2	2		
28	Barn Swallow	<i>Hirundo rustica</i>	50			50		
29	Brown headed barbet	<i>Megalaima zeylanica</i>	1			1		
30	Indian Roller	<i>Coracias benghalensis</i>	2			2		
31	Eurasian Collard Dove	<i>Streptopelia decaocto</i>	1			1		
32	Alexanderine Parakeet	<i>Psittacula eupatria</i>				0		1
33	Common kestrel	<i>Falco tinnunculus</i>			1	1		
34	Common Myna	<i>Acridotheres tristis</i>	10			10		
35	Brown Shrike	<i>Lanius cristatus</i>	1			1		
36	Tawny Pipit	<i>Anthus campestris</i>				0	2	
37	Ashy Drongo	<i>Dicrurus leucophaeus</i>				0	12	
38	Greater Coucal	<i>Centropus sinensis</i>	3			3		
39	Asian Palm Swift	<i>Cypsiurus balasensis</i>	5			5		
40	Golden Oriole	<i>Oriolus kundoo</i>	1			1		
41	Black winged Kite	<i>Elanus caeruleus</i>		1		1		

Annexure – 13. Details of birds reported during the Asian Waterbird Census 2022 in Samastipur and Saran Districts (contd.)

Sl. No.	Common Name	Scientific Name	Samastipur District			Total	Saran District	
			Deokhal Chaur	Tajpur Chaur	Satanpur Chaur		Bahiyara Chaur	Hariya Chaur
42	Creasted Serpent Eagle	<i>Spilornis cheela</i>					1	1
43	Long-legged Buzzard	<i>Buteo rufinus</i>				0		1
44	Large Cuckoo Shrike	<i>Coracina macei</i>	1			1		1
45	Common Starling	<i>Sturnus vulgaris</i>	1			1		
46	Rosy Starling	<i>Pastor roseus</i>					12	
47	Thick-billed Flowerpecker	<i>Dicaeum agile</i>	1			1		
48	Plain Prinia	<i>Prinia inornata</i>	4			4		
49	Pied Bushchat	<i>Saxicola caprata</i>						1
50	Lesser white throat	<i>Sylvia curruca</i>					1	

Annexure – 14. Details of birds reported during the Asian Waterbird Census 2022 in Nawada and Vaishali districts

Sl. No.	Common name	Scientific name	Nawada			Total	Vaishali		Total
			Phulwaria Reservoir	Kulmahadev Dam	Jabsalasaya Dam		Puraniya Chaur	Baraila Lake	
1	Little Grebe	<i>Tachybaptus ruficollis</i>	8	3		11			0
2	Great Crested Grebe	<i>Podiceps cristatus</i>	31			31			0
3	Little Cormorant	<i>Phalacrocorax niger</i>	11			11	10	13	23
4	Great Cormorant	<i>Phalacrocorax carbo</i>	87			87			0
5	Grey Heron	<i>Ardea cinerea</i>	1			1	3		3
6	Purple Heron	<i>Ardea purpurea</i>				0		2	2
7	Intermediate Egret	<i>Mesophoyx intermedia</i>				0	5		5
8	Little Egret	<i>Egretta garzetta</i>	6			6	80	24	104
9	Indian Pond Heron	<i>Ardeola grayii</i>	2			2	2	1	3
10	Asian Openbill	<i>Anastomus oscitans</i>	34		130	164			0
11	Lesser Adjutant	<i>Leptotilos javanicus</i>				0		2	2
12	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	24			24			0
13	Bar-headed Goose	<i>Anser indicus</i>	41			41	3		3
14	Northern Pintail	<i>Anas acuta</i>	20			20			0
15	Tufted Duck	<i>Aythya fuligula</i>	92			92			0
16	Northern Shoveler	<i>Anas clypeata</i>	3			3			0
17	Common Moorhen	<i>Gallinula chloropus</i>	1			1		2	2
18	Red-wattled Lapwing	<i>Vanellus indicus</i>	8			8			0
19	Black-winged Stilt	<i>Himantopus himantopus</i>	29			29			0
20	Common Redshank	<i>Trianga totanus</i>	3			3			0
21	Common Greenshank	<i>Trianga nebularia</i>	5			5			0
22	Common Sandpiper	<i>Actitis hypoleucos</i>	1			1			0
23	Common Kingfisher	<i>Alcedo atthis</i>					1		1
24	Indian Roller	<i>Coracias benghalensis</i>	1			1		2	2

Annexure – 14. Details of birds reported during the Asian Waterbird Census 2022 in Nawada and Vaishali districts (contd.)

Sl. No.	Common name	Scientific name	Nawada			Total	Vaishali		Total
			Phulwaria Reservoir	Kulmahadev Dam	Jabsalasaya Dam		Puraniya Chaur	Baraila Lake	
25	Yellow footed green Pigeon	<i>Treron phoenicopterus</i>	1			1			0
26	Red vented Bulbul	<i>Pycnonotus cafer</i>	2			2			0
27	Plum headed Parakeet	<i>Psittacula cyanocephala</i>	2			2			0
28	Common Myna	<i>Acridotheres tristis</i>	1			1	2		2
29	Paddy feild pipit	<i>Anthus rufulus</i>	2			2			0
30	Black Drongo	<i>Dicrurus macrocercus</i>	1			1	2		2
31	Greater Coucal	<i>Centropus sinensis</i>						1	1
32	House Crow	<i>Corvus splendens</i>					2		2
33	Asian Pied Starling	<i>Gracupica contra</i>	4			4			0
34	Chestnut-tailed Starling	<i>Sturnia malabarica</i>					9	8	17
35	Brahminy Starling	<i>Sturnia pagodarum</i>	2			2			0

Annexure – 15. Details of birds reported during the Asian Waterbird Census 2022 in Saharsa and Supauland Saharsa Districts

Sl. No.	Common Name	Scientific Name	Saharsa				Total	Supauland Saharsa	Total
			Simri Jheel	Arsi Chaur	Bora Chaur	Jalai Chaur		Kosi catchment area	
1	Little Grebe	<i>Tachybaptus ruficollis</i>	18		8	15	41	31	31
2	Little Cormorant	<i>Phalacrocorax niger</i>	16	3	24	17	60	35	35
3	Indian Cormorant/ Indian Shag	<i>Phalacrocorax fuscicollis</i>					0	15	15
4	Great Cormorant	<i>Phalacrocorax carbo</i>	1			9	10		
5	Grey Heron	<i>Ardea cinerea</i>	1			3	4	8	8
6	Purple Heron	<i>Ardea purpurea</i>	3	1		2	6	6	6
7	Great Egret/ Large Egret	<i>Casmerodius albus</i>		7	37	26	70	17	17
8	Intermediate Egret	<i>Mesophoyx intermedia</i>				28	28	16	16
9	Little Egret	<i>Egretta garzetta</i>	4		18	18	40	28	28
10	Cattle Egret	<i>Bubulcus ibis</i>	5	39	56	40	140	58	58
11	Indian Pond Heron	<i>Ardeola grayii</i>	10	3	19	29	61	32	32
12	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	10				10	1	1
13	Asian Openbill	<i>Anastomus oscitans</i>			758	59	817	58	58
14	Greater Adjutant	<i>Leptilos dubius</i>				1	1		
15	Lesser Adjutant	<i>Lepto tilos javanicus</i>		5	7	8	20	2	2
16	Wooly-necked Stork	<i>Ciconia episcopus</i>			7		7	9	9
17	Red-naped Ibis	<i>Pseudibis papilliosa</i>			4	11	15		
18	Glossy Ibis	<i>Plagadis falcinellus</i>				6	6		
19	White Ibis/ Black-headed Ibis	<i>Threskiornis melanocephalus</i>			15	7	22	10	10

Annexure – 15. Details of birds reported during the Asian Waterbird Census 2022 in Saharsa and Supauland Saharsa Districts (contd.)

Sl. No.	Common Name	Scientific Name	Saharsa				Total	Supauland Saharsa		Total
			Simri Jheel	Arsi Chaur	Bora Chaur	Jalai Chaur		Kosi catchment area		
20	Large (Fulvous) Whistling Duck	<i>Dendrocygna bicolor</i>	14					14		
21	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	6			43		210		210
22	Brahminy (Ruddy) Shelduck	<i>Tadorna ferruginea</i>				6		64		64
23	Cotton Teal/ Cotton Pygmy Goose	<i>Nettapus coromandelianus</i>	1		2			6		6
24	Mallard	<i>Anas platyrhynchos</i>			4			1		1
25	Northern Pintail	<i>Anas acuta</i>						14		14
26	Ferruginous Duck/ White-eyed Pochard	<i>Aythya nyroca</i>	6	1				8		8
27	Eurasian Wigeon	<i>Anas penelope</i>						1		1
28	Gadwall	<i>Anas strepera</i>						15		15
29	Falcated Teal/ Falcated Duck	<i>Anas falcata</i>						1		1
30	Northern Shoveler	<i>Anas clypeata</i>						2		2
31	Red-crested Pochard	<i>Netta rufina</i>		4				4		4
32	Common Merganser/ Goosesander	<i>Mergus merganser</i>						8		8
33	Purple Swamphen	<i>Porphyrio porphyrio</i>	2		63			18		18
34	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	1		3	5		16		16
35	Common Moorhen	<i>Gallinula chloropus</i>				14		51		51
36	Common Coot	<i>Fulica atra</i>			4					
37	Bronze-winged Jacana	<i>Metropidius indicus</i>	8	3	10	18		26		26
38	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	45		2			23		23
39	Yellow-wattled Lapwing	<i>vanellus malabicus</i>			4					

Annexure – 15. Details of birds reported during the Asian Waterbird Census 2022 in Saharsa and Supauland Saharsa Districts (contd.)

Sl. No.	Common Name	Scientific Name	Saharsa				Total	Supauland Saharsa		Total
			Simri Jheel	Arsi Chaur	Bora Chaur	Jalai Chaur		Kosi catchment area		
40	Red-wattled Lapwing	<i>Vanellus indicus</i>	8	2	4	3	17	24	24	
41	River Lapwing	<i>Vanellusduvaucelli</i>					2	2		
43	Black-winged Stilt	<i>Himantopus himantopus</i>				4	4			
44	Eurasian Curlew	<i>Numenius arquata</i>				2	2	5	5	
45	Green Sandpiper	<i>Trianga ochropus</i>				1	1	2	2	
46	Common Sandpiper	<i>Actitis hypoleucos</i>			9	2	11	7	7	
47	Little Stint	<i>Calidris minuta</i>			2		2			
48	Unidentified Waterbird					1	1	56	56	
49	Western Marsh Harrier	<i>Circus aeruginosus</i>					0	1	1	
50	Eurasian Marsh Harrier	<i>Circus aeruginosus</i>				3	3	4	4	
51	Pied Harrier	<i>Circus melanoleucos</i>					0	1	1	
52	Osprey	<i>Pandion haliaetus</i>				1	1	2	2	
53	Common Kingfisher	<i>Alcedo atthis</i>					0	4	4	
54	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	4	5		15	24			
55	Lesser Pied Kingfisher	<i>Ceryle rudis</i>				3	3			
56	White Wagtail	<i>Motacilla alba</i>	3	1		8	12	3	3	
57	White-browed Wagtail	<i>Motacilla maderaspatensis</i>				1	1	3	3	
58	Sand Martin	<i>Riparia riparia</i>					0	32	32	
59	Barn Swallow	<i>Hirundo rustica</i>				1	1	24	24	

Annexure – 15. Details of birds reported during the Asian Waterbird Census 2022 in Saharsa and Supauland Saharsa Districts (contd.)

Sl. No.	Common Name	Scientific Name	Saharsa				Total	Supauland Saharsa	Total
			Simri Jheel	Arsi Chaur	Bora Chaur	Jalai Chaur		Kosi catchment area	
61	Common Tailor bird	<i>Orthotomussutorius</i>					46	46	
62	Coppersmith Barbet	<i>Psilopogon haemacephalus</i>					0	2	2
63	Indian Roller	<i>Coracias benghalensis</i>					0	1	1
64	Spotted Dove	<i>Stigmatopelia chinensis</i>				8	8	4	4
65	Yellow footed green Pigeon	<i>Treron phoenicopterus</i>					0	4	4
66	Red vented Bulbul	<i>Pycnonotus cafer</i>					0	36	36
67	Red whiskered Bulbul	<i>Pycnonotus jocosus</i>					0	4	4
68	EurasianHooppe	<i>Upupa epops</i>					0	12	12
69	Bank Myna	<i>Acridotheres ginginianus</i>	32				32		
70	Long tailed Shrike	<i>Lanius schsch</i>	1				1	2	2
71	Paddy feild pipit	<i>Anthus rufulus</i>				1	1	2	2
72	Black Drongo	<i>Dicrurus macrocercus</i>	6				6		
73	Green Bee-eater	<i>Merops orientalis</i>				3	3	9	9
74	Jungle Crow	<i>Corvus macrorhynchos</i>					0	16	16
75	Rufous Treepie	<i>Dendrocitta vagabunda</i>					0	17	17
76	Little Swift	<i>Apus affinis</i>	14				14		
77	Golden Oriole	<i>Oriolus kundoo</i>					0	28	28
78	Shikra	<i>Accipiter badius</i>					0	24	24
79	Montague's Harrier	<i>Circus pygargus</i>	1				1		

Annexure – 15. Details of birds reported during the Asian Waterbird Census 2022 in Saharsa and Supauland Saharsa Districts (contd.)

Sl. No.	Common Name	Scientific Name	Saharsa				Total	Supauland Saharsa	Total
			Simri Jheel	Arsi Chaur	Bora Chaur	Jalai Chaur		Kosi catchment area	
80	Black Kite	<i>Milvus migrans</i>					0	7	7
81	Black winged Kite	<i>Elanus caeruleus</i>	1					1	
82	White-eyed Buzzard	<i>Butastur teesa</i>					0	2	2
83	Asian Pied Starling	<i>Gracupica contra</i>	37				37	3	3
84	Rosy Starling	<i>Pastor roseus</i>					0	1	1
85	Spotted Owllet	<i>Anthene brama</i>				3	3	11	11
86	Common Stonechat	<i>Saxicola rubicola</i>	1			1	2	3	3
87	Bluthroat	<i>Luscinia svecica</i>					0	4	4
88	House Sparrow	<i>Passer domesticus</i>				2	2	15	15
89	Baya Weaver	<i>Ploceus philippinus</i>					0	1	1
90	Unidentified Lark						0	5	5
91	Unidentified Raptor					10	10	3	3
92	Unidentified Pigeon					100	100		

Annexure – 16. District-wise summary of counts, number of species & number of bird family reported during the Asian Waterbird Census 2022

Sl. No	Districts	Number of wetlands covered	Count	Number of Species	Number of Families
1	East Champaran	2	2,063	71	34
2	Saharsa	4	2,046	59	27
3	Supaul & Saharsa	1	1,287	76	37
4	Madhubani	1	434	27	11
5	Saran	2	959	30	18
6	West Champaran	5	1,295	61	34
7	Vaishali	2	174	16	11
8	Patna	2	1,138	40	24
9	Darbanagha	2	306	24	12
10	Nalanda	4	1,062	28	16
11	Gaya	4	974	39	24
12	Aurangabad	1	2,657	30	16
13	Bhagalpur	6	7,544	97	45
14	Banka	1	2,003	55	30
15	Begusarai	2	2,105	75	42
16	Jamui	7	7,351	91	39
17	Katihar	3	5,615	67	31
18	Munger	2	261	14	9
19	Samstipur	3	848	30	23
20	Muzaffarpur	7	2,648	34	25
21	Nawada	3	556	28	17
22	Kaimur	3	1,705	48	27
23	Buxsar	1	142	6	5
	Total	68	45,173	202	63

Annexure – 17. Details of the wetland-wise count richness during the Asian Waterbird Census 2022

S.N.	Richness	Bird count	No. of Species	Name of wetland	Dist.	Co-ordinator
1	More than 2000	4992	41	Gogabeel	Katihar	Sh. Arvind Mishra
2		3816	50	VGDS	Bhagalpur	Dr S.Chowdhary / Sh. D.N.Chowdhary
3		2657	30	Indrapuri barrage	Aurangabad	Dr. S.Sudhakar/Dr. R.P.Singh
4		2601	55	Nagi Dams	Jamui	Sh. Arvind Mishra
5		2003	53	Orhni Dam	Banka	Sh. D.N.Chowdhary
6		2002	52	Jagatpur jheel	Bhagalpur	Dr S.Chowdhary / Sh. D.N.Chowdhary
7	1000-1999	1926	33	Nakti Dam	Jamui	Sh. Arvind Mishra
8		1783	12	Batraulia Chaur	Muzaffarpur	Dr. Niraj Kumar
9		1646	54	Gangaprashad Jheel	Bhagalpur	Dr S.Chowdhary / Sh. D.N.Chowdhary
10		1412	62	Kawar lake	Begusarai	Sh. Arvind Mishra
11		1287	75	Kosi catchment	Supaul	Dr Gopal Sharma / Sh. Navin Kr.
12		1217	49	Kesariya chaur or Sarrotar	Motihari	Dr. Niraj Kumar
13	500-999	1193	40	Gadhi Dam	Jamui	Sh. Arvind Mishra
14		1060	22	Bora chaur	Saharsa	Mr. Gyan Chandra Gyani
15		1009	34	Rajdhani jalashya	Patna	Col. Amit Sinha
16		846	50	Chilraon jheel	Motihari	Dr. Niraj Kumar
17		845	47	Gokul dam	Kaimur	BNHS team / Bird guides
18		803	24	Gandak river system	VTR & Bettiah	Kamlesh Maurya
19	500-999	760	32	Barandi dam	Gaya	Dr. S.Sudhakar/Dr. R.P.Singh
20		693	33	Pachaila Chaur	Begusarai	Sh. Arvind Mishra
21		614	21	Hariya chaur	Saran	Mr. Gyan Chandra Gyani
22		594	34	Belataar	Jamui	Sh. Arvind Mishra
23		582	9	Tajpur chaur	Samastipur	Sh. Arvind Mishra
24		538	42	Jalai Chaur	Saharsa	Dr Gopal Sharma / Sh. Navin Kr.
25		525	40	Karanchak/Durgawati Dam	Kaimur	BNHS team / Bird guides

Annexure – 17. Details of the wetland-wise count richness during the Asian Waterbird Census 2022 (contd.)

S.N.	Richness	Bird count	No. of Species	Name of wetland	Dist.	Co-ordinator
26	100-499	491	11	Arm & Ammunition factory ponds	Nalanda	Dr Gopal Sharma / Sh. Navin Kr.
27		460	11	Pawapuri Jal Mandir	Nalanda	Dr Gopal Sharma / Sh. Navin Kr.
28		444	10	Railway pond	Jamui	Sh. Arvind Mishra
29		434	27	Chapania Lake	Madhubani	Mr. Gyan Chandra Gyani
30		423	28	Phulwaria Dam	Nawada	Dr. S.Sudhakar/Dr. R.P.Singh
31		377	29	Udaipur jheel	Bettiah	Kamlesh Maurya
32		376	40	Bagar beel Lake	Katihar	Sh. Arvind Mishra
33		374	29	Simri jheel	Saharsa	Mr. Gyan Chandra Gyani
34		345	17	Bahiyara Chaur	Saran	Mr. Gyan Chandra Gyani
35		335	17	Dhraul Lake	Kaimur	BNHS team / Bird guides
36		332	12	Bramhpura man	Muzaffarpur	Dr. Niraj Kumar
37		326	19	Pailbajan	Jamui	Sh. Arvind Mishra
38		267	23	Devanahar	Jamui	Sh. Arvind Mishra
39		247	25	Baldiya chaur	Katihar	Sh. Arvind Mishra
40		247	12	Manika mann	Muzaffarpur	Dr. Niraj Kumar
41		225	13	Kharagpur lake	Munger	BNHS team / Bird guides
42		186	21	Kalma Jheel	Darbhanga	Dr Gopal Sharma / Sh. Navin Kr.
43		174	11	Satanpur chaur	Samastipur	Sh. Arvind Mishra
44		152	6	Manikpur chaur	Muzaffarpur	Dr. Niraj Kumar
45		142	6	Sewage Marsh	Buxar	Sh. Arvind Mishra
46		130	1	Jabsalasya dam	Nawada	Dr. S.Sudhakar/Dr. R.P.Singh
47		129	11	Patna Jalla	Patna City	Col. Amit Sinha
48		120	17	Kusheshwar asthan	Darbhanga	Dr Gopal Sharma / Sh. Navin Kr.
49		119	11	Puraniya chaur	Vaishali	Dr Gopal Sharma / Sh. Navin Kr.
50		102	11	Barwadih Dam	Gaya	Dr. S.Sudhakar/Dr. R.P.Singh

Annexure – 17. Details of the wetland-wise count richness during the Asian Waterbird Census 2022 (contd.)

S.N.	Richness	Bird count	No. of Species	Name of wetland	Dist.	Co-ordinator
51	50-99	92	17	Deokhal chaur	Samastipur	Sh. Arvind Mishra
52		86	11	Water reservoir, Mohanpur	Gaya	Dr. S.Sudhakar/Dr. R.P.Singh
53		81	12	Begampur wetland	Nalanda	Dr Gopal Sharma / Sh. Navin Kr.
54		74	12	Arsi Chaur	Saharsa	Mr. Gyan Chandra Gyani
55		72	11	Darwabari	VTR	Kamlesh Maurya
56		70	12	Narsan chaur	Muzaffarpur	Dr. Niraj Kumar
57		68	14	Bahatra jheel	Bhagalpur	Dr S.Chowdhary / Sh. D.N.Chowdhary
58		63	15	Basaitha Chaur	Muzaffarpur	Dr. Niraj Kumar
59		55	9	Baraila lake	Vaishali	Dr Gopal Sharma / Sh. Navin Kr.
60		36	4	Kukurjhap lake	Jamui	BNHS team / Bird guides
61	Less than 50	30	13	Dhobhaha	VTR	Kamlesh Maurya
62		30	3	Pushpakarni lake	Nalanda	Dr Gopal Sharma / Sh. Navin Kr.
63		26	6	Sita dam	Gaya	Dr. S.Sudhakar/Dr. R.P.Singh
64		13	3	Laal Saraiya mann	Bettiah	Kamlesh Maurya
65		12	9	Athaniya jheel	Bhagalpur	Dr S.Chowdhary / Sh. D.N.Chowdhary
66		3	1	Kul Mahadev dam	Nawada	Dr. S.Sudhakar/Dr. R.P.Singh
67		1	1	Rewa Ghat	Muzaffarpur	Dr. Niraj Kumar
		45173	202	TOTAL		

*** VGDS count was done in 2 stretches, Sultanganj-Barari (S-B) & Barai-Kahalgao (B-K)**

2542	44	S-B
1274	33	B-K
3816	50	

**Annexure – 18. Details of the wetland-wise species richness
during the Asian Waterbird Census 2022 (contd.)**

S.No.	Species Richness	No. of Species	Bird count	Name of wetland	Dist.	Co-ordinator
1	More than 50	75	1,287	Kosi catchment	Supaul	Dr Gopal Sharma / Sh. Navin Kr.
2		62	1,412	Kawar lake	Begusarai	Sh. Arvind Mishra
3		55	2,601	Nagi Dams	Jamui	Sh. Arvind Mishra
4		54	1,646	Gangaprashad Jheel	Bhagalpur	Dr S.Chowdhary / Sh. D.N.Chowdhary
5		53	2,003	Orhni Dam	Banka	Sh. D.N.Chowdhary
6		52	2,002	Jagatpur jheel	Bhagalpur	Dr S.Chowdhary / Sh. D.N.Chowdhary
7		50	3,816	VGDS	Bhagalpur	Dr S.Chowdhary / Sh. D.N.Chowdhary
8		50	846	Chilraon jheel	Motihari	Dr. Niraj Kumar
9	30 - 49	49	1217	Kesariya chaur or Sarrotar	Motihari	Dr. Niraj Kumar
10		47	845	Gokul dam	Kaimur	BNHS team / Bird guides
11		42	538	Jalai Chaur	Saharsa	Dr Gopal Sharma / Sh. Navin Kr.
12		41	4992	Gogabeel	Katihar	Sh. Arvind Mishra
13		40	1193	Gadhi Dam	Jamui	Sh. Arvind Mishra
14		40	525	Karanchak/Durgawati Dam	Kaimur	BNHS team / Bird guides
15		40	376	Bagar beel Lake	Katihar	Sh. Arvind Mishra
16		34	594	Belataar	Jamui	Sh. Arvind Mishra
17		34	1009	Rajdhani jalashya	Patna	Col. Amit Sinha
18		33	693	Pachaila Chaur	Begusarai	Sh. Arvind Mishra
19		33	1926	Nakti Dam	Jamui	Sh. Arvind Mishra
20		32	760	Barandi dam	Gaya	Dr. S.Sudhakar/ Dr. R.P.Singh
21		30	2657	Indrapuri barrage	Aurangabad	Dr. S.Sudhakar/ Dr. R.P.Singh
22	20-29	29	377	Udaipur jheel	Bettiah	Kamlesh Maurya
23		29	374	Simri jheel	Saharsa	Mr. Gyan Chandra Gyani
24		28	423	Phulwaria Dam	Nawada	Dr. S.Sudhakar/ Dr. R.P.Singh
25		27	434	Chapania Lake	Madhubani	Mr. Gyan Chandra Gyani
26		25	247	Baldiya chaur	Katihar	Sh. Arvind Mishra
27		24	803	Gandak river system	VTR & Bettiah	Kamlesh Maurya
28		23	267	Devanahar	Jamui	Sh. Arvind Mishra
29		22	1060	Bora chaur	Saharsa	Mr. Gyan Chandra Gyani
30		21	186	Kalma Jheel	Darbhanga	Dr Gopal Sharma / Sh. Navin Kr.
31		21	614	Hariya chaur	Saran	Mr. Gyan Chandra Gyani

**Annexure – 18. Details of the wetland-wise species richness
during the Asian Waterbird Census 2022 (contd.)**

S.No.	Species Richness	No. of Species	Bird count	Name of wetland	Dist.	Co-ordinator
32	10 - 19	19	326	Pailbajan	Jamui	Sh. Arvind Mishra
33		17	120	Kusheshwar asthan	Darbhanga	Dr Gopal Sharma / Sh. Navin Kr.
34		17	335	Dhraul Lake	Kaimur	BNHS team / Bird guides
35		17	92	Deokhal chaur	Samastipur	Sh. Arvind Mishra
36		17	345	Bahiyara Chaur	Saran	Mr. Gyan Chandra Gyani
37		15	63	Basaitha Chaur	Muzaffarpur	Dr. Niraj Kumar
38		14	68	Bahatra jheel	Bhagalpur	Dr S.Chowdhary / Sh. D.N.Chowdhary
39		13	225	Kharagpur lake	Munger	BNHS team / Bird guides
40		13	30	Dhobhaha	VTR	Kamlesh Maurya
41		12	1783	Batraulia Chaur	Muzaffarpur	Dr. Niraj Kumar
42		12	332	Bramhpura man	Muzaffarpur	Dr. Niraj Kumar
43		12	247	Manika mann	Muzaffarpur	Dr. Niraj Kumar
44		12	70	Narsan chaur	Muzzafarpur	Dr. Niraj Kumar
45		12	81	Begampur wetland	Nalanda	Dr Gopal Sharma / Sh. Navin Kr.
46		12	74	Arsi Chaur	Saharsa	Mr. Gyan Chandra Gyani
47		11	102	Barwadih Dam	Gaya	Dr. S.Sudhakar/ Dr. R.P.Singh
48		11	86	Water reservoir, Mohanpur	Gaya	Dr. S.Sudhakar/Dr. R.P.Singh
49		11	491	Arm & Ammunition factory ponds	Nalanda	Dr Gopal Sharma / Sh. Navin Kr.
50		11	460	Pawapuri Jal Mandir	Nalanda	Dr Gopal Sharma / Sh. Navin Kr.
51		11	129	Patna Jalla	Patna City	Col. Amit Sinha
52		11	174	Satanpur chaur	Samastipur	Sh. Arvind Mishra
53		11	119	Puraniya chaur	Vaishali	Dr Gopal Sharma / Sh. Navin Kr.
54		11	72	Darwabari	VTR	Kamlesh Maurya
55		10	444	Railway pond	Jamui	Sh. Arvind Mishra

**Annexure – 18. Details of the wetland-wise species richness
during the Asian Waterbird Census 2022 (contd.)**

S.N.	Species Richness	No. of Species	Bird count	Name of wetland	Dist.	Co-ordinator
56	Less than 10	9	12	Athaniya jheel	Bhagalpur	Dr S.Chowdhary / Sh. D.N.Chowdhary
57		9	582	Tajpur chaur	Samastipur	Sh. Arvind Mishra
58		9	55	Baraila lake	Vaishali	Dr Gopal Sharma / Sh. Navin Kr.
59		6	142	Sewage Marsh	Buxar	Sh. Arvind Mishra
60		6	26	Sita dam	Gaya	Dr. S.Sudhakar/ Dr. R.P.Singh
61		6	152	Manikpur chaur	Muzaffarpur	Dr. Niraj Kumar
62		4	36	Kukurjhaph lake	Jamui	BNHS team / Bird guides
63		3	13	Laal Saraiya mann	Bettiah	Kamlesh Maurya
64		3	30	Pushpakarni lake	Nalanda	Dr Gopal Sharma / Sh. Navin Kr.
65		1	1	Rewa Ghat	Muzaffarpur	Dr. Niraj Kumar
66		1	130	Jabsalasya dam	Nawada	Dr. S.Sudhakar/ Dr. R.P.Singh
67		1	3	Kul Mahadev dam	Nawada	Dr. S.Sudhakar/ Dr. R.P.Singh
	TOTAL	202	45,173			

Annexure – 19. District-wise details of number of species and individuals reported during the Asian Waterbird Census 2022 in Bihar

S.N.	District	Name of wetland	No. of Species	Bird count	Co-ordinator
1	Aurangabad	Indrapuri barrage	30	2,657	Dr. S.Sudhakar/Dr. R.P.Singh
2	Banka	Orhni Dam	53	2,003	Sh. D.N.Chowdhary
3	Begusarai	Kawar lake	62	1,412	Sh. Arvind Mishra
4	Begusarai	Pachaila Chaur	33	693	Sh. Arvind Mishra
5	Bettiah	Laal Saraiya mann	3	13	Kamlesh Maurya
6	Bettiah	Udaipur jheel	29	377	Kamlesh Maurya
7	Bhagalpur	Athaniya jheel	9	12	Dr S.Chowdhary / Sh. D.N.Chowdhary
8	Bhagalpur	Bahatra jheel	14	68	Dr S.Chowdhary / Sh. D.N.Chowdhary
9	Bhagalpur	Gangaprashad Jheel	54	1,646	Dr S.Chowdhary / Sh. D.N.Chowdhary
10	Bhagalpur	Jagatpur jheel	52	2,002	Dr S.Chowdhary / Sh. D.N.Chowdhary
11	Bhagalpur	VGDS (B-K)	33	1,274	Dr S.Chowdhary / Sh. D.N.Chowdhary
12	Bhagalpur	VGDS (S-B)	44	2,542	Dr S.Chowdhary / Sh. D.N.Chowdhary
13	Buxar	Sewage Marsh	6	142	Sh. Arvind Mishra
14	Darbhanga	Kalma Jheel	21	186	Dr Gopal Sharma / Sh. Navin Kr.
15	Darbhanga	Kusheshwar asthan	17	120	Dr Gopal Sharma / Sh. Navin Kr.
16	Gaya	Barandi dam	32	760	Dr. S.Sudhakar/Dr. R.P.Singh
17	Gaya	Barwadih Dam	11	102	Dr. S.Sudhakar/Dr. R.P.Singh
18	Gaya	Sita dam	6	26	Dr. S.Sudhakar/Dr. R.P.Singh
19	Gaya	Water reservoir, Mohanpur	11	86	Dr. S.Sudhakar/Dr. R.P.Singh
20	Jamui	Belataar	34	594	Sh. Arvind Mishra
21	Jamui	Devanahar	23	267	Sh. Arvind Mishra
22	Jamui	Gadhi Dam	40	1,193	Sh. Arvind Mishra
23	Jamui	Kukurjhap lake	4	36	BNHS team / Bird guides
24	Jamui	Nagi Dams	55	2,601	Sh. Arvind Mishra

Annexure – 19. District-wise details of number of species and individuals reported during the Asian Waterbird Census 2022 in Bihar (contd.)

S.N.	District	Name of wetland	No. of Species	Bird count	Co-ordinator
25	Jamui	Nakti Dam	33	1,926	Sh. Arvind Mishra
26	Jamui	Pailbajan	19	326	Sh. Arvind Mishra
27	Jamui	Railway pond	10	444	Sh. Arvind Mishra
28	Kaimur	Dhraul Lake	17	335	BNHS team / Bird guides
29	Kaimur	Gokul dam	47	845	BNHS team / Bird guides
30	Kaimur	Karanchak/Durgawati Dam	40	525	BNHS team / Bird guides
31	Katihar	Bagar beel Lake	40	376	Sh. Arvind Mishra
32	Katihar	Baldiya chaur	25	247	Sh. Arvind Mishra
33	Katihar	Gogabeel	41	4,992	Sh. Arvind Mishra
34	Madhubani	Chapania Lake	27	434	Mr. Gyan Chandra Gyani
35	Motihari	Chilraon jheel	50	846	Dr. Niraj Kumar
36	Motihari	Kesariya chaur or Sarrotar	49	1,217	Dr. Niraj Kumar
37	Munger	Kharagpur lake	13	225	BNHS team / Bird guides
38	Muzaffarpur	Basaita Chaur	15	63	Dr. Niraj Kumar
39	Muzaffarpur	Batraulia Chaur	12	1,783	Dr. Niraj Kumar
40	Muzaffarpur	Bramhpura man	12	332	Dr. Niraj Kumar
41	Muzaffarpur	Manika mann	12	247	Dr. Niraj Kumar
42	Muzaffarpur	Manikpur chaur	6	152	Dr. Niraj Kumar
43	Muzaffarpur	Rewa Ghat	1	1	Dr. Niraj Kumar
44	Muzaffarpur	Narsan chaur	12	70	Dr. Niraj Kumar
45	Nalanda	Arm & Ammunition factory ponds	11	491	Dr Gopal Sharma / Sh. Navin Kr.
46	Nalanda	Begampur wetland	12	81	Dr Gopal Sharma / Sh. Navin Kr.
47	Nalanda	Pawapuri Jal Mandir	11	460	Dr Gopal Sharma / Sh. Navin Kr.
48	Nalanda	Pushpakarni lake	3	30	Dr Gopal Sharma / Sh. Navin Kr.
49	Nawada	Jabsalasya dam	1	130	Dr. S.Sudhakar/Dr. R.P.Singh

Annexure – 19. District-wise details of number of species and individuals reported during the Asian Waterbird Census 2022 in Bihar (contd.)

S.N.	District	Name of wetland	No. of Species	Bird count	Co-ordinator
50	Nawada	Kul Mahadev dam	1	3	Dr. S.Sudhakar/Dr. R.P.Singh
51	Nawada	Phulwaria Dam	28	423	Dr. S.Sudhakar/Dr. R.P.Singh
52	Patna	Rajdhani jalashya	34	1,009	Col. Amit Sinha
53	Patna City	Patna Jalla	11	129	Col. Amit Sinha
54	Saharsa	Arsi Chaur	12	74	Mr. Gyan Chandra Gyani
55	Saharsa	Bora chaur	22	1,060	Mr. Gyan Chandra Gyani
56	Saharsa	Jalai Chaur	42	538	Dr Gopal Sharma / Sh. Navin Kr.
57	Saharsa	Simri jheel	29	374	Mr. Gyan Chandra Gyani
58	Samastipur	Deokhal chaur	17	92	Sh. Arvind Mishra
59	Samastipur	Satanpur chaur	11	174	Sh. Arvind Mishra
60	Samastipur	Tajpur chaur	9	582	Sh. Arvind Mishra
61	Saran	Hariya chaur	21	614	Mr. Gyan Chandra Gyani
62	Saran	Bahiyara Chaur	17	345	Mr. Gyan Chandra Gyani
63	Supaul	Kosi catchment	75	1,287	Dr Gopal Sharma / Sh. Navin Kr.
64	Vaishali	Baraila lake	9	55	Dr Gopal Sharma / Sh. Navin Kr.
65	Vaishali	Puraniya chaur	11	119	Dr Gopal Sharma / Sh. Navin Kr.
66	VTR	Darwabari	11	72	Kamlesh Maurya
67	VTR	Dhobhaha	13	30	Kamlesh Maurya
68	VTR & Bettiah	Gandak river system	24	803	Kamlesh Maurya
		TOTAL	202	45,173	

Annexure – 20. Details of number wetland-wise number of species and individuals recorded during the Asian Waterbird Census 2022 in Bihar

S.N.	Name of wetland	Dist.	No. of Species	Bird count	Co-ordinator
1	Arm & Ammunition factory ponds	Nalanda	11	491	Dr Gopal Sharma / Sh. Navin Kr.
2	Arsi Chaur	Saharsa	12	74	Mr. Gyan Chandra Gyani
3	Athaniya jheel	Bhagalpur	9	12	Dr S.Chowdhary / Sh. D.N.Chowdhary
4	Bagar beel Lake	Katihar	40	376	Sh. Arvind Mishra
5	Bahatna jheel	Bhagalpur	14	68	Dr S.Chowdhary / Sh. D.N.Chowdhary
6	Bahiyara Chaur	Saran	17	345	Mr. Gyan Chandra Gyani
7	Baldiya chaur	Katihar	25	247	Sh. Arvind Mishra
8	Barailla lake	Vaishali	9	55	Dr Gopal Sharma / Sh. Navin Kr.
9	Barandi dam	Gaya	32	760	Dr. S.Sudhakar/Dr. R.P.Singh
10	Barwadih Dam	Barachatti, Gaya	11	102	Dr. S.Sudhakar/Dr. R.P.Singh
11	Basaitha Chaur	Muzaffarpur	15	63	Dr. Niraj Kumar
12	Batraulia Chaur	Muzaffarpur	12	1783	Dr. Niraj Kumar
13	Begampur wetland	Nalanda	12	81	Dr Gopal Sharma / Sh. Navin Kr.
14	Belataar	Jamui	34	594	Sh. Arvind Mishra
15	Bora chaur	Saharsa	22	1060	Mr. Gyan Chandra Gyani
16	Bramhpura man	Muzaffarpur	12	332	Dr. Niraj Kumar
17	Chapania Lake	Madhubani	27	434	Mr. Gyan Chandra Gyani
18	Chilraon jheel	Motihari	50	846	Dr. Niraj Kumar
19	Darwabari	VTR	11	72	Kamlesh Maurya
20	Deokhal chaur	Samastipur	17	92	Sh. Arvind Mishra
21	Devanahar	Jamui	23	267	Sh. Arvind Mishra
22	Dhobhaha	VTR	13	30	Kamlesh Maurya
23	Dhrauli Lake	Kaimur	17	335	BNHS team / Bird guides
24	Gadhi Dam	Jamui	40	1193	Sh. Arvind Mishra

Annexure – 20. Details of number wetland-wise number of species and individuals recorded during the Asian Waterbird Census 2022 in Bihar (contd.)

S.N.	Name of wetland	Dist.	No. of Species	Bird count	Co-ordinator
25	Gandak river system	VTR & Bettiah	24	803	Kamlesh Maurya
26	Gangaprashad Jheel	Bhagalpur	54	1646	Dr S.Chowdhary / Sh. D.N.Chowdhary
27	Gogabeel	Katihar	41	4992	Sh. Arvind Mishra
28	Gokul dam	Kaimur	47	845	BNHS team / Bird guides
29	Hariya chaur	Akilepur, Saran	21	614	Mr. Gyan Chandra Gyani
30	Indrapuri barrage	Aurangabad	30	2657	Dr. S.Sudhakar/Dr. R.P.Singh
31	Jabsalasya dam	Nawada	1	130	Dr. S.Sudhakar/Dr. R.P.Singh
32	Jagatpur jheel	Bhagalpur	52	2002	Dr S.Chowdhary / Sh. D.N.Chowdhary
33	Jalai Chaur	Saharsa	42	538	Dr Gopal Sharma / Sh. Navin Kr.
34	Kalma Jheel	Darbhanga	21	186	Dr Gopal Sharma / Sh. Navin Kr.
35	Karanchak/Durgawati Dam	Kaimur	40	525	BNHS team / Bird guides
36	Kawar lake	Begusarai	62	1412	Sh. Arvind Mishra
37	Kesariya chaur or Sarrotar	Mothhari	49	1217	Dr. Niraj Kumar
38	Kharagpur lake	Munger	13	225	BNHS team / Bird guides
39	Kosi catchment	Supaul	75	1287	Dr Gopal Sharma / Sh. Navin Kr.
40	Kukurjhap lake	Jamui	4	36	BNHS team / Bird guides
41	Kul Mahadev dam	Nawada	1	3	Dr. S.Sudhakar/Dr. R.P.Singh
42	Kusheshwar asthan	Darbhanga	17	120	Dr Gopal Sharma / Sh. Navin Kr.
43	Laal Saraiya mann	Bettiah	3	13	Kamlesh Maurya
44	Manika mann	Muzaffarpur	12	247	Dr. Niraj Kumar
45	Manikpur chaur	Muzaffarpur	6	152	Dr. Niraj Kumar
46	Nagi Dams	Jamui	55	2601	Sh. Arvind Mishra
47	Nakti Dam	Jamui	33	1926	Sh. Arvind Mishra
48	Narsan chaur	Muzzaffarpur	12	70	Dr. Niraj Kumar

Annexure – 20. Details of number wetland-wise number of species and individuals recorded during the Asian Waterbird Census 2022 in Bihar (contd.)

S.N.	Name of wetland	Dist.	No. of Species	Bird count	Co-ordinator
49	Orhni Dam	Banka	53	2003	Sh. D.N.Chowdhary
50	Pachaila Chaur	Begusarai	33	693	Sh. Arvind Mishra
51	Pailbajan	Jamui	19	326	Sh. Arvind Mishra
52	Patna Jalla	Patna City	11	129	Col. Amit Sinha
53	Pawapuri Jal Mandir	Nalanda	11	460	Dr Gopal Sharma / Sh. Navin Kr.
54	Phulwaria Dam	Nawada	28	423	Dr. S.Sudhakar/Dr. R.P.Singh
55	Puraniya chaur	Vaishali	11	119	Dr Gopal Sharma / Sh. Navin Kr.
56	Pushpakarni lake	Nalanda	3	30	Dr Gopal Sharma / Sh. Navin Kr.
57	Railway pond	Jamui	10	444	Sh. Arvind Mishra
58	Rajdhani jalashya	Patna	34	1009	Col. Amit Sinha
59	Rewa Ghat	Muzaffarpur	1	1	Dr. Niraj Kumar
60	Satanpur chaur	Samastipur	11	174	Sh. Arvind Mishra
61	Sewage Marsh	Buxar	6	142	Sh. Arvind Mishra
62	Simri jheel	Saharsa	29	374	Mr. Gyan Chandra Gyani
63	Sita dam	Gaya	6	26	Dr. S.Sudhakar/Dr. R.P.Singh
64	Tajpur chaur	Samastipur	9	582	Sh. Arvind Mishra
65	Udaipur jheel	Bettiah	29	377	Kamlesh Maurya
66	VGDS (B-K)	Bhagalpur	33	1274	Dr S.Chowdhary / Sh. D.N.Chowdhary
67	VGDS (S-B)	Bhagalpur	44	2542	Dr S.Chowdhary / Sh. D.N.Chowdhary
68	Water reservoir, Mohanpur	Mohanpur, Gaya	11	86	Dr. S.Sudhakar/Dr. R.P.Singh
	TOTAL		202	45173	

*** Total species counted in VGDS were 50 and bird count was 3816**

Annexure – 21. Site-wise details of long, short distance migratory and resident species recorded during the Asian Waterbird Count

Name of the wetland	District	No. of birds			No. of Species			No. of Waterbird species			No. of Wetland Dependent species			No. of Land bird Species			Waterbirds counted			Wetland dependent birds counted			Land birds counted		
		LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R
Chilraon Lake	East Champaran	145	1	709	13	1	36	3	0	11	6	2	4	1	23	56	0	487	78	8	11	1	214		
Sarrolat Lake	East Champaran	289	0	943	19	0	30	7	0	17	8	2	4	0	11	168	0	845	111	15	10	0	83		
Brahmapura Lake	Muzaffarpur	0	0	332	0	0	12	0	0	4	0	1	0	0	7	0	0	53	0	4	0	0	275		
NarsanChaur	Muzaffarpur	19	1	52	2	1	9	1	0	6	1	0	0	1	3	2	0	36	17	0	0	1	16		
Simri Jheel	Saharsa	143	0	234	6	0	23	2	0	17	1	1	3	0	5	123	0	153	4	4	16	0	77		
Arsi Chaur	Saharsa	9	0	68	3	0	9	2	0	8	1	1	0	0	0	7	0	63	2	5	0	0	0		
Bora Chaur	Saharsa	18	4	1041	3	1	18	3	1	18	0	0	0	0	0	18	4	1041	0	0	0	0	0		
Jalai Chaur	Saharsa	35	0	401	10	0	29	4	0	22	5	2	1	0	5	15	0	366	19	18	1	0	17		
Kosi catchment area	Supaul and Saharsa	255	1	987	23	1	48	13	1	24	7	2	3	0	22	202	1	702	45	36	8	0	249		
Chapania Lake	Madhubani	225	2	215	8	1	18	7	1	17	1	1	0	0	0	223	2	209	2	6	0	0	0		
BahiyaraChaur	Saran	25	0	321	4	0	13	1	0	10	0	2	3	0	1	10	0	304	0	5	15	0	12		
Hariya Chaur	Saran	32	0	587	6	0	15	2	0	8	3	3	1	0	4	23	0	577	8	6	1	0	4		
Gandak River System	West Champaran	673	0	141	13	0	11	6	0	5	5	1	2	0	5	104	0	102	530	3	39	0	36		
Dhobhaha (VTR)	West Champaran	0	0	30	0	0	13	0	0	4	0	1	0	0	8	0	0	7	0	1	0	0	22		
Udaipur Jheel (Saraiya maan)	West Champaran	44	0	339	6	0	23	3	0	11	3	1	0	0	11	30	0	268	14	17	0	0	54		
Lal Saraiya mann	West Champaran	0	0	13	0	0	3	0	0	3	0	0	0	0	0	0	0	13	0	0	0	0	0		
PuraniyaChaur	Vaishali	4	0	116	1	0	10	1	0	5	0	1	0	0	4	4	0	100	0	1	0	0	15		
Baraila Lake	Vaishali	0	0	55	0	0	9	0	0	6	0	0	0	0	3	0	0	44	0	0	0	0	11		
Rajdhani Jalashya	Patna	116	0	889	9	0	23	7	0	9	1	0	1	0	14	113	0	847	2	0	1	0	42		
Patna Jalla	Patna	11	0	120	2	0	9	2	0	8	0	1	0	0	0	11	0	118	0	2	0	0	0		
Kaima Jheel	Darbhanga	87	0	107	8	0	13	7	0	12	1	1	0	0	0	83	0	105	4	2	0	0	0		
KusheshwarAsthan	Darbhanga	66	0	63	9	0	8	7	0	7	2	1	0	0	0	61	0	61	5	2	0	0	0		
Begampur or Giddhi Lake	Nalanda	52	0	31	2	0	10	2	0	6	0	1	0	0	3	52	0	25	0	1	0	0	5		
Arm and Ammunition factory	Nalanda	87	0	406	2	0	9	2	0	8	0	0	0	0	1	87	0	404	0	0	0	0	2		
Pawapuri Lake	Nalanda	92	0	319	2	0	7	2	0	6	0	0	0	0	1	92	0	318	0	0	0	0	1		
Pushkarni Lake	Nalanda	28	0	4	2	0	1	1	0	1	1	0	0	0	0	26	0	4	2	0	0	0	0		

Annexure – 21. Site-wise details of long, short distance migratory and resident species recorded during the Asian Waterbird Count (contd.)

Name of the wetland	District	No. of birds			No. of Species			No. of Waterbird species			No. of Wetland Dependent species			No. of Land bird Species			Waterbirds counted			Wetland dependent birds counted			Land birds counted		
		LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R
Mohanpur Reservoir	Gaya	59	0	30	3	0	8	3	0	7	0	1	0	0	0	29	0	59	0	29	0	1	0	0	0
Phulwaria Reservoir	Nawada	204	0	227	8	0	20	8	0	11	0	0	0	0	9	211	0	204	0	211	0	0	0	0	16
Indrapuri Barrage	Aurangabad	1795	0	875	13	0	17	11	0	13	2	1	0	0	3	864	0	1788	0	864	7	2	0	0	9
Jagatpur Lake	Bhagalpur	759	0	1255	14	0	38	9	0	22	3	1	2	0	15	1194	0	750	0	1194	6	2	3	0	59
Bahatna	Bhagalpur	5	0	65	2	0	12	0	0	6	2	1	0	0	5	50	0	0	0	50	5	2	0	0	13
Athaniya	Bhagalpur	6	0	8	2	0	7	1	0	1	1	0	0	0	6	1	2	0	0	1	4	0	0	0	7
VGDS (Sultanganj) to Bhagalpur)	Bhagalpur	1503	0	1054	16	0	28	11	0	17	4	4	1	0	7	654	0	1487	0	654	15	355	1	0	45
VGDS (Khagalgaoon to Bhagalpur)	Bhagalpur	341	0	941	9	0	24	5	0	14	3	2	1	0	8	519	0	305	0	519	35	358	1	0	64
Gangaprasad Lake	Bhagalpur	338	0	1318	14	0	40	6	0	19	4	1	4	0	20	1243	0	309	0	1243	23	13	6	0	62
Odhni Dam	Banka	468	2	1548	16	1	36	12	0	17	3	2	1	1	17	1483	0	457	0	1483	10	3	1	2	62
Durgawati Dam	Kaimur	22	6	491	5	1	33	2	0	6	2	3	1	1	24	381	0	13	0	381	8	4	1	6	106
Dhrauli Lake	Kaimur	29	0	310	5	0	12	3	0	7	1	1	1	0	4	301	0	7	0	301	21	2	1	0	7
Kanwar Lake	Begusarai	287	0	1129	12	0	49	2	0	15	5	1	5	0	33	953	0	5	0	953	263	3	19	0	173
Pachaila Chaur	Begusarai	180	0	519	13	0	19	6	0	10	6	0	1	0	9	441	0	155	0	441	24	0	1	0	78
Belatand	Jamui	199	0	407	13	0	21	11	0	12	1	0	1	0	9	387	0	189	0	387	9	0	1	0	20
Devanahar	Jamui	162	0	111	6	0	17	5	0	10	1	0	0	0	7	87	0	160	0	87	2	0	0	0	24
Pelbajan	Jamui	240	0	91	6	0	13	4	0	8	1	0	1	0	5	77	0	233	0	77	6	0	1	0	14
Nagi dam Bird sanctuary	Jamui	2114	1	444	17	1	35	14	1	14	2	1	1	0	20	289	1	2104	1	289	8	8	2	0	147
Nakti Dam Bird sanctuary	Jamui	1488	2	401	16	1	15	13	1	10	2	1	1	0	4	373	2	1479	2	373	8	2	1	0	26
Gadhi Pond	Jamui	995	2	211	15	1	24	12	0	11	3	3	0	1	10	164	0	988	0	164	7	6	0	2	41
Gogabeel Lake	Katihar	1914	0	3091	14	0	27	11	0	20	2	2	1	0	5	3077	0	1907	0	3077	6	2	1	0	12
Bagarbeel	Katihar	43	0	330	9	0	30	3	0	18	4	1	2	0	11	283	0	31	0	283	10	4	2	0	43
Baldia Chaur	Katihar	32	0	220	6	0	19	1	0	13	4	2	1	0	4	165	0	2	0	165	27	2	3	0	53
Kharagpur Lake	Munger	7	0	220	2	0	11	1	0	8	1	2	0	0	1	213	0	3	0	213	4	4	0	0	3
Kukurjhap Lake	Munger	0	0	36	0	0	4	0	0	4	0	0	0	0	0	36	0	0	0	36	0	0	0	0	0
Deokhalchaur	Samastipur	55	0	39	4	0	13	0	0	2	2	1	2	0	10	6	0	0	0	6	53	4	2	0	29

Annexure – 21. Site-wise details of long, short distance migratory and resident species recorded during the Asian Waterbird Count (contd.)

Name of the wetland	District	No. of birds			No. of Species			No. of Waterbird species			No. of Wetland Dependent species			No. of Land bird Species			Waterbirds counted			Wetland dependent birds counted			Land birds counted		
		LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R	LDM	SDM	R			
Satanpur Chaur	Samastipur	15	0	161	3	0	8	0	0	8	2	0	1	0	0	0	0	0	161	14	0	1	0	0	
Basaittha Chaur	Muzaffarpur	5	0	59	3	0	12	1	0	7	0	1	2	0	4	2	0	33	0	2	3	0	24		
Batraulia Chaur	Muzaffarpur	0	0	1783	0	0	12	0	0	10	0	1	0	0	1	0	0	1777	0	2	0	0	4		
Manika Lake	Muzaffarpur	123	1	124	2	1	9	1	0	6	0	0	1	1	3	121	0	106	0	0	2	1	18		
Manikpurchaur	Muzaffarpur	5	0	149	2	0	4	1	0	4	1	0	0	0	0	3	0	149	2	0	0	0	0		
Rewa ghat (Gandak River)	Muzaffarpur	2	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0		
Barandi Dam	Gaya	23	0	743	6	0	26	6	0	11	0	2	0	0	13	23	0	712	0	4	0	0	27		
Sita Dam	Gaya	2	0	25	1	0	5	0	0	4	1	0	0	0	1	0	0	24	2	0	0	0	1		
Kulmahadev Dam	Nawada	0	0	3	0	0	1	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0		
Jabsalasaya Dam	Nawada	0	0	130	0	0	1	0	0	1	0	0	0	0	0	0	0	130	0	0	0	0	0		
Railway Pond	Jamui	1	0	443	1	0	9	0	0	6	0	1	1	0	2	0	0	439	0	1	1	0	3		
Gokul Dam	Kaimur	61	0	789	9	0	38	3	0	15	2	1	4	0	22	41	0	580	15	2	5	0	207		
Darwabari (VTR)	West Chamaparan	6	0	66	1	0	9	0	0	5	1	1	0	0	3	0	0	58	6	3	0	0	5		
Sewage Marsh	Buxar	28	0	116	2	0	4	2	0	3	0	0	0	0	1	28	0	113	0	0	0	0	3		
Total		16020	23	29125	429	11	1134	257	5	642	114	63	58	6	429	14412	10	25656	1447	927	161	13	2542		

Annexure 22. Checklist of birds reported during the Asian Waterbird Census 2022 with status

Family	Species	Migratory status	IUCN status
WATERBIRD			
Podicipedidae	Little Grebe	R	LC
	Great Crested Grebe	LDM	LC
PHALACROCORACIDAE	Little Cormorant	R	LC
	Indian Cormorant/ Indian Shag	R	LC
	Great Cormorant	R	LC
ANHINGIDAE	Oriental Darter	R	NT
ARDEIDAE	Grey Heron	R	LC
	Purple Heron	R	LC
	Great Egret/ Large Egret	R	LC
	Intermediate Egret	R	LC
	Little Egret	R	LC
	Cattle Egret	R	LC
	Indian Pond Heron	R	LC
	Black-crowned Night Heron	R	LC
	Black Bittern	R	LC
	Yellow Bittern	R	LC
CICONIIDAE	Asian Openbill	R	NT
	Painted Stork	R	LC
	Greater Adjutant	R	EN
	Lesser Adjutant	R	VU
	Black-necked Stork	R	NT
	Woolly-necked Stork	R	NT
	Black Stork	LM	LC
THRESKIORNITHIDAE	Red-naped Ibis	R	LC
	Glossy Ibis	R	LC
	White Ibis/ Black-headed Ibis	R	LC
	Eurasian Spoonbill	R	LC

Annexure 22. Checklist of birds reported during the Asian Waterbird Census 2022 with status (contd.)

Family	Species	Migratory status	IUCN status
ANATIDAE	Large (Fulvous) Whistling-Duck	R	LC
	Lesser Whistling-Duck	R	LC
	Bar-headed Goose	LDM	LC
	Brahminy (Ruddy) Shelduck	LDM	LC
	Cotton Teal/ Cotton Pygmy Goose	R	LC
	Mallard	LM	LC
	Northern Pintail	LDM	LC
	Common Teal	LDM	LC
	Indian Spot-billed Duck	R	LC
	Garganey	LDM	LC
	Common Pochard	LDM	VU
	Ferruginous Duck/ White-eyed Pochard	LDM	LC
	Tufted Duck	LDM	LC
	Comb Duck/ Knob-billed Duck	LDM	LC
	Eurasian Wigeon	LDM	LC
	Gadwall	LDM	LC
	Falcated Teal/ Falcated Duck	LDM	NT
	Northern Shoveler	LDM	LC
	Red-crested Pochard	LDM	LC
	Common Merganser/ Goosander	LDM	LC
GRUIDAE	Sarus Crane	R	VU
RALLIDAE	Baillon's Crake	LDM	LC
	Purple Swamphen	R	LC
	White-breasted Waterhen	R	LC
	Common Moorhen	R	LC
	Common Coot	LDM	LC
JACANIDAE	Bronze-winged Jacana	R	LC
	Pheasant-tailed Jacana	R	LC

Annexure 22. Checklist of birds reported during the Asian Waterbird Census 2022 with status (contd.)

Family	Species	Migratory status	IUCN status
CHARADRIIDAE	Little Ringed Plover	LDM	LC
	Kentish Plover	LDM	LC
	Northern Lapwing	LDM	NT
	Yellow-wattled Lapwing	R	LC
	Red-wattled Lapwing	R	LC
	River Lapwing	R	NT
	Grey-headed Lapwing	LDM	LC
RECURVIROSTRIDAE	Black-winged Stilt	R	LC
GLAREOLIDAE	Small Pratincole	R	LC
SCOLOPACIDAE	Eurasian Curlew	LDM	NT
	Spotted Redshank	LDM	LC
	Marsh Sandpiper	LDM	LC
	Wood Sandpiper	LDM	LC
	Common Redshank	LDM	LC
	Common Greenshank	LDM	LC
	Green Sandpiper	LDM	LC
	Common Sandpiper	LDM	LC
	Pintail Snipe	LDM	LC
	Common Snipe	LDM	LC
	Little Stint	LDM	LC
	Temminck's Stint	LDM	LC
LARIDAE	Black-headed Gull	LDM	LC
	Brown-headed Gull	LDM	LC
	Whiskered Tern	LDM	LC
	River Tern	R	VU

Annexure 22. Checklist of birds reported during the Asian Waterbird Census 2022 with status (contd.)

Family	Species	Migratory status	IUCN status
WETLAND DEPENDENT BIRDS SPECIES			
ACCIPITRIDAE	Western Marsh Harrier	LDM	LC
	Eurasian Marsh Harrier	LDM	LC
	Eastern Marsh Harrier	LDM	LC
	Montagu's Harrier	LDM	LC
	Pied Harrier	LDM	LC
	Himalayan Griffon	LDM	NT
	Shikra	R	LC
	Black Kite	R	LC
	Black-winged Kite	R	LC
	Crested Serpent-Eagle	R	LC
	Common Buzzard	LDM	LC
	Long-legged Buzzard	LDM	LC
	White-eyed Buzzard	R	LC
	Booted Eagle	LDM	LC
	Tawny Eagle	R	VU
	Indian Spotted Eagle		VU
	Greater Spotted Eagle	LDM	VU
FALCONIDAE	Common Kestrel	LDM	LC
	Peregrine Falcon	LDM	LC
PANDIONIDAE	Osprey	LDM	LC
ALCEDINIDAE	Common Kingfisher	R	LC
	Stork-billed Kingfisher	LDM	LC
	White-throated Kingfisher	R	LC
	Black-capped Kingfisher	LDM	LC
	Lesser Pied Kingfisher	R	LC

Annexure 22. Checklist of birds reported during the Asian Waterbird Census 2022 with status (contd.)

Family	Species	Migratory status	IUCN status
MOTACILLIDAE	White Wagtail	LDM	LC
	White-browed Wagtail	LDM	LC
	Yellow Wagtail	LDM	LC
	Citrine Wagtail	LDM	LC
	Grey Wagtail	LDM	LC
	Paddy-field Pipit	R	LC
	Rosy Pipit	LDM	LC
	Tawny Pipit	LDM	LC
HIRUNDINIDAE	Barn Swallow	LDM	LC
	Wire-tailed Swallow	LDM	LC
	Sand Martin	R	LC
	Dusky Crag-Martin	LDM	LC
	Plain Martin	R	LC
LANDBIRD SPECIES			
<i>Leiothrichidae</i>	Jungle Babbler	R	LC
<i>Cisticolidae</i>	Common Tailorbird	R	LC
<i>Passeridae</i>	House Sparrow	R	LC
	Yellow-throated Sparrow	R	LC
<i>Megalaimidae</i>	Brown-headed Barbet	R	LC
	Coppersmith Barbet	R	LC
<i>Coraciidae</i>	Indian Roller	R	LC
<i>Columbidae</i>	Eurasian Collared Dove	R	LC
	Spotted Dove	R	LC
	Laughing Dove	R	LC
	Emerald Dove	R	LC
	Rock Pigeon	R	LC
	Yellow-footed Green Pigeon	R	LC
<i>Bucerotidae</i>	Grey Hornbill	R	LC
	Oriental Pied Hornbill	R	LC

Annexure 22. Checklist of birds reported during the Asian Waterbird Census 2022 with status (*contd.*)

Family	Species	Migratory status	IUCN status
<i>Alaudidae</i>	Rufous-tailed Lark	R	LC
	Oriental Skylark	LM	LC
	Bengal Bush Lark	R	LC
	Sand Lark	R	LC
	Ashy-crowned Sparrow Lark	R	LC
<i>Muscicapidae</i>	Black Redstart	R	LC
	Red-breasted Flycatcher	LDM	LC
	Taiga Flycatcher	LDM	LC
	Oriental Magpie Robin	R	LC
	Indian Robin	R	LC
	Common Stonechat	LDM	LC
	Pied Bushchat	R	LC
	Bluethroat	LDM	LC
	Brown Rockchat	R	LC
<i>Pycnonotidae</i>	Red-vented Bulbul	R	LC
	Red-whiskered Bulbul	R	LC
<i>Psittaculidae</i>	Rose-ringed Parakeet	R	LC
	Alexandrine Parakeet	R	NT
	Plum-headed Parakeet	R	LC
<i>Upupidae</i>	Eurasian Hoopoe	R	LC
<i>Phasianidae</i>	Grey Francolin	R	LC
<i>Sturnidae</i>	Common Starling	LDM	LC
	Asian Pied Starling	R	LC
	Chestnut-tailed Starling	R	LC
	Rosy Starling	LDM	LC
	Warbler sps.	LDM	LC
	Common Myna	R	LC
	Bank Myna	R	LC
	Brahminy Starling	R	LC

Annexure 22. Checklist of birds reported during the Asian Waterbird Census 2022 with status (contd.)

Family	Species	Migratory status	IUCN status
Laniidae	Brown Shrike	LDM	LC
	Long-tailed Shrike	R	LC
Campephagidae	Large Cuckoo shrike	R	LC
Dicruridae	Black Drongo	R	LC
	Ashy Drongo	R	LC
Cuculidae	Greater Coucal	R	LC
Zosteropidae	Oriental White Eye	R	LC
Meropidae	Green Bee-eater	R	LC
Nectariniidae	Purple Sunbird	R	LC
Corvidae	House Crow	R	LC
	Jungle Crow	R	LC
	Rufous Treepie	R	LC
Apodidae	Asian Palm Swift	R	LC
	Little Swift	R	LC
Oriolidae	Black-hooded Oriole	R	LC
	Golden Oriole	R	LC
Cuculidae	Asian Koel	R	LC
	Common Cuckoo	R	LC
	Common Hawk Cuckoo	R	LC
Paridae	Cinereous Tit	R	LC
Dicaeidae	Thick-billed Flowerpecker	R	LC
Cisticolidae	Ashy Prinia	R	LC
	Plain Prinia	R	LC
	Jungle Prinia	R	LC
	Zitting Cisticola	R	LC
Picidae	Lesser Goldenback	R	LC
	Himalayan Flameback Woodpecker	R	LC
Strigidae	Spotted Owlet	R	LC
Rhipiduridae	White-browed Fantail	R	LC
Estrildidae	Indian Silverbill	R	LC
Ploceidae	Baya Weaver	R	LC
Sylviidae	Lesser white throat	LDM	LC

Annexure 22. Checklist of birds reported during the Asian Waterbird Census 2022 with status (*contd.*)

Family	Species	Migratory status	IUCN status
Acrocephalidae	Clamorous reed warbler	LDM	LC
	Blyth's reed Warbler	LDM	LC
Glareolidae	Indian Courser	R	LC
Caprimulgidae	Indian Night jar	R	LC
Phylloscopidae	Greenish Warbler	LDM	LC
Estrildidae	Scaly-breasted Munia	R	LC

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GLIMPSE OF MEDIA COVERAGE

बिहार पहला राज्य होगा जहां राज्य स्तरीय पक्षी गणना के लिए लगभग 70 आईएमजी की पहचान की गई, वेटलैंड बर्ड गणना के समन्वयक गुप में वैशाली से डॉ सत्येंद्र कुमार भी किये गए शामिल

बिहार के वेटलैंड के पक्षियों की कराई जाएगी गणना

एएन | नवयुग संवाददाता

वेटलैंड बर्ड काउंट की तैयारी को लेकर एक ऑनलाइन बैठक बम्बई नेचुरल हिस्ट्री सोसाइटी की उप निदेशक डॉ नीता शाह और बिहार सरकार वन विभाग के चीफ वाइल्ड लाइफ वॉर्डन पीके गुप्ता के संचालन में हुई। इसमें बिहार के वन प्रमंडल पदाधिकारी, प्रोफेसर, वैज्ञानिक एवं पक्षीप्रियों की सहभागिता 40 सदस्यों ने भाग लिया। बैठक के बाद बीएनएसएस की उप निदेशक डॉ नीता शाह एवं एसएसएस कॉलेज, हाजीपुर के जन्तु विज्ञान विभाग के अध्यक्ष डॉ सत्येंद्र कुमार ने बताया कि बिहार के लिए एक बहुत ही महत्वपूर्ण पहल है। यहां आईएमजी पक्षी गणना की पहल की जा रही है। यह वार्षिक जल पक्षी गणना प्रयासों और आवासीय पक्षी विविधता

को समझने, उनकी बहुलता और उनकी आदतों के बारे में ज्ञान बढ़ाने का माध्यम बनेगी। साथ ही बिहार की महत्वपूर्ण आईएमजी को कवर करने वाले परिदृश्य स्तर पर के खतरों को समझने के लिए अवसर प्रदान करेगी। बैठक के दौरान मुंबई में अतिरिक्त 15-16 आईएमजी जोड़ी गयी। कुछ और स्थानीय पक्षी के नाम भी जोड़े गए। गणना टीम में बिहार के 15 पक्षी विशेषज्ञ शामिल होने की 45 से 50 स्थानीय पक्षी प्रेमियों के साथ समन्वयक के रूप में काम करेंगे। 15 पक्षी विशेषज्ञ एवं गणना समन्वयक के रूप में भागलपुर से पक्षी विज्ञानी अरविंद मिश्रा, पटना से नवीन कुमार, जूलीजिकल सर्वे ऑफ इंडिया के जॉइंट डायरेक्टर डॉ गोपाल शर्मा, एसएसएस कॉलेज, हाजीपुर के जन्तु विज्ञान विभाग के अध्यक्ष डॉ सत्येंद्र कुमार, भागलपुर से प्रोफेसर डीएन

चौधरी एवं प्रोफेसर एसके चौधरी, उत्तर बिहार से कमलेश, मोतिहारी से डॉ नीरज कुमार, गया से डॉ राम प्रताप सिंह, पटना से कर्नल अमित मिश्रा, भागलपुर से जय नंदन मंडल, गया से आईएमएस डॉ सुधाकर, भागलपुर से आईएमएस भारत चिन्तामणी एवं पटना जैविक उद्यान आरएफएओ अनंद कुमार शामिल हैं। यह भी तब हुआ कि आईएमएस डॉ सुधाकर इस समन्वयक गुप के कन्वेनर होंगे। टीम में विश्वविद्यालय और स्कूल के शिक्षक, छात्र, गैर सरकारी संगठन, राज्य सरकार के अधिकारी, सेना के जवान और स्थानीय पक्षी प्रेमी शामिल होंगे। बिहार पहला राज्य होगा जहां राज्य स्तरीय पक्षी गणना के लिए लगभग 70 आईएमजी की पहचान की गई थी। समन्वयकों और भागलपुर स्थित बीएनएसएस टीम द्वारा गणना के लिए मध्य फरवरी में समय तय किया गया है।



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एशियन वाटरबर्ड सेन्सस 2022 के लिए बर्डर का हुआ ट्रेनिंग प्रोग्राम



हाजीपुर | नवयुग संवाददाता

पर्यावरण एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार एवं बम्बई नेचुरल हिस्ट्री सोसाइटी के तत्वावधान में एशियन वाटरबर्ड सेन्सस 2022 का आयोजन होने जा रहा है। वैशाली जिले में बैरला वेटलैंड एवं पुरैनिया वेटलैंड में वाटर बर्ड गणना होना है।

वैशाली जिला के जलीय पक्षी गणना के लिए एसएनएस कॉलेज, हाजीपुर के जन्तु विज्ञान विभाग के विभागाध्यक्ष डॉ सत्येंद्र कुमार को को-ऑर्डिनेटर बनाया गया है।

उत्तरी शाही कॉलोनी स्थित डॉ सत्येंद्र कुमार

- जलपक्षी आबादी का प्रबंधन और संरक्षण जरूरी : डॉ गोपाल
- पक्षीसंख्या एवं आवास स्थान का आकलन जरूरी : डॉ सत्येंद्र

के आवास पर जिला के बर्डर के लिए एक ट्रेनिंग प्रोग्राम का आयोजन हुआ। इस आयोजन में जिले से डॉ. अजीत कुमार, रसायन विज्ञान विभाग, एन एन कॉलेज, सिंघाड़ा, जेपी विश्वविद्यालय के शोध छात्र राजन कुमार, राजेश कुमार, ज्योतिष कुमार सिंह, मगध विश्वविद्यालय की शोध छात्रा अर्चना कुमारी, पटना विश्वविद्यालय की शोध छात्रा कोमल एवं पुष्कर कुमार ने बर्डर के रूप में ट्रेनिंग

ली। कार्यक्रम में मुख्य अतिथि जूलीजिकल सर्वे ऑफ इंडिया के डायरेक्टर डॉ गोपाल शर्मा ने जलपक्षी आबादी के प्रबंधन और संरक्षण के लिए स्थानवार आबादी और उनके रुझानों के बारे में सटीक और अद्यतन जानकारी दी। बम्बई नेचुरल हिस्ट्री सोसाइटी के जॉइंट डायरेक्टर नीता गुप्ता ने पक्षी गणना और जानकारी संग्रह करने की विधियों के बारे में बताया। डॉ सत्येंद्र ने पक्षीसंख्या या आवास स्थान का आकलन करने के लिए तरीकों के बारे में जानकारी दी। कार्यक्रम में वैशाली के डीएफओ मोहम्मद जुनेद, हाजीपुर रेन्जर राय अलोक चन्द्र, लालगंज रेन्जर विजय कुमार एवं वनपाल गया प्रसाद मौजूद रहे।

योजना • मध्य फरवरी में समय तय, वन प्रमंडल पदाधिकारी, प्रोफेसर, वैज्ञानिक एवं पक्षी प्रेमियों की हुई बैठक

बिहार में पहली बार होगी राज्यस्तरीय पक्षी गणना

सिटी रिपोर्टर/हाजीपुर

बिहार पहला राज्य होगा जहां राज्य स्तरीय पक्षी गणना के लिए लगभग 70 आर्द्रभूमि की पहचान की गई। 9 जनवरी 2022 को वेटलैंड बर्ड काउंट की ऑनलाइन तैयारी बैठक को बम्बई नेचुरल हिस्ट्री सोसाइटी की उप निदेशक डॉ नीता शाह और बिहार सरकार वन विभाग के चीफ वाइल्ड लाइफ वाइडन पी के गुप्ता द्वारा संचालित किया गया। इसमें बिहार के वन प्रमंडल पदाधिकारी, प्रोफेसर, वैज्ञानिक एवं पक्षी प्रेमियों सहित लगभग 40 सदस्यों ने भाग लिया।

बैठक के बाद वीएनएचएस की उप निदेशक डॉ नीता शाह एवं एसएनएस कॉलेज, हाजीपुर के जन्तु



बर्ड काउंट की ऑनलाइन बैठक में शामिल प्रोफेसर, वैज्ञानिक और पक्षी प्रेमी

विज्ञान विभाग के अध्यक्ष डॉ सत्येन्द्र कुमार ने बताया कि यह बिहार के लिए एक बहुत ही महत्वपूर्ण आर्द्रभूमि पक्षी गणना पहल थी। यह वार्षिक जल पक्षी गणना प्रवासी और आवासीय पक्षी विविधता, बहुतायत

और आदतों की स्थिति और बिहार के महत्वपूर्ण आर्द्रभूमि को कवर करने वाले राज्य परिदृश्य स्तर पर प्रचलित खतरों को समझने के लिए एक युग की शुरुआत है। सलाहकार बैठक में सूची में अतिरिक्त 15 से

15 पक्षी विशेषज्ञ और गणना समन्वयक होंगे शामिल

15 पक्षी विशेषज्ञ एवं गणना समन्वयक के रूप में भागलपुर से पक्षी विज्ञानी अरविंद मिश्रा, पटना से नविन कुमार, जूलाँजिकल सुबै ऑफ इंडिया के जॉइंट डायरेक्टर डॉ गोपाल शर्मा, एस एन एस कॉलेज, हाजीपुर के जन्तु विज्ञान विभाग के अध्यक्ष डॉ सत्येन्द्र कुमार, भागलपुर से प्रोफेसर डीएन चौधरी एवं प्रोफेसर एसके चौधरी, उत्तरी बिहार से कमलेश, मोतिहारी से डॉ नीरज कुमार, गया से डॉ राम प्रताप सिंह, पटना से कर्नल अमित सिन्हा, भागलपुर से जय नंदन मंडल, गया से आईएफएस डॉ सुधाकर, भागलपुर से आईएफएस भरत चिन्तापली एवं पटना जैविक उद्यान आरएफओ आनंद कुमार शामिल हैं। यह भी तय हुआ कि आई एफएस डॉ सुधाकर इस समन्वयक ग्रुप के कन्वेनर होंगे। टीम में विश्वविद्यालय और स्कूल के शिक्षक, छात्र, गैर सरकारी संगठन, राज्य विभाग के अधिकारी, सेना के जवान और स्थानीय पक्षी प्रेमी शामिल होंगे। समन्वयकों और भागलपुर स्थित वीएनएचएस टीम द्वारा गणना के लिए मध्य फरवरी में समय तय की गई।

16 आर्द्रभूमि जोड़े गए और कुछ विशेषज्ञ शामिल होंगे जो 45 से 50 स्थानीय पक्षी प्रेमियों के साथ गए। टीमों में बिहार के 15 पक्षी समन्वयक के रूप में काम करेंगे।

जलीय पक्षियों का प्रबंधन और संरक्षण जरूरी



प्रशिक्षण कार्यक्रम में शामिल शोध छात्र-छात्राएं

हाजीपुर. पर्यावरण एवं जलवायु परिवर्तन मंत्रालय, बिहार सरकार तथा मुंबई नेचुरल हिस्ट्री सोसाइटी के तत्वावधान में एशियन वाटरबर्ड सेंसस 2022 का आयोजन होने जा रहा है। वैश्वी जिले में बराला वेटलैंड एवं पुरनिया वेटलैंड में वाटर बर्ड गणना की जायेगी, जिले के जलीय पक्षी गणना के लिए एसएनएस कॉलेज, हाजीपुर के जन्तु विज्ञान विभागाध्यक्ष डॉ सत्येन्द्र कुमार को कोऑर्डिनेटर बनाया गया है।

जलीय पक्षियों की गणना को लेकर स्थानीय उत्तरी शहरी कॉलेजों स्थित डॉ सत्येन्द्र कुमार के आवासोपर धरसर में जिले के बर्डों के लिए प्रशिक्षण कार्यक्रम आयोजित किया गया, कार्यक्रम में जिले से एएन कॉलेज, सिंगार के रसायन विभाग के प्राध्यापक डॉ अजीत कुमार, जेपी विश्वविद्यालय के शोध छात्र राजन कुमार, राजेश कुमार, ज्योतिष कुमार

सिंह, मगध विश्वविद्यालय की शोध छात्रा अर्चना कुमारी, पटना विश्वविद्यालय की शोध छात्रा कोमल एवं पुष्कर कुमार ने बर्डों के रूप में ट्रेनिंग ली। कार्यक्रम में मुख्य अतिथि जूलाँजिकल सुबै ऑफ इंडिया के निदेशक डॉ गोपाल शर्मा ने जलपक्षी आबादी के प्रबंधन और संरक्षण को आवश्यक बताया, इसके लिए स्थानवार आबादी और उनके रुझानों के बारे में सटीक और अद्यतन जानकारी दें। बम्बई नेचुरल हिस्ट्री सोसाइटी के जॉइंट डायरेक्टर नीता गुप्ता ने पक्षी गणना और जानकारी संग्रह करने की विधियों के बारे में बताया, वहीं, डॉ सत्येन्द्र ने पक्षीसंख्या या आवास स्थान का आकलन करने के लिए तरीकों के बारे में जानकारी दी। कार्यक्रम में वैश्वी के डीएफओ मो जुनैद, हाजीपुर रेंजर राय अलोक चंद्र, लालाजि के रेंजर विजय कुमार, वनप्रणाल गण प्रसाद आदि मौजूद थे।

पक्षी गणना के लिए राज्य में 70 आर्द्र भूमि की हुई पहचान

मध्य फरवरी से शुरू होगी गणना, समन्वयक बने डॉ सत्येन्द्र संवाददाता, हाजीपुर

बिहार में पहली बार जलीय पक्षियों की गणना होने जा रही है। राज्यस्तरीय पक्षी गणना के लिए लगभग 70 आर्द्र भूमि की पहचान की गयी है। पक्षियों की गणना के लिए मध्य फरवरी का समय निर्धारित किया गया है। स्थानीय एसएनएस कॉलेज के जन्तु विज्ञान विभागाध्यक्ष डॉ सत्येन्द्र कुमार बतौर समन्वयक टीम में शामिल किये गये हैं। वेटलैंड बर्ड काउंटिंग की तैयारी को लेकर पक्षी विशेषज्ञों की ऑनलाइन बैठक आयोजित की गयी।

नेचुरल हिस्ट्री सोसाइटी, मुंबई की उप निदेशक डॉ नीता शाह एवं डॉ सत्येन्द्र कुमार ने बताया कि यह बिहार के लिए एक बहुत ही महत्वपूर्ण आर्द्र भूमि पक्षी गणना पहल है। यह वार्षिक जल पक्षी गणना, प्रवासी और आवासीय पक्षी विविधता, बहुतायत और आदतों की स्थिति और राज्य की

महत्वपूर्ण आर्द्र भूमि को कवर करने वाले प्रचलित खतरों को समझने के लिए एक युग की शुरुआत है। बैठक में इसकी सूची में अतिरिक्त 15-16 आर्द्र भूमि को शामिल किया गया और कुछ अन्य स्थानीय पक्षियों के नाम भी जोड़े गये, इसके लिए बनायी जाने वाली टीमों में बिहार के 15 पक्षी विशेषज्ञ शामिल होंगे, जो 45 से 50 स्थानीय पक्षी प्रेमियों के साथ समन्वयक के रूप में काम करेंगे।

15 पक्षी विशेषज्ञ एवं गणना समन्वयक के रूप में भागलपुर से पक्षी विज्ञानी अरविंद मिश्रा, पटना से नवीन कुमार, जूलाँजिकल सुबै ऑफ इंडिया के जॉइंट डायरेक्टर डॉ गोपाल शर्मा, एसएनएस कॉलेज, हाजीपुर के जन्तु विज्ञान विभागाध्यक्ष डॉ सत्येन्द्र कुमार, भागलपुर से प्रो डीएन चौधरी एवं प्रो एसके चौधरी, उत्तर बिहार से कमलेश, मोतिहारी से डॉ नीरज कुमार, गया से डॉ राम प्रताप सिंह, पटना से कर्नल अमित सिन्हा, भागलपुर से जयनंदन मंडल, गया से आईएफएस डॉ सुधाकर, भागलपुर से आईएफएस भरत चिन्तापली एवं पटना जैविक उद्यान आरएफओ आनंद कुमार शामिल हैं। आईएफएस डॉ सुधाकर इस समन्वयक ग्रुप के कन्वेनर होंगे। टीम में विश्वविद्यालय और स्कूल के शिक्षक, छात्र, गैर सरकारी संगठन, वन विभाग के अधिकारी, सेना के जवान और स्थानीय पक्षी प्रेमी शामिल होंगे।



वेटलैंड बर्ड गणना के समन्वयक बने डॉ सत्येन्द्र

गणना के लिए मध्य फरवरी में समय तय

हाजीपुर। बिहार पहला राज्य होगा जहां राज्य स्तरीय पक्षी गणना के लिए लगभग 70 आर्द्रभूमि की पहचान की गई। 9 जनवरी 2022 को वेटलैंड बर्ड काउंट की ऑनलाइन तैयारी बैठक को बम्बई नेचुरल हिस्ट्री सोसाइटी की उप निदेशक डॉ नीता शाह और बिहार सरकार वन विभाग के चीफ वाइल्ड लाइफ वाइडन पी के गुप्ता द्वारा संचालित किया गया। इसमें बिहार के वन प्रमंडल पदाधिकारी, प्रोफेसर, वैज्ञानिक एवं पक्षी प्रेमियों सहित लगभग 40 सदस्यों ने भाग लिया। बैठक के बाद वीएनएचएस की उप निदेशक डॉ नीता शाह एवं एस एन एस कॉलेज, हाजीपुर के जन्तु विज्ञान विभाग के अध्यक्ष डॉ सत्येन्द्र कुमार ने बताया कि यह बिहार के लिए एक बहुत ही महत्वपूर्ण आर्द्रभूमि पक्षी गणना पहल थी। यह वार्षिक जल पक्षी गणना प्रवासी और आवासीय पक्षी विविधता, बहुतायत और आदतों की स्थिति और बिहार के महत्वपूर्ण आर्द्रभूमि को कवर करने वाले राज्य



बैठक में उपस्थित निदेशक व अन्य लोग।

परि.स व स्तर पर प्रचलित खतरों को समझने के लिए एक युग की शुरुआत है। सलाहकार बैठक में सूची में अतिरिक्त 15 से 16 आर्द्रभूमि जोड़े गए, और कुछ अन्य स्थानीय पक्षी नाम भी जोड़े गए। टीमों में बिहार के 15 पक्षी विशेषज्ञ शामिल होंगे जो 45 से 50 स्थानीय पक्षी प्रेमियों के साथ समन्वयक के रूप में काम करेंगे। 15 पक्षी विशेषज्ञ एवं गणना समन्वयक के रूप में भागलपुर से पक्षी विज्ञानी अरविंद मिश्रा, पटना से नविन कुमार, जूलाँजिकल सुबै ऑफ इंडिया के जॉइंट डायरेक्टर डॉ गोपाल शर्मा, एस एन एस कॉलेज, हाजीपुर के जन्तु विज्ञान विभाग के अध्यक्ष डॉ सत्येन्द्र कुमार, भागलपुर से प्रोफेसर डीएन चौधरी एवं प्रोफेसर एसके चौधरी, उत्तरी बिहार से कमलेश, मोतिहारी से डॉ नीरज कुमार, गया से डॉ राम प्रताप सिंह, पटना से कर्नल अमित सिंह, भागलपुर से जयनंदन मंडल, गया से आईएफएस डॉ सुधाकर, भागलपुर से आईएफएस भरत चिन्तापली एवं पटना जैविक उद्यान आरएफओ आनंद कुमार शामिल हैं। यह भी तय हुआ कि आईएफएस डॉ सुधाकर इस समन्वयक ग्रुप के कन्वेनर होंगे। टीम में विश्वविद्यालय और स्कूल के शिक्षक, छात्र, गैर सरकारी संगठन, राज्य विभाग के अधिकारी, सेना के जवान और स्थानीय पक्षी प्रेमी शामिल होंगे। समन्वयकों और भागलपुर स्थित वीएनएचएस टीम द्वारा गणना के लिए मध्य फरवरी में समय तय की गई।

पहल. बिहार सरकार की ओर से करायी जा रही है गिनती कांबर इलाके में पक्षियों की गिनती के लिए पहुंची टीम

संवाददाता, बेगूसराय

पक्षियों की गणना कर मंत्रालय को सौंपी जायेगी रिपोर्ट

आज दुनिया में जिस तेजी से विकास हो रहा है, उसी तेजी से पर्यावरण का भी हनन हो रहा है. हम विकास की अंधी दौड़ में इस कदर दौड़ते जा रहे हैं, कि अपने हित-अनहित को भी नहीं समझ पाते. वेदलैंड पर प्रवासी प्रजातियों का डेरा है. वेदलैंड एक समृद्ध जैव-विविधता का परिचायक है. और यही कारण है कि इसे बायोलॉजिकल सुपर मार्केट कहा जाता है. पूरे बिहार में एशियन जलीय पक्षी गणना 2022 का काउंट चल रहा है. यह गणना पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार द्वारा आयोजित किया गया है. वेदलैंड में जलीय पक्षी की गणना से न केवल पक्षियों की वास्तविक संख्या का पता चलता है, बल्कि वेदलैंड की वास्तविक स्थिति का भी अंदाजा लगता है. उक्त बातें काबर झील में विंटर जलीय पक्षी का गणना करते हुए एसएनएस कॉलेज, हाजीपुर के जंतु विज्ञान विभाग के विभागाध्यक्ष एवं एडवोकेट ए. सी. 2022 के को-ऑर्डिनेटर डॉ. सत्येंद्र कुमार ने कही. काबर झील बिहार का एक मात्र रामसर साइट है. यहां के पक्षियों की गणना बिहार के चर्चित बर्ड मैम अरविंद मिश्रा के नेतृत्व में किया गया. इस गणना



पक्षियों का अवलोकन करती टीम.

में हाजीपुर एसएनएस कॉलेज के जंतु विज्ञान विभाग के विभागाध्यक्ष एवं एडवोकेट ए. सी. 2022 के को-ऑर्डिनेटर डॉ. सत्येंद्र कुमार, पटना जेडएसआइ के डायरेक्टर एवं एडवोकेट 2022 के को-ऑर्डिनेटर डॉ. गोपाल शर्मा अपनी टीम के साथ शामिल हुए. डॉ. सत्येंद्र कुमार की टीम में शोध छात्र राजेश कुमार

एवं एसएनएस कॉलेज, हाजीपुर के छात्र कुमार अनंत शामिल थे. वहीं डॉ. गोपाल शर्मा की टीम में जेडएसआइ कोलकाता से डॉ. अंजुम नसरिन रिज्वी, डॉ. चित्रा जे. डॉ. अर्नोल्ता घोष, डॉ. शान्तनु मित्रा एवं शकुन जबकि अरविंद मिश्रा के बर्ड टीम में अमिर रिजवान खान, वतन कुमार, आशुतोष कुमार, राजीव कुमार,

विजय कुमार, मुकेश कुमार चौधरी, वन आरक्षी मुकेश कुमार एवं नीरज कुमार शामिल रहे. पक्षी गणना टीम के साथ बेगूसराय के वन प्रमंडल पदाधिकारी आरके रवि भी साथ रहे. पक्षियों की गणना कर जानकारी बिहार सरकार पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय को सौंपी जायेगी.

जलीय पक्षी की संख्या इंगित करती है झील की स्थिति: डॉ. सत्येंद्र
बिहार में एशियन जलीय पक्षी गणना के तहत चलाया जा रहा कार्यक्रम

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मोतिहारी व मुजफ्फरपुर में आधा दर्जन से अधिक झीलों में प्रवासी पक्षियों की गणना के लिए हुआ सर्वे

झील में साइबेरियन स्टोनचैट व रेड क्रेस्टेड पोचर्ड की उड़ान

मोतिहारी | पूरु नारायण सिंह

मोतिहारी व मुजफ्फरपुर जिले में एशियन वाटर बर्ड सेंसस का कार्य पूरा कर लिया गया है। दोनों जिलों के अर्धराष्ट्रिय वन्य जीव अभयारण्य में प्रवासी पक्षियों की गणना के लिए सर्वे हुआ है। राज्य में पहली बार एशियन वाटर बर्ड का सर्वे हुआ जिसमें पूर्वी चम्पारण व मुजफ्फरपुर जिले का चयन किया गया था। पर्यावरण, वन व जलवायु परिवर्तन विभाग बिहार सरकार, वेदलैंड इंटरनेशनल साइड एशिया व बॉम्बे नेचुरल हिस्ट्री सोसायटी (मुंबई) ने 16-20 फरवरी तक एशियन वाटर बर्ड का सर्वे किया है। इसका नेतृत्व मोतिहारी के वन्यजीव विशेषज्ञ व जंतु विज्ञानी डॉ. एशियन वाटर बर्ड सेंसस के स्टेट को-ऑर्डिनेटर प्रो. डॉ. नीरज कुमार कर रहे हैं। झील व चंचर में प्रवासी पक्षियों की उड़ान दिखाई। पूर्वी चम्पारण व मुजफ्फरपुर के जलमय क्षेत्रों में हुआ सर्वे। टीम ने जिले के केसरिया प्रखंड के सरोवर झील व तुलसीनारायण प्रखंड के निरंजना सर में प्रवासी पक्षियों का सर्वे किया। मुजफ्फरपुर जिले के ब्रह्मपुरा मार्गिका

05

दिनो तक चला एशियन पक्षियों के सर्वे का कार्य

02

झिलों में हुआ एशियन वाटर बर्ड सेंसस



मुजफ्फरपुर के बतरीनिया चंचर में सर्वे के दौरान झिले उड़ान भरते पक्षी। • हिन्दुस्तान

● विभिन्न प्रजातियों के पक्षियों को कैमरे में किया गया कैद

● पक्षियों के संरक्षण के लिए प्लान किया जाएगा तैयार

● प्रवासी पक्षियों का किया जा रहा डाटा एनालिसिस

मन, नारसन चंचर, मानिकपुर चंचर, बसहटा चंचर व गंडक नदी के रेवा घाट क्षेत्र के जल पक्षियों की गणना की गयी। कैमरे में प्रवासी पक्षियों की उड़ान दिखाई। प्रवासी पक्षियों के सर्वे के दौरान अत्याधुनिक डिजिटल कैमरे व दूरबीन का उपयोग किया। इस दौरान साइबेरिया

से आनेवाले प्रवासी पक्षी साइबेरियन स्टोनचैट, उत्तर पूर्व चीन व जापान से आनेवाली शीत प्रवासी पक्षी रेड क्रेस्टेड लैंग्विन, पाकिस्तान के पर्वतीय क्षेत्र व भारत पश्चिमी घाट से आनेवाली शीत प्रवासी पक्षी कॉमन केस्ट्रल, यूरोप व उत्तरी अमेरिका से भारत आनेवाली

ऑसप्रे (मछलीमार बाज), यूरोप व सेंट्रल एशिया से शीत ऋतु में भारत आनेवाली प्रवासी पक्षी रेड क्रेस्टेड पोचर्ड (लालसर) पक्षियों की गणना की गयी। इसके अलावा यूरोपियन कूट, ग्रेट क्रेस्टेड ग्रीब, लेसर ग्रीब, एशियन ओपेनबिल स्टार्क, लेसर एडवोकेट,

एशियन वाटर बर्ड सेंसस का कार्य पूरा कर लिया गया है। प्रवासी पक्षियों का डाटा एनालिसिस किया जा रहा है। इस संबंध में रिपोर्ट पर्यावरण, वन व जलवायु परिवर्तन विभाग बिहार सरकार को सुपुर्द किया जाएगा। बिहार में पहली बार एशियन वाटर बर्ड सेंसस कराया गया है। इस दौरान दो जिलों में प्रवासी पक्षियों का सर्वे किया गया है। - डॉ. नीरज कुमार, राज्य समन्वयक

प्रवासी व लोकल पक्षियों का सर्वे किया गया है कि इनकी कितनी आबादी है। इनके संरक्षण की दिशा में क्या कदम उठाया जा सकता है। आनेवाले समय पर तालाब व पक्षियों के संरक्षण व संवर्द्धन के लिए प्लान तैयार किया जाएगा। सर्वे कि रिपोर्ट तैयार की जा रही है। - अभिषेक कुमार, प्रभासी डीएफओ वन प्रमंडल मोतिहारी

परपल हेरन, ग्रे हेरन, रिबर लैंग्विन, कॉमन किंगफिशर, ब्राइट ब्रेस्टेड किंग फिशर, ग्रे वेटेल, ग्रेले वेटेल, पैडीफोल्ड पिपिट, बार्न स्वाली, वायर टेल्ड स्वाली, लिटल कॉमरेंट आदि प्रजाति के पक्षियों की उड़ान कैमरे में कैद की गयी।

कोसी की जैव विविधता देखेंगे विशेषज्ञ

अध्ययन के बाद कोसी क्षेत्र की विलक्षणता से दुनिया को कराएंगे अवगत

महेश कुमार झा • सुपौल

पक्षी गणना को पहुंची टीम, 45 प्रजाति के जलपक्षी की पहचान

विलक्षणता के लिए विश्व की मशहूर चीन की ह्वांग हो नदी के बाद इस क्षेत्र में दूसरा नंबर कोसी नदी का है। कोसी नदी जब बाढ़ के दिनों में उपवन पर आती है तो गांव के गांव डूब जाते हैं और कटान पर आती है तो कई गांवों का अस्तित्व एक साथ विलीन कर जाती है। इसे देखने-परखने के लिए नदी और जल विशेषज्ञों की टीम आती रही। अब कोसी की जैव विविधता विशेषज्ञों की टीम को खींच लाई है। ये यहां की जैव विविधता को समझेंगे और दुनिया को इससे अवगत कराएंगे।

दिखी कुर्तु चिड़िया: कोसी को डाल्फिन का बसेरा भी माना गया है। कोसी में गंगेय डाल्फिन पलते और बढ़ते हैं। इसकी गणना जब मार्च 2021 में की जाने लगी तो इस कार्य में लगे विशेषज्ञों ने इस क्षेत्र में 115 तरह की पक्षियों की पहचान की। वन प्रमंडल पदाधिकारी सुनील कुमार शरण बताते हैं कि जिले के वन क्षेत्र में यूरेशियन कुर्तु चिड़िया देखी गई। यह चिड़िया आइयूसीएन की लाल सूची में शामिल है। इस चिड़िया की चोंच काफी लंबी होती है और पैर भी लंबे होते हैं। इसके पंख गहरे काले रंग के धब्बेदार होते हैं। यह जल जमाव वाले क्षेत्र में रहना पसंद करती है। बताया कि डाल्फिन की गणना के क्रम में

जागरण संवाददाता, सुपौल : जल क्षेत्र समेत आसपास में बास करने वाली पक्षियों के सर्वे को ले विशेषज्ञों की एक टीम सुपौल आई हुई है। यह टीम जिले के कोसी इलाकों में पलने बढ़ने वाली पक्षियों की प्रजाति को चिन्हित करने के साथ-साथ अन्य प्रदेशों से आने वाली पक्षियों की संख्या का भी गणना करेगी। 9 सदस्यीय टीम में शामिल विशेषज्ञों द्वारा शनिवार को जिले के करीब 30 किलोमीटर क्षेत्रों का जायजा लिया गया। जिसमें करीब 45 प्रजाति के जल पक्षी की पहचान की गई। जिसमें पक्षियों की तीन प्रजाति ऐसी देखी गई जिसकी संख्या पूरे बिहार में 30 से 35 ही



प्रेस वार्ता में डीएफओ व विशेषज्ञ टीम के सदस्य • जागरण

पाई जाती है। पहले दिन के सर्वे बाद वापस लौटी टीम में शामिल बिहार स्टेट टूरिज्म डेवलपमेंट कारपोरेशन के नवीन कुमार ने बताया कि बिहार में पहली बार जल पक्षी का सर्वे कार्य किया जा रहा है। जिसके लिए

पूरे राज्य में 50 से अधिक टीम इस कार्य में लगी हुई है। बताया कि राज्य में विभिन्न तरह के जलवायु क्षेत्र हैं। यहां नदियों की संख्या भी काफी अधिक है। इसके अलावा बिहार में 4000 बड़े तथा 7000 छोटे-छोटे जल क्षेत्र हैं। ऐसे क्षेत्रों में बड़ी संख्या में पक्षी बास करते हैं या कुछ समय के लिए प्रवासी के रूप में आती हैं। सरकार ने राज्य में 50 से अधिक जल क्षेत्रों को चिन्हित किया है जहां पक्षियों का सर्वे किया जा रहा है। जिसमें कोसी भी शामिल है। कोसी क्षेत्र में इस बात का पता लगाया जाना है कि यहां कितने प्रजाति के पक्षी पाए जाते हैं और उनकी संख्या क्या है।

जिन पक्षियों की पहचान की गई इसकी संख्या और बढ़ने का अनुमान है।

क्या है आइयूसीएन: अंतरराष्ट्रीय प्रकृति और प्राकृतिक संसाधन संरक्षण संघ (आइयूसीएन), प्राकृतिक संसाधनों के संरक्षण के लिए समर्पित एक अंतरराष्ट्रीय संगठन है। संगठन का घोषित लक्ष्य, विश्व की सबसे थिकट पर्यावरण और विकास संबंधी चुनौतियों के लिए व्यावहारिक समाधान खोजने में सहायता करना है। संघ विश्व के विभिन्न संरक्षण संगठनों से प्राप्त जानकारी के आधार पर लाल सूची प्रकाशित करता है, जो

विश्व में सबसे अधिक संकटग्रस्त प्रजातियों को दर्शाती है।

जाड़े के दिनों में आते हैं प्रवासी जल पक्षी: खैर अब जब राज्य में पहली बार जल में निवास करनेवाली पक्षियों का सर्वे किया जाने लगा तो कोसी का यह इलाका विशेषज्ञों का ध्यान अपनी ओर आकृष्ट किया। इस इलाके में जाड़े के दिनों में हजारों किलोमीटर की यात्रा कर प्रवासी पक्षी पहुंचते हैं। ठंडे प्रदेशों में रहने वाले ये पक्षी तब यहां से कूच करते हैं जब पानी का जमाव शुरू हो जाता है और उन्हें भोजन मिलने में परेशानी होने

लगी है। ऐसे में कोसी का जल जमाव वाले क्षेत्रों में ये बसेरा डालते हैं। इनके आगमन के समय सामा-चकेबा पर्व भी मनाया जाता है जो पक्षियों से जुड़ा है। मार्च तक ये पक्षी यहां रुकते हैं और वंशवृद्धि करते हैं। जब धूप की गर्मी बढ़ जाती है तो ठंडे प्रदेशों में पानी का जमाव खत्म हो जाता है और ये वापस चले जाते हैं। फिलहाल कोसी के क्षेत्र में जल पक्षियों का सर्वे आनेवाले दिनों में पर्यटकों को भी आकर्षित करेगा और विशेषज्ञों की नजर में अगर विशेषता दिखी तो अभयारण्य का मार्ग भी प्रशस्त कर सकता है।

पक्षी गणना के लिए विशेषज्ञों की टीम कोसी नदी के बाढ़ के दिनों में उपवन पर आती है तो गांव के गांव डूब जाते हैं और कटान पर आती है तो कई गांवों का अस्तित्व एक साथ विलीन कर जाती है। इसे देखने-परखने के लिए नदी और जल विशेषज्ञों की टीम आती रही। अब कोसी की जैव विविधता विशेषज्ञों की टीम को खींच लाई है। ये यहां की जैव विविधता को समझेंगे और दुनिया को इससे अवगत कराएंगे।

पहली बार आये नॉर्थ अमेरिका से प्रवासी पक्षी

जुही सिन्हा • पटना

पक्षीगणना, वन एवं जलवायु परिवर्तन विभाग और कॉन्वे नेचुरल हिस्ट्री सोसाइटी के सहयोग से 19 और 20 फरवरी तक पक्षियों की गणना पूरी कर ली गयी है। इस दौरान राजधानी जलाशय में नॉर्थ अमेरिका से नॉर्दन गिन्टेल प्रजाति के प्रवासी पक्षी को पहली बार देखा गया है। इसके अलावा कई प्रवासी पक्षी आये हैं। इनमें नॉर्दन गिन्टेल और यूरेशियन विजन नॉर्थ अमेरिका से, नॉर्दन गोबेल्स यूरोप और नॉर्थ अमेरिका से, गैडवॉल आइसलैंड और रीशिया से और गारगेनी यूरोप के प्रवासी पक्षी हैं। वहीं पटना सिटी के पटना जल्ला (हनुमान मंदिर) में भारतीय प्रवासी पक्षी देखे गये हैं। राजधानी जलाशय में 15 और पटना सिटी के पटना जल्ला में 13 प्रजातियां पक्षियों की गणना पटना जू के रेंज ऑफिसर आनंद कुमार, कर्नल अमित सिन्हा के • पक्षी ऐप से

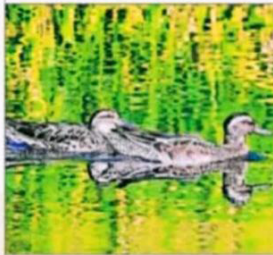
राजधानी जलाशय

	संख्या
नॉर्दन शॉवेलर	6
नॉर्दन गिन्टेल	6
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	संख्या
लेसर ब्रिस्लिंग टेल	80
ब्रॉन्ज थ्रिड जकाना	5
थॉमस मूर हेन	3
हाइट ब्रेस्टेड वाटर हेन	4
ग्रे हेडेड स्क्वैम हेन	2
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रिटिल कॉरमोरेट	8
रेट कॉरमोरेट	6

पक्षी फरवरी माह में वापस लौट जाते हैं



राजधानी जलाशय में आये प्रवासी पक्षी.

चार महीनों का प्रवास

ये प्रवासी पक्षी नवंबर के महीने में आना शुरू हो जाते हैं और फरवरी के महीने में वापस लौट जाते हैं। पिछले साल के मुकामले इस साल इन पक्षियों की संख्या में कमी आयी है। इसका मुख्य कारण फेब्रुअरी में आयी कमी है। इसके अलावा शिकार के कारण भी इनकी संख्या में कमी आयी है।

दनापुर डिफेंस एरिया में पक्षियों की प्रजाति

प्रवासी पक्षियों की गणना में शामिल पटना सायंस कॉलेज के स्टूडेंट्स ने बताया कि दानापुर डिफेंस के डिफेंस एरिया के जलाशय में नौ से ज्यादा प्रजातियों के प्रवासी पक्षी मौजूद हैं, जिनकी गणना एनप्रल वटर फाउल

बर्ड काउंट में शामिल नहीं हुई है। यहां पर यूरेशियन विजन, बूटड इगल, वेस्टर्न मैश हैरियर, रेड क्रैस्टेड पेचार्ड, गैडवॉल, फिरोशियस डक, नीयर ब्रेटेंड स्पीसीज, नॉर्दन गोबेल्स, हाइट गैगटेल आदि शामिल हैं।

नेतृत्व में की गयी। इसमें पटना साइंस कॉलेज के मो साहबाज, मो माज, एहबर आलम, शिवानी जायसवाल, जूलॉजी की पीजी हेड डॉ शाहला यास्मिन, जूलॉजिकल सर्वे ऑफ इंडिया के डॉ गोपाल शर्मा और गौरव कुमार शामिल रहे। डॉ शाहला यास्मिन ने बताया कि इस साल पटना के राजधानी जलाशय में 15 और पटना सिटी के पटना जल्ला में 13 प्रजाति की प्रवासी पक्षी आये हैं।

बिहार जलीयपक्षी गणना-2022 की हुई समीक्षा

पटना | नवयुग संवाददाता

बिहार में पहली बार 57 वेटलैंड में जलीय पक्षियों की गणना कराई गई है। यह गणना पर्यावरण, वन एवं जलवायु परिवर्तन विभाग बिहार सरकार के चीफ वार्डन प्रभात कुमार गुप्ता एवं बॉम्बे नेचुरल हिस्ट्री सोसाइटी की नीता साह के नेतृत्व में हुई। इस गणना में हाजीपुर एसएनएस कॉलेज के जन्तु विज्ञान विभाग के अध्यक्ष डॉ. सत्येन्द्र कुमार, आइबीसीएन के स्टेट को-ऑर्डिनेटर अरविन्द मिश्रा, जेडएसआई पटना के डॉ. गोपाल शर्मा, पटना के बर्डर नवीन कुमार सहित दर्जनों को-ऑर्डिनेटर शामिल रहे। डॉ. सत्येन्द्र कुमार ने वैशाली के पुरैनिया एवं बैरला झील के पक्षियों की गणना की। काबर झील बिहार का एक मात्र रामसर साइट है। यहां के पक्षियों की गणना बिहार के चर्चित बर्डमैन अरविन्द मिश्रा के साथ हाजीपुर से गए डॉ. सत्येन्द्र कुमार एवं पटना से पहुंचे डॉ. गोपाल शर्मा ने भी की। डॉ. सत्येन्द्र कुमार ने बताया कि आज दुनिया में जिस तेजी से विकास हो रहा है, उसी तेजी से पर्यावरण का भी हनन हो रहा है। हम विकास की अंधी दौड़ में इस कदर दौड़े जा रहे हैं कि अपने हित-अनहित को भी नहीं समझ पा



रहे। वेटलैंड पर प्रवासी प्रजातियों का डेरा है। वेटलैंड एक समृद्ध जैव विविधता का परिचायक है और यही कारण है कि इसे बायोलॉजिकल सुपर मार्केट कहा जाता है। वेटलैंड में जलीय पक्षी की गणना से न केवल पक्षियों की वास्तविक संख्या का पता चलता है, बल्कि वेटलैंड की वास्तविक

स्थिति का भी अंदाजा लगता है। बिहार के सभी कॉर्डिनेटों ने पक्षियों की गणना कर इसकी जानकारी बिहार सरकार के पर्यावरण, वन एवं जलवायु परिवर्तन विभाग को सौंपी। समीक्षा बैठक प्रभात कुमार गुप्ता के नेतृत्व में हुई। सभी लोगों ने पक्षी गणना के दौरान मिले अनुभव को साझा किया।

बिहार और बंगाल के विशेषज्ञों की दस सदस्यीय टीम कोसी नदी के चउर क्षेत्र में पक्षियों की गिनती की नेपाल बॉर्डर से भवटियाही तक चउर में दिखी हजार पक्षियां

हिन्दुस्तान
खास

सहरसा | निज प्रतिनिधि

नेपाल बॉर्डर से सुपौल जिले के भवटियाही में 35 किमी की दूरी में कोसी नदी के आद्र भूमि में स्थित चउर में विशेषज्ञों की करीब एक हजार की संख्या में देशी-विदेशी पक्षी दिखी। मोटरवोट से प्रमण के दौरान कोसी नदी के स्पर नंबर 17 के आसपास पांच किमी की दूरी में करीब 30 की संख्या में जल पक्षियां नजर आईं।

सहरसा-दरभंगा सीमा के गंडौल में करीब दस की संख्या में बड़ा गरुड़, जलकोआ, लालसर जैसी जल पक्षी दिखी। सुरखाव, नॉर्दन प्रिन्टल सहित अन्य दुर्लभ विदेशी पक्षियों को देखा गया। बिहार और बंगाल की दस सदस्यीय विशेषज्ञों की टीम ने कोसी क्षेत्र में शनि और रविवार को जल पक्षियों की गणना की। टीम का नेतृत्व करने वाले पटना स्थित जूलॉजिकल सर्वे ऑफ इंडिया भारत सरकार के संयुक्त निदेशक सह वरीय वैज्ञानिक डॉ. गोपाल शर्मा ने कहा कि दो दिनों की



गणना में सबसे अधिक नेपाल बॉर्डर से भवटियाही में 35 किमी की दूरी में कोसी नदी के आद्र भूमि में स्थित चउर में करीब एक हजार की संख्या में देशी और विदेशी पक्षियों को देखा गया है। पचास-पचास प्रतिशत की संख्या में 79 प्रकार की देशी-विदेशी पक्षियों को देखा गया है। उन्होंने कहा कि पक्षी गणना से संबंधित रिपोर्ट बंबई नेचुरल हिस्ट्री सोसाइटी को भेजा जाएगा। सोसाइटी के द्वारा रिपोर्ट को वेटलैंड इंटरनेशनल को देगी। पूरे बिहार राज्य के कौन से क्षेत्र में कितनी संख्या में पक्षियां देखी गई है उसका आंकलन

करते संरक्षण और चउर क्षेत्र के विकास की कार्ययोजना बनेगी। पक्षी गणना टीम में बिहार स्टेट टूरिज्म डवलपमेंट कॉरपोरेशन के पूर्व महाप्रबंधक सह बंबई नेचुरल हिस्ट्री सोसाइटी के सदस्य नवीन कुमार, कोलकाता के वैज्ञानिक डॉ. अंजुम, डॉ. चित्रा, डॉ. आनंददिता, डॉ. शांतनु मिश्रा, डॉ. शंकर सहित अन्य थे। वन विभाग की तरफ से वन क्षेत्र पदाधिकारी ललितेश कुमार सहित अन्य थे। वन प्रमंडल पदाधिकारी आर. के. सिन्हा ने कहा कि जल पक्षियों के संरक्षण का प्रस्ताव तैयार कर मुख्यालय को भेजा जाएगा।

जलय चउर पर पहुंच मिली निराशा नहीं दिखे पक्षी: गणना करने पहुंची बिहार और बंगाल की विशेषज्ञों की टीम को उस समय निराशा हाथ लगी जब सहरसा-दरभंगा सीमा स्थित जलय चउर पास रविवार को वे पहुंचे। टीम का नेतृत्व करने वाले जूलॉजिकल सर्वे ऑफ इंडिया भारत सरकार के संयुक्त निदेशक ने कहा कि जलय चउर सुखा मिला और पक्षी नहीं नजर आए। वहां की जगह दूसरे किसी आद्र स्थल का चयन करना चाहिए था।

जलय चउर में पक्षियों का किया जाता शिकार: संयुक्त निदेशक के

- बंबई नेचुरल हिस्ट्री सोसाइटी को करंगे रिपोर्ट
- किस क्षेत्र में कितनी पक्षियां गणना बाद संरक्षण पर निर्णय
- देशी-विदेशी सहित दुर्लभ पक्षियां भी देखी गई

30 10

की संख्या में कोसी नदी के पांच किमी की दूरी में दिखी पक्षियां

की संख्या में दरभंगा सीमा के गंडौल पास दिखी पक्षियां

रविवार को सहरसा-दरभंगा सीमा में गंडौल में जलय चउर आसपास गणना दौरान विशेषज्ञों की टीम।

अनुसार जलय चउर में पक्षियों का शिकार होता है। क्योंकि वहां पहुंचने पर देखा गया जहां-जहां कुछ पानी थी उधर जाल लगा था। जाल पक्षियों को फंसाकर शिकार लगाने के लिए ही लगाया गया होगा।

24 फरवरी तक होगी गिनती: पूरे बिहार में चउर क्षेत्रों में 24 फरवरी तक जल पक्षियों की गिनती होगी। बता दें कि बीते 13 और 14 फरवरी को सहरसा जिले के तीन चउर क्षेत्र की गणना को पक्षी विज्ञानी ज्ञानेंद्र ज्ञानी के नेतृत्व में आई टीम को 1235 की संख्या में देशी व विदेशी जल पक्षी मिले थे।

विलुप्त प्रायः 28 प्रजाति के पक्षियों का गूंज रहा कलरव

पटना | कार्यालय संवाददाता

भारतीय हो या प्रवासी पक्षी। राजधानी के जलाशय इन्हें खूब पसंद आ रहे हैं। शहर में 28 प्रजातियों के भारतीय जलीय पक्षियों का कलरव गूंज रहा है। इन्हें पर्यावरण के लिए शुभ संकेत माना जा रहा है।

शहर में जलीय पक्षियों की गणना में इन प्रजातियों का खुलासा हुआ है। राजधानी जलाशय में 15 और पटना जल्ला हनुमान मंदिर में 13 प्रजातियों के जलीय पक्षी देखे गए हैं। वे सभी भारतीय पक्षी हैं। पर्यावरण, वन एवं

लेजर हसलिंग डक ज्यादा देखे जा रहे

इस साल जलाशय में लेजर हसलिंग डक ज्यादा देखे जा रहे हैं। इनके अलावा नॉर्दन सोवर, नॉर्दन पैटल, फेरुजिनस डक दिखाई दे रहे हैं। ये विलुप्त प्रजातियां हैं। पक्षी विशेषज्ञ आनंद बताते हैं कि इन पक्षियों की स्थिति के आधार पर हमें पता चलता है कि हमारी जल भूमि की स्थिति क्या है। जल संरक्षण की नीतियां हमें कैसे निर्धारित करनी हैं।

जलवायु परिवर्तन विभाग बॉम्बे नेचुरल हिस्ट्री सोसाइटी के साथ मिलकर बिहार में लगभग 60 जलाशयों को घिरेनित किया है, जहां वे जलीय पक्षी मेहमान होते हैं। उन सभी जलाशयों में 16 फरवरी से गणना की जा रही है। यह 22

फरवरी तक चलेगी। इसमें वैसे अनुभवी और युवा लोगों को लगाया गया है, जो पक्षियों की दुनिया में रुचि रखते हैं और इनके संरक्षण में अपनी भूमिका निभाना चाहते हैं। यह गणना पटना जू के रेंज ऑफिसर आनंद कुमार

पक्षियों की गणना कर होगा संरक्षण

बिहार में मध्य शीतकालीन पक्षियाई जल पक्षी गणना का कार्य इस वर्ष बृहत पैमाने पर हो रहा है। इसके बाद पक्षियों के संरक्षण को लेकर उपाय किए जाएंगे। भारत में यह कार्यक्रम सन 1987 में शुरू हुआ और प्रत्येक वर्ष मध्य शीतकाल में इन पक्षियों की गिनती की जाती है, जब प्रवासी और स्थानीय पक्षियों का जमावड़ा एक साथ होता है।

और कर्नल अमित सिन्हा के नेतृत्व में की जा रही है। इसमें प्रो. सहला यशमिन, डॉ. रश्मि कोमल, गौरव नारायण, मो. मांज, नीरज कुमार, साहबाज, अभिषेक और इंदू समेत अन्य शामिल हैं।



राजधानी जलाशय में पक्षी की गणना की जा रही है।

सुपौल-निर्मली

आज का दिन

1737 में फ्रांस के वित्त मंत्री चौवेलिन ने इस्तीफा दिया।

हिन्दुस्तान

कोसी की आद्र जमीन पर पक्षियों की 45 प्रजातियां पाई गईं

सुपौल | वरिष्ठ संवाददाता

बिहार में पहली बार हो रहे जल पक्षियों की गणना के दौरान कोसी की आद्र जमीन (वेट लैंड) पर 45 प्रजातियों की जल पक्षियां पाई गईं हैं। पक्षियों की गणना करने पहुंचे ज्यूलॉजिकल सर्वे ऑफ इंडिया के संयुक्त निदेशक डॉ. मोहम्मद शर्मा और बॉम्बे नेचर हिस्टोरिकल सोसाइटी के सदस्य सह पक्षी विशेषज्ञ नवीन कुमार ने शनिवार को यह जानकारी दी। उन्होंने बताया कि एशिया जल पक्षी गणना के तहत यह अभियान चल रहा है। अन्य राज्यों में यह पहल से हो रहा है, बिहार में पहली बार हो रहा है। शनिवार को

उन्होंने कोसी नदी के किनारे लगभग 3.4 किमी तक के दायरे की आद्र जमीन का जायजा लिया है। इस दौरान 45 प्रजाति की पक्षियां मिली हैं। इसमें 20 से 22 प्रजाति की पक्षियां निम्न स्तर पर विलुप्त प्राय प्रजातियों में आती हैं। इसमें गरुड, छोटा गरुड और सफेद भुजा प्रजाति की पक्षियां भी मिली हैं। इनकी संख्या अभी और बढ़ेगी। रविवार को भी उनका अभियान चलेगा। उन्होंने बताया कि अभियान का आशय आद्र भूमियों को घिरेनित करना है जहां खासतौर पर जल पक्षियां रहती हैं। कोसी के किनारे 58 आद्र जमीन स्थल चिह्नित किया गया है। मौके पर डीएएफओ सुपौल शरण भी थे।

प्रवासी पक्षियों व वेट लैंड को संरक्षित करना उद्देश्य

वैज्ञानिकों ने बताया कि पक्षी जनगणना का उद्देश्य प्रवासी पक्षियों के संरक्षण के साथ-साथ उनके आवास स्थल को वेट लैंड को चिह्नित करना भी है। अभियान में यह जानने का प्रयास किया जा रहा है कि किन-किन प्रजातियों की प्रवासी पक्षियां किन-किन स्थानों पर किन-किन वेट लैंड पर आती हैं। यह देखा जा रहा है कि प्रवासी पक्षियां किस समय और किन-किन स्थानों में आती हैं, किन-किन दिनों कि यहां रहती हैं। उन्होंने पता लगाया कि कुल मिलाकर प्रवासी पक्षियों का शिकार करते हैं जो गलत है।



कोसी किनारे वेट लैंड पर जल पक्षियों की गणना करने निकली विशेषज्ञों की टीम।

• डॉ. हिन्दुस्तान

इको टूरिज्म को मिलाया बढ़ावा

पूरे बिहार में लगभग साढ़े बार हजार बड़े आद्र स्थल और लगभग सात हजार छोटे आद्र स्थल होने की संभावना है। लोगों को भी जागरूक किया जा रहा है कि प्रवासी पक्षियों का शिकार नहीं किया जाना है। पक्षियों को सुरक्षित स्थान पर वेट लैंड चिह्नित होंगे, जिससे इको टूरिज्म को बढ़ावा मिलेगा। इससे स्थानीय लोगों को हो लाभ मिलेगा।

राधुबन्ती वैशाली

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पटना। मंगलवार • 15 फरवरी • 2022

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एशियन जलीयपक्षी गणना 2022 का प्री काउन्ट शुरू

हाजीपुर (एसएनबी)। पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार एवं बॉम्बे नेचुरल हिस्ट्री सोसाइटी के तत्वाधान में एशियन जलीयपक्षी गणना 2022 का पहला प्री काउन्ट मे एस एन एस कॉलेज, हाजीपुर के जन्तु विज्ञान विभाग के विभागाध्यक्ष एवं वैशाली जिला डब्लू ए सी 2022 के को-ऑर्डिनेटर डॉ सत्येन्द्र कुमार ने अपनी बर्डर टीम के साथ किया।

यह प्री काउन्ट लालगंज के पूरनीया वेटलैंड में हुआ। पूरनीया वेटलैंड में अभी जल स्तर 4 फीट से 8 फीट तक बनी हुई है। इस वेटलैंड के अंदर मछली पालक हज़ारों कि संख्या में बतख पाल रहे हैं जो इस वेटलैंड को आकर्षक बना रखा है। गणना में कई जलीय पक्षी भी देखने को मिला। पूरनीया वेटलैंड के प्री काउन्ट में डॉ सत्येन्द्र की टीम के बर्डर में एन एन कॉलेज, सिन्धुवाड़ा के डॉ अजीत कुमार, शोध छात्र राजन कुमार, राजेश कुमार, पुष्कर कुमार एवं वन विभाग के



एशियन जलीयपक्षी गणना करते जन्तु विज्ञान विभाग के सदस्य।

वनपाल गया प्रसाद एवं वनपाल अवधेश सिंह अपने पाँच आरक्षी के साथ मौजूद रहे साथ दर्जनों ग्रामीण ने भी सहयोग किया। डॉ सत्येन्द्र ने जानकारी दी कि लगभग पूरे बिहार में अभी एशियन जलीयपक्षी गणना 2022 का प्री काउन्ट चल रहा है। राजधानी जलाशय पटना के प्री काउन्ट में जेड एस आई के

डायरेक्टर डॉ गोपाल शर्मा, पटना वि विद्यालय के जन्तु विज्ञान विभाग के अध्यक्ष डॉ शहला, बिहार के प्रख्यात बर्डर नविन कुमार की टीम ने गणना की। वहीं भागलपुर में अरविंद मिश्रा एवं प्रोफेसर डी एन चौधरी की टीम, मोतिहारी में डॉ नीरज कुमार की टीम ने प्री काउन्ट गणना की।

सेवानिवृत्त अभियंताओं के साथ न्यायोचित व्यवहार हो : सुनील हाजीपुर। विभागीय कार्रवाई का दश झेल रहे सेवानिवृत्त अभियंताओं का सरकार में बैठे अ.श.य शक्तियों द्वारा सर्वोच्च न्यायालय के फैसले का उल्लंघन करते हुए पेन्शन एवं ग्रेच्युटी भुगतान नहीं किये जाने पर इण्डियन इन्जीनियर्स फेडरेशन (दुपूरी) के उपाध्यक्ष एवं बिहार अभियन्त्रण सेवा संघ के पूर्व महासचिव डा सुनील कुमार चौधरी ने गहरी नाराजगी व्यक्त करते हुए इसे प्रशासनिक अत्याचार बताया है। उन्होंने अभियंताओं के साथ न्यायोचित व्यवहार करते हुए पेन्शन एवं ग्रेच्युटी पर लगे रोक को अविलंब हटाने की मांग की है। उन्होंने सरकार से मांग की कि वर्तमान सिस्टम को इस तरह सु.ड किया जाय कि अभियंताओं पर चल रहे विभागीय कार्रवाई को सेवकाल में ही पूर्ण कर ली जाय ताकि उन्हें आर्थिक परेशानी एवं मानसिक प्रताड़ना का शिकार नहीं होना पड़े।

जलपक्षियों की संख्या इंगित कर रही है वन विभाग

सिटी रिपोर्टर/हाजीपुर

वेटलैंड में जलीय पक्षी की गणना से न केवल पक्षियों की वास्तविक संख्या का पता चलता है, बल्कि आर्द्रभूमि की वास्तविक स्थिति का भी अंदाजा लगता है। जलपक्षियों की संख्या इंगित करती हैं कि आर्द्रभूमि क्षेत्र में भोजन की पर्याप्त मात्रा, पक्षियों के आराम करने, रोस्टिंग और फोर्जिंग स्पॉट विद्यमान हैं। ये बातें वैशाली जिला के लालगंज पूरनीया वेटलैंड में विंटर जलीयपक्षी का गणना करते हुए एसएनएस कॉलेज, हाजीपुर के जन्तु विज्ञान विभाग के विभागाध्यक्ष एवं वैशाली जिला डब्लु एससी 2022 के को-ऑर्डिनेटर डॉ सत्येन्द्र कुमार ने कहा। उन्होंने कहा कि



जलीय पक्षी की गणना के लिए पहुंची वन विभाग की टीम

यह एशियन जलीयपक्षी गणना 2022 का गणना पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार द्वारा आयोजित किया गया है। तीन किलोमीटर लम्बाई तथा ढाई किलोमीटर

चौड़ाई में फैला लालगंज के पूरनीया वेटलैंड में जलीय पक्षी की गणना को-ऑर्डिनेटर डॉ सत्येन्द्र कुमार ने अपनी बर्डर टीम के साथ किया। टीम के बर्डर में एनएन कॉलेज, सिन्धुड़ा

के डॉ अजीत कुमार, जेपी विश्वविद्यालय जन्तु विज्ञान के शोध छात्र राजन कुमार, राजेश कुमार, मगध विश्वविद्यालय के बायो टेक की शोध छात्रा अर्चना कुमारी, पटना विश्वविद्यालय के जन्तु विज्ञान की शोध छात्रा कोमल, आरएन कॉलेज के छात्र पुष्कर कुमार शामिल रहे। उन्होंने बताया कि वन प्रमंडल पदाधिकारी मोहम्मद जुनैद अली के निर्देश पर पक्षी गणना में लालगंज रेन्जर विजय कुमार, वन विभाग के वनपाल गया प्रसाद गुप्ता एवं वनपाल अवधेश सिंह, सहायक वनपाल दीपा कुमारी, आरक्षी कुमार गौरव, अजित कुमार, अनुज कुमार एवं जीतेन्द्र सिंह का सहयोग सराहनीय रहा। साथ मौजूद रहे दर्जनों ग्रामीण भी जिनका भी सहयोग रहा।

नवयुग बिहार

14 फरवरी, सोमवार 2022

बिहार

पेज 02



पूरे बिहार में चल रहा है एशियन जलीय पक्षी गणना



हाजीपुर | जलजल संवर्धन

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार एवं मुंबई में स्थित हिस्ट्री सोसाइटी के तत्वावधान में एशियन जलीय पक्षी गणना 2022

का पहले प्री काउंट में एसएनएस कॉलेज, हाजीपुर के जन्तु विज्ञान विभाग के विभागाध्यक्ष एवं वैशाली जिला डब्लुएससी -2022 के को-ऑर्डिनेटर डॉ सत्येन्द्र कुमार ने अपने बर्डर टीम के साथ भाग लिया। यह प्री काउंट लालगंज के पूरनीया वेटलैंड में हुआ।

पूरनीया वेटलैंड में अभी जलजल 4 फीट से 8 फीट तक बना हुआ है। इस वेटलैंड के अंदर गहरी पालक झरोकी की संख्या में बहुत पाल रहे हैं जो इस वेटलैंड को आकर्षक बना रहे हैं। समता के टीन बर्ड जलीय पक्षी देखने को मिले।



पूरनीया वेटलैंड के प्री काउंट में डॉ सत्येन्द्र की टीम में एसएनएस कॉलेज, सिन्धुड़ा के डॉ अजीत कुमार, शोध छात्र राजन कुमार, राजेश कुमार, पुष्कर कुमार एवं वन विभाग के वनपाल गया प्रसाद एवं वनपाल अवधेश सिंह अपने पंच आंखों के साथ मौजूद रहे।

दर्जनों ग्रामीणों ने भी सहयोग किया। डॉ सत्येन्द्र कुमार ने जानकारी दी कि लगभग पूरे बिहार में अभी एशियन जलीयपक्षी गणना 2022 का प्री काउंट चल रहा है। राजधानी पटना में जलजल के प्री काउंट में जेहरावआई के छात्रेकर डॉ सोशल कर्मा, पटना

विश्वविद्यालय के जन्तु विज्ञान विभाग की अध्यक्षा डॉ राहल, बिहार के प्रखराल बर्डर क्लब कुमारी की टीम ने भाग लिया। वहीं भागलपुर में अर्द्धिंदर मिश्रा एवं जेहेनार खैरन चौधरी की टीम, मेरिहरी में डॉ नील कुमारी की टीम ने प्री काउंट किया।

पुरैनिया वेटलैंड में हुई जलीय पक्षियों की गिनती

जलपक्षियों की संख्या
इंगित करती है आर्द्रभूमि
की स्थिति

संवाददाता, हाजीपुर

वेटलैंड में जलीय पक्षी की गणना से न सिर्फ पक्षियों की वास्तविक संख्या का पता चलता है बल्कि आर्द्रभूमि की वास्तविक स्थिति का भी अंदाजा लगता है। जलपक्षियों की संख्या इंगित करती है कि आर्द्रभूमि क्षेत्र में भोजन की पर्याप्त मात्रा, पक्षियों के आराम करने, रेस्टिंग और फीडिंग स्पॉट विद्यमान हैं। ये बातें जिले के लालगंज अंचल के पुरैनिया वेटलैंड में विंटर जलीय पक्षियों की गणना करते हुए एसएनएस



पुरैनिया वेटलैंड में बर्डर टीम के साथ कोऑर्डिनेटर डॉ सत्येंद्र कुमार

कॉलेज, हाजीपुर के जंतु विज्ञान विभागाध्यक्ष एवं वैशाली जिला डब्ल्यूएसी 2022 के कोऑर्डिनेटर डॉ सत्येंद्र कुमार ने कहीं। एशियन जलीयपक्षी गणना 2022 के तहत शनिवार को पुरैनिया वेटलैंड में जलपक्षियों की फाइनल काउंटिंग की गयी। एशियन जलीयपक्षी गणना 2022 का यह कार्यक्रम राज्य सरकार के पर्यावरण, वन

एवं जलवायु परिवर्तन मंत्रालय की ओर से आयोजित किया गया है। तीन किलोमीटर लंबाई तथा ढाई किलोमीटर चौड़ाई में फैले लालगंज के पुरैनिया वेटलैंड में जलीय पक्षी की गणना कोऑर्डिनेटर डॉ सत्येंद्र ने की। टीम के बर्डरों में एनएन कॉलेज, सिंघार के डॉ अजीत कुमार, जेपी विवि के जंतु विज्ञान के शोध छात्र राजन कुमार,

राजेश कुमार, मगध विवि की बायोटेक की शोध छात्रा अर्चना कुमारी, पटना विश्वविद्यालय जंतु विज्ञान की शोध छात्रा कोमल, आरएन कॉलेज, हाजीपुर के छात्र पुष्कर कुमार शामिल रहे। डॉ सत्येंद्र ने बताया कि वन प्रमंडल पदाधिकारी मो जुनैद अली के निर्देश पर पक्षी गणना में लालगंज रेंजर विजय कुमार, वनपाल गया प्रसाद गुप्ता एवं वनपाल अवधेश सिंह, सहायक वनपाल दीपा कुमारी, आरक्षी कुमार गौरव, अजीत कुमार, अनुज कुमार, जितेंद्र सिंह ने पूरा सहयोग किया। पुरैनिया वेटलैंड में अभी जल स्तर चार फुट से आठ फुट तक बना हुआ है। इस वेटलैंड के अंदर मछली पालकों ने काफी संख्या में बतख पाल रखे हैं।

Sun, 20 February 2022
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समृद्ध जैव विविधता का परिचायक है वेटलैंड : डॉ सत्येंद्र



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आज दुनिया में जिस तेजी से विकास हो रहा है, उसी तेजी से पर्यावरण को भी नुकसान पहुंच रहा है। हम विकास की अंधी दौड़ में इस कदर खे गए हैं कि अपने हित-अनहित को भी नहीं समझ पाते।

वेटलैंड पर प्रवासी प्रजातियों का डेरा है। वेटलैंड एक समृद्ध जैव-विविधता का परिचायक है और यही कारण है कि इसे बायोलॉजिकल सुपर मार्केट कहा जाता है। वेटलैंड में जलीय पक्षी की गणना से न केवल पक्षियों की वास्तविक संख्या का पता चलता है, बल्कि आर्द्रभूमि की वास्तविक स्थिति का भी अंदाजा लगता है। ये बातें वैशाली जिला के बरैला वेटलैंड में विंटर जलीयपक्षी का

गणना करते हुए एसएनएस कॉलेज, हाजीपुर के जंतु विज्ञान विभाग के विभागाध्यक्ष एवं वैशाली जिला डब्ल्यूएसी 2022 के को-ऑर्डिनेटर डॉ सत्येंद्र कुमार ने कही। उन्होंने कहा कि झील बरैला में नरकट के पौधे यहां वेटलैंड के विकास में सबसे बड़े बाधक बने हुए हैं। मालूम हो कि अभी बिहार में विंटर जलीय पक्षियों की गणना हो रही है। यह एशियन जलीयपक्षी गणना 2022 पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार द्वारा आयोजित की गयी है। वेटलैंड में जलीय पक्षी की गणना को लेकर को-ऑर्डिनेटर डॉ सत्येंद्र कुमार अपनी बर्डर टीम के साथ रविवार को बरैला झील क्षेत्र में थे। टीम के बर्डरों में एनएन कॉलेज, सिन्हाड़ा के डॉ अजीत कुमार, जेपी

विश्वविद्यालय जंतु विज्ञान के शोध छात्र राजन कुमार, राजेश कुमार, मगध विश्वविद्यालय के बायो टेक की शोध छात्रा अर्चना कुमारी, पटना विश्वविद्यालय के जंतु विज्ञान की शोध छात्रा कोमल, आरएन कॉलेज के छात्र पुष्कर कुमार शामिल रहे।

डॉ सत्येंद्र कुमार ने बताया कि वन प्रमंडल पदाधिकारी मोहम्मद जुनैद अली के निर्देश पर पक्षी गणना में हाजीपुर रेंजर राय आलोक चंद्र, वन विभाग के वनपाल गया प्रसाद गुप्ता एवं वनपाल अवधेश सिंह, सहायक वनपाल, आरक्षी कुमार गौरव, अजीत कुमार, अनुज कुमार का सहयोग सराहनीय रहा। साथ में पर्यावरणविद पंकज चौधरी सहित कई ग्रामीणों ने भी सहयोग किया।

हजारों बत्तखों ने पुरैनिया वेटलैंड को बनाया आकर्षक



पुरैनिया वेटलैंड में बर्डर टीम के साथ कोऑर्डिनेटर डॉ सत्येंद्र .

संवाददाता, हाजीपुर

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, बिहार सरकार एवं बम्बई नेचुरल हिस्ट्री सोसाइटी के तत्वावधान में एशियन जलीय पक्षी गणना 2022 का प्री काउंट किया जा रहा है. पहला प्री काउंट एसएनएस कॉलेज, हाजीपुर के जंतु विज्ञान विभागाध्यक्ष एवं वैशाली जिला डब्ल्यूएसी 2022 के कोऑर्डिनेटर डॉ सत्येंद्र कुमार ने अपनी बर्डर टीम के साथ किया. यह प्री काउंट जिले के लालगंज प्रखंड के पुरैनिया वेटलैंड में हुआ. पुरैनिया वेटलैंड के प्री काउंट में डॉ सत्येंद्र की टीम के बर्डरों में एनएन कॉलेज, सिंधारा के डॉ अजीत कुमार, शोध छात्र राजन कुमार, राजेश

कुमार, पुष्कर कुमार के अलावा वन विभाग के वनपाल गया प्रसाद तथा वनपाल अवधेश सिंह अपने पांच आरक्षी के साथ मौजूद रहे. साथ ही दर्जनों ग्रामीणों ने भी सहयोग किया. डॉ सत्येंद्र ने जानकारी दी कि लगभग पूरे बिहार में अभी एशियन जलीय पक्षी गणना 2022 का प्री काउंट चल रहा है. राजधानी जलाशय पटना के प्री काउंट में जेडएसआइ के डाइरेक्टर डॉ गोपाल शर्मा, पटना विश्वविद्यालय के जंतु विज्ञान विभाग की अध्यक्ष डॉ शाहिला, बिहार के ख्यात बर्डर नवीन कुमार की टीम ने गणना की. वहीं, भागलपुर में अरविंद मिश्रा एवं प्रो डीएन चौधरी की टीम, मोतिहारी में डॉ नीरज कुमार की टीम ने प्री काउंट का कार्य संपादित किया.

पूरे बिहार में चल रहा है एशियन जलीयपक्षी गणना 2022 का काउंट

जलपक्षियों की संख्या इंगित करती हैं आर्द्रभूमि की स्थिति : डॉ. सत्येंद्र कुमार

हाजीपुर | संवाददाता

वेटलैंड में जलीय पक्षी की गणना से न केवल पक्षियों की वास्तविक संख्या का पता चलता है, बल्कि आर्द्रभूमि की वास्तविक स्थिति का भी अंदाजा लगता है। जलपक्षियों की संख्या इंगित करती है कि आर्द्रभूमि क्षेत्र में जीवन की पर्याप्त मात्रा, पक्षियों के आवास करने, शैरिंग और फोर्निंग स्पॉट विद्यमान है। ये बातें वैशाली जिला के लालगंज पुरैनिया वेटलैंड में बिहार जलीय पक्षी का गणना करते हुए एसएनएस कॉलेज, हाजीपुर के जंतु विज्ञान विभाग के विभागाध्यक्ष एवं वैशाली जिला डब्ल्यूएसी 2022 के कोऑर्डिनेटर डॉ सत्येंद्र कुमार ने कही।

यह एशियन जलीयपक्षी गणना 2022 का गणना पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय बिहार सरकार द्वारा आयोजित किया गया है। तीन किलोमीटर लम्बाई तथा ढाई किलोमीटर चौड़ाई में फैला लालगंज के पुरैनिया वेटलैंड में जलीय पक्षी की गणना को-ऑर्डिनेटर डॉ सत्येंद्र कुमार ने अपनी बर्डर टीम



के साथ किया। टीम के बर्डर में एनएन कॉलेज, सिन्धारा के डॉ अजीत कुमार, जेपी विश्वविद्यालय जंतु विज्ञान के शोध छात्र राजन कुमार, राजेश कुमार, मगध विश्वविद्यालय के बायोटेक की शोध छात्रा अर्चना कुमारी, पटना विश्वविद्यालय के जंतु विज्ञान की शोध छात्रा कोमल, आर एन कॉलेज के छात्र पुष्कर कुमार शामिल रहे।

डॉ सत्येंद्र कुमार ने बताया कि वन प्रसंगल पदाधिकारी मोहम्मद जुनैद अली के निर्देश पर पक्षी गणना में लालगंज जेजर बिजय कुमार, वन विभाग के वनपाल गया प्रसाद गुप्ता एवं वनपाल अवधेश सिंह, सहायक वनपाल दीपा कुमारी, आरक्षी कुमार सौरव, अजीत कुमार, अनुज कुमार एवं जीतेन्द्र सिंह का सहयोग सहायक था। साथ मौजूद रहे दर्जनों ग्रामीण भी निरन्तर भी सहयोग रहा। पुरैनिया वेटलैंड में अभी जल स्तर 4 फीट से 8 फीट तक बना हुआ है। इस वेटलैंड के अंदर मछली पालक काफी संख्या में बाख पाल रहे हैं जो इस वेटलैंड का आकर्षण है। गणना में कई जलीय पक्षी भी देखने को मिले।

प्रधान संपादक : शैलेश कुमार, कार्यकारी संपादक : डॉ सत्येंद्र कुमार, समाचार संपादक डॉ. कुमारी निरजा, प्रधान कार्यालय : कुती मार्केट, केशरीनगर, पटना - 800024, फोन नंबर : +91 - 9955897144

202 bird species spotted in 68 wetlands of state

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Pintu Kumar Singh

Patna: Altogether 202 bird species with a population count of 45,173 were recorded at 68 different water bodies in Bihar, as per the first Asian Waterbird Census (AWC) conducted across the state in February this year. The two-week exercise of counting the varieties of local and migratory water birds was done by the department of forests, environment and climate change (DFECC), with technical support from the Bombay Natural History Society (BNHS), a bird conservation network, and Wetlands Inter-

Rahul Sharma



ASIAN WATERBIRD CENSUS

national, a global organisation that annually conducts the Asiatic Waterbird Census.

The census report showed that 80 of the 202 species are water birds spotted in wetlands while 21 were water associated species and 101 land bird species. Total 335 enu-

rators were deployed for the task.

DFECC principal secretary Dipak Kumar Singh told TOI that the census report has created the baseline for Bihar. "The second survey, likely to be conducted by February-March next year, will help us evaluate whether the population of birds in Bihar has increased or decreased. We will be able to compare the reports and take measures for their conservation, safe and suitable habitat for nesting and successful breeding of birds," he said.

► Continued on P 5

Some rare birds spotted during census conducted in Feb-March

► Continued from P 1

"The waterbird census is conducted in February and March because the migratory birds visit the state during the winter time. They start arriving from November and stay here till mid-March," he added.

Lesser whistling duck, red-crested pochard, Asian open billed stork, little cormorant,

ASIAN WATERBIRD CENSUS

common coot and gadwall are the most dominant waterbird species.

Among the water associated bird species, barn swallow, dusky craig martin, sand martin, white throated kingfisher and citrine wagtail are easily spotted in wetlands.

The presence of black kite, Asian pied starling, house crow, common myna and black drongo has been recorded in the land

Purnia recorded the maximum number of gogabil with 4,992 population of 41 different species, including 31 waterbirds, 4 water associated bird species and six land bird species

bird species category. As per the report, the maximum number of 75 different species of waterbirds were found in the Kosi catchment (Supaul and Saharsa) areas, closely followed by 62 species in Kabar Lake in Begusarai, 55 in Nagi Dam Bird Sanctuary in Jamui and 54 in Ganga-prasad Lake in Bhagalpur. Rewa Ghat in Muzaffarpur and Kulmahadev Dam and Jabsalaya Dam, both in Nawada, recorded single species.

Purnia recorded the maximum number of gogabil with

4,992 population of 41 different species, including 31 waterbirds, 4 water associated bird species and six land bird species.

In Patna, the survey was conducted at Rajdhani Jalashay (pond) at Old Secretariat and Patna Jalla in Patna City. The findings showed that the newly created urban wetland at Rajdhani Jalashay accounted for 1009 birds of 34 species, mostly dominated by the resident lesser whistling duck followed by two long-distance migrants namely Gadwal, Garganey and land bird. The paddy field pipit were spotted among the other species.

According to experts, some rare birds spotted include common merganser, white-capped redstart and yellow-brow sparrow at Garhi Dam in Jamui, brown hawk owl in Kabar Lake, northern lapwing in Gogabil Lake of Katihar and Eastern Orphean warbler in Buxar.

